

Form 3160-3  
(June 2015)FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

UNITED 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<br>1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other<br>1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |                                       | 5. Lease Serial No.<br><br>6. If Indian, Allottee or Tribe Name<br><br>7. If Unit or CA Agreement, Name and No.<br><br>8. Lease Name and Well No.<br><br><div style="text-align: center; font-weight: bold; font-size: 1.2em;">[326125]</div> |
| 2. Name of Operator<br><div style="text-align: center; font-weight: bold; font-size: 1.2em;">[373910]</div>                                                                                                                                                                                                                                                    |                                       | 9. API Well No. <div style="text-align: center; font-weight: bold; font-size: 1.2em;">30-025-49875</div>                                                                                                                                      |
| 3a. Address                                                                                                                                                                                                                                                                                                                                                    | 3b. Phone No. (include area code)     | 10. Field and Pool, or Exploratory <div style="text-align: center; font-weight: bold; font-size: 1.2em;">[97088]</div>                                                                                                                        |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *)<br>At surface<br>At proposed prod. zone                                                                                                                                                                                                                         |                                       | 11. Sec., T. R. M. or Blk. and Survey or Area                                                                                                                                                                                                 |
| 14. Distance in miles and direction from nearest town or post office*                                                                                                                                                                                                                                                                                          |                                       | 12. County or Parish<br>13. State                                                                                                                                                                                                             |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)                                                                                                                                                                                                                                          | 16. No of acres in lease              | 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.<br>2. A Drilling Plan.<br>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). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).<br>5. Operator certification.<br>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.

**NGMP Rec 03/08/2022**

**SL**

(Continued on page 2)



**KZ**  
**03/16/2022**

\*(Instructions on page 2)

## INSTRUCTIONS

**GENERAL:** This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

**ITEM I:** If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

**ITEM 4:** Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

**ITEM 14:** Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

**ITEMS 15 AND 18:** If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

**ITEM 22:** Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

**ITEM 24:** If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

**PRINCIPAL PURPOSES:** The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

**ROUTINE USE:** Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

## Additional Operator Remarks

### Location of Well

0. SHL: TR N / 998 FSL / 1907 FWL / TWSP: 25S / RANGE: 35E / SECTION: 35 / LAT: 32.082309 / LONG: -103.340711 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNE / 0 FNL / 2100 FEL / TWSP: 26S / RANGE: 35E / SECTION: 11 / LAT: 32.065052 / LONG: -103.336552 ( TVD: 1205 feet, MD: 17300 feet )

PPP: SWSE / 2653 FNL / 2110 FEL / TWSP: 26S / RANGE: 35E / SECTION: 2 / LAT: 32.072277 / LONG: -103.336557 ( TVD: 12065 feet, MD: 14700 feet )

PPP: NWNE / 624 FNL / 2102 FEL / TWSP: 26S / RANGE: 35E / SECTION: 2 / LAT: 32.077854 / LONG: -103.33656 ( TVD: 12065 feet, MD: 12653 feet )

BHL: TR O / 150 FSL / 2100 FEL / TWSP: 26S / RANGE: 35E / SECTION: 11 / LAT: 32.050938 / LONG: -103.336543 ( TVD: 12065 feet, MD: 22445 feet )

### BLM Point of Contact

Name: TENILLE ORTIZ

Title: Legal Instruments Examiner

Phone: (575) 234-2224

Email: tortiz@blm.gov

CONFIDENTIAL

### **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

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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

|                                                |                                                            |                                                             |
|------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------|
| <sup>1</sup> API Number<br><b>30-025-49875</b> | <sup>2</sup> Pool Code<br>97088                            | <sup>3</sup> Pool Name<br>WC-025 G-08 S253534O; BONE SPRING |
| <sup>4</sup> Property Code<br><b>326125</b>    | <sup>5</sup> Property Name<br>TATANKA FED COM              | <sup>6</sup> Well Number<br>603H                            |
| <sup>7</sup> OGRID No.<br>373910               | <sup>8</sup> Operator Name<br>FRANKLIN MOUNTAIN ENERGY LLC | <sup>9</sup> Elevation<br>3136.1'                           |

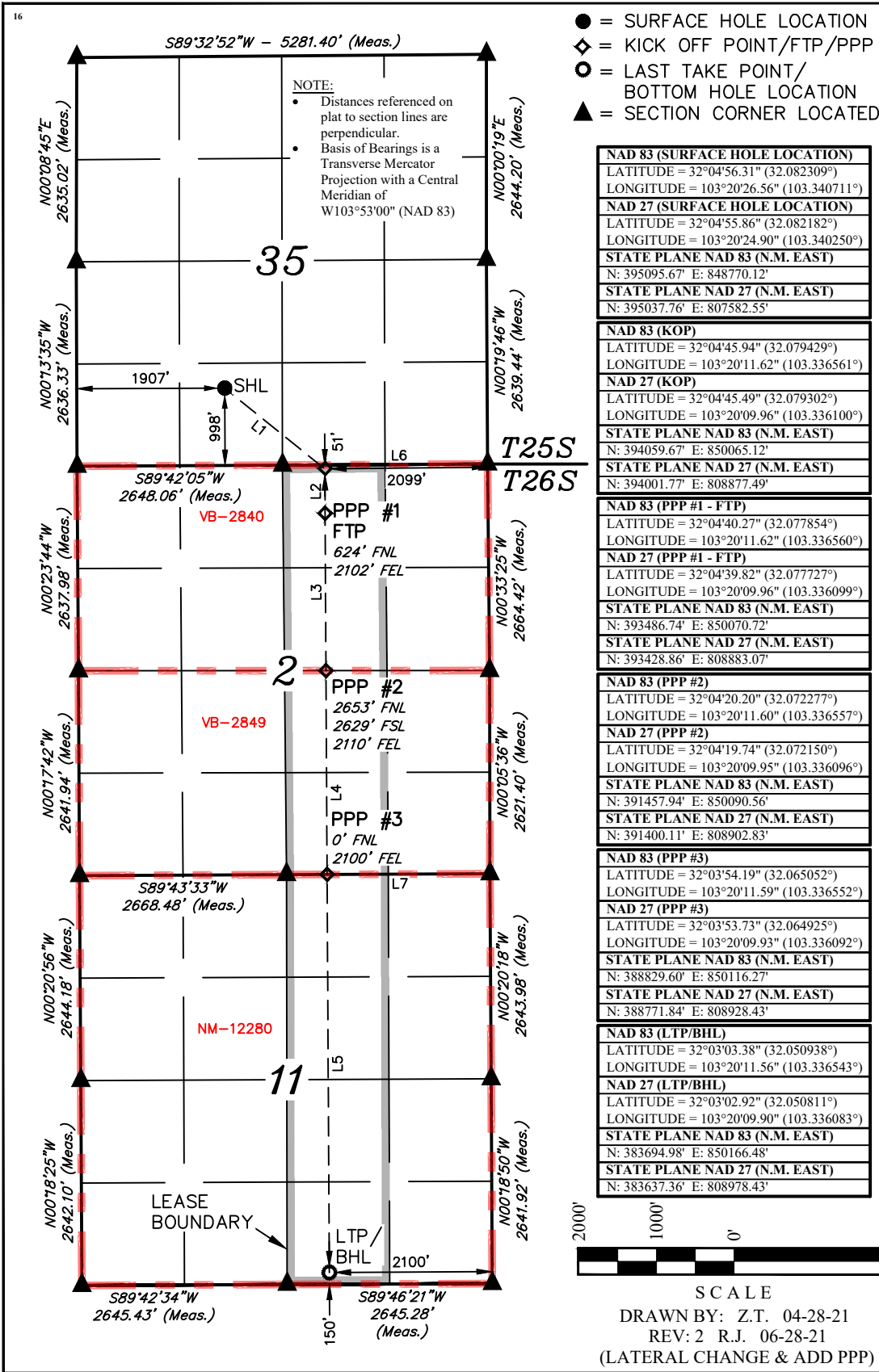
<sup>10</sup> Surface Location

|                    |               |                 |              |         |                      |                           |                       |                        |               |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|
| UL or lot no.<br>N | Section<br>35 | Township<br>25S | Range<br>35E | Lot Idn | Feet from the<br>998 | North/South line<br>SOUTH | Feet from the<br>1907 | East/West line<br>WEST | County<br>LEA |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|

<sup>11</sup> Bottom Hole Location If Different From Surface

|                                      |                               |                                  |                         |         |                      |                           |                       |                        |               |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|
| UL or lot no.<br>O                   | Section<br>11                 | Township<br>26S                  | Range<br>35E            | Lot Idn | Feet from the<br>150 | North/South line<br>SOUTH | Feet from the<br>2100 | East/West line<br>EAST | County<br>LEA |
| <sup>12</sup> Dedicated Acres<br>320 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |         |                      |                           |                       |                        |               |

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



**<sup>17</sup> OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: Shelly Albrecht Date: 7/7/2021

Printed Name: Shelly Albrecht

E-mail Address: salbrecht@fmellc.com

| LINE TABLE |             |          |
|------------|-------------|----------|
| LINE       | DIRECTION   | LENGTH   |
| L1         | S51°06'04"E | 1658.65' |
| L2         | S00°19'16"E | 573.04'  |
| L3         | S00°19'17"E | 2029.20' |
| L4         | S00°19'17"E | 2628.85' |
| L5         | S00°19'17"E | 5135.62' |
| L6         | S89°39'43"W | 2644.48' |
| L7         | S89°45'53"W | 2622.39' |

**<sup>18</sup> SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JUNE 03, 2021

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number:



State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Franklin Mountain Energy, LLC **OGRID:** 373910 **Date:** 03/\_08/\_2022

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

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

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

| Well Name              | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|------------------------|-----|-------|----------|-----------------------|-----------------------|----------------------------------|
| See Attached Well List |     |       |          |                       |                       |                                  |
|                        |     |       |          |                       |                       |                                  |

**IV. Central Delivery Point Name:** Tatanka North CTB: (f#) TBD [See 19.15.27.9(D)(1) NMAC]

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

| Well Name              | API | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|------------------------|-----|-----------|-----------------|------------------------------|------------------------|-----------------------|
| See Attached Well List |     |           |                 |                              |                        |                       |
|                        |     |           |                 |                              |                        |                       |

**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**

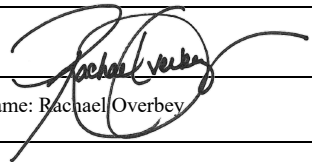
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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:      |
| Printed Name: Rachael Overbey                                                                    |
| Title: Director Operations Planning & Regulatory                                                 |
| E-mail Address: roverbey@fmelle.com                                                              |
| Date: 3/8/2022                                                                                   |
| Phone: 720-414-7868                                                                              |
| <b>OIL CONSERVATION DIVISION</b><br><b>(Only applicable when submitted as a standalone form)</b> |
| Approved By:                                                                                     |
| Title:                                                                                           |
| Approval Date:                                                                                   |
| Conditions of Approval:                                                                          |

**NATURAL GAS MANAGEMENT PLAN**

**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 14 Digit     | ULSTR        | Surface Location FTG | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|----------------------|------------------|--------------|----------------------|-----------------------|-----------------------|----------------------------------|
| Tatanka Fed Com 101H | TBD              | C-2-26S-35E  | 20 FNL 1347 FWL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 102H | TBD              | C-2-26S-35E  | 20 FNL 1372 FWL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 103H | TBD              | B-2-26S-35E  | 20 FNL 1875 FEL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 104H | TBD              | B-2-26S-35E  | 20 FNL 1850 FEL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 501H | TBD              | C-2-26S-35E  | 20 FNL 1397 FWL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 502H | TBD              | C-2-26S-35E  | 20 FNL 1422 FWL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 503H | TBD              | B-2-26S-35E  | 20 FNL 1925 FEL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 504H | TBD              | B-2-26S-35E  | 20 FNL 1900 FEL      | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 601H | TBD              | D-2-26S-35E  | 10 FNL 545 FWL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 602H | TBD              | N-35-25S-35E | 998 FSL 1807 FWL     | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 603H | TBD              | N-35-25S-35E | 998 FSL 1907 FWL     | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 604H | TBD 30-025-49875 | A-2-26S-35E  | 20 FNL 885 FEL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 701H | TBD              | D-2-26S-35E  | 10 FNL 620 FWL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 702H | TBD              | N-35-25S-35E | 998 FSL 1782 FWL     | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 703H | TBD              | N-35-25S-35E | 998 FSL 1857 FWL     | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 704H | TBD              | A-2-26S-35E  | 20 FNL 935 FEL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 705H | TBD              | A-2-26S-35E  | 20 FNL 860 FEL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 801H | TBD              | D-2-26S-35E  | 10 FNL 570 FWL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 802H | TBD              | D-2-26S-35E  | 10 FNL 595 FWL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 803H | TBD              | N-35-25S-35E | 998 FSL 1832 FWL     | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 804H | TBD              | N-35-25S-35E | 998 FSL 1882 FWL     | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 805H | TBD              | A-2-26S-35E  | 20 FNL 910 FEL       | 800 +/-               | 700 +/-               | 600 +/-                          |
| Tatanka Fed Com 806H | TBD              | A-2-26S-35E  | 20 FNL 835 FEL       | 800 +/-               | 700 +/-               | 600 +/-                          |

**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 14 Digit     | Spud Date (Batch Drilling) | TD Reached Date | Completion Commencement Date | Initial Flowback Date | First Production Date |
|----------------------|------------------|----------------------------|-----------------|------------------------------|-----------------------|-----------------------|
| Tatanka Fed Com 101H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 102H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 103H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 104H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 501H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 502H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 503H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 504H | TBD              | TBD                        | TBD             | TBD                          | TBD                   | TBD                   |
| Tatanka Fed Com 601H | TBD              | 7/15/2022                  | 12/15/2022      | 2/28/2023                    | 3/28/2023             | 4/2/2023              |
| Tatanka Fed Com 602H | TBD              | 6/15/2022                  | 12/15/2022      | 1/30/2023                    | 3/10/2023             | 3/13/2023             |
| Tatanka Fed Com 603H | TBD 30-025-49875 | 6/15/2022                  | 12/15/2022      | 1/30/2023                    | 3/10/2023             | 3/13/2023             |
| Tatanka Fed Com 604H | TBD              | 7/1/2022                   | 12/15/2022      | 1/30/2023                    | 3/1/2023              | 3/4/2023              |
| Tatanka Fed Com 701H | TBD              | 7/15/2022                  | 12/15/2022      | 2/28/2023                    | 3/28/2023             | 4/2/2023              |
| Tatanka Fed Com 702H | TBD              | 6/15/2022                  | 12/15/2022      | 1/30/2023                    | 3/10/2023             | 3/13/2023             |
| Tatanka Fed Com 703H | TBD              | 6/15/2022                  | 12/15/2022      | 1/30/2023                    | 3/10/2023             | 3/13/2023             |
| Tatanka Fed Com 704H | TBD              | 7/1/2022                   | 12/15/2022      | 1/30/2023                    | 3/1/2023              | 3/4/2023              |
| Tatanka Fed Com 705H | TBD              | 7/1/2022                   | 12/15/2022      | 1/30/2023                    | 3/1/2023              | 3/4/2023              |
| Tatanka Fed Com 801H | TBD              | 7/15/2022                  | 12/15/2022      | 2/28/2023                    | 3/28/2023             | 4/2/2023              |
| Tatanka Fed Com 802H | TBD              | 7/15/2022                  | 12/15/2022      | 2/28/2023                    | 3/28/2023             | 4/2/2023              |
| Tatanka Fed Com 803H | TBD              | 6/15/2022                  | 12/15/2022      | 1/30/2023                    | 3/10/2023             | 3/13/2023             |
| Tatanka Fed Com 804H | TBD              | 6/15/2022                  | 12/15/2022      | 1/30/2023                    | 3/10/2023             | 3/13/2023             |
| Tatanka Fed Com 805H | TBD              | 7/1/2022                   | 12/15/2022      | 1/30/2023                    | 3/1/2023              | 3/4/2023              |
| Tatanka Fed Com 806H | TBD              | 7/1/2022                   | 12/15/2022      | 1/30/2023                    | 3/1/2023              | 3/4/2023              |



## Natural Gas Management Plan

### Items VI-VIII

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

- Data from surrounding wells is used to generate type curves which provides the basis for expected gas rates during initial production, peak production and then the natural decline.
- Separation equipment will be sized to provide adequate separation for peak production.
- Facility design includes multiple stages of separation to minimize gas waste. Wells flow through a high pressure 2-phase separator to remove bulk gas, liquid from the 2-phase separator is sent to a 3-phase separator where additional gas is separated. Gas from the 2 Phase and 3 Phase separators are then sent through a gas scrubber before being route to treatment and/or sales. As production declines the 2-phase separator may be removed.
- Industry standard sizing calculations are used for gas-liquid separation and liquid-liquid separation.

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

- Drilling, completion and production setup is designed to minimize the waste of natural gas and to flare instead of vent.
- *Drilling Operations:*
  - Natural gas encountered will be flared instead of vented unless there is an equipment malfunction and/or to avoid risking safety or the environment.
  - Flares will be properly sized and placed at least 100' from the nearest surface hole on the pad.
- *Completions/Recompletions Operations:*
  - Flowback operations will not commence until connected to a properly sized gas gathering system.
  - During initial flowback wells are routed to the separation equipment as soon as technically feasible to minimize gas waste.
  - During separation flowback wells are routed to the separation equipment to minimize gas waste.
  - Gas sales is maximized. Gas will be flared instead of vented during an emergency or malfunction to avoid posing a risk to operations or personnel safety.
  - Flares are properly sized with a continuous pilot.
- *Production Operations:*
  - Gas sales will be maximized. Gas will be flared instead of vented during an emergency or malfunction to avoid posing a risk to operations or personnel safety.
  - After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- *Performance Standards:*
  - The facility will be designed to handle peak production rates and pressures.
  - All tanks will have automatic gauging equipment.
  - Flares will be designed to ensure proper combustion and will have continuous pilots. Flares will be located 100' from nearest surface hole on the pad and storage tanks.
  - Weekly AVOs will be performed, and any leaking thief hatches will be cleaned and properly re-sealed.





- **Measurement and Calibration:**
  - All volume that is flared and vented that is not measured will be estimated.
  - When metering is not practical due to low pressure/rate, all vented or flared volumes will be estimated.
  - Measurement will conform to industry standards. Measurement will not be bypassed except for purposes of inspection or calibration.

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

- Venting will be minimized during active and planned maintenance.
- Systems and equipment requiring maintenance will be isolated and blown down to sales and then flare before any remaining gas is vented in an effort to minimize waste and venting.
- Downhole maintenance will use best management practices to minimize vent.





## Tatanka Fed Com 603H

1. Geologic name of surface location: Permian
2. Estimated tops of important geological markers:

| Formations                    | PROG SS | PROG TVD | Picked TVD | delta | Potential/Issues                 |
|-------------------------------|---------|----------|------------|-------|----------------------------------|
| Cenozoic Alluvium (surface)   | 3,130'  | 30'      | 30'        | 0     | Sand/Gravels/unconsolidated      |
| Rustler                       | 2,371'  | 789'     |            |       | Carbonates                       |
| Salado                        | 1,895'  | 1,265'   |            |       | Salt, Carbonate & Clastics       |
| Base Salt                     | -382'   | 3,542'   |            |       | Shaley Carbonate & Shale         |
| Lamar                         | -1,944' | 5,104'   |            |       | Carbonate & Clastics             |
| Bell Canyon                   | -2,025' | 5,185'   |            |       | Sandstone - oil/gas/water        |
| Cherry Canyon                 | -2,893' | 6,053'   |            |       | Sandstone - oil/gas/water        |
| Brushy Canyon                 | -4,329' | 7,489'   |            |       | Sand/carb/shales - oil/gas/water |
| Bone Spring Lime              | -5,642' | 8,802'   |            |       | Shale/Carbonates - oil/gas       |
| Avalon                        | -5,681' | 8,841'   |            |       | Shale/Carbonates - oil/gas       |
| Chert Zone                    | -5,862' | 9,022'   |            |       | Chert/Carbonate                  |
| First Bone Spring Sand        | -6,919' | 10,079'  |            |       | Sandstone - oil/gas/water        |
| Second Bone Spring Carbonates | -7,089' | 10,249'  |            |       | Shale/Carbonates - oil/gas       |
| Second Bone Spring Sand       | -7,442' | 10,602'  |            |       | Sandstone - oil/gas/water        |
| Third Bone Spring Carbonates  | -8,020' | 11,180'  |            |       | Shale/Carbonates - oil/gas       |
| Third Bone Spring Sand        | -8,722' | 11,882'  |            |       | Sandstone - oil/gas/water        |
| HZ Target at Landing          | -8,905' | 12,065'  |            |       | Overpressure shale/sand- Oil/Gas |
| Wolfcamp                      | -9,004' | 12,164'  |            |       | Overpressure shale/sand- Oil/Gas |
| Wolfcamp A                    | -9,068' | 12,228'  |            |       | Overpressure Shale - Oil/Gas     |
| Wolfcamp B                    | -9,286' | 12,446'  |            |       | Overpressure Shale - Oil/Gas     |

3. Estimated depth of anticipated fresh water, oil or gas:

|                     |         |             |
|---------------------|---------|-------------|
| Upper Permian Sands | 0- 400' | Fresh Water |
| Delaware Sands      | 5,185'  | Oil         |
| Bone Spring         | 10,079' | Oil         |
| Wolfcamp            | 12,164' | Oil         |

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Surface freshwater sands will be protected by setting 13 3/8" casing at 1,300' and circulating cement back to surface.

4. Casing Program:

All casing strings will be run new. Safety factors calculated assuming the well is vertical.

| Casing string       | Weight | Grade   | Burst | Collapse | Tension | Conn                | Length         | API design factor |          |         |              |
|---------------------|--------|---------|-------|----------|---------|---------------------|----------------|-------------------|----------|---------|--------------|
|                     |        |         |       |          |         |                     |                | Burst             | Collapse | Tension | Coupling     |
| Surface 13 3/8"     | 54.5   | J-55    | 2730  | 1130     | 853     | BTC<br>909          | 1300           | 1.18              | 1.67     | 4.99    | 5.32         |
| Intermediate 9 5/8" | 40     | HCL-80  | 7430  | 4230     | 916     | BTC<br>1042         | 5170           | 1.77              | 1.75     | 2.99    | 3.40         |
| Intermediate 7 5/8" | 29.7   | HCP-110 | 8280  | 7150     | 827     | Stinger<br>564      | 12653          | 1.05              | 1.21     | 1.74    | 1.19         |
| Long string 5 1/2"  | 23     | P-110   | 14520 | 14520    | 729     | Eagle<br>606<br>TVD | 22445<br>12065 | 1.32              | 1.38     | 1.18    | 0.98<br>1.61 |



7 5/8" casing will be set at 12,653' MD/12,065' TVD at 90° Inc. Stress calculations on 5 1/2" casing performed assuming 22,445' depth. Actual max vertical depth is 12,065'.

### Cementing Program:

Cementing Stage tool can be placed in the 1<sup>st</sup> Intermediate string as a contingency to ensure required TOC to surface.

| String Type | Hole Size | Casing Size | Setting Depth | Sacks | Type of cmt                                             | Lead Yield ft <sup>3</sup> /sk | Water gal/sk | TOC ft | Sacks | Type of cmt                                | Tail Yield ft <sup>3</sup> /sk | Water gal/sk | TOC   | Excess |
|-------------|-----------|-------------|---------------|-------|---------------------------------------------------------|--------------------------------|--------------|--------|-------|--------------------------------------------|--------------------------------|--------------|-------|--------|
| Surf        | 17.5      | 13.375      | 1300          | 795   | Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal          | 1.747                          | 9.06         | 0      | 334   | Tail, 14.8 ppg, Class C,                   | 1.349                          | 6.51         | 1000  | 100%   |
|             |           |             |               |       | 0.125pps Poly-E-Flake                                   |                                |              |        |       | 1% CaCl <sub>2</sub> , 0.125pps Celo-Flake |                                |              |       |        |
| Int1        | 12.25     | 9.625       | 5170          | 1512  | Lead, 12.8 ppg, Class C 5% Salt,                        | 1.79                           | 9.74         | 0      | 154   | Tail, 14.8 ppg, Class C,                   | 1.33                           | 6.37         | 4870  | 100%   |
|             |           |             |               |       | 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal                 |                                |              |        |       | 0.1% HR 800 .125 pps Poly-E-Flake          |                                |              |       |        |
| Int2        | 8.75      | 7.625       | 12653         | 402   | Lite Fill, 9.5 ppg, Class C 3lb/sk                      | 2.13                           | 5.97         | 4150   | 94    | NeoCem 14.8 ppg, Class C                   | 1.33                           | 6.29         | 11653 | 50%    |
|             |           |             |               |       | Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake |                                |              |        |       | 0.25 pps Cello-Flake, 2% CaCl <sub>2</sub> |                                |              |       |        |
| Prod        | 6.75      | 5.5         | 22445         | 805   | Tail, 14.5 ppg, Gas Migration Control                   | 1.34                           | 6.22         | 11653  |       |                                            |                                |              |       | 20%    |

### 5. Minimum Specifications for Pressure Control:

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated, and the ram-type will be equipped with blind rams on bottom and 4 1/2" x 7" variable pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5,000/250 psig and the annular preventer to 5,000/250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the second intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The second intermediate casing will be tested to 2000 psi for 30 minutes prior to drillout.

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.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.



## 6. Types and characteristics of the proposed mud system:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal. The applicable depths and properties of the drilling fluid systems are as follows.

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 – 1,300'                   | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,300' – 12,653'             | Brine       | 8.8-10.2     | 28-34     | N/c        |
| 12,653' – 22,445'<br>Lateral | Oil Base    | 10.0-12.0    | 58-68     | 3 - 6      |

The highest mud weight needed to balance formation is expected to be 10-11 ppg. In order to maintain hole stability, mud weights up to 12 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

## 7. Auxiliary well control and monitoring equipment:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

(C) H<sub>2</sub>S monitoring and detection equipment will be utilized from surface casing point to TD.

(D) A wear bushing will be installed in the wellhead prior to drilling out of the surface casing.

## 8. Logging, testing and coring program:

GR–CCL–CNL Will be run in cased hole during completions phase of operations.

Open-hole logs are not planned for this well.

## 9. Abnormal conditions, pressures, temperatures and potential hazards:

The estimated bottom-hole temperature at 12,065' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,842 psig (based on 12.5 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

## 10. Hydrogen Sulfide Plan:

A. All personnel shall receive proper awareness H<sub>2</sub>S training.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment

a. Well Control Equipment

i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.

ii. Choke manifold with a remotely operated hydraulic choke.

iii. Mud/gas separator

b. Protective equipment for essential personnel

i. Breathing Apparatus

1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.

2. Work/Escapes packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity



3. Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.
- ii. Auxiliary Rescue Equipment
  1. Stretcher
  2. Two OSHA full body harnesses
  3. 100 feet of 5/8 inches OSHA approved rope
  4. 1-20# class ABC fire extinguisher
- c. H2S Detection and Monitoring Equipment
  - i. A stationary detector with three sensors will be placed in the doghouse if equipped, set to visually alarm at 10 ppm and audible at 14 ppm. The detector will be calibrated a minimum of every 30 days or as needed. The sensors will be placed in the following places:
    1. Rig Floor
    2. Below Rig Floor / Near BOPs
    3. End of flow line or where well bore fluid is being discharged (near shakers)
  - ii. If H2S is encountered, measured values and formations will be provided to the BLM.
- d. Visual Warning Systems
  - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  - iii. Two windsocks will be placed in strategic locations, visible from all angles.
- e. Mud Program
  - i. The Mud program will be designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.
- f. Metallurgy
  - i. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service at the anticipated operating pressures to prevent sour sulfide stress cracking.
- g. Communication
  - i. Communication will be via cell phones and walkie talkies on location.

Franklin Mountain Energy has conducted a review of offset operated wells to determine if an H2S contingency plan is required for the proposed well. Based on concentrations of offset wells, proximity to main roads, and distance to populated areas, the radius of exposure created by a potential release was determined to be minimal and low enough to not necessitate an H2S contingency plan. This will be reevaluated during wellbore construction if H2S is observed and after the well is on production.

#### **11. Anticipated starting date and duration of operations:**

The drilling operations on the well should be finished in approximately one month. However, in order to minimize disturbance in the area and to improve efficiency Franklin Mountain is planning to drill all the wells on the pad prior to commence completion operations. To even further reduce the time heavy machinery is used the “batch drilling” method may be used. A batch drilling sequence sundry will be submitted for BLM approval prior to spud. A drilling rig with walking/skidding capabilities will be used.

**12. Disposal/environmental concerns:**

- (A) Drilled cuttings will be hauled to and disposed of in a state-certified disposal site.
- (B) Non-hazardous waste mud/cement from the drilling process will also be hauled to and disposed of in a state-certified disposal site.
- (C) Garbage will be hauled to the Pecos City Landfill.
- (D) Sewage (grey water) will be hauled to the Carlsbad City Landfill

**13. Wellhead:**

A multi-bowl wellhead system will be utilized.

After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 21 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 5,000 psi.

After running the 2nd intermediate casing, and before drilling out, the wellhead, BOP, and related equipment will be tested to 10,000/250 psig.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Cactus Multi-Bowl WH system has been sent to the BLM office in Carlsbad.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing strings. After installation of the first intermediate string the pack-off and lower flanges will be pressure tested to 5000 psi. After installation of the second intermediate string, the pack-off and upper flange will be pressure tested to 10,000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

**14. Additional variance requests****A. Casing.**

In order to minimize potential environmental and technical hazards, this well is planned with two intermediate strings of casing.

1. Variance is requested to wave the centralizer requirements for the 7 5/8" casing due to the tight clearance with 9 5/8" string.
2. Variance is requested to wave/reduce the centralizer requirements for the 5 1/2" casing due to the tight clearance with 6 3/4" hole and 5 1/2" casing due to tight clearances.

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# Franklin Mountain Energy

Project: Lea County, NM (NAD83)  
Site: Tatanka Fed Com  
Well: Tatanka Fed Com 603H  
Wellbore: OH  
Design: Plan #1

3136.1' GE + 30' KB @ 3166.10usft



Azimuths to Grid North  
True North: -0.53°  
Magnetic North: 5.90°

Magnetic Field  
Strength: 47432.2nT  
Dip Angle: 59.80°  
Date: 6/25/2021  
Model: IGRF2020

PROJECT DETAILS: Lea County, NM (NAD83)

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



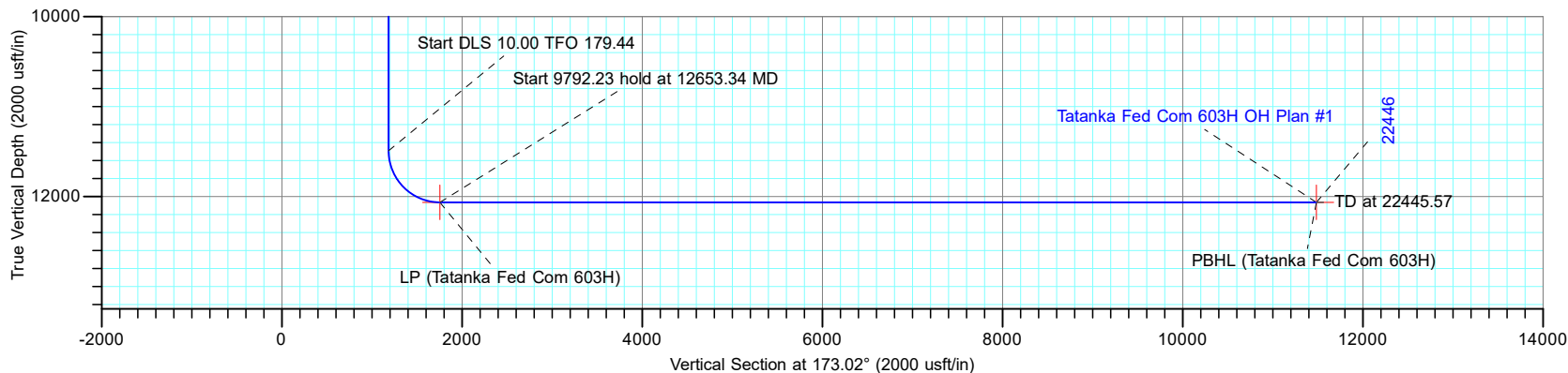
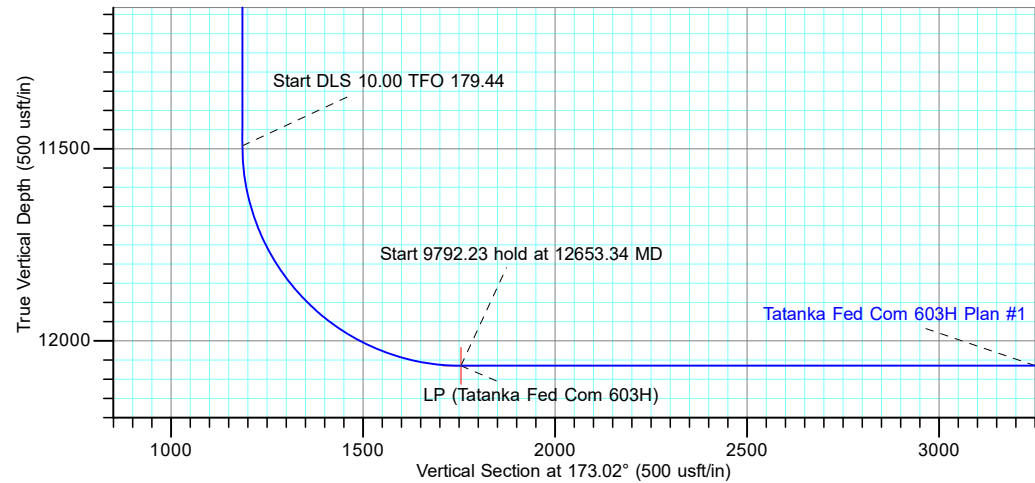
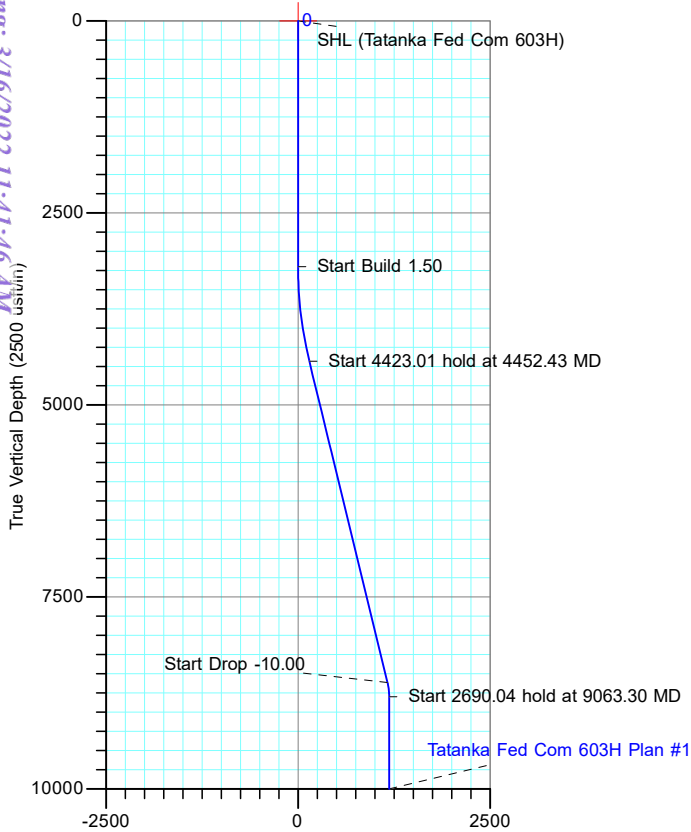
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## SECTION DETAILS

| MD       | Inc   | Azi    | TVD      | +N/-S     | +E/-W   | Dleg  | TFace  | VSect    | Annotation                        |
|----------|-------|--------|----------|-----------|---------|-------|--------|----------|-----------------------------------|
| 0.00     | 0.00  | 0.00   | 0.00     | 0.00      | 0.00    | 0.00  | 0.00   | 0.00     |                                   |
| 3200.00  | 0.00  | 0.00   | 3200.00  | 0.00      | 0.00    | 0.00  | 0.00   | 0.00     | Start Build 1.50                  |
| 4452.43  | 18.79 | 128.66 | 4430.11  | -127.12   | 158.90  | 1.50  | 128.66 | 145.50   | Start 4423.01 hold at 4452.43 MD  |
| 8875.44  | 18.79 | 128.66 | 8617.48  | -1016.93  | 1271.16 | 0.00  | 0.00   | 1163.93  | Start Drop -10.00                 |
| 9063.30  | 0.00  | 0.00   | 8802.00  | -1036.00  | 1295.00 | 10.00 | 180.00 | 1185.75  | Start 2690.04 hold at 9063.30 MD  |
| 11753.34 | 0.00  | 0.00   | 11492.04 | -1036.00  | 1295.00 | 0.00  | 0.00   | 1185.75  | Start DLS 10.00 TFO 179.44        |
| 12653.34 | 90.00 | 179.44 | 12065.00 | -1608.93  | 1300.60 | 10.00 | 179.44 | 1755.11  | Start 9792.23 hold at 12653.34 MD |
| 22445.57 | 90.00 | 179.44 | 12065.00 | -11400.69 | 1396.36 | 0.00  | 0.00   | 11485.88 | TD at 22445.57                    |

## DESIGN TARGET DETAILS

| Name                        | TVD      | +N/-S     | +E/-W   | Latitude  | Longitude   |
|-----------------------------|----------|-----------|---------|-----------|-------------|
| LP (Tatanka Fed Com 603H)   | 12065.00 | -1608.93  | 1300.60 | 32.077854 | -103.336560 |
| PBHL (Tatanka Fed Com 603H) | 12065.00 | -11400.69 | 1396.36 | 32.050938 | -103.336543 |
| SHL (Tatanka Fed Com 603H)  | 0.00     | 0.00      | 0.00    | 32.082309 | -103.340711 |



TOTAL DIRECTIONAL SERVICES LLC  
671 Academy Ct, Windsor, CO 80550  
Phone: (970) 460-9402

Plan: Plan #1 (Tatanka Fed Com 603H/OH)  
Created By: Dustin Ault  
Date: 11:58, June 25 2021  
Approved: \_\_\_\_\_ Date: \_\_\_\_\_

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# Franklin Mountain Energy

Project: Lea County, NM (NAD83)  
Site: Tatanka Fed Com  
Well: Tatanka Fed Com 603H  
Wellbore: OH  
Design: Plan #1

Azimuths to Grid North  
True North: -0.53°  
Magnetic North: 5.90°

Magnetic Field  
Strength: 47432.2nT  
Dip Angle: 59.80°  
Date: 6/25/2021  
Model: IGRF2020

PROJECT DETAILS: Lea County, NM (NAD83)  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

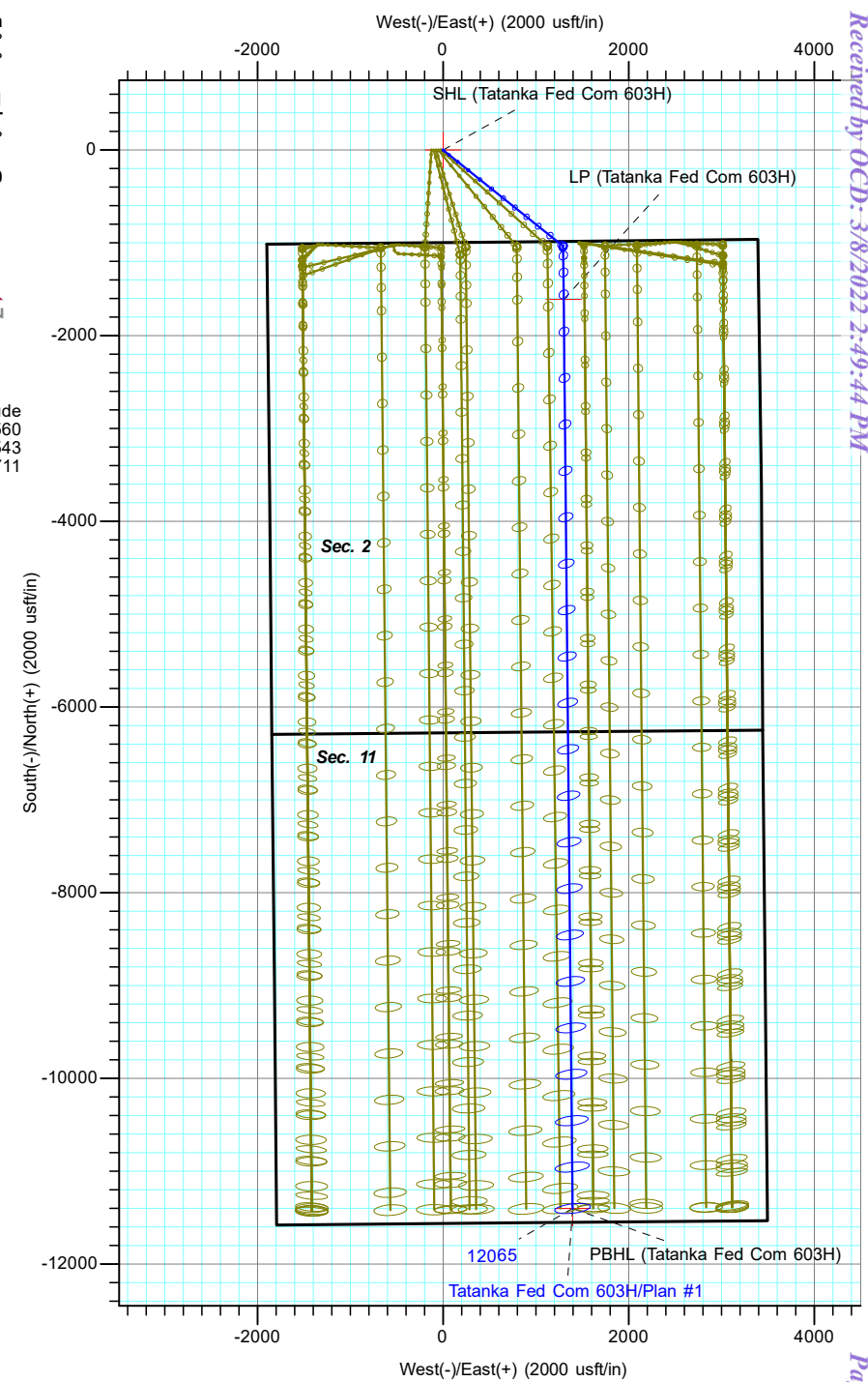
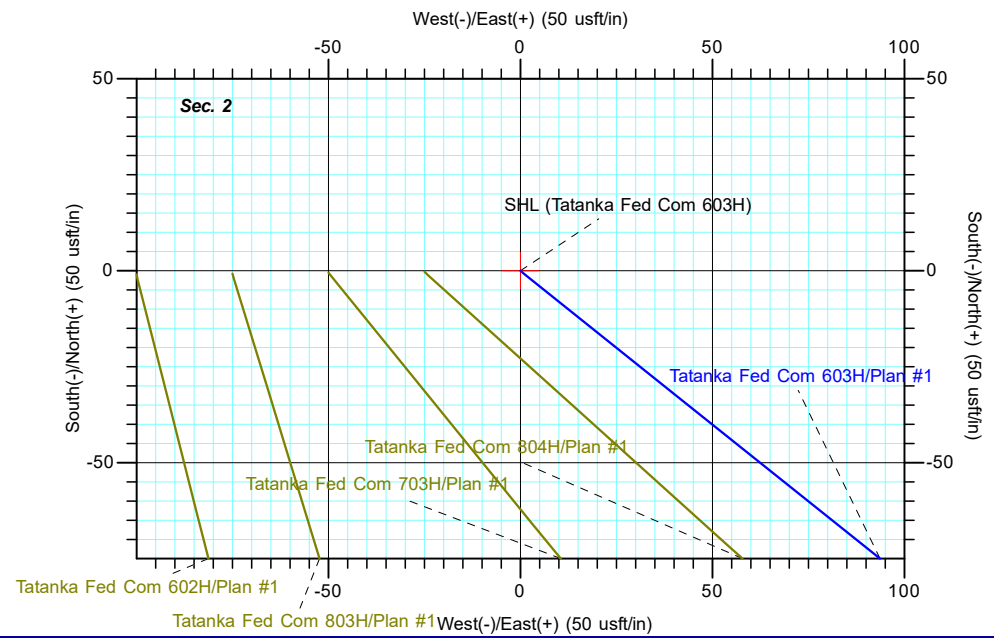


## DESIGN TARGET DETAILS

| Name                        | TVD      | +N/-S     | +E/-W   | Northing  | Easting   | Latitude  | Longitude   |
|-----------------------------|----------|-----------|---------|-----------|-----------|-----------|-------------|
| LP (Tatanka Fed Com 603H)   | 12065.00 | -1608.93  | 1300.60 | 393486.74 | 850070.72 | 32.077854 | -103.336560 |
| PBHL (Tatanka Fed Com 603H) | 12065.00 | -11400.69 | 1396.36 | 383694.98 | 850166.48 | 32.050938 | -103.336543 |
| SHL (Tatanka Fed Com 603H)  | 0.00     | 0.00      | 0.00    | 395095.67 | 848770.12 | 32.082309 | -103.340711 |

## SECTION DETAILS

| MD       | Inc   | Azi    | TVD      | +N/-S     | +E/-W   | Dleg  | TFace  | VSect    | Annotation                        |
|----------|-------|--------|----------|-----------|---------|-------|--------|----------|-----------------------------------|
| 0.00     | 0.00  | 0.00   | 0.00     | 0.00      | 0.00    | 0.00  | 0.00   | 0.00     |                                   |
| 3200.00  | 0.00  | 0.00   | 3200.00  | 0.00      | 0.00    | 0.00  | 0.00   | 0.00     | Start Build 1.50                  |
| 4452.43  | 18.79 | 128.66 | 4430.11  | -127.12   | 158.90  | 1.50  | 128.66 | 145.50   | Start 4423.01 hold at 4452.43 MD  |
| 8875.44  | 18.79 | 128.66 | 8617.48  | -1016.93  | 1271.16 | 0.00  | 0.00   | 1163.93  | Start Drop -10.00                 |
| 9063.30  | 0.00  | 0.00   | 8802.00  | -1036.00  | 1295.00 | 10.00 | 180.00 | 1185.75  | Start 2690.04 hold at 9063.30 MD  |
| 11753.34 | 0.00  | 0.00   | 11492.04 | -1036.00  | 1295.00 | 0.00  | 0.00   | 1185.75  | Start DLS 10.00 TFO 179.44        |
| 12653.34 | 90.00 | 179.44 | 12065.00 | -1608.93  | 1300.60 | 10.00 | 179.44 | 1755.11  | Start 9792.23 hold at 12653.34 MD |
| 22445.57 | 90.00 | 179.44 | 12065.00 | -11400.69 | 1396.36 | 0.00  | 0.00   | 11485.88 | TD at 22445.57                    |



TOTAL DIRECTIONAL SERVICES LLC  
671 Academy Ct, Windsor, CO 80550  
Phone: (970) 460-9402

Plan: Plan #1 (Tatanka Fed Com 603H/OH)  
Tatanka Fed Com  
Created By: Dustin Ault  
Date: 11:59, June 25 2021  
Approved: \_\_\_\_\_  
Date: \_\_\_\_\_





# Franklin Mountain Energy

Lea County, NM (NAD83)

Tatanka Fed Com

Tatanka Fed Com 603H

OH

Plan: Plan #1

## Standard Planning Report

25 June, 2021





## Total Directional Services

### Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, NM (NAD83)    |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone   |                      |                |

| Site                  |           | Tatanka Fed Com |                 |                   |             |
|-----------------------|-----------|-----------------|-----------------|-------------------|-------------|
| Site Position:        |           | Northing:       | 394,075.36 usft | Latitude:         | 32.079539   |
| From:                 | Map       | Easting:        | 847,416.74 usft | Longitude:        | -103.345111 |
| Position Uncertainty: | 0.00 usft | Slot Radius:    | 13-3/16 "       | Grid Convergence: | 0.52        |

| Well                 | Tatanka Fed Com 603H |               |                     |                 |               |               |
|----------------------|----------------------|---------------|---------------------|-----------------|---------------|---------------|
| Well Position        | +N/-S                | 1,020.31 usft | Northing:           | 395,095.67 usft | Latitude:     | 32.082309     |
|                      | +E/-W                | 1,353.38 usft | Easting:            | 848,770.12 usft | Longitude:    | -103.340711   |
| Position Uncertainty |                      | 0.00 usft     | Wellhead Elevation: |                 | Ground Level: | 3,136.10 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2020          | 6/25/2021          | 6.42                   | 59.80                | 47,432.19071073            |

|                          |                                |                     |                      |                      |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| <b>Design</b>            | Plan #1                        |                     |                      |                      |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                  | PLAN                | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |
|                          | 0.00                           | 0.00                | 0.00                 | 173.02               |

|                                 |                        |                          |                     |                |
|---------------------------------|------------------------|--------------------------|---------------------|----------------|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 6/25/2021                |                     |                |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>    | <b>Remarks</b> |
| 1                               | 0.00                   | 22,445.57 Plan #1 (OH)   | OWSG (Rev2) MWD     |                |
|                                 |                        |                          | OWSG MWD - Standard |                |

|                              |                        |                    |                              |                     |                     |                                |                               |                              |                |                     |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|------------------------------|----------------|---------------------|
| <b>Plan Sections</b>         |                        |                    |                              |                     |                     |                                |                               |                              |                |                     |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> | <b>TFO (°)</b> | <b>Target</b>       |
| 0.00                         | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 0.00                           | 0.00                          | 0.00                         | 0.00           |                     |
| 3,200.00                     | 0.00                   | 0.00               | 3,200.00                     | 0.00                | 0.00                | 0.00                           | 0.00                          | 0.00                         | 0.00           |                     |
| 4,452.43                     | 18.79                  | 128.66             | 4,430.11                     | -127.12             | 158.90              | 1.50                           | 1.50                          | 0.00                         | 128.66         |                     |
| 8,875.44                     | 18.79                  | 128.66             | 8,617.48                     | -1,016.93           | 1,271.16            | 0.00                           | 0.00                          | 0.00                         | 0.00           |                     |
| 9,063.30                     | 0.00                   | 0.00               | 8,802.00                     | -1,036.00           | 1,295.00            | 10.00                          | -10.00                        | 0.00                         | 180.00         |                     |
| 11,753.34                    | 0.00                   | 0.00               | 11,492.04                    | -1,036.00           | 1,295.00            | 0.00                           | 0.00                          | 0.00                         | 0.00           |                     |
| 12,653.34                    | 90.00                  | 179.44             | 12,065.00                    | -1,608.93           | 1,300.60            | 10.00                          | 10.00                         | 19.94                        | 179.44         |                     |
| 22,445.57                    | 90.00                  | 179.44             | 12,065.00                    | -11,400.69          | 1,396.36            | 0.00                           | 0.00                          | 0.00                         | 0.00           | PBHL (Tatanka Fed C |



## Total Directional Services

### Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

| 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                  |
| SHL (Tatanka Fed Com 603H)       |                 |             |                       |              |              |                         |                         |                        |                       |
| 100.00                           | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                           | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 300.00                           | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 400.00                           | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 500.00                           | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 600.00                           | 0.00            | 0.00        | 600.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 700.00                           | 0.00            | 0.00        | 700.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 800.00                           | 0.00            | 0.00        | 800.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 900.00                           | 0.00            | 0.00        | 900.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00                         | 0.00            | 0.00        | 1,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                         | 0.00            | 0.00        | 1,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                         | 0.00            | 0.00        | 1,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                         | 0.00            | 0.00        | 1,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                         | 0.00            | 0.00        | 1,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                         | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                         | 0.00            | 0.00        | 1,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                         | 0.00            | 0.00        | 1,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                         | 0.00            | 0.00        | 1,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                         | 0.00            | 0.00        | 1,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                         | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                         | 0.00            | 0.00        | 2,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                         | 0.00            | 0.00        | 2,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                         | 0.00            | 0.00        | 2,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                         | 0.00            | 0.00        | 2,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                         | 0.00            | 0.00        | 2,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                         | 0.00            | 0.00        | 2,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                         | 0.00            | 0.00        | 2,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                         | 0.00            | 0.00        | 2,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                         | 0.00            | 0.00        | 2,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                         | 0.00            | 0.00        | 3,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                         | 0.00            | 0.00        | 3,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                         | 0.00            | 0.00        | 3,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| Start Build 1.50                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,300.00                         | 1.50            | 128.66      | 3,299.99              | -0.82        | 1.02         | 0.94                    | 1.50                    | 1.50                   | 0.00                  |
| 3,400.00                         | 3.00            | 128.66      | 3,399.91              | -3.27        | 4.09         | 3.74                    | 1.50                    | 1.50                   | 0.00                  |
| 3,500.00                         | 4.50            | 128.66      | 3,499.69              | -7.36        | 9.19         | 8.42                    | 1.50                    | 1.50                   | 0.00                  |
| 3,600.00                         | 6.00            | 128.66      | 3,599.27              | -13.07       | 16.34        | 14.96                   | 1.50                    | 1.50                   | 0.00                  |
| 3,700.00                         | 7.50            | 128.66      | 3,698.57              | -20.41       | 25.52        | 23.36                   | 1.50                    | 1.50                   | 0.00                  |
| 3,800.00                         | 9.00            | 128.66      | 3,797.54              | -29.38       | 36.72        | 33.62                   | 1.50                    | 1.50                   | 0.00                  |
| 3,900.00                         | 10.50           | 128.66      | 3,896.09              | -39.96       | 49.95        | 45.73                   | 1.50                    | 1.50                   | 0.00                  |
| 4,000.00                         | 12.00           | 128.66      | 3,994.16              | -52.14       | 65.18        | 59.68                   | 1.50                    | 1.50                   | 0.00                  |
| 4,100.00                         | 13.50           | 128.66      | 4,091.70              | -65.93       | 82.41        | 75.46                   | 1.50                    | 1.50                   | 0.00                  |
| 4,200.00                         | 15.00           | 128.66      | 4,188.62              | -81.31       | 101.63       | 93.06                   | 1.50                    | 1.50                   | 0.00                  |
| 4,300.00                         | 16.50           | 128.66      | 4,284.86              | -98.26       | 122.83       | 112.47                  | 1.50                    | 1.50                   | 0.00                  |
| 4,400.00                         | 18.00           | 128.66      | 4,380.36              | -116.79      | 145.98       | 133.67                  | 1.50                    | 1.50                   | 0.00                  |
| 4,452.43                         | 18.79           | 128.66      | 4,430.11              | -127.12      | 158.90       | 145.50                  | 1.50                    | 1.50                   | 0.00                  |
| Start 4423.01 hold at 4452.43 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,500.00                         | 18.79           | 128.66      | 4,475.14              | -136.69      | 170.86       | 156.45                  | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                         | 18.79           | 128.66      | 4,569.82              | -156.81      | 196.01       | 179.48                  | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                         | 18.79           | 128.66      | 4,664.49              | -176.93      | 221.16       | 202.50                  | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                         | 18.79           | 128.66      | 4,759.16              | -197.04      | 246.31       | 225.53                  | 0.00                    | 0.00                   | 0.00                  |



# Total Directional Services

## Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

| Planned Survey                          |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,900.00                                | 18.79           | 128.66      | 4,853.84              | -217.16      | 271.45       | 248.55                  | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                                | 18.79           | 128.66      | 4,948.51              | -237.28      | 296.60       | 271.58                  | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                                | 18.79           | 128.66      | 5,043.18              | -257.40      | 321.75       | 294.60                  | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                                | 18.79           | 128.66      | 5,137.85              | -277.52      | 346.89       | 317.63                  | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                                | 18.79           | 128.66      | 5,232.53              | -297.63      | 372.04       | 340.66                  | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                                | 18.79           | 128.66      | 5,327.20              | -317.75      | 397.19       | 363.68                  | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                                | 18.79           | 128.66      | 5,421.87              | -337.87      | 422.34       | 386.71                  | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00                                | 18.79           | 128.66      | 5,516.54              | -357.99      | 447.48       | 409.73                  | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                                | 18.79           | 128.66      | 5,611.22              | -378.10      | 472.63       | 432.76                  | 0.00                    | 0.00                   | 0.00                  |
| 5,800.00                                | 18.79           | 128.66      | 5,705.89              | -398.22      | 497.78       | 455.78                  | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                                | 18.79           | 128.66      | 5,800.56              | -418.34      | 522.93       | 478.81                  | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                                | 18.79           | 128.66      | 5,895.23              | -438.46      | 548.07       | 501.84                  | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                                | 18.79           | 128.66      | 5,989.91              | -458.58      | 573.22       | 524.86                  | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                                | 18.79           | 128.66      | 6,084.58              | -478.69      | 598.37       | 547.89                  | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                                | 18.79           | 128.66      | 6,179.25              | -498.81      | 623.51       | 570.91                  | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                                | 18.79           | 128.66      | 6,273.92              | -518.93      | 648.66       | 593.94                  | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                                | 18.79           | 128.66      | 6,368.60              | -539.05      | 673.81       | 616.96                  | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                                | 18.79           | 128.66      | 6,463.27              | -559.16      | 698.96       | 639.99                  | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                                | 18.79           | 128.66      | 6,557.94              | -579.28      | 724.10       | 663.02                  | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                                | 18.79           | 128.66      | 6,652.61              | -599.40      | 749.25       | 686.04                  | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                                | 18.79           | 128.66      | 6,747.29              | -619.52      | 774.40       | 709.07                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                                | 18.79           | 128.66      | 6,841.96              | -639.64      | 799.54       | 732.09                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                                | 18.79           | 128.66      | 6,936.63              | -659.75      | 824.69       | 755.12                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                                | 18.79           | 128.66      | 7,031.30              | -679.87      | 849.84       | 778.14                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                                | 18.79           | 128.66      | 7,125.98              | -699.99      | 874.99       | 801.17                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                                | 18.79           | 128.66      | 7,220.65              | -720.11      | 900.13       | 824.20                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                                | 18.79           | 128.66      | 7,315.32              | -740.22      | 925.28       | 847.22                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                                | 18.79           | 128.66      | 7,409.99              | -760.34      | 950.43       | 870.25                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                                | 18.79           | 128.66      | 7,504.67              | -780.46      | 975.58       | 893.27                  | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                                | 18.79           | 128.66      | 7,599.34              | -800.58      | 1,000.72     | 916.30                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                                | 18.79           | 128.66      | 7,694.01              | -820.70      | 1,025.87     | 939.32                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                                | 18.79           | 128.66      | 7,788.68              | -840.81      | 1,051.02     | 962.35                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                                | 18.79           | 128.66      | 7,883.36              | -860.93      | 1,076.16     | 985.38                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                                | 18.79           | 128.66      | 7,978.03              | -881.05      | 1,101.31     | 1,008.40                | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                                | 18.79           | 128.66      | 8,072.70              | -901.17      | 1,126.46     | 1,031.43                | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                                | 18.79           | 128.66      | 8,167.37              | -921.28      | 1,151.61     | 1,054.45                | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                                | 18.79           | 128.66      | 8,262.05              | -941.40      | 1,176.75     | 1,077.48                | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                                | 18.79           | 128.66      | 8,356.72              | -961.52      | 1,201.90     | 1,100.51                | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                                | 18.79           | 128.66      | 8,451.39              | -981.64      | 1,227.05     | 1,123.53                | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                                | 18.79           | 128.66      | 8,546.07              | -1,001.76    | 1,252.19     | 1,146.56                | 0.00                    | 0.00                   | 0.00                  |
| 8,875.44                                | 18.79           | 128.66      | 8,617.48              | -1,016.93    | 1,271.16     | 1,163.93                | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Drop -10.00</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,900.00                                | 16.33           | 128.66      | 8,640.90              | -1,021.56    | 1,276.95     | 1,169.22                | 10.00                   | -10.00                 | 0.00                  |
| 8,950.00                                | 11.33           | 128.66      | 8,689.44              | -1,029.02    | 1,286.28     | 1,177.77                | 10.00                   | -10.00                 | 0.00                  |
| 9,000.00                                | 6.33            | 128.66      | 8,738.83              | -1,033.82    | 1,292.27     | 1,183.25                | 10.00                   | -10.00                 | 0.00                  |
| 9,050.00                                | 1.33            | 128.66      | 8,788.70              | -1,035.90    | 1,294.88     | 1,185.64                | 10.00                   | -10.00                 | 0.00                  |
| 9,063.30                                | 0.00            | 0.00        | 8,802.00              | -1,036.00    | 1,295.00     | 1,185.75                | 10.00                   | -10.00                 | 0.00                  |
| <b>Start 2690.04 hold at 9063.30 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.00                                | 0.00            | 0.00        | 8,838.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                                | 0.00            | 0.00        | 8,938.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                                | 0.00            | 0.00        | 9,038.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                                | 0.00            | 0.00        | 9,138.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                                | 0.00            | 0.00        | 9,238.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                                | 0.00            | 0.00        | 9,338.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |



## Total Directional Services

### Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

| 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) |
| 9,700.00                                                             | 0.00            | 0.00        | 9,438.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                                                             | 0.00            | 0.00        | 9,538.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                                                             | 0.00            | 0.00        | 9,638.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00                                                            | 0.00            | 0.00        | 9,738.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                                                            | 0.00            | 0.00        | 9,838.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00                                                            | 0.00            | 0.00        | 9,938.70              | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00                                                            | 0.00            | 0.00        | 10,038.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00                                                            | 0.00            | 0.00        | 10,138.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00                                                            | 0.00            | 0.00        | 10,238.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00                                                            | 0.00            | 0.00        | 10,338.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00                                                            | 0.00            | 0.00        | 10,438.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00                                                            | 0.00            | 0.00        | 10,538.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00                                                            | 0.00            | 0.00        | 10,638.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00                                                            | 0.00            | 0.00        | 10,738.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00                                                            | 0.00            | 0.00        | 10,838.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00                                                            | 0.00            | 0.00        | 10,938.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00                                                            | 0.00            | 0.00        | 11,038.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                                                            | 0.00            | 0.00        | 11,138.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                                                            | 0.00            | 0.00        | 11,238.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                                                            | 0.00            | 0.00        | 11,338.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                                                            | 0.00            | 0.00        | 11,438.70             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| 11,753.34                                                            | 0.00            | 0.00        | 11,492.04             | -1,036.00    | 1,295.00     | 1,185.75                | 0.00                    | 0.00                   | 0.00                  |
| <b>Start DLS 10.00 TFO 179.44</b>                                    |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,800.00                                                            | 4.67            | 179.44      | 11,538.65             | -1,037.90    | 1,295.02     | 1,187.64                | 10.00                   | 10.00                  | 0.00                  |
| 11,850.00                                                            | 9.67            | 179.44      | 11,588.24             | -1,044.13    | 1,295.08     | 1,193.83                | 10.00                   | 10.00                  | 0.00                  |
| 11,900.00                                                            | 14.67           | 179.44      | 11,637.10             | -1,054.67    | 1,295.18     | 1,204.30                | 10.00                   | 10.00                  | 0.00                  |
| 11,950.00                                                            | 19.67           | 179.44      | 11,684.86             | -1,069.42    | 1,295.33     | 1,218.96                | 10.00                   | 10.00                  | 0.00                  |
| 12,000.00                                                            | 24.67           | 179.44      | 11,731.15             | -1,088.28    | 1,295.51     | 1,237.70                | 10.00                   | 10.00                  | 0.00                  |
| 12,050.00                                                            | 29.67           | 179.44      | 11,775.62             | -1,111.10    | 1,295.73     | 1,260.38                | 10.00                   | 10.00                  | 0.00                  |
| 12,100.00                                                            | 34.67           | 179.44      | 11,817.93             | -1,137.70    | 1,295.99     | 1,286.82                | 10.00                   | 10.00                  | 0.00                  |
| 12,150.00                                                            | 39.67           | 179.44      | 11,857.76             | -1,167.90    | 1,296.29     | 1,316.83                | 10.00                   | 10.00                  | 0.00                  |
| 12,200.00                                                            | 44.67           | 179.44      | 11,894.81             | -1,201.45    | 1,296.62     | 1,350.17                | 10.00                   | 10.00                  | 0.00                  |
| 12,250.00                                                            | 49.67           | 179.44      | 11,928.80             | -1,238.10    | 1,296.98     | 1,386.60                | 10.00                   | 10.00                  | 0.00                  |
| 12,300.00                                                            | 54.67           | 179.44      | 11,959.45             | -1,277.58    | 1,297.36     | 1,425.83                | 10.00                   | 10.00                  | 0.00                  |
| 12,350.00                                                            | 59.67           | 179.44      | 11,986.56             | -1,319.58    | 1,297.77     | 1,467.56                | 10.00                   | 10.00                  | 0.00                  |
| 12,400.00                                                            | 64.67           | 179.44      | 12,009.90             | -1,363.77    | 1,298.21     | 1,511.48                | 10.00                   | 10.00                  | 0.00                  |
| 12,450.00                                                            | 69.67           | 179.44      | 12,029.29             | -1,409.84    | 1,298.66     | 1,557.26                | 10.00                   | 10.00                  | 0.00                  |
| 12,500.00                                                            | 74.67           | 179.44      | 12,044.60             | -1,457.42    | 1,299.12     | 1,604.55                | 10.00                   | 10.00                  | 0.00                  |
| 12,550.00                                                            | 79.67           | 179.44      | 12,055.70             | -1,506.15    | 1,299.60     | 1,652.98                | 10.00                   | 10.00                  | 0.00                  |
| 12,600.00                                                            | 84.67           | 179.44      | 12,062.52             | -1,555.67    | 1,300.08     | 1,702.18                | 10.00                   | 10.00                  | 0.00                  |
| 12,653.34                                                            | 90.00           | 179.44      | 12,065.00             | -1,608.93    | 1,300.60     | 1,755.11                | 10.00                   | 10.00                  | 0.00                  |
| <b>Start 9792.23 hold at 12653.34 MD - LP (Tatanka Fed Com 603H)</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,700.00                                                            | 90.00           | 179.44      | 12,065.00             | -1,655.59    | 1,301.06     | 1,801.48                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                                                            | 90.00           | 179.44      | 12,065.00             | -1,755.58    | 1,302.04     | 1,900.85                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                                                            | 90.00           | 179.44      | 12,065.00             | -1,855.58    | 1,303.01     | 2,000.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00                                                            | 90.00           | 179.44      | 12,065.00             | -1,955.57    | 1,303.99     | 2,099.60                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,055.57    | 1,304.97     | 2,198.97                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,155.56    | 1,305.95     | 2,298.34                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,255.56    | 1,306.93     | 2,397.71                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,355.55    | 1,307.90     | 2,497.08                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,455.55    | 1,308.88     | 2,596.46                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,555.54    | 1,309.86     | 2,695.83                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,655.54    | 1,310.84     | 2,795.20                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00                                                            | 90.00           | 179.44      | 12,065.00             | -2,755.53    | 1,311.82     | 2,894.57                | 0.00                    | 0.00                   | 0.00                  |



## Total Directional Services

### Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

| 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) |  |
| 13,900.00             | 90.00           | 179.44      | 12,065.00             | -2,855.53    | 1,312.79     | 2,993.95                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,000.00             | 90.00           | 179.44      | 12,065.00             | -2,955.52    | 1,313.77     | 3,093.32                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,100.00             | 90.00           | 179.44      | 12,065.00             | -3,055.52    | 1,314.75     | 3,192.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,200.00             | 90.00           | 179.44      | 12,065.00             | -3,155.51    | 1,315.73     | 3,292.06                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,300.00             | 90.00           | 179.44      | 12,065.00             | -3,255.51    | 1,316.71     | 3,391.44                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.00             | 90.00           | 179.44      | 12,065.00             | -3,355.50    | 1,317.68     | 3,490.81                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.00             | 90.00           | 179.44      | 12,065.00             | -3,455.50    | 1,318.66     | 3,590.18                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,600.00             | 90.00           | 179.44      | 12,065.00             | -3,555.50    | 1,319.64     | 3,689.55                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,700.00             | 90.00           | 179.44      | 12,065.00             | -3,655.49    | 1,320.62     | 3,788.93                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,800.00             | 90.00           | 179.44      | 12,065.00             | -3,755.49    | 1,321.59     | 3,888.30                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,900.00             | 90.00           | 179.44      | 12,065.00             | -3,855.48    | 1,322.57     | 3,987.67                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,000.00             | 90.00           | 179.44      | 12,065.00             | -3,955.48    | 1,323.55     | 4,087.04                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,100.00             | 90.00           | 179.44      | 12,065.00             | -4,055.47    | 1,324.53     | 4,186.42                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,200.00             | 90.00           | 179.44      | 12,065.00             | -4,155.47    | 1,325.51     | 4,285.79                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,300.00             | 90.00           | 179.44      | 12,065.00             | -4,255.46    | 1,326.48     | 4,385.16                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,400.00             | 90.00           | 179.44      | 12,065.00             | -4,355.46    | 1,327.46     | 4,484.53                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,500.00             | 90.00           | 179.44      | 12,065.00             | -4,455.45    | 1,328.44     | 4,583.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,600.00             | 90.00           | 179.44      | 12,065.00             | -4,555.45    | 1,329.42     | 4,683.28                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,700.00             | 90.00           | 179.44      | 12,065.00             | -4,655.44    | 1,330.40     | 4,782.65                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,800.00             | 90.00           | 179.44      | 12,065.00             | -4,755.44    | 1,331.37     | 4,882.02                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,900.00             | 90.00           | 179.44      | 12,065.00             | -4,855.43    | 1,332.35     | 4,981.40                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,000.00             | 90.00           | 179.44      | 12,065.00             | -4,955.43    | 1,333.33     | 5,080.77                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,100.00             | 90.00           | 179.44      | 12,065.00             | -5,055.42    | 1,334.31     | 5,180.14                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,200.00             | 90.00           | 179.44      | 12,065.00             | -5,155.42    | 1,335.29     | 5,279.51                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,300.00             | 90.00           | 179.44      | 12,065.00             | -5,255.41    | 1,336.26     | 5,378.88                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,400.00             | 90.00           | 179.44      | 12,065.00             | -5,355.41    | 1,337.24     | 5,478.26                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,500.00             | 90.00           | 179.44      | 12,065.00             | -5,455.40    | 1,338.22     | 5,577.63                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,600.00             | 90.00           | 179.44      | 12,065.00             | -5,555.40    | 1,339.20     | 5,677.00                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,700.00             | 90.00           | 179.44      | 12,065.00             | -5,655.39    | 1,340.17     | 5,776.37                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,800.00             | 90.00           | 179.44      | 12,065.00             | -5,755.39    | 1,341.15     | 5,875.75                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,900.00             | 90.00           | 179.44      | 12,065.00             | -5,855.39    | 1,342.13     | 5,975.12                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,000.00             | 90.00           | 179.44      | 12,065.00             | -5,955.38    | 1,343.11     | 6,074.49                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,100.00             | 90.00           | 179.44      | 12,065.00             | -6,055.38    | 1,344.09     | 6,173.86                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,200.00             | 90.00           | 179.44      | 12,065.00             | -6,155.37    | 1,345.06     | 6,273.24                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,300.00             | 90.00           | 179.44      | 12,065.00             | -6,255.37    | 1,346.04     | 6,372.61                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,400.00             | 90.00           | 179.44      | 12,065.00             | -6,355.36    | 1,347.02     | 6,471.98                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,500.00             | 90.00           | 179.44      | 12,065.00             | -6,455.36    | 1,348.00     | 6,571.35                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,600.00             | 90.00           | 179.44      | 12,065.00             | -6,555.35    | 1,348.98     | 6,670.73                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,700.00             | 90.00           | 179.44      | 12,065.00             | -6,655.35    | 1,349.95     | 6,770.10                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,800.00             | 90.00           | 179.44      | 12,065.00             | -6,755.34    | 1,350.93     | 6,869.47                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,900.00             | 90.00           | 179.44      | 12,065.00             | -6,855.34    | 1,351.91     | 6,968.84                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,000.00             | 90.00           | 179.44      | 12,065.00             | -6,955.33    | 1,352.89     | 7,068.22                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,100.00             | 90.00           | 179.44      | 12,065.00             | -7,055.33    | 1,353.87     | 7,167.59                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,200.00             | 90.00           | 179.44      | 12,065.00             | -7,155.32    | 1,354.84     | 7,266.96                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,300.00             | 90.00           | 179.44      | 12,065.00             | -7,255.32    | 1,355.82     | 7,366.33                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,400.00             | 90.00           | 179.44      | 12,065.00             | -7,355.31    | 1,356.80     | 7,465.71                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,500.00             | 90.00           | 179.44      | 12,065.00             | -7,455.31    | 1,357.78     | 7,565.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,600.00             | 90.00           | 179.44      | 12,065.00             | -7,555.30    | 1,358.75     | 7,664.45                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,700.00             | 90.00           | 179.44      | 12,065.00             | -7,655.30    | 1,359.73     | 7,763.82                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,800.00             | 90.00           | 179.44      | 12,065.00             | -7,755.29    | 1,360.71     | 7,863.19                | 0.00                    | 0.00                   | 0.00                  |  |
| 18,900.00             | 90.00           | 179.44      | 12,065.00             | -7,855.29    | 1,361.69     | 7,962.57                | 0.00                    | 0.00                   | 0.00                  |  |
| 19,000.00             | 90.00           | 179.44      | 12,065.00             | -7,955.28    | 1,362.67     | 8,061.94                | 0.00                    | 0.00                   | 0.00                  |  |
| 19,100.00             | 90.00           | 179.44      | 12,065.00             | -8,055.28    | 1,363.64     | 8,161.31                | 0.00                    | 0.00                   | 0.00                  |  |
| 19,200.00             | 90.00           | 179.44      | 12,065.00             | -8,155.28    | 1,364.62     | 8,260.68                | 0.00                    | 0.00                   | 0.00                  |  |



## Total Directional Services

### Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

| Planned Survey                               |                    |                |                             |                 |                 |                               |                               |                              |                             |  |
|----------------------------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|--|
| Measured<br>Depth<br>(usft)                  | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |  |
| 19,300.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,255.27       | 1,365.60        | 8,360.06                      | 0.00                          | 0.00                         | 0.00                        |  |
| 19,400.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,355.27       | 1,366.58        | 8,459.43                      | 0.00                          | 0.00                         | 0.00                        |  |
| 19,500.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,455.26       | 1,367.56        | 8,558.80                      | 0.00                          | 0.00                         | 0.00                        |  |
| 19,600.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,555.26       | 1,368.53        | 8,658.17                      | 0.00                          | 0.00                         | 0.00                        |  |
| 19,700.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,655.25       | 1,369.51        | 8,757.55                      | 0.00                          | 0.00                         | 0.00                        |  |
| 19,800.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,755.25       | 1,370.49        | 8,856.92                      | 0.00                          | 0.00                         | 0.00                        |  |
| 19,900.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,855.24       | 1,371.47        | 8,956.29                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,000.00                                    | 90.00              | 179.44         | 12,065.00                   | -8,955.24       | 1,372.45        | 9,055.66                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,100.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,055.23       | 1,373.42        | 9,155.04                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,200.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,155.23       | 1,374.40        | 9,254.41                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,300.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,255.22       | 1,375.38        | 9,353.78                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,400.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,355.22       | 1,376.36        | 9,453.15                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,500.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,455.21       | 1,377.33        | 9,552.53                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,600.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,555.21       | 1,378.31        | 9,651.90                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,700.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,655.20       | 1,379.29        | 9,751.27                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,800.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,755.20       | 1,380.27        | 9,850.64                      | 0.00                          | 0.00                         | 0.00                        |  |
| 20,900.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,855.19       | 1,381.25        | 9,950.02                      | 0.00                          | 0.00                         | 0.00                        |  |
| 21,000.00                                    | 90.00              | 179.44         | 12,065.00                   | -9,955.19       | 1,382.22        | 10,049.39                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,100.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,055.18      | 1,383.20        | 10,148.76                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,200.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,155.18      | 1,384.18        | 10,248.13                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,300.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,255.18      | 1,385.16        | 10,347.50                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,400.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,355.17      | 1,386.14        | 10,446.88                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,500.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,455.17      | 1,387.11        | 10,546.25                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,600.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,555.16      | 1,388.09        | 10,645.62                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,700.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,655.16      | 1,389.07        | 10,744.99                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,800.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,755.15      | 1,390.05        | 10,844.37                     | 0.00                          | 0.00                         | 0.00                        |  |
| 21,900.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,855.15      | 1,391.02        | 10,943.74                     | 0.00                          | 0.00                         | 0.00                        |  |
| 22,000.00                                    | 90.00              | 179.44         | 12,065.00                   | -10,955.14      | 1,392.00        | 11,043.11                     | 0.00                          | 0.00                         | 0.00                        |  |
| 22,100.00                                    | 90.00              | 179.44         | 12,065.00                   | -11,055.14      | 1,392.98        | 11,142.48                     | 0.00                          | 0.00                         | 0.00                        |  |
| 22,200.00                                    | 90.00              | 179.44         | 12,065.00                   | -11,155.13      | 1,393.96        | 11,241.86                     | 0.00                          | 0.00                         | 0.00                        |  |
| 22,300.00                                    | 90.00              | 179.44         | 12,065.00                   | -11,255.13      | 1,394.94        | 11,341.23                     | 0.00                          | 0.00                         | 0.00                        |  |
| 22,400.00                                    | 90.00              | 179.44         | 12,065.00                   | -11,355.12      | 1,395.91        | 11,440.60                     | 0.00                          | 0.00                         | 0.00                        |  |
| 22,445.57                                    | 90.00              | 179.44         | 12,065.00                   | -11,400.69      | 1,396.36        | 11,485.89                     | 0.00                          | 0.00                         | 0.00                        |  |
| TD at 22445.57 - PBHL (Tatanka Fed Com 603H) |                    |                |                             |                 |                 |                               |                               |                              |                             |  |

| Design Targets                                                        |               |              |            |              |              |                 |                |           |             |
|-----------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| Target Name                                                           | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude  | Longitude   |
| SHL (Tatanka Fed Com 603H)<br>- hit/miss target<br>- Shape<br>- Point | 0.00          | 0.00         | 0.00       | 0.00         | 0.00         | 395,095.67      | 848,770.12     | 32.082309 | -103.340711 |
| LP (Tatanka Fed Com 603H)<br>- plan hits target center<br>- Point     | 0.00          | 0.00         | 12,065.00  | -1,608.93    | 1,300.60     | 393,486.74      | 850,070.72     | 32.077854 | -103.336561 |
| PBHL (Tatanka Fed Com 603H)<br>- plan hits target center<br>- Point   | 0.00          | 0.01         | 12,065.00  | -11,400.69   | 1,396.36     | 383,694.98      | 850,166.48     | 32.050938 | -103.336543 |





## Total Directional Services

### Planning Report



|                  |                            |                                     |                                   |
|------------------|----------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | EDM 5000.15 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Project:</b>  | Lea County, NM (NAD83)     | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site:</b>     | Tatanka Fed Com            | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Tatanka Fed Com 603H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | OH                         |                                     |                                   |
| <b>Design:</b>   | Plan #1                    |                                     |                                   |

| Plan Annotations            |                             |                   |                 |                                   |
|-----------------------------|-----------------------------|-------------------|-----------------|-----------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                           |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                   |
| 3,200.00                    | 3,200.00                    | 0.00              | 0.00            | Start Build 1.50                  |
| 4,452.43                    | 4,430.11                    | -127.12           | 158.90          | Start 4423.01 hold at 4452.43 MD  |
| 8,875.44                    | 8,617.48                    | -1,016.93         | 1,271.16        | Start Drop -10.00                 |
| 9,063.30                    | 8,802.00                    | -1,036.00         | 1,295.00        | Start 2690.04 hold at 9063.30 MD  |
| 11,753.34                   | 11,492.04                   | -1,036.00         | 1,295.00        | Start DLS 10.00 TFO 179.44        |
| 12,653.34                   | 12,065.00                   | -1,608.93         | 1,300.60        | Start 9792.23 hold at 12653.34 MD |
| 22,445.57                   | 12,065.00                   | -11,400.69        | 1,396.36        | TD at 22445.57                    |



# Franklin Mountain Energy

Lea County, NM (NAD83)

Tatanka Fed Com

Tatanka Fed Com 603H

OH

Plan #1

## Anticollision Report

25 June, 2021





## Total Directional Services

## Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

|                                     |                                                                     |
|-------------------------------------|---------------------------------------------------------------------|
| <b>Reference</b>                    | Plan #1                                                             |
| <b>Filter type:</b>                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |
| <b>Interpolation Method:</b>        | Stations                                                            |
| <b>Depth Range:</b>                 | Unlimited                                                           |
| <b>Results Limited by:</b>          | Maximum ellipse separation of 1,000.00 usft                         |
| <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>               | Combined Separation                                                 |
| <b>Casing Method:</b>               | Not applied                                                         |

|                            |                  |                          |
|----------------------------|------------------|--------------------------|
| <b>Survey Tool Program</b> | <b>Date</b>      | 6/25/2021                |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> |
| 0.00                       | 22,445.57        | Plan #1 (OH)             |
|                            |                  | <b>Tool Name</b>         |
|                            |                  | OWSG (Rev2) MWD          |
|                            |                  | <b>Description</b>       |
|                            |                  | OWSG MWD - Standard      |

| 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     |                                 |                              |                                 |                                  |                   |            |
| Tatanka Fed Com                     |                                 |                              |                                 |                                  |                   |            |
| Tatanka Fed Com 101H - OH - Plan #1 | 3,200.00                        | 3,186.30                     | 1,161.98                        | 1,146.12                         | 73.272            | CC         |
| Tatanka Fed Com 101H - OH - Plan #1 | 3,300.00                        | 3,270.51                     | 1,162.33                        | 1,146.02                         | 71.274            | ES         |
| Tatanka Fed Com 101H - OH - Plan #1 | 22,445.57                       | 18,762.37                    | 4,301.29                        | 4,111.97                         | 22.720            | SF         |
| Tatanka Fed Com 102H - OH - Plan #1 | 7,029.77                        | 7,021.84                     | 1,005.85                        | 967.52                           | 26.240            | CC, ES     |
| Tatanka Fed Com 102H - OH - Plan #1 | 22,445.57                       | 18,862.99                    | 3,510.58                        | 3,367.66                         | 24.563            | SF         |
| Tatanka Fed Com 103H - OH - Plan #1 | 8,759.99                        | 8,389.65                     | 382.34                          | 339.91                           | 9.012             | CC, ES, SF |
| Tatanka Fed Com 104H - OH - Plan #1 | 8,965.59                        | 8,669.88                     | 1,777.69                        | 1,730.65                         | 37.786            | CC, ES     |
| Tatanka Fed Com 104H - OH - Plan #1 | 22,445.57                       | 18,772.58                    | 3,820.28                        | 3,658.24                         | 23.577            | SF         |
| Tatanka Fed Com 501H - OH - Plan #1 | 3,548.24                        | 3,511.43                     | 1,136.61                        | 1,119.11                         | 64.958            | CC         |
| Tatanka Fed Com 501H - OH - Plan #1 | 3,600.00                        | 3,554.46                     | 1,136.76                        | 1,119.04                         | 64.149            | ES         |
| Tatanka Fed Com 501H - OH - Plan #1 | 22,445.57                       | 20,841.66                    | 3,088.13                        | 2,847.89                         | 12.854            | SF         |
| Tatanka Fed Com 502H - OH - Plan #1 | 6,254.18                        | 6,224.10                     | 946.71                          | 913.40                           | 28.421            | CC         |
| Tatanka Fed Com 502H - OH - Plan #1 | 6,400.00                        | 6,365.69                     | 947.35                          | 913.14                           | 27.690            | ES         |
| Tatanka Fed Com 502H - OH - Plan #1 | 22,445.57                       | 20,879.44                    | 1,855.58                        | 1,660.47                         | 9.510             | SF         |
| Tatanka Fed Com 503H - OH - Plan #1 | 10,449.58                       | 10,171.71                    | 223.83                          | 169.69                           | 4.135             | CC         |
| Tatanka Fed Com 503H - OH - Plan #1 | 10,500.00                       | 10,221.78                    | 223.87                          | 169.62                           | 4.127             | ES, SF     |
| Tatanka Fed Com 504H - OH - Plan #1 | 8,877.73                        | 8,348.17                     | 1,555.78                        | 1,509.90                         | 33.910            | CC, ES     |
| Tatanka Fed Com 504H - OH - Plan #1 | 22,445.57                       | 20,816.07                    | 2,178.27                        | 1,958.31                         | 9.903             | SF         |
| Tatanka Fed Com 601H - OH - Plan #2 | 3,200.00                        | 3,198.40                     | 1,694.90                        | 1,679.01                         | 106.671           | CC, ES     |
| Tatanka Fed Com 601H - OH - Plan #2 | 22,445.57                       | 22,129.15                    | 2,810.91                        | 2,549.97                         | 10.772            | SF         |
| Tatanka Fed Com 602H - OH - Plan #1 | 3,200.00                        | 3,199.20                     | 99.98                           | 84.09                            | 6.292             | CC, ES     |
| Tatanka Fed Com 602H - OH - Plan #1 | 22,444.37                       | 22,187.30                    | 1,111.52                        | 839.96                           | 4.093             | SF         |
| Tatanka Fed Com 604H - OH - Plan #2 | 11,691.64                       | 11,394.71                    | 1,439.67                        | 1,379.81                         | 24.050            | CC         |
| Tatanka Fed Com 604H - OH - Plan #2 | 22,445.57                       | 22,053.08                    | 1,443.03                        | 1,182.53                         | 5.539             | ES, SF     |
| Tatanka Fed Com 702H - OH - Plan #1 | 3,200.00                        | 3,199.20                     | 124.99                          | 109.09                           | 7.865             | CC, ES     |
| Tatanka Fed Com 702H - OH - Plan #1 | 22,445.57                       | 22,375.46                    | 1,492.60                        | 1,220.65                         | 5.488             | SF         |
| Tatanka Fed Com 703H - OH - Plan #1 | 3,200.00                        | 3,199.90                     | 49.99                           | 34.10                            | 3.146             | CC         |
| Tatanka Fed Com 703H - OH - Plan #1 | 3,300.00                        | 3,300.72                     | 50.19                           | 33.81                            | 3.064             | ES         |
| Tatanka Fed Com 703H - OH - Plan #1 | 22,443.89                       | 22,641.65                    | 572.56                          | 336.56                           | 2.426             | SF         |
| Tatanka Fed Com 704H - OH - Plan #2 | 11,753.34                       | 11,516.24                    | 449.63                          | 389.39                           | 7.463             | CC         |
| Tatanka Fed Com 704H - OH - Plan #2 | 22,445.57                       | 22,295.51                    | 458.14                          | 204.24                           | 1.804             | ES, SF     |
| Tatanka Fed Com 705H - OH - Plan #2 | 12,718.65                       | 12,328.55                    | 1,719.51                        | 1,652.49                         | 25.658            | CC         |
| Tatanka Fed Com 705H - OH - Plan #2 | 22,445.57                       | 22,055.51                    | 1,719.76                        | 1,459.20                         | 6.600             | ES, SF     |
| Tatanka Fed Com 801H - OH - Plan #2 | 3,200.00                        | 3,198.20                     | 1,674.86                        | 1,658.97                         | 105.413           | CC         |
| Tatanka Fed Com 801H - OH - Plan #2 | 3,300.00                        | 3,298.19                     | 1,675.17                        | 1,658.79                         | 102.239           | ES         |
| Tatanka Fed Com 801H - OH - Plan #2 | 22,445.57                       | 22,865.07                    | 2,890.62                        | 2,634.69                         | 11.295            | SF         |
| Tatanka Fed Com 802H - OH - Plan #2 | 5,887.43                        | 6,058.57                     | 1,542.82                        | 1,511.74                         | 49.632            | CC         |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

#### Summary

| Site Name                              | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning    |
|----------------------------------------|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|------------|
| <b>Offset Well - Wellbore - Design</b> |                                 |                              |                                 |                                  |                   |            |
| Tatanka Fed Com                        |                                 |                              |                                 |                                  |                   |            |
| Tatanka Fed Com 802H - OH - Plan #2    | 6,100.00                        | 6,266.38                     | 1,543.47                        | 1,511.10                         | 47.674            | ES         |
| Tatanka Fed Com 802H - OH - Plan #2    | 22,445.57                       | 22,787.51                    | 2,040.97                        | 1,786.69                         | 8.026             | SF         |
| Tatanka Fed Com 803H - OH - Plan #1    | 3,200.00                        | 3,199.70                     | 74.99                           | 59.10                            | 4.719             | CC, ES     |
| Tatanka Fed Com 803H - OH - Plan #1    | 3,300.00                        | 3,299.69                     | 76.01                           | 59.62                            | 4.638             | SF         |
| Tatanka Fed Com 804H - OH - Plan #1    | 3,200.00                        | 3,199.90                     | 25.00                           | 9.11                             | 1.573             | CC, ES, SF |
| Tatanka Fed Com 805H - OH - Plan #2    | 11,753.34                       | 11,468.84                    | 793.63                          | 733.47                           | 13.192            | CC         |
| Tatanka Fed Com 805H - OH - Plan #2    | 22,445.57                       | 22,641.80                    | 927.77                          | 703.58                           | 4.138             | ES, SF     |
| Tatanka Fed Com 806H - OH - Plan #2    | 11,753.34                       | 11,472.10                    | 1,719.67                        | 1,659.49                         | 28.574            | CC         |
| Tatanka Fed Com 806H - OH - Plan #2    | 22,445.57                       | 22,521.06                    | 1,756.20                        | 1,501.11                         | 6.885             | ES, SF     |

#### Offset Design

| Tatanka Fed Com - Tatanka Fed Com 101H - OH - Plan #1 |                       |                              |                       |                                  |               |                       |                                     |              |                                 |                                  |                           | Offset Site Error: | 0.00 usft |
|-------------------------------------------------------|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-------------------------------------|--------------|---------------------------------|----------------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD                     |                       |                              |                       |                                  |               |                       |                                     |              |                                 |                                  |                           | Offset Well Error: | 0.00 usft |
| Reference Measured Depth (usft)                       | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 0.00                                                  | 0.00                  | 0.00                         | 0.00                  | 0.00                             | 0.00          | -151.67               | -1,022.78                           | -551.47      | 1,162.06                        |                                  |                           |                    |           |
| 100.00                                                | 100.00                | 86.30                        | 86.30                 | 0.13                             | 0.11          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,161.81                         | 0.17                      | 7,011.427          |           |
| 200.00                                                | 200.00                | 186.30                       | 186.30                | 0.48                             | 0.43          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,161.33                         | 0.65                      | 1,786.038          |           |
| 300.00                                                | 300.00                | 286.30                       | 286.30                | 0.84                             | 0.79          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,160.82                         | 1.16                      | 1,004.183          |           |
| 400.00                                                | 400.00                | 386.30                       | 386.30                | 1.20                             | 1.15          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,160.32                         | 1.66                      | 698.332            |           |
| 500.00                                                | 500.00                | 486.30                       | 486.30                | 1.56                             | 1.51          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,159.81                         | 2.17                      | 535.276            |           |
| 600.00                                                | 600.00                | 586.30                       | 586.30                | 1.92                             | 1.87          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,159.30                         | 2.68                      | 433.946            |           |
| 700.00                                                | 700.00                | 686.30                       | 686.30                | 2.28                             | 2.23          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,158.80                         | 3.18                      | 364.871            |           |
| 800.00                                                | 800.00                | 786.30                       | 786.30                | 2.63                             | 2.59          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,158.29                         | 3.69                      | 314.767            |           |
| 900.00                                                | 900.00                | 886.30                       | 886.30                | 2.99                             | 2.94          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,157.78                         | 4.20                      | 276.761            |           |
| 1,000.00                                              | 1,000.00              | 986.30                       | 986.30                | 3.35                             | 3.30          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,157.27                         | 4.71                      | 246.944            |           |
| 1,100.00                                              | 1,100.00              | 1,086.30                     | 1,086.30              | 3.71                             | 3.66          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,156.77                         | 5.21                      | 222.927            |           |
| 1,200.00                                              | 1,200.00              | 1,186.30                     | 1,186.30              | 4.07                             | 4.02          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,156.26                         | 5.72                      | 203.167            |           |
| 1,300.00                                              | 1,300.00              | 1,286.30                     | 1,286.30              | 4.43                             | 4.38          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,155.75                         | 6.23                      | 186.625            |           |
| 1,400.00                                              | 1,400.00              | 1,386.30                     | 1,386.30              | 4.79                             | 4.74          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,155.25                         | 6.73                      | 172.574            |           |
| 1,500.00                                              | 1,500.00              | 1,486.30                     | 1,486.30              | 5.14                             | 5.09          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,154.74                         | 7.24                      | 160.491            |           |
| 1,600.00                                              | 1,600.00              | 1,586.30                     | 1,586.30              | 5.50                             | 5.45          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,154.23                         | 7.75                      | 149.989            |           |
| 1,700.00                                              | 1,700.00              | 1,686.30                     | 1,686.30              | 5.86                             | 5.81          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,153.73                         | 8.25                      | 140.777            |           |
| 1,800.00                                              | 1,800.00              | 1,786.30                     | 1,786.30              | 6.22                             | 6.17          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,153.22                         | 8.76                      | 132.631            |           |
| 1,900.00                                              | 1,900.00              | 1,886.30                     | 1,886.30              | 6.58                             | 6.53          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,152.71                         | 9.27                      | 125.376            |           |
| 2,000.00                                              | 2,000.00              | 1,986.30                     | 1,986.30              | 6.94                             | 6.89          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,152.21                         | 9.77                      | 118.874            |           |
| 2,100.00                                              | 2,100.00              | 2,086.30                     | 2,086.30              | 7.29                             | 7.25          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,151.70                         | 10.28                     | 113.013            |           |
| 2,200.00                                              | 2,200.00              | 2,186.30                     | 2,186.30              | 7.65                             | 7.60          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,151.19                         | 10.79                     | 107.702            |           |
| 2,300.00                                              | 2,300.00              | 2,286.30                     | 2,286.30              | 8.01                             | 7.96          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,150.68                         | 11.30                     | 102.869            |           |
| 2,400.00                                              | 2,400.00              | 2,386.30                     | 2,386.30              | 8.37                             | 8.32          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,150.18                         | 11.80                     | 98.450             |           |
| 2,500.00                                              | 2,500.00              | 2,486.30                     | 2,486.30              | 8.73                             | 8.68          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,149.67                         | 12.31                     | 94.396             |           |
| 2,600.00                                              | 2,600.00              | 2,586.30                     | 2,586.30              | 9.09                             | 9.04          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,149.16                         | 12.82                     | 90.662             |           |
| 2,700.00                                              | 2,700.00              | 2,686.30                     | 2,686.30              | 9.45                             | 9.40          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,148.66                         | 13.32                     | 87.212             |           |
| 2,800.00                                              | 2,800.00              | 2,786.30                     | 2,786.30              | 9.80                             | 9.76          | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,148.15                         | 13.83                     | 84.016             |           |
| 2,900.00                                              | 2,900.00              | 2,886.30                     | 2,886.30              | 10.16                            | 10.11         | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,147.64                         | 14.34                     | 81.045             |           |
| 3,000.00                                              | 3,000.00              | 2,986.30                     | 2,986.30              | 10.52                            | 10.47         | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,147.14                         | 14.84                     | 78.277             |           |
| 3,100.00                                              | 3,100.00              | 3,086.30                     | 3,086.30              | 10.88                            | 10.83         | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,146.63                         | 15.35                     | 75.692             |           |
| 3,200.00                                              | 3,200.00              | 3,186.30                     | 3,186.30              | 11.24                            | 11.19         | -151.67               | -1,022.78                           | -551.47      | 1,161.98                        | 1,146.12                         | 15.86                     | 73.272             | CC        |
| 3,300.00                                              | 3,299.99              | 3,270.51                     | 3,270.51              | 11.58                            | 11.48         | 79.74                 | -1,022.99                           | -552.09      | 1,162.33                        | 1,146.02                         | 16.31                     | 71.274             | ES        |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |  |
| 3,400.00                          | 3,399.91              | 3,352.04              | 3,352.00              | 11.91            | 11.76         | 79.95                 | -1,023.76                           | -554.33      | 1,163.79               | 1,147.06                | 16.73                     | 69.551            |                    |           |  |
| 3,500.00                          | 3,499.69              | 3,433.17              | 3,433.02              | 12.25            | 12.03         | 80.31                 | -1,025.09                           | -558.20      | 1,166.41               | 1,149.26                | 17.15                     | 68.000            |                    |           |  |
| 3,600.00                          | 3,599.27              | 3,513.71              | 3,513.35              | 12.58            | 12.31         | 80.79                 | -1,026.95                           | -563.65      | 1,170.28               | 1,152.71                | 17.57                     | 66.604            |                    |           |  |
| 3,700.00                          | 3,698.57              | 3,600.00              | 3,599.27              | 12.92            | 12.60         | 81.47                 | -1,029.56                           | -571.26      | 1,175.53               | 1,157.52                | 18.01                     | 65.281            |                    |           |  |
| 3,800.00                          | 3,797.54              | 3,672.25              | 3,671.05              | 13.27            | 12.85         | 82.13                 | -1,032.23                           | -579.05      | 1,182.21               | 1,163.81                | 18.40                     | 64.259            |                    |           |  |
| 3,900.00                          | 3,896.09              | 3,749.90              | 3,748.00              | 13.62            | 13.12         | 82.95                 | -1,035.59                           | -588.85      | 1,190.55               | 1,171.74                | 18.81                     | 63.306            |                    |           |  |
| 4,000.00                          | 3,994.16              | 3,826.23              | 3,823.43              | 13.98            | 13.39         | 83.85                 | -1,039.38                           | -599.92      | 1,200.69               | 1,181.48                | 19.21                     | 62.495            |                    |           |  |
| 4,100.00                          | 4,091.70              | 3,900.00              | 3,896.09              | 14.35            | 13.66         | 84.80                 | -1,043.51                           | -611.98      | 1,212.82               | 1,193.21                | 19.61                     | 61.844            |                    |           |  |
| 4,200.00                          | 4,188.62              | 3,974.39              | 3,969.10              | 14.74            | 13.93         | 85.83                 | -1,048.14                           | -625.48      | 1,227.12               | 1,207.10                | 20.02                     | 61.303            |                    |           |  |
| 4,300.00                          | 4,284.86              | 4,045.94              | 4,039.04              | 15.14            | 14.20         | 86.87                 | -1,053.02                           | -639.72      | 1,243.76               | 1,223.34                | 20.42                     | 60.922            |                    |           |  |
| 4,400.00                          | 4,380.36              | 4,115.66              | 4,106.91              | 15.55            | 14.46         | 87.92                 | -1,058.19                           | -654.80      | 1,262.91               | 1,242.10                | 20.81                     | 60.681            |                    |           |  |
| 4,452.43                          | 4,430.11              | 4,151.44              | 4,141.63              | 15.78            | 14.60         | 88.47                 | -1,060.99                           | -662.99      | 1,274.02               | 1,253.00                | 21.02                     | 60.609            |                    |           |  |
| 4,500.00                          | 4,475.14              | 4,183.53              | 4,172.70              | 15.99            | 14.73         | 89.12                 | -1,063.60                           | -670.60      | 1,284.75               | 1,263.55                | 21.21                     | 60.579            |                    |           |  |
| 4,600.00                          | 4,569.82              | 4,250.18              | 4,237.00              | 16.44            | 14.99         | 90.48                 | -1,069.29                           | -687.18      | 1,309.38               | 1,287.78                | 21.60                     | 60.618            |                    |           |  |
| 4,700.00                          | 4,664.49              | 4,315.71              | 4,299.91              | 16.91            | 15.26         | 91.79                 | -1,075.23                           | -704.52      | 1,336.77               | 1,314.78                | 21.99                     | 60.796            |                    |           |  |
| 4,800.00                          | 4,759.16              | 4,380.29              | 4,361.59              | 17.39            | 15.53         | 93.08                 | -1,081.43                           | -722.61      | 1,366.85               | 1,344.48                | 22.37                     | 61.103            |                    |           |  |
| 4,900.00                          | 4,853.84              | 4,465.23              | 4,442.52              | 17.87            | 15.90         | 94.72                 | -1,089.79                           | -747.03      | 1,398.89               | 1,376.01                | 22.88                     | 61.132            |                    |           |  |
| 5,000.00                          | 4,948.51              | 4,550.18              | 4,523.45              | 18.37            | 16.28         | 96.30                 | -1,098.16                           | -771.45      | 1,432.16               | 1,408.76                | 23.40                     | 61.199            |                    |           |  |
| 5,100.00                          | 5,043.18              | 4,635.13              | 4,604.38              | 18.88            | 16.67         | 97.83                 | -1,106.53                           | -795.88      | 1,466.57               | 1,442.65                | 23.92                     | 61.300            |                    |           |  |
| 5,200.00                          | 5,137.85              | 4,720.07              | 4,685.31              | 19.39            | 17.06         | 99.29                 | -1,114.90                           | -820.30      | 1,502.05               | 1,477.60                | 24.45                     | 61.431            |                    |           |  |
| 5,300.00                          | 5,232.53              | 4,805.02              | 4,766.23              | 19.92            | 17.46         | 100.70                | -1,123.27                           | -844.72      | 1,538.52               | 1,513.54                | 24.98                     | 61.588            |                    |           |  |
| 5,400.00                          | 5,327.20              | 4,889.96              | 4,847.16              | 20.45            | 17.87         | 102.05                | -1,131.64                           | -869.15      | 1,575.91               | 1,550.40                | 25.51                     | 61.768            |                    |           |  |
| 5,500.00                          | 5,421.87              | 4,974.91              | 4,928.09              | 20.99            | 18.29         | 103.35                | -1,140.01                           | -893.57      | 1,614.16               | 1,588.11                | 26.05                     | 61.968            |                    |           |  |
| 5,600.00                          | 5,516.54              | 5,059.86              | 5,009.02              | 21.53            | 18.71         | 104.60                | -1,148.38                           | -917.99      | 1,653.21               | 1,626.63                | 26.59                     | 62.185            |                    |           |  |
| 5,700.00                          | 5,611.22              | 5,144.80              | 5,089.94              | 22.08            | 19.13         | 105.80                | -1,156.75                           | -942.42      | 1,693.01               | 1,665.88                | 27.12                     | 62.417            |                    |           |  |
| 5,800.00                          | 5,705.89              | 5,229.75              | 5,170.87              | 22.63            | 19.56         | 106.95                | -1,165.12                           | -966.84      | 1,733.49               | 1,705.83                | 27.66                     | 62.661            |                    |           |  |
| 5,900.00                          | 5,800.56              | 5,314.69              | 5,251.80              | 23.19            | 20.00         | 108.05                | -1,173.49                           | -991.26      | 1,774.63               | 1,746.42                | 28.21                     | 62.915            |                    |           |  |
| 6,000.00                          | 5,895.23              | 5,399.64              | 5,332.73              | 23.76            | 20.44         | 109.11                | -1,181.86                           | -1,015.69    | 1,816.36               | 1,787.61                | 28.75                     | 63.179            |                    |           |  |
| 6,100.00                          | 5,989.91              | 5,484.59              | 5,413.65              | 24.33            | 20.88         | 110.13                | -1,190.23                           | -1,040.11    | 1,858.66               | 1,829.36                | 29.29                     | 63.448            |                    |           |  |
| 6,200.00                          | 6,084.58              | 5,569.53              | 5,494.58              | 24.90            | 21.33         | 111.11                | -1,198.60                           | -1,064.53    | 1,901.48               | 1,871.64                | 29.84                     | 63.723            |                    |           |  |
| 6,300.00                          | 6,179.25              | 5,654.48              | 5,575.51              | 25.48            | 21.78         | 112.05                | -1,206.96                           | -1,088.96    | 1,944.78               | 1,914.40                | 30.39                     | 64.001            |                    |           |  |
| 6,400.00                          | 6,273.92              | 5,739.42              | 5,656.44              | 26.05            | 22.24         | 112.95                | -1,215.33                           | -1,113.38    | 1,988.55               | 1,957.61                | 30.93                     | 64.283            |                    |           |  |
| 6,500.00                          | 6,368.60              | 5,824.37              | 5,737.37              | 26.64            | 22.70         | 113.82                | -1,223.70                           | -1,137.80    | 2,032.74               | 2,001.26                | 31.48                     | 64.566            |                    |           |  |
| 6,600.00                          | 6,463.27              | 5,909.32              | 5,818.29              | 27.22            | 23.16         | 114.65                | -1,232.07                           | -1,162.22    | 2,077.33               | 2,045.30                | 32.03                     | 64.850            |                    |           |  |
| 6,700.00                          | 6,557.94              | 5,994.26              | 5,899.22              | 27.81            | 23.62         | 115.45                | -1,240.44                           | -1,186.65    | 2,122.30               | 2,089.71                | 32.58                     | 65.133            |                    |           |  |
| 6,800.00                          | 6,652.61              | 6,079.21              | 5,980.15              | 28.40            | 24.09         | 116.22                | -1,248.81                           | -1,211.07    | 2,167.62               | 2,134.48                | 33.14                     | 65.416            |                    |           |  |
| 6,900.00                          | 6,747.29              | 6,164.15              | 6,061.08              | 29.00            | 24.56         | 116.97                | -1,257.18                           | -1,235.49    | 2,213.27               | 2,179.58                | 33.69                     | 65.698            |                    |           |  |
| 7,000.00                          | 6,841.96              | 6,249.10              | 6,142.00              | 29.59            | 25.03         | 117.68                | -1,265.55                           | -1,259.92    | 2,259.22               | 2,224.98                | 34.24                     | 65.977            |                    |           |  |
| 7,100.00                          | 6,936.63              | 6,334.05              | 6,222.93              | 30.19            | 25.51         | 118.37                | -1,273.92                           | -1,284.34    | 2,305.48               | 2,270.68                | 34.80                     | 66.255            |                    |           |  |
| 7,200.00                          | 7,031.30              | 6,418.99              | 6,303.86              | 30.79            | 25.99         | 119.03                | -1,282.29                           | -1,308.76    | 2,352.00               | 2,316.65                | 35.35                     | 66.530            |                    |           |  |
| 7,300.00                          | 7,125.98              | 6,503.94              | 6,384.79              | 31.40            | 26.46         | 119.67                | -1,290.66                           | -1,333.19    | 2,398.78               | 2,362.87                | 35.91                     | 66.801            |                    |           |  |
| 7,400.00                          | 7,220.65              | 6,588.89              | 6,465.72              | 32.00            | 26.94         | 120.30                | -1,299.03                           | -1,357.62    | 2,445.94               | 2,409.95                | 36.48                     | 67.068            |                    |           |  |
| 7,500.00                          | 7,315.32              | 6,673.84              | 6,548.65              | 32.61            | 27.41         | 120.90                | -1,307.40                           | -1,382.05    | 2,493.60               | 2,458.11                | 37.06                     | 67.330            |                    |           |  |
| 7,600.00                          | 7,409.99              | 6,758.79              | 6,631.58              | 33.21            | 27.88         | 121.50                | -1,315.77                           | -1,406.48    | 2,541.26               | 2,506.17                | 37.64                     | 67.588            |                    |           |  |
| 7,700.00                          | 7,504.67              | 6,843.74              | 6,714.51              | 33.82            | 28.35         | 122.10                | -1,324.14                           | -1,430.91    | 2,588.92               | 2,553.82                | 38.22                     | 67.842            |                    |           |  |
| 7,800.00                          | 7,599.34              | 6,928.69              | 6,797.38              | 34.43            | 28.82         | 122.70                | -1,332.51                           | -1,455.34    | 2,636.58               | 2,601.47                | 38.80                     | 68.092            |                    |           |  |
| 7,900.00                          | 7,694.01              | 7,013.64              | 6,880.25              | 35.05            | 29.29         | 123.30                | -1,340.88                           | -1,479.77    | 2,684.24               | 2,649.13                | 39.38                     | 68.338            |                    |           |  |
| 8,000.00                          | 7,788.68              | 7,098.59              | 6,963.12              | 35.66            | 29.76         | 123.90                | -1,349.25                           | -1,504.20    | 2,731.90               | 2,696.79                | 39.96                     | 68.580            |                    |           |  |
| 8,100.00                          | 7,883.36              | 7,183.54              | 7,046.00              | 36.28            | 30.23         | 124.50                | -1,357.62                           | -1,528.63    | 2,779.56               | 2,744.45                | 40.54                     | 68.818            |                    |           |  |
| 8,200.00                          | 7,978.03              | 7,268.49              | 7,128.87              | 36.89            | 30.70         | 125.10                | -1,365.99                           | -1,553.06    | 2,827.22               | 2,792.11                | 41.12                     | 69.055            |                    |           |  |
| 8,300.00                          | 8,072.70              | 7,353.44              | 7,211.75              | 37.51            | 31.17         | 125.70                | -1,374.36                           | -1,577.49    | 2,874.88               | 2,839.77                | 41.70                     | 69.288            |                    |           |  |
| 8,400.00                          | 8,167.37              | 7,438.39              | 7,294.62              | 38.13            | 31.64         | 126.30                | -1,382.73                           | -1,601.92    | 2,922.54               | 2,887.43                | 42.28                     | 69.518            |                    |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 8,500.00                          | 8,262.05              | 8,377.29              | 8,237.78              | 38.75            | 33.72         | 131.03                | -1,353.00                           | -1,514.47    | 2,722.53               | 2,676.54                | 45.99                     | 59.196            |                    |           |
| 8,600.00                          | 8,356.72              | 8,435.12              | 8,295.40              | 39.37            | 33.90         | 131.24                | -1,357.50                           | -1,514.42    | 2,745.45               | 2,698.97                | 46.47                     | 59.074            |                    |           |
| 8,700.00                          | 8,451.39              | 8,500.00              | 8,359.14              | 39.99            | 34.11         | 131.32                | -1,369.42                           | -1,514.30    | 2,769.76               | 2,722.77                | 46.99                     | 58.947            |                    |           |
| 8,800.00                          | 8,546.07              | 8,550.00              | 8,407.11              | 40.61            | 34.28         | 131.28                | -1,383.49                           | -1,514.16    | 2,795.38               | 2,747.92                | 47.46                     | 58.902            |                    |           |
| 8,875.44                          | 8,617.48              | 8,600.00              | 8,453.66              | 41.08            | 34.45         | 131.15                | -1,401.68                           | -1,513.98    | 2,815.60               | 2,767.74                | 47.86                     | 58.825            |                    |           |
| 8,900.00                          | 8,640.90              | 8,600.00              | 8,453.66              | 41.23            | 34.45         | 131.65                | -1,401.68                           | -1,513.98    | 2,822.04               | 2,774.11                | 47.93                     | 58.881            |                    |           |
| 8,950.00                          | 8,689.44              | 8,637.32              | 8,487.28              | 41.49            | 34.59         | 132.31                | -1,417.87                           | -1,513.82    | 2,833.24               | 2,785.05                | 48.20                     | 58.784            |                    |           |
| 9,000.00                          | 8,738.83              | 8,663.71              | 8,510.38              | 41.70            | 34.68         | 132.76                | -1,430.62                           | -1,513.69    | 2,842.01               | 2,793.60                | 48.40                     | 58.716            |                    |           |
| 9,050.00                          | 8,788.70              | 8,688.43              | 8,531.47              | 41.87            | 34.77         | 132.99                | -1,443.51                           | -1,513.56    | 2,848.30               | 2,799.72                | 48.58                     | 58.632            |                    |           |
| 9,063.30                          | 8,802.00              | 8,700.00              | 8,541.15              | 41.91            | 34.81         | -98.38                | -1,449.86                           | -1,513.50    | 2,849.57               | 2,800.92                | 48.65                     | 58.577            |                    |           |
| 9,100.00                          | 8,838.70              | 8,711.39              | 8,550.54              | 42.00            | 34.86         | -98.51                | -1,456.30                           | -1,513.44    | 2,852.94               | 2,804.22                | 48.73                     | 58.547            |                    |           |
| 9,200.00                          | 8,938.70              | 8,750.00              | 8,581.41              | 42.26            | 35.00         | -98.97                | -1,479.48                           | -1,513.20    | 2,863.69               | 2,814.72                | 48.98                     | 58.468            |                    |           |
| 9,300.00                          | 9,038.70              | 8,800.00              | 8,618.93              | 42.51            | 35.19         | -99.63                | -1,512.50                           | -1,512.87    | 2,876.82               | 2,827.54                | 49.28                     | 58.381            |                    |           |
| 9,400.00                          | 9,138.70              | 8,824.96              | 8,636.55              | 42.77            | 35.28         | -99.98                | -1,530.18                           | -1,512.70    | 2,892.40               | 2,842.98                | 49.42                     | 58.533            |                    |           |
| 9,500.00                          | 9,238.70              | 8,850.00              | 8,653.44              | 43.03            | 35.38         | -100.35               | -1,548.66                           | -1,512.51    | 2,910.61               | 2,861.08                | 49.53                     | 58.768            |                    |           |
| 9,600.00                          | 9,338.70              | 8,881.58              | 8,673.55              | 43.30            | 35.50         | -100.83               | -1,573.00                           | -1,512.27    | 2,931.47               | 2,881.81                | 49.66                     | 59.035            |                    |           |
| 9,700.00                          | 9,438.70              | 8,900.00              | 8,684.66              | 43.56            | 35.58         | -101.12               | -1,587.69                           | -1,512.12    | 2,955.06               | 2,905.39                | 49.67                     | 59.489            |                    |           |
| 9,800.00                          | 9,538.70              | 8,926.79              | 8,699.95              | 43.82            | 35.68         | -101.55               | -1,609.68                           | -1,511.90    | 2,981.36               | 2,931.64                | 49.72                     | 59.959            |                    |           |
| 9,900.00                          | 9,638.70              | 8,950.00              | 8,712.36              | 44.09            | 35.78         | -101.94               | -1,629.30                           | -1,511.71    | 3,010.40               | 2,960.68                | 49.72                     | 60.543            |                    |           |
| 10,000.00                         | 9,738.70              | 8,950.00              | 8,712.36              | 44.36            | 35.78         | -101.94               | -1,629.30                           | -1,511.71    | 3,042.21               | 2,992.67                | 49.54                     | 61.407            |                    |           |
| 10,100.00                         | 9,838.70              | 8,978.96              | 8,726.71              | 44.63            | 35.90         | -102.43               | -1,654.45                           | -1,511.46    | 3,076.51               | 3,026.97                | 49.54                     | 62.102            |                    |           |
| 10,200.00                         | 9,938.70              | 9,000.00              | 8,736.33              | 44.90            | 35.99         | -102.79               | -1,673.16                           | -1,511.27    | 3,113.53               | 3,064.06                | 49.46                     | 62.946            |                    |           |
| 10,300.00                         | 10,038.70             | 9,000.00              | 8,736.33              | 45.17            | 35.99         | -102.79               | -1,673.16                           | -1,511.27    | 3,153.06               | 3,103.84                | 49.22                     | 64.057            |                    |           |
| 10,400.00                         | 10,138.70             | 9,000.00              | 8,736.33              | 45.44            | 35.99         | -102.79               | -1,673.16                           | -1,511.27    | 3,195.23               | 3,146.27                | 48.97                     | 65.253            |                    |           |
| 10,500.00                         | 10,238.70             | 9,028.79              | 8,748.36              | 45.71            | 36.12         | -103.30               | -1,699.30                           | -1,511.01    | 3,239.46               | 3,190.55                | 48.91                     | 66.238            |                    |           |
| 10,600.00                         | 10,338.70             | 9,050.00              | 8,756.38              | 45.99            | 36.22         | -103.68               | -1,718.94                           | -1,510.81    | 3,286.26               | 3,237.49                | 48.78                     | 67.371            |                    |           |
| 10,700.00                         | 10,438.70             | 9,050.00              | 8,756.38              | 46.26            | 36.22         | -103.68               | -1,718.94                           | -1,510.81    | 3,335.15               | 3,286.66                | 48.50                     | 68.771            |                    |           |
| 10,800.00                         | 10,538.70             | 9,050.00              | 8,756.38              | 46.54            | 36.22         | -103.68               | -1,718.94                           | -1,510.81    | 3,386.29               | 3,338.08                | 48.21                     | 70.241            |                    |           |
| 10,900.00                         | 10,638.70             | 9,050.00              | 8,756.38              | 46.82            | 36.22         | -103.68               | -1,718.94                           | -1,510.81    | 3,439.58               | 3,391.66                | 47.92                     | 71.775            |                    |           |
| 11,000.00                         | 10,738.70             | 9,071.59              | 8,763.80              | 47.10            | 36.32         | -104.07               | -1,739.22                           | -1,510.61    | 3,494.61               | 3,446.82                | 47.79                     | 73.128            |                    |           |
| 11,100.00                         | 10,838.70             | 9,078.39              | 8,765.97              | 47.38            | 36.35         | -104.20               | -1,745.66                           | -1,510.54    | 3,551.66               | 3,504.11                | 47.55                     | 74.692            |                    |           |
| 11,200.00                         | 10,938.70             | 9,100.00              | 8,772.37              | 47.66            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,610.69               | 3,563.27                | 47.42                     | 76.143            |                    |           |
| 11,300.00                         | 11,038.70             | 9,100.00              | 8,772.37              | 47.94            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,671.18               | 3,624.03                | 47.15                     | 77.867            |                    |           |
| 11,400.00                         | 11,138.70             | 9,100.00              | 8,772.37              | 48.22            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,733.38               | 3,686.49                | 46.88                     | 79.633            |                    |           |
| 11,500.00                         | 11,238.70             | 9,100.00              | 8,772.37              | 48.51            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,797.19               | 3,750.56                | 46.63                     | 81.437            |                    |           |
| 11,600.00                         | 11,338.70             | 9,100.00              | 8,772.37              | 48.79            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,862.53               | 3,816.15                | 46.38                     | 83.274            |                    |           |
| 11,700.00                         | 11,438.70             | 9,100.00              | 8,772.37              | 49.08            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,929.34               | 3,883.18                | 46.15                     | 85.140            |                    |           |
| 11,753.34                         | 11,492.04             | 9,100.00              | 8,772.37              | 49.23            | 36.45         | -104.59               | -1,766.30                           | -1,510.34    | 3,965.54               | 3,919.51                | 46.03                     | 86.146            |                    |           |
| 11,800.00                         | 11,538.65             | 9,100.00              | 8,772.37              | 49.37            | 36.45         | 71.84                 | -1,766.30                           | -1,510.34    | 3,997.16               | 3,951.22                | 45.93                     | 87.021            |                    |           |
| 11,850.00                         | 11,588.24             | 9,100.00              | 8,772.37              | 49.55            | 36.45         | 67.67                 | -1,766.30                           | -1,510.34    | 4,030.39               | 3,984.55                | 45.83                     | 87.934            |                    |           |
| 11,900.00                         | 11,637.10             | 9,122.36              | 8,778.17              | 49.74            | 36.56         | 63.48                 | -1,787.89                           | -1,510.12    | 4,062.35               | 4,016.46                | 45.89                     | 88.531            |                    |           |
| 11,950.00                         | 11,684.86             | 9,126.53              | 8,779.16              | 49.95            | 36.58         | 59.94                 | -1,791.94                           | -1,510.08    | 4,093.41               | 4,047.58                | 45.83                     | 89.318            |                    |           |
| 12,000.00                         | 11,731.15             | 9,150.00              | 8,784.17              | 50.18            | 36.70         | 56.53                 | -1,814.86                           | -1,509.85    | 4,123.36               | 4,077.46                | 45.90                     | 89.833            |                    |           |
| 12,050.00                         | 11,775.62             | 9,150.00              | 8,784.17              | 50.42            | 36.70         | 53.76                 | -1,814.86                           | -1,509.85    | 4,151.34               | 4,105.50                | 45.83                     | 90.572            |                    |           |
| 12,100.00                         | 11,817.93             | 9,150.00              | 8,784.17              | 50.68            | 36.70         | 51.31                 | -1,814.86                           | -1,509.85    | 4,177.57               | 4,131.79                | 45.78                     | 91.258            |                    |           |
| 12,150.00                         | 11,857.76             | 9,150.00              | 8,784.17              | 50.96            | 36.70         | 49.17                 | -1,814.86                           | -1,509.85    | 4,201.90               | 4,156.17                | 45.73                     | 91.884            |                    |           |
| 12,200.00                         | 11,894.81             | 9,150.00              | 8,784.17              | 51.25            | 36.70         | 47.31                 | -1,814.86                           | -1,509.85    | 4,224.17               | 4,178.47                | 45.69                     | 92.447            |                    |           |
| 12,250.00                         | 11,928.80             | 9,150.00              | 8,784.17              | 51.56            | 36.70         | 45.72                 | -1,814.86                           | -1,509.85    | 4,244.25               | 4,198.58                | 45.67                     | 92.942            |                    |           |
| 12,300.00                         | 11,959.45             | 9,150.00              | 8,784.17              | 51.87            | 36.70         | 44.38                 | -1,814.86                           | -1,509.85    | 4,262.01               | 4,216.36                | 45.65                     | 93.364            |                    |           |
| 12,350.00                         | 11,986.56             | 9,173.94              | 8,788.31              | 52.20            | 36.83         | 43.18                 | -1,838.44                           | -1,509.62    | 4,276.91               | 4,231.12                | 45.79                     | 93.408            |                    |           |
| 12,400.00                         | 12,009.90             | 9,200.00              | 8,791.69              | 52.55            | 36.97         | 42.23                 | -1,864.28                           | -1,509.36    | 4,289.72               | 4,243.78                | 45.95                     | 93.364            |                    |           |
| 12,450.00                         | 12,029.29             | 9,200.00              | 8,791.69              | 52.90            | 36.97         | 41.57                 | -1,864.28                           | -1,509.36    | 4,299.42               | 4,253.45                | 45.97                     | 93.533            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 12,500.00                         | 12,044.60             | 9,200.00              | 8,791.69              | 53.26            | 36.97         | 41.10                 | -1,864.28                           | -1,509.36    | 4,306.45               | 4,260.45                | 46.00                     | 93.616            |                    |           |
| 12,550.00                         | 12,055.70             | 9,200.00              | 8,791.69              | 53.63            | 36.97         | 40.81                 | -1,864.28                           | -1,509.36    | 4,310.80               | 4,264.75                | 46.05                     | 93.610            |                    |           |
| 12,600.00                         | 12,062.52             | 9,200.00              | 8,791.69              | 54.01            | 36.97         | 40.70                 | -1,864.28                           | -1,509.36    | 4,312.43               | 4,266.31                | 46.11                     | 93.515            |                    |           |
| 12,653.34                         | 12,065.00             | 9,200.00              | 8,791.69              | 54.42            | 36.97         | 40.79                 | -1,864.28                           | -1,509.36    | 4,311.16               | 4,264.96                | 46.20                     | 93.313            |                    |           |
| 12,700.00                         | 12,065.00             | 9,225.39              | 8,793.86              | 54.78            | 37.10         | 40.81                 | -1,889.57                           | -1,509.11    | 4,308.44               | 4,262.01                | 46.43                     | 92.793            |                    |           |
| 12,800.00                         | 12,065.00             | 9,250.00              | 8,794.88              | 55.59            | 37.24         | 40.81                 | -1,914.16                           | -1,508.86    | 4,304.71               | 4,257.94                | 46.77                     | 92.044            |                    |           |
| 12,900.00                         | 12,065.00             | 9,255.26              | 8,794.96              | 56.43            | 37.27         | 40.82                 | -1,919.42                           | -1,508.81    | 4,302.81               | 4,255.78                | 47.02                     | 91.506            |                    |           |
| 13,000.00                         | 12,065.00             | 9,319.52              | 8,795.00              | 57.31            | 37.65         | 40.82                 | -1,983.68                           | -1,508.16    | 4,302.62               | 4,255.00                | 47.62                     | 90.352            |                    |           |
| 13,010.42                         | 12,065.00             | 9,329.95              | 8,795.00              | 57.40            | 37.71         | 40.82                 | -1,994.10                           | -1,508.06    | 4,302.62               | 4,254.91                | 47.71                     | 90.189            |                    |           |
| 13,100.00                         | 12,065.00             | 9,419.52              | 8,795.00              | 58.22            | 38.29         | 40.82                 | -2,083.67                           | -1,507.17    | 4,302.60               | 4,254.15                | 48.45                     | 88.797            |                    |           |
| 13,200.00                         | 12,065.00             | 9,519.52              | 8,795.00              | 59.17            | 38.99         | 40.82                 | -2,183.67                           | -1,506.17    | 4,302.59               | 4,253.25                | 49.34                     | 87.211            |                    |           |
| 13,300.00                         | 12,065.00             | 9,619.52              | 8,795.00              | 60.14            | 39.76         | 40.81                 | -2,283.66                           | -1,505.17    | 4,302.57               | 4,252.31                | 50.26                     | 85.605            |                    |           |
| 13,400.00                         | 12,065.00             | 9,719.52              | 8,795.00              | 61.15            | 40.57         | 40.81                 | -2,383.66                           | -1,504.17    | 4,302.56               | 4,251.33                | 51.23                     | 83.990            |                    |           |
| 13,500.00                         | 12,065.00             | 9,819.52              | 8,795.00              | 62.18            | 41.45         | 40.81                 | -2,483.65                           | -1,503.17    | 4,302.55               | 4,250.32                | 52.23                     | 82.374            |                    |           |
| 13,600.00                         | 12,065.00             | 9,919.52              | 8,795.00              | 63.24            | 42.37         | 40.81                 | -2,583.65                           | -1,502.17    | 4,302.53               | 4,249.26                | 53.27                     | 80.763            |                    |           |
| 13,700.00                         | 12,065.00             | 10,019.52             | 8,795.00              | 64.32            | 43.33         | 40.81                 | -2,683.64                           | -1,501.17    | 4,302.52               | 4,248.17                | 54.35                     | 79.163            |                    |           |
| 13,800.00                         | 12,065.00             | 10,119.52             | 8,795.00              | 65.43            | 44.34         | 40.81                 | -2,783.64                           | -1,500.17    | 4,302.50               | 4,247.04                | 55.46                     | 77.578            |                    |           |
| 13,900.00                         | 12,065.00             | 10,219.52             | 8,795.00              | 66.56            | 45.39         | 40.81                 | -2,883.63                           | -1,499.17    | 4,302.49               | 4,245.89                | 56.60                     | 76.010            |                    |           |
| 14,000.00                         | 12,065.00             | 10,319.52             | 8,795.00              | 67.71            | 46.47         | 40.81                 | -2,983.63                           | -1,498.17    | 4,302.48               | 4,244.70                | 57.78                     | 74.467            |                    |           |
| 14,100.00                         | 12,065.00             | 10,419.52             | 8,795.00              | 68.88            | 47.59         | 40.81                 | -3,083.62                           | -1,497.17    | 4,302.46               | 4,243.49                | 58.98                     | 72.951            |                    |           |
| 14,200.00                         | 12,065.00             | 10,519.52             | 8,795.00              | 70.08            | 48.74         | 40.81                 | -3,183.62                           | -1,496.17    | 4,302.45               | 4,242.25                | 60.20                     | 71.465            |                    |           |
| 14,300.00                         | 12,065.00             | 10,619.52             | 8,795.00              | 71.29            | 49.91         | 40.81                 | -3,283.61                           | -1,495.17    | 4,302.43               | 4,240.98                | 61.45                     | 70.013            |                    |           |
| 14,400.00                         | 12,065.00             | 10,719.52             | 8,795.00              | 72.51            | 51.12         | 40.81                 | -3,383.61                           | -1,494.17    | 4,302.42               | 4,239.70                | 62.72                     | 68.594            |                    |           |
| 14,500.00                         | 12,065.00             | 10,819.52             | 8,795.00              | 73.76            | 52.35         | 40.81                 | -3,483.60                           | -1,493.18    | 4,302.41               | 4,238.39                | 64.01                     | 67.210            |                    |           |
| 14,600.00                         | 12,065.00             | 10,919.52             | 8,795.00              | 75.02            | 53.60         | 40.81                 | -3,583.60                           | -1,492.18    | 4,302.39               | 4,237.07                | 65.33                     | 65.859            |                    |           |
| 14,700.00                         | 12,065.00             | 11,019.52             | 8,795.00              | 76.29            | 54.87         | 40.81                 | -3,683.59                           | -1,491.18    | 4,302.38               | 4,235.72                | 66.66                     | 64.544            |                    |           |
| 14,800.00                         | 12,065.00             | 11,119.52             | 8,795.00              | 77.58            | 56.17         | 40.81                 | -3,783.59                           | -1,490.18    | 4,302.36               | 4,234.36                | 68.01                     | 63.263            |                    |           |
| 14,900.00                         | 12,065.00             | 11,219.52             | 8,795.00              | 78.89            | 57.48         | 40.81                 | -3,883.58                           | -1,489.18    | 4,302.35               | 4,232.98                | 69.37                     | 62.017            |                    |           |
| 15,000.00                         | 12,065.00             | 11,319.52             | 8,795.00              | 80.20            | 58.81         | 40.81                 | -3,983.58                           | -1,488.18    | 4,302.34               | 4,231.58                | 70.76                     | 60.805            |                    |           |
| 15,100.00                         | 12,065.00             | 11,419.52             | 8,795.00              | 81.53            | 60.16         | 40.81                 | -4,083.57                           | -1,487.18    | 4,302.32               | 4,230.17                | 72.15                     | 59.628            |                    |           |
| 15,200.00                         | 12,065.00             | 11,519.52             | 8,795.00              | 82.87            | 61.52         | 40.81                 | -4,183.57                           | -1,486.18    | 4,302.31               | 4,228.74                | 73.56                     | 58.484            |                    |           |
| 15,300.00                         | 12,065.00             | 11,619.52             | 8,795.00              | 84.22            | 62.90         | 40.81                 | -4,283.56                           | -1,485.18    | 4,302.29               | 4,227.31                | 74.99                     | 57.375            |                    |           |
| 15,400.00                         | 12,065.00             | 11,719.52             | 8,795.00              | 85.59            | 64.29         | 40.81                 | -4,383.56                           | -1,484.18    | 4,302.28               | 4,225.86                | 76.42                     | 56.298            |                    |           |
| 15,500.00                         | 12,065.00             | 11,819.52             | 8,795.00              | 86.96            | 65.69         | 40.81                 | -4,483.55                           | -1,483.18    | 4,302.27               | 4,224.40                | 77.87                     | 55.252            |                    |           |
| 15,600.00                         | 12,065.00             | 11,919.52             | 8,795.00              | 88.34            | 67.10         | 40.81                 | -4,583.55                           | -1,482.18    | 4,302.25               | 4,222.93                | 79.32                     | 54.236            |                    |           |
| 15,700.00                         | 12,065.00             | 12,019.52             | 8,795.00              | 89.73            | 68.52         | 40.81                 | -4,683.54                           | -1,481.18    | 4,302.24               | 4,221.45                | 80.79                     | 53.250            |                    |           |
| 15,800.00                         | 12,065.00             | 12,119.52             | 8,795.00              | 91.13            | 69.96         | 40.81                 | -4,783.54                           | -1,480.18    | 4,302.22               | 4,219.95                | 82.27                     | 52.293            |                    |           |
| 15,900.00                         | 12,065.00             | 12,219.52             | 8,795.00              | 92.54            | 71.40         | 40.81                 | -4,883.53                           | -1,479.18    | 4,302.21               | 4,218.45                | 83.76                     | 51.364            |                    |           |
| 16,000.00                         | 12,065.00             | 12,319.52             | 8,795.00              | 93.95            | 72.85         | 40.81                 | -4,983.53                           | -1,478.19    | 4,302.20               | 4,216.94                | 85.26                     | 50.462            |                    |           |
| 16,100.00                         | 12,065.00             | 12,419.52             | 8,795.00              | 95.38            | 74.31         | 40.81                 | -5,083.52                           | -1,477.19    | 4,302.18               | 4,215.42                | 86.76                     | 49.588            |                    |           |
| 16,200.00                         | 12,065.00             | 12,519.52             | 8,795.00              | 96.81            | 75.78         | 40.81                 | -5,183.52                           | -1,476.19    | 4,302.17               | 4,213.90                | 88.27                     | 48.739            |                    |           |
| 16,300.00                         | 12,065.00             | 12,619.52             | 8,795.00              | 98.24            | 77.26         | 40.81                 | -5,283.51                           | -1,475.19    | 4,302.15               | 4,212.37                | 89.79                     | 47.914            |                    |           |
| 16,400.00                         | 12,065.00             | 12,719.52             | 8,795.00              | 99.69            | 78.74         | 40.81                 | -5,383.51                           | -1,474.19    | 4,302.14               | 4,210.83                | 91.31                     | 47.113            |                    |           |
| 16,500.00                         | 12,065.00             | 12,819.52             | 8,795.00              | 101.14           | 80.23         | 40.81                 | -5,483.50                           | -1,473.19    | 4,302.13               | 4,209.28                | 92.85                     | 46.335            |                    |           |
| 16,600.00                         | 12,065.00             | 12,919.52             | 8,795.00              | 102.60           | 81.73         | 40.81                 | -5,583.50                           | -1,472.19    | 4,302.11               | 4,207.73                | 94.39                     | 45.579            |                    |           |
| 16,700.00                         | 12,065.00             | 13,019.52             | 8,795.00              | 104.06           | 83.23         | 40.81                 | -5,683.49                           | -1,471.19    | 4,302.10               | 4,206.17                | 95.93                     | 44.845            |                    |           |
| 16,800.00                         | 12,065.00             | 13,119.52             | 8,795.00              | 105.53           | 84.74         | 40.81                 | -5,783.49                           | -1,470.19    | 4,302.08               | 4,204.60                | 97.48                     | 44.131            |                    |           |
| 16,900.00                         | 12,065.00             | 13,219.52             | 8,795.00              | 107.00           | 86.25         | 40.81                 | -5,883.48                           | -1,469.19    | 4,302.07               | 4,203.03                | 99.04                     | 43.438            |                    |           |
| 17,000.00                         | 12,065.00             | 13,319.52             | 8,795.00              | 108.48           | 87.77         | 40.81                 | -5,983.48                           | -1,468.19    | 4,302.06               | 4,201.46                | 100.60                    | 42.765            |                    |           |
| 17,100.00                         | 12,065.00             | 13,419.52             | 8,795.00              | 109.96           | 89.29         | 40.81                 | -6,083.47                           | -1,467.19    | 4,302.04               | 4,199.88                | 102.16                    | 42.110            |                    |           |
| 17,200.00                         | 12,065.00             | 13,519.52             | 8,795.00              | 111.45           | 90.82         | 40.81                 | -6,183.47                           | -1,466.19    | 4,302.03               | 4,198.30                | 103.73                    | 41.473            |                    |           |
| 17,300.00                         | 12,065.00             | 13,619.52             | 8,795.00              | 112.94           | 92.35         | 40.81                 | -6,283.46                           | -1,465.19    | 4,302.01               | 4,196.71                | 105.31                    | 40.852            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 101H - OH - Plan #1 |         | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                                                       |         |                              |  |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |         |                              |  |
| 17,400.00                         | 12,065.00             | 13,719.52             | 8,795.00              | 114.44           | 93.88         | 40.81                 | -6,383.46              | -1,464.19    | 4,302.00               | 4,195.11                | 106.89                    | 40.248            |                                                       |         |                              |  |
| 17,500.00                         | 12,065.00             | 13,819.52             | 8,795.00              | 115.94           | 95.42         | 40.81                 | -6,483.45              | -1,463.20    | 4,301.99               | 4,193.51                | 108.47                    | 39.659            |                                                       |         |                              |  |
| 17,600.00                         | 12,065.00             | 13,919.52             | 8,795.00              | 117.45           | 96.96         | 40.81                 | -6,583.45              | -1,462.20    | 4,301.97               | 4,191.91                | 110.06                    | 39.087            |                                                       |         |                              |  |
| 17,700.00                         | 12,065.00             | 14,019.52             | 8,795.00              | 118.96           | 98.51         | 40.81                 | -6,683.44              | -1,461.20    | 4,301.96               | 4,190.31                | 111.65                    | 38.530            |                                                       |         |                              |  |
| 17,800.00                         | 12,065.00             | 14,119.52             | 8,795.00              | 120.47           | 100.06        | 40.81                 | -6,783.44              | -1,460.20    | 4,301.94               | 4,188.70                | 113.25                    | 37.988            |                                                       |         |                              |  |
| 17,900.00                         | 12,065.00             | 14,219.52             | 8,795.00              | 121.99           | 101.61        | 40.80                 | -6,883.43              | -1,459.20    | 4,301.93               | 4,187.09                | 114.84                    | 37.459            |                                                       |         |                              |  |
| 18,000.00                         | 12,065.00             | 14,319.52             | 8,795.00              | 123.51           | 103.17        | 40.80                 | -6,983.43              | -1,458.20    | 4,301.92               | 4,185.47                | 116.44                    | 36.944            |                                                       |         |                              |  |
| 18,100.00                         | 12,065.00             | 14,419.52             | 8,795.00              | 125.03           | 104.73        | 40.80                 | -7,083.42              | -1,457.20    | 4,301.90               | 4,183.86                | 118.05                    | 36.442            |                                                       |         |                              |  |
| 18,200.00                         | 12,065.00             | 14,519.52             | 8,795.00              | 126.56           | 106.29        | 40.80                 | -7,183.42              | -1,456.20    | 4,301.89               | 4,182.24                | 119.65                    | 35.953            |                                                       |         |                              |  |
| 18,300.00                         | 12,065.00             | 14,619.52             | 8,795.00              | 128.09           | 107.86        | 40.80                 | -7,283.41              | -1,455.20    | 4,301.87               | 4,180.61                | 121.26                    | 35.476            |                                                       |         |                              |  |
| 18,400.00                         | 12,065.00             | 14,719.52             | 8,795.00              | 129.62           | 109.42        | 40.80                 | -7,383.41              | -1,454.20    | 4,301.86               | 4,178.98                | 122.88                    | 35.010            |                                                       |         |                              |  |
| 18,500.00                         | 12,065.00             | 14,819.52             | 8,795.00              | 131.16           | 110.99        | 40.80                 | -7,483.40              | -1,453.20    | 4,301.85               | 4,177.36                | 124.49                    | 34.556            |                                                       |         |                              |  |
| 18,600.00                         | 12,065.00             | 14,919.52             | 8,795.00              | 132.69           | 112.57        | 40.80                 | -7,583.40              | -1,452.20    | 4,301.83               | 4,175.73                | 126.10                    | 34.113            |                                                       |         |                              |  |
| 18,700.00                         | 12,065.00             | 15,019.52             | 8,795.00              | 134.24           | 114.14        | 40.80                 | -7,683.39              | -1,451.20    | 4,301.82               | 4,174.10                | 127.72                    | 33.681            |                                                       |         |                              |  |
| 18,800.00                         | 12,065.00             | 15,119.52             | 8,795.00              | 135.78           | 115.72        | 40.80                 | -7,783.39              | -1,450.20    | 4,301.80               | 4,172.46                | 129.34                    | 33.259            |                                                       |         |                              |  |
| 18,900.00                         | 12,065.00             | 15,219.52             | 8,795.00              | 137.33           | 117.30        | 40.80                 | -7,883.38              | -1,449.20    | 4,301.79               | 4,170.82                | 130.97                    | 32.846            |                                                       |         |                              |  |
| 19,000.00                         | 12,065.00             | 15,319.52             | 8,795.00              | 138.87           | 118.88        | 40.80                 | -7,983.38              | -1,448.21    | 4,301.78               | 4,169.18                | 132.59                    | 32.444            |                                                       |         |                              |  |
| 19,100.00                         | 12,065.00             | 15,419.52             | 8,795.00              | 140.43           | 120.46        | 40.80                 | -8,083.37              | -1,447.21    | 4,301.76               | 4,167.54                | 134.22                    | 32.050            |                                                       |         |                              |  |
| 19,200.00                         | 12,065.00             | 15,519.52             | 8,795.00              | 141.98           | 122.04        | 40.80                 | -8,183.37              | -1,446.21    | 4,301.75               | 4,165.90                | 135.85                    | 31.665            |                                                       |         |                              |  |
| 19,300.00                         | 12,065.00             | 15,619.52             | 8,795.00              | 143.53           | 123.63        | 40.80                 | -8,283.36              | -1,445.21    | 4,301.73               | 4,164.25                | 137.48                    | 31.290            |                                                       |         |                              |  |
| 19,400.00                         | 12,065.00             | 15,719.52             | 8,795.00              | 145.09           | 125.22        | 40.80                 | -8,383.36              | -1,444.21    | 4,301.72               | 4,162.61                | 139.11                    | 30.923            |                                                       |         |                              |  |
| 19,500.00                         | 12,065.00             | 15,819.52             | 8,795.00              | 146.65           | 126.81        | 40.80                 | -8,483.35              | -1,443.21    | 4,301.71               | 4,160.96                | 140.74                    | 30.564            |                                                       |         |                              |  |
| 19,600.00                         | 12,065.00             | 15,919.52             | 8,795.00              | 148.21           | 128.40        | 40.80                 | -8,583.35              | -1,442.21    | 4,301.69               | 4,159.31                | 142.38                    | 30.213            |                                                       |         |                              |  |
| 19,700.00                         | 12,065.00             | 16,019.52             | 8,795.00              | 149.78           | 129.99        | 40.80                 | -8,683.34              | -1,441.21    | 4,301.68               | 4,157.66                | 144.02                    | 29.869            |                                                       |         |                              |  |
| 19,800.00                         | 12,065.00             | 16,119.52             | 8,795.00              | 151.34           | 131.58        | 40.80                 | -8,783.34              | -1,440.21    | 4,301.66               | 4,156.01                | 145.66                    | 29.533            |                                                       |         |                              |  |
| 19,900.00                         | 12,065.00             | 16,219.52             | 8,795.00              | 152.91           | 133.18        | 40.80                 | -8,883.33              | -1,439.21    | 4,301.65               | 4,154.35                | 147.30                    | 29.204            |                                                       |         |                              |  |
| 20,000.00                         | 12,065.00             | 16,319.52             | 8,795.00              | 154.48           | 134.78        | 40.80                 | -8,983.33              | -1,438.21    | 4,301.64               | 4,152.70                | 148.94                    | 28.882            |                                                       |         |                              |  |
| 20,100.00                         | 12,065.00             | 16,419.52             | 8,795.00              | 156.05           | 136.37        | 40.80                 | -9,083.32              | -1,437.21    | 4,301.62               | 4,151.04                | 150.58                    | 28.567            |                                                       |         |                              |  |
| 20,200.00                         | 12,065.00             | 16,519.52             | 8,795.00              | 157.62           | 137.97        | 40.80                 | -9,183.32              | -1,436.21    | 4,301.61               | 4,149.39                | 152.22                    | 28.259            |                                                       |         |                              |  |
| 20,300.00                         | 12,065.00             | 16,619.52             | 8,795.00              | 159.20           | 139.57        | 40.80                 | -9,283.31              | -1,435.21    | 4,301.59               | 4,147.73                | 153.86                    | 27.957            |                                                       |         |                              |  |
| 20,400.00                         | 12,065.00             | 16,719.52             | 8,795.00              | 160.77           | 141.17        | 40.80                 | -9,383.31              | -1,434.21    | 4,301.58               | 4,146.07                | 155.51                    | 27.662            |                                                       |         |                              |  |
| 20,500.00                         | 12,065.00             | 16,819.52             | 8,795.00              | 162.35           | 142.78        | 40.80                 | -9,483.30              | -1,433.22    | 4,301.57               | 4,144.41                | 157.15                    | 27.372            |                                                       |         |                              |  |
| 20,600.00                         | 12,065.00             | 16,919.52             | 8,795.00              | 163.93           | 144.38        | 40.80                 | -9,583.30              | -1,432.22    | 4,301.55               | 4,142.75                | 158.80                    | 27.087            |                                                       |         |                              |  |
| 20,700.00                         | 12,065.00             | 17,019.52             | 8,795.00              | 165.51           | 145.99        | 40.80                 | -9,683.29              | -1,431.22    | 4,301.54               | 4,141.08                | 160.45                    | 26.808            |                                                       |         |                              |  |
| 20,800.00                         | 12,065.00             | 17,119.52             | 8,795.00              | 167.09           | 147.59        | 40.80                 | -9,783.29              | -1,430.22    | 4,301.52               | 4,139.42                | 162.10                    | 26.535            |                                                       |         |                              |  |
| 20,900.00                         | 12,065.00             | 17,219.52             | 8,795.00              | 168.67           | 149.20        | 40.80                 | -9,883.28              | -1,429.22    | 4,301.51               | 4,137.76                | 163.75                    | 26.268            |                                                       |         |                              |  |
| 21,000.00                         | 12,065.00             | 17,319.52             | 8,795.00              | 170.26           | 150.81        | 40.80                 | -9,983.28              | -1,428.22    | 4,301.50               | 4,136.09                | 165.40                    | 26.006            |                                                       |         |                              |  |
| 21,100.00                         | 12,065.00             | 17,419.52             | 8,795.00              | 171.84           | 152.42        | 40.80                 | -10,083.27             | -1,427.22    | 4,301.48               | 4,134.43                | 167.06                    | 25.749            |                                                       |         |                              |  |
| 21,200.00                         | 12,065.00             | 17,519.52             | 8,795.00              | 173.43           | 154.03        | 40.80                 | -10,183.27             | -1,426.22    | 4,301.47               | 4,132.76                | 168.71                    | 25.496            |                                                       |         |                              |  |
| 21,300.00                         | 12,065.00             | 17,619.52             | 8,795.00              | 175.02           | 155.64        | 40.80                 | -10,283.26             | -1,425.22    | 4,301.45               | 4,131.09                | 170.36                    | 25.249            |                                                       |         |                              |  |
| 21,400.00                         | 12,065.00             | 17,719.52             | 8,795.00              | 176.60           | 157.25        | 40.80                 | -10,383.26             | -1,424.22    | 4,301.44               | 4,129.42                | 172.02                    | 25.006            |                                                       |         |                              |  |
| 21,500.00                         | 12,065.00             | 17,819.52             | 8,795.00              | 178.19           | 158.86        | 40.80                 | -10,483.25             | -1,423.22    | 4,301.43               | 4,127.75                | 173.67                    | 24.767            |                                                       |         |                              |  |
| 21,600.00                         | 12,065.00             | 17,919.52             | 8,795.00              | 179.79           | 160.47        | 40.80                 | -10,583.25             | -1,422.22    | 4,301.41               | 4,126.08                | 175.33                    | 24.533            |                                                       |         |                              |  |
| 21,700.00                         | 12,065.00             | 18,019.52             | 8,795.00              | 181.38           | 162.09        | 40.80                 | -10,683.24             | -1,421.22    | 4,301.40               | 4,124.41                | 176.98                    | 24.304            |                                                       |         |                              |  |
| 21,800.00                         | 12,065.00             | 18,119.52             | 8,795.00              | 182.97           | 163.70        | 40.80                 | -10,783.24             | -1,420.22    | 4,301.38               | 4,122.74                | 178.64                    | 24.079            |                                                       |         |                              |  |
| 21,900.00                         | 12,065.00             | 18,219.52             | 8,795.00              | 184.57           | 165.32        | 40.80                 | -10,883.23             | -1,419.22    | 4,301.37               | 4,121.07                | 180.30                    | 23.857            |                                                       |         |                              |  |
| 22,000.00                         | 12,065.00             | 18,319.52             | 8,795.00              | 186.16           | 166.93        | 40.80                 | -10,983.23             | -1,418.23    | 4,301.36               | 4,119.40                | 181.95                    | 23.640            |                                                       |         |                              |  |
| 22,100.00                         | 12,065.00             | 18,419.52             | 8,795.00              | 187.76           | 168.55        | 40.80                 | -11,083.22             | -1,417.23    | 4,301.34               | 4,117.73                | 183.61                    | 23.426            |                                                       |         |                              |  |
| 22,200.00                         | 12,065.00             | 18,519.52             | 8,795.00              | 189.36           | 170.17        | 40.80                 | -11,183.22             | -1,416.23    | 4,301.33               | 4,116.06                | 185.27                    | 23.216            |                                                       |         |                              |  |
| 22,300.00                         | 12,065.00             | 18,619.52             | 8,795.00              | 190.95           | 171.79        | 40.80                 | -11,283.21             | -1,415.23    | 4,301.31               | 4,114.38                | 186.93                    | 23.010            |                                                       |         |                              |  |
| 22,400.00                         | 12,065.00             | 18,719.52             | 8,795.00              | 192.55           | 173.41        | 40.80                 | -11,383.21             | -1,414.23    | 4,301.30               | 4,112.71                | 188.59                    | 22.807            |                                                       |         |                              |  |
| 22,443.43                         | 12,065.00             | 18,762.37             | 8,795.00              | 193.25           | 174.10        | 40.80                 | -11,426.05             | -1,413.80    | 4,301.29               | 4,111.99                | 189.31                    | 22.721            |                                                       |         |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design         |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Tatanka Fed Com - Tatanka Fed Com 101H - OH - Plan #1 |    | Offset Site Error: |  | 0.00 usft |  |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------------------------------------------|----|--------------------|--|-----------|--|
| Survey Program:       |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | 0-OWSG (Rev2) MWD                                     |    | 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                                     |    |                    |  |           |  |
| 22,445.57             | 12,065.00             | 18,762.37             | 8,795.00              | 193.28           | 174.10        | 40.80                 | -11,426.05                          | -1,413.80    | 4,301.29               | 4,111.97                | 189.32                    | 22.720                                                | SF |                    |  |           |  |



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 102H - OH - Plan #1 |         | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -152.76               | -1,022.55                           | -526.48      | 1,150.22               |                         |                           |                   |                                                       |         |                              |  |
| 100.00                            | 100.00                | 85.60                 | 85.60                 | 0.13             | 0.11          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,149.96                | 0.17                      | 6,963.953         |                                                       |         |                              |  |
| 200.00                            | 200.00                | 185.60                | 185.60                | 0.48             | 0.43          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,149.48                | 0.65                      | 1,772.379         |                                                       |         |                              |  |
| 300.00                            | 300.00                | 285.60                | 285.60                | 0.84             | 0.79          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,148.97                | 1.16                      | 995.417           |                                                       |         |                              |  |
| 400.00                            | 400.00                | 385.60                | 385.60                | 1.20             | 1.15          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,148.46                | 1.66                      | 691.930           |                                                       |         |                              |  |
| 500.00                            | 500.00                | 485.60                | 485.60                | 1.56             | 1.51          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,147.96                | 2.17                      | 530.241           |                                                       |         |                              |  |
| 600.00                            | 600.00                | 585.60                | 585.60                | 1.92             | 1.87          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,147.45                | 2.68                      | 429.799           |                                                       |         |                              |  |
| 700.00                            | 700.00                | 685.60                | 685.60                | 2.28             | 2.22          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,146.94                | 3.18                      | 361.348           |                                                       |         |                              |  |
| 800.00                            | 800.00                | 785.60                | 785.60                | 2.63             | 2.58          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,146.44                | 3.69                      | 311.704           |                                                       |         |                              |  |
| 900.00                            | 900.00                | 885.60                | 885.60                | 2.99             | 2.94          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,145.93                | 4.20                      | 274.053           |                                                       |         |                              |  |
| 1,000.00                          | 1,000.00              | 985.60                | 985.60                | 3.35             | 3.30          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,145.42                | 4.70                      | 244.517           |                                                       |         |                              |  |
| 1,100.00                          | 1,100.00              | 1,085.60              | 1,085.60              | 3.71             | 3.66          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,144.92                | 5.21                      | 220.727           |                                                       |         |                              |  |
| 1,200.00                          | 1,200.00              | 1,185.60              | 1,185.60              | 4.07             | 4.02          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,144.41                | 5.72                      | 201.157           |                                                       |         |                              |  |
| 1,300.00                          | 1,300.00              | 1,285.60              | 1,285.60              | 4.43             | 4.38          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,143.90                | 6.22                      | 184.774           |                                                       |         |                              |  |
| 1,400.00                          | 1,400.00              | 1,385.60              | 1,385.60              | 4.79             | 4.73          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,143.39                | 6.73                      | 170.859           |                                                       |         |                              |  |
| 1,500.00                          | 1,500.00              | 1,485.60              | 1,485.60              | 5.14             | 5.09          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,142.89                | 7.24                      | 158.892           |                                                       |         |                              |  |
| 1,600.00                          | 1,600.00              | 1,585.60              | 1,585.60              | 5.50             | 5.45          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,142.38                | 7.75                      | 148.492           |                                                       |         |                              |  |
| 1,700.00                          | 1,700.00              | 1,685.60              | 1,685.60              | 5.86             | 5.81          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,141.87                | 8.25                      | 139.370           |                                                       |         |                              |  |
| 1,800.00                          | 1,800.00              | 1,785.60              | 1,785.60              | 6.22             | 6.17          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,141.37                | 8.76                      | 131.304           |                                                       |         |                              |  |
| 1,900.00                          | 1,900.00              | 1,885.60              | 1,885.60              | 6.58             | 6.53          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,140.86                | 9.27                      | 124.121           |                                                       |         |                              |  |
| 2,000.00                          | 2,000.00              | 1,985.60              | 1,985.60              | 6.94             | 6.88          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,140.35                | 9.77                      | 117.682           |                                                       |         |                              |  |
| 2,100.00                          | 2,100.00              | 2,085.60              | 2,085.60              | 7.29             | 7.24          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,139.85                | 10.28                     | 111.879           |                                                       |         |                              |  |
| 2,200.00                          | 2,200.00              | 2,185.60              | 2,185.60              | 7.65             | 7.60          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,139.34                | 10.79                     | 106.621           |                                                       |         |                              |  |
| 2,300.00                          | 2,300.00              | 2,285.60              | 2,285.60              | 8.01             | 7.96          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,138.83                | 11.29                     | 101.835           |                                                       |         |                              |  |
| 2,400.00                          | 2,400.00              | 2,385.60              | 2,385.60              | 8.37             | 8.32          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,138.33                | 11.80                     | 97.460            |                                                       |         |                              |  |
| 2,500.00                          | 2,500.00              | 2,485.60              | 2,485.60              | 8.73             | 8.68          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,137.82                | 12.31                     | 93.446            |                                                       |         |                              |  |
| 2,600.00                          | 2,600.00              | 2,585.60              | 2,585.60              | 9.09             | 9.04          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,137.31                | 12.81                     | 89.749            |                                                       |         |                              |  |
| 2,700.00                          | 2,700.00              | 2,685.60              | 2,685.60              | 9.45             | 9.39          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,136.80                | 13.32                     | 86.334            |                                                       |         |                              |  |
| 2,800.00                          | 2,800.00              | 2,785.60              | 2,785.60              | 9.80             | 9.75          | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,136.30                | 13.83                     | 83.169            |                                                       |         |                              |  |
| 2,900.00                          | 2,900.00              | 2,885.60              | 2,885.60              | 10.16            | 10.11         | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,135.79                | 14.34                     | 80.228            |                                                       |         |                              |  |
| 3,000.00                          | 3,000.00              | 2,985.60              | 2,985.60              | 10.52            | 10.47         | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,135.28                | 14.84                     | 77.488            |                                                       |         |                              |  |
| 3,100.00                          | 3,100.00              | 3,085.60              | 3,085.60              | 10.88            | 10.83         | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,134.78                | 15.35                     | 74.929            |                                                       |         |                              |  |
| 3,200.00                          | 3,200.00              | 3,185.60              | 3,185.60              | 11.24            | 11.19         | -152.76               | -1,022.55                           | -526.48      | 1,150.13               | 1,134.27                | 15.86                     | 72.533            |                                                       |         |                              |  |
| 3,300.00                          | 3,299.99              | 3,267.52              | 3,267.52              | 11.58            | 11.47         | 78.61                 | -1,023.15                           | -526.48      | 1,150.54               | 1,134.24                | 16.30                     | 70.598            |                                                       |         |                              |  |
| 3,400.00                          | 3,399.91              | 3,346.36              | 3,346.33              | 11.91            | 11.73         | 78.69                 | -1,025.35                           | -526.48      | 1,152.26               | 1,135.55                | 16.71                     | 68.961            |                                                       |         |                              |  |
| 3,500.00                          | 3,499.69              | 3,425.13              | 3,425.00              | 12.25            | 11.98         | 78.81                 | -1,029.18                           | -526.48      | 1,155.30               | 1,138.18                | 17.11                     | 67.507            |                                                       |         |                              |  |
| 3,600.00                          | 3,599.27              | 3,500.00              | 3,499.69              | 12.58            | 12.23         | 78.96                 | -1,034.32                           | -526.48      | 1,159.68               | 1,142.18                | 17.50                     | 66.252            |                                                       |         |                              |  |
| 3,700.00                          | 3,698.57              | 3,582.27              | 3,581.63              | 12.92            | 12.49         | 79.17                 | -1,041.66                           | -526.48      | 1,165.40               | 1,147.49                | 17.92                     | 65.043            |                                                       |         |                              |  |
| 3,800.00                          | 3,797.54              | 3,660.56              | 3,659.44              | 13.27            | 12.75         | 79.41                 | -1,050.28                           | -526.48      | 1,172.49               | 1,154.18                | 18.32                     | 64.008            |                                                       |         |                              |  |
| 3,900.00                          | 3,896.09              | 3,742.72              | 3,740.90              | 13.62            | 13.02         | 79.70                 | -1,061.02                           | -526.47      | 1,180.95               | 1,162.22                | 18.73                     | 63.035            |                                                       |         |                              |  |
| 4,000.00                          | 3,994.16              | 3,881.83              | 3,878.87              | 13.98            | 13.50         | 80.39                 | -1,078.60                           | -524.23      | 1,187.94               | 1,168.57                | 19.37                     | 61.328            |                                                       |         |                              |  |
| 4,100.00                          | 4,091.70              | 4,021.48              | 4,017.62              | 14.35            | 13.97         | 81.21                 | -1,093.07                           | -518.00      | 1,191.24               | 1,171.24                | 20.00                     | 59.554            |                                                       |         |                              |  |
| 4,200.00                          | 4,188.62              | 4,161.28              | 4,156.58              | 14.74            | 14.46         | 82.17                 | -1,104.34                           | -507.78      | 1,190.92               | 1,170.29                | 20.63                     | 57.722            |                                                       |         |                              |  |
| 4,300.00                          | 4,284.86              | 4,300.86              | 4,295.20              | 15.14            | 14.95         | 83.27                 | -1,112.38                           | -493.62      | 1,187.04               | 1,165.78                | 21.26                     | 55.845            |                                                       |         |                              |  |
| 4,400.00                          | 4,380.36              | 4,439.82              | 4,432.90              | 15.55            | 15.45         | 84.53                 | -1,117.18                           | -475.61      | 1,179.68               | 1,157.81                | 21.87                     | 53.929            |                                                       |         |                              |  |
| 4,452.43                          | 4,430.11              | 4,512.31              | 4,504.55              | 15.78            | 15.71         | 85.25                 | -1,118.41                           | -464.67      | 1,174.48               | 1,152.28                | 22.20                     | 52.915            |                                                       |         |                              |  |
| 4,500.00                          | 4,475.14              | 4,563.40              | 4,554.97              | 15.99            | 15.89         | 85.72                 | -1,118.86                           | -456.46      | 1,169.22               | 1,146.75                | 22.47                     | 52.038            |                                                       |         |                              |  |
| 4,600.00                          | 4,569.82              | 4,661.05              | 4,651.34              | 16.44            | 16.25         | 86.62                 | -1,119.68                           | -440.71      | 1,158.33               | 1,135.29                | 23.04                     | 50.275            |                                                       |         |                              |  |
| 4,700.00                          | 4,664.49              | 4,758.71              | 4,747.71              | 16.91            | 16.61         | 87.54                 | -1,120.49                           | -424.95      | 1,147.74               | 1,124.12                | 23.62                     | 48.587            |                                                       |         |                              |  |
| 4,800.00                          | 4,759.16              | 4,856.36              | 4,844.08              | 17.39            | 16.97         | 88.48                 | -1,121.31                           | -409.20      | 1,137.46               | 1,113.25                | 24.21                     | 46.974            |                                                       |         |                              |  |
| 4,900.00                          | 4,853.84              | 4,954.02              | 4,940.45              | 17.87            | 17.34         | 89.43                 | -1,122.13                           | -393.45      | 1,127.50               | 1,102.68                | 24.82                     | 45.434            |                                                       |         |                              |  |
| 5,000.00                          | 4,948.51              | 5,051.67              | 5,036.83              | 18.37            | 17.71         | 90.40                 | -1,122.94                           | -377.70      | 1,117.87               | 1,092.44                | 25.43                     | 43.965            |                                                       |         |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,149.32              | 5,133.20              | 18.88            | 18.08         | 91.38                 | -1,123.76                           | -361.94      | 1,108.56               | 1,082.52                | 26.04                     | 42.566            |                    |           |
| 5,200.00                          | 5,137.85              | 5,246.98              | 5,229.57              | 19.39            | 18.46         | 92.39                 | -1,124.57                           | -346.19      | 1,099.61               | 1,072.94                | 26.67                     | 41.234            |                    |           |
| 5,300.00                          | 5,232.53              | 5,344.63              | 5,325.94              | 19.92            | 18.84         | 93.40                 | -1,125.39                           | -330.44      | 1,091.00               | 1,063.70                | 27.30                     | 39.967            |                    |           |
| 5,400.00                          | 5,327.20              | 5,442.29              | 5,422.31              | 20.45            | 19.22         | 94.43                 | -1,126.21                           | -314.69      | 1,082.76               | 1,054.82                | 27.93                     | 38.764            |                    |           |
| 5,500.00                          | 5,421.87              | 5,539.94              | 5,518.68              | 20.99            | 19.60         | 95.48                 | -1,127.02                           | -298.93      | 1,074.88               | 1,046.31                | 28.57                     | 37.622            |                    |           |
| 5,600.00                          | 5,516.54              | 5,637.59              | 5,615.06              | 21.53            | 19.99         | 96.54                 | -1,127.84                           | -283.18      | 1,067.38               | 1,038.16                | 29.21                     | 36.539            |                    |           |
| 5,700.00                          | 5,611.22              | 5,735.25              | 5,711.43              | 22.08            | 20.37         | 97.61                 | -1,128.65                           | -267.43      | 1,060.26               | 1,030.40                | 29.86                     | 35.512            |                    |           |
| 5,800.00                          | 5,705.89              | 5,832.90              | 5,807.80              | 22.63            | 20.76         | 98.70                 | -1,129.47                           | -251.68      | 1,053.53               | 1,023.03                | 30.50                     | 34.539            |                    |           |
| 5,900.00                          | 5,800.56              | 5,930.56              | 5,904.17              | 23.19            | 21.15         | 99.80                 | -1,130.29                           | -235.92      | 1,047.21               | 1,016.06                | 31.15                     | 33.618            |                    |           |
| 6,000.00                          | 5,895.23              | 6,028.21              | 6,000.54              | 23.76            | 21.55         | 100.92                | -1,131.10                           | -220.17      | 1,041.29               | 1,009.49                | 31.80                     | 32.747            |                    |           |
| 6,100.00                          | 5,989.91              | 6,125.86              | 6,096.91              | 24.33            | 21.94         | 102.04                | -1,131.92                           | -204.42      | 1,035.79               | 1,003.34                | 32.44                     | 31.925            |                    |           |
| 6,200.00                          | 6,084.58              | 6,223.52              | 6,193.29              | 24.90            | 22.33         | 103.18                | -1,132.73                           | -188.67      | 1,030.70               | 997.61                  | 33.09                     | 31.147            |                    |           |
| 6,300.00                          | 6,179.25              | 6,321.17              | 6,289.66              | 25.48            | 22.73         | 104.32                | -1,133.55                           | -172.91      | 1,026.04               | 992.31                  | 33.74                     | 30.414            |                    |           |
| 6,400.00                          | 6,273.92              | 6,418.83              | 6,386.03              | 26.05            | 23.13         | 105.48                | -1,134.37                           | -157.16      | 1,021.82               | 987.44                  | 34.38                     | 29.723            |                    |           |
| 6,500.00                          | 6,368.60              | 6,516.48              | 6,482.40              | 26.64            | 23.53         | 106.64                | -1,135.18                           | -141.41      | 1,018.03               | 983.02                  | 35.02                     | 29.072            |                    |           |
| 6,600.00                          | 6,463.27              | 6,614.13              | 6,578.77              | 27.22            | 23.93         | 107.82                | -1,136.00                           | -125.66      | 1,014.69               | 979.04                  | 35.65                     | 28.460            |                    |           |
| 6,700.00                          | 6,557.94              | 6,711.79              | 6,675.14              | 27.81            | 24.33         | 108.99                | -1,136.81                           | -109.90      | 1,011.80               | 975.51                  | 36.29                     | 27.884            |                    |           |
| 6,800.00                          | 6,652.61              | 6,809.44              | 6,771.51              | 28.40            | 24.73         | 110.18                | -1,137.63                           | -94.15       | 1,009.35               | 972.44                  | 36.91                     | 27.345            |                    |           |
| 6,900.00                          | 6,747.29              | 6,907.09              | 6,867.89              | 29.00            | 25.13         | 111.37                | -1,138.45                           | -78.40       | 1,007.36               | 969.83                  | 37.53                     | 26.838            |                    |           |
| 7,000.00                          | 6,841.96              | 7,000.00              | 6,959.59              | 29.59            | 25.52         | 112.51                | -1,139.22                           | -63.55       | 1,005.95               | 967.80                  | 38.15                     | 26.367            |                    |           |
| 7,029.77                          | 6,870.14              | 7,021.84              | 6,981.19              | 29.77            | 25.61         | 112.79                | -1,139.39                           | -60.26       | 1,005.85               | 967.52                  | 38.33                     | 26.240 CC, ES     |                    |           |
| 7,100.00                          | 6,936.63              | 7,077.75              | 7,036.54              | 30.19            | 25.83         | 113.51                | -1,139.79                           | -52.43       | 1,006.40               | 967.65                  | 38.75                     | 25.970            |                    |           |
| 7,200.00                          | 7,031.30              | 7,156.97              | 7,115.15              | 30.79            | 26.15         | 114.56                | -1,140.29                           | -42.71       | 1,009.10               | 969.77                  | 39.33                     | 25.655            |                    |           |
| 7,300.00                          | 7,125.98              | 7,235.66              | 7,193.44              | 31.40            | 26.45         | 115.65                | -1,140.71                           | -34.67       | 1,014.11               | 974.22                  | 39.89                     | 25.423            |                    |           |
| 7,400.00                          | 7,220.65              | 7,313.78              | 7,271.29              | 32.00            | 26.75         | 116.77                | -1,141.04                           | -28.29       | 1,021.46               | 981.04                  | 40.42                     | 25.270            |                    |           |
| 7,500.00                          | 7,315.32              | 7,400.00              | 7,357.35              | 32.61            | 27.06         | 118.03                | -1,141.31                           | -23.09       | 1,031.24               | 990.29                  | 40.95                     | 25.182            |                    |           |
| 7,600.00                          | 7,409.99              | 7,468.06              | 7,425.36              | 33.21            | 27.30         | 119.04                | -1,141.45                           | -20.35       | 1,043.33               | 1,001.93                | 41.41                     | 25.198            |                    |           |
| 7,700.00                          | 7,504.67              | 7,544.11              | 7,501.39              | 33.82            | 27.57         | 120.18                | -1,141.54                           | -18.73       | 1,057.89               | 1,016.04                | 41.86                     | 25.274            |                    |           |
| 7,800.00                          | 7,599.34              | 7,627.66              | 7,584.94              | 34.43            | 27.85         | 121.43                | -1,141.55                           | -18.48       | 1,074.73               | 1,032.41                | 42.32                     | 25.397            |                    |           |
| 7,900.00                          | 7,694.01              | 7,722.34              | 7,679.61              | 35.05            | 28.17         | 122.82                | -1,141.55                           | -18.48       | 1,092.53               | 1,049.71                | 42.82                     | 25.515            |                    |           |
| 8,000.00                          | 7,788.68              | 7,817.01              | 7,774.28              | 35.66            | 28.49         | 124.16                | -1,141.55                           | -18.48       | 1,110.98               | 1,067.66                | 43.32                     | 25.648            |                    |           |
| 8,100.00                          | 7,883.36              | 7,911.68              | 7,868.96              | 36.28            | 28.81         | 125.47                | -1,141.55                           | -18.48       | 1,130.04               | 1,086.23                | 43.81                     | 25.794            |                    |           |
| 8,200.00                          | 7,978.03              | 8,006.35              | 7,963.63              | 36.89            | 29.13         | 126.73                | -1,141.55                           | -18.48       | 1,149.69               | 1,105.39                | 44.30                     | 25.951            |                    |           |
| 8,300.00                          | 8,072.70              | 8,101.03              | 8,058.30              | 37.51            | 29.45         | 127.95                | -1,141.55                           | -18.48       | 1,169.90               | 1,125.11                | 44.79                     | 26.119            |                    |           |
| 8,400.00                          | 8,167.37              | 8,195.70              | 8,152.97              | 38.13            | 29.77         | 129.14                | -1,141.55                           | -18.48       | 1,190.64               | 1,145.36                | 45.28                     | 26.297            |                    |           |
| 8,500.00                          | 8,262.05              | 8,284.03              | 8,241.30              | 38.75            | 30.07         | 130.19                | -1,141.87                           | -18.48       | 1,211.94               | 1,166.21                | 45.73                     | 26.500            |                    |           |
| 8,600.00                          | 8,356.72              | 8,356.97              | 8,313.85              | 39.37            | 30.31         | 130.72                | -1,148.95                           | -18.41       | 1,234.95               | 1,188.80                | 46.14                     | 26.763            |                    |           |
| 8,700.00                          | 8,451.39              | 8,430.87              | 8,385.83              | 39.99            | 30.56         | 130.80                | -1,165.46                           | -18.24       | 1,259.82               | 1,213.23                | 46.60                     | 27.035            |                    |           |
| 8,800.00                          | 8,546.07              | 8,500.00              | 8,450.72              | 40.61            | 30.79         | 130.48                | -1,189.16                           | -18.01       | 1,286.50               | 1,239.45                | 47.05                     | 27.343            |                    |           |
| 8,875.44                          | 8,617.48              | 8,550.00              | 8,495.64              | 41.08            | 30.95         | 130.02                | -1,211.09                           | -17.79       | 1,307.92               | 1,260.53                | 47.39                     | 27.601            |                    |           |
| 8,900.00                          | 8,640.90              | 8,572.15              | 8,514.89              | 41.23            | 31.03         | 130.30                | -1,222.04                           | -17.69       | 1,314.81               | 1,267.26                | 47.55                     | 27.650            |                    |           |
| 8,950.00                          | 8,689.44              | 8,600.00              | 8,538.47              | 41.49            | 31.12         | 130.83                | -1,236.85                           | -17.54       | 1,327.32               | 1,279.61                | 47.71                     | 27.820            |                    |           |
| 9,000.00                          | 8,738.83              | 8,634.33              | 8,566.51              | 41.70            | 31.23         | 130.94                | -1,256.66                           | -17.34       | 1,337.79               | 1,289.87                | 47.92                     | 27.916            |                    |           |
| 9,050.00                          | 8,788.70              | 8,661.58              | 8,587.89              | 41.87            | 31.32         | 130.93                | -1,273.55                           | -17.18       | 1,346.37               | 1,298.33                | 48.04                     | 28.027            |                    |           |
| 9,063.30                          | 8,802.00              | 8,668.34              | 8,593.06              | 41.91            | 31.34         | -100.45               | -1,277.90                           | -17.13       | 1,348.35               | 1,300.29                | 48.06                     | 28.056            |                    |           |
| 9,100.00                          | 8,838.70              | 8,686.19              | 8,606.48              | 42.00            | 31.40         | -100.94               | -1,289.67                           | -17.02       | 1,353.95               | 1,305.85                | 48.10                     | 28.148            |                    |           |
| 9,200.00                          | 8,938.70              | 8,730.14              | 8,637.91              | 42.26            | 31.55         | -102.23               | -1,320.38                           | -16.71       | 1,372.40               | 1,324.29                | 48.11                     | 28.527            |                    |           |
| 9,300.00                          | 9,038.70              | 8,767.98              | 8,663.01              | 42.51            | 31.68         | -103.41               | -1,348.68                           | -16.44       | 1,395.76               | 1,347.80                | 47.96                     | 29.102            |                    |           |
| 9,400.00                          | 9,138.70              | 8,800.00              | 8,682.76              | 42.77            | 31.79         | -104.45               | -1,373.88                           | -16.19       | 1,424.19               | 1,376.54                | 47.65                     | 29.888            |                    |           |
| 9,500.00                          | 9,238.70              | 8,828.91              | 8,699.35              | 43.03            | 31.90         | -105.42               | -1,397.55                           | -15.95       | 1,457.70               | 1,410.47                | 47.22                     | 30.867            |                    |           |
| 9,600.00                          | 9,338.70              | 8,850.00              | 8,710.69              | 43.30            | 31.98         | -106.14               | -1,415.33                           | -15.78       | 1,496.17               | 1,449.55                | 46.62                     | 32.092            |                    |           |
| 9,700.00                          | 9,438.70              | 8,875.09              | 8,723.32              | 43.56            | 32.08         | -107.01               | -1,437.00                           | -15.56       | 1,539.40               | 1,493.36                | 46.04                     | 33.439            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design      Tatanka Fed Com - Tatanka Fed Com 102H - OH - Plan #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|--------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD                                        |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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            |           |
| 9,800.00                                                                 | 9,538.70              | 8,900.00              | 8,734.91              | 43.82            | 32.18         | -107.89               | -1,459.05                           | -15.35       | 1,587.17               | 1,541.75                | 45.42                     | 34.942            |                    |           |
| 9,900.00                                                                 | 9,638.70              | 8,900.00              | 8,734.91              | 44.09            | 32.18         | -107.89               | -1,459.05                           | -15.35       | 1,639.21               | 1,594.77                | 44.44                     | 36.890            |                    |           |
| 10,000.00                                                                | 9,738.70              | 8,925.82              | 8,745.89              | 44.36            | 32.29         | -108.82               | -1,482.41                           | -15.11       | 1,694.98               | 1,651.15                | 43.84                     | 38.666            |                    |           |
| 10,100.00                                                                | 9,838.70              | 8,950.00              | 8,755.22              | 44.63            | 32.39         | -109.69               | -1,504.72                           | -14.89       | 1,754.55               | 1,711.32                | 43.23                     | 40.588            |                    |           |
| 10,200.00                                                                | 9,938.70              | 8,950.00              | 8,755.22              | 44.90            | 32.39         | -109.69               | -1,504.72                           | -14.89       | 1,817.22               | 1,774.90                | 42.32                     | 42.945            |                    |           |
| 10,300.00                                                                | 10,038.70             | 8,950.00              | 8,755.22              | 45.17            | 32.39         | -109.69               | -1,504.72                           | -14.89       | 1,883.11               | 1,841.66                | 41.45                     | 45.430            |                    |           |
| 10,400.00                                                                | 10,138.70             | 8,971.93              | 8,762.85              | 45.44            | 32.49         | -110.48               | -1,525.28                           | -14.69       | 1,951.46               | 1,910.53                | 40.93                     | 47.678            |                    |           |
| 10,500.00                                                                | 10,238.70             | 8,980.90              | 8,765.75              | 45.71            | 32.54         | -110.81               | -1,533.76                           | -14.61       | 2,022.43               | 1,982.14                | 40.29                     | 50.200            |                    |           |
| 10,600.00                                                                | 10,338.70             | 9,000.00              | 8,771.47              | 45.99            | 32.63         | -111.51               | -1,551.99                           | -14.43       | 2,095.74               | 2,055.92                | 39.82                     | 52.629            |                    |           |
| 10,700.00                                                                | 10,438.70             | 9,000.00              | 8,771.47              | 46.26            | 32.63         | -111.51               | -1,551.99                           | -14.43       | 2,170.87               | 2,131.70                | 39.18                     | 55.415            |                    |           |
| 10,800.00                                                                | 10,538.70             | 9,000.00              | 8,771.47              | 46.54            | 32.63         | -111.51               | -1,551.99                           | -14.43       | 2,247.94               | 2,209.35                | 38.59                     | 58.253            |                    |           |
| 10,900.00                                                                | 10,638.70             | 9,000.00              | 8,771.47              | 46.82            | 32.63         | -111.51               | -1,551.99                           | -14.43       | 2,326.76               | 2,288.70                | 38.06                     | 61.133            |                    |           |
| 11,000.00                                                                | 10,738.70             | 9,000.00              | 8,771.47              | 47.10            | 32.63         | -111.51               | -1,551.99                           | -14.43       | 2,407.15               | 2,369.56                | 37.59                     | 64.039            |                    |           |
| 11,100.00                                                                | 10,838.70             | 9,021.30              | 8,777.13              | 47.38            | 32.73         | -112.28               | -1,572.52                           | -14.23       | 2,488.54               | 2,451.15                | 37.39                     | 66.558            |                    |           |
| 11,200.00                                                                | 10,938.70             | 9,026.40              | 8,778.37              | 47.66            | 32.75         | -112.47               | -1,577.47                           | -14.18       | 2,571.40               | 2,534.34                | 37.07                     | 69.373            |                    |           |
| 11,300.00                                                                | 11,038.70             | 9,050.00              | 8,783.54              | 47.94            | 32.87         | -113.33               | -1,600.49                           | -13.95       | 2,655.74               | 2,618.78                | 36.96                     | 71.849            |                    |           |
| 11,400.00                                                                | 11,138.70             | 9,050.00              | 8,783.54              | 48.22            | 32.87         | -113.33               | -1,600.49                           | -13.95       | 2,740.64               | 2,703.97                | 36.68                     | 74.726            |                    |           |
| 11,500.00                                                                | 11,238.70             | 9,050.00              | 8,783.54              | 48.51            | 32.87         | -113.33               | -1,600.49                           | -13.95       | 2,826.53               | 2,790.10                | 36.43                     | 77.582            |                    |           |
| 11,600.00                                                                | 11,338.70             | 9,050.00              | 8,783.54              | 48.79            | 32.87         | -113.33               | -1,600.49                           | -13.95       | 2,913.32               | 2,877.09                | 36.23                     | 80.409            |                    |           |
| 11,700.00                                                                | 11,438.70             | 9,050.00              | 8,783.54              | 49.08            | 32.87         | -113.33               | -1,600.49                           | -13.95       | 3,000.93               | 2,964.87                | 36.06                     | 83.211            |                    |           |
| 11,753.34                                                                | 11,492.04             | 9,050.00              | 8,783.54              | 49.23            | 32.87         | -113.33               | -1,600.49                           | -13.95       | 3,047.98               | 3,011.98                | 35.99                     | 84.687            |                    |           |
| 11,800.00                                                                | 11,538.65             | 9,050.00              | 8,783.54              | 49.37            | 32.87         | 59.61                 | -1,600.49                           | -13.95       | 3,088.91               | 3,052.98                | 35.93                     | 85.975            |                    |           |
| 11,850.00                                                                | 11,588.24             | 9,050.00              | 8,783.54              | 49.55            | 32.87         | 52.62                 | -1,600.49                           | -13.95       | 3,131.91               | 3,096.05                | 35.85                     | 87.353            |                    |           |
| 11,900.00                                                                | 11,637.10             | 9,050.00              | 8,783.54              | 49.74            | 32.87         | 46.80                 | -1,600.49                           | -13.95       | 3,173.73               | 3,137.96                | 35.77                     | 88.717            |                    |           |
| 11,950.00                                                                | 11,684.86             | 9,050.00              | 8,783.54              | 49.95            | 32.87         | 42.00                 | -1,600.49                           | -13.95       | 3,214.11               | 3,178.42                | 35.69                     | 90.058            |                    |           |
| 12,000.00                                                                | 11,731.15             | 9,050.00              | 8,783.54              | 50.18            | 32.87         | 38.07                 | -1,600.49                           | -13.95       | 3,252.81               | 3,217.20                | 35.60                     | 91.366            |                    |           |
| 12,050.00                                                                | 11,775.62             | 9,050.00              | 8,783.54              | 50.42            | 32.87         | 34.85                 | -1,600.49                           | -13.95       | 3,289.58               | 3,254.07                | 35.51                     | 92.633            |                    |           |
| 12,100.00                                                                | 11,817.93             | 9,075.30              | 8,788.03              | 50.68            | 33.00         | 31.97                 | -1,625.38                           | -13.70       | 3,323.61               | 3,288.02                | 35.59                     | 93.387            |                    |           |
| 12,150.00                                                                | 11,857.76             | 9,100.00              | 8,791.34              | 50.96            | 33.13         | 29.65                 | -1,649.86                           | -13.46       | 3,355.98               | 3,320.32                | 35.65                     | 94.127            |                    |           |
| 12,200.00                                                                | 11,894.81             | 9,100.00              | 8,791.34              | 51.25            | 33.13         | 27.91                 | -1,649.86                           | -13.46       | 3,385.22               | 3,349.67                | 35.55                     | 95.223            |                    |           |
| 12,250.00                                                                | 11,928.80             | 9,100.00              | 8,791.34              | 51.56            | 33.13         | 26.48                 | -1,649.86                           | -13.46       | 3,411.78               | 3,376.33                | 35.45                     | 96.248            |                    |           |
| 12,300.00                                                                | 11,959.45             | 9,100.00              | 8,791.34              | 51.87            | 33.13         | 25.30                 | -1,649.86                           | -13.46       | 3,435.51               | 3,400.17                | 35.35                     | 97.194            |                    |           |
| 12,350.00                                                                | 11,986.56             | 9,100.00              | 8,791.34              | 52.20            | 33.13         | 24.34                 | -1,649.86                           | -13.46       | 3,456.30               | 3,421.05                | 35.25                     | 98.053            |                    |           |
| 12,400.00                                                                | 12,009.90             | 9,100.00              | 8,791.34              | 52.55            | 33.13         | 23.57                 | -1,649.86                           | -13.46       | 3,474.03               | 3,438.88                | 35.16                     | 98.817            |                    |           |
| 12,450.00                                                                | 12,029.29             | 9,100.00              | 8,791.34              | 52.90            | 33.13         | 22.97                 | -1,649.86                           | -13.46       | 3,488.63               | 3,453.56                | 35.07                     | 99.479            |                    |           |
| 12,500.00                                                                | 12,044.60             | 9,128.09              | 8,793.82              | 53.26            | 33.28         | 22.48                 | -1,677.83                           | -13.19       | 3,499.27               | 3,464.13                | 35.14                     | 99.588            |                    |           |
| 12,550.00                                                                | 12,055.70             | 9,150.00              | 8,794.81              | 53.63            | 33.40         | 22.17                 | -1,699.72                           | -12.97       | 3,507.14               | 3,471.97                | 35.17                     | 99.710            |                    |           |
| 12,600.00                                                                | 12,062.52             | 9,150.00              | 8,794.81              | 54.01            | 33.40         | 22.01                 | -1,699.72                           | -12.97       | 3,511.25               | 3,476.15                | 35.10                     | 100.027           |                    |           |
| 12,653.34                                                                | 12,065.00             | 9,150.00              | 8,794.81              | 54.42            | 33.40         | 21.98                 | -1,699.72                           | -12.97       | 3,511.96               | 3,476.92                | 35.04                     | 100.225           |                    |           |
| 12,700.00                                                                | 12,065.00             | 9,157.89              | 8,794.96              | 54.78            | 33.45         | 21.99                 | -1,707.61                           | -12.89       | 3,511.18               | 3,476.14                | 35.03                     | 100.221           |                    |           |
| 12,800.00                                                                | 12,065.00             | 9,218.84              | 8,795.00              | 55.59            | 33.80         | 21.99                 | -1,768.56                           | -12.29       | 3,510.92               | 3,475.67                | 35.25                     | 99.610            |                    |           |
| 12,812.65                                                                | 12,065.00             | 9,231.49              | 8,795.00              | 55.69            | 33.88         | 21.99                 | -1,781.21                           | -12.16       | 3,510.92               | 3,475.62                | 35.30                     | 99.458            |                    |           |
| 12,900.00                                                                | 12,065.00             | 9,318.84              | 8,795.00              | 56.43            | 34.43         | 21.99                 | -1,868.55                           | -11.30       | 3,510.92               | 3,475.24                | 35.68                     | 98.411            |                    |           |
| 13,000.00                                                                | 12,065.00             | 9,418.84              | 8,795.00              | 57.31            | 35.13         | 21.99                 | -1,968.55                           | -10.32       | 3,510.91               | 3,474.76                | 36.15                     | 97.119            |                    |           |
| 13,100.00                                                                | 12,065.00             | 9,518.84              | 8,795.00              | 58.22            | 35.89         | 21.99                 | -2,068.54                           | -9.33        | 3,510.91               | 3,474.24                | 36.67                     | 95.749            |                    |           |
| 13,200.00                                                                | 12,065.00             | 9,618.84              | 8,795.00              | 59.17            | 36.71         | 21.98                 | -2,168.54                           | -8.34        | 3,510.91               | 3,473.68                | 37.23                     | 94.311            |                    |           |
| 13,300.00                                                                | 12,065.00             | 9,718.84              | 8,795.00              | 60.14            | 37.59         | 21.98                 | -2,268.53                           | -7.35        | 3,510.90               | 3,473.08                | 37.83                     | 92.820            |                    |           |
| 13,400.00                                                                | 12,065.00             | 9,818.84              | 8,795.00              | 61.15            | 38.51         | 21.98                 | -2,368.53                           | -6.37        | 3,510.90               | 3,472.44                | 38.46                     | 91.285            |                    |           |
| 13,500.00                                                                | 12,065.00             | 9,918.84              | 8,795.00              | 62.18            | 39.48         | 21.98                 | -2,468.52                           | -5.38        | 3,510.89               | 3,471.76                | 39.13                     | 89.717            |                    |           |
| 13,600.00                                                                | 12,065.00             | 10,018.84             | 8,795.00              | 63.24            | 40.50         | 21.98                 | -2,568.52                           | -4.39        | 3,510.89               | 3,471.05                | 39.84                     | 88.128            |                    |           |
| 13,700.00                                                                | 12,065.00             | 10,118.84             | 8,795.00              | 64.32            | 41.56         | 21.98                 | -2,668.51                           | -3.40        | 3,510.89               | 3,470.31                | 40.58                     | 86.525            |                    |           |
| 13,800.00                                                                | 12,065.00             | 10,218.84             | 8,795.00              | 65.43            | 42.65         | 21.98                 | -2,768.51                           | -2.42        | 3,510.88               | 3,469.54                | 41.35                     | 84.916            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design      Tatanka Fed Com - Tatanka Fed Com 102H - OH - Plan #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|--------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program:      0-OWSG (Rev2) MWD                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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            |           |
| 13,900.00                                                                | 12,065.00             | 10,318.84             | 8,795.00              | 66.56            | 43.78         | 21.98                 | -2,868.50                           | -1.43        | 3,510.88               | 3,468.74                | 42.14                     | 83.309            |                    |           |
| 14,000.00                                                                | 12,065.00             | 10,418.84             | 8,795.00              | 67.71            | 44.94         | 21.98                 | -2,968.50                           | -0.44        | 3,510.88               | 3,467.91                | 42.97                     | 81.711            |                    |           |
| 14,100.00                                                                | 12,065.00             | 10,518.84             | 8,795.00              | 68.88            | 46.13         | 21.98                 | -3,068.49                           | 0.54         | 3,510.87               | 3,467.06                | 43.82                     | 80.129            |                    |           |
| 14,200.00                                                                | 12,065.00             | 10,618.84             | 8,795.00              | 70.08            | 47.35         | 21.98                 | -3,168.49                           | 1.53         | 3,510.87               | 3,466.18                | 44.69                     | 78.568            |                    |           |
| 14,300.00                                                                | 12,065.00             | 10,718.84             | 8,795.00              | 71.29            | 48.59         | 21.98                 | -3,268.48                           | 2.52         | 3,510.87               | 3,465.29                | 45.58                     | 77.028            |                    |           |
| 14,400.00                                                                | 12,065.00             | 10,818.84             | 8,795.00              | 72.51            | 49.86         | 21.98                 | -3,368.48                           | 3.51         | 3,510.86               | 3,464.37                | 46.49                     | 75.513            |                    |           |
| 14,500.00                                                                | 12,065.00             | 10,918.84             | 8,795.00              | 73.76            | 51.15         | 21.98                 | -3,468.48                           | 4.49         | 3,510.86               | 3,463.43                | 47.43                     | 74.024            |                    |           |
| 14,600.00                                                                | 12,065.00             | 11,018.84             | 8,795.00              | 75.02            | 52.46         | 21.98                 | -3,568.47                           | 5.48         | 3,510.86               | 3,462.47                | 48.38                     | 72.565            |                    |           |
| 14,700.00                                                                | 12,065.00             | 11,118.84             | 8,795.00              | 76.29            | 53.79         | 21.98                 | -3,668.47                           | 6.47         | 3,510.85               | 3,461.50                | 49.35                     | 71.136            |                    |           |
| 14,800.00                                                                | 12,065.00             | 11,218.84             | 8,795.00              | 77.58            | 55.14         | 21.98                 | -3,768.46                           | 7.45         | 3,510.85               | 3,460.51                | 50.34                     | 69.739            |                    |           |
| 14,900.00                                                                | 12,065.00             | 11,318.84             | 8,795.00              | 78.89            | 56.50         | 21.98                 | -3,868.46                           | 8.44         | 3,510.85               | 3,459.50                | 51.35                     | 68.374            |                    |           |
| 15,000.00                                                                | 12,065.00             | 11,418.84             | 8,795.00              | 80.20            | 57.87         | 21.98                 | -3,968.45                           | 9.43         | 3,510.84               | 3,458.48                | 52.37                     | 67.043            |                    |           |
| 15,100.00                                                                | 12,065.00             | 11,518.84             | 8,795.00              | 81.53            | 59.27         | 21.98                 | -4,068.45                           | 10.42        | 3,510.84               | 3,457.44                | 53.40                     | 65.745            |                    |           |
| 15,200.00                                                                | 12,065.00             | 11,618.84             | 8,795.00              | 82.87            | 60.67         | 21.98                 | -4,168.44                           | 11.40        | 3,510.84               | 3,456.39                | 54.45                     | 64.481            |                    |           |
| 15,300.00                                                                | 12,065.00             | 11,718.84             | 8,795.00              | 84.22            | 62.09         | 21.98                 | -4,268.44                           | 12.39        | 3,510.83               | 3,455.32                | 55.51                     | 63.250            |                    |           |
| 15,400.00                                                                | 12,065.00             | 11,818.84             | 8,795.00              | 85.59            | 63.51         | 21.98                 | -4,368.43                           | 13.38        | 3,510.83               | 3,454.25                | 56.58                     | 62.052            |                    |           |
| 15,500.00                                                                | 12,065.00             | 11,918.84             | 8,795.00              | 86.96            | 64.95         | 21.98                 | -4,468.43                           | 14.37        | 3,510.83               | 3,453.16                | 57.66                     | 60.887            |                    |           |
| 15,600.00                                                                | 12,065.00             | 12,018.84             | 8,795.00              | 88.34            | 66.40         | 21.98                 | -4,568.42                           | 15.35        | 3,510.82               | 3,452.07                | 58.75                     | 59.757            |                    |           |
| 15,700.00                                                                | 12,065.00             | 12,118.84             | 8,795.00              | 89.73            | 67.86         | 21.98                 | -4,668.42                           | 16.34        | 3,510.82               | 3,450.97                | 59.85                     | 58.657            |                    |           |
| 15,800.00                                                                | 12,065.00             | 12,218.84             | 8,795.00              | 91.13            | 69.32         | 21.98                 | -4,768.41                           | 17.33        | 3,510.81               | 3,449.85                | 60.96                     | 57.590            |                    |           |
| 15,900.00                                                                | 12,065.00             | 12,318.84             | 8,795.00              | 92.54            | 70.80         | 21.98                 | -4,868.41                           | 18.31        | 3,510.81               | 3,448.73                | 62.08                     | 56.554            |                    |           |
| 16,000.00                                                                | 12,065.00             | 12,418.84             | 8,795.00              | 93.95            | 72.28         | 21.98                 | -4,968.40                           | 19.30        | 3,510.81               | 3,447.60                | 63.20                     | 55.546            |                    |           |
| 16,100.00                                                                | 12,065.00             | 12,518.84             | 8,795.00              | 95.38            | 73.77         | 21.98                 | -5,068.40                           | 20.29        | 3,510.80               | 3,446.47                | 64.34                     | 54.568            |                    |           |
| 16,200.00                                                                | 12,065.00             | 12,618.84             | 8,795.00              | 96.81            | 75.27         | 21.98                 | -5,168.39                           | 21.28        | 3,510.80               | 3,445.32                | 65.48                     | 53.617            |                    |           |
| 16,300.00                                                                | 12,065.00             | 12,718.84             | 8,795.00              | 98.24            | 76.77         | 21.98                 | -5,268.39                           | 22.26        | 3,510.80               | 3,444.17                | 66.63                     | 52.693            |                    |           |
| 16,400.00                                                                | 12,065.00             | 12,818.84             | 8,795.00              | 99.69            | 78.28         | 21.98                 | -5,368.38                           | 23.25        | 3,510.79               | 3,443.01                | 67.78                     | 51.795            |                    |           |
| 16,500.00                                                                | 12,065.00             | 12,918.84             | 8,795.00              | 101.14           | 79.79         | 21.98                 | -5,468.38                           | 24.24        | 3,510.79               | 3,441.85                | 68.94                     | 50.922            |                    |           |
| 16,600.00                                                                | 12,065.00             | 13,018.84             | 8,795.00              | 102.60           | 81.31         | 21.98                 | -5,568.37                           | 25.22        | 3,510.79               | 3,440.67                | 70.11                     | 50.074            |                    |           |
| 16,700.00                                                                | 12,065.00             | 13,118.84             | 8,795.00              | 104.06           | 82.83         | 21.98                 | -5,668.37                           | 26.21        | 3,510.78               | 3,439.50                | 71.29                     | 49.250            |                    |           |
| 16,800.00                                                                | 12,065.00             | 13,218.84             | 8,795.00              | 105.53           | 84.36         | 21.98                 | -5,768.36                           | 27.20        | 3,510.78               | 3,438.32                | 72.46                     | 48.449            |                    |           |
| 16,900.00                                                                | 12,065.00             | 13,318.84             | 8,795.00              | 107.00           | 85.90         | 21.98                 | -5,868.36                           | 28.19        | 3,510.78               | 3,437.13                | 73.65                     | 47.669            |                    |           |
| 17,000.00                                                                | 12,065.00             | 13,418.84             | 8,795.00              | 108.48           | 87.43         | 21.98                 | -5,968.35                           | 29.17        | 3,510.77               | 3,435.93                | 74.84                     | 46.912            |                    |           |
| 17,100.00                                                                | 12,065.00             | 13,518.84             | 8,795.00              | 109.96           | 88.98         | 21.98                 | -6,068.35                           | 30.16        | 3,510.77               | 3,434.74                | 76.03                     | 46.176            |                    |           |
| 17,200.00                                                                | 12,065.00             | 13,618.84             | 8,795.00              | 111.45           | 90.52         | 21.98                 | -6,168.34                           | 31.15        | 3,510.77               | 3,433.54                | 77.23                     | 45.461            |                    |           |
| 17,300.00                                                                | 12,065.00             | 13,718.84             | 8,795.00              | 112.94           | 92.07         | 21.98                 | -6,268.34                           | 32.14        | 3,510.76               | 3,432.34                | 78.43                     | 44.765            |                    |           |
| 17,400.00                                                                | 12,065.00             | 13,818.84             | 8,795.00              | 114.44           | 93.62         | 21.98                 | -6,368.33                           | 33.12        | 3,510.76               | 3,431.13                | 79.63                     | 44.089            |                    |           |
| 17,500.00                                                                | 12,065.00             | 13,918.84             | 8,795.00              | 115.94           | 95.18         | 21.98                 | -6,468.33                           | 34.11        | 3,510.76               | 3,429.92                | 80.84                     | 43.431            |                    |           |
| 17,600.00                                                                | 12,065.00             | 14,018.84             | 8,795.00              | 117.45           | 96.74         | 21.98                 | -6,568.32                           | 35.10        | 3,510.75               | 3,428.71                | 82.05                     | 42.790            |                    |           |
| 17,700.00                                                                | 12,065.00             | 14,118.84             | 8,795.00              | 118.96           | 98.30         | 21.98                 | -6,668.32                           | 36.08        | 3,510.75               | 3,427.49                | 83.26                     | 42.166            |                    |           |
| 17,800.00                                                                | 12,065.00             | 14,218.84             | 8,795.00              | 120.47           | 99.87         | 21.98                 | -6,768.31                           | 37.07        | 3,510.74               | 3,426.27                | 84.48                     | 41.558            |                    |           |
| 17,900.00                                                                | 12,065.00             | 14,318.84             | 8,795.00              | 121.99           | 101.44        | 21.98                 | -6,868.31                           | 38.06        | 3,510.74               | 3,425.04                | 85.70                     | 40.966            |                    |           |
| 18,000.00                                                                | 12,065.00             | 14,418.84             | 8,795.00              | 123.51           | 103.01        | 21.98                 | -6,968.30                           | 39.05        | 3,510.74               | 3,423.81                | 86.92                     | 40.389            |                    |           |
| 18,100.00                                                                | 12,065.00             | 14,518.84             | 8,795.00              | 125.03           | 104.58        | 21.98                 | -7,068.30                           | 40.03        | 3,510.73               | 3,422.58                | 88.15                     | 39.827            |                    |           |
| 18,200.00                                                                | 12,065.00             | 14,618.84             | 8,795.00              | 126.56           | 106.16        | 21.98                 | -7,168.29                           | 41.02        | 3,510.73               | 3,421.35                | 89.38                     | 39.279            |                    |           |
| 18,300.00                                                                | 12,065.00             | 14,718.84             | 8,795.00              | 128.09           | 107.73        | 21.98                 | -7,268.29                           | 42.01        | 3,510.73               | 3,420.11                | 90.61                     | 38.744            |                    |           |
| 18,400.00                                                                | 12,065.00             | 14,818.84             | 8,795.00              | 129.62           | 109.31        | 21.98                 | -7,368.29                           | 43.00        | 3,510.72               | 3,418.87                | 91.85                     | 38.223            |                    |           |
| 18,500.00                                                                | 12,065.00             | 14,918.84             | 8,795.00              | 131.16           | 110.90        | 21.98                 | -7,468.28                           | 43.98        | 3,510.72               | 3,417.63                | 93.09                     | 37.714            |                    |           |
| 18,600.00                                                                | 12,065.00             | 15,018.84             | 8,795.00              | 132.69           | 112.48        | 21.98                 | -7,568.28                           | 44.97        | 3,510.72               | 3,416.39                | 94.33                     | 37.219            |                    |           |
| 18,700.00                                                                | 12,065.00             | 15,118.84             | 8,795.00              | 134.24           | 114.07        | 21.98                 | -7,668.27                           | 45.96        | 3,510.71               | 3,415.15                | 95.57                     | 36.736            |                    |           |
| 18,800.00                                                                | 12,065.00             | 15,218.84             | 8,795.00              | 135.78           | 115.65        | 21.98                 | -7,768.27                           | 46.94        | 3,510.71               | 3,413.90                | 96.81                     | 36.264            |                    |           |
| 18,900.00                                                                | 12,065.00             | 15,318.84             | 8,795.00              | 137.33           | 117.24        | 21.98                 | -7,868.26                           | 47.93        | 3,510.71               | 3,412.65                | 98.05                     | 35.804            |                    |           |
| 19,000.00                                                                | 12,065.00             | 15,418.84             | 8,795.00              | 138.87           | 118.83        | 21.98                 | -7,968.26                           | 48.92        | 3,510.70               | 3,411.41                | 99.30                     | 35.355            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 102H - OH - Plan #1 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   |                                                       |         | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |         |                    |           |
| 19,100.00                         | 12,065.00             | 15,518.84             | 8,795.00              | 140.43           | 120.43        | 21.98                 | -8,068.25              | 49.91        | 3,510.70               | 3,410.15                | 100.54                    | 34.917            |                                                       |         |                    |           |
| 19,200.00                         | 12,065.00             | 15,618.84             | 8,795.00              | 141.98           | 122.02        | 21.98                 | -8,168.25              | 50.89        | 3,510.70               | 3,408.90                | 101.79                    | 34.488            |                                                       |         |                    |           |
| 19,300.00                         | 12,065.00             | 15,718.84             | 8,795.00              | 143.53           | 123.62        | 21.98                 | -8,268.24              | 51.88        | 3,510.69               | 3,407.65                | 103.04                    | 34.070            |                                                       |         |                    |           |
| 19,400.00                         | 12,065.00             | 15,818.84             | 8,795.00              | 145.09           | 125.21        | 21.98                 | -8,368.24              | 52.87        | 3,510.69               | 3,406.39                | 104.30                    | 33.660            |                                                       |         |                    |           |
| 19,500.00                         | 12,065.00             | 15,918.84             | 8,795.00              | 146.65           | 126.81        | 21.98                 | -8,468.23              | 53.85        | 3,510.69               | 3,405.13                | 105.55                    | 33.260            |                                                       |         |                    |           |
| 19,600.00                         | 12,065.00             | 16,018.84             | 8,795.00              | 148.21           | 128.41        | 21.98                 | -8,568.23              | 54.84        | 3,510.68               | 3,403.87                | 106.81                    | 32.869            |                                                       |         |                    |           |
| 19,700.00                         | 12,065.00             | 16,118.84             | 8,795.00              | 149.78           | 130.01        | 21.98                 | -8,668.22              | 55.83        | 3,510.68               | 3,402.61                | 108.07                    | 32.487            |                                                       |         |                    |           |
| 19,800.00                         | 12,065.00             | 16,218.84             | 8,795.00              | 151.34           | 131.62        | 21.98                 | -8,768.22              | 56.82        | 3,510.67               | 3,401.35                | 109.32                    | 32.112            |                                                       |         |                    |           |
| 19,900.00                         | 12,065.00             | 16,318.84             | 8,795.00              | 152.91           | 133.22        | 21.98                 | -8,868.21              | 57.80        | 3,510.67               | 3,400.09                | 110.59                    | 31.746            |                                                       |         |                    |           |
| 20,000.00                         | 12,065.00             | 16,418.84             | 8,795.00              | 154.48           | 134.83        | 21.98                 | -8,968.21              | 58.79        | 3,510.67               | 3,398.82                | 111.85                    | 31.388            |                                                       |         |                    |           |
| 20,100.00                         | 12,065.00             | 16,518.84             | 8,795.00              | 156.05           | 136.43        | 21.98                 | -9,068.20              | 59.78        | 3,510.66               | 3,397.55                | 113.11                    | 31.037            |                                                       |         |                    |           |
| 20,200.00                         | 12,065.00             | 16,618.84             | 8,795.00              | 157.62           | 138.04        | 21.98                 | -9,168.20              | 60.77        | 3,510.66               | 3,396.29                | 114.37                    | 30.695            |                                                       |         |                    |           |
| 20,300.00                         | 12,065.00             | 16,718.84             | 8,795.00              | 159.20           | 139.65        | 21.97                 | -9,268.19              | 61.75        | 3,510.66               | 3,395.02                | 115.64                    | 30.359            |                                                       |         |                    |           |
| 20,400.00                         | 12,065.00             | 16,818.84             | 8,795.00              | 160.77           | 141.26        | 21.97                 | -9,368.19              | 62.74        | 3,510.65               | 3,393.75                | 116.90                    | 30.031            |                                                       |         |                    |           |
| 20,500.00                         | 12,065.00             | 16,918.84             | 8,795.00              | 162.35           | 142.87        | 21.97                 | -9,468.18              | 63.73        | 3,510.65               | 3,392.48                | 118.17                    | 29.709            |                                                       |         |                    |           |
| 20,600.00                         | 12,065.00             | 17,018.84             | 8,795.00              | 163.93           | 144.48        | 21.97                 | -9,568.18              | 64.71        | 3,510.65               | 3,391.21                | 119.43                    | 29.395            |                                                       |         |                    |           |
| 20,700.00                         | 12,065.00             | 17,118.84             | 8,795.00              | 165.51           | 146.09        | 21.97                 | -9,668.17              | 65.70        | 3,510.64               | 3,389.94                | 120.70                    | 29.086            |                                                       |         |                    |           |
| 20,800.00                         | 12,065.00             | 17,218.84             | 8,795.00              | 167.09           | 147.70        | 21.97                 | -9,768.17              | 66.69        | 3,510.64               | 3,388.67                | 121.97                    | 28.784            |                                                       |         |                    |           |
| 20,900.00                         | 12,065.00             | 17,318.84             | 8,795.00              | 168.67           | 149.32        | 21.97                 | -9,868.16              | 67.68        | 3,510.64               | 3,387.40                | 123.24                    | 28.487            |                                                       |         |                    |           |
| 21,000.00                         | 12,065.00             | 17,418.84             | 8,795.00              | 170.26           | 150.93        | 21.97                 | -9,968.16              | 68.66        | 3,510.63               | 3,386.13                | 124.51                    | 28.197            |                                                       |         |                    |           |
| 21,100.00                         | 12,065.00             | 17,518.84             | 8,795.00              | 171.84           | 152.55        | 21.97                 | -10,068.15             | 69.65        | 3,510.63               | 3,384.85                | 125.78                    | 27.912            |                                                       |         |                    |           |
| 21,200.00                         | 12,065.00             | 17,618.84             | 8,795.00              | 173.43           | 154.16        | 21.97                 | -10,168.15             | 70.64        | 3,510.63               | 3,383.58                | 127.05                    | 27.632            |                                                       |         |                    |           |
| 21,300.00                         | 12,065.00             | 17,718.84             | 8,795.00              | 175.02           | 155.78        | 21.97                 | -10,268.14             | 71.62        | 3,510.62               | 3,382.30                | 128.32                    | 27.358            |                                                       |         |                    |           |
| 21,400.00                         | 12,065.00             | 17,818.84             | 8,795.00              | 176.60           | 157.40        | 21.97                 | -10,368.14             | 72.61        | 3,510.62               | 3,381.02                | 129.60                    | 27.089            |                                                       |         |                    |           |
| 21,500.00                         | 12,065.00             | 17,918.84             | 8,795.00              | 178.19           | 159.02        | 21.97                 | -10,468.13             | 73.60        | 3,510.62               | 3,379.74                | 130.87                    | 26.825            |                                                       |         |                    |           |
| 21,600.00                         | 12,065.00             | 18,018.84             | 8,795.00              | 179.79           | 160.63        | 21.97                 | -10,568.13             | 74.59        | 3,510.61               | 3,378.47                | 132.15                    | 26.566            |                                                       |         |                    |           |
| 21,700.00                         | 12,065.00             | 18,118.84             | 8,795.00              | 181.38           | 162.25        | 21.97                 | -10,668.12             | 75.57        | 3,510.61               | 3,377.19                | 133.42                    | 26.312            |                                                       |         |                    |           |
| 21,800.00                         | 12,065.00             | 18,218.84             | 8,795.00              | 182.97           | 163.87        | 21.97                 | -10,768.12             | 76.56        | 3,510.60               | 3,375.91                | 134.70                    | 26.063            |                                                       |         |                    |           |
| 21,900.00                         | 12,065.00             | 18,318.84             | 8,795.00              | 184.57           | 165.49        | 21.97                 | -10,868.11             | 77.55        | 3,510.60               | 3,374.63                | 135.97                    | 25.819            |                                                       |         |                    |           |
| 22,000.00                         | 12,065.00             | 18,418.84             | 8,795.00              | 186.16           | 167.12        | 21.97                 | -10,968.11             | 78.54        | 3,510.60               | 3,373.35                | 137.25                    | 25.579            |                                                       |         |                    |           |
| 22,100.00                         | 12,065.00             | 18,518.84             | 8,795.00              | 187.76           | 168.74        | 21.97                 | -11,068.11             | 79.52        | 3,510.59               | 3,372.07                | 138.52                    | 25.343            |                                                       |         |                    |           |
| 22,200.00                         | 12,065.00             | 18,618.84             | 8,795.00              | 189.36           | 170.36        | 21.97                 | -11,168.10             | 80.51        | 3,510.59               | 3,370.79                | 139.80                    | 25.112            |                                                       |         |                    |           |
| 22,300.00                         | 12,065.00             | 18,718.84             | 8,795.00              | 190.95           | 171.98        | 21.97                 | -11,268.10             | 81.50        | 3,510.59               | 3,369.51                | 141.07                    | 24.885            |                                                       |         |                    |           |
| 22,400.00                         | 12,065.00             | 18,818.84             | 8,795.00              | 192.55           | 173.61        | 21.97                 | -11,368.09             | 82.48        | 3,510.58               | 3,368.23                | 142.35                    | 24.661            |                                                       |         |                    |           |
| 22,442.76                         | 12,065.00             | 18,861.60             | 8,795.00              | 193.24           | 174.30        | 21.97                 | -11,410.84             | 82.91        | 3,510.58               | 3,367.68                | 142.90                    | 24.567            |                                                       |         |                    |           |
| 22,445.57                         | 12,065.00             | 18,862.99             | 8,795.00              | 193.28           | 174.32        | 21.97                 | -11,412.23             | 82.92        | 3,510.58               | 3,367.66                | 142.92                    | 24.563 SF         |                                                       |         |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.11               |                         |                           |                   |                    |           |  |
| 100.00                            | 100.00                | 82.90                 | 82.90                 | 0.13             | 0.10          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,819.87                | 0.16                      | N/A               |                    |           |  |
| 200.00                            | 200.00                | 182.90                | 182.90                | 0.48             | 0.42          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,819.39                | 0.64                      | 2,832.689         |                    |           |  |
| 300.00                            | 300.00                | 282.90                | 282.90                | 0.84             | 0.78          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,818.88                | 1.15                      | 1,584.261         |                    |           |  |
| 400.00                            | 400.00                | 382.90                | 382.90                | 1.20             | 1.14          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,818.37                | 1.66                      | 1,099.367         |                    |           |  |
| 500.00                            | 500.00                | 482.90                | 482.90                | 1.56             | 1.50          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,817.87                | 2.16                      | 841.692           |                    |           |  |
| 600.00                            | 600.00                | 582.90                | 582.90                | 1.92             | 1.86          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,817.36                | 2.67                      | 681.858           |                    |           |  |
| 700.00                            | 700.00                | 682.90                | 682.90                | 2.28             | 2.21          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,816.85                | 3.18                      | 573.035           |                    |           |  |
| 800.00                            | 800.00                | 782.90                | 782.90                | 2.63             | 2.57          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,816.34                | 3.68                      | 494.166           |                    |           |  |
| 900.00                            | 900.00                | 882.90                | 882.90                | 2.99             | 2.93          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,815.84                | 4.19                      | 434.379           |                    |           |  |
| 1,000.00                          | 1,000.00              | 982.90                | 982.90                | 3.35             | 3.29          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,815.33                | 4.70                      | 387.497           |                    |           |  |
| 1,100.00                          | 1,100.00              | 1,082.90              | 1,082.90              | 3.71             | 3.65          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,814.82                | 5.20                      | 349.748           |                    |           |  |
| 1,200.00                          | 1,200.00              | 1,182.90              | 1,182.90              | 4.07             | 4.01          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,814.32                | 5.71                      | 318.701           |                    |           |  |
| 1,300.00                          | 1,300.00              | 1,282.90              | 1,282.90              | 4.43             | 4.37          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,813.81                | 6.22                      | 292.717           |                    |           |  |
| 1,400.00                          | 1,400.00              | 1,382.90              | 1,382.90              | 4.79             | 4.72          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,813.30                | 6.72                      | 270.650           |                    |           |  |
| 1,500.00                          | 1,500.00              | 1,482.90              | 1,482.90              | 5.14             | 5.08          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,812.80                | 7.23                      | 251.677           |                    |           |  |
| 1,600.00                          | 1,600.00              | 1,582.90              | 1,582.90              | 5.50             | 5.44          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,812.29                | 7.74                      | 235.190           |                    |           |  |
| 1,700.00                          | 1,700.00              | 1,682.90              | 1,682.90              | 5.86             | 5.80          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,811.78                | 8.25                      | 220.730           |                    |           |  |
| 1,800.00                          | 1,800.00              | 1,782.90              | 1,782.90              | 6.22             | 6.16          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,811.28                | 8.75                      | 207.945           |                    |           |  |
| 1,900.00                          | 1,900.00              | 1,882.90              | 1,882.90              | 6.58             | 6.52          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,810.77                | 9.26                      | 196.560           |                    |           |  |
| 2,000.00                          | 2,000.00              | 1,982.90              | 1,982.90              | 6.94             | 6.88          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,810.26                | 9.77                      | 186.357           |                    |           |  |
| 2,100.00                          | 2,100.00              | 2,082.90              | 2,082.90              | 7.29             | 7.23          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,809.75                | 10.27                     | 177.161           |                    |           |  |
| 2,200.00                          | 2,200.00              | 2,182.90              | 2,182.90              | 7.65             | 7.59          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,809.25                | 10.78                     | 168.830           |                    |           |  |
| 2,300.00                          | 2,300.00              | 2,282.90              | 2,282.90              | 8.01             | 7.95          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,808.74                | 11.29                     | 161.247           |                    |           |  |
| 2,400.00                          | 2,400.00              | 2,382.90              | 2,382.90              | 8.37             | 8.31          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,808.23                | 11.79                     | 154.316           |                    |           |  |
| 2,500.00                          | 2,500.00              | 2,482.90              | 2,482.90              | 8.73             | 8.67          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,807.73                | 12.30                     | 147.957           |                    |           |  |
| 2,600.00                          | 2,600.00              | 2,582.90              | 2,582.90              | 9.09             | 9.03          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,807.22                | 12.81                     | 142.100           |                    |           |  |
| 2,700.00                          | 2,700.00              | 2,682.90              | 2,682.90              | 9.45             | 9.38          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,806.71                | 13.31                     | 136.690           |                    |           |  |
| 2,800.00                          | 2,800.00              | 2,782.90              | 2,782.90              | 9.80             | 9.74          | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,806.21                | 13.82                     | 131.677           |                    |           |  |
| 2,900.00                          | 2,900.00              | 2,882.90              | 2,882.90              | 10.16            | 10.10         | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,805.70                | 14.33                     | 127.018           |                    |           |  |
| 3,000.00                          | 3,000.00              | 2,982.90              | 2,982.90              | 10.52            | 10.46         | 123.44                | -1,002.87                           | 1,518.80     | 1,820.03               | 1,805.19                | 14.84                     | 122.678           |                    |           |  |
| 3,100.00                          | 3,100.00              | 3,065.53              | 3,065.52              | 10.88            | 10.74         | 123.45                | -1,003.43                           | 1,518.80     | 1,820.42               | 1,805.13                | 15.29                     | 119.061           |                    |           |  |
| 3,200.00                          | 3,200.00              | 3,144.51              | 3,144.48              | 11.24            | 11.01         | 123.51                | -1,005.60                           | 1,518.82     | 1,821.95               | 1,806.23                | 15.73                     | 115.857           |                    |           |  |
| 3,300.00                          | 3,299.99              | 3,223.41              | 3,223.28              | 11.58            | 11.26         | -5.05                 | -1,009.40                           | 1,518.84     | 1,823.34               | 1,807.19                | 16.15                     | 112.931           |                    |           |  |
| 3,400.00                          | 3,399.91              | 3,300.00              | 3,299.69              | 11.91            | 11.51         | -4.92                 | -1,014.64                           | 1,518.87     | 1,823.28               | 1,806.74                | 16.55                     | 110.178           |                    |           |  |
| 3,500.00                          | 3,499.69              | 3,380.81              | 3,380.18              | 12.25            | 11.77         | -4.75                 | -1,021.84                           | 1,518.92     | 1,821.79               | 1,804.83                | 16.96                     | 107.400           |                    |           |  |
| 3,600.00                          | 3,599.27              | 3,459.23              | 3,458.13              | 12.58            | 12.03         | -4.55                 | -1,030.44                           | 1,518.97     | 1,818.88               | 1,801.51                | 17.37                     | 104.709           |                    |           |  |
| 3,700.00                          | 3,698.57              | 3,538.62              | 3,536.84              | 12.92            | 12.30         | -4.31                 | -1,040.78                           | 1,519.04     | 1,814.57               | 1,796.79                | 17.78                     | 102.047           |                    |           |  |
| 3,800.00                          | 3,797.54              | 3,637.88              | 3,635.13              | 13.27            | 12.63         | -3.99                 | -1,054.58                           | 1,519.12     | 1,808.22               | 1,789.97                | 18.25                     | 99.063            |                    |           |  |
| 3,900.00                          | 3,896.09              | 3,736.95              | 3,733.24              | 13.62            | 12.97         | -3.68                 | -1,068.37                           | 1,519.21     | 1,799.33               | 1,780.61                | 18.73                     | 96.079            |                    |           |  |
| 4,000.00                          | 3,994.16              | 3,835.78              | 3,831.11              | 13.98            | 13.32         | -3.37                 | -1,082.11                           | 1,519.30     | 1,787.90               | 1,768.70                | 19.20                     | 93.098            |                    |           |  |
| 4,100.00                          | 4,091.70              | 3,934.30              | 3,928.67              | 14.35            | 13.66         | -3.06                 | -1,095.82                           | 1,519.38     | 1,773.93               | 1,754.25                | 19.68                     | 90.124            |                    |           |  |
| 4,200.00                          | 4,188.62              | 4,032.43              | 4,025.85              | 14.74            | 14.01         | -2.75                 | -1,109.47                           | 1,519.47     | 1,757.44               | 1,737.27                | 20.16                     | 87.157            |                    |           |  |
| 4,300.00                          | 4,284.86              | 4,130.12              | 4,122.59              | 15.14            | 14.37         | -2.43                 | -1,123.05                           | 1,519.55     | 1,738.42               | 1,717.78                | 20.65                     | 84.202            |                    |           |  |
| 4,400.00                          | 4,380.36              | 4,256.34              | 4,247.78              | 15.55            | 14.82         | -2.06                 | -1,139.13                           | 1,519.65     | 1,716.24               | 1,695.03                | 21.21                     | 80.900            |                    |           |  |
| 4,452.43                          | 4,430.11              | 4,325.68              | 4,316.75              | 15.78            | 15.07         | -1.90                 | -1,146.22                           | 1,519.70     | 1,702.82               | 1,681.30                | 21.52                     | 79.131            |                    |           |  |
| 4,500.00                          | 4,475.14              | 4,388.23              | 4,379.07              | 15.99            | 15.29         | -1.77                 | -1,151.54                           | 1,519.73     | 1,689.85               | 1,668.06                | 21.79                     | 77.547            |                    |           |  |
| 4,600.00                          | 4,569.82              | 4,518.78              | 4,509.38              | 16.44            | 15.75         | -1.59                 | -1,159.36                           | 1,519.78     | 1,661.13               | 1,638.78                | 22.35                     | 74.315            |                    |           |  |
| 4,700.00                          | 4,664.49              | 4,647.83              | 4,638.38              | 16.91            | 16.20         | -1.54                 | -1,162.71                           | 1,519.80     | 1,630.44               | 1,607.54                | 22.90                     | 71.199            |                    |           |  |
| 4,800.00                          | 4,759.16              | 4,751.51              | 4,742.06              | 17.39            | 16.56         | -1.57                 | -1,162.87                           | 1,519.80     | 1,598.31               | 1,574.92                | 23.39                     | 68.325            |                    |           |  |
| 4,900.00                          | 4,853.84              | 4,846.18              | 4,836.74              | 17.87            | 16.89         | -1.60                 | -1,162.87                           | 1,519.80     | 1,566.12               | 1,542.25                | 23.87                     | 65.609            |                    |           |  |
| 5,000.00                          | 4,948.51              | 4,940.86              | 4,931.41              | 18.37            | 17.22         | -1.63                 | -1,162.87                           | 1,519.80     | 1,533.93               | 1,509.58                | 24.35                     | 62.994            |                    |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,035.53              | 5,026.08              | 18.88            | 17.56         | -1.67                 | -1,162.87                           | 1,519.80     | 1,501.74               | 1,476.90                | 24.83                     | 60.475            |                    |           |
| 5,200.00                          | 5,137.85              | 5,130.20              | 5,120.75              | 19.39            | 17.89         | -1.70                 | -1,162.87                           | 1,519.80     | 1,469.54               | 1,444.23                | 25.32                     | 58.048            |                    |           |
| 5,300.00                          | 5,232.53              | 5,224.87              | 5,215.43              | 19.92            | 18.22         | -1.74                 | -1,162.87                           | 1,519.80     | 1,437.35               | 1,411.55                | 25.80                     | 55.708            |                    |           |
| 5,400.00                          | 5,327.20              | 5,319.55              | 5,310.10              | 20.45            | 18.55         | -1.78                 | -1,162.87                           | 1,519.80     | 1,405.16               | 1,378.87                | 26.29                     | 53.450            |                    |           |
| 5,500.00                          | 5,421.87              | 5,414.22              | 5,404.77              | 20.99            | 18.88         | -1.82                 | -1,162.87                           | 1,519.80     | 1,372.97               | 1,346.19                | 26.78                     | 51.272            |                    |           |
| 5,600.00                          | 5,516.54              | 5,508.89              | 5,499.44              | 21.53            | 19.22         | -1.87                 | -1,162.87                           | 1,519.80     | 1,340.78               | 1,313.51                | 27.27                     | 49.168            |                    |           |
| 5,700.00                          | 5,611.22              | 5,603.56              | 5,594.12              | 22.08            | 19.55         | -1.91                 | -1,162.87                           | 1,519.80     | 1,308.59               | 1,280.83                | 27.76                     | 47.137            |                    |           |
| 5,800.00                          | 5,705.89              | 5,698.24              | 5,688.79              | 22.63            | 19.88         | -1.96                 | -1,162.87                           | 1,519.80     | 1,276.41               | 1,248.15                | 28.26                     | 45.174            |                    |           |
| 5,900.00                          | 5,800.56              | 5,792.91              | 5,783.46              | 23.19            | 20.22         | -2.01                 | -1,162.87                           | 1,519.80     | 1,244.22               | 1,215.47                | 28.75                     | 43.277            |                    |           |
| 6,000.00                          | 5,895.23              | 5,887.58              | 5,878.13              | 23.76            | 20.55         | -2.07                 | -1,162.87                           | 1,519.80     | 1,212.03               | 1,182.79                | 29.25                     | 41.441            |                    |           |
| 6,100.00                          | 5,989.91              | 5,982.26              | 5,972.81              | 24.33            | 20.88         | -2.12                 | -1,162.87                           | 1,519.80     | 1,179.85               | 1,150.10                | 29.74                     | 39.666            |                    |           |
| 6,200.00                          | 6,084.58              | 6,076.93              | 6,067.48              | 24.90            | 21.22         | -2.18                 | -1,162.87                           | 1,519.80     | 1,147.67               | 1,117.42                | 30.24                     | 37.947            |                    |           |
| 6,300.00                          | 6,179.25              | 6,171.60              | 6,162.15              | 25.48            | 21.55         | -2.24                 | -1,162.87                           | 1,519.80     | 1,115.48               | 1,084.74                | 30.74                     | 36.283            |                    |           |
| 6,400.00                          | 6,273.92              | 6,266.27              | 6,256.82              | 26.05            | 21.89         | -2.31                 | -1,162.87                           | 1,519.80     | 1,083.30               | 1,052.06                | 31.25                     | 34.671            |                    |           |
| 6,500.00                          | 6,368.60              | 6,360.95              | 6,351.50              | 26.64            | 22.22         | -2.38                 | -1,162.87                           | 1,519.80     | 1,051.12               | 1,019.37                | 31.75                     | 33.109            |                    |           |
| 6,600.00                          | 6,463.27              | 6,455.62              | 6,446.17              | 27.22            | 22.55         | -2.46                 | -1,162.87                           | 1,519.80     | 1,018.94               | 986.69                  | 32.25                     | 31.595            |                    |           |
| 6,700.00                          | 6,557.94              | 6,550.29              | 6,540.84              | 27.81            | 22.89         | -2.54                 | -1,162.87                           | 1,519.80     | 986.77                 | 954.01                  | 32.75                     | 30.126            |                    |           |
| 6,800.00                          | 6,652.61              | 6,644.96              | 6,635.51              | 28.40            | 23.22         | -2.62                 | -1,162.87                           | 1,519.80     | 954.59                 | 921.33                  | 33.26                     | 28.701            |                    |           |
| 6,900.00                          | 6,747.29              | 6,739.64              | 6,730.19              | 29.00            | 23.56         | -2.71                 | -1,162.87                           | 1,519.80     | 922.42                 | 888.65                  | 33.77                     | 27.318            |                    |           |
| 7,000.00                          | 6,841.96              | 6,834.31              | 6,824.86              | 29.59            | 23.89         | -2.81                 | -1,162.87                           | 1,519.80     | 890.25                 | 855.98                  | 34.27                     | 25.976            |                    |           |
| 7,100.00                          | 6,936.63              | 6,928.98              | 6,919.53              | 30.19            | 24.23         | -2.92                 | -1,162.87                           | 1,519.80     | 858.08                 | 823.30                  | 34.78                     | 24.671            |                    |           |
| 7,200.00                          | 7,031.30              | 7,023.65              | 7,014.20              | 30.79            | 24.56         | -3.03                 | -1,162.87                           | 1,519.80     | 825.92                 | 790.63                  | 35.29                     | 23.404            |                    |           |
| 7,300.00                          | 7,125.98              | 7,118.33              | 7,108.88              | 31.40            | 24.90         | -3.15                 | -1,162.87                           | 1,519.80     | 793.75                 | 757.95                  | 35.80                     | 22.173            |                    |           |
| 7,400.00                          | 7,220.65              | 7,213.00              | 7,203.55              | 32.00            | 25.23         | -3.29                 | -1,162.87                           | 1,519.80     | 761.59                 | 725.29                  | 36.31                     | 20.975            |                    |           |
| 7,500.00                          | 7,315.32              | 7,307.67              | 7,298.22              | 32.61            | 25.57         | -3.43                 | -1,162.87                           | 1,519.80     | 729.44                 | 692.62                  | 36.82                     | 19.810            |                    |           |
| 7,600.00                          | 7,409.99              | 7,402.34              | 7,392.89              | 33.21            | 25.91         | -3.59                 | -1,162.87                           | 1,519.80     | 697.29                 | 659.96                  | 37.33                     | 18.677            |                    |           |
| 7,700.00                          | 7,504.67              | 7,497.02              | 7,487.57              | 33.82            | 26.24         | -3.77                 | -1,162.87                           | 1,519.80     | 665.15                 | 627.30                  | 37.85                     | 17.574            |                    |           |
| 7,800.00                          | 7,599.34              | 7,591.69              | 7,582.24              | 34.43            | 26.58         | -3.96                 | -1,162.87                           | 1,519.80     | 633.01                 | 594.64                  | 38.36                     | 16.501            |                    |           |
| 7,900.00                          | 7,694.01              | 7,686.36              | 7,676.91              | 35.05            | 26.91         | -4.17                 | -1,162.87                           | 1,519.80     | 600.88                 | 562.00                  | 38.88                     | 15.455            |                    |           |
| 8,000.00                          | 7,788.68              | 7,781.03              | 7,771.58              | 35.66            | 27.25         | -4.40                 | -1,162.87                           | 1,519.80     | 568.75                 | 529.36                  | 39.40                     | 14.437            |                    |           |
| 8,100.00                          | 7,883.36              | 7,875.71              | 7,866.26              | 36.28            | 27.59         | -4.67                 | -1,162.87                           | 1,519.80     | 536.64                 | 496.72                  | 39.91                     | 13.445            |                    |           |
| 8,200.00                          | 7,978.03              | 7,970.38              | 7,960.93              | 36.89            | 27.92         | -4.97                 | -1,162.87                           | 1,519.80     | 504.54                 | 464.10                  | 40.43                     | 12.478            |                    |           |
| 8,300.00                          | 8,072.70              | 8,065.05              | 8,055.60              | 37.51            | 28.26         | -5.30                 | -1,162.87                           | 1,519.80     | 472.45                 | 431.49                  | 40.95                     | 11.536            |                    |           |
| 8,400.00                          | 8,167.37              | 8,159.00              | 8,149.53              | 38.13            | 28.56         | -5.54                 | -1,163.79                           | 1,519.81     | 441.00                 | 399.48                  | 41.52                     | 10.621            |                    |           |
| 8,500.00                          | 8,262.05              | 8,254.68              | 8,245.21              | 38.75            | 28.78         | -4.97                 | -1,171.13                           | 1,519.88     | 414.86                 | 372.78                  | 42.08                     | 9.859             |                    |           |
| 8,600.00                          | 8,356.72              | 8,348.35              | 8,338.88              | 39.37            | 29.03         | -3.36                 | -1,186.72                           | 1,520.03     | 395.66                 | 353.22                  | 42.44                     | 9.322             |                    |           |
| 8,700.00                          | 8,451.39              | 8,443.02              | 8,433.55              | 39.99            | 29.27         | -0.79                 | -1,209.40                           | 1,520.25     | 384.53                 | 342.00                  | 42.53                     | 9.041             |                    |           |
| 8,759.99                          | 8,508.18              | 8,499.81              | 8,490.34              | 40.36            | 29.42         | 1.17                  | -1,226.30                           | 1,520.42     | 382.34                 | 339.91                  | 42.43                     | 9.012 CC, ES, SF  |                    |           |
| 8,800.00                          | 8,546.07              | 8,537.70              | 8,528.23              | 40.61            | 29.52         | 2.56                  | -1,238.35                           | 1,520.53     | 382.97                 | 340.70                  | 42.27                     | 9.061             |                    |           |
| 8,875.44                          | 8,617.48              | 8,609.11              | 8,600.64              | 41.08            | 29.70         | 5.34                  | -1,262.60                           | 1,520.77     | 389.01                 | 347.24                  | 41.77                     | 9.314             |                    |           |
| 8,900.00                          | 8,640.90              | 8,632.53              | 8,623.06              | 41.23            | 29.76         | 6.29                  | -1,270.78                           | 1,520.85     | 392.92                 | 351.37                  | 41.55                     | 9.457             |                    |           |
| 8,950.00                          | 8,689.44              | 8,681.07              | 8,671.60              | 41.49            | 29.86         | 8.12                  | -1,285.88                           | 1,521.00     | 406.18                 | 365.24                  | 40.94                     | 9.921             |                    |           |
| 9,000.00                          | 8,738.83              | 8,730.46              | 8,721.00              | 41.70            | 29.98         | 10.36                 | -1,303.87                           | 1,521.17     | 426.16                 | 385.69                  | 40.47                     | 10.531            |                    |           |
| 9,050.00                          | 8,788.70              | 8,780.33              | 8,770.87              | 41.87            | 30.07         | 12.43                 | -1,318.50                           | 1,521.31     | 452.28                 | 412.45                  | 39.83                     | 11.354            |                    |           |
| 9,063.30                          | 8,802.00              | 8,793.63              | 8,784.16              | 41.91            | 30.07         | 141.30                | -1,318.50                           | 1,521.31     | 460.26                 | 420.79                  | 39.46                     | 11.663            |                    |           |
| 9,100.00                          | 8,838.70              | 8,830.33              | 8,820.87              | 42.00            | 30.16         | 142.77                | -1,334.00                           | 1,521.46     | 482.90                 | 443.59                  | 39.31                     | 12.285            |                    |           |
| 9,200.00                          | 8,938.70              | 8,930.33              | 8,920.87              | 42.26            | 30.28         | 144.55                | -1,354.30                           | 1,521.66     | 549.33                 | 511.52                  | 37.81                     | 14.530            |                    |           |
| 9,300.00                          | 9,038.70              | 9,030.33              | 9,020.87              | 42.51            | 30.51         | 147.55                | -1,393.01                           | 1,522.04     | 620.92                 | 583.57                  | 37.35                     | 16.623            |                    |           |
| 9,400.00                          | 9,138.70              | 9,130.33              | 9,120.87              | 42.77            | 30.61         | 148.69                | -1,409.58                           | 1,522.20     | 696.81                 | 660.71                  | 36.09                     | 19.306            |                    |           |
| 9,500.00                          | 9,238.70              | 9,230.33              | 9,220.87              | 43.03            | 30.75         | 150.27                | -1,434.33                           | 1,522.44     | 776.33                 | 740.97                  | 35.36                     | 21.952            |                    |           |
| 9,600.00                          | 9,338.70              | 9,330.33              | 9,320.87              | 43.30            | 30.83         | 151.14                | -1,448.92                           | 1,522.58     | 858.63                 | 824.17                  | 34.46                     | 24.917            |                    |           |
| 9,700.00                          | 9,438.70              | 9,430.33              | 9,420.87              | 43.56            | 30.99         | 152.72                | -1,477.94                           | 1,522.86     | 943.55                 | 909.40                  | 34.15                     | 27.630            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,800.00                          | 9,538.70              | 8,750.00              | 8,619.68              | 43.82            | 30.99         | 152.72                | -1,477.94                           | 1,522.86     | 1,029.89               | 996.73                  | 33.16                     | 31.055            |                    |           |
| 9,900.00                          | 9,638.70              | 8,768.66              | 8,627.81              | 44.09            | 31.09         | 153.57                | -1,494.74                           | 1,523.03     | 1,118.05               | 1,085.29                | 32.77                     | 34.122            |                    |           |
| 10,000.00                         | 9,738.70              | 8,782.37              | 8,633.43              | 44.36            | 31.16         | 154.17                | -1,507.23                           | 1,523.15     | 1,207.57               | 1,175.20                | 32.37                     | 37.307            |                    |           |
| 10,100.00                         | 9,838.70              | 8,800.00              | 8,640.21              | 44.63            | 31.25         | 154.91                | -1,523.51                           | 1,523.31     | 1,298.25               | 1,266.11                | 32.14                     | 40.397            |                    |           |
| 10,200.00                         | 9,938.70              | 8,800.00              | 8,640.21              | 44.90            | 31.25         | 154.91                | -1,523.51                           | 1,523.31     | 1,389.87               | 1,358.20                | 31.67                     | 43.882            |                    |           |
| 10,300.00                         | 10,038.70             | 8,800.00              | 8,640.21              | 45.17            | 31.25         | 154.91                | -1,523.51                           | 1,523.31     | 1,482.57               | 1,451.26                | 31.31                     | 47.353            |                    |           |
| 10,400.00                         | 10,138.70             | 8,825.28              | 8,649.06              | 45.44            | 31.39         | 155.91                | -1,547.19                           | 1,523.54     | 1,575.41               | 1,544.02                | 31.39                     | 50.187            |                    |           |
| 10,500.00                         | 10,238.70             | 8,850.00              | 8,656.69              | 45.71            | 31.52         | 156.84                | -1,570.69                           | 1,523.77     | 1,669.48               | 1,637.99                | 31.49                     | 53.019            |                    |           |
| 10,600.00                         | 10,338.70             | 8,850.00              | 8,656.69              | 45.99            | 31.52         | 156.84                | -1,570.69                           | 1,523.77     | 1,763.56               | 1,732.27                | 31.29                     | 56.366            |                    |           |
| 10,700.00                         | 10,438.70             | 8,850.00              | 8,656.69              | 46.26            | 31.52         | 156.84                | -1,570.69                           | 1,523.77     | 1,858.26               | 1,827.12                | 31.14                     | 59.667            |                    |           |
| 10,800.00                         | 10,538.70             | 8,850.00              | 8,656.69              | 46.54            | 31.52         | 156.84                | -1,570.69                           | 1,523.77     | 1,953.49               | 1,922.44                | 31.05                     | 62.917            |                    |           |
| 10,900.00                         | 10,638.70             | 8,850.00              | 8,656.69              | 46.82            | 31.52         | 156.84                | -1,570.69                           | 1,523.77     | 2,049.17               | 2,018.18                | 30.99                     | 66.118            |                    |           |
| 11,000.00                         | 10,738.70             | 8,850.00              | 8,656.69              | 47.10            | 31.52         | 156.84                | -1,570.69                           | 1,523.77     | 2,145.24               | 2,114.27                | 30.97                     | 69.261            |                    |           |
| 11,100.00                         | 10,838.70             | 8,872.44              | 8,662.74              | 47.38            | 31.65         | 157.63                | -1,592.31                           | 1,523.98     | 2,241.11               | 2,209.92                | 31.20                     | 71.839            |                    |           |
| 11,200.00                         | 10,938.70             | 8,877.39              | 8,663.96              | 47.66            | 31.67         | 157.80                | -1,597.10                           | 1,524.02     | 2,337.57               | 2,306.30                | 31.27                     | 74.756            |                    |           |
| 11,300.00                         | 11,038.70             | 8,900.00              | 8,668.99              | 47.94            | 31.80         | 158.54                | -1,619.14                           | 1,524.24     | 2,434.61               | 2,403.10                | 31.51                     | 77.254            |                    |           |
| 11,400.00                         | 11,138.70             | 8,900.00              | 8,668.99              | 48.22            | 31.80         | 158.54                | -1,619.14                           | 1,524.24     | 2,531.38               | 2,499.80                | 31.58                     | 80.155            |                    |           |
| 11,500.00                         | 11,238.70             | 8,900.00              | 8,668.99              | 48.51            | 31.80         | 158.54                | -1,619.14                           | 1,524.24     | 2,628.38               | 2,596.71                | 31.67                     | 82.991            |                    |           |
| 11,600.00                         | 11,338.70             | 8,900.00              | 8,668.99              | 48.79            | 31.80         | 158.54                | -1,619.14                           | 1,524.24     | 2,725.60               | 2,693.82                | 31.78                     | 85.763            |                    |           |
| 11,700.00                         | 11,438.70             | 8,900.00              | 8,668.99              | 49.08            | 31.80         | 158.54                | -1,619.14                           | 1,524.24     | 2,823.02               | 2,791.11                | 31.91                     | 88.476            |                    |           |
| 11,753.34                         | 11,492.04             | 8,900.00              | 8,668.99              | 49.23            | 31.80         | 158.54                | -1,619.14                           | 1,524.24     | 2,875.05               | 2,843.07                | 31.98                     | 89.898            |                    |           |
| 11,800.00                         | 11,538.65             | 8,900.00              | 8,668.99              | 49.37            | 31.80         | -15.36                | -1,619.14                           | 1,524.24     | 2,920.18               | 2,888.14                | 32.04                     | 91.142            |                    |           |
| 11,850.00                         | 11,588.24             | 8,900.00              | 8,668.99              | 49.55            | 31.80         | -11.95                | -1,619.14                           | 1,524.24     | 2,967.42               | 2,935.34                | 32.09                     | 92.481            |                    |           |
| 11,900.00                         | 11,637.10             | 8,900.00              | 8,668.99              | 49.74            | 31.80         | -9.79                 | -1,619.14                           | 1,524.24     | 3,013.23               | 2,981.11                | 32.12                     | 93.812            |                    |           |
| 11,950.00                         | 11,684.86             | 8,900.00              | 8,668.99              | 49.95            | 31.80         | -8.32                 | -1,619.14                           | 1,524.24     | 3,057.32               | 3,025.18                | 32.14                     | 95.123            |                    |           |
| 12,000.00                         | 11,731.15             | 8,900.00              | 8,668.99              | 50.18            | 31.80         | -7.26                 | -1,619.14                           | 1,524.24     | 3,099.43               | 3,067.28                | 32.15                     | 96.401            |                    |           |
| 12,050.00                         | 11,775.62             | 8,900.00              | 8,668.99              | 50.42            | 31.80         | -6.47                 | -1,619.14                           | 1,524.24     | 3,139.35               | 3,107.19                | 32.15                     | 97.635            |                    |           |
| 12,100.00                         | 11,817.93             | 8,925.16              | 8,673.57              | 50.68            | 31.94         | -5.81                 | -1,643.87                           | 1,524.48     | 3,176.18               | 3,143.90                | 32.28                     | 98.382            |                    |           |
| 12,150.00                         | 11,857.76             | 8,950.00              | 8,677.03              | 50.96            | 32.09         | -5.31                 | -1,668.47                           | 1,524.72     | 3,211.13               | 3,178.73                | 32.40                     | 99.113            |                    |           |
| 12,200.00                         | 11,894.81             | 8,950.00              | 8,677.03              | 51.25            | 32.09         | -4.94                 | -1,668.47                           | 1,524.72     | 3,242.61               | 3,210.24                | 32.37                     | 100.166           |                    |           |
| 12,250.00                         | 11,928.80             | 8,950.00              | 8,677.03              | 51.56            | 32.09         | -4.65                 | -1,668.47                           | 1,524.72     | 3,271.11               | 3,238.77                | 32.34                     | 101.136           |                    |           |
| 12,300.00                         | 11,959.45             | 8,950.00              | 8,677.03              | 51.87            | 32.09         | -4.42                 | -1,668.47                           | 1,524.72     | 3,296.49               | 3,264.17                | 32.32                     | 102.002           |                    |           |
| 12,350.00                         | 11,986.56             | 8,950.00              | 8,677.03              | 52.20            | 32.09         | -4.23                 | -1,668.47                           | 1,524.72     | 3,318.63               | 3,286.34                | 32.29                     | 102.783           |                    |           |
| 12,400.00                         | 12,009.90             | 8,950.00              | 8,677.03              | 52.55            | 32.09         | -4.09                 | -1,668.47                           | 1,524.72     | 3,337.43               | 3,305.17                | 32.27                     | 103.435           |                    |           |
| 12,450.00                         | 12,029.29             | 8,950.00              | 8,677.03              | 52.90            | 32.09         | -3.97                 | -1,668.47                           | 1,524.72     | 3,352.81               | 3,320.57                | 32.24                     | 104.004           |                    |           |
| 12,500.00                         | 12,044.60             | 8,976.55              | 8,679.54              | 53.26            | 32.24         | -3.88                 | -1,694.89                           | 1,524.97     | 3,363.97               | 3,331.65                | 32.32                     | 104.083           |                    |           |
| 12,550.00                         | 12,055.70             | 9,000.00              | 8,680.73              | 53.63            | 32.38         | -3.83                 | -1,718.32                           | 1,525.20     | 3,372.12               | 3,339.74                | 32.38                     | 104.130           |                    |           |
| 12,600.00                         | 12,062.52             | 9,000.00              | 8,680.73              | 54.01            | 32.38         | -3.80                 | -1,718.32                           | 1,525.20     | 3,376.13               | 3,343.76                | 32.37                     | 104.294           |                    |           |
| 12,653.34                         | 12,065.00             | 9,000.00              | 8,680.73              | 54.42            | 32.38         | -3.80                 | -1,718.32                           | 1,525.20     | 3,376.42               | 3,344.06                | 32.37                     | 104.318           |                    |           |
| 12,700.00                         | 12,065.00             | 9,000.00              | 8,680.73              | 54.78            | 32.38         | -3.80                 | -1,718.32                           | 1,525.20     | 3,375.20               | 3,342.83                | 32.37                     | 104.268           |                    |           |
| 12,800.00                         | 12,065.00             | 9,035.10              | 8,681.00              | 55.59            | 32.60         | -3.80                 | -1,753.41                           | 1,525.54     | 3,374.31               | 3,341.79                | 32.52                     | 103.755           |                    |           |
| 12,900.00                         | 12,065.00             | 9,135.10              | 8,681.00              | 56.43            | 33.25         | -3.80                 | -1,853.40                           | 1,526.51     | 3,374.31               | 3,341.45                | 32.86                     | 102.677           |                    |           |
| 13,000.00                         | 12,065.00             | 9,235.10              | 8,681.00              | 57.31            | 33.96         | -3.80                 | -1,953.40                           | 1,527.49     | 3,374.31               | 3,341.07                | 33.24                     | 101.521           |                    |           |
| 13,100.00                         | 12,065.00             | 9,335.10              | 8,681.00              | 58.22            | 34.74         | -3.80                 | -2,053.39                           | 1,528.46     | 3,374.31               | 3,340.66                | 33.65                     | 100.291           |                    |           |
| 13,200.00                         | 12,065.00             | 9,435.10              | 8,681.00              | 59.17            | 35.58         | -3.80                 | -2,153.39                           | 1,529.43     | 3,374.31               | 3,340.23                | 34.08                     | 98.999            |                    |           |
| 13,300.00                         | 12,065.00             | 9,535.10              | 8,681.00              | 60.14            | 36.48         | -3.80                 | -2,253.39                           | 1,530.40     | 3,374.31               | 3,339.76                | 34.55                     | 97.653            |                    |           |
| 13,400.00                         | 12,065.00             | 9,635.10              | 8,681.00              | 61.15            | 37.42         | -3.80                 | -2,353.38                           | 1,531.37     | 3,374.31               | 3,339.26                | 35.05                     | 96.263            |                    |           |
| 13,500.00                         | 12,065.00             | 9,735.10              | 8,681.00              | 62.18            | 38.42         | -3.80                 | -2,453.38                           | 1,532.35     | 3,374.31               | 3,338.73                | 35.58                     | 94.836            |                    |           |
| 13,600.00                         | 12,065.00             | 9,835.10              | 8,681.00              | 63.24            | 39.46         | -3.80                 | -2,553.37                           | 1,533.32     | 3,374.31               | 3,338.17                | 36.13                     | 93.382            |                    |           |
| 13,700.00                         | 12,065.00             | 9,935.10              | 8,681.00              | 64.32            | 40.54         | -3.80                 | -2,653.37                           | 1,534.29     | 3,374.31               | 3,337.59                | 36.71                     | 91.907            |                    |           |
| 13,800.00                         | 12,065.00             | 10,035.10             | 8,681.00              | 65.43            | 41.65         | -3.80                 | -2,753.36                           | 1,535.26     | 3,374.31               | 3,336.99                | 37.32                     | 90.419            |                    |           |
| 13,900.00                         | 12,065.00             | 10,135.10             | 8,681.00              | 66.56            | 42.80         | -3.80                 | -2,853.36                           | 1,536.24     | 3,374.31               | 3,336.36                | 37.95                     | 88.923            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 14,000.00                         | 12,065.00             | 10,235.10             | 8,681.00              | 67.71            | 43.99         | -3.80                 | -2,953.35                           | 1,537.21     | 3,374.31               | 3,335.71                | 38.60                     | 87.426            |                    |           |
| 14,100.00                         | 12,065.00             | 10,335.10             | 8,681.00              | 68.88            | 45.20         | -3.80                 | -3,053.35                           | 1,538.18     | 3,374.31               | 3,335.04                | 39.27                     | 85.933            |                    |           |
| 14,200.00                         | 12,065.00             | 10,435.10             | 8,681.00              | 70.08            | 46.44         | -3.80                 | -3,153.34                           | 1,539.15     | 3,374.31               | 3,334.35                | 39.96                     | 84.447            |                    |           |
| 14,300.00                         | 12,065.00             | 10,535.10             | 8,681.00              | 71.29            | 47.70         | -3.80                 | -3,253.34                           | 1,540.12     | 3,374.31               | 3,333.64                | 40.67                     | 82.973            |                    |           |
| 14,400.00                         | 12,065.00             | 10,635.10             | 8,681.00              | 72.51            | 48.99         | -3.80                 | -3,353.33                           | 1,541.10     | 3,374.31               | 3,332.91                | 41.40                     | 81.515            |                    |           |
| 14,500.00                         | 12,065.00             | 10,735.10             | 8,681.00              | 73.76            | 50.30         | -3.80                 | -3,453.33                           | 1,542.07     | 3,374.30               | 3,332.16                | 42.14                     | 80.074            |                    |           |
| 14,600.00                         | 12,065.00             | 10,835.10             | 8,681.00              | 75.02            | 51.63         | -3.80                 | -3,553.32                           | 1,543.04     | 3,374.30               | 3,331.40                | 42.90                     | 78.653            |                    |           |
| 14,700.00                         | 12,065.00             | 10,935.10             | 8,681.00              | 76.29            | 52.97         | -3.80                 | -3,653.32                           | 1,544.01     | 3,374.30               | 3,330.63                | 43.68                     | 77.255            |                    |           |
| 14,800.00                         | 12,065.00             | 11,035.10             | 8,681.00              | 77.58            | 54.34         | -3.80                 | -3,753.31                           | 1,544.99     | 3,374.30               | 3,329.84                | 44.47                     | 75.881            |                    |           |
| 14,900.00                         | 12,065.00             | 11,135.10             | 8,681.00              | 78.89            | 55.72         | -3.80                 | -3,853.31                           | 1,545.96     | 3,374.30               | 3,329.03                | 45.27                     | 74.532            |                    |           |
| 15,000.00                         | 12,065.00             | 11,235.10             | 8,681.00              | 80.20            | 57.11         | -3.80                 | -3,953.31                           | 1,546.93     | 3,374.30               | 3,328.21                | 46.09                     | 73.210            |                    |           |
| 15,100.00                         | 12,065.00             | 11,335.10             | 8,681.00              | 81.53            | 58.52         | -3.80                 | -4,053.30                           | 1,547.90     | 3,374.30               | 3,327.38                | 46.92                     | 71.915            |                    |           |
| 15,200.00                         | 12,065.00             | 11,435.10             | 8,681.00              | 82.87            | 59.94         | -3.80                 | -4,153.30                           | 1,548.87     | 3,374.30               | 3,326.54                | 47.76                     | 70.647            |                    |           |
| 15,300.00                         | 12,065.00             | 11,535.10             | 8,681.00              | 84.22            | 61.37         | -3.80                 | -4,253.29                           | 1,549.85     | 3,374.30               | 3,325.69                | 48.62                     | 69.408            |                    |           |
| 15,400.00                         | 12,065.00             | 11,635.10             | 8,681.00              | 85.59            | 62.81         | -3.80                 | -4,353.29                           | 1,550.82     | 3,374.30               | 3,324.82                | 49.48                     | 68.197            |                    |           |
| 15,500.00                         | 12,065.00             | 11,735.10             | 8,681.00              | 86.96            | 64.26         | -3.80                 | -4,453.28                           | 1,551.79     | 3,374.30               | 3,323.95                | 50.35                     | 67.014            |                    |           |
| 15,600.00                         | 12,065.00             | 11,835.10             | 8,681.00              | 88.34            | 65.72         | -3.80                 | -4,553.28                           | 1,552.76     | 3,374.30               | 3,323.07                | 51.24                     | 65.859            |                    |           |
| 15,700.00                         | 12,065.00             | 11,935.10             | 8,681.00              | 89.73            | 67.19         | -3.80                 | -4,653.27                           | 1,553.74     | 3,374.30               | 3,322.17                | 52.13                     | 64.732            |                    |           |
| 15,800.00                         | 12,065.00             | 12,035.10             | 8,681.00              | 91.13            | 68.67         | -3.80                 | -4,753.27                           | 1,554.71     | 3,374.30               | 3,321.27                | 53.03                     | 63.633            |                    |           |
| 15,900.00                         | 12,065.00             | 12,135.10             | 8,681.00              | 92.54            | 70.16         | -3.80                 | -4,853.26                           | 1,555.68     | 3,374.30               | 3,320.36                | 53.94                     | 62.561            |                    |           |
| 16,000.00                         | 12,065.00             | 12,235.10             | 8,681.00              | 93.95            | 71.65         | -3.79                 | -4,953.26                           | 1,556.65     | 3,374.30               | 3,319.45                | 54.85                     | 61.516            |                    |           |
| 16,100.00                         | 12,065.00             | 12,335.10             | 8,681.00              | 95.38            | 73.15         | -3.79                 | -5,053.25                           | 1,557.62     | 3,374.30               | 3,318.52                | 55.78                     | 60.497            |                    |           |
| 16,200.00                         | 12,065.00             | 12,435.10             | 8,681.00              | 96.81            | 74.66         | -3.79                 | -5,153.25                           | 1,558.60     | 3,374.30               | 3,317.59                | 56.71                     | 59.504            |                    |           |
| 16,300.00                         | 12,065.00             | 12,535.10             | 8,681.00              | 98.24            | 76.17         | -3.79                 | -5,253.24                           | 1,559.57     | 3,374.30               | 3,316.65                | 57.64                     | 58.537            |                    |           |
| 16,400.00                         | 12,065.00             | 12,635.10             | 8,681.00              | 99.69            | 77.69         | -3.79                 | -5,353.24                           | 1,560.54     | 3,374.30               | 3,315.71                | 58.59                     | 57.594            |                    |           |
| 16,500.00                         | 12,065.00             | 12,735.10             | 8,681.00              | 101.14           | 79.21         | -3.79                 | -5,453.23                           | 1,561.51     | 3,374.30               | 3,314.76                | 59.54                     | 56.676            |                    |           |
| 16,600.00                         | 12,065.00             | 12,835.10             | 8,681.00              | 102.60           | 80.74         | -3.79                 | -5,553.23                           | 1,562.49     | 3,374.30               | 3,313.80                | 60.49                     | 55.781            |                    |           |
| 16,700.00                         | 12,065.00             | 12,935.10             | 8,681.00              | 104.06           | 82.27         | -3.79                 | -5,653.22                           | 1,563.46     | 3,374.30               | 3,312.84                | 61.45                     | 54.908            |                    |           |
| 16,800.00                         | 12,065.00             | 13,035.10             | 8,681.00              | 105.53           | 83.81         | -3.79                 | -5,753.22                           | 1,564.43     | 3,374.30               | 3,311.88                | 62.42                     | 54.059            |                    |           |
| 16,900.00                         | 12,065.00             | 13,135.10             | 8,681.00              | 107.00           | 85.35         | -3.79                 | -5,853.22                           | 1,565.40     | 3,374.30               | 3,310.91                | 63.39                     | 53.231            |                    |           |
| 17,000.00                         | 12,065.00             | 13,235.10             | 8,681.00              | 108.48           | 86.90         | -3.79                 | -5,953.21                           | 1,566.37     | 3,374.30               | 3,309.93                | 64.37                     | 52.424            |                    |           |
| 17,100.00                         | 12,065.00             | 13,335.10             | 8,681.00              | 109.96           | 88.45         | -3.79                 | -6,053.21                           | 1,567.35     | 3,374.29               | 3,308.95                | 65.34                     | 51.639            |                    |           |
| 17,200.00                         | 12,065.00             | 13,435.10             | 8,681.00              | 111.45           | 90.00         | -3.79                 | -6,153.20                           | 1,568.32     | 3,374.29               | 3,307.97                | 66.33                     | 50.873            |                    |           |
| 17,300.00                         | 12,065.00             | 13,535.10             | 8,681.00              | 112.94           | 91.56         | -3.79                 | -6,253.20                           | 1,569.29     | 3,374.29               | 3,306.98                | 67.32                     | 50.126            |                    |           |
| 17,400.00                         | 12,065.00             | 13,635.10             | 8,681.00              | 114.44           | 93.12         | -3.79                 | -6,353.19                           | 1,570.26     | 3,374.29               | 3,305.99                | 68.31                     | 49.399            |                    |           |
| 17,500.00                         | 12,065.00             | 13,735.10             | 8,681.00              | 115.94           | 94.68         | -3.79                 | -6,453.19                           | 1,571.24     | 3,374.29               | 3,304.99                | 69.30                     | 48.689            |                    |           |
| 17,600.00                         | 12,065.00             | 13,835.10             | 8,681.00              | 117.45           | 96.25         | -3.79                 | -6,553.18                           | 1,572.21     | 3,374.29               | 3,303.99                | 70.30                     | 47.997            |                    |           |
| 17,700.00                         | 12,065.00             | 13,935.10             | 8,681.00              | 118.96           | 97.82         | -3.79                 | -6,653.18                           | 1,573.18     | 3,374.29               | 3,302.99                | 71.30                     | 47.322            |                    |           |
| 17,800.00                         | 12,065.00             | 14,035.10             | 8,681.00              | 120.47           | 99.39         | -3.79                 | -6,753.17                           | 1,574.15     | 3,374.29               | 3,301.98                | 72.31                     | 46.664            |                    |           |
| 17,900.00                         | 12,065.00             | 14,135.10             | 8,681.00              | 121.99           | 100.97        | -3.79                 | -6,853.17                           | 1,575.12     | 3,374.29               | 3,300.97                | 73.32                     | 46.021            |                    |           |
| 18,000.00                         | 12,065.00             | 14,235.10             | 8,681.00              | 123.51           | 102.54        | -3.79                 | -6,953.16                           | 1,576.10     | 3,374.29               | 3,299.96                | 74.33                     | 45.396            |                    |           |
| 18,100.00                         | 12,065.00             | 14,335.10             | 8,681.00              | 125.03           | 104.12        | -3.79                 | -7,053.16                           | 1,577.07     | 3,374.29               | 3,298.95                | 75.35                     | 44.784            |                    |           |
| 18,200.00                         | 12,065.00             | 14,435.10             | 8,681.00              | 126.56           | 105.70        | -3.79                 | -7,153.15                           | 1,578.04     | 3,374.29               | 3,297.93                | 76.36                     | 44.187            |                    |           |
| 18,300.00                         | 12,065.00             | 14,535.10             | 8,681.00              | 128.09           | 107.29        | -3.79                 | -7,253.15                           | 1,579.01     | 3,374.29               | 3,296.91                | 77.39                     | 43.604            |                    |           |
| 18,400.00                         | 12,065.00             | 14,635.10             | 8,681.00              | 129.62           | 108.87        | -3.79                 | -7,353.14                           | 1,579.99     | 3,374.29               | 3,295.88                | 78.41                     | 43.035            |                    |           |
| 18,500.00                         | 12,065.00             | 14,735.10             | 8,681.00              | 131.16           | 110.46        | -3.79                 | -7,453.14                           | 1,580.96     | 3,374.29               | 3,294.85                | 79.44                     | 42.479            |                    |           |
| 18,600.00                         | 12,065.00             | 14,835.10             | 8,681.00              | 132.69           | 112.05        | -3.79                 | -7,553.14                           | 1,581.93     | 3,374.29               | 3,293.83                | 80.46                     | 41.935            |                    |           |
| 18,700.00                         | 12,065.00             | 14,935.10             | 8,681.00              | 134.24           | 113.64        | -3.79                 | -7,653.13                           | 1,582.90     | 3,374.29               | 3,292.79                | 81.49                     | 41.405            |                    |           |
| 18,800.00                         | 12,065.00             | 15,035.10             | 8,681.00              | 135.78           | 115.23        | -3.79                 | -7,753.13                           | 1,583.87     | 3,374.29               | 3,291.76                | 82.53                     | 40.887            |                    |           |
| 18,900.00                         | 12,065.00             | 15,135.10             | 8,681.00              | 137.33           | 116.83        | -3.79                 | -7,853.12                           | 1,584.85     | 3,374.29               | 3,290.72                | 83.56                     | 40.380            |                    |           |
| 19,000.00                         | 12,065.00             | 15,235.10             | 8,681.00              | 138.87           | 118.42        | -3.79                 | -7,953.12                           | 1,585.82     | 3,374.29               | 3,289.69                | 84.60                     | 39.885            |                    |           |
| 19,100.00                         | 12,065.00             | 15,335.10             | 8,681.00              | 140.43           | 120.02        | -3.79                 | -8,053.11                           | 1,586.79     | 3,374.29               | 3,288.65                | 85.64                     | 39.401            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 103H - OH - Plan #1 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         | 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 |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 19,200.00                         | 12,065.00             | 15,435.10             | 8,681.00              | 141.98           | 121.62        | -3.79                 | -8,153.11                           | 1,587.76     | 3,374.29               | 3,287.61                | 86.68                     | 38.927            |                                                       |         |                    |           |
| 19,300.00                         | 12,065.00             | 15,535.10             | 8,681.00              | 143.53           | 123.22        | -3.79                 | -8,253.10                           | 1,588.74     | 3,374.29               | 3,286.56                | 87.72                     | 38.464            |                                                       |         |                    |           |
| 19,400.00                         | 12,065.00             | 15,635.10             | 8,681.00              | 145.09           | 124.82        | -3.79                 | -8,353.10                           | 1,589.71     | 3,374.29               | 3,285.52                | 88.77                     | 38.012            |                                                       |         |                    |           |
| 19,500.00                         | 12,065.00             | 15,735.10             | 8,681.00              | 146.65           | 126.42        | -3.79                 | -8,453.09                           | 1,590.68     | 3,374.29               | 3,284.47                | 89.82                     | 37.569            |                                                       |         |                    |           |
| 19,600.00                         | 12,065.00             | 15,835.10             | 8,681.00              | 148.21           | 128.03        | -3.79                 | -8,553.09                           | 1,591.65     | 3,374.29               | 3,283.42                | 90.87                     | 37.135            |                                                       |         |                    |           |
| 19,700.00                         | 12,065.00             | 15,935.10             | 8,681.00              | 149.78           | 129.63        | -3.79                 | -8,653.08                           | 1,592.62     | 3,374.29               | 3,282.37                | 91.92                     | 36.711            |                                                       |         |                    |           |
| 19,800.00                         | 12,065.00             | 16,035.10             | 8,681.00              | 151.34           | 131.24        | -3.79                 | -8,753.08                           | 1,593.60     | 3,374.28               | 3,281.32                | 92.97                     | 36.296            |                                                       |         |                    |           |
| 19,900.00                         | 12,065.00             | 16,135.10             | 8,681.00              | 152.91           | 132.85        | -3.79                 | -8,853.07                           | 1,594.57     | 3,374.28               | 3,280.26                | 94.02                     | 35.889            |                                                       |         |                    |           |
| 20,000.00                         | 12,065.00             | 16,235.10             | 8,681.00              | 154.48           | 134.45        | -3.79                 | -8,953.07                           | 1,595.54     | 3,374.28               | 3,279.21                | 95.07                     | 35.491            |                                                       |         |                    |           |
| 20,100.00                         | 12,065.00             | 16,335.10             | 8,681.00              | 156.05           | 136.06        | -3.79                 | -9,053.06                           | 1,596.51     | 3,374.28               | 3,278.15                | 96.13                     | 35.101            |                                                       |         |                    |           |
| 20,200.00                         | 12,065.00             | 16,435.10             | 8,681.00              | 157.62           | 137.67        | -3.79                 | -9,153.06                           | 1,597.48     | 3,374.28               | 3,277.10                | 97.19                     | 34.719            |                                                       |         |                    |           |
| 20,300.00                         | 12,065.00             | 16,535.10             | 8,681.00              | 159.20           | 139.29        | -3.79                 | -9,253.05                           | 1,598.46     | 3,374.28               | 3,276.04                | 98.25                     | 34.345            |                                                       |         |                    |           |
| 20,400.00                         | 12,065.00             | 16,635.10             | 8,681.00              | 160.77           | 140.90        | -3.79                 | -9,353.05                           | 1,599.43     | 3,374.28               | 3,274.98                | 99.31                     | 33.979            |                                                       |         |                    |           |
| 20,500.00                         | 12,065.00             | 16,735.10             | 8,681.00              | 162.35           | 142.51        | -3.79                 | -9,453.05                           | 1,600.40     | 3,374.28               | 3,273.92                | 100.37                    | 33.620            |                                                       |         |                    |           |
| 20,600.00                         | 12,065.00             | 16,835.10             | 8,681.00              | 163.93           | 144.13        | -3.79                 | -9,553.04                           | 1,601.37     | 3,374.28               | 3,272.85                | 101.43                    | 33.268            |                                                       |         |                    |           |
| 20,700.00                         | 12,065.00             | 16,935.10             | 8,681.00              | 165.51           | 145.74        | -3.79                 | -9,653.04                           | 1,602.35     | 3,374.28               | 3,271.79                | 102.49                    | 32.923            |                                                       |         |                    |           |
| 20,800.00                         | 12,065.00             | 17,035.10             | 8,681.00              | 167.09           | 147.36        | -3.79                 | -9,753.03                           | 1,603.32     | 3,374.28               | 3,270.73                | 103.55                    | 32.585            |                                                       |         |                    |           |
| 20,900.00                         | 12,065.00             | 17,135.10             | 8,681.00              | 168.67           | 148.97        | -3.79                 | -9,853.03                           | 1,604.29     | 3,374.28               | 3,269.66                | 104.62                    | 32.253            |                                                       |         |                    |           |
| 21,000.00                         | 12,065.00             | 17,235.10             | 8,681.00              | 170.26           | 150.59        | -3.79                 | -9,953.02                           | 1,605.26     | 3,374.28               | 3,268.60                | 105.68                    | 31.928            |                                                       |         |                    |           |
| 21,100.00                         | 12,065.00             | 17,335.10             | 8,681.00              | 171.84           | 152.21        | -3.79                 | -10,053.02                          | 1,606.23     | 3,374.28               | 3,267.53                | 106.75                    | 31.609            |                                                       |         |                    |           |
| 21,200.00                         | 12,065.00             | 17,435.10             | 8,681.00              | 173.43           | 153.83        | -3.79                 | -10,153.01                          | 1,607.21     | 3,374.28               | 3,266.46                | 107.82                    | 31.296            |                                                       |         |                    |           |
| 21,300.00                         | 12,065.00             | 17,535.10             | 8,681.00              | 175.02           | 155.45        | -3.79                 | -10,253.01                          | 1,608.18     | 3,374.28               | 3,265.39                | 108.89                    | 30.989            |                                                       |         |                    |           |
| 21,400.00                         | 12,065.00             | 17,635.10             | 8,681.00              | 176.60           | 157.07        | -3.79                 | -10,353.00                          | 1,609.15     | 3,374.28               | 3,264.32                | 109.96                    | 30.687            |                                                       |         |                    |           |
| 21,500.00                         | 12,065.00             | 17,735.10             | 8,681.00              | 178.19           | 158.69        | -3.79                 | -10,453.00                          | 1,610.12     | 3,374.28               | 3,263.25                | 111.03                    | 30.391            |                                                       |         |                    |           |
| 21,600.00                         | 12,065.00             | 17,835.10             | 8,681.00              | 179.79           | 160.31        | -3.79                 | -10,552.99                          | 1,611.10     | 3,374.28               | 3,262.18                | 112.10                    | 30.101            |                                                       |         |                    |           |
| 21,700.00                         | 12,065.00             | 17,935.10             | 8,681.00              | 181.38           | 161.93        | -3.79                 | -10,652.99                          | 1,612.07     | 3,374.28               | 3,261.11                | 113.17                    | 29.815            |                                                       |         |                    |           |
| 21,800.00                         | 12,065.00             | 18,035.10             | 8,681.00              | 182.97           | 163.55        | -3.79                 | -10,752.98                          | 1,613.04     | 3,374.28               | 3,260.03                | 114.25                    | 29.535            |                                                       |         |                    |           |
| 21,900.00                         | 12,065.00             | 18,135.10             | 8,681.00              | 184.57           | 165.18        | -3.79                 | -10,852.98                          | 1,614.01     | 3,374.28               | 3,258.96                | 115.32                    | 29.260            |                                                       |         |                    |           |
| 22,000.00                         | 12,065.00             | 18,235.10             | 8,681.00              | 186.16           | 166.80        | -3.79                 | -10,952.97                          | 1,614.98     | 3,374.28               | 3,257.88                | 116.39                    | 28.990            |                                                       |         |                    |           |
| 22,100.00                         | 12,065.00             | 18,335.10             | 8,681.00              | 187.76           | 168.43        | -3.79                 | -11,052.97                          | 1,615.96     | 3,374.28               | 3,256.81                | 117.47                    | 28.725            |                                                       |         |                    |           |
| 22,200.00                         | 12,065.00             | 18,435.10             | 8,681.00              | 189.36           | 170.05        | -3.79                 | -11,152.96                          | 1,616.93     | 3,374.28               | 3,255.73                | 118.55                    | 28.464            |                                                       |         |                    |           |
| 22,300.00                         | 12,065.00             | 18,535.10             | 8,681.00              | 190.95           | 171.68        | -3.79                 | -11,252.96                          | 1,617.90     | 3,374.28               | 3,254.65                | 119.62                    | 28.208            |                                                       |         |                    |           |
| 22,400.00                         | 12,065.00             | 18,635.10             | 8,681.00              | 192.55           | 173.30        | -3.79                 | -11,352.96                          | 1,618.87     | 3,374.27               | 3,253.57                | 120.70                    | 27.956            |                                                       |         |                    |           |
| 22,445.57                         | 12,065.00             | 18,680.67             | 8,681.00              | 193.28           | 174.04        | -3.79                 | -11,398.52                          | 1,619.32     | 3,374.27               | 3,253.08                | 121.19                    | 27.842            |                                                       |         |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.90               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 82.30                 | 82.30                 | 0.13             | 0.10          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,840.65                | 0.16                      | N/A               |                    |           |
| 200.00                            | 200.00                | 182.30                | 182.30                | 0.48             | 0.42          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,840.17                | 0.64                      | 2,871.349         |                    |           |
| 300.00                            | 300.00                | 282.30                | 282.30                | 0.84             | 0.78          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,839.66                | 1.15                      | 1,604.392         |                    |           |
| 400.00                            | 400.00                | 382.30                | 382.30                | 1.20             | 1.14          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,839.16                | 1.65                      | 1,112.916         |                    |           |
| 500.00                            | 500.00                | 482.30                | 482.30                | 1.56             | 1.50          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,838.65                | 2.16                      | 851.890           |                    |           |
| 600.00                            | 600.00                | 582.30                | 582.30                | 1.92             | 1.85          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,838.14                | 2.67                      | 690.031           |                    |           |
| 700.00                            | 700.00                | 682.30                | 682.30                | 2.28             | 2.21          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,837.64                | 3.17                      | 579.853           |                    |           |
| 800.00                            | 800.00                | 782.30                | 782.30                | 2.63             | 2.57          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,837.13                | 3.68                      | 500.013           |                    |           |
| 900.00                            | 900.00                | 882.30                | 882.30                | 2.99             | 2.93          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,836.62                | 4.19                      | 439.497           |                    |           |
| 1,000.00                          | 1,000.00              | 982.30                | 982.30                | 3.35             | 3.29          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,836.12                | 4.70                      | 392.047           |                    |           |
| 1,100.00                          | 1,100.00              | 1,082.30              | 1,082.30              | 3.71             | 3.65          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,835.61                | 5.20                      | 353.845           |                    |           |
| 1,200.00                          | 1,200.00              | 1,182.30              | 1,182.30              | 4.07             | 4.01          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,835.10                | 5.71                      | 322.426           |                    |           |
| 1,300.00                          | 1,300.00              | 1,282.30              | 1,282.30              | 4.43             | 4.36          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,834.59                | 6.22                      | 296.132           |                    |           |
| 1,400.00                          | 1,400.00              | 1,382.30              | 1,382.30              | 4.79             | 4.72          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,834.09                | 6.72                      | 273.802           |                    |           |
| 1,500.00                          | 1,500.00              | 1,482.30              | 1,482.30              | 5.14             | 5.08          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,833.58                | 7.23                      | 254.604           |                    |           |
| 1,600.00                          | 1,600.00              | 1,582.30              | 1,582.30              | 5.50             | 5.44          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,833.07                | 7.74                      | 237.922           |                    |           |
| 1,700.00                          | 1,700.00              | 1,682.30              | 1,682.30              | 5.86             | 5.80          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,832.57                | 8.24                      | 223.292           |                    |           |
| 1,800.00                          | 1,800.00              | 1,782.30              | 1,782.30              | 6.22             | 6.16          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,832.06                | 8.75                      | 210.356           |                    |           |
| 1,900.00                          | 1,900.00              | 1,882.30              | 1,882.30              | 6.58             | 6.51          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,831.55                | 9.26                      | 198.837           |                    |           |
| 2,000.00                          | 2,000.00              | 1,982.30              | 1,982.30              | 6.94             | 6.87          | 123.00                | -1,002.63                           | 1,543.80     | 1,840.81               | 1,831.05                | 9.76                      | 188.515           |                    |           |
| 2,100.00                          | 2,100.00              | 2,051.93              | 2,051.93              | 7.29             | 7.12          | 123.00                | -1,002.70                           | 1,544.27     | 1,841.49               | 1,831.30                | 10.19                     | 180.705           |                    |           |
| 2,200.00                          | 2,200.00              | 2,100.00              | 2,099.98              | 7.65             | 7.28          | 122.98                | -1,002.89                           | 1,545.53     | 1,844.24               | 1,833.68                | 10.56                     | 174.686           |                    |           |
| 2,300.00                          | 2,300.00              | 2,177.91              | 2,177.80              | 8.01             | 7.55          | 122.93                | -1,003.45                           | 1,549.26     | 1,848.79               | 1,837.80                | 10.99                     | 168.168           |                    |           |
| 2,400.00                          | 2,400.00              | 2,240.68              | 2,240.39              | 8.37             | 7.77          | 122.87                | -1,004.12                           | 1,553.79     | 1,855.44               | 1,844.06                | 11.39                     | 162.919           |                    |           |
| 2,500.00                          | 2,500.00              | 2,300.00              | 2,299.45              | 8.73             | 7.97          | 122.80                | -1,004.95                           | 1,559.32     | 1,864.09               | 1,852.32                | 11.77                     | 158.370           |                    |           |
| 2,600.00                          | 2,600.00              | 2,365.46              | 2,364.47              | 9.09             | 8.20          | 122.70                | -1,006.07                           | 1,566.82     | 1,874.72               | 1,862.55                | 12.17                     | 154.091           |                    |           |
| 2,700.00                          | 2,700.00              | 2,427.36              | 2,425.77              | 9.45             | 8.42          | 122.60                | -1,007.33                           | 1,575.27     | 1,887.32               | 1,874.78                | 12.55                     | 150.409           |                    |           |
| 2,800.00                          | 2,800.00              | 2,500.00              | 2,497.47              | 9.80             | 8.68          | 122.45                | -1,009.06                           | 1,586.84     | 1,901.95               | 1,888.99                | 12.96                     | 146.763           |                    |           |
| 2,900.00                          | 2,900.00              | 2,549.91              | 2,546.54              | 10.16            | 8.87          | 122.34                | -1,010.41                           | 1,595.84     | 1,918.43               | 1,905.13                | 13.30                     | 144.291           |                    |           |
| 3,000.00                          | 3,000.00              | 2,600.00              | 2,595.62              | 10.52            | 9.06          | 122.22                | -1,011.88                           | 1,605.72     | 1,936.94               | 1,923.32                | 13.62                     | 142.163           |                    |           |
| 3,100.00                          | 3,100.00              | 2,670.46              | 2,664.35              | 10.88            | 9.33          | 122.03                | -1,014.17                           | 1,621.04     | 1,957.29               | 1,943.27                | 14.02                     | 139.607           |                    |           |
| 3,200.00                          | 3,200.00              | 2,729.86              | 2,721.99              | 11.24            | 9.57          | 121.86                | -1,016.30                           | 1,635.26     | 1,979.60               | 1,965.22                | 14.37                     | 137.730           |                    |           |
| 3,300.00                          | 3,299.99              | 2,800.00              | 2,789.64              | 11.58            | 9.85          | -6.98                 | -1,019.03                           | 1,653.56     | 2,002.58               | 1,987.83                | 14.75                     | 135.763           |                    |           |
| 3,400.00                          | 3,399.91              | 2,847.48              | 2,835.17              | 11.91            | 10.06         | -7.10                 | -1,021.02                           | 1,666.87     | 2,024.83               | 2,009.80                | 15.03                     | 134.737           |                    |           |
| 3,500.00                          | 3,499.69              | 2,909.59              | 2,894.39              | 12.25            | 10.33         | -7.28                 | -1,023.79                           | 1,685.40     | 2,046.48               | 2,031.13                | 15.36                     | 133.247           |                    |           |
| 3,600.00                          | 3,599.27              | 3,006.73              | 2,986.78              | 12.58            | 10.78         | -7.60                 | -1,028.23                           | 1,715.10     | 2,066.42               | 2,050.59                | 15.84                     | 130.495           |                    |           |
| 3,700.00                          | 3,698.57              | 3,104.32              | 3,079.58              | 12.92            | 11.25         | -7.93                 | -1,032.69                           | 1,744.93     | 2,083.90               | 2,067.58                | 16.32                     | 127.701           |                    |           |
| 3,800.00                          | 3,797.54              | 3,202.27              | 3,172.74              | 13.27            | 11.73         | -8.27                 | -1,037.16                           | 1,774.87     | 2,098.90               | 2,082.09                | 16.81                     | 124.875           |                    |           |
| 3,900.00                          | 3,896.09              | 3,300.52              | 3,266.18              | 13.62            | 12.23         | -8.61                 | -1,041.65                           | 1,804.91     | 2,111.42               | 2,094.11                | 17.30                     | 122.027           |                    |           |
| 4,000.00                          | 3,994.16              | 3,399.01              | 3,359.84              | 13.98            | 12.73         | -8.97                 | -1,046.15                           | 1,835.02     | 2,121.46               | 2,103.66                | 17.80                     | 119.166           |                    |           |
| 4,100.00                          | 4,091.70              | 3,497.66              | 3,453.67              | 14.35            | 13.25         | -9.34                 | -1,050.65                           | 1,865.17     | 2,129.02               | 2,110.71                | 18.31                     | 116.297           |                    |           |
| 4,200.00                          | 4,188.62              | 3,596.41              | 3,547.58              | 14.74            | 13.78         | -9.72                 | -1,055.16                           | 1,895.36     | 2,134.10               | 2,115.29                | 18.82                     | 113.425           |                    |           |
| 4,300.00                          | 4,284.86              | 3,695.20              | 3,641.53              | 15.14            | 14.32         | -10.12                | -1,059.68                           | 1,925.56     | 2,136.72               | 2,117.39                | 19.33                     | 110.555           |                    |           |
| 4,400.00                          | 4,380.36              | 3,793.95              | 3,735.44              | 15.55            | 14.86         | -10.54                | -1,064.19                           | 1,955.74     | 2,136.87               | 2,117.02                | 19.84                     | 107.689           |                    |           |
| 4,452.43                          | 4,430.11              | 3,845.68              | 3,784.64              | 15.78            | 15.15         | -10.76                | -1,066.55                           | 1,971.56     | 2,135.96               | 2,115.85                | 20.12                     | 106.188           |                    |           |
| 4,500.00                          | 4,475.14              | 3,892.61              | 3,829.27              | 15.99            | 15.41         | -10.97                | -1,068.69                           | 1,985.90     | 2,134.85               | 2,114.49                | 20.36                     | 104.843           |                    |           |
| 4,600.00                          | 4,569.82              | 3,991.25              | 3,923.08              | 16.44            | 15.97         | -11.40                | -1,073.20                           | 2,016.06     | 2,132.61               | 2,111.72                | 20.89                     | 102.107           |                    |           |
| 4,700.00                          | 4,664.49              | 4,089.89              | 4,016.90              | 16.91            | 16.53         | -11.83                | -1,077.71                           | 2,046.21     | 2,130.49               | 2,109.08                | 21.41                     | 99.492            |                    |           |
| 4,800.00                          | 4,759.16              | 4,188.54              | 4,110.71              | 17.39            | 17.09         | -12.26                | -1,082.21                           | 2,076.37     | 2,128.50               | 2,106.55                | 21.95                     | 96.990            |                    |           |
| 4,900.00                          | 4,853.84              | 4,287.18              | 4,204.52              | 17.87            | 17.66         | -12.70                | -1,086.72                           | 2,106.52     | 2,126.62               | 2,104.14                | 22.48                     | 94.596            |                    |           |
| 5,000.00                          | 4,948.51              | 4,385.82              | 4,298.34              | 18.37            | 18.24         | -13.13                | -1,091.22                           | 2,136.68     | 2,124.88               | 2,101.86                | 23.02                     | 92.305            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,484.47              | 4,392.15              | 18.88            | 18.81         | -13.57                | -1,095.73                           | 2,166.83     | 2,123.26               | 2,099.70                | 23.56                     | 90.110            |                    |           |
| 5,200.00                          | 5,137.85              | 4,583.11              | 4,485.96              | 19.39            | 19.39         | -14.00                | -1,100.24                           | 2,196.98     | 2,121.77               | 2,097.66                | 24.11                     | 88.007            |                    |           |
| 5,300.00                          | 5,232.53              | 4,681.75              | 4,579.78              | 19.92            | 19.97         | -14.44                | -1,104.74                           | 2,227.14     | 2,120.40               | 2,095.74                | 24.66                     | 85.991            |                    |           |
| 5,400.00                          | 5,327.20              | 4,780.39              | 4,673.59              | 20.45            | 20.56         | -14.87                | -1,109.25                           | 2,257.29     | 2,119.16               | 2,093.95                | 25.21                     | 84.058            |                    |           |
| 5,500.00                          | 5,421.87              | 4,879.04              | 4,767.40              | 20.99            | 21.15         | -15.31                | -1,113.75                           | 2,287.45     | 2,118.04               | 2,092.28                | 25.77                     | 82.202            |                    |           |
| 5,600.00                          | 5,516.54              | 4,977.68              | 4,861.21              | 21.53            | 21.74         | -15.75                | -1,118.26                           | 2,317.60     | 2,117.06               | 2,090.73                | 26.32                     | 80.420            |                    |           |
| 5,700.00                          | 5,611.22              | 5,076.32              | 4,955.03              | 22.08            | 22.33         | -16.19                | -1,122.77                           | 2,347.76     | 2,116.19               | 2,089.31                | 26.89                     | 78.709            |                    |           |
| 5,800.00                          | 5,705.89              | 5,174.97              | 5,048.84              | 22.63            | 22.92         | -16.62                | -1,127.27                           | 2,377.91     | 2,115.46               | 2,088.01                | 27.45                     | 77.063            |                    |           |
| 5,900.00                          | 5,800.56              | 5,273.61              | 5,142.65              | 23.19            | 23.52         | -17.06                | -1,131.78                           | 2,408.06     | 2,114.85               | 2,086.84                | 28.02                     | 75.481            |                    |           |
| 6,000.00                          | 5,895.23              | 5,372.25              | 5,236.47              | 23.76            | 24.11         | -17.50                | -1,136.28                           | 2,438.22     | 2,114.37               | 2,085.79                | 28.59                     | 73.957            |                    |           |
| 6,100.00                          | 5,989.91              | 5,470.90              | 5,330.28              | 24.33            | 24.71         | -17.94                | -1,140.79                           | 2,468.37     | 2,114.02               | 2,084.86                | 29.16                     | 72.491            |                    |           |
| 6,200.00                          | 6,084.58              | 5,569.54              | 5,424.09              | 24.90            | 25.31         | -18.38                | -1,145.30                           | 2,498.53     | 2,113.80               | 2,084.06                | 29.74                     | 71.078            |                    |           |
| 6,300.00                          | 6,179.25              | 5,668.18              | 5,517.91              | 25.48            | 25.91         | -18.82                | -1,149.80                           | 2,528.68     | 2,113.70               | 2,083.38                | 30.32                     | 69.716            |                    |           |
| 6,326.15                          | 6,204.01              | 5,693.98              | 5,542.44              | 25.63            | 26.07         | -18.93                | -1,150.98                           | 2,536.57     | 2,113.70               | 2,083.23                | 30.47                     | 69.368            |                    |           |
| 6,400.00                          | 6,273.92              | 5,766.83              | 5,611.72              | 26.05            | 26.51         | -19.26                | -1,154.31                           | 2,558.84     | 2,113.73               | 2,082.83                | 30.90                     | 68.403            |                    |           |
| 6,500.00                          | 6,368.60              | 5,865.47              | 5,705.53              | 26.64            | 27.11         | -19.70                | -1,158.81                           | 2,588.99     | 2,113.89               | 2,082.40                | 31.49                     | 67.136            |                    |           |
| 6,600.00                          | 6,463.27              | 5,964.11              | 5,799.34              | 27.22            | 27.72         | -20.14                | -1,163.32                           | 2,619.14     | 2,114.17               | 2,082.10                | 32.08                     | 65.913            |                    |           |
| 6,700.00                          | 6,557.94              | 6,062.75              | 5,893.16              | 27.81            | 28.32         | -20.57                | -1,167.83                           | 2,649.30     | 2,114.59               | 2,081.92                | 32.67                     | 64.731            |                    |           |
| 6,800.00                          | 6,652.61              | 6,161.40              | 5,986.97              | 28.40            | 28.93         | -21.01                | -1,172.33                           | 2,679.45     | 2,115.13               | 2,081.87                | 33.26                     | 63.590            |                    |           |
| 6,900.00                          | 6,747.29              | 6,260.04              | 6,080.78              | 29.00            | 29.54         | -21.45                | -1,176.84                           | 2,709.61     | 2,115.79               | 2,081.93                | 33.86                     | 62.487            |                    |           |
| 7,000.00                          | 6,841.96              | 6,358.68              | 6,174.60              | 29.59            | 30.14         | -21.89                | -1,181.34                           | 2,739.76     | 2,116.59               | 2,082.13                | 34.46                     | 61.420            |                    |           |
| 7,100.00                          | 6,936.63              | 6,457.33              | 6,268.41              | 30.19            | 30.75         | -22.33                | -1,185.85                           | 2,769.92     | 2,117.51               | 2,082.45                | 35.07                     | 60.387            |                    |           |
| 7,200.00                          | 7,031.30              | 6,555.97              | 6,362.22              | 30.79            | 31.36         | -22.76                | -1,190.36                           | 2,800.07     | 2,118.56               | 2,082.89                | 35.67                     | 59.388            |                    |           |
| 7,300.00                          | 7,125.98              | 6,654.61              | 6,456.04              | 31.40            | 31.97         | -23.20                | -1,194.86                           | 2,830.22     | 2,119.73               | 2,083.45                | 36.28                     | 58.420            |                    |           |
| 7,400.00                          | 7,220.65              | 6,753.26              | 6,549.85              | 32.00            | 32.58         | -23.64                | -1,199.37                           | 2,860.38     | 2,121.04               | 2,084.14                | 36.90                     | 57.482            |                    |           |
| 7,500.00                          | 7,315.32              | 6,851.91              | 6,643.66              | 32.61            | 33.19         | -24.07                | -1,203.87                           | 2,890.53     | 2,122.31               | 2,084.83                | 37.52                     | 56.544            |                    |           |
| 7,600.00                          | 7,409.99              | 6,950.56              | 6,737.47              | 33.21            | 33.79         | -24.50                | -1,208.37                           | 2,920.68     | 2,123.58               | 2,085.52                | 38.14                     | 55.606            |                    |           |
| 7,700.00                          | 7,504.67              | 7,049.21              | 6,831.28              | 33.82            | 34.40         | -24.93                | -1,212.87                           | 2,950.83     | 2,124.85               | 2,086.21                | 38.76                     | 54.668            |                    |           |
| 7,800.00                          | 7,599.34              | 7,147.86              | 6,926.09              | 34.43            | 35.01         | -25.36                | -1,217.37                           | 2,980.98     | 2,126.12               | 2,086.90                | 39.38                     | 53.730            |                    |           |
| 7,900.00                          | 7,694.01              | 7,246.51              | 7,020.90              | 35.05            | 35.63         | -25.79                | -1,221.87                           | 3,011.13     | 2,127.39               | 2,087.59                | 40.00                     | 52.792            |                    |           |
| 8,000.00                          | 7,788.68              | 7,345.16              | 7,115.71              | 35.66            | 36.24         | -26.22                | -1,226.37                           | 3,041.28     | 2,128.66               | 2,088.28                | 40.62                     | 51.854            |                    |           |
| 8,100.00                          | 7,883.36              | 7,443.81              | 7,210.52              | 36.28            | 36.86         | -26.65                | -1,230.87                           | 3,071.43     | 2,129.93               | 2,088.97                | 41.24                     | 50.916            |                    |           |
| 8,200.00                          | 7,978.03              | 7,542.46              | 7,305.33              | 36.89            | 37.47         | -27.08                | -1,235.37                           | 3,101.58     | 2,131.20               | 2,089.66                | 41.86                     | 50.000            |                    |           |
| 8,300.00                          | 8,072.70              | 7,641.11              | 7,400.14              | 37.51            | 38.09         | -27.51                | -1,239.87                           | 3,131.73     | 2,132.47               | 2,090.35                | 42.48                     | 49.084            |                    |           |
| 8,400.00                          | 8,167.37              | 7,739.76              | 7,494.95              | 38.13            | 38.71         | -27.94                | -1,244.37                           | 3,161.88     | 2,133.74               | 2,091.04                | 43.10                     | 48.168            |                    |           |
| 8,500.00                          | 8,262.05              | 7,838.41              | 7,589.76              | 38.75            | 39.33         | -28.37                | -1,248.87                           | 3,192.03     | 2,135.01               | 2,091.73                | 43.72                     | 47.252            |                    |           |
| 8,600.00                          | 8,356.72              | 7,937.06              | 7,684.57              | 39.37            | 39.95         | -28.80                | -1,253.37                           | 3,222.18     | 2,136.28               | 2,092.42                | 44.34                     | 46.336            |                    |           |
| 8,700.00                          | 8,451.39              | 8,035.71              | 7,779.38              | 39.99            | 40.57         | -29.23                | -1,257.87                           | 3,252.33     | 2,137.55               | 2,093.11                | 44.96                     | 45.420            |                    |           |
| 8,800.00                          | 8,546.07              | 8,134.36              | 7,874.19              | 40.61            | 41.19         | -29.66                | -1,262.37                           | 3,282.48     | 2,138.82               | 2,093.80                | 45.58                     | 44.504            |                    |           |
| 8,875.44                          | 8,617.48              | 8,233.01              | 7,969.00              | 41.08            | 41.66         | -29.90                | -1,266.87                           | 3,312.63     | 2,140.09               | 2,094.49                | 46.20                     | 43.588            |                    |           |
| 8,900.00                          | 8,640.90              | 8,331.66              | 8,063.81              | 41.23            | 41.81         | -29.84                | -1,267.97                           | 3,317.09     | 2,140.69               | 2,094.69                | 46.29                     | 43.480            |                    |           |
| 8,950.00                          | 8,689.44              | 8,429.81              | 8,158.62              | 41.49            | 42.07         | -29.66                | -1,269.07                           | 3,321.55     | 2,141.20               | 2,094.80                | 46.38                     | 43.372            |                    |           |
| 8,965.59                          | 8,704.76              | 8,484.06              | 8,253.43              | 41.56            | 42.14         | -29.51                | -1,270.17                           | 3,326.01     | 2,141.71               | 2,094.91                | 46.47                     | 43.264            |                    |           |
| 9,000.00                          | 8,738.83              | 8,582.21              | 8,348.24              | 41.70            | 42.28         | -29.36                | -1,271.27                           | 3,330.47     | 2,142.22               | 2,095.02                | 46.56                     | 43.156            |                    |           |
| 9,050.00                          | 8,788.70              | 8,680.36              | 8,443.05              | 41.87            | 42.43         | -29.21                | -1,272.37                           | 3,334.93     | 2,142.73               | 2,095.13                | 46.65                     | 43.048            |                    |           |
| 9,063.30                          | 8,802.00              | 8,734.61              | 8,537.86              | 41.91            | 42.47         | -29.06                | -1,273.47                           | 3,339.39     | 2,143.24               | 2,095.24                | 46.74                     | 42.940            |                    |           |
| 9,100.00                          | 8,838.70              | 8,832.86              | 8,632.67              | 42.00            | 42.56         | -28.91                | -1,274.57                           | 3,343.85     | 2,143.75               | 2,095.35                | 46.83                     | 42.832            |                    |           |
| 9,200.00                          | 8,938.70              | 8,931.01              | 8,732.48              | 42.26            | 42.82         | -28.73                | -1,275.67                           | 3,348.31     | 2,144.26               | 2,095.46                | 46.92                     | 42.724            |                    |           |
| 9,300.00                          | 9,038.70              | 9,029.16              | 8,832.29              | 42.51            | 43.07         | -28.55                | -1,276.77                           | 3,352.77     | 2,144.77               | 2,095.57                | 47.01                     | 42.616            |                    |           |
| 9,400.00                          | 9,138.70              | 9,127.31              | 8,932.10              | 42.77            | 43.33         | -28.37                | -1,277.87                           | 3,357.23     | 2,145.28               | 2,095.68                | 47.10                     | 42.508            |                    |           |
| 9,500.00                          | 9,238.70              | 9,225.46              | 9,031.91              | 43.03            | 43.59         | -28.19                | -1,278.97                           | 3,361.69     | 2,145.79               | 2,095.79                | 47.19                     | 42.400            |                    |           |
| 9,600.00                          | 9,338.70              | 9,323.61              | 9,131.72              | 43.30            | 43.86         | -28.01                | -1,279.07                           | 3,366.15     | 2,146.30               | 2,095.90                | 47.28                     | 42.292            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,700.00                          | 9,438.70              | 8,900.00              | 8,567.09              | 43.56            | 40.09         | 105.78                | -1,523.15                           | 3,019.01     | 1,984.61               | 1,937.21                | 47.40                     | 41.871            |                    |           |
| 9,800.00                          | 9,538.70              | 8,900.00              | 8,567.09              | 43.82            | 40.09         | 105.78                | -1,523.15                           | 3,019.01     | 2,029.64               | 1,982.50                | 47.15                     | 43.049            |                    |           |
| 9,900.00                          | 9,638.70              | 8,918.98              | 8,575.83              | 44.09            | 40.15         | 106.29                | -1,539.99                           | 3,019.17     | 2,078.26               | 2,031.33                | 46.92                     | 44.290            |                    |           |
| 10,000.00                         | 9,738.70              | 8,950.00              | 8,588.91              | 44.36            | 40.26         | 107.15                | -1,568.11                           | 3,019.45     | 2,130.37               | 2,083.65                | 46.72                     | 45.597            |                    |           |
| 10,100.00                         | 9,838.70              | 8,950.00              | 8,588.91              | 44.63            | 40.26         | 107.15                | -1,568.11                           | 3,019.45     | 2,185.15               | 2,138.77                | 46.38                     | 47.111            |                    |           |
| 10,200.00                         | 9,938.70              | 8,950.00              | 8,588.91              | 44.90            | 40.26         | 107.15                | -1,568.11                           | 3,019.45     | 2,243.06               | 2,197.03                | 46.03                     | 48.733            |                    |           |
| 10,300.00                         | 10,038.70             | 8,950.00              | 8,588.91              | 45.17            | 40.26         | 107.15                | -1,568.11                           | 3,019.45     | 2,303.85               | 2,258.19                | 45.66                     | 50.455            |                    |           |
| 10,400.00                         | 10,138.70             | 8,977.18              | 8,599.11              | 45.44            | 40.36         | 107.91                | -1,593.30                           | 3,019.70     | 2,366.71               | 2,321.29                | 45.42                     | 52.107            |                    |           |
| 10,500.00                         | 10,238.70             | 9,000.00              | 8,606.74              | 45.71            | 40.44         | 108.55                | -1,614.81                           | 3,019.91     | 2,432.32               | 2,387.15                | 45.16                     | 53.856            |                    |           |
| 10,600.00                         | 10,338.70             | 9,000.00              | 8,606.74              | 45.99            | 40.44         | 108.55                | -1,614.81                           | 3,019.91     | 2,499.80               | 2,454.99                | 44.81                     | 55.786            |                    |           |
| 10,700.00                         | 10,438.70             | 9,000.00              | 8,606.74              | 46.26            | 40.44         | 108.55                | -1,614.81                           | 3,019.91     | 2,569.41               | 2,524.94                | 44.47                     | 57.781            |                    |           |
| 10,800.00                         | 10,538.70             | 9,000.00              | 8,606.74              | 46.54            | 40.44         | 108.55                | -1,614.81                           | 3,019.91     | 2,640.97               | 2,596.83                | 44.14                     | 59.834            |                    |           |
| 10,900.00                         | 10,638.70             | 9,000.00              | 8,606.74              | 46.82            | 40.44         | 108.55                | -1,614.81                           | 3,019.91     | 2,714.33               | 2,670.50                | 43.82                     | 61.938            |                    |           |
| 11,000.00                         | 10,738.70             | 9,021.05              | 8,613.01              | 47.10            | 40.52         | 109.15                | -1,634.90                           | 3,020.11     | 2,788.96               | 2,745.33                | 43.63                     | 63.925            |                    |           |
| 11,100.00                         | 10,838.70             | 9,026.66              | 8,614.55              | 47.38            | 40.54         | 109.30                | -1,640.29                           | 3,020.16     | 2,865.26               | 2,821.89                | 43.38                     | 66.055            |                    |           |
| 11,200.00                         | 10,938.70             | 9,050.00              | 8,620.42              | 47.66            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 2,943.22               | 2,900.00                | 43.23                     | 68.086            |                    |           |
| 11,300.00                         | 11,038.70             | 9,050.00              | 8,620.42              | 47.94            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 3,022.03               | 2,979.04                | 42.99                     | 70.297            |                    |           |
| 11,400.00                         | 11,138.70             | 9,050.00              | 8,620.42              | 48.22            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 3,102.06               | 3,059.29                | 42.77                     | 72.528            |                    |           |
| 11,500.00                         | 11,238.70             | 9,050.00              | 8,620.42              | 48.51            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 3,183.22               | 3,140.65                | 42.57                     | 74.772            |                    |           |
| 11,600.00                         | 11,338.70             | 9,050.00              | 8,620.42              | 48.79            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 3,265.43               | 3,223.03                | 42.40                     | 77.023            |                    |           |
| 11,700.00                         | 11,438.70             | 9,050.00              | 8,620.42              | 49.08            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 3,348.60               | 3,306.36                | 42.24                     | 79.278            |                    |           |
| 11,753.34                         | 11,492.04             | 9,050.00              | 8,620.42              | 49.23            | 40.63         | 109.97                | -1,662.88                           | 3,020.38     | 3,393.34               | 3,351.18                | 42.16                     | 80.481            |                    |           |
| 11,800.00                         | 11,538.65             | 9,050.00              | 8,620.42              | 49.37            | 40.63         | -63.01                | -1,662.88                           | 3,020.38     | 3,432.28               | 3,390.17                | 42.10                     | 81.524            |                    |           |
| 11,850.00                         | 11,588.24             | 9,050.00              | 8,620.42              | 49.55            | 40.63         | -56.87                | -1,662.88                           | 3,020.38     | 3,473.14               | 3,431.10                | 42.04                     | 82.614            |                    |           |
| 11,900.00                         | 11,637.10             | 9,050.00              | 8,620.42              | 49.74            | 40.63         | -51.57                | -1,662.88                           | 3,020.38     | 3,512.85               | 3,470.86                | 41.99                     | 83.665            |                    |           |
| 11,950.00                         | 11,684.86             | 9,050.00              | 8,620.42              | 49.95            | 40.63         | -47.06                | -1,662.88                           | 3,020.38     | 3,551.14               | 3,509.20                | 41.94                     | 84.668            |                    |           |
| 12,000.00                         | 11,731.15             | 9,071.69              | 8,625.04              | 50.18            | 40.71         | -42.97                | -1,684.07                           | 3,020.59     | 3,587.35               | 3,545.35                | 42.00                     | 85.411            |                    |           |
| 12,050.00                         | 11,775.62             | 9,076.42              | 8,625.95              | 50.42            | 40.73         | -39.76                | -1,688.71                           | 3,020.64     | 3,621.90               | 3,579.91                | 42.00                     | 86.245            |                    |           |
| 12,100.00                         | 11,817.93             | 9,100.00              | 8,629.87              | 50.68            | 40.83         | -36.90                | -1,711.96                           | 3,020.86     | 3,654.61               | 3,612.53                | 42.08                     | 86.853            |                    |           |
| 12,150.00                         | 11,857.76             | 9,100.00              | 8,629.87              | 50.96            | 40.83         | -34.72                | -1,711.96                           | 3,020.86     | 3,684.50               | 3,642.42                | 42.08                     | 87.567            |                    |           |
| 12,200.00                         | 11,894.81             | 9,100.00              | 8,629.87              | 51.25            | 40.83         | -32.90                | -1,711.96                           | 3,020.86     | 3,711.91               | 3,669.82                | 42.09                     | 88.189            |                    |           |
| 12,250.00                         | 11,928.80             | 9,100.00              | 8,629.87              | 51.56            | 40.83         | -31.38                | -1,711.96                           | 3,020.86     | 3,736.68               | 3,694.56                | 42.12                     | 88.714            |                    |           |
| 12,300.00                         | 11,959.45             | 9,100.00              | 8,629.87              | 51.87            | 40.83         | -30.12                | -1,711.96                           | 3,020.86     | 3,758.69               | 3,716.52                | 42.17                     | 89.136            |                    |           |
| 12,350.00                         | 11,986.56             | 9,100.00              | 8,629.87              | 52.20            | 40.83         | -29.10                | -1,711.96                           | 3,020.86     | 3,777.81               | 3,735.58                | 42.24                     | 89.447            |                    |           |
| 12,400.00                         | 12,009.90             | 9,100.00              | 8,629.87              | 52.55            | 40.83         | -28.28                | -1,711.96                           | 3,020.86     | 3,793.95               | 3,751.63                | 42.32                     | 89.644            |                    |           |
| 12,450.00                         | 12,029.29             | 9,125.68              | 8,633.04              | 52.90            | 40.94         | -27.61                | -1,737.44                           | 3,021.12     | 3,806.41               | 3,763.90                | 42.51                     | 89.541            |                    |           |
| 12,500.00                         | 12,044.60             | 9,150.00              | 8,635.00              | 53.26            | 41.04         | -27.12                | -1,761.68                           | 3,021.35     | 3,816.24               | 3,773.53                | 42.71                     | 89.360            |                    |           |
| 12,550.00                         | 12,055.70             | 9,150.00              | 8,635.00              | 53.63            | 41.04         | -26.85                | -1,761.68                           | 3,021.35     | 3,822.33               | 3,779.48                | 42.85                     | 89.199            |                    |           |
| 12,600.00                         | 12,062.52             | 9,150.00              | 8,635.00              | 54.01            | 41.04         | -26.72                | -1,761.68                           | 3,021.35     | 3,825.19               | 3,782.17                | 43.02                     | 88.918            |                    |           |
| 12,653.34                         | 12,065.00             | 9,150.00              | 8,635.00              | 54.42            | 41.04         | -26.74                | -1,761.68                           | 3,021.35     | 3,824.67               | 3,781.45                | 43.22                     | 88.489            |                    |           |
| 12,700.00                         | 12,065.00             | 9,150.00              | 8,635.00              | 54.78            | 41.04         | -26.74                | -1,761.68                           | 3,021.35     | 3,822.89               | 3,779.47                | 43.42                     | 88.049            |                    |           |
| 12,800.00                         | 12,065.00             | 9,183.90              | 8,636.00              | 55.59            | 41.19         | -26.75                | -1,795.56                           | 3,021.69     | 3,820.44               | 3,776.49                | 43.95                     | 86.931            |                    |           |
| 12,856.79                         | 12,065.00             | 9,183.90              | 8,636.00              | 56.06            | 41.19         | -26.75                | -1,795.56                           | 3,021.69     | 3,820.02               | 3,775.78                | 44.24                     | 86.351            |                    |           |
| 12,900.00                         | 12,065.00             | 9,227.01              | 8,636.00              | 56.43            | 41.39         | -26.75                | -1,838.66                           | 3,022.11     | 3,820.02               | 3,775.48                | 44.54                     | 85.774            |                    |           |
| 13,000.00                         | 12,065.00             | 9,327.01              | 8,636.00              | 57.31            | 41.90         | -26.75                | -1,938.66                           | 3,023.10     | 3,820.02               | 3,774.77                | 45.25                     | 84.424            |                    |           |
| 13,100.00                         | 12,065.00             | 9,427.01              | 8,636.00              | 58.22            | 42.47         | -26.75                | -2,038.65                           | 3,024.08     | 3,820.02               | 3,774.03                | 45.99                     | 83.055            |                    |           |
| 13,200.00                         | 12,065.00             | 9,527.01              | 8,636.00              | 59.17            | 43.10         | -26.75                | -2,138.65                           | 3,025.06     | 3,820.03               | 3,773.26                | 46.77                     | 81.673            |                    |           |
| 13,300.00                         | 12,065.00             | 9,627.01              | 8,636.00              | 60.14            | 43.78         | -26.75                | -2,238.64                           | 3,026.05     | 3,820.03               | 3,772.45                | 47.58                     | 80.282            |                    |           |
| 13,400.00                         | 12,065.00             | 9,727.01              | 8,636.00              | 61.15            | 44.51         | -26.75                | -2,338.64                           | 3,027.03     | 3,820.03               | 3,771.61                | 48.42                     | 78.890            |                    |           |
| 13,500.00                         | 12,065.00             | 9,827.01              | 8,636.00              | 62.18            | 45.30         | -26.75                | -2,438.63                           | 3,028.02     | 3,820.04               | 3,770.75                | 49.29                     | 77.501            |                    |           |
| 13,600.00                         | 12,065.00             | 9,927.01              | 8,636.00              | 63.24            | 46.13         | -26.75                | -2,538.63                           | 3,029.00     | 3,820.04               | 3,769.85                | 50.18                     | 76.121            |                    |           |
| 13,700.00                         | 12,065.00             | 10,027.01             | 8,636.00              | 64.32            | 47.01         | -26.75                | -2,638.62                           | 3,029.98     | 3,820.04               | 3,768.94                | 51.10                     | 74.756            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 13,800.00                         | 12,065.00             | 10,127.01             | 8,636.00              | 65.43            | 47.94         | -26.75                | -2,738.62                           | 3,030.97     | 3,820.04               | 3,768.01                | 52.04                     | 73.408            |                    |           |
| 13,900.00                         | 12,065.00             | 10,227.01             | 8,636.00              | 66.56            | 48.90         | -26.75                | -2,838.61                           | 3,031.95     | 3,820.05               | 3,767.05                | 53.00                     | 72.078            |                    |           |
| 14,000.00                         | 12,065.00             | 10,327.01             | 8,636.00              | 67.71            | 49.90         | -26.75                | -2,938.61                           | 3,032.93     | 3,820.05               | 3,766.07                | 53.98                     | 70.767            |                    |           |
| 14,100.00                         | 12,065.00             | 10,427.01             | 8,636.00              | 68.88            | 50.94         | -26.75                | -3,038.60                           | 3,033.92     | 3,820.05               | 3,765.07                | 54.98                     | 69.478            |                    |           |
| 14,200.00                         | 12,065.00             | 10,527.01             | 8,636.00              | 70.08            | 52.02         | -26.75                | -3,138.60                           | 3,034.90     | 3,820.05               | 3,764.05                | 56.00                     | 68.213            |                    |           |
| 14,300.00                         | 12,065.00             | 10,627.01             | 8,636.00              | 71.29            | 53.12         | -26.75                | -3,238.59                           | 3,035.89     | 3,820.06               | 3,763.02                | 57.04                     | 66.971            |                    |           |
| 14,400.00                         | 12,065.00             | 10,727.01             | 8,636.00              | 72.51            | 54.25         | -26.75                | -3,338.59                           | 3,036.87     | 3,820.06               | 3,761.96                | 58.09                     | 65.755            |                    |           |
| 14,500.00                         | 12,065.00             | 10,827.01             | 8,636.00              | 73.76            | 55.42         | -26.75                | -3,438.58                           | 3,037.85     | 3,820.06               | 3,760.90                | 59.17                     | 64.565            |                    |           |
| 14,600.00                         | 12,065.00             | 10,927.01             | 8,636.00              | 75.02            | 56.60         | -26.75                | -3,538.58                           | 3,038.84     | 3,820.07               | 3,759.81                | 60.25                     | 63.402            |                    |           |
| 14,700.00                         | 12,065.00             | 11,027.01             | 8,636.00              | 76.29            | 57.81         | -26.75                | -3,638.58                           | 3,039.82     | 3,820.07               | 3,758.72                | 61.35                     | 62.265            |                    |           |
| 14,800.00                         | 12,065.00             | 11,127.01             | 8,636.00              | 77.58            | 59.05         | -26.75                | -3,738.57                           | 3,040.81     | 3,820.07               | 3,757.61                | 62.46                     | 61.156            |                    |           |
| 14,900.00                         | 12,065.00             | 11,227.01             | 8,636.00              | 78.89            | 60.30         | -26.75                | -3,838.57                           | 3,041.79     | 3,820.07               | 3,756.49                | 63.59                     | 60.075            |                    |           |
| 15,000.00                         | 12,065.00             | 11,327.01             | 8,636.00              | 80.20            | 61.57         | -26.75                | -3,938.56                           | 3,042.77     | 3,820.08               | 3,755.35                | 64.73                     | 59.020            |                    |           |
| 15,100.00                         | 12,065.00             | 11,427.01             | 8,636.00              | 81.53            | 62.86         | -26.75                | -4,038.56                           | 3,043.76     | 3,820.08               | 3,754.20                | 65.87                     | 57.991            |                    |           |
| 15,200.00                         | 12,065.00             | 11,527.01             | 8,636.00              | 82.87            | 64.17         | -26.75                | -4,138.55                           | 3,044.74     | 3,820.08               | 3,753.05                | 67.03                     | 56.990            |                    |           |
| 15,300.00                         | 12,065.00             | 11,627.01             | 8,636.00              | 84.22            | 65.50         | -26.75                | -4,238.55                           | 3,045.73     | 3,820.08               | 3,751.89                | 68.20                     | 56.015            |                    |           |
| 15,400.00                         | 12,065.00             | 11,727.01             | 8,636.00              | 85.59            | 66.84         | -26.75                | -4,338.54                           | 3,046.71     | 3,820.09               | 3,750.71                | 69.37                     | 55.065            |                    |           |
| 15,500.00                         | 12,065.00             | 11,827.01             | 8,636.00              | 86.96            | 68.19         | -26.75                | -4,438.54                           | 3,047.69     | 3,820.09               | 3,749.53                | 70.56                     | 54.139            |                    |           |
| 15,600.00                         | 12,065.00             | 11,927.01             | 8,636.00              | 88.34            | 69.56         | -26.75                | -4,538.53                           | 3,048.68     | 3,820.09               | 3,748.34                | 71.76                     | 53.237            |                    |           |
| 15,700.00                         | 12,065.00             | 12,027.01             | 8,636.00              | 89.73            | 70.94         | -26.75                | -4,638.53                           | 3,049.66     | 3,820.10               | 3,747.14                | 72.96                     | 52.359            |                    |           |
| 15,800.00                         | 12,065.00             | 12,127.01             | 8,636.00              | 91.13            | 72.33         | -26.75                | -4,738.52                           | 3,050.64     | 3,820.10               | 3,745.93                | 74.17                     | 51.504            |                    |           |
| 15,900.00                         | 12,065.00             | 12,227.01             | 8,636.00              | 92.54            | 73.73         | -26.75                | -4,838.52                           | 3,051.63     | 3,820.10               | 3,744.71                | 75.39                     | 50.671            |                    |           |
| 16,000.00                         | 12,065.00             | 12,327.01             | 8,636.00              | 93.95            | 75.15         | -26.75                | -4,938.51                           | 3,052.61     | 3,820.10               | 3,743.49                | 76.62                     | 49.860            |                    |           |
| 16,100.00                         | 12,065.00             | 12,427.01             | 8,636.00              | 95.38            | 76.57         | -26.75                | -5,038.51                           | 3,053.60     | 3,820.11               | 3,742.26                | 77.85                     | 49.071            |                    |           |
| 16,200.00                         | 12,065.00             | 12,527.01             | 8,636.00              | 96.81            | 78.00         | -26.75                | -5,138.50                           | 3,054.58     | 3,820.11               | 3,741.02                | 79.09                     | 48.301            |                    |           |
| 16,300.00                         | 12,065.00             | 12,627.01             | 8,636.00              | 98.24            | 79.44         | -26.75                | -5,238.50                           | 3,055.56     | 3,820.11               | 3,739.78                | 80.34                     | 47.552            |                    |           |
| 16,400.00                         | 12,065.00             | 12,727.01             | 8,636.00              | 99.69            | 80.89         | -26.75                | -5,338.49                           | 3,056.55     | 3,820.11               | 3,738.53                | 81.59                     | 46.822            |                    |           |
| 16,500.00                         | 12,065.00             | 12,827.01             | 8,636.00              | 101.14           | 82.35         | -26.75                | -5,438.49                           | 3,057.53     | 3,820.12               | 3,737.27                | 82.84                     | 46.112            |                    |           |
| 16,600.00                         | 12,065.00             | 12,927.01             | 8,636.00              | 102.60           | 83.81         | -26.75                | -5,538.48                           | 3,058.52     | 3,820.12               | 3,736.02                | 84.10                     | 45.422            |                    |           |
| 16,700.00                         | 12,065.00             | 13,027.01             | 8,636.00              | 104.06           | 85.28         | -26.75                | -5,638.48                           | 3,059.50     | 3,820.12               | 3,734.76                | 85.37                     | 44.750            |                    |           |
| 16,800.00                         | 12,065.00             | 13,127.01             | 8,636.00              | 105.53           | 86.76         | -26.75                | -5,738.47                           | 3,060.48     | 3,820.13               | 3,733.49                | 86.63                     | 44.095            |                    |           |
| 16,900.00                         | 12,065.00             | 13,227.01             | 8,636.00              | 107.00           | 88.24         | -26.75                | -5,838.47                           | 3,061.47     | 3,820.13               | 3,732.22                | 87.91                     | 43.456            |                    |           |
| 17,000.00                         | 12,065.00             | 13,327.01             | 8,636.00              | 108.48           | 89.73         | -26.75                | -5,938.46                           | 3,062.45     | 3,820.13               | 3,730.94                | 89.19                     | 42.833            |                    |           |
| 17,100.00                         | 12,065.00             | 13,427.01             | 8,636.00              | 109.96           | 91.23         | -26.75                | -6,038.46                           | 3,063.44     | 3,820.13               | 3,729.66                | 90.47                     | 42.226            |                    |           |
| 17,200.00                         | 12,065.00             | 13,527.01             | 8,636.00              | 111.45           | 92.73         | -26.75                | -6,138.45                           | 3,064.42     | 3,820.14               | 3,728.38                | 91.76                     | 41.634            |                    |           |
| 17,300.00                         | 12,065.00             | 13,627.01             | 8,636.00              | 112.94           | 94.24         | -26.75                | -6,238.45                           | 3,065.40     | 3,820.14               | 3,727.09                | 93.05                     | 41.057            |                    |           |
| 17,400.00                         | 12,065.00             | 13,727.01             | 8,636.00              | 114.44           | 95.75         | -26.75                | -6,338.44                           | 3,066.39     | 3,820.14               | 3,725.80                | 94.34                     | 40.493            |                    |           |
| 17,500.00                         | 12,065.00             | 13,827.01             | 8,636.00              | 115.94           | 97.26         | -26.75                | -6,438.44                           | 3,067.37     | 3,820.14               | 3,724.51                | 95.64                     | 39.944            |                    |           |
| 17,600.00                         | 12,065.00             | 13,927.01             | 8,636.00              | 117.45           | 98.78         | -26.75                | -6,538.43                           | 3,068.36     | 3,820.15               | 3,723.21                | 96.94                     | 39.407            |                    |           |
| 17,700.00                         | 12,065.00             | 14,027.01             | 8,636.00              | 118.96           | 100.31        | -26.75                | -6,638.43                           | 3,069.34     | 3,820.15               | 3,721.90                | 98.24                     | 38.884            |                    |           |
| 17,800.00                         | 12,065.00             | 14,127.01             | 8,636.00              | 120.47           | 101.83        | -26.75                | -6,738.43                           | 3,070.32     | 3,820.15               | 3,720.60                | 99.55                     | 38.373            |                    |           |
| 17,900.00                         | 12,065.00             | 14,227.01             | 8,636.00              | 121.99           | 103.37        | -26.75                | -6,838.42                           | 3,071.31     | 3,820.15               | 3,719.29                | 100.86                    | 37.874            |                    |           |
| 18,000.00                         | 12,065.00             | 14,327.01             | 8,636.00              | 123.51           | 104.90        | -26.75                | -6,938.42                           | 3,072.29     | 3,820.16               | 3,717.98                | 102.18                    | 37.388            |                    |           |
| 18,100.00                         | 12,065.00             | 14,427.01             | 8,636.00              | 125.03           | 106.44        | -26.75                | -7,038.41                           | 3,073.27     | 3,820.16               | 3,716.67                | 103.49                    | 36.913            |                    |           |
| 18,200.00                         | 12,065.00             | 14,527.01             | 8,636.00              | 126.56           | 107.98        | -26.75                | -7,138.41                           | 3,074.26     | 3,820.16               | 3,715.36                | 104.81                    | 36.450            |                    |           |
| 18,300.00                         | 12,065.00             | 14,627.01             | 8,636.00              | 128.09           | 109.53        | -26.75                | -7,238.40                           | 3,075.24     | 3,820.17               | 3,714.04                | 106.12                    | 35.998            |                    |           |
| 18,400.00                         | 12,065.00             | 14,727.01             | 8,636.00              | 129.62           | 111.08        | -26.75                | -7,338.40                           | 3,076.23     | 3,820.17               | 3,712.72                | 107.44                    | 35.555            |                    |           |
| 18,500.00                         | 12,065.00             | 14,827.01             | 8,636.00              | 131.16           | 112.63        | -26.75                | -7,438.39                           | 3,077.21     | 3,820.17               | 3,711.40                | 108.77                    | 35.123            |                    |           |
| 18,600.00                         | 12,065.00             | 14,927.01             | 8,636.00              | 132.69           | 114.18        | -26.75                | -7,538.39                           | 3,078.19     | 3,820.17               | 3,710.08                | 110.09                    | 34.700            |                    |           |
| 18,700.00                         | 12,065.00             | 15,027.01             | 8,636.00              | 134.24           | 115.74        | -26.75                | -7,638.38                           | 3,079.18     | 3,820.18               | 3,708.76                | 111.42                    | 34.287            |                    |           |
| 18,800.00                         | 12,065.00             | 15,127.01             | 8,636.00              | 135.78           | 117.30        | -26.75                | -7,738.38                           | 3,080.16     | 3,820.18               | 3,707.43                | 112.75                    | 33.882            |                    |           |
| 18,900.00                         | 12,065.00             | 15,227.01             | 8,636.00              | 137.33           | 118.86        | -26.75                | -7,838.37                           | 3,081.15     | 3,820.18               | 3,706.10                | 114.08                    | 33.487            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 104H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                                                       |           |                    |           |
| 19,000.00                         | 12,065.00             | 15,327.01             | 8,636.00              | 138.87           | 120.43        | -26.75                | -7,938.37                           | 3,082.13     | 3,820.18               | 3,704.77                | 115.41                    | 33.100            |                                                       |           |                    |           |
| 19,100.00                         | 12,065.00             | 15,427.01             | 8,636.00              | 140.43           | 121.99        | -26.75                | -8,038.36                           | 3,083.11     | 3,820.19               | 3,703.44                | 116.75                    | 32.721            |                                                       |           |                    |           |
| 19,200.00                         | 12,065.00             | 15,527.01             | 8,636.00              | 141.98           | 123.56        | -26.75                | -8,138.36                           | 3,084.10     | 3,820.19               | 3,702.10                | 118.09                    | 32.350            |                                                       |           |                    |           |
| 19,300.00                         | 12,065.00             | 15,627.01             | 8,636.00              | 143.53           | 125.14        | -26.75                | -8,238.35                           | 3,085.08     | 3,820.19               | 3,700.76                | 119.43                    | 31.987            |                                                       |           |                    |           |
| 19,400.00                         | 12,065.00             | 15,727.01             | 8,636.00              | 145.09           | 126.71        | -26.75                | -8,338.35                           | 3,086.07     | 3,820.20               | 3,699.43                | 120.77                    | 31.632            |                                                       |           |                    |           |
| 19,500.00                         | 12,065.00             | 15,827.01             | 8,636.00              | 146.65           | 128.28        | -26.75                | -8,438.34                           | 3,087.05     | 3,820.20               | 3,698.09                | 122.11                    | 31.285            |                                                       |           |                    |           |
| 19,600.00                         | 12,065.00             | 15,927.01             | 8,636.00              | 148.21           | 129.86        | -26.75                | -8,538.34                           | 3,088.03     | 3,820.20               | 3,696.75                | 123.45                    | 30.945            |                                                       |           |                    |           |
| 19,700.00                         | 12,065.00             | 16,027.01             | 8,636.00              | 149.78           | 131.44        | -26.75                | -8,638.33                           | 3,089.02     | 3,820.20               | 3,695.41                | 124.79                    | 30.612            |                                                       |           |                    |           |
| 19,800.00                         | 12,065.00             | 16,127.01             | 8,636.00              | 151.34           | 133.02        | -26.75                | -8,738.33                           | 3,090.00     | 3,820.21               | 3,694.07                | 126.14                    | 30.286            |                                                       |           |                    |           |
| 19,900.00                         | 12,065.00             | 16,227.01             | 8,636.00              | 152.91           | 134.60        | -26.75                | -8,838.32                           | 3,090.99     | 3,820.21               | 3,692.73                | 127.48                    | 29.967            |                                                       |           |                    |           |
| 20,000.00                         | 12,065.00             | 16,327.01             | 8,636.00              | 154.48           | 136.19        | -26.75                | -8,938.32                           | 3,091.97     | 3,820.21               | 3,691.38                | 128.83                    | 29.653            |                                                       |           |                    |           |
| 20,100.00                         | 12,065.00             | 16,427.01             | 8,636.00              | 156.05           | 137.77        | -26.75                | -9,038.31                           | 3,092.95     | 3,820.21               | 3,690.04                | 130.18                    | 29.346            |                                                       |           |                    |           |
| 20,200.00                         | 12,065.00             | 16,527.01             | 8,636.00              | 157.62           | 139.36        | -26.75                | -9,138.31                           | 3,093.94     | 3,820.22               | 3,688.69                | 131.53                    | 29.045            |                                                       |           |                    |           |
| 20,300.00                         | 12,065.00             | 16,627.01             | 8,636.00              | 159.20           | 140.95        | -26.75                | -9,238.30                           | 3,094.92     | 3,820.22               | 3,687.34                | 132.88                    | 28.750            |                                                       |           |                    |           |
| 20,400.00                         | 12,065.00             | 16,727.01             | 8,636.00              | 160.77           | 142.54        | -26.75                | -9,338.30                           | 3,095.90     | 3,820.22               | 3,685.99                | 134.23                    | 28.461            |                                                       |           |                    |           |
| 20,500.00                         | 12,065.00             | 16,827.01             | 8,636.00              | 162.35           | 144.13        | -26.75                | -9,438.29                           | 3,096.89     | 3,820.23               | 3,684.64                | 135.58                    | 28.177            |                                                       |           |                    |           |
| 20,600.00                         | 12,065.00             | 16,927.01             | 8,636.00              | 163.93           | 145.73        | -26.75                | -9,538.29                           | 3,097.87     | 3,820.23               | 3,683.29                | 136.94                    | 27.898            |                                                       |           |                    |           |
| 20,700.00                         | 12,065.00             | 17,027.01             | 8,636.00              | 165.51           | 147.32        | -26.75                | -9,638.28                           | 3,098.86     | 3,820.23               | 3,681.94                | 138.29                    | 27.625            |                                                       |           |                    |           |
| 20,800.00                         | 12,065.00             | 17,127.01             | 8,636.00              | 167.09           | 148.92        | -26.75                | -9,738.28                           | 3,099.84     | 3,820.23               | 3,680.59                | 139.65                    | 27.356            |                                                       |           |                    |           |
| 20,900.00                         | 12,065.00             | 17,227.01             | 8,636.00              | 168.67           | 150.51        | -26.75                | -9,838.28                           | 3,100.82     | 3,820.24               | 3,679.23                | 141.00                    | 27.093            |                                                       |           |                    |           |
| 21,000.00                         | 12,065.00             | 17,327.01             | 8,636.00              | 170.26           | 152.11        | -26.75                | -9,938.27                           | 3,101.81     | 3,820.24               | 3,677.88                | 142.36                    | 26.835            |                                                       |           |                    |           |
| 21,100.00                         | 12,065.00             | 17,427.01             | 8,636.00              | 171.84           | 153.71        | -26.75                | -10,038.27                          | 3,102.79     | 3,820.24               | 3,676.52                | 143.72                    | 26.582            |                                                       |           |                    |           |
| 21,200.00                         | 12,065.00             | 17,527.01             | 8,636.00              | 173.43           | 155.31        | -26.75                | -10,138.26                          | 3,103.78     | 3,820.24               | 3,675.17                | 145.07                    | 26.333            |                                                       |           |                    |           |
| 21,300.00                         | 12,065.00             | 17,627.01             | 8,636.00              | 175.02           | 156.91        | -26.75                | -10,238.26                          | 3,104.76     | 3,820.25               | 3,673.82                | 146.43                    | 26.089            |                                                       |           |                    |           |
| 21,400.00                         | 12,065.00             | 17,727.01             | 8,636.00              | 176.60           | 158.51        | -26.75                | -10,338.25                          | 3,105.74     | 3,820.25               | 3,672.46                | 147.79                    | 25.850            |                                                       |           |                    |           |
| 21,500.00                         | 12,065.00             | 17,827.01             | 8,636.00              | 178.19           | 160.12        | -26.75                | -10,438.25                          | 3,106.73     | 3,820.25               | 3,671.11                | 149.15                    | 25.614            |                                                       |           |                    |           |
| 21,600.00                         | 12,065.00             | 17,927.01             | 8,636.00              | 179.79           | 161.72        | -26.75                | -10,538.24                          | 3,107.71     | 3,820.26               | 3,669.75                | 150.51                    | 25.383            |                                                       |           |                    |           |
| 21,700.00                         | 12,065.00             | 18,027.01             | 8,636.00              | 181.38           | 163.33        | -26.75                | -10,638.24                          | 3,108.70     | 3,820.26               | 3,668.39                | 151.87                    | 25.155            |                                                       |           |                    |           |
| 21,800.00                         | 12,065.00             | 18,127.01             | 8,636.00              | 182.97           | 164.93        | -26.75                | -10,738.23                          | 3,109.68     | 3,820.26               | 3,667.03                | 153.23                    | 24.932            |                                                       |           |                    |           |
| 21,900.00                         | 12,065.00             | 18,227.01             | 8,636.00              | 184.57           | 166.54        | -26.75                | -10,838.23                          | 3,110.66     | 3,820.26               | 3,665.67                | 154.59                    | 24.712            |                                                       |           |                    |           |
| 22,000.00                         | 12,065.00             | 18,327.01             | 8,636.00              | 186.16           | 168.15        | -26.75                | -10,938.22                          | 3,111.65     | 3,820.27               | 3,664.31                | 155.95                    | 24.496            |                                                       |           |                    |           |
| 22,100.00                         | 12,065.00             | 18,427.01             | 8,636.00              | 187.76           | 169.76        | -26.75                | -11,038.22                          | 3,112.63     | 3,820.27               | 3,662.95                | 157.32                    | 24.284            |                                                       |           |                    |           |
| 22,200.00                         | 12,065.00             | 18,527.01             | 8,636.00              | 189.36           | 171.37        | -26.75                | -11,138.21                          | 3,113.62     | 3,820.27               | 3,661.59                | 158.68                    | 24.075            |                                                       |           |                    |           |
| 22,300.00                         | 12,065.00             | 18,627.01             | 8,636.00              | 190.95           | 172.98        | -26.75                | -11,238.21                          | 3,114.60     | 3,820.27               | 3,660.23                | 160.05                    | 23.869            |                                                       |           |                    |           |
| 22,400.00                         | 12,065.00             | 18,727.01             | 8,636.00              | 192.55           | 174.59        | -26.75                | -11,338.20                          | 3,115.58     | 3,820.28               | 3,658.86                | 161.41                    | 23.668            |                                                       |           |                    |           |
| 22,445.57                         | 12,065.00             | 18,772.58             | 8,636.00              | 193.28           | 175.32        | -26.75                | -11,383.77                          | 3,116.03     | 3,820.28               | 3,658.24                | 162.03                    | 23.577 SF         |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -153.87               | -1,022.31                           | -501.48      | 1,138.78               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 85.20                 | 85.20                 | 0.13             | 0.11          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,138.52                | 0.16                      | 6,908.302         |                    |           |
| 200.00                            | 200.00                | 185.20                | 185.20                | 0.48             | 0.43          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,138.04                | 0.65                      | 1,757.330         |                    |           |
| 300.00                            | 300.00                | 285.20                | 285.20                | 0.84             | 0.79          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,137.53                | 1.15                      | 986.351           |                    |           |
| 400.00                            | 400.00                | 385.20                | 385.20                | 1.20             | 1.15          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,137.02                | 1.66                      | 685.454           |                    |           |
| 500.00                            | 500.00                | 485.20                | 485.20                | 1.56             | 1.51          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,136.52                | 2.17                      | 525.207           |                    |           |
| 600.00                            | 600.00                | 585.20                | 585.20                | 1.92             | 1.86          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,136.01                | 2.67                      | 425.682           |                    |           |
| 700.00                            | 700.00                | 685.20                | 685.20                | 2.28             | 2.22          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,135.50                | 3.18                      | 357.866           |                    |           |
| 800.00                            | 800.00                | 785.20                | 785.20                | 2.63             | 2.58          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,134.99                | 3.69                      | 308.687           |                    |           |
| 900.00                            | 900.00                | 885.20                | 885.20                | 2.99             | 2.94          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,134.49                | 4.20                      | 271.391           |                    |           |
| 1,000.00                          | 1,000.00              | 985.20                | 985.20                | 3.35             | 3.30          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,133.98                | 4.70                      | 242.136           |                    |           |
| 1,100.00                          | 1,100.00              | 1,085.20              | 1,085.20              | 3.71             | 3.66          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,133.47                | 5.21                      | 218.574           |                    |           |
| 1,200.00                          | 1,200.00              | 1,185.20              | 1,185.20              | 4.07             | 4.02          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,132.97                | 5.72                      | 199.191           |                    |           |
| 1,300.00                          | 1,300.00              | 1,285.20              | 1,285.20              | 4.43             | 4.37          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,132.46                | 6.22                      | 182.965           |                    |           |
| 1,400.00                          | 1,400.00              | 1,385.20              | 1,385.20              | 4.79             | 4.73          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,131.95                | 6.73                      | 169.184           |                    |           |
| 1,500.00                          | 1,500.00              | 1,485.20              | 1,485.20              | 5.14             | 5.09          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,131.45                | 7.24                      | 157.333           |                    |           |
| 1,600.00                          | 1,600.00              | 1,585.20              | 1,585.20              | 5.50             | 5.45          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,130.94                | 7.74                      | 147.034           |                    |           |
| 1,700.00                          | 1,700.00              | 1,685.20              | 1,685.20              | 5.86             | 5.81          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,130.43                | 8.25                      | 138.001           |                    |           |
| 1,800.00                          | 1,800.00              | 1,785.20              | 1,785.20              | 6.22             | 6.17          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,129.93                | 8.76                      | 130.013           |                    |           |
| 1,900.00                          | 1,900.00              | 1,885.20              | 1,885.20              | 6.58             | 6.52          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,129.42                | 9.27                      | 122.899           |                    |           |
| 2,000.00                          | 2,000.00              | 1,985.20              | 1,985.20              | 6.94             | 6.88          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,128.91                | 9.77                      | 116.523           |                    |           |
| 2,100.00                          | 2,100.00              | 2,085.20              | 2,085.20              | 7.29             | 7.24          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,128.40                | 10.28                     | 110.777           |                    |           |
| 2,200.00                          | 2,200.00              | 2,185.20              | 2,185.20              | 7.65             | 7.60          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,127.90                | 10.79                     | 105.570           |                    |           |
| 2,300.00                          | 2,300.00              | 2,285.20              | 2,285.20              | 8.01             | 7.96          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,127.39                | 11.29                     | 100.831           |                    |           |
| 2,400.00                          | 2,400.00              | 2,385.20              | 2,385.20              | 8.37             | 8.32          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,126.88                | 11.80                     | 96.499            |                    |           |
| 2,500.00                          | 2,500.00              | 2,485.20              | 2,485.20              | 8.73             | 8.68          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,126.38                | 12.31                     | 92.524            |                    |           |
| 2,600.00                          | 2,600.00              | 2,585.20              | 2,585.20              | 9.09             | 9.03          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,125.87                | 12.81                     | 88.863            |                    |           |
| 2,700.00                          | 2,700.00              | 2,685.20              | 2,685.20              | 9.45             | 9.39          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,125.36                | 13.32                     | 85.482            |                    |           |
| 2,800.00                          | 2,800.00              | 2,785.20              | 2,785.20              | 9.80             | 9.75          | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,124.86                | 13.83                     | 82.348            |                    |           |
| 2,900.00                          | 2,900.00              | 2,885.20              | 2,885.20              | 10.16            | 10.11         | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,124.35                | 14.33                     | 79.435            |                    |           |
| 3,000.00                          | 3,000.00              | 2,985.20              | 2,985.20              | 10.52            | 10.47         | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,123.84                | 14.84                     | 76.722            |                    |           |
| 3,100.00                          | 3,100.00              | 3,085.20              | 3,085.20              | 10.88            | 10.83         | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,123.33                | 15.35                     | 74.188            |                    |           |
| 3,200.00                          | 3,200.00              | 3,185.20              | 3,185.20              | 11.24            | 11.19         | -153.87               | -1,022.31                           | -501.48      | 1,138.68               | 1,122.83                | 15.86                     | 71.816            |                    |           |
| 3,300.00                          | 3,299.99              | 3,285.19              | 3,285.19              | 11.58            | 11.54         | 77.54                 | -1,022.31                           | -501.48      | 1,138.40               | 1,122.05                | 16.35                     | 69.618            |                    |           |
| 3,400.00                          | 3,399.91              | 3,385.11              | 3,385.11              | 11.91            | 11.90         | 77.74                 | -1,022.31                           | -501.48      | 1,137.56               | 1,120.72                | 16.84                     | 67.554            |                    |           |
| 3,500.00                          | 3,499.69              | 3,471.20              | 3,471.19              | 12.25            | 12.20         | 78.06                 | -1,022.47                           | -502.13      | 1,136.70               | 1,119.41                | 17.29                     | 65.757            |                    |           |
| 3,548.24                          | 3,547.76              | 3,511.43              | 3,511.42              | 12.41            | 12.34         | 78.26                 | -1,022.69                           | -503.06      | 1,136.61               | 1,119.11                | 17.50                     | 64.958 CC         |                    |           |
| 3,600.00                          | 3,599.27              | 3,554.46              | 3,554.41              | 12.58            | 12.49         | 78.53                 | -1,023.04                           | -504.52      | 1,136.76               | 1,119.04                | 17.72                     | 64.149 ES         |                    |           |
| 3,700.00                          | 3,698.57              | 3,637.05              | 3,636.90              | 12.92            | 12.77         | 79.15                 | -1,024.03                           | -508.63      | 1,137.87               | 1,119.72                | 18.15                     | 62.688            |                    |           |
| 3,800.00                          | 3,797.54              | 3,718.78              | 3,718.41              | 13.27            | 13.04         | 79.91                 | -1,025.42                           | -514.40      | 1,140.17               | 1,121.59                | 18.58                     | 61.363            |                    |           |
| 3,900.00                          | 3,896.09              | 3,800.00              | 3,799.27              | 13.62            | 13.32         | 80.82                 | -1,027.21                           | -521.82      | 1,143.82               | 1,124.81                | 19.01                     | 60.167            |                    |           |
| 4,000.00                          | 3,994.16              | 3,878.79              | 3,877.54              | 13.98            | 13.60         | 81.82                 | -1,029.33                           | -530.62      | 1,149.01               | 1,129.58                | 19.44                     | 59.120            |                    |           |
| 4,100.00                          | 4,091.70              | 3,956.72              | 3,954.75              | 14.35            | 13.87         | 82.92                 | -1,031.79                           | -540.85      | 1,155.97               | 1,136.11                | 19.86                     | 58.203            |                    |           |
| 4,200.00                          | 4,188.62              | 4,033.03              | 4,030.13              | 14.74            | 14.14         | 84.10                 | -1,034.57                           | -552.36      | 1,164.93               | 1,144.64                | 20.29                     | 57.426            |                    |           |
| 4,300.00                          | 4,284.86              | 4,100.00              | 4,096.09              | 15.14            | 14.38         | 85.19                 | -1,037.29                           | -563.66      | 1,176.14               | 1,155.46                | 20.67                     | 56.887            |                    |           |
| 4,400.00                          | 4,380.36              | 4,180.21              | 4,174.79              | 15.55            | 14.67         | 86.60                 | -1,040.90                           | -578.68      | 1,189.76               | 1,168.62                | 21.13                     | 56.302            |                    |           |
| 4,452.43                          | 4,430.11              | 4,217.49              | 4,211.26              | 15.78            | 14.81         | 87.27                 | -1,042.72                           | -586.20      | 1,197.97               | 1,176.62                | 21.35                     | 56.105            |                    |           |
| 4,500.00                          | 4,475.14              | 4,250.93              | 4,243.91              | 15.99            | 14.94         | 87.99                 | -1,044.41                           | -593.25      | 1,206.10               | 1,184.54                | 21.55                     | 55.961            |                    |           |
| 4,600.00                          | 4,569.82              | 4,320.36              | 4,311.48              | 16.44            | 15.20         | 89.49                 | -1,048.15                           | -608.76      | 1,225.34               | 1,203.37                | 21.97                     | 55.774            |                    |           |
| 4,700.00                          | 4,664.49              | 4,388.60              | 4,377.60              | 16.91            | 15.47         | 90.97                 | -1,052.10                           | -625.16      | 1,247.49               | 1,225.11                | 22.38                     | 55.739            |                    |           |
| 4,800.00                          | 4,759.16              | 4,455.64              | 4,442.25              | 17.39            | 15.74         | 92.41                 | -1,056.25                           | -642.39      | 1,272.52               | 1,249.73                | 22.79                     | 55.848            |                    |           |
| 4,900.00                          | 4,853.84              | 4,521.47              | 4,505.43              | 17.87            | 16.01         | 93.81                 | -1,060.59                           | -660.39      | 1,300.38               | 1,277.20                | 23.18                     | 56.098            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,000.00                          | 4,948.51              | 4,586.09              | 4,567.12              | 18.37            | 16.28         | 95.17                 | -1,065.09                           | -679.08      | 1,331.01               | 1,307.45                | 23.57                     | 56.481            |                    |           |
| 5,100.00                          | 5,043.18              | 4,649.49              | 4,627.32              | 18.88            | 16.55         | 96.49                 | -1,069.74                           | -698.39      | 1,364.35               | 1,340.40                | 23.94                     | 56.988            |                    |           |
| 5,200.00                          | 5,137.85              | 4,711.67              | 4,686.04              | 19.39            | 16.83         | 97.75                 | -1,074.53                           | -718.28      | 1,400.29               | 1,375.99                | 24.30                     | 57.615            |                    |           |
| 5,300.00                          | 5,232.53              | 4,781.87              | 4,751.98              | 19.92            | 17.15         | 99.15                 | -1,080.17                           | -741.70      | 1,438.65               | 1,413.93                | 24.72                     | 58.191            |                    |           |
| 5,400.00                          | 5,327.20              | 4,863.91              | 4,828.97              | 20.45            | 17.54         | 100.73                | -1,086.80                           | -769.24      | 1,478.41               | 1,453.18                | 25.23                     | 58.601            |                    |           |
| 5,500.00                          | 5,421.87              | 4,945.94              | 4,905.97              | 20.99            | 17.94         | 102.23                | -1,093.44                           | -796.78      | 1,519.28               | 1,493.55                | 25.74                     | 59.034            |                    |           |
| 5,600.00                          | 5,516.54              | 5,027.98              | 4,982.96              | 21.53            | 18.35         | 103.67                | -1,100.07                           | -824.31      | 1,561.18               | 1,534.94                | 26.24                     | 59.485            |                    |           |
| 5,700.00                          | 5,611.22              | 5,110.02              | 5,059.95              | 22.08            | 18.76         | 105.05                | -1,106.70                           | -851.85      | 1,604.02               | 1,577.27                | 26.76                     | 59.951            |                    |           |
| 5,800.00                          | 5,705.89              | 5,192.05              | 5,136.94              | 22.63            | 19.19         | 106.37                | -1,113.34                           | -879.38      | 1,647.74               | 1,620.47                | 27.27                     | 60.427            |                    |           |
| 5,900.00                          | 5,800.56              | 5,274.09              | 5,213.93              | 23.19            | 19.62         | 107.63                | -1,119.97                           | -906.92      | 1,692.25               | 1,664.47                | 27.78                     | 60.911            |                    |           |
| 6,000.00                          | 5,895.23              | 5,356.13              | 5,290.93              | 23.76            | 20.06         | 108.83                | -1,126.60                           | -934.46      | 1,737.51               | 1,709.22                | 28.30                     | 61.402            |                    |           |
| 6,100.00                          | 5,989.91              | 5,438.16              | 5,367.92              | 24.33            | 20.50         | 109.99                | -1,133.23                           | -961.99      | 1,783.46               | 1,754.64                | 28.81                     | 61.896            |                    |           |
| 6,200.00                          | 6,084.58              | 5,520.20              | 5,444.91              | 24.90            | 20.95         | 111.09                | -1,139.87                           | -989.53      | 1,830.03               | 1,800.70                | 29.33                     | 62.392            |                    |           |
| 6,300.00                          | 6,179.25              | 5,602.24              | 5,521.90              | 25.48            | 21.40         | 112.14                | -1,146.50                           | -1,017.07    | 1,877.20               | 1,847.35                | 29.85                     | 62.888            |                    |           |
| 6,400.00                          | 6,273.92              | 5,684.27              | 5,598.90              | 26.05            | 21.87         | 113.15                | -1,153.13                           | -1,044.60    | 1,924.90               | 1,894.53                | 30.37                     | 63.382            |                    |           |
| 6,500.00                          | 6,368.60              | 5,766.31              | 5,675.89              | 26.64            | 22.33         | 114.12                | -1,159.76                           | -1,072.14    | 1,973.11               | 1,942.22                | 30.89                     | 63.873            |                    |           |
| 6,600.00                          | 6,463.27              | 5,848.35              | 5,752.88              | 27.22            | 22.80         | 115.04                | -1,166.40                           | -1,099.67    | 2,021.79               | 1,990.38                | 31.41                     | 64.361            |                    |           |
| 6,700.00                          | 6,557.94              | 5,930.38              | 5,829.87              | 27.81            | 23.28         | 115.93                | -1,173.03                           | -1,127.21    | 2,070.91               | 2,038.97                | 31.94                     | 64.844            |                    |           |
| 6,800.00                          | 6,652.61              | 6,012.42              | 5,906.86              | 28.40            | 23.75         | 116.78                | -1,179.66                           | -1,154.75    | 2,120.42               | 2,087.96                | 32.46                     | 65.321            |                    |           |
| 6,900.00                          | 6,747.29              | 6,094.46              | 5,983.86              | 29.00            | 24.24         | 117.60                | -1,186.29                           | -1,182.28    | 2,170.32               | 2,137.33                | 32.99                     | 65.792            |                    |           |
| 7,000.00                          | 6,841.96              | 6,176.49              | 6,060.85              | 29.59            | 24.72         | 118.38                | -1,192.93                           | -1,209.82    | 2,220.56               | 2,187.05                | 33.51                     | 66.257            |                    |           |
| 7,100.00                          | 6,936.63              | 6,258.53              | 6,137.84              | 30.19            | 25.21         | 119.13                | -1,199.56                           | -1,237.35    | 2,271.14               | 2,237.10                | 34.04                     | 66.715            |                    |           |
| 7,200.00                          | 7,031.30              | 6,340.57              | 6,214.83              | 30.79            | 25.71         | 119.85                | -1,206.19                           | -1,264.89    | 2,322.02               | 2,287.45                | 34.57                     | 67.165            |                    |           |
| 7,300.00                          | 7,125.98              | 6,423.38              | 6,302.82              | 31.40            | 26.38         | 120.79                | -1,212.82                           | -1,302.46    | 2,373.07               | 2,337.75                | 35.11                     | 67.602            |                    |           |
| 7,400.00                          | 7,220.65              | 6,507.30              | 6,393.93              | 32.00            | 27.07         | 122.55                | -1,219.45                           | -1,369.45    | 2,424.99               | 2,384.23                | 35.66                     | 68.030            |                    |           |
| 7,500.00                          | 7,315.32              | 6,592.25              | 6,486.43              | 32.61            | 27.76         | 124.26                | -1,226.08                           | -1,427.14    | 2,476.94               | 2,435.77                | 36.21                     | 68.459            |                    |           |
| 7,600.00                          | 7,409.99              | 6,677.29              | 6,577.51              | 33.21            | 28.46         | 125.93                | -1,232.71                           | -1,484.83    | 2,528.99               | 2,487.82                | 36.76                     | 68.888            |                    |           |
| 7,700.00                          | 7,504.67              | 6,762.33              | 6,672.74              | 33.82            | 29.16         | 127.57                | -1,239.34                           | -1,542.52    | 2,581.04               | 2,539.87                | 37.31                     | 69.317            |                    |           |
| 7,800.00                          | 7,599.34              | 6,847.37              | 6,767.86              | 34.43            | 29.86         | 128.92                | -1,246.00                           | -1,600.21    | 2,633.09               | 2,591.92                | 37.86                     | 69.746            |                    |           |
| 7,900.00                          | 7,694.01              | 6,932.41              | 6,858.00              | 35.05            | 30.56         | 129.84                | -1,252.63                           | -1,657.90    | 2,685.14               | 2,643.97                | 38.41                     | 70.175            |                    |           |
| 8,000.00                          | 7,788.68              | 7,017.45              | 6,948.11              | 35.66            | 31.26         | 130.37                | -1,259.26                           | -1,715.59    | 2,737.19               | 2,695.92                | 38.96                     | 70.604            |                    |           |
| 8,100.00                          | 7,883.36              | 7,102.49              | 7,038.15              | 36.28            | 31.96         | 130.89                | -1,265.89                           | -1,773.28    | 2,789.24               | 2,747.97                | 39.51                     | 71.033            |                    |           |
| 8,200.00                          | 7,978.03              | 7,187.53              | 7,123.19              | 36.89            | 32.66         | 131.40                | -1,272.52                           | -1,830.97    | 2,841.29               | 2,800.02                | 40.06                     | 71.462            |                    |           |
| 8,300.00                          | 8,072.70              | 7,272.57              | 7,208.23              | 37.51            | 33.36         | 131.91                | -1,279.15                           | -1,888.66    | 2,893.34               | 2,851.07                | 40.61                     | 71.891            |                    |           |
| 8,400.00                          | 8,167.37              | 7,357.61              | 7,293.27              | 38.13            | 34.06         | 132.40                | -1,285.78                           | -1,946.35    | 2,945.39               | 2,902.12                | 41.16                     | 72.320            |                    |           |
| 8,500.00                          | 8,262.05              | 7,442.65              | 7,378.31              | 38.75            | 34.76         | 132.89                | -1,292.41                           | -2,004.04    | 2,997.44               | 2,953.17                | 41.71                     | 72.749            |                    |           |
| 8,600.00                          | 8,356.72              | 7,527.69              | 7,463.35              | 39.37            | 35.46         | 133.37                | -1,299.04                           | -2,061.73    | 3,049.49               | 2,999.22                | 42.26                     | 73.178            |                    |           |
| 8,700.00                          | 8,451.39              | 7,612.73              | 7,548.39              | 39.99            | 36.16         | 133.84                | -1,305.67                           | -2,119.42    | 3,101.54               | 3,049.27                | 42.81                     | 73.607            |                    |           |
| 8,800.00                          | 8,546.07              | 7,697.77              | 7,633.43              | 40.61            | 36.86         | 134.31                | -1,312.30                           | -2,177.11    | 3,153.59               | 3,099.32                | 43.36                     | 74.036            |                    |           |
| 8,875.44                          | 8,617.48              | 7,760.03              | 7,700.68              | 41.08            | 37.16         | 134.66                | -1,318.93                           | -2,234.80    | 3,205.64               | 3,149.37                | 43.91                     | 74.465            |                    |           |
| 8,900.00                          | 8,640.90              | 7,783.44              | 7,724.10              | 41.23            | 37.31         | 135.15                | -1,321.56                           | -2,257.33    | 3,228.17               | 3,171.90                | 44.16                     | 74.604            |                    |           |
| 8,950.00                          | 8,689.44              | 7,831.98              | 7,772.64              | 41.49            | 37.57         | 135.93                | -1,327.19                           | -2,280.86    | 3,250.70               | 3,194.43                | 44.41                     | 74.743            |                    |           |
| 9,000.00                          | 8,738.83              | 7,880.52              | 7,821.18              | 41.70            | 37.83         | 136.43                | -1,332.82                           | -2,303.39    | 3,273.23               | 3,216.96                | 44.66                     | 74.882            |                    |           |
| 9,050.00                          | 8,788.70              | 7,929.06              | 7,870.72              | 41.87            | 38.09         | 136.64                | -1,338.45                           | -2,325.92    | 3,295.76               | 3,239.49                | 44.91                     | 75.021            |                    |           |
| 9,063.30                          | 8,802.00              | 7,944.54              | 7,884.20              | 41.91            | 38.13         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,770.11                | 48.79                     | 57.773            |                    |           |
| 9,100.00                          | 8,838.70              | 7,981.24              | 7,921.90              | 42.00            | 38.22         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,769.95                | 48.95                     | 57.585            |                    |           |
| 9,200.00                          | 8,938.70              | 8,081.24              | 8,021.90              | 42.26            | 38.48         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,769.52                | 49.39                     | 57.080            |                    |           |
| 9,300.00                          | 9,038.70              | 8,181.24              | 8,121.90              | 42.51            | 38.74         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,769.08                | 49.82                     | 56.581            |                    |           |
| 9,400.00                          | 9,138.70              | 8,281.24              | 8,221.90              | 42.77            | 39.00         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,768.65                | 50.26                     | 56.090            |                    |           |
| 9,500.00                          | 9,238.70              | 8,381.24              | 8,321.90              | 43.03            | 39.26         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,768.21                | 50.69                     | 55.606            |                    |           |
| 9,600.00                          | 9,338.70              | 8,481.24              | 8,421.90              | 43.30            | 39.52         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,767.77                | 51.13                     | 55.128            |                    |           |
| 9,700.00                          | 9,438.70              | 8,581.24              | 8,521.90              | 43.56            | 39.78         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,767.33                | 51.57                     | 54.658            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,800.00                          | 9,538.70              | 9,681.24              | 9,523.90              | 43.82            | 38.03         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,766.89                | 52.02                     | 54.194            |                    |           |
| 9,900.00                          | 9,638.70              | 9,781.24              | 9,623.90              | 44.09            | 38.34         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,766.45                | 52.46                     | 53.737            |                    |           |
| 10,000.00                         | 9,738.70              | 9,881.24              | 9,723.90              | 44.36            | 38.66         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,766.00                | 52.90                     | 53.286            |                    |           |
| 10,100.00                         | 9,838.70              | 9,981.24              | 9,823.90              | 44.63            | 38.97         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,765.56                | 53.35                     | 52.842            |                    |           |
| 10,200.00                         | 9,938.70              | 10,081.24             | 9,923.90              | 44.90            | 39.29         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,765.11                | 53.79                     | 52.403            |                    |           |
| 10,300.00                         | 10,038.70             | 10,181.24             | 10,023.90             | 45.17            | 39.60         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,764.66                | 54.24                     | 51.972            |                    |           |
| 10,400.00                         | 10,138.70             | 10,281.24             | 10,123.90             | 45.44            | 39.92         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,764.22                | 54.69                     | 51.546            |                    |           |
| 10,404.44                         | 10,143.14             | 10,285.68             | 10,128.34             | 45.45            | 39.93         | -94.69                | -1,266.31                           | -1,514.48    | 2,818.90               | 2,764.20                | 54.71                     | 51.527            |                    |           |
| 10,500.00                         | 10,238.70             | 10,374.22             | 10,216.87             | 45.71            | 40.21         | -94.69                | -1,266.65                           | -1,514.48    | 2,818.94               | 2,763.82                | 55.12                     | 51.143            |                    |           |
| 10,600.00                         | 10,338.70             | 10,450.00             | 10,292.22             | 45.99            | 40.45         | -94.85                | -1,274.27                           | -1,514.40    | 2,819.67               | 2,764.15                | 55.52                     | 50.788            |                    |           |
| 10,700.00                         | 10,438.70             | 10,517.46             | 10,357.92             | 46.26            | 40.67         | -95.15                | -1,289.36                           | -1,514.25    | 2,821.42               | 2,765.52                | 55.91                     | 50.466            |                    |           |
| 10,800.00                         | 10,538.70             | 10,582.95             | 10,419.59             | 46.54            | 40.87         | -95.60                | -1,311.30                           | -1,514.03    | 2,824.42               | 2,768.12                | 56.30                     | 50.167            |                    |           |
| 10,900.00                         | 10,638.70             | 10,650.00             | 10,479.72             | 46.82            | 41.09         | -96.20                | -1,340.89                           | -1,513.74    | 2,828.92               | 2,772.21                | 56.70                     | 49.889            |                    |           |
| 11,000.00                         | 10,738.70             | 10,700.00             | 10,522.08             | 47.10            | 41.25         | -96.73                | -1,367.42                           | -1,513.48    | 2,835.16               | 2,778.12                | 57.04                     | 49.707            |                    |           |
| 11,100.00                         | 10,838.70             | 10,750.00             | 10,561.96             | 47.38            | 41.40         | -97.34                | -1,397.55                           | -1,513.18    | 2,843.45               | 2,786.09                | 57.36                     | 49.574            |                    |           |
| 11,200.00                         | 10,938.70             | 10,785.87             | 10,588.88             | 47.66            | 41.51         | -97.81                | -1,421.24                           | -1,512.94    | 2,853.98               | 2,796.39                | 57.59                     | 49.553            |                    |           |
| 11,300.00                         | 11,038.70             | 10,822.77             | 10,614.97             | 47.94            | 41.62         | -98.33                | -1,447.33                           | -1,512.69    | 2,866.97               | 2,809.16                | 57.81                     | 49.590            |                    |           |
| 11,400.00                         | 11,138.70             | 10,850.00             | 10,633.12             | 48.22            | 41.71         | -98.74                | -1,467.62                           | -1,512.49    | 2,882.56               | 2,824.60                | 57.95                     | 49.738            |                    |           |
| 11,500.00                         | 11,238.70             | 10,883.80             | 10,654.28             | 48.51            | 41.81         | -99.27                | -1,493.98                           | -1,512.22    | 2,900.81               | 2,842.71                | 58.11                     | 49.922            |                    |           |
| 11,600.00                         | 11,338.70             | 10,900.00             | 10,663.85             | 48.79            | 41.86         | -99.53                | -1,507.04                           | -1,512.09    | 2,921.87               | 2,863.74                | 58.13                     | 50.265            |                    |           |
| 11,700.00                         | 11,438.70             | 10,931.44             | 10,681.37             | 49.08            | 41.95         | -100.04               | -1,533.14                           | -1,511.84    | 2,945.65               | 2,887.43                | 58.21                     | 50.602            |                    |           |
| 11,753.34                         | 11,492.04             | 10,950.00             | 10,691.03             | 49.23            | 42.01         | -100.36               | -1,548.99                           | -1,511.68    | 2,959.51               | 2,901.26                | 58.26                     | 50.802            |                    |           |
| 11,800.00                         | 11,538.65             | 10,950.00             | 10,691.03             | 49.37            | 42.01         | 78.94                 | -1,548.99                           | -1,511.68    | 2,971.93               | 2,913.73                | 58.19                     | 51.069            |                    |           |
| 11,850.00                         | 11,588.24             | 10,950.00             | 10,691.03             | 49.55            | 42.01         | 77.59                 | -1,548.99                           | -1,511.68    | 2,985.20               | 2,927.07                | 58.13                     | 51.353            |                    |           |
| 11,900.00                         | 11,637.10             | 10,974.72             | 10,703.09             | 49.74            | 42.09         | 75.92                 | -1,570.56                           | -1,511.46    | 2,998.06               | 2,939.83                | 58.23                     | 51.488            |                    |           |
| 11,950.00                         | 11,684.86             | 11,000.00             | 10,714.45             | 49.95            | 42.17         | 74.33                 | -1,593.15                           | -1,511.24    | 3,010.70               | 2,952.36                | 58.33                     | 51.611            |                    |           |
| 12,000.00                         | 11,731.15             | 11,000.00             | 10,714.45             | 50.18            | 42.17         | 73.14                 | -1,593.15                           | -1,511.24    | 3,022.67               | 2,964.38                | 58.29                     | 51.852            |                    |           |
| 12,050.00                         | 11,775.62             | 11,000.00             | 10,714.45             | 50.42            | 42.17         | 72.01                 | -1,593.15                           | -1,511.24    | 3,034.20               | 2,975.94                | 58.26                     | 52.080            |                    |           |
| 12,100.00                         | 11,817.93             | 11,026.82             | 10,725.40             | 50.68            | 42.26         | 70.69                 | -1,617.62                           | -1,511.00    | 3,044.84               | 2,986.43                | 58.41                     | 52.132            |                    |           |
| 12,150.00                         | 11,857.76             | 11,050.00             | 10,733.93             | 50.96            | 42.33         | 69.53                 | -1,639.17                           | -1,510.79    | 3,054.79               | 2,996.25                | 58.54                     | 52.183            |                    |           |
| 12,200.00                         | 11,894.81             | 11,050.00             | 10,733.93             | 51.25            | 42.33         | 68.68                 | -1,639.17                           | -1,510.79    | 3,063.76               | 3,005.22                | 58.54                     | 52.336            |                    |           |
| 12,250.00                         | 11,928.80             | 11,069.74             | 10,740.50             | 51.56            | 42.40         | 67.78                 | -1,657.78                           | -1,510.60    | 3,071.76               | 3,013.08                | 58.68                     | 52.348            |                    |           |
| 12,300.00                         | 11,959.45             | 11,100.00             | 10,749.32             | 51.87            | 42.50         | 66.96                 | -1,686.73                           | -1,510.31    | 3,078.84               | 3,019.94                | 58.90                     | 52.274            |                    |           |
| 12,350.00                         | 11,986.56             | 11,100.00             | 10,749.32             | 52.20            | 42.50         | 66.43                 | -1,686.73                           | -1,510.31    | 3,084.56               | 3,025.61                | 58.94                     | 52.330            |                    |           |
| 12,400.00                         | 12,009.90             | 11,100.00             | 10,749.32             | 52.55            | 42.50         | 65.99                 | -1,686.73                           | -1,510.31    | 3,089.34               | 3,030.33                | 59.01                     | 52.356            |                    |           |
| 12,450.00                         | 12,029.29             | 11,129.79             | 10,756.50             | 52.90            | 42.61         | 65.58                 | -1,715.63                           | -1,510.03    | 3,092.69               | 3,033.42                | 59.27                     | 52.176            |                    |           |
| 12,500.00                         | 12,044.60             | 11,150.00             | 10,760.52             | 53.26            | 42.68         | 65.35                 | -1,735.44                           | -1,509.83    | 3,094.93               | 3,035.43                | 59.50                     | 52.018            |                    |           |
| 12,550.00                         | 12,055.70             | 11,150.00             | 10,760.52             | 53.63            | 42.68         | 65.26                 | -1,735.44                           | -1,509.83    | 3,095.94               | 3,036.32                | 59.62                     | 51.930            |                    |           |
| 12,600.00                         | 12,062.52             | 11,175.71             | 10,764.61             | 54.01            | 42.78         | 65.28                 | -1,760.82                           | -1,509.58    | 3,095.59               | 3,035.67                | 59.91                     | 51.668            |                    |           |
| 12,653.34                         | 12,065.00             | 11,200.00             | 10,767.42             | 54.42            | 42.87         | 65.47                 | -1,784.94                           | -1,509.34    | 3,093.91               | 3,033.68                | 60.23                     | 51.370            |                    |           |
| 12,700.00                         | 12,065.00             | 11,200.00             | 10,767.42             | 54.78            | 42.87         | 65.47                 | -1,784.94                           | -1,509.34    | 3,092.02               | 3,031.63                | 60.39                     | 51.201            |                    |           |
| 12,800.00                         | 12,065.00             | 11,254.38             | 10,770.00             | 55.59            | 43.09         | 65.52                 | -1,839.24                           | -1,508.80    | 3,089.78               | 3,028.72                | 61.06                     | 50.600            |                    |           |
| 12,900.00                         | 12,065.00             | 11,298.58             | 10,770.00             | 56.43            | 43.28         | 65.52                 | -1,883.44                           | -1,508.36    | 3,089.26               | 3,027.57                | 61.69                     | 50.075            |                    |           |
| 12,928.13                         | 12,065.00             | 11,326.71             | 10,770.00             | 56.68            | 43.41         | 65.52                 | -1,911.57                           | -1,508.09    | 3,089.26               | 3,027.29                | 61.97                     | 49.848            |                    |           |
| 13,000.00                         | 12,065.00             | 11,398.58             | 10,770.00             | 57.31            | 43.75         | 65.52                 | -1,983.43                           | -1,507.37    | 3,089.25               | 3,026.56                | 62.69                     | 49.278            |                    |           |
| 13,100.00                         | 12,065.00             | 11,498.58             | 10,770.00             | 58.22            | 44.29         | 65.52                 | -2,083.43                           | -1,506.38    | 3,089.24               | 3,025.49                | 63.75                     | 48.462            |                    |           |
| 13,200.00                         | 12,065.00             | 11,598.58             | 10,770.00             | 59.17            | 44.88         | 65.52                 | -2,183.42                           | -1,505.39    | 3,089.23               | 3,024.37                | 64.86                     | 47.631            |                    |           |
| 13,300.00                         | 12,065.00             | 11,698.58             | 10,770.00             | 60.14            | 45.52         | 65.52                 | -2,283.42                           | -1,504.40    | 3,089.22               | 3,023.19                | 66.02                     | 46.792            |                    |           |
| 13,400.00                         | 12,065.00             | 11,798.58             | 10,770.00             | 61.15            | 46.22         | 65.52                 | -2,383.41                           | -1,503.41    | 3,089.20               | 3,021.97                | 67.23                     | 45.947            |                    |           |
| 13,500.00                         | 12,065.00             | 11,898.58             | 10,770.00             | 62.18            | 46.98         | 65.52                 | -2,483.41                           | -1,502.42    | 3,089.19               | 3,020.70                | 68.50                     | 45.101            |                    |           |
| 13,600.00                         | 12,065.00             | 11,998.58             | 10,770.00             | 63.24            | 47.78         | 65.52                 | -2,583.40                           | -1,501.43    | 3,089.18               | 3,019.38                | 69.80                     | 44.257            |                    |           |
| 13,700.00                         | 12,065.00             | 12,098.58             | 10,770.00             | 64.32            | 48.63         | 65.52                 | -2,683.40                           | -1,500.44    | 3,089.17               | 3,018.02                | 71.15                     | 43.418            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 501H - OH - Plan #1 |         | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                                                       |         |                              |  |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |         |                              |  |
| 13,800.00                         | 12,065.00             | 12,198.58             | 10,770.00             | 65.43            | 49.52         | 65.52                 | -2,783.39              | -1,499.45    | 3,089.16               | 3,016.62                | 72.54                     | 42.587            |                                                       |         |                              |  |
| 13,900.00                         | 12,065.00             | 12,298.58             | 10,770.00             | 66.56            | 50.45         | 65.52                 | -2,883.39              | -1,498.46    | 3,089.14               | 3,015.18                | 73.96                     | 41.767            |                                                       |         |                              |  |
| 14,000.00                         | 12,065.00             | 12,398.58             | 10,770.00             | 67.71            | 51.42         | 65.52                 | -2,983.38              | -1,497.46    | 3,089.13               | 3,013.71                | 75.42                     | 40.959            |                                                       |         |                              |  |
| 14,100.00                         | 12,065.00             | 12,498.58             | 10,770.00             | 68.88            | 52.42         | 65.52                 | -3,083.38              | -1,496.47    | 3,089.12               | 3,012.21                | 76.91                     | 40.164            |                                                       |         |                              |  |
| 14,200.00                         | 12,065.00             | 12,598.58             | 10,770.00             | 70.08            | 53.46         | 65.52                 | -3,183.37              | -1,495.48    | 3,089.11               | 3,010.67                | 78.44                     | 39.383            |                                                       |         |                              |  |
| 14,300.00                         | 12,065.00             | 12,698.58             | 10,770.00             | 71.29            | 54.53         | 65.52                 | -3,283.37              | -1,494.49    | 3,089.10               | 3,009.10                | 79.99                     | 38.618            |                                                       |         |                              |  |
| 14,400.00                         | 12,065.00             | 12,798.58             | 10,770.00             | 72.51            | 55.63         | 65.52                 | -3,383.36              | -1,493.50    | 3,089.08               | 3,007.51                | 81.57                     | 37.868            |                                                       |         |                              |  |
| 14,500.00                         | 12,065.00             | 12,898.58             | 10,770.00             | 73.76            | 56.76         | 65.52                 | -3,483.36              | -1,492.51    | 3,089.07               | 3,005.89                | 83.18                     | 37.135            |                                                       |         |                              |  |
| 14,600.00                         | 12,065.00             | 12,998.58             | 10,770.00             | 75.02            | 57.92         | 65.52                 | -3,583.35              | -1,491.52    | 3,089.06               | 3,004.24                | 84.82                     | 36.419            |                                                       |         |                              |  |
| 14,700.00                         | 12,065.00             | 13,098.58             | 10,770.00             | 76.29            | 59.09         | 65.52                 | -3,683.35              | -1,490.53    | 3,089.05               | 3,002.57                | 86.48                     | 35.721            |                                                       |         |                              |  |
| 14,800.00                         | 12,065.00             | 13,198.58             | 10,770.00             | 77.58            | 60.30         | 65.52                 | -3,783.34              | -1,489.54    | 3,089.04               | 3,000.88                | 88.15                     | 35.041            |                                                       |         |                              |  |
| 14,900.00                         | 12,065.00             | 13,298.58             | 10,770.00             | 78.89            | 61.52         | 65.52                 | -3,883.34              | -1,488.55    | 3,089.03               | 2,999.17                | 89.85                     | 34.378            |                                                       |         |                              |  |
| 15,000.00                         | 12,065.00             | 13,398.58             | 10,770.00             | 80.20            | 62.76         | 65.52                 | -3,983.33              | -1,487.56    | 3,089.01               | 2,997.44                | 91.57                     | 33.733            |                                                       |         |                              |  |
| 15,100.00                         | 12,065.00             | 13,498.58             | 10,770.00             | 81.53            | 64.02         | 65.52                 | -4,083.33              | -1,486.56    | 3,089.00               | 2,995.69                | 93.31                     | 33.105            |                                                       |         |                              |  |
| 15,200.00                         | 12,065.00             | 13,598.58             | 10,770.00             | 82.87            | 65.30         | 65.52                 | -4,183.32              | -1,485.57    | 3,088.99               | 2,993.92                | 95.07                     | 32.493            |                                                       |         |                              |  |
| 15,300.00                         | 12,065.00             | 13,698.58             | 10,770.00             | 84.22            | 66.60         | 65.52                 | -4,283.32              | -1,484.58    | 3,088.98               | 2,992.14                | 96.84                     | 31.899            |                                                       |         |                              |  |
| 15,400.00                         | 12,065.00             | 13,798.58             | 10,770.00             | 85.59            | 67.91         | 65.52                 | -4,383.31              | -1,483.59    | 3,088.97               | 2,990.34                | 98.62                     | 31.320            |                                                       |         |                              |  |
| 15,500.00                         | 12,065.00             | 13,898.58             | 10,770.00             | 86.96            | 69.23         | 65.52                 | -4,483.31              | -1,482.60    | 3,088.95               | 2,988.53                | 100.43                    | 30.758            |                                                       |         |                              |  |
| 15,600.00                         | 12,065.00             | 13,998.58             | 10,770.00             | 88.34            | 70.58         | 65.52                 | -4,583.30              | -1,481.61    | 3,088.94               | 2,986.70                | 102.24                    | 30.211            |                                                       |         |                              |  |
| 15,700.00                         | 12,065.00             | 14,098.58             | 10,770.00             | 89.73            | 71.93         | 65.52                 | -4,683.30              | -1,480.62    | 3,088.93               | 2,984.86                | 104.07                    | 29.680            |                                                       |         |                              |  |
| 15,800.00                         | 12,065.00             | 14,198.58             | 10,770.00             | 91.13            | 73.29         | 65.52                 | -4,783.29              | -1,479.63    | 3,088.92               | 2,983.00                | 105.92                    | 29.164            |                                                       |         |                              |  |
| 15,900.00                         | 12,065.00             | 14,298.58             | 10,770.00             | 92.54            | 74.67         | 65.52                 | -4,883.29              | -1,478.64    | 3,088.91               | 2,981.14                | 107.77                    | 28.662            |                                                       |         |                              |  |
| 16,000.00                         | 12,065.00             | 14,398.58             | 10,770.00             | 93.95            | 76.06         | 65.52                 | -4,983.28              | -1,477.65    | 3,088.89               | 2,979.26                | 109.64                    | 28.174            |                                                       |         |                              |  |
| 16,100.00                         | 12,065.00             | 14,498.58             | 10,770.00             | 95.38            | 77.46         | 65.52                 | -5,083.28              | -1,476.66    | 3,088.88               | 2,977.37                | 111.51                    | 27.700            |                                                       |         |                              |  |
| 16,200.00                         | 12,065.00             | 14,598.58             | 10,770.00             | 96.81            | 78.87         | 65.51                 | -5,183.27              | -1,475.66    | 3,088.87               | 2,975.47                | 113.40                    | 27.239            |                                                       |         |                              |  |
| 16,300.00                         | 12,065.00             | 14,698.58             | 10,770.00             | 98.24            | 80.29         | 65.51                 | -5,283.27              | -1,474.67    | 3,088.86               | 2,973.57                | 115.29                    | 26.791            |                                                       |         |                              |  |
| 16,400.00                         | 12,065.00             | 14,798.58             | 10,770.00             | 99.69            | 81.71         | 65.51                 | -5,383.26              | -1,473.68    | 3,088.85               | 2,971.65                | 117.20                    | 26.356            |                                                       |         |                              |  |
| 16,500.00                         | 12,065.00             | 14,898.58             | 10,770.00             | 101.14           | 83.15         | 65.51                 | -5,483.26              | -1,472.69    | 3,088.84               | 2,969.72                | 119.11                    | 25.932            |                                                       |         |                              |  |
| 16,600.00                         | 12,065.00             | 14,998.58             | 10,770.00             | 102.60           | 84.59         | 65.51                 | -5,583.26              | -1,471.70    | 3,088.82               | 2,967.79                | 121.04                    | 25.520            |                                                       |         |                              |  |
| 16,700.00                         | 12,065.00             | 15,098.58             | 10,770.00             | 104.06           | 86.04         | 65.51                 | -5,683.25              | -1,470.71    | 3,088.81               | 2,965.85                | 122.97                    | 25.119            |                                                       |         |                              |  |
| 16,800.00                         | 12,065.00             | 15,198.58             | 10,770.00             | 105.53           | 87.50         | 65.51                 | -5,783.25              | -1,469.72    | 3,088.80               | 2,963.90                | 124.90                    | 24.730            |                                                       |         |                              |  |
| 16,900.00                         | 12,065.00             | 15,298.58             | 10,770.00             | 107.00           | 88.97         | 65.51                 | -5,883.24              | -1,468.73    | 3,088.79               | 2,961.94                | 126.85                    | 24.351            |                                                       |         |                              |  |
| 17,000.00                         | 12,065.00             | 15,398.58             | 10,770.00             | 108.48           | 90.44         | 65.51                 | -5,983.24              | -1,467.74    | 3,088.78               | 2,959.98                | 128.80                    | 23.982            |                                                       |         |                              |  |
| 17,100.00                         | 12,065.00             | 15,498.58             | 10,770.00             | 109.96           | 91.92         | 65.51                 | -6,083.23              | -1,466.75    | 3,088.76               | 2,958.01                | 130.75                    | 23.623            |                                                       |         |                              |  |
| 17,200.00                         | 12,065.00             | 15,598.58             | 10,770.00             | 111.45           | 93.40         | 65.51                 | -6,183.23              | -1,465.75    | 3,088.75               | 2,956.03                | 132.72                    | 23.273            |                                                       |         |                              |  |
| 17,300.00                         | 12,065.00             | 15,698.58             | 10,770.00             | 112.94           | 94.89         | 65.51                 | -6,283.22              | -1,464.76    | 3,088.74               | 2,954.05                | 134.69                    | 22.932            |                                                       |         |                              |  |
| 17,400.00                         | 12,065.00             | 15,798.58             | 10,770.00             | 114.44           | 96.38         | 65.51                 | -6,383.22              | -1,463.77    | 3,088.73               | 2,952.06                | 136.67                    | 22.601            |                                                       |         |                              |  |
| 17,500.00                         | 12,065.00             | 15,898.58             | 10,770.00             | 115.94           | 97.88         | 65.51                 | -6,483.21              | -1,462.78    | 3,088.72               | 2,950.07                | 138.65                    | 22.278            |                                                       |         |                              |  |
| 17,600.00                         | 12,065.00             | 15,998.58             | 10,770.00             | 117.45           | 99.39         | 65.51                 | -6,583.21              | -1,461.79    | 3,088.71               | 2,948.07                | 140.63                    | 21.963            |                                                       |         |                              |  |
| 17,700.00                         | 12,065.00             | 16,098.58             | 10,770.00             | 118.96           | 100.90        | 65.51                 | -6,683.20              | -1,460.80    | 3,088.69               | 2,946.07                | 142.63                    | 21.656            |                                                       |         |                              |  |
| 17,800.00                         | 12,065.00             | 16,198.58             | 10,770.00             | 120.47           | 102.41        | 65.51                 | -6,783.20              | -1,459.81    | 3,088.68               | 2,944.06                | 144.62                    | 21.357            |                                                       |         |                              |  |
| 17,900.00                         | 12,065.00             | 16,298.58             | 10,770.00             | 121.99           | 103.93        | 65.51                 | -6,883.19              | -1,458.82    | 3,088.67               | 2,942.05                | 146.62                    | 21.066            |                                                       |         |                              |  |
| 18,000.00                         | 12,065.00             | 16,398.58             | 10,770.00             | 123.51           | 105.45        | 65.51                 | -6,983.19              | -1,457.83    | 3,088.66               | 2,940.03                | 148.62                    | 20.782            |                                                       |         |                              |  |
| 18,100.00                         | 12,065.00             | 16,498.58             | 10,770.00             | 125.03           | 106.97        | 65.51                 | -7,083.18              | -1,456.84    | 3,088.65               | 2,938.01                | 150.63                    | 20.505            |                                                       |         |                              |  |
| 18,200.00                         | 12,065.00             | 16,598.58             | 10,770.00             | 126.56           | 108.50        | 65.51                 | -7,183.18              | -1,455.85    | 3,088.63               | 2,935.99                | 152.65                    | 20.234            |                                                       |         |                              |  |
| 18,300.00                         | 12,065.00             | 16,698.58             | 10,770.00             | 128.09           | 110.04        | 65.51                 | -7,283.17              | -1,454.85    | 3,088.62               | 2,933.96                | 154.66                    | 19.970            |                                                       |         |                              |  |
| 18,400.00                         | 12,065.00             | 16,798.58             | 10,770.00             | 129.62           | 111.57        | 65.51                 | -7,383.17              | -1,453.86    | 3,088.61               | 2,931.92                | 156.69                    | 19.712            |                                                       |         |                              |  |
| 18,500.00                         | 12,065.00             | 16,898.58             | 10,770.00             | 131.16           | 113.11        | 65.51                 | -7,483.16              | -1,452.87    | 3,088.60               | 2,929.89                | 158.71                    | 19.460            |                                                       |         |                              |  |
| 18,600.00                         | 12,065.00             | 16,998.58             | 10,770.00             | 132.69           | 114.65        | 65.51                 | -7,583.16              | -1,451.88    | 3,088.59               | 2,927.85                | 160.74                    | 19.215            |                                                       |         |                              |  |
| 18,700.00                         | 12,065.00             | 17,098.58             | 10,770.00             | 134.24           | 116.20        | 65.51                 | -7,683.15              | -1,450.89    | 3,088.57               | 2,925.81                | 162.77                    | 18.975            |                                                       |         |                              |  |
| 18,800.00                         | 12,065.00             | 17,198.58             | 10,770.00             | 135.78           | 117.75        | 65.51                 | -7,783.15              | -1,449.90    | 3,088.56               | 2,923.76                | 164.80                    | 18.741            |                                                       |         |                              |  |
| 18,900.00                         | 12,065.00             | 17,298.58             | 10,770.00             | 137.33           | 119.30        | 65.51                 | -7,883.14              | -1,448.91    | 3,088.55               | 2,921.71                | 166.84                    | 18.512            |                                                       |         |                              |  |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 501H - OH - Plan #1 |  | Offset Site Error: |  | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|--------------------|--|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   |                                                       |  | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning                                               |  |                    |  |           |  |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |  |                    |  |           |  |
| 19,000.00                         | 12,065.00             | 17,398.58             | 10,770.00             | 138.87           | 120.85        | 65.51                 | -7,983.14              | -1,447.92    | 3,088.54               | 2,919.66                | 168.88                    | 18.289            |                                                       |  |                    |  |           |  |
| 19,100.00                         | 12,065.00             | 17,498.58             | 10,770.00             | 140.43           | 122.41        | 65.51                 | -8,083.13              | -1,446.93    | 3,088.53               | 2,917.61                | 170.92                    | 18.070            |                                                       |  |                    |  |           |  |
| 19,200.00                         | 12,065.00             | 17,598.58             | 10,770.00             | 141.98           | 123.97        | 65.51                 | -8,183.13              | -1,445.94    | 3,088.52               | 2,915.55                | 172.97                    | 17.856            |                                                       |  |                    |  |           |  |
| 19,300.00                         | 12,065.00             | 17,698.58             | 10,770.00             | 143.53           | 125.53        | 65.51                 | -8,283.12              | -1,444.95    | 3,088.50               | 2,913.49                | 175.01                    | 17.647            |                                                       |  |                    |  |           |  |
| 19,400.00                         | 12,065.00             | 17,798.58             | 10,770.00             | 145.09           | 127.09        | 65.51                 | -8,383.12              | -1,443.95    | 3,088.49               | 2,911.43                | 177.07                    | 17.443            |                                                       |  |                    |  |           |  |
| 19,500.00                         | 12,065.00             | 17,898.58             | 10,770.00             | 146.65           | 128.66        | 65.51                 | -8,483.11              | -1,442.96    | 3,088.48               | 2,909.36                | 179.12                    | 17.243            |                                                       |  |                    |  |           |  |
| 19,600.00                         | 12,065.00             | 17,998.58             | 10,770.00             | 148.21           | 130.23        | 65.51                 | -8,583.11              | -1,441.97    | 3,088.47               | 2,907.30                | 181.17                    | 17.047            |                                                       |  |                    |  |           |  |
| 19,700.00                         | 12,065.00             | 18,098.58             | 10,770.00             | 149.78           | 131.80        | 65.51                 | -8,683.10              | -1,440.98    | 3,088.46               | 2,905.23                | 183.23                    | 16.856            |                                                       |  |                    |  |           |  |
| 19,800.00                         | 12,065.00             | 18,198.58             | 10,770.00             | 151.34           | 133.37        | 65.51                 | -8,783.10              | -1,439.99    | 3,088.44               | 2,903.16                | 185.29                    | 16.668            |                                                       |  |                    |  |           |  |
| 19,900.00                         | 12,065.00             | 18,298.58             | 10,770.00             | 152.91           | 134.94        | 65.51                 | -8,883.09              | -1,439.00    | 3,088.43               | 2,901.08                | 187.35                    | 16.485            |                                                       |  |                    |  |           |  |
| 20,000.00                         | 12,065.00             | 18,398.58             | 10,770.00             | 154.48           | 136.52        | 65.51                 | -8,983.09              | -1,438.01    | 3,088.42               | 2,899.01                | 189.41                    | 16.305            |                                                       |  |                    |  |           |  |
| 20,100.00                         | 12,065.00             | 18,498.58             | 10,770.00             | 156.05           | 138.10        | 65.51                 | -9,083.08              | -1,437.02    | 3,088.41               | 2,896.93                | 191.48                    | 16.129            |                                                       |  |                    |  |           |  |
| 20,200.00                         | 12,065.00             | 18,598.58             | 10,770.00             | 157.62           | 139.68        | 65.51                 | -9,183.08              | -1,436.03    | 3,088.40               | 2,894.85                | 193.55                    | 15.957            |                                                       |  |                    |  |           |  |
| 20,300.00                         | 12,065.00             | 18,698.58             | 10,770.00             | 159.20           | 141.26        | 65.51                 | -9,283.07              | -1,435.04    | 3,088.38               | 2,892.77                | 195.61                    | 15.788            |                                                       |  |                    |  |           |  |
| 20,400.00                         | 12,065.00             | 18,798.58             | 10,770.00             | 160.77           | 142.84        | 65.51                 | -9,383.07              | -1,434.05    | 3,088.37               | 2,890.69                | 197.68                    | 15.623            |                                                       |  |                    |  |           |  |
| 20,500.00                         | 12,065.00             | 18,898.58             | 10,770.00             | 162.35           | 144.42        | 65.51                 | -9,483.06              | -1,433.05    | 3,088.36               | 2,888.61                | 199.76                    | 15.461            |                                                       |  |                    |  |           |  |
| 20,600.00                         | 12,065.00             | 18,998.58             | 10,770.00             | 163.93           | 146.01        | 65.51                 | -9,583.06              | -1,432.06    | 3,088.35               | 2,886.52                | 201.83                    | 15.302            |                                                       |  |                    |  |           |  |
| 20,700.00                         | 12,065.00             | 19,098.58             | 10,770.00             | 165.51           | 147.60        | 65.51                 | -9,683.05              | -1,431.07    | 3,088.34               | 2,884.43                | 203.90                    | 15.146            |                                                       |  |                    |  |           |  |
| 20,800.00                         | 12,065.00             | 19,198.58             | 10,770.00             | 167.09           | 149.18        | 65.51                 | -9,783.05              | -1,430.08    | 3,088.33               | 2,882.34                | 205.98                    | 14.993            |                                                       |  |                    |  |           |  |
| 20,900.00                         | 12,065.00             | 19,298.58             | 10,770.00             | 168.67           | 150.77        | 65.51                 | -9,883.04              | -1,429.09    | 3,088.31               | 2,880.25                | 208.06                    | 14.843            |                                                       |  |                    |  |           |  |
| 21,000.00                         | 12,065.00             | 19,398.58             | 10,770.00             | 170.26           | 152.37        | 65.51                 | -9,983.04              | -1,428.10    | 3,088.30               | 2,878.16                | 210.14                    | 14.696            |                                                       |  |                    |  |           |  |
| 21,100.00                         | 12,065.00             | 19,498.58             | 10,770.00             | 171.84           | 153.96        | 65.51                 | -10,083.03             | -1,427.11    | 3,088.29               | 2,876.07                | 212.22                    | 14.552            |                                                       |  |                    |  |           |  |
| 21,200.00                         | 12,065.00             | 19,598.58             | 10,770.00             | 173.43           | 155.55        | 65.51                 | -10,183.03             | -1,426.12    | 3,088.28               | 2,873.98                | 214.30                    | 14.411            |                                                       |  |                    |  |           |  |
| 21,300.00                         | 12,065.00             | 19,698.58             | 10,770.00             | 175.02           | 157.15        | 65.51                 | -10,283.02             | -1,425.13    | 3,088.27               | 2,871.88                | 216.38                    | 14.272            |                                                       |  |                    |  |           |  |
| 21,400.00                         | 12,065.00             | 19,798.58             | 10,770.00             | 176.60           | 158.74        | 65.51                 | -10,383.02             | -1,424.14    | 3,088.25               | 2,869.79                | 218.47                    | 14.136            |                                                       |  |                    |  |           |  |
| 21,500.00                         | 12,065.00             | 19,898.58             | 10,770.00             | 178.19           | 160.34        | 65.51                 | -10,483.01             | -1,423.15    | 3,088.24               | 2,867.69                | 220.55                    | 14.002            |                                                       |  |                    |  |           |  |
| 21,600.00                         | 12,065.00             | 19,998.58             | 10,770.00             | 179.79           | 161.94        | 65.51                 | -10,583.01             | -1,422.15    | 3,088.23               | 2,865.59                | 222.64                    | 13.871            |                                                       |  |                    |  |           |  |
| 21,700.00                         | 12,065.00             | 20,098.58             | 10,770.00             | 181.38           | 163.54        | 65.51                 | -10,683.00             | -1,421.16    | 3,088.22               | 2,863.49                | 224.73                    | 13.742            |                                                       |  |                    |  |           |  |
| 21,800.00                         | 12,065.00             | 20,198.58             | 10,770.00             | 182.97           | 165.14        | 65.51                 | -10,783.00             | -1,420.17    | 3,088.21               | 2,861.39                | 226.82                    | 13.615            |                                                       |  |                    |  |           |  |
| 21,900.00                         | 12,065.00             | 20,298.58             | 10,770.00             | 184.57           | 166.74        | 65.51                 | -10,882.99             | -1,419.18    | 3,088.19               | 2,859.29                | 228.91                    | 13.491            |                                                       |  |                    |  |           |  |
| 22,000.00                         | 12,065.00             | 20,398.58             | 10,770.00             | 186.16           | 168.34        | 65.51                 | -10,982.99             | -1,418.19    | 3,088.18               | 2,857.18                | 231.00                    | 13.369            |                                                       |  |                    |  |           |  |
| 22,100.00                         | 12,065.00             | 20,498.58             | 10,770.00             | 187.76           | 169.94        | 65.51                 | -11,082.99             | -1,417.20    | 3,088.17               | 2,855.08                | 233.09                    | 13.249            |                                                       |  |                    |  |           |  |
| 22,200.00                         | 12,065.00             | 20,598.58             | 10,770.00             | 189.36           | 171.55        | 65.51                 | -11,182.98             | -1,416.21    | 3,088.16               | 2,852.98                | 235.18                    | 13.131            |                                                       |  |                    |  |           |  |
| 22,300.00                         | 12,065.00             | 20,698.58             | 10,770.00             | 190.95           | 173.15        | 65.51                 | -11,282.98             | -1,415.22    | 3,088.15               | 2,850.87                | 237.28                    | 13.015            |                                                       |  |                    |  |           |  |
| 22,400.00                         | 12,065.00             | 20,798.58             | 10,770.00             | 192.55           | 174.76        | 65.51                 | -11,382.97             | -1,414.23    | 3,088.14               | 2,848.76                | 239.37                    | 12.901            |                                                       |  |                    |  |           |  |
| 22,441.90                         | 12,065.00             | 20,840.49             | 10,770.00             | 193.22           | 175.38        | 65.51                 | -11,424.87             | -1,413.81    | 3,088.13               | 2,847.94                | 240.19                    | 12.857            |                                                       |  |                    |  |           |  |
| 22,445.57                         | 12,065.00             | 20,841.66             | 10,770.00             | 193.28           | 175.40        | 65.51                 | -11,426.05             | -1,413.80    | 3,088.13               | 2,847.89                | 240.24                    | 12.854 SF         |                                                       |  |                    |  |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 502H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -155.01               | -1,022.07                           | -476.49      | 1,127.79               |                         |                           |                   |                                                       |           |                    |           |
| 100.00                            | 100.00                | 84.70                 | 84.70                 | 0.13             | 0.11          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,127.52                | 0.16                      | 6,858.465         |                                                       |           |                    |           |
| 200.00                            | 200.00                | 184.70                | 184.70                | 0.48             | 0.43          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,127.04                | 0.65                      | 1,743.557         |                                                       |           |                    |           |
| 300.00                            | 300.00                | 284.70                | 284.70                | 0.84             | 0.79          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,126.53                | 1.15                      | 977.860           |                                                       |           |                    |           |
| 400.00                            | 400.00                | 384.70                | 384.70                | 1.20             | 1.15          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,126.02                | 1.66                      | 679.339           |                                                       |           |                    |           |
| 500.00                            | 500.00                | 484.70                | 484.70                | 1.56             | 1.50          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,125.52                | 2.17                      | 520.432           |                                                       |           |                    |           |
| 600.00                            | 600.00                | 584.70                | 584.70                | 1.92             | 1.86          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,125.01                | 2.67                      | 421.767           |                                                       |           |                    |           |
| 700.00                            | 700.00                | 684.70                | 684.70                | 2.28             | 2.22          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,124.50                | 3.18                      | 354.548           |                                                       |           |                    |           |
| 800.00                            | 800.00                | 784.70                | 784.70                | 2.63             | 2.58          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,124.00                | 3.69                      | 305.809           |                                                       |           |                    |           |
| 900.00                            | 900.00                | 884.70                | 884.70                | 2.99             | 2.94          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,123.49                | 4.19                      | 268.850           |                                                       |           |                    |           |
| 1,000.00                          | 1,000.00              | 984.70                | 984.70                | 3.35             | 3.30          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,122.98                | 4.70                      | 239.861           |                                                       |           |                    |           |
| 1,100.00                          | 1,100.00              | 1,084.70              | 1,084.70              | 3.71             | 3.66          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,122.48                | 5.21                      | 216.515           |                                                       |           |                    |           |
| 1,200.00                          | 1,200.00              | 1,184.70              | 1,184.70              | 4.07             | 4.01          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,121.97                | 5.72                      | 197.310           |                                                       |           |                    |           |
| 1,300.00                          | 1,300.00              | 1,284.70              | 1,284.70              | 4.43             | 4.37          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,121.46                | 6.22                      | 181.234           |                                                       |           |                    |           |
| 1,400.00                          | 1,400.00              | 1,384.70              | 1,384.70              | 4.79             | 4.73          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,120.95                | 6.73                      | 167.581           |                                                       |           |                    |           |
| 1,500.00                          | 1,500.00              | 1,484.70              | 1,484.70              | 5.14             | 5.09          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,120.45                | 7.24                      | 155.841           |                                                       |           |                    |           |
| 1,600.00                          | 1,600.00              | 1,584.70              | 1,584.70              | 5.50             | 5.45          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,119.94                | 7.74                      | 145.638           |                                                       |           |                    |           |
| 1,700.00                          | 1,700.00              | 1,684.70              | 1,684.70              | 5.86             | 5.81          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,119.43                | 8.25                      | 136.688           |                                                       |           |                    |           |
| 1,800.00                          | 1,800.00              | 1,784.70              | 1,784.70              | 6.22             | 6.16          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,118.93                | 8.76                      | 128.775           |                                                       |           |                    |           |
| 1,900.00                          | 1,900.00              | 1,884.70              | 1,884.70              | 6.58             | 6.52          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,118.42                | 9.26                      | 121.728           |                                                       |           |                    |           |
| 2,000.00                          | 2,000.00              | 1,984.70              | 1,984.70              | 6.94             | 6.88          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,117.91                | 9.77                      | 115.413           |                                                       |           |                    |           |
| 2,100.00                          | 2,100.00              | 2,084.70              | 2,084.70              | 7.29             | 7.24          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,117.41                | 10.28                     | 109.720           |                                                       |           |                    |           |
| 2,200.00                          | 2,200.00              | 2,184.70              | 2,184.70              | 7.65             | 7.60          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,116.90                | 10.78                     | 104.562           |                                                       |           |                    |           |
| 2,300.00                          | 2,300.00              | 2,284.70              | 2,284.70              | 8.01             | 7.96          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,116.39                | 11.29                     | 99.868            |                                                       |           |                    |           |
| 2,400.00                          | 2,400.00              | 2,384.70              | 2,384.70              | 8.37             | 8.32          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,115.88                | 11.80                     | 95.577            |                                                       |           |                    |           |
| 2,500.00                          | 2,500.00              | 2,484.70              | 2,484.70              | 8.73             | 8.67          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,115.38                | 12.31                     | 91.640            |                                                       |           |                    |           |
| 2,600.00                          | 2,600.00              | 2,584.70              | 2,584.70              | 9.09             | 9.03          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,114.87                | 12.81                     | 88.014            |                                                       |           |                    |           |
| 2,700.00                          | 2,700.00              | 2,684.70              | 2,684.70              | 9.45             | 9.39          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,114.36                | 13.32                     | 84.664            |                                                       |           |                    |           |
| 2,800.00                          | 2,800.00              | 2,784.70              | 2,784.70              | 9.80             | 9.75          | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,113.86                | 13.83                     | 81.560            |                                                       |           |                    |           |
| 2,900.00                          | 2,900.00              | 2,884.70              | 2,884.70              | 10.16            | 10.11         | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,113.35                | 14.33                     | 78.675            |                                                       |           |                    |           |
| 3,000.00                          | 3,000.00              | 2,984.70              | 2,984.70              | 10.52            | 10.47         | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,112.84                | 14.84                     | 75.987            |                                                       |           |                    |           |
| 3,100.00                          | 3,100.00              | 3,084.70              | 3,084.70              | 10.88            | 10.82         | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,112.34                | 15.35                     | 73.477            |                                                       |           |                    |           |
| 3,200.00                          | 3,200.00              | 3,184.70              | 3,184.70              | 11.24            | 11.18         | -155.01               | -1,022.07                           | -476.49      | 1,127.68               | 1,111.83                | 15.85                     | 71.128            |                                                       |           |                    |           |
| 3,300.00                          | 3,299.99              | 3,294.84              | 3,294.83              | 11.58            | 11.57         | 76.36                 | -1,022.15                           | -475.32      | 1,126.99               | 1,110.62                | 16.37                     | 68.846            |                                                       |           |                    |           |
| 3,400.00                          | 3,399.91              | 3,406.77              | 3,406.67              | 11.91            | 11.95         | 76.40                 | -1,022.44                           | -470.91      | 1,124.64               | 1,107.77                | 16.87                     | 66.659            |                                                       |           |                    |           |
| 3,500.00                          | 3,499.69              | 3,518.60              | 3,518.23              | 12.25            | 12.34         | 76.46                 | -1,022.94                           | -463.24      | 1,120.60               | 1,103.23                | 17.37                     | 64.496            |                                                       |           |                    |           |
| 3,600.00                          | 3,599.27              | 3,630.28              | 3,629.37              | 12.58            | 12.72         | 76.53                 | -1,023.66                           | -452.33      | 1,114.90               | 1,097.02                | 17.88                     | 62.353            |                                                       |           |                    |           |
| 3,700.00                          | 3,698.57              | 3,731.66              | 3,730.06              | 12.92            | 13.08         | 76.66                 | -1,024.43                           | -440.59      | 1,107.92               | 1,089.55                | 18.37                     | 60.309            |                                                       |           |                    |           |
| 3,800.00                          | 3,797.54              | 3,831.32              | 3,829.04              | 13.27            | 13.43         | 76.94                 | -1,025.19                           | -429.01      | 1,100.34               | 1,081.48                | 18.86                     | 58.333            |                                                       |           |                    |           |
| 3,900.00                          | 3,896.09              | 3,930.82              | 3,927.87              | 13.62            | 13.79         | 77.36                 | -1,025.95                           | -417.45      | 1,092.19               | 1,072.82                | 19.36                     | 56.412            |                                                       |           |                    |           |
| 4,000.00                          | 3,994.16              | 4,030.09              | 4,026.46              | 13.98            | 14.14         | 77.92                 | -1,026.71                           | -405.92      | 1,083.51               | 1,063.64                | 19.87                     | 54.542            |                                                       |           |                    |           |
| 4,100.00                          | 4,091.70              | 4,129.06              | 4,124.77              | 14.35            | 14.50         | 78.64                 | -1,027.47                           | -394.42      | 1,074.37               | 1,053.99                | 20.38                     | 52.722            |                                                       |           |                    |           |
| 4,200.00                          | 4,188.62              | 4,227.68              | 4,222.71              | 14.74            | 14.86         | 79.50                 | -1,028.22                           | -382.97      | 1,064.86               | 1,043.96                | 20.90                     | 50.951            |                                                       |           |                    |           |
| 4,300.00                          | 4,284.86              | 4,325.86              | 4,320.22              | 15.14            | 15.22         | 80.52                 | -1,028.97                           | -371.56      | 1,055.09               | 1,033.66                | 21.43                     | 49.231            |                                                       |           |                    |           |
| 4,400.00                          | 4,380.36              | 4,423.54              | 4,417.24              | 15.55            | 15.58         | 81.69                 | -1,029.72                           | -360.22      | 1,045.18               | 1,023.21                | 21.98                     | 47.562            |                                                       |           |                    |           |
| 4,452.43                          | 4,430.11              | 4,474.53              | 4,467.88              | 15.78            | 15.76         | 82.36                 | -1,030.11                           | -354.29      | 1,039.99               | 1,017.72                | 22.27                     | 46.708            |                                                       |           |                    |           |
| 4,500.00                          | 4,475.14              | 4,520.72              | 4,513.76              | 15.99            | 15.94         | 82.92                 | -1,030.46                           | -348.93      | 1,035.33               | 1,012.80                | 22.53                     | 45.950            |                                                       |           |                    |           |
| 4,600.00                          | 4,569.82              | 4,617.83              | 4,610.21              | 16.44            | 16.30         | 84.12                 | -1,031.20                           | -337.65      | 1,025.89               | 1,002.79                | 23.10                     | 44.410            |                                                       |           |                    |           |
| 4,700.00                          | 4,664.49              | 4,714.93              | 4,706.65              | 16.91            | 16.66         | 85.33                 | -1,031.95                           | -326.37      | 1,016.93               | 993.25                  | 23.68                     | 42.947            |                                                       |           |                    |           |
| 4,800.00                          | 4,759.16              | 4,812.03              | 4,803.09              | 17.39            | 17.02         | 86.57                 | -1,032.69                           | -315.09      | 1,008.45               | 984.18                  | 24.27                     | 41.557            |                                                       |           |                    |           |
| 4,900.00                          | 4,853.84              | 4,909.14              | 4,899.54              | 17.87            | 17.38         | 87.83                 | -1,033.43                           | -303.81      | 1,000.47               | 975.61                  | 24.86                     | 40.239            |                                                       |           |                    |           |
| 5,000.00                          | 4,948.51              | 5,006.24              | 4,995.98              | 18.37            | 17.75         | 89.10                 | -1,034.17                           | -292.53      | 993.00                 | 967.53                  | 25.47                     | 38.992            |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,103.34              | 5,092.42              | 18.88            | 18.12         | 90.39                 | -1,034.91                           | -281.25      | 986.05                 | 959.98                  | 26.08                     | 37.813            |                    |           |
| 5,200.00                          | 5,137.85              | 5,200.45              | 5,188.87              | 19.39            | 18.48         | 91.70                 | -1,035.66                           | -269.97      | 979.64                 | 952.95                  | 26.69                     | 36.700            |                    |           |
| 5,300.00                          | 5,232.53              | 5,297.55              | 5,285.31              | 19.92            | 18.85         | 93.02                 | -1,036.40                           | -258.69      | 973.77                 | 946.46                  | 27.31                     | 35.651            |                    |           |
| 5,400.00                          | 5,327.20              | 5,394.66              | 5,381.75              | 20.45            | 19.22         | 94.36                 | -1,037.14                           | -247.41      | 968.46                 | 940.52                  | 27.94                     | 34.664            |                    |           |
| 5,500.00                          | 5,421.87              | 5,491.76              | 5,478.20              | 20.99            | 19.59         | 95.71                 | -1,037.88                           | -236.13      | 963.70                 | 935.14                  | 28.57                     | 33.736            |                    |           |
| 5,600.00                          | 5,516.54              | 5,588.86              | 5,574.64              | 21.53            | 19.96         | 97.08                 | -1,038.63                           | -224.85      | 959.52                 | 930.33                  | 29.20                     | 32.865            |                    |           |
| 5,700.00                          | 5,611.22              | 5,685.97              | 5,671.08              | 22.08            | 20.33         | 98.45                 | -1,039.37                           | -213.57      | 955.92                 | 926.10                  | 29.83                     | 32.049            |                    |           |
| 5,800.00                          | 5,705.89              | 5,783.07              | 5,767.53              | 22.63            | 20.71         | 99.83                 | -1,040.11                           | -202.29      | 952.91                 | 922.45                  | 30.46                     | 31.286            |                    |           |
| 5,900.00                          | 5,800.56              | 5,880.18              | 5,863.97              | 23.19            | 21.08         | 101.22                | -1,040.85                           | -191.01      | 950.48                 | 919.39                  | 31.09                     | 30.572            |                    |           |
| 6,000.00                          | 5,895.23              | 5,977.28              | 5,960.42              | 23.76            | 21.45         | 102.62                | -1,041.59                           | -179.73      | 948.65                 | 916.93                  | 31.72                     | 29.908            |                    |           |
| 6,100.00                          | 5,989.91              | 6,074.38              | 6,056.86              | 24.33            | 21.83         | 104.02                | -1,042.34                           | -168.45      | 947.42                 | 915.08                  | 32.35                     | 29.289            |                    |           |
| 6,200.00                          | 6,084.58              | 6,171.49              | 6,153.30              | 24.90            | 22.20         | 105.42                | -1,043.08                           | -157.17      | 946.80                 | 913.82                  | 32.97                     | 28.715            |                    |           |
| 6,254.18                          | 6,135.87              | 6,224.10              | 6,205.56              | 25.21            | 22.41         | 106.19                | -1,043.48                           | -151.06      | 946.71                 | 913.40                  | 33.31                     | 28.421 CC         |                    |           |
| 6,300.00                          | 6,179.25              | 6,268.59              | 6,249.75              | 25.48            | 22.58         | 106.83                | -1,043.82                           | -145.89      | 946.77                 | 913.18                  | 33.59                     | 28.182            |                    |           |
| 6,400.00                          | 6,273.92              | 6,365.69              | 6,346.19              | 26.05            | 22.96         | 108.23                | -1,044.56                           | -134.61      | 947.35                 | 913.14                  | 34.21                     | 27.690 ES         |                    |           |
| 6,500.00                          | 6,368.60              | 6,462.80              | 6,442.63              | 26.64            | 23.33         | 109.63                | -1,045.30                           | -123.33      | 948.53                 | 913.70                  | 34.83                     | 27.236            |                    |           |
| 6,600.00                          | 6,463.27              | 6,559.90              | 6,539.08              | 27.22            | 23.71         | 111.03                | -1,046.05                           | -112.05      | 950.31                 | 914.87                  | 35.44                     | 26.818            |                    |           |
| 6,700.00                          | 6,557.94              | 6,657.01              | 6,635.52              | 27.81            | 24.09         | 112.42                | -1,046.79                           | -100.77      | 952.68                 | 916.64                  | 36.04                     | 26.435            |                    |           |
| 6,800.00                          | 6,652.61              | 6,754.11              | 6,731.96              | 28.40            | 24.47         | 113.80                | -1,047.53                           | -89.49       | 955.65                 | 919.01                  | 36.64                     | 26.084            |                    |           |
| 6,900.00                          | 6,747.29              | 6,851.21              | 6,828.41              | 29.00            | 24.85         | 115.18                | -1,048.27                           | -78.21       | 959.20                 | 921.97                  | 37.23                     | 25.765            |                    |           |
| 7,000.00                          | 6,841.96              | 6,948.32              | 6,924.85              | 29.59            | 25.22         | 116.54                | -1,049.01                           | -66.93       | 963.33                 | 925.52                  | 37.82                     | 25.474            |                    |           |
| 7,100.00                          | 6,936.63              | 7,045.42              | 7,021.29              | 30.19            | 25.60         | 117.90                | -1,049.76                           | -55.65       | 968.04                 | 929.64                  | 38.40                     | 25.212            |                    |           |
| 7,200.00                          | 7,031.30              | 7,139.26              | 7,114.50              | 30.79            | 25.97         | 119.19                | -1,050.47                           | -44.77       | 973.33                 | 934.37                  | 38.97                     | 24.979            |                    |           |
| 7,300.00                          | 7,125.98              | 7,217.97              | 7,192.79              | 31.40            | 26.27         | 120.29                | -1,051.00                           | -36.73       | 980.40                 | 940.89                  | 39.51                     | 24.817            |                    |           |
| 7,400.00                          | 7,220.65              | 7,300.00              | 7,274.55              | 32.00            | 26.58         | 121.47                | -1,051.44                           | -30.06       | 989.86                 | 949.83                  | 40.03                     | 24.728            |                    |           |
| 7,500.00                          | 7,315.32              | 7,373.56              | 7,347.97              | 32.61            | 26.85         | 122.54                | -1,051.74                           | -25.56       | 1,001.72               | 961.21                  | 40.51                     | 24.728            |                    |           |
| 7,600.00                          | 7,409.99              | 7,450.34              | 7,424.68              | 33.21            | 27.13         | 123.66                | -1,051.95                           | -22.38       | 1,016.02               | 975.04                  | 40.97                     | 24.798            |                    |           |
| 7,700.00                          | 7,504.67              | 7,526.37              | 7,500.69              | 33.82            | 27.39         | 124.78                | -1,052.05                           | -20.75       | 1,032.74               | 991.33                  | 41.41                     | 24.940            |                    |           |
| 7,800.00                          | 7,599.34              | 7,609.72              | 7,584.04              | 34.43            | 27.68         | 126.00                | -1,052.07                           | -20.49       | 1,051.72               | 1,009.86                | 41.86                     | 25.125            |                    |           |
| 7,900.00                          | 7,694.01              | 7,704.39              | 7,678.71              | 35.05            | 28.00         | 127.35                | -1,052.07                           | -20.49       | 1,071.64               | 1,029.28                | 42.35                     | 25.301            |                    |           |
| 8,000.00                          | 7,788.68              | 7,799.06              | 7,773.38              | 35.66            | 28.32         | 128.65                | -1,052.07                           | -20.49       | 1,092.13               | 1,049.29                | 42.85                     | 25.489            |                    |           |
| 8,100.00                          | 7,883.36              | 7,893.74              | 7,868.06              | 36.28            | 28.65         | 129.90                | -1,052.07                           | -20.49       | 1,113.19               | 1,069.85                | 43.34                     | 25.686            |                    |           |
| 8,200.00                          | 7,978.03              | 7,988.41              | 7,962.73              | 36.89            | 28.97         | 131.11                | -1,052.07                           | -20.49       | 1,134.76               | 1,090.94                | 43.83                     | 25.892            |                    |           |
| 8,300.00                          | 8,072.70              | 8,083.08              | 8,057.40              | 37.51            | 29.29         | 132.28                | -1,052.07                           | -20.49       | 1,156.83               | 1,112.52                | 44.31                     | 26.106            |                    |           |
| 8,400.00                          | 8,167.37              | 8,177.75              | 8,152.07              | 38.13            | 29.62         | 133.41                | -1,052.07                           | -20.49       | 1,179.37               | 1,134.57                | 44.80                     | 26.326            |                    |           |
| 8,500.00                          | 8,262.05              | 8,272.43              | 8,246.75              | 38.75            | 29.94         | 134.49                | -1,052.07                           | -20.49       | 1,202.35               | 1,157.06                | 45.28                     | 26.552            |                    |           |
| 8,600.00                          | 8,356.72              | 8,367.10              | 8,341.42              | 39.37            | 30.27         | 135.54                | -1,052.07                           | -20.49       | 1,225.74               | 1,179.97                | 45.77                     | 26.783            |                    |           |
| 8,700.00                          | 8,451.39              | 8,461.77              | 8,436.09              | 39.99            | 30.59         | 136.55                | -1,052.07                           | -20.49       | 1,249.52               | 1,203.27                | 46.25                     | 27.017            |                    |           |
| 8,800.00                          | 8,546.07              | 8,556.44              | 8,530.77              | 40.61            | 30.92         | 137.52                | -1,052.07                           | -20.49       | 1,273.68               | 1,226.95                | 46.73                     | 27.255            |                    |           |
| 8,875.44                          | 8,617.48              | 8,627.86              | 8,602.18              | 41.08            | 31.16         | 138.23                | -1,052.07                           | -20.49       | 1,292.13               | 1,245.04                | 47.10                     | 27.437            |                    |           |
| 8,900.00                          | 8,640.90              | 8,651.28              | 8,625.60              | 41.23            | 31.24         | 138.83                | -1,052.07                           | -20.49       | 1,297.80               | 1,250.59                | 47.21                     | 27.488            |                    |           |
| 8,950.00                          | 8,689.44              | 8,699.81              | 8,674.14              | 41.49            | 31.41         | 139.77                | -1,052.07                           | -20.49       | 1,306.97               | 1,259.52                | 47.45                     | 27.544            |                    |           |
| 9,000.00                          | 8,738.83              | 8,749.20              | 8,723.53              | 41.70            | 31.58         | 140.37                | -1,052.07                           | -20.49       | 1,312.89               | 1,265.20                | 47.69                     | 27.532            |                    |           |
| 9,050.00                          | 8,788.70              | 8,799.08              | 8,773.40              | 41.87            | 31.75         | 140.63                | -1,052.07                           | -20.49       | 1,315.47               | 1,267.55                | 47.92                     | 27.454            |                    |           |
| 9,063.30                          | 8,802.00              | 8,812.38              | 8,786.70              | 41.91            | 31.80         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,267.61                | 47.98                     | 27.422            |                    |           |
| 9,100.00                          | 8,838.70              | 8,849.08              | 8,823.40              | 42.00            | 31.93         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,267.45                | 48.14                     | 27.329            |                    |           |
| 9,200.00                          | 8,938.70              | 8,949.08              | 8,923.40              | 42.26            | 32.27         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,267.01                | 48.58                     | 27.079            |                    |           |
| 9,300.00                          | 9,038.70              | 9,049.08              | 9,023.40              | 42.51            | 32.61         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,266.56                | 49.03                     | 26.833            |                    |           |
| 9,400.00                          | 9,138.70              | 9,149.08              | 9,123.40              | 42.77            | 32.96         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,266.11                | 49.47                     | 26.591            |                    |           |
| 9,500.00                          | 9,238.70              | 9,249.08              | 9,223.40              | 43.03            | 33.31         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,265.67                | 49.92                     | 26.353            |                    |           |
| 9,600.00                          | 9,338.70              | 9,349.08              | 9,323.40              | 43.30            | 33.65         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,265.22                | 50.37                     | 26.118            |                    |           |
| 9,700.00                          | 9,438.70              | 9,449.08              | 9,423.40              | 43.56            | 34.00         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,264.77                | 50.82                     | 25.887            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,800.00                          | 9,538.70              | 9,549.08              | 9,523.40              | 43.82            | 34.34         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,264.32                | 51.27                     | 25.659            |                    |           |
| 9,900.00                          | 9,638.70              | 9,649.08              | 9,623.40              | 44.09            | 34.69         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,263.86                | 51.72                     | 25.435            |                    |           |
| 10,000.00                         | 9,738.70              | 9,749.08              | 9,723.40              | 44.36            | 35.04         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,263.41                | 52.18                     | 25.214            |                    |           |
| 10,100.00                         | 9,838.70              | 9,849.08              | 9,823.40              | 44.63            | 35.39         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,262.96                | 52.63                     | 24.996            |                    |           |
| 10,200.00                         | 9,938.70              | 9,949.08              | 9,923.40              | 44.90            | 35.73         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,262.50                | 53.09                     | 24.782            |                    |           |
| 10,300.00                         | 10,038.70             | 10,049.08             | 10,023.40             | 45.17            | 36.08         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,262.05                | 53.54                     | 24.571            |                    |           |
| 10,400.00                         | 10,138.70             | 10,149.08             | 10,123.40             | 45.44            | 36.43         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,261.59                | 54.00                     | 24.363            |                    |           |
| 10,401.16                         | 10,139.86             | 10,150.24             | 10,124.56             | 45.44            | 36.43         | -90.70                | -1,052.07                           | -20.49       | 1,315.59               | 1,261.58                | 54.00                     | 24.361            |                    |           |
| 10,500.00                         | 10,238.70             | 10,248.60             | 10,222.82             | 45.71            | 36.76         | -90.82                | -1,054.89                           | -20.46       | 1,315.60               | 1,261.14                | 54.46                     | 24.157            |                    |           |
| 10,600.00                         | 10,338.70             | 10,344.54             | 10,317.06             | 45.99            | 37.07         | -91.58                | -1,072.33                           | -20.29       | 1,315.80               | 1,260.84                | 54.97                     | 23.938            |                    |           |
| 10,700.00                         | 10,438.70             | 10,432.51             | 10,399.80             | 46.26            | 37.35         | -92.87                | -1,101.92                           | -19.99       | 1,316.86               | 1,261.38                | 55.48                     | 23.736            |                    |           |
| 10,800.00                         | 10,538.70             | 10,509.92             | 10,468.14             | 46.54            | 37.58         | -94.44                | -1,138.18                           | -19.63       | 1,319.75               | 1,263.81                | 55.94                     | 23.590            |                    |           |
| 10,900.00                         | 10,638.70             | 10,576.27             | 10,522.37             | 46.82            | 37.76         | -96.10                | -1,176.34                           | -19.25       | 1,325.58               | 1,269.26                | 56.31                     | 23.539            |                    |           |
| 11,000.00                         | 10,738.70             | 10,632.35             | 10,564.50             | 47.10            | 37.91         | -97.69                | -1,213.30                           | -18.88       | 1,335.28               | 1,278.74                | 56.54                     | 23.615            |                    |           |
| 11,100.00                         | 10,838.70             | 10,679.51             | 10,597.00             | 47.38            | 38.04         | -99.15                | -1,247.46                           | -18.54       | 1,349.58               | 1,292.97                | 56.61                     | 23.842            |                    |           |
| 11,200.00                         | 10,938.70             | 10,719.22             | 10,622.12             | 47.66            | 38.15         | -100.45               | -1,278.21                           | -18.23       | 1,368.95               | 1,312.46                | 56.49                     | 24.234            |                    |           |
| 11,300.00                         | 11,038.70             | 10,750.00             | 10,640.08             | 47.94            | 38.23         | -101.50               | -1,303.20                           | -17.98       | 1,393.65               | 1,337.48                | 56.16                     | 24.815            |                    |           |
| 11,400.00                         | 11,138.70             | 10,781.43             | 10,657.01             | 48.22            | 38.32         | -102.61               | -1,329.67                           | -17.72       | 1,423.72               | 1,367.97                | 55.75                     | 25.538            |                    |           |
| 11,500.00                         | 11,238.70             | 10,800.00             | 10,666.33             | 48.51            | 38.38         | -103.28               | -1,345.74                           | -17.56       | 1,459.14               | 1,404.04                | 55.09                     | 26.485            |                    |           |
| 11,600.00                         | 11,338.70             | 10,827.17             | 10,679.00             | 48.79            | 38.46         | -104.27               | -1,369.76                           | -17.32       | 1,499.61               | 1,445.12                | 54.49                     | 27.522            |                    |           |
| 11,700.00                         | 11,438.70             | 10,850.00             | 10,688.76             | 49.08            | 38.53         | -105.11               | -1,390.40                           | -17.11       | 1,544.97               | 1,491.18                | 53.79                     | 28.722            |                    |           |
| 11,753.34                         | 11,492.04             | 10,850.00             | 10,688.76             | 49.23            | 38.53         | -105.11               | -1,390.40                           | -17.11       | 1,571.03               | 1,517.78                | 53.25                     | 29.502            |                    |           |
| 11,800.00                         | 11,538.65             | 10,850.00             | 10,688.76             | 49.37            | 38.53         | 72.83                 | -1,390.40                           | -17.11       | 1,594.51               | 1,541.74                | 52.78                     | 30.213            |                    |           |
| 11,850.00                         | 11,588.24             | 10,871.95             | 10,697.36             | 49.55            | 38.60         | 69.36                 | -1,410.59                           | -16.91       | 1,619.33               | 1,566.79                | 52.55                     | 30.818            |                    |           |
| 11,900.00                         | 11,637.10             | 10,882.26             | 10,701.14             | 49.74            | 38.64         | 66.42                 | -1,420.19                           | -16.82       | 1,643.95               | 1,591.79                | 52.16                     | 31.518            |                    |           |
| 11,950.00                         | 11,684.86             | 10,900.00             | 10,707.22             | 49.95            | 38.70         | 63.43                 | -1,436.85                           | -16.65       | 1,668.05               | 1,616.18                | 51.87                     | 32.159            |                    |           |
| 12,000.00                         | 11,731.15             | 10,900.00             | 10,707.22             | 50.18            | 38.70         | 61.11                 | -1,436.85                           | -16.65       | 1,691.33               | 1,639.97                | 51.36                     | 32.931            |                    |           |
| 12,050.00                         | 11,775.62             | 10,917.33             | 10,712.66             | 50.42            | 38.75         | 58.55                 | -1,453.30                           | -16.49       | 1,713.65               | 1,662.58                | 51.07                     | 33.552            |                    |           |
| 12,100.00                         | 11,817.93             | 10,930.13             | 10,716.36             | 50.68            | 38.80         | 56.31                 | -1,465.56                           | -16.36       | 1,734.86               | 1,684.12                | 50.74                     | 34.189            |                    |           |
| 12,150.00                         | 11,857.76             | 10,950.00             | 10,721.56             | 50.96            | 38.87         | 54.18                 | -1,484.73                           | -16.17       | 1,754.81               | 1,704.30                | 50.51                     | 34.743            |                    |           |
| 12,200.00                         | 11,894.81             | 10,950.00             | 10,721.56             | 51.25            | 38.87         | 52.58                 | -1,484.73                           | -16.17       | 1,773.28               | 1,723.21                | 50.06                     | 35.420            |                    |           |
| 12,250.00                         | 11,928.80             | 10,970.98             | 10,726.32             | 51.56            | 38.95         | 50.89                 | -1,505.16                           | -15.97       | 1,790.12               | 1,740.24                | 49.88                     | 35.891            |                    |           |
| 12,300.00                         | 11,959.45             | 11,000.00             | 10,731.67             | 51.87            | 39.06         | 49.34                 | -1,533.68                           | -15.68       | 1,805.49               | 1,755.70                | 49.79                     | 36.264            |                    |           |
| 12,350.00                         | 11,986.56             | 11,000.00             | 10,731.67             | 52.20            | 39.06         | 48.31                 | -1,533.68                           | -15.68       | 1,818.67               | 1,769.25                | 49.43                     | 36.796            |                    |           |
| 12,400.00                         | 12,009.90             | 11,000.00             | 10,731.67             | 52.55            | 39.06         | 47.42                 | -1,533.68                           | -15.68       | 1,830.34               | 1,781.24                | 49.10                     | 37.275            |                    |           |
| 12,450.00                         | 12,029.29             | 11,029.32             | 10,735.60             | 52.90            | 39.17         | 46.52                 | -1,562.73                           | -15.39       | 1,839.67               | 1,790.57                | 49.09                     | 37.472            |                    |           |
| 12,500.00                         | 12,044.60             | 11,050.00             | 10,737.48             | 53.26            | 39.25         | 45.88                 | -1,583.32                           | -15.19       | 1,847.18               | 1,798.14                | 49.03                     | 37.673            |                    |           |
| 12,550.00                         | 12,055.70             | 11,050.00             | 10,737.48             | 53.63            | 39.25         | 45.49                 | -1,583.32                           | -15.19       | 1,852.63               | 1,803.80                | 48.83                     | 37.941            |                    |           |
| 12,600.00                         | 12,062.52             | 11,074.61             | 10,738.74             | 54.01            | 39.35         | 45.20                 | -1,607.89                           | -14.94       | 1,855.83               | 1,806.96                | 48.87                     | 37.974            |                    |           |
| 12,653.34                         | 12,065.00             | 11,091.72             | 10,739.00             | 54.42            | 39.42         | 45.10                 | -1,625.00                           | -14.77       | 1,856.99               | 1,808.10                | 48.89                     | 37.987            |                    |           |
| 12,672.49                         | 12,065.00             | 11,107.92             | 10,739.00             | 54.57            | 39.49         | 45.10                 | -1,641.20                           | -14.61       | 1,856.98               | 1,808.01                | 48.97                     | 37.917            |                    |           |
| 12,700.00                         | 12,065.00             | 11,135.44             | 10,739.00             | 54.78            | 39.61         | 45.10                 | -1,668.72                           | -14.33       | 1,856.98               | 1,807.84                | 49.14                     | 37.792            |                    |           |
| 12,800.00                         | 12,065.00             | 11,235.44             | 10,739.00             | 55.59            | 40.08         | 45.10                 | -1,768.71                           | -13.34       | 1,856.96               | 1,807.20                | 49.76                     | 37.318            |                    |           |
| 12,900.00                         | 12,065.00             | 11,335.44             | 10,739.00             | 56.43            | 40.61         | 45.10                 | -1,868.71                           | -12.34       | 1,856.95               | 1,806.51                | 50.44                     | 36.816            |                    |           |
| 13,000.00                         | 12,065.00             | 11,435.44             | 10,739.00             | 57.31            | 41.20         | 45.10                 | -1,968.70                           | -11.34       | 1,856.94               | 1,805.76                | 51.17                     | 36.288            |                    |           |
| 13,100.00                         | 12,065.00             | 11,535.44             | 10,739.00             | 58.22            | 41.85         | 45.10                 | -2,068.70                           | -10.34       | 1,856.92               | 1,804.96                | 51.96                     | 35.738            |                    |           |
| 13,200.00                         | 12,065.00             | 11,635.44             | 10,739.00             | 59.17            | 42.55         | 45.10                 | -2,168.69                           | -9.34        | 1,856.91               | 1,804.11                | 52.80                     | 35.171            |                    |           |
| 13,300.00                         | 12,065.00             | 11,735.44             | 10,739.00             | 60.14            | 43.30         | 45.10                 | -2,268.69                           | -8.35        | 1,856.89               | 1,803.21                | 53.68                     | 34.590            |                    |           |
| 13,400.00                         | 12,065.00             | 11,835.44             | 10,739.00             | 61.15            | 44.10         | 45.10                 | -2,368.68                           | -7.35        | 1,856.88               | 1,802.26                | 54.61                     | 34.000            |                    |           |
| 13,500.00                         | 12,065.00             | 11,935.44             | 10,739.00             | 62.18            | 44.95         | 45.10                 | -2,468.68                           | -6.35        | 1,856.86               | 1,801.27                | 55.59                     | 33.403            |                    |           |
| 13,600.00                         | 12,065.00             | 12,035.44             | 10,739.00             | 63.24            | 45.84         | 45.10                 | -2,568.67                           | -5.35        | 1,856.85               | 1,800.24                | 56.60                     | 32.804            |                    |           |
| 13,700.00                         | 12,065.00             | 12,135.44             | 10,739.00             | 64.32            | 46.77         | 45.10                 | -2,668.67                           | -4.35        | 1,856.84               | 1,799.18                | 57.66                     | 32.205            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 13,800.00                         | 12,065.00             | 12,235.44             | 10,739.00             | 65.43            | 47.74         | 45.10                 | -2,768.66                           | -3.36        | 1,856.82               | 1,798.08                | 58.75                     | 31.608            |                    |           |
| 13,900.00                         | 12,065.00             | 12,335.44             | 10,739.00             | 66.56            | 48.74         | 45.10                 | -2,868.66                           | -2.36        | 1,856.81               | 1,796.94                | 59.87                     | 31.014            |                    |           |
| 14,000.00                         | 12,065.00             | 12,435.44             | 10,739.00             | 67.71            | 49.78         | 45.10                 | -2,968.65                           | -1.36        | 1,856.79               | 1,795.77                | 61.03                     | 30.426            |                    |           |
| 14,100.00                         | 12,065.00             | 12,535.44             | 10,739.00             | 68.88            | 50.86         | 45.10                 | -3,068.65                           | -0.36        | 1,856.78               | 1,794.56                | 62.21                     | 29.845            |                    |           |
| 14,200.00                         | 12,065.00             | 12,635.44             | 10,739.00             | 70.08            | 51.96         | 45.10                 | -3,168.64                           | 0.64         | 1,856.76               | 1,793.34                | 63.43                     | 29.273            |                    |           |
| 14,300.00                         | 12,065.00             | 12,735.44             | 10,739.00             | 71.29            | 53.09         | 45.10                 | -3,268.64                           | 1.63         | 1,856.75               | 1,792.08                | 64.67                     | 28.711            |                    |           |
| 14,400.00                         | 12,065.00             | 12,835.44             | 10,739.00             | 72.51            | 54.25         | 45.10                 | -3,368.63                           | 2.63         | 1,856.73               | 1,790.80                | 65.94                     | 28.158            |                    |           |
| 14,500.00                         | 12,065.00             | 12,935.44             | 10,739.00             | 73.76            | 55.43         | 45.10                 | -3,468.63                           | 3.63         | 1,856.72               | 1,789.49                | 67.23                     | 27.616            |                    |           |
| 14,600.00                         | 12,065.00             | 13,035.44             | 10,739.00             | 75.02            | 56.64         | 45.10                 | -3,568.62                           | 4.63         | 1,856.71               | 1,788.16                | 68.55                     | 27.086            |                    |           |
| 14,700.00                         | 12,065.00             | 13,135.44             | 10,739.00             | 76.29            | 57.87         | 45.10                 | -3,668.62                           | 5.63         | 1,856.69               | 1,786.81                | 69.88                     | 26.568            |                    |           |
| 14,800.00                         | 12,065.00             | 13,235.44             | 10,739.00             | 77.58            | 59.12         | 45.09                 | -3,768.61                           | 6.63         | 1,856.68               | 1,785.44                | 71.24                     | 26.062            |                    |           |
| 14,900.00                         | 12,065.00             | 13,335.44             | 10,739.00             | 78.89            | 60.39         | 45.09                 | -3,868.61                           | 7.62         | 1,856.66               | 1,784.05                | 72.61                     | 25.569            |                    |           |
| 15,000.00                         | 12,065.00             | 13,435.44             | 10,739.00             | 80.20            | 61.67         | 45.09                 | -3,968.60                           | 8.62         | 1,856.65               | 1,782.64                | 74.01                     | 25.087            |                    |           |
| 15,100.00                         | 12,065.00             | 13,535.44             | 10,739.00             | 81.53            | 62.98         | 45.09                 | -4,068.60                           | 9.62         | 1,856.63               | 1,781.22                | 75.42                     | 24.618            |                    |           |
| 15,200.00                         | 12,065.00             | 13,635.44             | 10,739.00             | 82.87            | 64.30         | 45.09                 | -4,168.59                           | 10.62        | 1,856.62               | 1,779.78                | 76.84                     | 24.161            |                    |           |
| 15,300.00                         | 12,065.00             | 13,735.44             | 10,739.00             | 84.22            | 65.63         | 45.09                 | -4,268.59                           | 11.62        | 1,856.61               | 1,778.32                | 78.28                     | 23.716            |                    |           |
| 15,400.00                         | 12,065.00             | 13,835.44             | 10,739.00             | 85.59            | 66.98         | 45.09                 | -4,368.58                           | 12.61        | 1,856.59               | 1,776.85                | 79.74                     | 23.283            |                    |           |
| 15,500.00                         | 12,065.00             | 13,935.44             | 10,739.00             | 86.96            | 68.34         | 45.09                 | -4,468.58                           | 13.61        | 1,856.58               | 1,775.37                | 81.20                     | 22.863            |                    |           |
| 15,600.00                         | 12,065.00             | 14,035.44             | 10,739.00             | 88.34            | 69.72         | 45.09                 | -4,568.57                           | 14.61        | 1,856.56               | 1,773.88                | 82.68                     | 22.454            |                    |           |
| 15,700.00                         | 12,065.00             | 14,135.44             | 10,739.00             | 89.73            | 71.10         | 45.09                 | -4,668.57                           | 15.61        | 1,856.55               | 1,772.37                | 84.18                     | 22.055            |                    |           |
| 15,800.00                         | 12,065.00             | 14,235.44             | 10,739.00             | 91.13            | 72.50         | 45.09                 | -4,768.56                           | 16.61        | 1,856.53               | 1,770.86                | 85.68                     | 21.668            |                    |           |
| 15,900.00                         | 12,065.00             | 14,335.44             | 10,739.00             | 92.54            | 73.91         | 45.09                 | -4,868.56                           | 17.60        | 1,856.52               | 1,769.33                | 87.19                     | 21.292            |                    |           |
| 16,000.00                         | 12,065.00             | 14,435.44             | 10,739.00             | 93.95            | 75.33         | 45.09                 | -4,968.55                           | 18.60        | 1,856.51               | 1,767.79                | 88.71                     | 20.927            |                    |           |
| 16,100.00                         | 12,065.00             | 14,535.44             | 10,739.00             | 95.38            | 76.75         | 45.09                 | -5,068.55                           | 19.60        | 1,856.49               | 1,766.24                | 90.25                     | 20.571            |                    |           |
| 16,200.00                         | 12,065.00             | 14,635.44             | 10,739.00             | 96.81            | 78.19         | 45.09                 | -5,168.54                           | 20.60        | 1,856.48               | 1,764.69                | 91.79                     | 20.226            |                    |           |
| 16,300.00                         | 12,065.00             | 14,735.44             | 10,739.00             | 98.24            | 79.63         | 45.09                 | -5,268.54                           | 21.60        | 1,856.46               | 1,763.13                | 93.34                     | 19.890            |                    |           |
| 16,400.00                         | 12,065.00             | 14,835.44             | 10,739.00             | 99.69            | 81.09         | 45.09                 | -5,368.53                           | 22.59        | 1,856.45               | 1,761.55                | 94.89                     | 19.563            |                    |           |
| 16,500.00                         | 12,065.00             | 14,935.44             | 10,739.00             | 101.14           | 82.55         | 45.09                 | -5,468.53                           | 23.59        | 1,856.43               | 1,759.98                | 96.46                     | 19.246            |                    |           |
| 16,600.00                         | 12,065.00             | 15,035.44             | 10,739.00             | 102.60           | 84.01         | 45.09                 | -5,568.52                           | 24.59        | 1,856.42               | 1,758.39                | 98.03                     | 18.937            |                    |           |
| 16,700.00                         | 12,065.00             | 15,135.44             | 10,739.00             | 104.06           | 85.49         | 45.09                 | -5,668.52                           | 25.59        | 1,856.41               | 1,756.80                | 99.61                     | 18.637            |                    |           |
| 16,800.00                         | 12,065.00             | 15,235.44             | 10,739.00             | 105.53           | 86.97         | 45.09                 | -5,768.51                           | 26.59        | 1,856.39               | 1,755.20                | 101.19                    | 18.345            |                    |           |
| 16,900.00                         | 12,065.00             | 15,335.44             | 10,739.00             | 107.00           | 88.45         | 45.09                 | -5,868.51                           | 27.59        | 1,856.38               | 1,753.59                | 102.78                    | 18.061            |                    |           |
| 17,000.00                         | 12,065.00             | 15,435.44             | 10,739.00             | 108.48           | 89.94         | 45.08                 | -5,968.50                           | 28.58        | 1,856.36               | 1,751.99                | 104.38                    | 17.785            |                    |           |
| 17,100.00                         | 12,065.00             | 15,535.44             | 10,739.00             | 109.96           | 91.44         | 45.08                 | -6,068.50                           | 29.58        | 1,856.35               | 1,750.37                | 105.98                    | 17.516            |                    |           |
| 17,200.00                         | 12,065.00             | 15,635.44             | 10,739.00             | 111.45           | 92.94         | 45.08                 | -6,168.49                           | 30.58        | 1,856.33               | 1,748.75                | 107.59                    | 17.254            |                    |           |
| 17,300.00                         | 12,065.00             | 15,735.44             | 10,739.00             | 112.94           | 94.45         | 45.08                 | -6,268.49                           | 31.58        | 1,856.32               | 1,747.12                | 109.20                    | 17.000            |                    |           |
| 17,400.00                         | 12,065.00             | 15,835.44             | 10,739.00             | 114.44           | 95.96         | 45.08                 | -6,368.48                           | 32.58        | 1,856.31               | 1,745.49                | 110.81                    | 16.752            |                    |           |
| 17,500.00                         | 12,065.00             | 15,935.44             | 10,739.00             | 115.94           | 97.48         | 45.08                 | -6,468.48                           | 33.57        | 1,856.29               | 1,743.86                | 112.43                    | 16.510            |                    |           |
| 17,600.00                         | 12,065.00             | 16,035.44             | 10,739.00             | 117.45           | 99.00         | 45.08                 | -6,568.47                           | 34.57        | 1,856.28               | 1,742.22                | 114.06                    | 16.275            |                    |           |
| 17,700.00                         | 12,065.00             | 16,135.44             | 10,739.00             | 118.96           | 100.53        | 45.08                 | -6,668.47                           | 35.57        | 1,856.26               | 1,740.58                | 115.69                    | 16.046            |                    |           |
| 17,800.00                         | 12,065.00             | 16,235.44             | 10,739.00             | 120.47           | 102.06        | 45.08                 | -6,768.46                           | 36.57        | 1,856.25               | 1,738.93                | 117.32                    | 15.822            |                    |           |
| 17,900.00                         | 12,065.00             | 16,335.44             | 10,739.00             | 121.99           | 103.59        | 45.08                 | -6,868.46                           | 37.57        | 1,856.23               | 1,737.28                | 118.95                    | 15.605            |                    |           |
| 18,000.00                         | 12,065.00             | 16,435.44             | 10,739.00             | 123.51           | 105.13        | 45.08                 | -6,968.45                           | 38.56        | 1,856.22               | 1,735.63                | 120.59                    | 15.393            |                    |           |
| 18,100.00                         | 12,065.00             | 16,535.44             | 10,739.00             | 125.03           | 106.67        | 45.08                 | -7,068.45                           | 39.56        | 1,856.21               | 1,733.97                | 122.23                    | 15.186            |                    |           |
| 18,200.00                         | 12,065.00             | 16,635.44             | 10,739.00             | 126.56           | 108.21        | 45.08                 | -7,168.44                           | 40.56        | 1,856.19               | 1,732.31                | 123.88                    | 14.984            |                    |           |
| 18,300.00                         | 12,065.00             | 16,735.44             | 10,739.00             | 128.09           | 109.76        | 45.08                 | -7,268.44                           | 41.56        | 1,856.18               | 1,730.65                | 125.53                    | 14.787            |                    |           |
| 18,400.00                         | 12,065.00             | 16,835.44             | 10,739.00             | 129.62           | 111.30        | 45.08                 | -7,368.43                           | 42.56        | 1,856.16               | 1,728.99                | 127.18                    | 14.595            |                    |           |
| 18,500.00                         | 12,065.00             | 16,935.44             | 10,739.00             | 131.16           | 112.86        | 45.08                 | -7,468.43                           | 43.55        | 1,856.15               | 1,727.32                | 128.83                    | 14.408            |                    |           |
| 18,600.00                         | 12,065.00             | 17,035.44             | 10,739.00             | 132.69           | 114.41        | 45.08                 | -7,568.42                           | 44.55        | 1,856.13               | 1,725.65                | 130.49                    | 14.225            |                    |           |
| 18,700.00                         | 12,065.00             | 17,135.44             | 10,739.00             | 134.24           | 115.97        | 45.08                 | -7,668.42                           | 45.55        | 1,856.12               | 1,723.97                | 132.14                    | 14.046            |                    |           |
| 18,800.00                         | 12,065.00             | 17,235.44             | 10,739.00             | 135.78           | 117.53        | 45.08                 | -7,768.41                           | 46.55        | 1,856.11               | 1,722.30                | 133.80                    | 13.872            |                    |           |
| 18,900.00                         | 12,065.00             | 17,335.44             | 10,739.00             | 137.33           | 119.09        | 45.08                 | -7,868.41                           | 47.55        | 1,856.09               | 1,720.62                | 135.47                    | 13.701            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 502H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                                               |           |                    |           |
| 19,000.00                         | 12,065.00             | 17,435.44             | 10,739.00             | 138.87           | 120.66        | 45.08                 | -7,968.40                           | 48.55        | 1,856.08               | 1,718.94                | 137.13                    | 13.535            |                                                       |           |                    |           |
| 19,100.00                         | 12,065.00             | 17,535.44             | 10,739.00             | 140.43           | 122.23        | 45.08                 | -8,068.40                           | 49.54        | 1,856.06               | 1,717.27                | 138.80                    | 13.372            |                                                       |           |                    |           |
| 19,200.00                         | 12,065.00             | 17,635.44             | 10,739.00             | 141.98           | 123.80        | 45.08                 | -8,168.39                           | 50.54        | 1,856.05               | 1,715.58                | 140.47                    | 13.214            |                                                       |           |                    |           |
| 19,300.00                         | 12,065.00             | 17,735.44             | 10,739.00             | 143.53           | 125.37        | 45.07                 | -8,268.39                           | 51.54        | 1,856.03               | 1,713.90                | 142.14                    | 13.058            |                                                       |           |                    |           |
| 19,400.00                         | 12,065.00             | 17,835.44             | 10,739.00             | 145.09           | 126.94        | 45.07                 | -8,368.38                           | 52.54        | 1,856.02               | 1,712.21                | 143.81                    | 12.906            |                                                       |           |                    |           |
| 19,500.00                         | 12,065.00             | 17,935.44             | 10,739.00             | 146.65           | 128.52        | 45.07                 | -8,468.38                           | 53.54        | 1,856.00               | 1,710.53                | 145.48                    | 12.758            |                                                       |           |                    |           |
| 19,600.00                         | 12,065.00             | 18,035.44             | 10,739.00             | 148.21           | 130.09        | 45.07                 | -8,568.37                           | 54.53        | 1,855.99               | 1,708.84                | 147.15                    | 12.613            |                                                       |           |                    |           |
| 19,700.00                         | 12,065.00             | 18,135.44             | 10,739.00             | 149.78           | 131.67        | 45.07                 | -8,668.37                           | 55.53        | 1,855.98               | 1,707.15                | 148.83                    | 12.471            |                                                       |           |                    |           |
| 19,800.00                         | 12,065.00             | 18,235.44             | 10,739.00             | 151.34           | 133.25        | 45.07                 | -8,768.36                           | 56.53        | 1,855.96               | 1,705.46                | 150.50                    | 12.332            |                                                       |           |                    |           |
| 19,900.00                         | 12,065.00             | 18,335.44             | 10,739.00             | 152.91           | 134.84        | 45.07                 | -8,868.36                           | 57.53        | 1,855.95               | 1,703.76                | 152.18                    | 12.195            |                                                       |           |                    |           |
| 20,000.00                         | 12,065.00             | 18,435.44             | 10,739.00             | 154.48           | 136.42        | 45.07                 | -8,968.35                           | 58.53        | 1,855.93               | 1,702.07                | 153.86                    | 12.062            |                                                       |           |                    |           |
| 20,100.00                         | 12,065.00             | 18,535.44             | 10,739.00             | 156.05           | 138.01        | 45.07                 | -9,068.35                           | 59.52        | 1,855.92               | 1,700.38                | 155.54                    | 11.932            |                                                       |           |                    |           |
| 20,200.00                         | 12,065.00             | 18,635.44             | 10,739.00             | 157.62           | 139.59        | 45.07                 | -9,168.34                           | 60.52        | 1,855.90               | 1,698.68                | 157.22                    | 11.804            |                                                       |           |                    |           |
| 20,300.00                         | 12,065.00             | 18,735.44             | 10,739.00             | 159.20           | 141.18        | 45.07                 | -9,268.34                           | 61.52        | 1,855.89               | 1,696.98                | 158.91                    | 11.679            |                                                       |           |                    |           |
| 20,400.00                         | 12,065.00             | 18,835.44             | 10,739.00             | 160.77           | 142.77        | 45.07                 | -9,368.33                           | 62.52        | 1,855.88               | 1,695.29                | 160.59                    | 11.557            |                                                       |           |                    |           |
| 20,500.00                         | 12,065.00             | 18,935.44             | 10,739.00             | 162.35           | 144.37        | 45.07                 | -9,468.33                           | 63.52        | 1,855.86               | 1,693.59                | 162.27                    | 11.437            |                                                       |           |                    |           |
| 20,600.00                         | 12,065.00             | 19,035.44             | 10,739.00             | 163.93           | 145.96        | 45.07                 | -9,568.32                           | 64.52        | 1,855.85               | 1,691.89                | 163.96                    | 11.319            |                                                       |           |                    |           |
| 20,700.00                         | 12,065.00             | 19,135.44             | 10,739.00             | 165.51           | 147.55        | 45.07                 | -9,668.32                           | 65.51        | 1,855.83               | 1,690.19                | 165.64                    | 11.204            |                                                       |           |                    |           |
| 20,800.00                         | 12,065.00             | 19,235.44             | 10,739.00             | 167.09           | 149.15        | 45.07                 | -9,768.31                           | 66.51        | 1,855.82               | 1,688.49                | 167.33                    | 11.091            |                                                       |           |                    |           |
| 20,900.00                         | 12,065.00             | 19,335.44             | 10,739.00             | 168.67           | 150.75        | 45.07                 | -9,868.31                           | 67.51        | 1,855.80               | 1,686.79                | 169.02                    | 10.980            |                                                       |           |                    |           |
| 21,000.00                         | 12,065.00             | 19,435.44             | 10,739.00             | 170.26           | 152.34        | 45.07                 | -9,968.30                           | 68.51        | 1,855.79               | 1,685.09                | 170.70                    | 10.871            |                                                       |           |                    |           |
| 21,100.00                         | 12,065.00             | 19,535.44             | 10,739.00             | 171.84           | 153.94        | 45.07                 | -10,068.30                          | 69.51        | 1,855.78               | 1,683.38                | 172.39                    | 10.765            |                                                       |           |                    |           |
| 21,200.00                         | 12,065.00             | 19,635.44             | 10,739.00             | 173.43           | 155.54        | 45.07                 | -10,168.29                          | 70.50        | 1,855.76               | 1,681.68                | 174.08                    | 10.660            |                                                       |           |                    |           |
| 21,300.00                         | 12,065.00             | 19,735.44             | 10,739.00             | 175.02           | 157.14        | 45.07                 | -10,268.29                          | 71.50        | 1,855.75               | 1,679.98                | 175.77                    | 10.558            |                                                       |           |                    |           |
| 21,400.00                         | 12,065.00             | 19,835.44             | 10,739.00             | 176.60           | 158.75        | 45.07                 | -10,368.28                          | 72.50        | 1,855.73               | 1,678.28                | 177.46                    | 10.457            |                                                       |           |                    |           |
| 21,500.00                         | 12,065.00             | 19,935.44             | 10,739.00             | 178.19           | 160.35        | 45.07                 | -10,468.28                          | 73.50        | 1,855.72               | 1,676.57                | 179.15                    | 10.359            |                                                       |           |                    |           |
| 21,600.00                         | 12,065.00             | 20,035.44             | 10,739.00             | 179.79           | 161.95        | 45.06                 | -10,568.27                          | 74.50        | 1,855.70               | 1,674.87                | 180.84                    | 10.262            |                                                       |           |                    |           |
| 21,700.00                         | 12,065.00             | 20,135.44             | 10,739.00             | 181.38           | 163.56        | 45.06                 | -10,668.27                          | 75.49        | 1,855.69               | 1,673.16                | 182.53                    | 10.166            |                                                       |           |                    |           |
| 21,800.00                         | 12,065.00             | 20,235.44             | 10,739.00             | 182.97           | 165.17        | 45.06                 | -10,768.26                          | 76.49        | 1,855.68               | 1,671.46                | 184.22                    | 10.073            |                                                       |           |                    |           |
| 21,900.00                         | 12,065.00             | 20,335.44             | 10,739.00             | 184.57           | 166.77        | 45.06                 | -10,868.26                          | 77.49        | 1,855.66               | 1,669.75                | 185.91                    | 9.981             |                                                       |           |                    |           |
| 22,000.00                         | 12,065.00             | 20,435.44             | 10,739.00             | 186.16           | 168.38        | 45.06                 | -10,968.25                          | 78.49        | 1,855.65               | 1,668.04                | 187.60                    | 9.891             |                                                       |           |                    |           |
| 22,100.00                         | 12,065.00             | 20,535.44             | 10,739.00             | 187.76           | 169.99        | 45.06                 | -11,068.25                          | 79.49        | 1,855.63               | 1,666.34                | 189.29                    | 9.803             |                                                       |           |                    |           |
| 22,200.00                         | 12,065.00             | 20,635.44             | 10,739.00             | 189.36           | 171.60        | 45.06                 | -11,168.24                          | 80.48        | 1,855.62               | 1,664.63                | 190.98                    | 9.716             |                                                       |           |                    |           |
| 22,300.00                         | 12,065.00             | 20,735.44             | 10,739.00             | 190.95           | 173.21        | 45.06                 | -11,268.24                          | 81.48        | 1,855.60               | 1,662.93                | 192.68                    | 9.631             |                                                       |           |                    |           |
| 22,400.00                         | 12,065.00             | 20,835.44             | 10,739.00             | 192.55           | 174.82        | 45.06                 | -11,368.23                          | 82.48        | 1,855.59               | 1,661.22                | 194.37                    | 9.547             |                                                       |           |                    |           |
| 22,442.57                         | 12,065.00             | 20,878.01             | 10,739.00             | 193.23           | 175.51        | 45.06                 | -11,410.80                          | 82.91        | 1,855.58               | 1,660.49                | 195.09                    | 9.511             |                                                       |           |                    |           |
| 22,445.57                         | 12,065.00             | 20,879.44             | 10,739.00             | 193.28           | 175.53        | 45.06                 | -11,412.23                          | 82.92        | 1,855.58               | 1,660.47                | 195.11                    | 9.510 SF          |                                                       |           |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.88               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 82.20                 | 82.20                 | 0.13             | 0.10          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,778.63                | 0.16                      | N/A               |                    |           |
| 200.00                            | 200.00                | 182.20                | 182.20                | 0.48             | 0.42          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,778.15                | 0.64                      | 2,775.125         |                    |           |
| 300.00                            | 300.00                | 282.20                | 282.20                | 0.84             | 0.78          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,777.65                | 1.15                      | 1,550.506         |                    |           |
| 400.00                            | 400.00                | 382.20                | 382.20                | 1.20             | 1.14          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,777.14                | 1.65                      | 1,075.503         |                    |           |
| 500.00                            | 500.00                | 482.20                | 482.20                | 1.56             | 1.50          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,776.63                | 2.16                      | 823.238           |                    |           |
| 600.00                            | 600.00                | 582.20                | 582.20                | 1.92             | 1.85          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,776.13                | 2.67                      | 666.815           |                    |           |
| 700.00                            | 700.00                | 682.20                | 682.20                | 2.28             | 2.21          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,775.62                | 3.17                      | 560.340           |                    |           |
| 800.00                            | 800.00                | 782.20                | 782.20                | 2.63             | 2.57          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,775.11                | 3.68                      | 483.184           |                    |           |
| 900.00                            | 900.00                | 882.20                | 882.20                | 2.99             | 2.93          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,774.61                | 4.19                      | 424.703           |                    |           |
| 1,000.00                          | 1,000.00              | 982.20                | 982.20                | 3.35             | 3.29          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,774.10                | 4.70                      | 378.850           |                    |           |
| 1,100.00                          | 1,100.00              | 1,082.20              | 1,082.20              | 3.71             | 3.65          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,773.59                | 5.20                      | 341.932           |                    |           |
| 1,200.00                          | 1,200.00              | 1,182.20              | 1,182.20              | 4.07             | 4.01          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,773.09                | 5.71                      | 311.570           |                    |           |
| 1,300.00                          | 1,300.00              | 1,282.20              | 1,282.20              | 4.43             | 4.36          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,772.58                | 6.22                      | 286.161           |                    |           |
| 1,400.00                          | 1,400.00              | 1,382.20              | 1,382.20              | 4.79             | 4.72          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,772.07                | 6.72                      | 264.583           |                    |           |
| 1,500.00                          | 1,500.00              | 1,482.20              | 1,482.20              | 5.14             | 5.08          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,771.57                | 7.23                      | 246.031           |                    |           |
| 1,600.00                          | 1,600.00              | 1,582.20              | 1,582.20              | 5.50             | 5.44          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,771.06                | 7.74                      | 229.911           |                    |           |
| 1,700.00                          | 1,700.00              | 1,682.20              | 1,682.20              | 5.86             | 5.80          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,770.55                | 8.24                      | 215.772           |                    |           |
| 1,800.00                          | 1,800.00              | 1,782.20              | 1,782.20              | 6.22             | 6.16          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,770.04                | 8.75                      | 203.272           |                    |           |
| 1,900.00                          | 1,900.00              | 1,882.20              | 1,882.20              | 6.58             | 6.51          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,769.54                | 9.26                      | 192.141           |                    |           |
| 2,000.00                          | 2,000.00              | 1,982.20              | 1,982.20              | 6.94             | 6.87          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,769.03                | 9.76                      | 182.166           |                    |           |
| 2,100.00                          | 2,100.00              | 2,082.20              | 2,082.20              | 7.29             | 7.23          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,768.52                | 10.27                     | 173.175           |                    |           |
| 2,200.00                          | 2,200.00              | 2,182.20              | 2,182.20              | 7.65             | 7.59          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,768.02                | 10.78                     | 165.030           |                    |           |
| 2,300.00                          | 2,300.00              | 2,282.20              | 2,282.20              | 8.01             | 7.95          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,767.51                | 11.29                     | 157.617           |                    |           |
| 2,400.00                          | 2,400.00              | 2,382.20              | 2,382.20              | 8.37             | 8.31          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,767.00                | 11.79                     | 150.841           |                    |           |
| 2,500.00                          | 2,500.00              | 2,482.20              | 2,482.20              | 8.73             | 8.67          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,766.50                | 12.30                     | 144.624           |                    |           |
| 2,600.00                          | 2,600.00              | 2,582.20              | 2,582.20              | 9.09             | 9.02          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,765.99                | 12.81                     | 138.899           |                    |           |
| 2,700.00                          | 2,700.00              | 2,682.20              | 2,682.20              | 9.45             | 9.38          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,765.48                | 13.31                     | 133.610           |                    |           |
| 2,800.00                          | 2,800.00              | 2,782.20              | 2,782.20              | 9.80             | 9.74          | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,764.98                | 13.82                     | 128.709           |                    |           |
| 2,900.00                          | 2,900.00              | 2,882.20              | 2,882.20              | 10.16            | 10.10         | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,764.47                | 14.33                     | 124.155           |                    |           |
| 3,000.00                          | 3,000.00              | 2,982.20              | 2,982.20              | 10.52            | 10.46         | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,763.96                | 14.83                     | 119.912           |                    |           |
| 3,100.00                          | 3,100.00              | 3,082.20              | 3,082.20              | 10.88            | 10.82         | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,763.45                | 15.34                     | 115.949           |                    |           |
| 3,200.00                          | 3,200.00              | 3,182.20              | 3,182.20              | 11.24            | 11.17         | 124.34                | -1,003.35                           | 1,468.81     | 1,778.80               | 1,762.95                | 15.85                     | 112.240           |                    |           |
| 3,300.00                          | 3,299.99              | 3,282.19              | 3,282.19              | 11.58            | 11.53         | -4.33                 | -1,003.35                           | 1,468.81     | 1,777.49               | 1,761.15                | 16.34                     | 108.752           |                    |           |
| 3,400.00                          | 3,399.91              | 3,382.11              | 3,382.11              | 11.91            | 11.89         | -4.34                 | -1,003.35                           | 1,468.81     | 1,773.58               | 1,756.74                | 16.83                     | 105.376           |                    |           |
| 3,500.00                          | 3,499.69              | 3,481.89              | 3,481.89              | 12.25            | 12.25         | -4.36                 | -1,003.35                           | 1,468.81     | 1,767.05               | 1,749.74                | 17.32                     | 102.036           |                    |           |
| 3,600.00                          | 3,599.27              | 3,581.47              | 3,581.47              | 12.58            | 12.61         | -4.40                 | -1,003.35                           | 1,468.81     | 1,757.93               | 1,740.13                | 17.81                     | 98.732            |                    |           |
| 3,700.00                          | 3,698.57              | 3,680.77              | 3,680.77              | 12.92            | 12.96         | -4.44                 | -1,003.35                           | 1,468.81     | 1,746.21               | 1,727.92                | 18.29                     | 95.464            |                    |           |
| 3,800.00                          | 3,797.54              | 3,779.74              | 3,779.74              | 13.27            | 13.32         | -4.50                 | -1,003.35                           | 1,468.81     | 1,731.91               | 1,713.13                | 18.78                     | 92.231            |                    |           |
| 3,900.00                          | 3,896.09              | 3,878.29              | 3,878.29              | 13.62            | 13.67         | -4.56                 | -1,003.35                           | 1,468.81     | 1,715.02               | 1,695.76                | 19.26                     | 89.031            |                    |           |
| 4,000.00                          | 3,994.16              | 3,976.36              | 3,976.36              | 13.98            | 14.02         | -4.64                 | -1,003.35                           | 1,468.81     | 1,695.57               | 1,675.83                | 19.75                     | 85.863            |                    |           |
| 4,100.00                          | 4,091.70              | 4,073.90              | 4,073.90              | 14.35            | 14.37         | -4.72                 | -1,003.35                           | 1,468.81     | 1,673.58               | 1,653.35                | 20.23                     | 82.727            |                    |           |
| 4,200.00                          | 4,188.62              | 4,170.82              | 4,170.82              | 14.74            | 14.72         | -4.83                 | -1,003.35                           | 1,468.81     | 1,649.04               | 1,628.33                | 20.71                     | 79.620            |                    |           |
| 4,300.00                          | 4,284.86              | 4,267.06              | 4,267.06              | 15.14            | 15.06         | -4.94                 | -1,003.35                           | 1,468.81     | 1,621.99               | 1,600.80                | 21.19                     | 76.541            |                    |           |
| 4,400.00                          | 4,380.36              | 4,362.56              | 4,362.56              | 15.55            | 15.41         | -5.08                 | -1,003.35                           | 1,468.81     | 1,592.44               | 1,570.77                | 21.67                     | 73.489            |                    |           |
| 4,452.43                          | 4,430.11              | 4,412.31              | 4,412.31              | 15.78            | 15.58         | -5.15                 | -1,003.35                           | 1,468.81     | 1,575.96               | 1,554.04                | 21.92                     | 71.898            |                    |           |
| 4,500.00                          | 4,475.14              | 4,457.34              | 4,457.34              | 15.99            | 15.75         | -5.20                 | -1,003.35                           | 1,468.81     | 1,560.69               | 1,538.55                | 22.15                     | 70.474            |                    |           |
| 4,600.00                          | 4,569.82              | 4,537.16              | 4,537.16              | 16.44            | 16.03         | -5.30                 | -1,003.44                           | 1,468.97     | 1,528.86               | 1,506.28                | 22.58                     | 67.696            |                    |           |
| 4,700.00                          | 4,664.49              | 4,600.00              | 4,599.99              | 16.91            | 16.24         | -5.37                 | -1,004.02                           | 1,469.93     | 1,498.57               | 1,475.59                | 22.98                     | 65.212            |                    |           |
| 4,800.00                          | 4,759.16              | 4,677.24              | 4,677.18              | 17.39            | 16.50         | -5.47                 | -1,005.46                           | 1,472.32     | 1,469.96               | 1,446.55                | 23.40                     | 62.811            |                    |           |
| 4,900.00                          | 4,853.84              | 4,773.22              | 4,773.07              | 17.87            | 16.82         | -5.60                 | -1,007.62                           | 1,475.92     | 1,442.06               | 1,418.18                | 23.88                     | 60.400            |                    |           |
| 5,000.00                          | 4,948.51              | 4,869.20              | 4,868.95              | 18.37            | 17.14         | -5.74                 | -1,009.77                           | 1,479.52     | 1,414.16               | 1,389.81                | 24.35                     | 58.076            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,965.17              | 4,964.84              | 18.88            | 17.46         | -5.88                 | -1,011.93                           | 1,483.11     | 1,386.27               | 1,361.45                | 24.83                     | 55.834            |                    |           |
| 5,200.00                          | 5,137.85              | 5,061.15              | 5,060.72              | 19.39            | 17.79         | -6.02                 | -1,014.09                           | 1,486.71     | 1,358.40               | 1,333.09                | 25.31                     | 53.672            |                    |           |
| 5,300.00                          | 5,232.53              | 5,157.13              | 5,156.61              | 19.92            | 18.11         | -6.17                 | -1,016.25                           | 1,490.31     | 1,330.53               | 1,304.73                | 25.79                     | 51.586            |                    |           |
| 5,400.00                          | 5,327.20              | 5,253.11              | 5,252.49              | 20.45            | 18.44         | -6.33                 | -1,018.41                           | 1,493.90     | 1,302.67               | 1,276.39                | 26.28                     | 49.573            |                    |           |
| 5,500.00                          | 5,421.87              | 5,349.08              | 5,348.38              | 20.99            | 18.76         | -6.50                 | -1,020.56                           | 1,497.50     | 1,274.81               | 1,248.05                | 26.77                     | 47.628            |                    |           |
| 5,600.00                          | 5,516.54              | 5,445.06              | 5,444.26              | 21.53            | 19.09         | -6.67                 | -1,022.72                           | 1,501.10     | 1,246.97               | 1,219.72                | 27.26                     | 45.750            |                    |           |
| 5,700.00                          | 5,611.22              | 5,541.04              | 5,540.15              | 22.08            | 19.42         | -6.85                 | -1,024.88                           | 1,504.69     | 1,219.14               | 1,191.39                | 27.75                     | 43.935            |                    |           |
| 5,800.00                          | 5,705.89              | 5,637.01              | 5,636.03              | 22.63            | 19.75         | -7.04                 | -1,027.04                           | 1,508.29     | 1,191.32               | 1,163.08                | 28.24                     | 42.181            |                    |           |
| 5,900.00                          | 5,800.56              | 5,732.99              | 5,731.92              | 23.19            | 20.08         | -7.24                 | -1,029.20                           | 1,511.89     | 1,163.52               | 1,134.78                | 28.74                     | 40.484            |                    |           |
| 6,000.00                          | 5,895.23              | 5,828.97              | 5,827.80              | 23.76            | 20.41         | -7.44                 | -1,031.35                           | 1,515.48     | 1,135.73               | 1,106.49                | 29.24                     | 38.843            |                    |           |
| 6,100.00                          | 5,989.91              | 5,961.95              | 5,960.73              | 24.33            | 20.87         | -7.75                 | -1,033.25                           | 1,518.64     | 1,106.43               | 1,076.63                | 29.80                     | 37.132            |                    |           |
| 6,200.00                          | 6,084.58              | 6,068.00              | 6,066.78              | 24.90            | 21.24         | -8.01                 | -1,033.35                           | 1,518.81     | 1,074.64               | 1,044.33                | 30.31                     | 35.451            |                    |           |
| 6,300.00                          | 6,179.25              | 6,162.67              | 6,161.45              | 25.48            | 21.58         | -8.25                 | -1,033.35                           | 1,518.81     | 1,042.73               | 1,011.91                | 30.82                     | 33.831            |                    |           |
| 6,400.00                          | 6,273.92              | 6,257.35              | 6,256.12              | 26.05            | 21.92         | -8.52                 | -1,033.35                           | 1,518.81     | 1,010.84               | 979.50                  | 31.33                     | 32.264            |                    |           |
| 6,500.00                          | 6,368.60              | 6,352.02              | 6,350.80              | 26.64            | 22.26         | -8.80                 | -1,033.35                           | 1,518.81     | 978.96                 | 947.12                  | 31.84                     | 30.745            |                    |           |
| 6,600.00                          | 6,463.27              | 6,446.69              | 6,445.47              | 27.22            | 22.59         | -9.09                 | -1,033.35                           | 1,518.81     | 947.11                 | 914.75                  | 32.35                     | 29.273            |                    |           |
| 6,700.00                          | 6,557.94              | 6,541.36              | 6,540.14              | 27.81            | 22.93         | -9.41                 | -1,033.35                           | 1,518.81     | 915.28                 | 882.41                  | 32.87                     | 27.846            |                    |           |
| 6,800.00                          | 6,652.61              | 6,636.04              | 6,634.81              | 28.40            | 23.27         | -9.75                 | -1,033.35                           | 1,518.81     | 883.48                 | 850.09                  | 33.39                     | 26.463            |                    |           |
| 6,900.00                          | 6,747.29              | 6,730.71              | 6,729.49              | 29.00            | 23.61         | -10.12                | -1,033.35                           | 1,518.81     | 851.71                 | 817.80                  | 33.91                     | 25.120            |                    |           |
| 7,000.00                          | 6,841.96              | 6,825.38              | 6,824.16              | 29.59            | 23.95         | -10.51                | -1,033.35                           | 1,518.81     | 819.97                 | 785.54                  | 34.43                     | 23.818            |                    |           |
| 7,100.00                          | 6,936.63              | 6,920.05              | 6,918.83              | 30.19            | 24.28         | -10.94                | -1,033.35                           | 1,518.81     | 788.27                 | 753.32                  | 34.95                     | 22.553            |                    |           |
| 7,200.00                          | 7,031.30              | 7,014.73              | 7,013.50              | 30.79            | 24.62         | -11.40                | -1,033.35                           | 1,518.81     | 756.62                 | 721.14                  | 35.48                     | 21.326            |                    |           |
| 7,300.00                          | 7,125.98              | 7,109.40              | 7,108.18              | 31.40            | 24.96         | -11.90                | -1,033.35                           | 1,518.81     | 725.01                 | 689.00                  | 36.01                     | 20.134            |                    |           |
| 7,400.00                          | 7,220.65              | 7,204.07              | 7,202.85              | 32.00            | 25.30         | -12.45                | -1,033.35                           | 1,518.81     | 693.46                 | 656.91                  | 36.54                     | 18.976            |                    |           |
| 7,500.00                          | 7,315.32              | 7,298.74              | 7,297.52              | 32.61            | 25.64         | -13.05                | -1,033.35                           | 1,518.81     | 661.97                 | 624.88                  | 37.08                     | 17.851            |                    |           |
| 7,600.00                          | 7,409.99              | 7,393.42              | 7,392.19              | 33.21            | 25.97         | -13.71                | -1,033.35                           | 1,518.81     | 630.55                 | 592.92                  | 37.63                     | 16.758            |                    |           |
| 7,700.00                          | 7,504.67              | 7,488.09              | 7,486.87              | 33.82            | 26.31         | -14.44                | -1,033.35                           | 1,518.81     | 599.21                 | 561.04                  | 38.18                     | 15.695            |                    |           |
| 7,800.00                          | 7,599.34              | 7,582.76              | 7,581.54              | 34.43            | 26.65         | -15.24                | -1,033.35                           | 1,518.81     | 567.98                 | 529.24                  | 38.74                     | 14.663            |                    |           |
| 7,900.00                          | 7,694.01              | 7,677.43              | 7,676.21              | 35.05            | 26.99         | -16.14                | -1,033.35                           | 1,518.81     | 536.85                 | 497.55                  | 39.30                     | 13.659            |                    |           |
| 8,000.00                          | 7,788.68              | 7,772.11              | 7,770.88              | 35.66            | 27.33         | -17.15                | -1,033.35                           | 1,518.81     | 505.87                 | 465.99                  | 39.88                     | 12.684            |                    |           |
| 8,100.00                          | 7,883.36              | 7,866.78              | 7,865.56              | 36.28            | 27.67         | -18.29                | -1,033.35                           | 1,518.81     | 475.04                 | 434.57                  | 40.47                     | 11.737            |                    |           |
| 8,200.00                          | 7,978.03              | 7,961.45              | 7,960.23              | 36.89            | 28.00         | -19.59                | -1,033.35                           | 1,518.81     | 444.41                 | 403.33                  | 41.08                     | 10.818            |                    |           |
| 8,300.00                          | 8,072.70              | 8,056.12              | 8,054.90              | 37.51            | 28.34         | -21.07                | -1,033.35                           | 1,518.81     | 414.02                 | 372.31                  | 41.71                     | 9.925             |                    |           |
| 8,400.00                          | 8,167.37              | 8,150.80              | 8,149.57              | 38.13            | 28.68         | -22.79                | -1,033.35                           | 1,518.81     | 383.92                 | 341.55                  | 42.38                     | 9.060             |                    |           |
| 8,500.00                          | 8,262.05              | 8,245.47              | 8,244.25              | 38.75            | 29.02         | -24.79                | -1,033.35                           | 1,518.81     | 354.20                 | 311.13                  | 43.07                     | 8.223             |                    |           |
| 8,600.00                          | 8,356.72              | 8,340.14              | 8,338.92              | 39.37            | 29.36         | -27.14                | -1,033.35                           | 1,518.81     | 324.95                 | 281.13                  | 43.82                     | 7.415             |                    |           |
| 8,700.00                          | 8,451.39              | 8,434.81              | 8,433.59              | 39.99            | 29.70         | -29.95                | -1,033.35                           | 1,518.81     | 296.31                 | 251.67                  | 44.64                     | 6.638             |                    |           |
| 8,800.00                          | 8,546.07              | 8,529.49              | 8,528.27              | 40.61            | 30.03         | -33.33                | -1,033.35                           | 1,518.81     | 268.48                 | 222.93                  | 45.55                     | 5.895             |                    |           |
| 8,875.44                          | 8,617.48              | 8,600.91              | 8,599.68              | 41.08            | 30.29         | -36.35                | -1,033.35                           | 1,518.81     | 248.19                 | 201.88                  | 46.31                     | 5.359             |                    |           |
| 8,900.00                          | 8,640.90              | 8,624.32              | 8,623.10              | 41.23            | 30.37         | -37.00                | -1,033.35                           | 1,518.81     | 242.15                 | 195.58                  | 46.57                     | 5.200             |                    |           |
| 8,950.00                          | 8,689.44              | 8,672.86              | 8,671.64              | 41.49            | 30.55         | -38.14                | -1,033.35                           | 1,518.81     | 232.57                 | 185.52                  | 47.05                     | 4.943             |                    |           |
| 9,000.00                          | 8,738.83              | 8,722.25              | 8,721.03              | 41.70            | 30.72         | -38.95                | -1,033.35                           | 1,518.81     | 226.54                 | 179.08                  | 47.46                     | 4.774             |                    |           |
| 9,050.00                          | 8,788.70              | 8,772.12              | 8,770.90              | 41.87            | 30.90         | -39.32                | -1,033.35                           | 1,518.81     | 223.95                 | 176.18                  | 47.76                     | 4.689             |                    |           |
| 9,063.30                          | 8,802.00              | 8,785.42              | 8,784.20              | 41.91            | 30.95         | -89.32                | -1,033.35                           | 1,518.81     | 223.83                 | 176.00                  | 47.83                     | 4.680             |                    |           |
| 9,100.00                          | 8,838.70              | 8,822.12              | 8,820.90              | 42.00            | 31.08         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 175.83                  | 47.99                     | 4.664             |                    |           |
| 9,200.00                          | 8,938.70              | 8,922.12              | 8,920.90              | 42.26            | 31.44         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 175.38                  | 48.44                     | 4.620             |                    |           |
| 9,300.00                          | 9,038.70              | 9,022.12              | 9,020.90              | 42.51            | 31.80         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 174.93                  | 48.89                     | 4.578             |                    |           |
| 9,400.00                          | 9,138.70              | 9,122.12              | 9,120.90              | 42.77            | 32.15         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 174.48                  | 49.35                     | 4.536             |                    |           |
| 9,500.00                          | 9,238.70              | 9,222.12              | 9,220.90              | 43.03            | 32.51         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 174.03                  | 49.80                     | 4.494             |                    |           |
| 9,600.00                          | 9,338.70              | 9,322.12              | 9,320.90              | 43.30            | 32.87         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 173.57                  | 50.25                     | 4.454             |                    |           |
| 9,700.00                          | 9,438.70              | 9,422.12              | 9,420.90              | 43.56            | 33.23         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 173.12                  | 50.71                     | 4.414             |                    |           |
| 9,800.00                          | 9,538.70              | 9,522.12              | 9,520.90              | 43.82            | 33.58         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 172.66                  | 51.17                     | 4.374             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 503H - OH - Plan #1 |  | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                                                       |  |                              |  |
| 9,900.00                          | 9,638.70              | 9,622.12              | 9,620.90              | 44.09            | 33.94         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 172.20                  | 51.62                     | 4.336             |                                                       |  |                              |  |
| 10,000.00                         | 9,738.70              | 9,722.12              | 9,720.90              | 44.36            | 34.30         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 171.74                  | 52.08                     | 4.298             |                                                       |  |                              |  |
| 10,100.00                         | 9,838.70              | 9,822.12              | 9,820.90              | 44.63            | 34.66         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 171.28                  | 52.54                     | 4.260             |                                                       |  |                              |  |
| 10,200.00                         | 9,938.70              | 9,922.12              | 9,920.90              | 44.90            | 35.02         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 170.82                  | 53.00                     | 4.223             |                                                       |  |                              |  |
| 10,300.00                         | 10,038.70             | 10,022.12             | 10,020.90             | 45.17            | 35.37         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 170.36                  | 53.46                     | 4.187             |                                                       |  |                              |  |
| 10,400.00                         | 10,138.70             | 10,122.12             | 10,120.90             | 45.44            | 35.73         | 89.32                 | -1,033.35                           | 1,518.81     | 223.83                 | 169.90                  | 53.92                     | 4.151             |                                                       |  |                              |  |
| 10,449.58                         | 10,188.28             | 10,171.71             | 10,170.48             | 45.57            | 35.90         | 89.44                 | -1,033.83                           | 1,518.81     | 223.83                 | 169.69                  | 54.13                     | 4.135 CC          |                                                       |  |                              |  |
| 10,500.00                         | 10,238.70             | 10,221.78             | 10,220.35             | 45.71            | 36.07         | 90.53                 | -1,038.06                           | 1,518.86     | 223.87                 | 169.62                  | 54.24                     | 4.127 ES, SF      |                                                       |  |                              |  |
| 10,600.00                         | 10,338.70             | 10,317.19             | 10,313.54             | 45.99            | 36.37         | 95.63                 | -1,058.07                           | 1,519.05     | 225.25                 | 171.04                  | 54.22                     | 4.155             |                                                       |  |                              |  |
| 10,700.00                         | 10,438.70             | 10,403.91             | 10,394.29             | 46.26            | 36.64         | 103.40                | -1,089.44                           | 1,519.35     | 232.16                 | 178.23                  | 53.93                     | 4.305             |                                                       |  |                              |  |
| 10,800.00                         | 10,538.70             | 10,479.73             | 10,460.32             | 46.54            | 36.87         | 111.95                | -1,126.58                           | 1,519.71     | 249.74                 | 196.55                  | 53.19                     | 4.695             |                                                       |  |                              |  |
| 10,900.00                         | 10,638.70             | 10,550.00             | 10,516.66             | 46.82            | 37.09         | 120.48                | -1,168.51                           | 1,520.12     | 281.25                 | 229.26                  | 51.99                     | 5.410             |                                                       |  |                              |  |
| 11,000.00                         | 10,738.70             | 10,600.00             | 10,553.41             | 47.10            | 37.25         | 126.43                | -1,202.39                           | 1,520.45     | 326.44                 | 276.46                  | 49.98                     | 6.531             |                                                       |  |                              |  |
| 11,100.00                         | 10,838.70             | 10,650.00             | 10,587.07             | 47.38            | 37.41         | 132.00                | -1,239.34                           | 1,520.81     | 383.42                 | 335.21                  | 48.21                     | 7.953             |                                                       |  |                              |  |
| 11,200.00                         | 10,938.70             | 10,683.33             | 10,607.66             | 47.66            | 37.52         | 135.44                | -1,265.54                           | 1,521.06     | 449.35                 | 403.17                  | 46.18                     | 9.731             |                                                       |  |                              |  |
| 11,300.00                         | 11,038.70             | 10,715.97             | 10,626.31             | 47.94            | 37.63         | 138.56                | -1,292.32                           | 1,521.32     | 522.13                 | 477.51                  | 44.62                     | 11.701            |                                                       |  |                              |  |
| 11,400.00                         | 11,138.70             | 10,750.00             | 10,644.10             | 48.22            | 37.74         | 141.54                | -1,321.32                           | 1,521.60     | 600.08                 | 556.53                  | 43.55                     | 13.779            |                                                       |  |                              |  |
| 11,500.00                         | 11,238.70             | 10,767.64             | 10,652.64             | 48.51            | 37.80         | 142.99                | -1,336.76                           | 1,521.75     | 681.75                 | 639.48                  | 42.27                     | 16.129            |                                                       |  |                              |  |
| 11,600.00                         | 11,338.70             | 10,800.00             | 10,667.05             | 48.79            | 37.91         | 145.45                | -1,365.73                           | 1,522.03     | 766.67                 | 724.92                  | 41.75                     | 18.364            |                                                       |  |                              |  |
| 11,700.00                         | 11,438.70             | 10,800.00             | 10,667.05             | 49.08            | 37.91         | 145.45                | -1,365.73                           | 1,522.03     | 853.55                 | 812.98                  | 40.57                     | 21.040            |                                                       |  |                              |  |
| 11,753.34                         | 11,492.04             | 10,800.00             | 10,667.05             | 49.23            | 37.91         | 145.45                | -1,365.73                           | 1,522.03     | 901.01                 | 860.95                  | 40.07                     | 22.488            |                                                       |  |                              |  |
| 11,800.00                         | 11,538.65             | 10,822.72             | 10,676.18             | 49.37            | 38.00         | -28.14                | -1,386.53                           | 1,522.23     | 941.61                 | 901.45                  | 40.16                     | 23.446            |                                                       |  |                              |  |
| 11,850.00                         | 11,588.24             | 10,831.99             | 10,679.66             | 49.55            | 38.03         | -24.21                | -1,395.12                           | 1,522.32     | 984.03                 | 944.16                  | 39.87                     | 24.680            |                                                       |  |                              |  |
| 11,900.00                         | 11,637.10             | 10,850.00             | 10,686.04             | 49.74            | 38.09         | -20.96                | -1,411.96                           | 1,522.48     | 1,024.85               | 985.11                  | 39.74                     | 25.792            |                                                       |  |                              |  |
| 11,950.00                         | 11,684.86             | 10,850.00             | 10,686.04             | 49.95            | 38.09         | -18.87                | -1,411.96                           | 1,522.48     | 1,063.65               | 1,024.43                | 39.22                     | 27.123            |                                                       |  |                              |  |
| 12,000.00                         | 11,731.15             | 10,850.00             | 10,686.04             | 50.18            | 38.09         | -17.16                | -1,411.96                           | 1,522.48     | 1,100.75               | 1,062.04                | 38.72                     | 28.432            |                                                       |  |                              |  |
| 12,050.00                         | 11,775.62             | 10,876.66             | 10,694.49             | 50.42            | 38.19         | -15.42                | -1,437.25                           | 1,522.73     | 1,135.15               | 1,096.47                | 38.68                     | 29.351            |                                                       |  |                              |  |
| 12,100.00                         | 11,817.93             | 10,900.00             | 10,700.92             | 50.68            | 38.28         | -14.09                | -1,459.68                           | 1,522.94     | 1,167.66               | 1,129.11                | 38.55                     | 30.286            |                                                       |  |                              |  |
| 12,150.00                         | 11,857.76             | 10,900.00             | 10,700.92             | 50.96            | 38.28         | -13.21                | -1,459.68                           | 1,522.94     | 1,197.46               | 1,159.39                | 38.07                     | 31.453            |                                                       |  |                              |  |
| 12,200.00                         | 11,894.81             | 10,900.00             | 10,700.92             | 51.25            | 38.28         | -12.47                | -1,459.68                           | 1,522.94     | 1,225.19               | 1,187.56                | 37.63                     | 32.555            |                                                       |  |                              |  |
| 12,250.00                         | 11,928.80             | 10,929.68             | 10,707.77             | 51.56            | 38.39         | -11.70                | -1,488.55                           | 1,523.22     | 1,249.66               | 1,212.07                | 37.60                     | 33.237            |                                                       |  |                              |  |
| 12,300.00                         | 11,959.45             | 10,950.00             | 10,711.59             | 51.87            | 38.47         | -11.12                | -1,508.50                           | 1,523.42     | 1,271.80               | 1,234.36                | 37.45                     | 33.964            |                                                       |  |                              |  |
| 12,350.00                         | 11,986.56             | 10,950.00             | 10,711.59             | 52.20            | 38.47         | -10.72                | -1,508.50                           | 1,523.42     | 1,291.15               | 1,254.05                | 37.10                     | 34.800            |                                                       |  |                              |  |
| 12,400.00                         | 12,009.90             | 10,972.72             | 10,715.03             | 52.55            | 38.56         | -10.34                | -1,530.96                           | 1,523.64     | 1,307.55               | 1,270.53                | 37.02                     | 35.322            |                                                       |  |                              |  |
| 12,450.00                         | 12,029.29             | 11,000.00             | 10,717.97             | 52.90            | 38.67         | -10.03                | -1,558.08                           | 1,523.90     | 1,321.33               | 1,284.35                | 36.99                     | 35.726            |                                                       |  |                              |  |
| 12,500.00                         | 12,044.60             | 11,000.00             | 10,717.97             | 53.26            | 38.67         | -9.85                 | -1,558.08                           | 1,523.90     | 1,331.80               | 1,295.02                | 36.78                     | 36.206            |                                                       |  |                              |  |
| 12,550.00                         | 12,055.70             | 11,017.29             | 10,719.16             | 53.63            | 38.74         | -9.69                 | -1,575.33                           | 1,524.07     | 1,339.50               | 1,302.75                | 36.75                     | 36.450            |                                                       |  |                              |  |
| 12,600.00                         | 12,062.52             | 11,048.26             | 10,720.00             | 54.01            | 38.86         | -9.59                 | -1,606.28                           | 1,524.37     | 1,344.52               | 1,307.72                | 36.81                     | 36.530            |                                                       |  |                              |  |
| 12,653.34                         | 12,065.00             | 11,048.74             | 10,720.00             | 54.42            | 38.86         | -9.57                 | -1,606.76                           | 1,524.37     | 1,345.93               | 1,309.15                | 36.79                     | 36.587            |                                                       |  |                              |  |
| 12,700.00                         | 12,065.00             | 11,095.40             | 10,720.00             | 54.78            | 39.06         | -9.57                 | -1,653.42                           | 1,524.82     | 1,345.93               | 1,309.00                | 36.93                     | 36.444            |                                                       |  |                              |  |
| 12,800.00                         | 12,065.00             | 11,195.40             | 10,720.00             | 55.59            | 39.52         | -9.57                 | -1,753.41                           | 1,525.79     | 1,345.93               | 1,308.67                | 37.26                     | 36.118            |                                                       |  |                              |  |
| 12,900.00                         | 12,065.00             | 11,295.40             | 10,720.00             | 56.43            | 40.05         | -9.57                 | -1,853.41                           | 1,526.76     | 1,345.93               | 1,308.30                | 37.63                     | 35.767            |                                                       |  |                              |  |
| 13,000.00                         | 12,065.00             | 11,395.40             | 10,720.00             | 57.31            | 40.64         | -9.57                 | -1,953.40                           | 1,527.73     | 1,345.93               | 1,307.90                | 38.03                     | 35.393            |                                                       |  |                              |  |
| 13,100.00                         | 12,065.00             | 11,495.40             | 10,720.00             | 58.22            | 41.28         | -9.57                 | -2,053.40                           | 1,528.70     | 1,345.93               | 1,307.47                | 38.46                     | 34.999            |                                                       |  |                              |  |
| 13,200.00                         | 12,065.00             | 11,595.40             | 10,720.00             | 59.17            | 41.98         | -9.57                 | -2,153.39                           | 1,529.67     | 1,345.93               | 1,307.01                | 38.91                     | 34.587            |                                                       |  |                              |  |
| 13,300.00                         | 12,065.00             | 11,695.40             | 10,720.00             | 60.14            | 42.74         | -9.57                 | -2,253.39                           | 1,530.64     | 1,345.92               | 1,306.52                | 39.40                     | 34.160            |                                                       |  |                              |  |
| 13,400.00                         | 12,065.00             | 11,795.40             | 10,720.00             | 61.15            | 43.54         | -9.57                 | -2,353.38                           | 1,531.61     | 1,345.92               | 1,306.01                | 39.91                     | 33.721            |                                                       |  |                              |  |
| 13,500.00                         | 12,065.00             | 11,895.40             | 10,720.00             | 62.18            | 44.39         | -9.57                 | -2,453.38                           | 1,532.58     | 1,345.92               | 1,305.47                | 40.45                     | 33.272            |                                                       |  |                              |  |
| 13,600.00                         | 12,065.00             | 11,995.40             | 10,720.00             | 63.24            | 45.29         | -9.57                 | -2,553.37                           | 1,533.55     | 1,345.92               | 1,304.90                | 41.02                     | 32.814            |                                                       |  |                              |  |
| 13,700.00                         | 12,065.00             | 12,095.40             | 10,720.00             | 64.32            | 46.22         | -9.57                 | -2,653.37                           | 1,534.52     | 1,345.92               | 1,304.31                | 41.61                     | 32.350            |                                                       |  |                              |  |
| 13,800.00                         | 12,065.00             | 12,195.40             | 10,720.00             | 65.43            | 47.20         | -9.57                 | -2,753.36                           | 1,535.49     | 1,345.92               | 1,303.70                | 42.22                     | 31.881            |                                                       |  |                              |  |
| 13,900.00                         | 12,065.00             | 12,295.40             | 10,720.00             | 66.56            | 48.21         | -9.57                 | -2,853.36                           | 1,536.46     | 1,345.92               | 1,303.06                | 42.85                     | 31.409            |                                                       |  |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 503H - OH - Plan #1 |  | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                                                       |  |                              |  |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |  |                              |  |
| 14,000.00                         | 12,065.00             | 12,395.40             | 10,720.00             | 67.71            | 49.26         | -9.57                 | -2,953.36                           | 1,537.43     | 1,345.91               | 1,302.41                | 43.51                     | 30.935            |                                                       |  |                              |  |
| 14,100.00                         | 12,065.00             | 12,495.40             | 10,720.00             | 68.88            | 50.33         | -9.57                 | -3,053.35                           | 1,538.40     | 1,345.91               | 1,301.73                | 44.18                     | 30.463            |                                                       |  |                              |  |
| 14,200.00                         | 12,065.00             | 12,595.40             | 10,720.00             | 70.08            | 51.44         | -9.57                 | -3,153.35                           | 1,539.37     | 1,345.91               | 1,301.04                | 44.88                     | 29.991            |                                                       |  |                              |  |
| 14,300.00                         | 12,065.00             | 12,695.40             | 10,720.00             | 71.29            | 52.58         | -9.56                 | -3,253.34                           | 1,540.34     | 1,345.91               | 1,300.32                | 45.59                     | 29.522            |                                                       |  |                              |  |
| 14,400.00                         | 12,065.00             | 12,795.40             | 10,720.00             | 72.51            | 53.75         | -9.56                 | -3,353.34                           | 1,541.31     | 1,345.91               | 1,299.59                | 46.32                     | 29.056            |                                                       |  |                              |  |
| 14,500.00                         | 12,065.00             | 12,895.40             | 10,720.00             | 73.76            | 54.94         | -9.56                 | -3,453.33                           | 1,542.28     | 1,345.91               | 1,298.84                | 47.07                     | 28.595            |                                                       |  |                              |  |
| 14,600.00                         | 12,065.00             | 12,995.40             | 10,720.00             | 75.02            | 56.15         | -9.56                 | -3,553.33                           | 1,543.25     | 1,345.91               | 1,298.08                | 47.83                     | 28.139            |                                                       |  |                              |  |
| 14,700.00                         | 12,065.00             | 13,095.40             | 10,720.00             | 76.29            | 57.38         | -9.56                 | -3,653.32                           | 1,544.21     | 1,345.91               | 1,297.30                | 48.61                     | 27.689            |                                                       |  |                              |  |
| 14,800.00                         | 12,065.00             | 13,195.40             | 10,720.00             | 77.58            | 58.64         | -9.56                 | -3,753.32                           | 1,545.18     | 1,345.90               | 1,296.50                | 49.40                     | 27.245            |                                                       |  |                              |  |
| 14,900.00                         | 12,065.00             | 13,295.40             | 10,720.00             | 78.89            | 59.91         | -9.56                 | -3,853.31                           | 1,546.15     | 1,345.90               | 1,295.70                | 50.21                     | 26.808            |                                                       |  |                              |  |
| 15,000.00                         | 12,065.00             | 13,395.40             | 10,720.00             | 80.20            | 61.21         | -9.56                 | -3,953.31                           | 1,547.12     | 1,345.90               | 1,294.88                | 51.02                     | 26.378            |                                                       |  |                              |  |
| 15,100.00                         | 12,065.00             | 13,495.40             | 10,720.00             | 81.53            | 62.52         | -9.56                 | -4,053.30                           | 1,548.09     | 1,345.90               | 1,294.04                | 51.86                     | 25.955            |                                                       |  |                              |  |
| 15,200.00                         | 12,065.00             | 13,595.40             | 10,720.00             | 82.87            | 63.84         | -9.56                 | -4,153.30                           | 1,549.06     | 1,345.90               | 1,293.20                | 52.70                     | 25.539            |                                                       |  |                              |  |
| 15,300.00                         | 12,065.00             | 13,695.40             | 10,720.00             | 84.22            | 65.18         | -9.56                 | -4,253.29                           | 1,550.03     | 1,345.90               | 1,292.34                | 53.55                     | 25.132            |                                                       |  |                              |  |
| 15,400.00                         | 12,065.00             | 13,795.40             | 10,720.00             | 85.59            | 66.54         | -9.56                 | -4,353.29                           | 1,551.00     | 1,345.90               | 1,291.48                | 54.42                     | 24.732            |                                                       |  |                              |  |
| 15,500.00                         | 12,065.00             | 13,895.40             | 10,720.00             | 86.96            | 67.90         | -9.56                 | -4,453.29                           | 1,551.97     | 1,345.89               | 1,290.60                | 55.30                     | 24.340            |                                                       |  |                              |  |
| 15,600.00                         | 12,065.00             | 13,995.40             | 10,720.00             | 88.34            | 69.28         | -9.56                 | -4,553.28                           | 1,552.94     | 1,345.89               | 1,289.71                | 56.18                     | 23.956            |                                                       |  |                              |  |
| 15,700.00                         | 12,065.00             | 14,095.40             | 10,720.00             | 89.73            | 70.67         | -9.56                 | -4,653.28                           | 1,553.91     | 1,345.89               | 1,288.81                | 57.08                     | 23.580            |                                                       |  |                              |  |
| 15,800.00                         | 12,065.00             | 14,195.40             | 10,720.00             | 91.13            | 72.08         | -9.56                 | -4,753.27                           | 1,554.88     | 1,345.89               | 1,287.91                | 57.98                     | 23.213            |                                                       |  |                              |  |
| 15,900.00                         | 12,065.00             | 14,295.40             | 10,720.00             | 92.54            | 73.49         | -9.56                 | -4,853.27                           | 1,555.85     | 1,345.89               | 1,287.00                | 58.89                     | 22.854            |                                                       |  |                              |  |
| 16,000.00                         | 12,065.00             | 14,395.40             | 10,720.00             | 93.95            | 74.91         | -9.56                 | -4,953.26                           | 1,556.82     | 1,345.89               | 1,286.08                | 59.81                     | 22.502            |                                                       |  |                              |  |
| 16,100.00                         | 12,065.00             | 14,495.40             | 10,720.00             | 95.38            | 76.34         | -9.56                 | -5,053.26                           | 1,557.79     | 1,345.89               | 1,285.15                | 60.74                     | 22.159            |                                                       |  |                              |  |
| 16,200.00                         | 12,065.00             | 14,595.40             | 10,720.00             | 96.81            | 77.78         | -9.56                 | -5,153.25                           | 1,558.76     | 1,345.88               | 1,284.21                | 61.67                     | 21.823            |                                                       |  |                              |  |
| 16,300.00                         | 12,065.00             | 14,695.40             | 10,720.00             | 98.24            | 79.23         | -9.56                 | -5,253.25                           | 1,559.73     | 1,345.88               | 1,283.27                | 62.62                     | 21.494            |                                                       |  |                              |  |
| 16,400.00                         | 12,065.00             | 14,795.40             | 10,720.00             | 99.69            | 80.69         | -9.56                 | -5,353.24                           | 1,560.70     | 1,345.88               | 1,282.32                | 63.56                     | 21.174            |                                                       |  |                              |  |
| 16,500.00                         | 12,065.00             | 14,895.40             | 10,720.00             | 101.14           | 82.15         | -9.56                 | -5,453.24                           | 1,561.67     | 1,345.88               | 1,281.36                | 64.52                     | 20.860            |                                                       |  |                              |  |
| 16,600.00                         | 12,065.00             | 14,995.40             | 10,720.00             | 102.60           | 83.62         | -9.56                 | -5,553.23                           | 1,562.64     | 1,345.88               | 1,280.40                | 65.48                     | 20.554            |                                                       |  |                              |  |
| 16,700.00                         | 12,065.00             | 15,095.40             | 10,720.00             | 104.06           | 85.10         | -9.56                 | -5,653.23                           | 1,563.61     | 1,345.88               | 1,279.43                | 66.44                     | 20.256            |                                                       |  |                              |  |
| 16,800.00                         | 12,065.00             | 15,195.40             | 10,720.00             | 105.53           | 86.59         | -9.56                 | -5,753.22                           | 1,564.58     | 1,345.88               | 1,278.46                | 67.42                     | 19.964            |                                                       |  |                              |  |
| 16,900.00                         | 12,065.00             | 15,295.40             | 10,720.00             | 107.00           | 88.07         | -9.56                 | -5,853.22                           | 1,565.55     | 1,345.87               | 1,277.48                | 68.39                     | 19.678            |                                                       |  |                              |  |
| 17,000.00                         | 12,065.00             | 15,395.40             | 10,720.00             | 108.48           | 89.57         | -9.56                 | -5,953.21                           | 1,566.52     | 1,345.87               | 1,276.50                | 69.38                     | 19.400            |                                                       |  |                              |  |
| 17,100.00                         | 12,065.00             | 15,495.40             | 10,720.00             | 109.96           | 91.07         | -9.56                 | -6,053.21                           | 1,567.49     | 1,345.87               | 1,275.51                | 70.36                     | 19.128            |                                                       |  |                              |  |
| 17,200.00                         | 12,065.00             | 15,595.40             | 10,720.00             | 111.45           | 92.58         | -9.55                 | -6,153.21                           | 1,568.46     | 1,345.87               | 1,274.52                | 71.36                     | 18.862            |                                                       |  |                              |  |
| 17,300.00                         | 12,065.00             | 15,695.40             | 10,720.00             | 112.94           | 94.09         | -9.55                 | -6,253.20                           | 1,569.42     | 1,345.87               | 1,273.52                | 72.35                     | 18.602            |                                                       |  |                              |  |
| 17,400.00                         | 12,065.00             | 15,795.40             | 10,720.00             | 114.44           | 95.60         | -9.55                 | -6,353.20                           | 1,570.39     | 1,345.87               | 1,272.52                | 73.35                     | 18.348            |                                                       |  |                              |  |
| 17,500.00                         | 12,065.00             | 15,895.40             | 10,720.00             | 115.94           | 97.12         | -9.55                 | -6,453.19                           | 1,571.36     | 1,345.87               | 1,271.51                | 74.35                     | 18.101            |                                                       |  |                              |  |
| 17,600.00                         | 12,065.00             | 15,995.40             | 10,720.00             | 117.45           | 98.65         | -9.55                 | -6,553.19                           | 1,572.33     | 1,345.87               | 1,270.50                | 75.36                     | 17.858            |                                                       |  |                              |  |
| 17,700.00                         | 12,065.00             | 16,095.40             | 10,720.00             | 118.96           | 100.18        | -9.55                 | -6,653.18                           | 1,573.30     | 1,345.86               | 1,269.49                | 76.37                     | 17.622            |                                                       |  |                              |  |
| 17,800.00                         | 12,065.00             | 16,195.40             | 10,720.00             | 120.47           | 101.71        | -9.55                 | -6,753.18                           | 1,574.27     | 1,345.86               | 1,268.47                | 77.39                     | 17.391            |                                                       |  |                              |  |
| 17,900.00                         | 12,065.00             | 16,295.40             | 10,720.00             | 121.99           | 103.24        | -9.55                 | -6,853.17                           | 1,575.24     | 1,345.86               | 1,267.45                | 78.41                     | 17.165            |                                                       |  |                              |  |
| 18,000.00                         | 12,065.00             | 16,395.40             | 10,720.00             | 123.51           | 104.78        | -9.55                 | -6,953.17                           | 1,576.21     | 1,345.86               | 1,266.43                | 79.43                     | 16.944            |                                                       |  |                              |  |
| 18,100.00                         | 12,065.00             | 16,495.40             | 10,720.00             | 125.03           | 106.33        | -9.55                 | -7,053.16                           | 1,577.18     | 1,345.86               | 1,265.40                | 80.46                     | 16.727            |                                                       |  |                              |  |
| 18,200.00                         | 12,065.00             | 16,595.40             | 10,720.00             | 126.56           | 107.87        | -9.55                 | -7,153.16                           | 1,578.15     | 1,345.86               | 1,264.37                | 81.49                     | 16.516            |                                                       |  |                              |  |
| 18,300.00                         | 12,065.00             | 16,695.40             | 10,720.00             | 128.09           | 109.42        | -9.55                 | -7,253.15                           | 1,579.12     | 1,345.86               | 1,263.34                | 82.52                     | 16.310            |                                                       |  |                              |  |
| 18,400.00                         | 12,065.00             | 16,795.40             | 10,720.00             | 129.62           | 110.97        | -9.55                 | -7,353.15                           | 1,580.09     | 1,345.85               | 1,262.30                | 83.55                     | 16.108            |                                                       |  |                              |  |
| 18,500.00                         | 12,065.00             | 16,895.40             | 10,720.00             | 131.16           | 112.53        | -9.55                 | -7,453.14                           | 1,581.06     | 1,345.85               | 1,261.27                | 84.59                     | 15.911            |                                                       |  |                              |  |
| 18,600.00                         | 12,065.00             | 16,995.40             | 10,720.00             | 132.69           | 114.08        | -9.55                 | -7,553.14                           | 1,582.03     | 1,345.85               | 1,260.22                | 85.63                     | 15.717            |                                                       |  |                              |  |
| 18,700.00                         | 12,065.00             | 17,095.40             | 10,720.00             | 134.24           | 115.64        | -9.55                 | -7,653.13                           | 1,583.00     | 1,345.85               | 1,259.18                | 86.67                     | 15.528            |                                                       |  |                              |  |
| 18,800.00                         | 12,065.00             | 17,195.40             | 10,720.00             | 135.78           | 117.21        | -9.55                 | -7,753.13                           | 1,583.97     | 1,345.85               | 1,258.14                | 87.71                     | 15.344            |                                                       |  |                              |  |
| 18,900.00                         | 12,065.00             | 17,295.40             | 10,720.00             | 137.33           | 118.77        | -9.55                 | -7,853.13                           | 1,584.94     | 1,345.85               | 1,257.09                | 88.76                     | 15.163            |                                                       |  |                              |  |
| 19,000.00                         | 12,065.00             | 17,395.40             | 10,720.00             | 138.87           | 120.34        | -9.55                 | -7,953.12                           | 1,585.91     | 1,345.85               | 1,256.04                | 89.81                     | 14.986            |                                                       |  |                              |  |
| 19,100.00                         | 12,065.00             | 17,495.40             | 10,720.00             | 140.43           | 121.91        | -9.55                 | -8,053.12                           | 1,586.88     | 1,345.84               | 1,254.99                | 90.86                     | 14.812            |                                                       |  |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 503H - OH - Plan #1 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   |                                                       |         | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |         |                    |           |
| 19,200.00                         | 12,065.00             | 17,595.40             | 10,720.00             | 141.98           | 123.48        | -9.55                 | -8,153.11              | 1,587.85     | 1,345.84               | 1,253.93                | 91.91                     | 14.643            |                                                       |         |                    |           |
| 19,300.00                         | 12,065.00             | 17,695.40             | 10,720.00             | 143.53           | 125.05        | -9.55                 | -8,253.11              | 1,588.82     | 1,345.84               | 1,252.87                | 92.97                     | 14.476            |                                                       |         |                    |           |
| 19,400.00                         | 12,065.00             | 17,795.40             | 10,720.00             | 145.09           | 126.63        | -9.55                 | -8,353.10              | 1,589.79     | 1,345.84               | 1,251.82                | 94.02                     | 14.314            |                                                       |         |                    |           |
| 19,500.00                         | 12,065.00             | 17,895.40             | 10,720.00             | 146.65           | 128.21        | -9.55                 | -8,453.10              | 1,590.76     | 1,345.84               | 1,250.76                | 95.08                     | 14.154            |                                                       |         |                    |           |
| 19,600.00                         | 12,065.00             | 17,995.40             | 10,720.00             | 148.21           | 129.79        | -9.55                 | -8,553.09              | 1,591.73     | 1,345.84               | 1,249.69                | 96.14                     | 13.998            |                                                       |         |                    |           |
| 19,700.00                         | 12,065.00             | 18,095.40             | 10,720.00             | 149.78           | 131.37        | -9.55                 | -8,653.09              | 1,592.70     | 1,345.84               | 1,248.63                | 97.21                     | 13.845            |                                                       |         |                    |           |
| 19,800.00                         | 12,065.00             | 18,195.40             | 10,720.00             | 151.34           | 132.95        | -9.55                 | -8,753.08              | 1,593.66     | 1,345.84               | 1,247.57                | 98.27                     | 13.695            |                                                       |         |                    |           |
| 19,900.00                         | 12,065.00             | 18,295.40             | 10,720.00             | 152.91           | 134.53        | -9.55                 | -8,853.08              | 1,594.63     | 1,345.83               | 1,246.50                | 99.33                     | 13.548            |                                                       |         |                    |           |
| 20,000.00                         | 12,065.00             | 18,395.40             | 10,720.00             | 154.48           | 136.12        | -9.55                 | -8,953.07              | 1,595.60     | 1,345.83               | 1,245.43                | 100.40                    | 13.404            |                                                       |         |                    |           |
| 20,100.00                         | 12,065.00             | 18,495.40             | 10,720.00             | 156.05           | 137.71        | -9.54                 | -9,053.07              | 1,596.57     | 1,345.83               | 1,244.36                | 101.47                    | 13.263            |                                                       |         |                    |           |
| 20,200.00                         | 12,065.00             | 18,595.40             | 10,720.00             | 157.62           | 139.30        | -9.54                 | -9,153.06              | 1,597.54     | 1,345.83               | 1,243.29                | 102.54                    | 13.125            |                                                       |         |                    |           |
| 20,300.00                         | 12,065.00             | 18,695.40             | 10,720.00             | 159.20           | 140.89        | -9.54                 | -9,253.06              | 1,598.51     | 1,345.83               | 1,242.22                | 103.61                    | 12.989            |                                                       |         |                    |           |
| 20,400.00                         | 12,065.00             | 18,795.40             | 10,720.00             | 160.77           | 142.48        | -9.54                 | -9,353.05              | 1,599.48     | 1,345.83               | 1,241.14                | 104.68                    | 12.856            |                                                       |         |                    |           |
| 20,500.00                         | 12,065.00             | 18,895.40             | 10,720.00             | 162.35           | 144.07        | -9.54                 | -9,453.05              | 1,600.45     | 1,345.83               | 1,240.07                | 105.76                    | 12.726            |                                                       |         |                    |           |
| 20,600.00                         | 12,065.00             | 18,995.40             | 10,720.00             | 163.93           | 145.67        | -9.54                 | -9,553.05              | 1,601.42     | 1,345.82               | 1,238.99                | 106.83                    | 12.597            |                                                       |         |                    |           |
| 20,700.00                         | 12,065.00             | 19,095.40             | 10,720.00             | 165.51           | 147.26        | -9.54                 | -9,653.04              | 1,602.39     | 1,345.82               | 1,237.91                | 107.91                    | 12.472            |                                                       |         |                    |           |
| 20,800.00                         | 12,065.00             | 19,195.40             | 10,720.00             | 167.09           | 148.86        | -9.54                 | -9,753.04              | 1,603.36     | 1,345.82               | 1,236.83                | 108.99                    | 12.348            |                                                       |         |                    |           |
| 20,900.00                         | 12,065.00             | 19,295.40             | 10,720.00             | 168.67           | 150.46        | -9.54                 | -9,853.03              | 1,604.33     | 1,345.82               | 1,235.75                | 110.07                    | 12.227            |                                                       |         |                    |           |
| 21,000.00                         | 12,065.00             | 19,395.40             | 10,720.00             | 170.26           | 152.06        | -9.54                 | -9,953.03              | 1,605.30     | 1,345.82               | 1,234.67                | 111.15                    | 12.108            |                                                       |         |                    |           |
| 21,100.00                         | 12,065.00             | 19,495.40             | 10,720.00             | 171.84           | 153.66        | -9.54                 | -10,053.02             | 1,606.27     | 1,345.82               | 1,233.59                | 112.23                    | 11.992            |                                                       |         |                    |           |
| 21,200.00                         | 12,065.00             | 19,595.40             | 10,720.00             | 173.43           | 155.26        | -9.54                 | -10,153.02             | 1,607.24     | 1,345.82               | 1,232.51                | 113.31                    | 11.877            |                                                       |         |                    |           |
| 21,300.00                         | 12,065.00             | 19,695.40             | 10,720.00             | 175.02           | 156.86        | -9.54                 | -10,253.01             | 1,608.21     | 1,345.81               | 1,231.42                | 114.39                    | 11.765            |                                                       |         |                    |           |
| 21,400.00                         | 12,065.00             | 19,795.40             | 10,720.00             | 176.60           | 158.47        | -9.54                 | -10,353.01             | 1,609.18     | 1,345.81               | 1,230.34                | 115.48                    | 11.655            |                                                       |         |                    |           |
| 21,500.00                         | 12,065.00             | 19,895.40             | 10,720.00             | 178.19           | 160.07        | -9.54                 | -10,453.00             | 1,610.15     | 1,345.81               | 1,229.25                | 116.56                    | 11.546            |                                                       |         |                    |           |
| 21,600.00                         | 12,065.00             | 19,995.40             | 10,720.00             | 179.79           | 161.68        | -9.54                 | -10,553.00             | 1,611.12     | 1,345.81               | 1,228.16                | 117.65                    | 11.439            |                                                       |         |                    |           |
| 21,700.00                         | 12,065.00             | 20,095.40             | 10,720.00             | 181.38           | 163.28        | -9.54                 | -10,652.99             | 1,612.09     | 1,345.81               | 1,227.08                | 118.73                    | 11.335            |                                                       |         |                    |           |
| 21,800.00                         | 12,065.00             | 20,195.40             | 10,720.00             | 182.97           | 164.89        | -9.54                 | -10,752.99             | 1,613.06     | 1,345.81               | 1,225.99                | 119.82                    | 11.232            |                                                       |         |                    |           |
| 21,900.00                         | 12,065.00             | 20,295.40             | 10,720.00             | 184.57           | 166.50        | -9.54                 | -10,852.98             | 1,614.03     | 1,345.81               | 1,224.90                | 120.91                    | 11.131            |                                                       |         |                    |           |
| 22,000.00                         | 12,065.00             | 20,395.40             | 10,720.00             | 186.16           | 168.11        | -9.54                 | -10,952.98             | 1,615.00     | 1,345.80               | 1,223.81                | 122.00                    | 11.031            |                                                       |         |                    |           |
| 22,100.00                         | 12,065.00             | 20,495.40             | 10,720.00             | 187.76           | 169.72        | -9.54                 | -11,052.97             | 1,615.97     | 1,345.80               | 1,222.72                | 123.09                    | 10.934            |                                                       |         |                    |           |
| 22,200.00                         | 12,065.00             | 20,595.40             | 10,720.00             | 189.36           | 171.33        | -9.54                 | -11,152.97             | 1,616.94     | 1,345.80               | 1,221.62                | 124.18                    | 10.838            |                                                       |         |                    |           |
| 22,300.00                         | 12,065.00             | 20,695.40             | 10,720.00             | 190.95           | 172.94        | -9.54                 | -11,252.97             | 1,617.91     | 1,345.80               | 1,220.53                | 125.27                    | 10.743            |                                                       |         |                    |           |
| 22,400.00                         | 12,065.00             | 20,795.40             | 10,720.00             | 192.55           | 174.55        | -9.54                 | -11,352.96             | 1,618.87     | 1,345.80               | 1,219.44                | 126.36                    | 10.650            |                                                       |         |                    |           |
| 22,445.57                         | 12,065.00             | 20,840.97             | 10,720.00             | 193.28           | 175.21        | -9.54                 | -11,398.53             | 1,619.32     | 1,345.80               | 1,219.04                | 126.76                    | 10.617            |                                                       |         |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.45               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 81.90                 | 81.90                 | 0.13             | 0.10          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,799.20                | 0.16                      | N/A               |                    |           |
| 200.00                            | 200.00                | 181.90                | 181.90                | 0.48             | 0.42          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,798.72                | 0.64                      | 2,810.813         |                    |           |
| 300.00                            | 300.00                | 281.90                | 281.90                | 0.84             | 0.78          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,798.21                | 1.15                      | 1,569.596         |                    |           |
| 400.00                            | 400.00                | 381.90                | 381.90                | 1.20             | 1.14          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,797.71                | 1.65                      | 1,088.504         |                    |           |
| 500.00                            | 500.00                | 481.90                | 481.90                | 1.56             | 1.49          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,797.20                | 2.16                      | 833.090           |                    |           |
| 600.00                            | 600.00                | 581.90                | 581.90                | 1.92             | 1.85          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,796.69                | 2.67                      | 674.745           |                    |           |
| 700.00                            | 700.00                | 681.90                | 681.90                | 2.28             | 2.21          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,796.19                | 3.17                      | 566.974           |                    |           |
| 800.00                            | 800.00                | 781.90                | 781.90                | 2.63             | 2.57          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,795.68                | 3.68                      | 488.886           |                    |           |
| 900.00                            | 900.00                | 881.90                | 881.90                | 2.99             | 2.93          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,795.17                | 4.19                      | 429.703           |                    |           |
| 1,000.00                          | 1,000.00              | 981.90                | 981.90                | 3.35             | 3.29          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,794.67                | 4.69                      | 383.301           |                    |           |
| 1,100.00                          | 1,100.00              | 1,081.90              | 1,081.90              | 3.71             | 3.65          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,794.16                | 5.20                      | 345.944           |                    |           |
| 1,200.00                          | 1,200.00              | 1,181.90              | 1,181.90              | 4.07             | 4.00          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,793.65                | 5.71                      | 315.221           |                    |           |
| 1,300.00                          | 1,300.00              | 1,281.90              | 1,281.90              | 4.43             | 4.36          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,793.15                | 6.22                      | 289.510           |                    |           |
| 1,400.00                          | 1,400.00              | 1,381.90              | 1,381.90              | 4.79             | 4.72          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,792.64                | 6.72                      | 267.677           |                    |           |
| 1,500.00                          | 1,500.00              | 1,481.90              | 1,481.90              | 5.14             | 5.08          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,792.13                | 7.23                      | 248.906           |                    |           |
| 1,600.00                          | 1,600.00              | 1,581.90              | 1,581.90              | 5.50             | 5.44          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,791.62                | 7.74                      | 232.595           |                    |           |
| 1,700.00                          | 1,700.00              | 1,681.90              | 1,681.90              | 5.86             | 5.80          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,791.12                | 8.24                      | 218.290           |                    |           |
| 1,800.00                          | 1,800.00              | 1,781.90              | 1,781.90              | 6.22             | 6.15          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,790.61                | 8.75                      | 205.643           |                    |           |
| 1,900.00                          | 1,900.00              | 1,881.90              | 1,881.90              | 6.58             | 6.51          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,790.10                | 9.26                      | 194.381           |                    |           |
| 2,000.00                          | 2,000.00              | 1,981.90              | 1,981.90              | 6.94             | 6.87          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,789.60                | 9.76                      | 184.289           |                    |           |
| 2,100.00                          | 2,100.00              | 2,081.90              | 2,081.90              | 7.29             | 7.23          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,789.09                | 10.27                     | 175.192           |                    |           |
| 2,200.00                          | 2,200.00              | 2,181.90              | 2,181.90              | 7.65             | 7.59          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,788.58                | 10.78                     | 166.952           |                    |           |
| 2,300.00                          | 2,300.00              | 2,281.90              | 2,281.90              | 8.01             | 7.95          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,788.08                | 11.28                     | 159.452           |                    |           |
| 2,400.00                          | 2,400.00              | 2,381.90              | 2,381.90              | 8.37             | 8.31          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,787.57                | 11.79                     | 152.597           |                    |           |
| 2,500.00                          | 2,500.00              | 2,481.90              | 2,481.90              | 8.73             | 8.66          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,787.06                | 12.30                     | 146.307           |                    |           |
| 2,600.00                          | 2,600.00              | 2,581.90              | 2,581.90              | 9.09             | 9.02          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,786.55                | 12.81                     | 140.514           |                    |           |
| 2,700.00                          | 2,700.00              | 2,681.90              | 2,681.90              | 9.45             | 9.38          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,786.05                | 13.31                     | 135.164           |                    |           |
| 2,800.00                          | 2,800.00              | 2,781.90              | 2,781.90              | 9.80             | 9.74          | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,785.54                | 13.82                     | 130.205           |                    |           |
| 2,900.00                          | 2,900.00              | 2,881.90              | 2,881.90              | 10.16            | 10.10         | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,785.03                | 14.33                     | 125.598           |                    |           |
| 3,000.00                          | 3,000.00              | 2,981.90              | 2,981.90              | 10.52            | 10.46         | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,784.53                | 14.83                     | 121.305           |                    |           |
| 3,100.00                          | 3,100.00              | 3,081.90              | 3,081.90              | 10.88            | 10.81         | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,784.02                | 15.34                     | 117.296           |                    |           |
| 3,200.00                          | 3,200.00              | 3,181.90              | 3,181.90              | 11.24            | 11.17         | 123.88                | -1,003.11                           | 1,493.81     | 1,799.36               | 1,783.51                | 15.85                     | 113.544           |                    |           |
| 3,300.00                          | 3,299.99              | 3,281.89              | 3,281.89              | 11.58            | 11.53         | -4.78                 | -1,003.11                           | 1,493.81     | 1,798.06               | 1,781.71                | 16.34                     | 110.016           |                    |           |
| 3,400.00                          | 3,399.91              | 3,352.20              | 3,352.19              | 11.91            | 11.78         | -4.80                 | -1,003.18                           | 1,494.28     | 1,794.82               | 1,778.07                | 16.75                     | 107.157           |                    |           |
| 3,500.00                          | 3,499.69              | 3,400.00              | 3,399.98              | 12.25            | 11.94         | -4.83                 | -1,003.38                           | 1,495.53     | 1,791.07               | 1,773.98                | 17.09                     | 104.806           |                    |           |
| 3,600.00                          | 3,599.27              | 3,479.73              | 3,479.61              | 12.58            | 12.22         | -4.91                 | -1,003.97                           | 1,499.38     | 1,786.51               | 1,769.00                | 17.51                     | 102.044           |                    |           |
| 3,700.00                          | 3,698.57              | 3,543.49              | 3,543.20              | 12.92            | 12.43         | -5.00                 | -1,004.69                           | 1,504.03     | 1,781.47               | 1,763.59                | 17.88                     | 99.651            |                    |           |
| 3,800.00                          | 3,797.54              | 3,600.00              | 3,599.45              | 13.27            | 12.63         | -5.10                 | -1,005.50                           | 1,509.32     | 1,775.88               | 1,757.66                | 18.22                     | 97.473            |                    |           |
| 3,900.00                          | 3,896.09              | 3,670.96              | 3,669.93              | 13.62            | 12.87         | -5.26                 | -1,006.77                           | 1,517.51     | 1,769.68               | 1,751.08                | 18.60                     | 95.132            |                    |           |
| 4,000.00                          | 3,994.16              | 3,734.66              | 3,732.99              | 13.98            | 13.10         | -5.43                 | -1,008.13                           | 1,526.34     | 1,762.94               | 1,743.99                | 18.96                     | 92.996            |                    |           |
| 4,100.00                          | 4,091.70              | 3,800.00              | 3,797.47              | 14.35            | 13.33         | -5.62                 | -1,009.74                           | 1,536.82     | 1,755.66               | 1,736.35                | 19.31                     | 90.904            |                    |           |
| 4,200.00                          | 4,188.62              | 3,861.90              | 3,858.30              | 14.74            | 13.55         | -5.84                 | -1,011.48                           | 1,548.10     | 1,747.84               | 1,728.19                | 19.65                     | 88.940            |                    |           |
| 4,300.00                          | 4,284.86              | 3,925.43              | 3,920.48              | 15.14            | 13.78         | -6.09                 | -1,013.47                           | 1,561.02     | 1,739.51               | 1,719.52                | 19.99                     | 87.011            |                    |           |
| 4,400.00                          | 4,380.36              | 4,000.00              | 3,993.06              | 15.55            | 14.06         | -6.41                 | -1,016.08                           | 1,577.91     | 1,730.74               | 1,710.36                | 20.37                     | 84.949            |                    |           |
| 4,452.43                          | 4,430.11              | 4,022.14              | 4,014.51              | 15.78            | 14.14         | -6.52                 | -1,016.91                           | 1,583.29     | 1,725.86               | 1,705.36                | 20.50                     | 84.186            |                    |           |
| 4,500.00                          | 4,475.14              | 4,052.30              | 4,043.68              | 15.99            | 14.26         | -6.65                 | -1,018.08                           | 1,590.87     | 1,721.67               | 1,701.01                | 20.66                     | 83.344            |                    |           |
| 4,600.00                          | 4,569.82              | 4,126.05              | 4,114.69              | 16.44            | 14.55         | -7.01                 | -1,021.11                           | 1,610.56     | 1,714.34               | 1,693.31                | 21.03                     | 81.515            |                    |           |
| 4,700.00                          | 4,664.49              | 4,224.75              | 4,209.60              | 16.91            | 14.95         | -7.50                 | -1,025.25                           | 1,637.36     | 1,707.64               | 1,686.12                | 21.52                     | 79.333            |                    |           |
| 4,800.00                          | 4,759.16              | 4,323.45              | 4,304.50              | 17.39            | 15.36         | -7.98                 | -1,029.38                           | 1,664.15     | 1,701.07               | 1,679.05                | 22.02                     | 77.236            |                    |           |
| 4,900.00                          | 4,853.84              | 4,422.15              | 4,399.40              | 17.87            | 15.78         | -8.48                 | -1,033.51                           | 1,690.95     | 1,694.63               | 1,672.10                | 22.53                     | 75.219            |                    |           |
| 5,000.00                          | 4,948.51              | 4,520.85              | 4,494.31              | 18.37            | 16.21         | -8.97                 | -1,037.64                           | 1,717.74     | 1,688.32               | 1,665.28                | 23.04                     | 73.282            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,619.55              | 4,589.21              | 18.88            | 16.65         | -9.47                 | -1,041.77                           | 1,744.54     | 1,682.13               | 1,658.58                | 23.55                     | 71.419            |                    |           |
| 5,200.00                          | 5,137.85              | 4,718.25              | 4,684.11              | 19.39            | 17.09         | -9.98                 | -1,045.90                           | 1,771.34     | 1,676.08               | 1,652.01                | 24.07                     | 69.630            |                    |           |
| 5,300.00                          | 5,232.53              | 4,816.95              | 4,779.02              | 19.92            | 17.55         | -10.48                | -1,050.04                           | 1,798.13     | 1,670.16               | 1,645.56                | 24.59                     | 67.909            |                    |           |
| 5,400.00                          | 5,327.20              | 4,915.65              | 4,873.92              | 20.45            | 18.01         | -10.99                | -1,054.17                           | 1,824.93     | 1,664.37               | 1,639.25                | 25.12                     | 66.255            |                    |           |
| 5,500.00                          | 5,421.87              | 5,014.35              | 4,968.82              | 20.99            | 18.48         | -11.51                | -1,058.30                           | 1,851.72     | 1,658.72               | 1,633.07                | 25.65                     | 64.664            |                    |           |
| 5,600.00                          | 5,516.54              | 5,113.05              | 5,063.73              | 21.53            | 18.95         | -12.02                | -1,062.43                           | 1,878.52     | 1,653.20               | 1,627.02                | 26.19                     | 63.134            |                    |           |
| 5,700.00                          | 5,611.22              | 5,211.75              | 5,158.63              | 22.08            | 19.43         | -12.54                | -1,066.56                           | 1,905.31     | 1,647.83               | 1,621.10                | 26.72                     | 61.661            |                    |           |
| 5,800.00                          | 5,705.89              | 5,310.45              | 5,253.53              | 22.63            | 19.91         | -13.07                | -1,070.70                           | 1,932.11     | 1,642.59               | 1,615.32                | 27.27                     | 60.244            |                    |           |
| 5,900.00                          | 5,800.56              | 5,409.15              | 5,348.44              | 23.19            | 20.40         | -13.59                | -1,074.83                           | 1,958.90     | 1,637.50               | 1,609.68                | 27.81                     | 58.880            |                    |           |
| 6,000.00                          | 5,895.23              | 5,507.85              | 5,443.34              | 23.76            | 20.89         | -14.13                | -1,078.96                           | 1,985.70     | 1,632.54               | 1,604.18                | 28.36                     | 57.566            |                    |           |
| 6,100.00                          | 5,989.91              | 5,606.55              | 5,538.24              | 24.33            | 21.39         | -14.66                | -1,083.09                           | 2,012.50     | 1,627.73               | 1,598.82                | 28.91                     | 56.300            |                    |           |
| 6,200.00                          | 6,084.58              | 5,705.25              | 5,633.14              | 24.90            | 21.89         | -15.19                | -1,087.22                           | 2,039.29     | 1,623.07               | 1,593.60                | 29.47                     | 55.079            |                    |           |
| 6,300.00                          | 6,179.25              | 5,803.95              | 5,728.05              | 25.48            | 22.40         | -15.73                | -1,091.35                           | 2,066.09     | 1,618.55               | 1,588.52                | 30.03                     | 53.903            |                    |           |
| 6,400.00                          | 6,273.92              | 5,902.65              | 5,822.95              | 26.05            | 22.91         | -16.28                | -1,095.49                           | 2,092.88     | 1,614.18               | 1,583.59                | 30.59                     | 52.768            |                    |           |
| 6,500.00                          | 6,368.60              | 6,001.35              | 5,917.85              | 26.64            | 23.42         | -16.82                | -1,099.62                           | 2,119.68     | 1,609.96               | 1,578.80                | 31.16                     | 51.673            |                    |           |
| 6,600.00                          | 6,463.27              | 6,100.05              | 6,012.76              | 27.22            | 23.93         | -17.37                | -1,103.75                           | 2,146.47     | 1,605.88               | 1,574.16                | 31.73                     | 50.617            |                    |           |
| 6,700.00                          | 6,557.94              | 6,198.75              | 6,107.66              | 27.81            | 24.45         | -17.92                | -1,107.88                           | 2,173.27     | 1,601.96               | 1,569.66                | 32.30                     | 49.596            |                    |           |
| 6,800.00                          | 6,652.61              | 6,297.45              | 6,202.56              | 28.40            | 24.97         | -18.47                | -1,112.01                           | 2,200.06     | 1,598.19               | 1,565.31                | 32.88                     | 48.610            |                    |           |
| 6,900.00                          | 6,747.29              | 6,396.15              | 6,297.47              | 29.00            | 25.49         | -19.03                | -1,116.15                           | 2,226.86     | 1,594.57               | 1,561.12                | 33.46                     | 47.657            |                    |           |
| 7,000.00                          | 6,841.96              | 6,494.85              | 6,392.37              | 29.59            | 26.01         | -19.59                | -1,120.28                           | 2,253.66     | 1,591.11               | 1,557.07                | 34.04                     | 46.736            |                    |           |
| 7,100.00                          | 6,936.63              | 6,593.55              | 6,487.27              | 30.19            | 26.54         | -20.15                | -1,124.41                           | 2,280.45     | 1,587.81               | 1,553.17                | 34.63                     | 45.846            |                    |           |
| 7,200.00                          | 7,031.30              | 6,692.25              | 6,582.18              | 30.79            | 27.07         | -20.71                | -1,128.54                           | 2,307.25     | 1,584.65               | 1,549.43                | 35.23                     | 44.984            |                    |           |
| 7,300.00                          | 7,125.98              | 6,790.95              | 6,677.08              | 31.40            | 27.60         | -21.27                | -1,132.67                           | 2,334.04     | 1,581.66               | 1,545.83                | 35.82                     | 44.150            |                    |           |
| 7,400.00                          | 7,220.65              | 6,889.65              | 6,771.98              | 32.00            | 28.13         | -21.84                | -1,136.81                           | 2,360.84     | 1,578.82               | 1,542.40                | 36.43                     | 43.342            |                    |           |
| 7,500.00                          | 7,315.32              | 6,988.35              | 6,866.89              | 32.61            | 28.66         | -22.41                | -1,140.94                           | 2,387.63     | 1,576.15               | 1,539.11                | 37.03                     | 42.560            |                    |           |
| 7,600.00                          | 7,409.99              | 7,087.05              | 6,961.79              | 33.21            | 29.20         | -22.98                | -1,145.07                           | 2,414.43     | 1,573.63               | 1,535.98                | 37.64                     | 41.802            |                    |           |
| 7,700.00                          | 7,504.67              | 7,185.75              | 7,056.69              | 33.82            | 29.73         | -23.55                | -1,149.20                           | 2,441.22     | 1,571.27               | 1,533.01                | 38.26                     | 41.068            |                    |           |
| 7,800.00                          | 7,599.34              | 7,284.45              | 7,151.60              | 34.43            | 30.27         | -24.12                | -1,153.33                           | 2,468.02     | 1,569.07               | 1,530.19                | 38.88                     | 40.357            |                    |           |
| 7,900.00                          | 7,694.01              | 7,383.15              | 7,246.50              | 35.05            | 30.81         | -24.70                | -1,157.46                           | 2,494.82     | 1,567.04               | 1,527.54                | 39.50                     | 39.668            |                    |           |
| 8,000.00                          | 7,788.68              | 7,481.85              | 7,341.40              | 35.66            | 31.35         | -25.28                | -1,161.60                           | 2,521.61     | 1,565.17               | 1,525.03                | 40.13                     | 38.999            |                    |           |
| 8,100.00                          | 7,883.36              | 7,580.55              | 7,436.30              | 36.28            | 31.89         | -25.85                | -1,165.73                           | 2,548.41     | 1,563.46               | 1,522.69                | 40.77                     | 38.351            |                    |           |
| 8,200.00                          | 7,978.03              | 7,679.25              | 7,531.21              | 36.89            | 32.44         | -26.43                | -1,169.86                           | 2,575.20     | 1,561.91               | 1,520.51                | 41.41                     | 37.721            |                    |           |
| 8,300.00                          | 8,072.70              | 7,777.95              | 7,626.11              | 37.51            | 32.98         | -27.01                | -1,173.99                           | 2,602.00     | 1,560.53               | 1,518.48                | 42.05                     | 37.110            |                    |           |
| 8,400.00                          | 8,167.37              | 7,876.65              | 7,721.01              | 38.13            | 33.53         | -27.59                | -1,178.12                           | 2,628.79     | 1,559.31               | 1,516.61                | 42.70                     | 36.517            |                    |           |
| 8,500.00                          | 8,262.05              | 7,975.35              | 7,815.92              | 38.75            | 34.07         | -28.18                | -1,182.26                           | 2,655.59     | 1,558.26               | 1,514.91                | 43.36                     | 35.941            |                    |           |
| 8,600.00                          | 8,356.72              | 8,074.05              | 7,910.82              | 39.37            | 34.62         | -28.76                | -1,186.39                           | 2,682.38     | 1,557.37               | 1,513.36                | 44.02                     | 35.382            |                    |           |
| 8,700.00                          | 8,451.39              | 8,172.75              | 8,005.72              | 39.99            | 35.17         | -29.34                | -1,190.52                           | 2,709.18     | 1,556.65               | 1,511.97                | 44.68                     | 34.838            |                    |           |
| 8,800.00                          | 8,546.07              | 8,271.45              | 8,100.63              | 40.61            | 35.72         | -29.93                | -1,194.65                           | 2,735.98     | 1,556.10               | 1,510.74                | 45.35                     | 34.310            |                    |           |
| 8,875.44                          | 8,617.48              | 8,345.91              | 8,172.22              | 41.08            | 36.13         | -30.37                | -1,197.77                           | 2,756.19     | 1,555.79               | 1,509.92                | 45.86                     | 33.922            |                    |           |
| 8,877.73                          | 8,619.65              | 8,348.17              | 8,174.39              | 41.09            | 36.14         | -30.38                | -1,197.86                           | 2,756.80     | 1,555.78               | 1,509.90                | 45.88                     | 33.910 CC, ES     |                    |           |
| 8,900.00                          | 8,640.90              | 8,370.19              | 8,195.57              | 41.23            | 36.27         | -30.52                | -1,198.78                           | 2,762.78     | 1,556.16               | 1,510.13                | 46.03                     | 33.809            |                    |           |
| 8,950.00                          | 8,689.44              | 8,419.70              | 8,243.17              | 41.49            | 36.54         | -30.92                | -1,200.86                           | 2,776.22     | 1,559.74               | 1,513.39                | 46.34                     | 33.656            |                    |           |
| 9,000.00                          | 8,738.83              | 8,469.02              | 8,290.60              | 41.70            | 36.82         | -31.43                | -1,202.92                           | 2,789.61     | 1,567.05               | 1,520.41                | 46.63                     | 33.604            |                    |           |
| 9,050.00                          | 8,788.70              | 8,517.77              | 8,337.47              | 41.87            | 37.09         | -32.07                | -1,204.96                           | 2,802.85     | 1,578.02               | 1,531.13                | 46.89                     | 33.652            |                    |           |
| 9,063.30                          | 8,802.00              | 8,530.60              | 8,349.80              | 41.91            | 37.16         | 96.40                 | -1,205.50                           | 2,806.33     | 1,581.55               | 1,534.59                | 46.96                     | 33.681            |                    |           |
| 9,100.00                          | 8,838.70              | 8,565.88              | 8,383.73              | 42.00            | 37.36         | 96.41                 | -1,206.98                           | 2,815.91     | 1,591.62               | 1,544.49                | 47.13                     | 33.774            |                    |           |
| 9,200.00                          | 8,938.70              | 8,662.04              | 8,476.19              | 42.26            | 37.90         | 96.45                 | -1,211.00                           | 2,842.01     | 1,619.07               | 1,571.48                | 47.59                     | 34.024            |                    |           |
| 9,300.00                          | 9,038.70              | 8,758.19              | 8,568.64              | 42.51            | 38.43         | 96.49                 | -1,215.03                           | 2,868.12     | 1,646.52               | 1,598.47                | 48.05                     | 34.268            |                    |           |
| 9,400.00                          | 9,138.70              | 8,854.34              | 8,661.09              | 42.77            | 38.97         | 96.53                 | -1,219.05                           | 2,894.22     | 1,673.97               | 1,625.45                | 48.51                     | 34.506            |                    |           |
| 9,500.00                          | 9,238.70              | 9,011.93              | 8,813.11              | 43.03            | 39.84         | 96.59                 | -1,225.37                           | 2,935.22     | 1,700.66               | 1,651.37                | 49.29                     | 34.504            |                    |           |
| 9,600.00                          | 9,338.70              | 9,255.03              | 9,051.31              | 43.30            | 41.00         | 96.65                 | -1,232.72                           | 2,982.87     | 1,720.50               | 1,670.21                | 50.28                     | 34.217            |                    |           |
| 9,700.00                          | 9,438.70              | 9,504.84              | 9,299.42              | 43.56            | 41.98         | 96.68                 | -1,237.04                           | 3,010.86     | 1,731.84               | 1,680.87                | 50.97                     | 33.974            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,800.00                          | 9,538.70              | 9,726.17              | 9,520.60              | 43.82            | 42.66         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,683.24                | 51.38                     | 33.758            |                    |           |
| 9,900.00                          | 9,638.70              | 9,826.17              | 9,620.60              | 44.09            | 42.94         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,682.80                | 51.83                     | 33.469            |                    |           |
| 10,000.00                         | 9,738.70              | 9,926.17              | 9,720.60              | 44.36            | 43.22         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,682.35                | 52.27                     | 33.185            |                    |           |
| 10,100.00                         | 9,838.70              | 10,026.17             | 9,820.60              | 44.63            | 43.50         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,681.91                | 52.72                     | 32.904            |                    |           |
| 10,200.00                         | 9,938.70              | 10,126.17             | 9,920.60              | 44.90            | 43.78         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,681.46                | 53.16                     | 32.628            |                    |           |
| 10,300.00                         | 10,038.70             | 10,226.17             | 10,020.60             | 45.17            | 44.06         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,681.01                | 53.61                     | 32.355            |                    |           |
| 10,400.00                         | 10,138.70             | 10,326.17             | 10,120.60             | 45.44            | 44.35         | 96.69                 | -1,238.11                           | 3,017.81     | 1,734.62               | 1,680.56                | 54.06                     | 32.087            |                    |           |
| 10,500.00                         | 10,238.70             | 10,400.00             | 10,194.33             | 45.71            | 44.55         | 96.79                 | -1,240.98                           | 3,017.84     | 1,735.19               | 1,680.67                | 54.52                     | 31.827            |                    |           |
| 10,600.00                         | 10,338.70             | 10,473.15             | 10,266.44             | 45.99            | 44.76         | 97.18                 | -1,252.91                           | 3,017.95     | 1,737.40               | 1,682.46                | 54.94                     | 31.623            |                    |           |
| 10,700.00                         | 10,438.70             | 10,539.66             | 10,330.23             | 46.26            | 44.96         | 97.79                 | -1,271.66                           | 3,018.13     | 1,741.52               | 1,686.19                | 55.33                     | 31.473            |                    |           |
| 10,800.00                         | 10,538.70             | 10,600.00             | 10,385.86             | 46.54            | 45.14         | 98.55                 | -1,294.95                           | 3,018.36     | 1,747.91               | 1,692.21                | 55.70                     | 31.383            |                    |           |
| 10,900.00                         | 10,638.70             | 10,650.00             | 10,429.89             | 46.82            | 45.29         | 99.31                 | -1,318.60                           | 3,018.59     | 1,756.98               | 1,700.96                | 56.02                     | 31.362            |                    |           |
| 11,000.00                         | 10,738.70             | 10,700.00             | 10,471.70             | 47.10            | 45.44         | 100.19                | -1,346.00                           | 3,018.85     | 1,769.10               | 1,712.80                | 56.30                     | 31.422            |                    |           |
| 11,100.00                         | 10,838.70             | 10,750.00             | 10,510.96             | 47.38            | 45.58         | 101.19                | -1,376.93                           | 3,019.15     | 1,784.61               | 1,728.08                | 56.53                     | 31.569            |                    |           |
| 11,200.00                         | 10,938.70             | 10,800.00             | 10,547.37             | 47.66            | 45.73         | 102.27                | -1,411.17                           | 3,019.49     | 1,803.86               | 1,747.15                | 56.71                     | 31.809            |                    |           |
| 11,300.00                         | 11,038.70             | 10,823.99             | 10,563.75             | 47.94            | 45.80         | 102.83                | -1,428.70                           | 3,019.66     | 1,826.84               | 1,770.05                | 56.79                     | 32.166            |                    |           |
| 11,400.00                         | 11,138.70             | 10,850.00             | 10,580.66             | 48.22            | 45.88         | 103.45                | -1,448.46                           | 3,019.85     | 1,853.85               | 1,797.03                | 56.81                     | 32.630            |                    |           |
| 11,500.00                         | 11,238.70             | 10,881.07             | 10,599.66             | 48.51            | 45.97         | 104.22                | -1,473.03                           | 3,020.08     | 1,884.80               | 1,828.02                | 56.79                     | 33.192            |                    |           |
| 11,600.00                         | 11,338.70             | 10,900.00             | 10,610.58             | 48.79            | 46.03         | 104.70                | -1,488.50                           | 3,020.23     | 1,919.72               | 1,863.05                | 56.66                     | 33.879            |                    |           |
| 11,700.00                         | 11,438.70             | 10,925.94             | 10,624.69             | 49.08            | 46.11         | 105.37                | -1,510.26                           | 3,020.44     | 1,958.46               | 1,901.94                | 56.52                     | 34.652            |                    |           |
| 11,753.34                         | 11,492.04             | 10,950.00             | 10,636.89             | 49.23            | 46.18         | 106.01                | -1,530.99                           | 3,020.65     | 1,980.79               | 1,924.33                | 56.46                     | 35.085            |                    |           |
| 11,800.00                         | 11,538.65             | 10,950.00             | 10,636.89             | 49.37            | 46.18         | -71.37                | -1,530.99                           | 3,020.65     | 2,000.45               | 1,944.12                | 56.33                     | 35.515            |                    |           |
| 11,850.00                         | 11,588.24             | 10,950.00             | 10,636.89             | 49.55            | 46.18         | -69.21                | -1,530.99                           | 3,020.65     | 2,021.28               | 1,965.09                | 56.19                     | 35.972            |                    |           |
| 11,900.00                         | 11,637.10             | 10,967.13             | 10,645.03             | 49.74            | 46.24         | -66.78                | -1,546.06                           | 3,020.79     | 2,041.52               | 1,985.39                | 56.13                     | 36.369            |                    |           |
| 11,950.00                         | 11,684.86             | 10,978.93             | 10,650.38             | 49.95            | 46.27         | -64.61                | -1,556.58                           | 3,020.89     | 2,061.05               | 2,004.98                | 56.07                     | 36.761            |                    |           |
| 12,000.00                         | 11,731.15             | 11,000.00             | 10,659.39             | 50.18            | 46.34         | -62.44                | -1,575.62                           | 3,021.08     | 2,079.73               | 2,023.68                | 56.05                     | 37.105            |                    |           |
| 12,050.00                         | 11,775.62             | 11,000.00             | 10,659.39             | 50.42            | 46.34         | -60.80                | -1,575.62                           | 3,021.08     | 2,097.25               | 2,041.28                | 55.97                     | 37.471            |                    |           |
| 12,100.00                         | 11,817.93             | 11,017.24             | 10,666.24             | 50.68            | 46.40         | -59.05                | -1,591.44                           | 3,021.23     | 2,113.61               | 2,057.63                | 55.98                     | 37.758            |                    |           |
| 12,150.00                         | 11,857.76             | 11,030.78             | 10,671.28             | 50.96            | 46.44         | -57.54                | -1,604.01                           | 3,021.35     | 2,128.65               | 2,072.65                | 56.00                     | 38.014            |                    |           |
| 12,200.00                         | 11,894.81             | 11,050.00             | 10,677.93             | 51.25            | 46.50         | -56.16                | -1,622.04                           | 3,021.53     | 2,142.26               | 2,086.20                | 56.06                     | 38.213            |                    |           |
| 12,250.00                         | 11,928.80             | 11,050.00             | 10,677.93             | 51.56            | 46.50         | -55.13                | -1,622.04                           | 3,021.53     | 2,154.35               | 2,098.26                | 56.09                     | 38.409            |                    |           |
| 12,300.00                         | 11,959.45             | 11,073.05             | 10,685.09             | 51.87            | 46.58         | -54.08                | -1,643.95                           | 3,021.74     | 2,164.69               | 2,108.46                | 56.23                     | 38.496            |                    |           |
| 12,350.00                         | 11,986.56             | 11,100.00             | 10,692.34             | 52.20            | 46.67         | -53.21                | -1,669.90                           | 3,021.99     | 2,173.51               | 2,117.09                | 56.42                     | 38.527            |                    |           |
| 12,400.00                         | 12,009.90             | 11,100.00             | 10,692.34             | 52.55            | 46.67         | -52.66                | -1,669.90                           | 3,021.99     | 2,180.31               | 2,123.74                | 56.57                     | 38.544            |                    |           |
| 12,450.00                         | 12,029.29             | 11,100.00             | 10,692.34             | 52.90            | 46.67         | -52.24                | -1,669.90                           | 3,021.99     | 2,185.61               | 2,128.84                | 56.77                     | 38.503            |                    |           |
| 12,500.00                         | 12,044.60             | 11,131.73             | 10,699.30             | 53.26            | 46.79         | -51.91                | -1,700.85                           | 3,022.29     | 2,188.61               | 2,131.54                | 57.08                     | 38.345            |                    |           |
| 12,550.00                         | 12,055.70             | 11,150.00             | 10,702.53             | 53.63            | 46.85         | -51.79                | -1,718.83                           | 3,022.46     | 2,189.96               | 2,132.56                | 57.40                     | 38.154            |                    |           |
| 12,600.00                         | 12,062.52             | 11,150.00             | 10,702.53             | 54.01            | 46.85         | -51.83                | -1,718.83                           | 3,022.46     | 2,189.49               | 2,131.75                | 57.74                     | 37.920            |                    |           |
| 12,653.34                         | 12,065.00             | 11,177.27             | 10,706.28             | 54.42            | 46.96         | -52.08                | -1,745.84                           | 3,022.73     | 2,186.71               | 2,128.53                | 58.18                     | 37.582            |                    |           |
| 12,700.00                         | 12,065.00             | 11,200.00             | 10,708.41             | 54.78            | 47.04         | -52.12                | -1,768.47                           | 3,022.94     | 2,183.84               | 2,125.25                | 58.59                     | 37.271            |                    |           |
| 12,800.00                         | 12,065.00             | 11,220.99             | 10,709.59             | 55.59            | 47.13         | -52.15                | -1,789.42                           | 3,023.15     | 2,179.85               | 2,120.34                | 59.51                     | 36.630            |                    |           |
| 12,900.00                         | 12,065.00             | 11,270.50             | 10,710.00             | 56.43            | 47.33         | -52.15                | -1,838.92                           | 3,023.63     | 2,179.01               | 2,118.54                | 60.47                     | 36.035            |                    |           |
| 13,000.00                         | 12,065.00             | 11,370.50             | 10,710.00             | 57.31            | 47.77         | -52.15                | -1,938.91                           | 3,024.59     | 2,179.00               | 2,117.57                | 61.43                     | 35.472            |                    |           |
| 13,100.00                         | 12,065.00             | 11,470.50             | 10,710.00             | 58.22            | 48.27         | -52.15                | -2,038.91                           | 3,025.56     | 2,178.99               | 2,116.56                | 62.43                     | 34.901            |                    |           |
| 13,200.00                         | 12,065.00             | 11,570.50             | 10,710.00             | 59.17            | 48.82         | -52.15                | -2,138.91                           | 3,026.53     | 2,178.99               | 2,115.50                | 63.48                     | 34.324            |                    |           |
| 13,300.00                         | 12,065.00             | 11,670.50             | 10,710.00             | 60.14            | 49.42         | -52.15                | -2,238.90                           | 3,027.50     | 2,178.98               | 2,114.40                | 64.57                     | 33.743            |                    |           |
| 13,400.00                         | 12,065.00             | 11,770.50             | 10,710.00             | 61.15            | 50.07         | -52.15                | -2,338.90                           | 3,028.47     | 2,178.97               | 2,113.27                | 65.70                     | 33.163            |                    |           |
| 13,500.00                         | 12,065.00             | 11,870.50             | 10,710.00             | 62.18            | 50.77         | -52.15                | -2,438.89                           | 3,029.44     | 2,178.96               | 2,112.09                | 66.87                     | 32.585            |                    |           |
| 13,600.00                         | 12,065.00             | 11,970.50             | 10,710.00             | 63.24            | 51.51         | -52.15                | -2,538.89                           | 3,030.40     | 2,178.96               | 2,110.88                | 68.07                     | 32.009            |                    |           |
| 13,700.00                         | 12,065.00             | 12,070.50             | 10,710.00             | 64.32            | 52.30         | -52.15                | -2,638.88                           | 3,031.37     | 2,178.95               | 2,109.64                | 69.31                     | 31.437            |                    |           |
| 13,800.00                         | 12,065.00             | 12,170.50             | 10,710.00             | 65.43            | 53.13         | -52.15                | -2,738.88                           | 3,032.34     | 2,178.94               | 2,108.36                | 70.58                     | 30.871            |                    |           |
| 13,900.00                         | 12,065.00             | 12,270.50             | 10,710.00             | 66.56            | 54.00         | -52.15                | -2,838.87                           | 3,033.31     | 2,178.93               | 2,107.05                | 71.88                     | 30.313            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 14,000.00                         | 12,065.00             | 12,370.50             | 10,710.00             | 67.71            | 54.90         | -52.15                | -2,938.87                           | 3,034.28     | 2,178.92               | 2,105.72                | 73.21                     | 29.763            |                    |           |
| 14,100.00                         | 12,065.00             | 12,470.50             | 10,710.00             | 68.88            | 55.85         | -52.15                | -3,038.86                           | 3,035.24     | 2,178.92               | 2,104.35                | 74.57                     | 29.222            |                    |           |
| 14,200.00                         | 12,065.00             | 12,570.50             | 10,710.00             | 70.08            | 56.82         | -52.15                | -3,138.86                           | 3,036.21     | 2,178.91               | 2,102.96                | 75.95                     | 28.690            |                    |           |
| 14,300.00                         | 12,065.00             | 12,670.50             | 10,710.00             | 71.29            | 57.83         | -52.15                | -3,238.85                           | 3,037.18     | 2,178.90               | 2,101.55                | 77.35                     | 28.168            |                    |           |
| 14,400.00                         | 12,065.00             | 12,770.50             | 10,710.00             | 72.51            | 58.87         | -52.15                | -3,338.85                           | 3,038.15     | 2,178.89               | 2,100.11                | 78.78                     | 27.658            |                    |           |
| 14,500.00                         | 12,065.00             | 12,870.50             | 10,710.00             | 73.76            | 59.94         | -52.15                | -3,438.84                           | 3,039.12     | 2,178.89               | 2,098.66                | 80.23                     | 27.158            |                    |           |
| 14,600.00                         | 12,065.00             | 12,970.50             | 10,710.00             | 75.02            | 61.03         | -52.15                | -3,538.84                           | 3,040.08     | 2,178.88               | 2,097.18                | 81.70                     | 26.670            |                    |           |
| 14,700.00                         | 12,065.00             | 13,070.50             | 10,710.00             | 76.29            | 62.15         | -52.15                | -3,638.83                           | 3,041.05     | 2,178.87               | 2,095.68                | 83.19                     | 26.192            |                    |           |
| 14,800.00                         | 12,065.00             | 13,170.50             | 10,710.00             | 77.58            | 63.30         | -52.15                | -3,738.83                           | 3,042.02     | 2,178.86               | 2,094.17                | 84.70                     | 25.725            |                    |           |
| 14,900.00                         | 12,065.00             | 13,270.50             | 10,710.00             | 78.89            | 64.46         | -52.15                | -3,838.83                           | 3,042.99     | 2,178.85               | 2,092.63                | 86.22                     | 25.270            |                    |           |
| 15,000.00                         | 12,065.00             | 13,370.50             | 10,710.00             | 80.20            | 65.65         | -52.15                | -3,938.82                           | 3,043.96     | 2,178.85               | 2,091.08                | 87.77                     | 24.826            |                    |           |
| 15,100.00                         | 12,065.00             | 13,470.50             | 10,710.00             | 81.53            | 66.86         | -52.15                | -4,038.82                           | 3,044.92     | 2,178.84               | 2,089.51                | 89.33                     | 24.392            |                    |           |
| 15,200.00                         | 12,065.00             | 13,570.50             | 10,710.00             | 82.87            | 68.09         | -52.15                | -4,138.81                           | 3,045.89     | 2,178.83               | 2,087.93                | 90.90                     | 23.970            |                    |           |
| 15,300.00                         | 12,065.00             | 13,670.50             | 10,710.00             | 84.22            | 69.34         | -52.15                | -4,238.81                           | 3,046.86     | 2,178.82               | 2,086.34                | 92.48                     | 23.559            |                    |           |
| 15,400.00                         | 12,065.00             | 13,770.50             | 10,710.00             | 85.59            | 70.60         | -52.15                | -4,338.80                           | 3,047.83     | 2,178.82               | 2,084.73                | 94.08                     | 23.159            |                    |           |
| 15,500.00                         | 12,065.00             | 13,870.50             | 10,710.00             | 86.96            | 71.88         | -52.15                | -4,438.80                           | 3,048.80     | 2,178.81               | 2,083.11                | 95.69                     | 22.768            |                    |           |
| 15,600.00                         | 12,065.00             | 13,970.50             | 10,710.00             | 88.34            | 73.18         | -52.15                | -4,538.79                           | 3,049.76     | 2,178.80               | 2,081.48                | 97.32                     | 22.388            |                    |           |
| 15,700.00                         | 12,065.00             | 14,070.50             | 10,710.00             | 89.73            | 74.49         | -52.15                | -4,638.79                           | 3,050.73     | 2,178.79               | 2,079.84                | 98.95                     | 22.019            |                    |           |
| 15,800.00                         | 12,065.00             | 14,170.50             | 10,710.00             | 91.13            | 75.81         | -52.15                | -4,738.78                           | 3,051.70     | 2,178.78               | 2,078.19                | 100.60                    | 21.659            |                    |           |
| 15,900.00                         | 12,065.00             | 14,270.50             | 10,710.00             | 92.54            | 77.14         | -52.15                | -4,838.78                           | 3,052.67     | 2,178.78               | 2,076.52                | 102.25                    | 21.308            |                    |           |
| 16,000.00                         | 12,065.00             | 14,370.50             | 10,710.00             | 93.95            | 78.49         | -52.15                | -4,938.77                           | 3,053.64     | 2,178.77               | 2,074.85                | 103.92                    | 20.966            |                    |           |
| 16,100.00                         | 12,065.00             | 14,470.50             | 10,710.00             | 95.38            | 79.85         | -52.15                | -5,038.77                           | 3,054.60     | 2,178.76               | 2,073.17                | 105.59                    | 20.634            |                    |           |
| 16,200.00                         | 12,065.00             | 14,570.50             | 10,710.00             | 96.81            | 81.22         | -52.15                | -5,138.76                           | 3,055.57     | 2,178.75               | 2,071.48                | 107.27                    | 20.310            |                    |           |
| 16,300.00                         | 12,065.00             | 14,670.50             | 10,710.00             | 98.24            | 82.61         | -52.15                | -5,238.76                           | 3,056.54     | 2,178.75               | 2,069.78                | 108.96                    | 19.995            |                    |           |
| 16,400.00                         | 12,065.00             | 14,770.50             | 10,710.00             | 99.69            | 84.00         | -52.15                | -5,338.76                           | 3,057.51     | 2,178.74               | 2,068.07                | 110.66                    | 19.688            |                    |           |
| 16,500.00                         | 12,065.00             | 14,870.50             | 10,710.00             | 101.14           | 85.40         | -52.15                | -5,438.75                           | 3,058.48     | 2,178.73               | 2,066.36                | 112.37                    | 19.389            |                    |           |
| 16,600.00                         | 12,065.00             | 14,970.50             | 10,710.00             | 102.60           | 86.81         | -52.15                | -5,538.75                           | 3,059.45     | 2,178.72               | 2,064.64                | 114.08                    | 19.097            |                    |           |
| 16,700.00                         | 12,065.00             | 15,070.50             | 10,710.00             | 104.06           | 88.23         | -52.15                | -5,638.74                           | 3,060.41     | 2,178.72               | 2,062.91                | 115.80                    | 18.814            |                    |           |
| 16,800.00                         | 12,065.00             | 15,170.50             | 10,710.00             | 105.53           | 89.65         | -52.15                | -5,738.74                           | 3,061.38     | 2,178.71               | 2,061.18                | 117.53                    | 18.537            |                    |           |
| 16,900.00                         | 12,065.00             | 15,270.50             | 10,710.00             | 107.00           | 91.09         | -52.15                | -5,838.73                           | 3,062.35     | 2,178.70               | 2,059.44                | 119.26                    | 18.268            |                    |           |
| 17,000.00                         | 12,065.00             | 15,370.50             | 10,710.00             | 108.48           | 92.53         | -52.15                | -5,938.73                           | 3,063.32     | 2,178.69               | 2,057.69                | 121.00                    | 18.006            |                    |           |
| 17,100.00                         | 12,065.00             | 15,470.50             | 10,710.00             | 109.96           | 93.98         | -52.15                | -6,038.72                           | 3,064.29     | 2,178.68               | 2,055.94                | 122.74                    | 17.750            |                    |           |
| 17,200.00                         | 12,065.00             | 15,570.50             | 10,710.00             | 111.45           | 95.43         | -52.15                | -6,138.72                           | 3,065.25     | 2,178.68               | 2,054.18                | 124.49                    | 17.501            |                    |           |
| 17,300.00                         | 12,065.00             | 15,670.50             | 10,710.00             | 112.94           | 96.89         | -52.15                | -6,238.71                           | 3,066.22     | 2,178.67               | 2,052.42                | 126.25                    | 17.257            |                    |           |
| 17,400.00                         | 12,065.00             | 15,770.50             | 10,710.00             | 114.44           | 98.36         | -52.15                | -6,338.71                           | 3,067.19     | 2,178.66               | 2,050.66                | 128.01                    | 17.020            |                    |           |
| 17,500.00                         | 12,065.00             | 15,870.50             | 10,710.00             | 115.94           | 99.83         | -52.15                | -6,438.70                           | 3,068.16     | 2,178.65               | 2,048.88                | 129.77                    | 16.789            |                    |           |
| 17,600.00                         | 12,065.00             | 15,970.50             | 10,710.00             | 117.45           | 101.31        | -52.15                | -6,538.70                           | 3,069.13     | 2,178.65               | 2,047.11                | 131.54                    | 16.563            |                    |           |
| 17,700.00                         | 12,065.00             | 16,070.50             | 10,710.00             | 118.96           | 102.80        | -52.15                | -6,638.69                           | 3,070.09     | 2,178.64               | 2,045.33                | 133.31                    | 16.342            |                    |           |
| 17,800.00                         | 12,065.00             | 16,170.50             | 10,710.00             | 120.47           | 104.29        | -52.15                | -6,738.69                           | 3,071.06     | 2,178.63               | 2,043.54                | 135.09                    | 16.128            |                    |           |
| 17,900.00                         | 12,065.00             | 16,270.50             | 10,710.00             | 121.99           | 105.78        | -52.15                | -6,838.69                           | 3,072.03     | 2,178.62               | 2,041.76                | 136.87                    | 15.918            |                    |           |
| 18,000.00                         | 12,065.00             | 16,370.50             | 10,710.00             | 123.51           | 107.28        | -52.15                | -6,938.68                           | 3,073.00     | 2,178.61               | 2,039.97                | 138.65                    | 15.713            |                    |           |
| 18,100.00                         | 12,065.00             | 16,470.50             | 10,710.00             | 125.03           | 108.78        | -52.15                | -7,038.68                           | 3,073.97     | 2,178.61               | 2,038.17                | 140.43                    | 15.513            |                    |           |
| 18,200.00                         | 12,065.00             | 16,570.50             | 10,710.00             | 126.56           | 110.29        | -52.15                | -7,138.67                           | 3,074.93     | 2,178.60               | 2,036.37                | 142.23                    | 15.318            |                    |           |
| 18,300.00                         | 12,065.00             | 16,670.50             | 10,710.00             | 128.09           | 111.80        | -52.15                | -7,238.67                           | 3,075.90     | 2,178.59               | 2,034.57                | 144.02                    | 15.127            |                    |           |
| 18,400.00                         | 12,065.00             | 16,770.50             | 10,710.00             | 129.62           | 113.32        | -52.15                | -7,338.66                           | 3,076.87     | 2,178.58               | 2,032.77                | 145.82                    | 14.941            |                    |           |
| 18,500.00                         | 12,065.00             | 16,870.50             | 10,710.00             | 131.16           | 114.84        | -52.15                | -7,438.66                           | 3,077.84     | 2,178.58               | 2,030.96                | 147.62                    | 14.758            |                    |           |
| 18,600.00                         | 12,065.00             | 16,970.50             | 10,710.00             | 132.69           | 116.36        | -52.15                | -7,538.65                           | 3,078.81     | 2,178.57               | 2,029.15                | 149.42                    | 14.580            |                    |           |
| 18,700.00                         | 12,065.00             | 17,070.50             | 10,710.00             | 134.24           | 117.89        | -52.15                | -7,638.65                           | 3,079.77     | 2,178.56               | 2,027.34                | 151.22                    | 14.406            |                    |           |
| 18,800.00                         | 12,065.00             | 17,170.50             | 10,710.00             | 135.78           | 119.42        | -52.15                | -7,738.64                           | 3,080.74     | 2,178.55               | 2,025.52                | 153.03                    | 14.236            |                    |           |
| 18,900.00                         | 12,065.00             | 17,270.50             | 10,710.00             | 137.33           | 120.95        | -52.14                | -7,838.64                           | 3,081.71     | 2,178.54               | 2,023.71                | 154.84                    | 14.070            |                    |           |
| 19,000.00                         | 12,065.00             | 17,370.50             | 10,710.00             | 138.87           | 122.48        | -52.14                | -7,938.63                           | 3,082.68     | 2,178.54               | 2,021.89                | 156.65                    | 13.907            |                    |           |
| 19,100.00                         | 12,065.00             | 17,470.50             | 10,710.00             | 140.43           | 124.02        | -52.14                | -8,038.63                           | 3,083.65     | 2,178.53               | 2,020.06                | 158.46                    | 13.748            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 19,200.00                         | 12,065.00             | 17,570.50             | 10,710.00             | 141.98           | 125.57        | -52.14                | -8,138.62                           | 3,084.62     | 2,178.52               | 2,018.24                | 160.28                    | 13.592            |                    |           |
| 19,300.00                         | 12,065.00             | 17,670.50             | 10,710.00             | 143.53           | 127.11        | -52.14                | -8,238.62                           | 3,085.58     | 2,178.51               | 2,016.41                | 162.10                    | 13.439            |                    |           |
| 19,400.00                         | 12,065.00             | 17,770.50             | 10,710.00             | 145.09           | 128.66        | -52.14                | -8,338.61                           | 3,086.55     | 2,178.51               | 2,014.58                | 163.92                    | 13.290            |                    |           |
| 19,500.00                         | 12,065.00             | 17,870.50             | 10,710.00             | 146.65           | 130.21        | -52.14                | -8,438.61                           | 3,087.52     | 2,178.50               | 2,012.75                | 165.75                    | 13.144            |                    |           |
| 19,600.00                         | 12,065.00             | 17,970.50             | 10,710.00             | 148.21           | 131.76        | -52.14                | -8,538.61                           | 3,088.49     | 2,178.49               | 2,010.92                | 167.57                    | 13.001            |                    |           |
| 19,700.00                         | 12,065.00             | 18,070.50             | 10,710.00             | 149.78           | 133.32        | -52.14                | -8,638.60                           | 3,089.46     | 2,178.48               | 2,009.09                | 169.39                    | 12.861            |                    |           |
| 19,800.00                         | 12,065.00             | 18,170.50             | 10,710.00             | 151.34           | 134.87        | -52.14                | -8,738.60                           | 3,090.42     | 2,178.47               | 2,007.26                | 171.22                    | 12.723            |                    |           |
| 19,900.00                         | 12,065.00             | 18,270.50             | 10,710.00             | 152.91           | 136.43        | -52.14                | -8,838.59                           | 3,091.39     | 2,178.47               | 2,005.42                | 173.05                    | 12.589            |                    |           |
| 20,000.00                         | 12,065.00             | 18,370.50             | 10,710.00             | 154.48           | 137.99        | -52.14                | -8,938.59                           | 3,092.36     | 2,178.46               | 2,003.58                | 174.88                    | 12.457            |                    |           |
| 20,100.00                         | 12,065.00             | 18,470.50             | 10,710.00             | 156.05           | 139.56        | -52.14                | -9,038.58                           | 3,093.33     | 2,178.45               | 2,001.74                | 176.71                    | 12.328            |                    |           |
| 20,200.00                         | 12,065.00             | 18,570.50             | 10,710.00             | 157.62           | 141.12        | -52.14                | -9,138.58                           | 3,094.30     | 2,178.44               | 1,999.90                | 178.55                    | 12.201            |                    |           |
| 20,300.00                         | 12,065.00             | 18,670.50             | 10,710.00             | 159.20           | 142.69        | -52.14                | -9,238.57                           | 3,095.26     | 2,178.44               | 1,998.06                | 180.38                    | 12.077            |                    |           |
| 20,400.00                         | 12,065.00             | 18,770.50             | 10,710.00             | 160.77           | 144.26        | -52.14                | -9,338.57                           | 3,096.23     | 2,178.43               | 1,996.21                | 182.22                    | 11.955            |                    |           |
| 20,500.00                         | 12,065.00             | 18,870.50             | 10,710.00             | 162.35           | 145.83        | -52.14                | -9,438.56                           | 3,097.20     | 2,178.42               | 1,994.37                | 184.05                    | 11.836            |                    |           |
| 20,600.00                         | 12,065.00             | 18,970.50             | 10,710.00             | 163.93           | 147.40        | -52.14                | -9,538.56                           | 3,098.17     | 2,178.41               | 1,992.52                | 185.89                    | 11.719            |                    |           |
| 20,700.00                         | 12,065.00             | 19,070.50             | 10,710.00             | 165.51           | 148.98        | -52.14                | -9,638.55                           | 3,099.14     | 2,178.41               | 1,990.68                | 187.73                    | 11.604            |                    |           |
| 20,800.00                         | 12,065.00             | 19,170.50             | 10,710.00             | 167.09           | 150.56        | -52.14                | -9,738.55                           | 3,100.10     | 2,178.40               | 1,988.83                | 189.57                    | 11.491            |                    |           |
| 20,900.00                         | 12,065.00             | 19,270.50             | 10,710.00             | 168.67           | 152.13        | -52.14                | -9,838.54                           | 3,101.07     | 2,178.39               | 1,986.98                | 191.41                    | 11.381            |                    |           |
| 21,000.00                         | 12,065.00             | 19,370.50             | 10,710.00             | 170.26           | 153.71        | -52.14                | -9,938.54                           | 3,102.04     | 2,178.38               | 1,985.13                | 193.25                    | 11.272            |                    |           |
| 21,100.00                         | 12,065.00             | 19,470.50             | 10,710.00             | 171.84           | 155.29        | -52.14                | -10,038.54                          | 3,103.01     | 2,178.37               | 1,983.28                | 195.10                    | 11.166            |                    |           |
| 21,200.00                         | 12,065.00             | 19,570.50             | 10,710.00             | 173.43           | 156.88        | -52.14                | -10,138.53                          | 3,103.98     | 2,178.37               | 1,981.43                | 196.94                    | 11.061            |                    |           |
| 21,300.00                         | 12,065.00             | 19,670.50             | 10,710.00             | 175.02           | 158.46        | -52.14                | -10,238.53                          | 3,104.94     | 2,178.36               | 1,979.57                | 198.78                    | 10.958            |                    |           |
| 21,400.00                         | 12,065.00             | 19,770.50             | 10,710.00             | 176.60           | 160.05        | -52.14                | -10,338.52                          | 3,105.91     | 2,178.35               | 1,977.72                | 200.63                    | 10.858            |                    |           |
| 21,500.00                         | 12,065.00             | 19,870.50             | 10,710.00             | 178.19           | 161.63        | -52.14                | -10,438.52                          | 3,106.88     | 2,178.34               | 1,975.87                | 202.47                    | 10.759            |                    |           |
| 21,600.00                         | 12,065.00             | 19,970.50             | 10,710.00             | 179.79           | 163.22        | -52.14                | -10,538.51                          | 3,107.85     | 2,178.34               | 1,974.01                | 204.32                    | 10.661            |                    |           |
| 21,700.00                         | 12,065.00             | 20,070.50             | 10,710.00             | 181.38           | 164.81        | -52.14                | -10,638.51                          | 3,108.82     | 2,178.33               | 1,972.16                | 206.17                    | 10.566            |                    |           |
| 21,800.00                         | 12,065.00             | 20,170.50             | 10,710.00             | 182.97           | 166.40        | -52.14                | -10,738.50                          | 3,109.78     | 2,178.32               | 1,970.30                | 208.02                    | 10.472            |                    |           |
| 21,900.00                         | 12,065.00             | 20,270.50             | 10,710.00             | 184.57           | 167.99        | -52.14                | -10,838.50                          | 3,110.75     | 2,178.31               | 1,968.44                | 209.87                    | 10.379            |                    |           |
| 22,000.00                         | 12,065.00             | 20,370.50             | 10,710.00             | 186.16           | 169.58        | -52.14                | -10,938.49                          | 3,111.72     | 2,178.30               | 1,966.59                | 211.72                    | 10.289            |                    |           |
| 22,100.00                         | 12,065.00             | 20,470.50             | 10,710.00             | 187.76           | 171.18        | -52.14                | -11,038.49                          | 3,112.69     | 2,178.30               | 1,964.73                | 213.57                    | 10.200            |                    |           |
| 22,200.00                         | 12,065.00             | 20,570.50             | 10,710.00             | 189.36           | 172.77        | -52.14                | -11,138.48                          | 3,113.66     | 2,178.29               | 1,962.87                | 215.41                    | 10.112            |                    |           |
| 22,300.00                         | 12,065.00             | 20,670.50             | 10,710.00             | 190.95           | 174.37        | -52.14                | -11,238.48                          | 3,114.63     | 2,178.28               | 1,961.02                | 217.26                    | 10.026            |                    |           |
| 22,400.00                         | 12,065.00             | 20,770.50             | 10,710.00             | 192.55           | 175.97        | -52.14                | -11,338.47                          | 3,115.59     | 2,178.27               | 1,959.16                | 219.12                    | 9.941             |                    |           |
| 22,445.57                         | 12,065.00             | 20,816.07             | 10,710.00             | 193.28           | 176.69        | -52.14                | -11,384.04                          | 3,116.03     | 2,178.27               | 1,958.31                | 219.96                    | 9.903 SF          |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 98.40                 | 98.40                 | 0.13             | 0.12          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,694.72                | 0.18                      | 9,628.944         |                    |           |
| 200.00                            | 200.00                | 198.40                | 198.40                | 0.48             | 0.48          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,694.21                | 0.68                      | 2,491.224         |                    |           |
| 300.00                            | 300.00                | 298.40                | 298.40                | 0.84             | 0.84          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,693.71                | 1.19                      | 1,427.525         |                    |           |
| 400.00                            | 400.00                | 398.40                | 398.40                | 1.20             | 1.20          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,693.20                | 1.69                      | 1,000.381         |                    |           |
| 500.00                            | 500.00                | 498.40                | 498.40                | 1.56             | 1.55          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,692.69                | 2.20                      | 769.986           |                    |           |
| 600.00                            | 600.00                | 598.40                | 598.40                | 1.92             | 1.91          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,692.19                | 2.71                      | 625.848           |                    |           |
| 700.00                            | 700.00                | 698.40                | 698.40                | 2.28             | 2.27          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,691.68                | 3.22                      | 527.165           |                    |           |
| 800.00                            | 800.00                | 798.40                | 798.40                | 2.63             | 2.63          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,691.17                | 3.72                      | 455.364           |                    |           |
| 900.00                            | 900.00                | 898.40                | 898.40                | 2.99             | 2.99          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,690.67                | 4.23                      | 400.777           |                    |           |
| 1,000.00                          | 1,000.00              | 998.40                | 998.40                | 3.35             | 3.35          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,690.16                | 4.74                      | 357.876           |                    |           |
| 1,100.00                          | 1,100.00              | 1,098.40              | 1,098.40              | 3.71             | 3.70          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,689.65                | 5.24                      | 323.272           |                    |           |
| 1,200.00                          | 1,200.00              | 1,198.40              | 1,198.40              | 4.07             | 4.06          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,689.15                | 5.75                      | 294.770           |                    |           |
| 1,300.00                          | 1,300.00              | 1,298.40              | 1,298.40              | 4.43             | 4.42          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,688.64                | 6.26                      | 270.887           |                    |           |
| 1,400.00                          | 1,400.00              | 1,398.40              | 1,398.40              | 4.79             | 4.78          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,688.13                | 6.76                      | 250.583           |                    |           |
| 1,500.00                          | 1,500.00              | 1,498.40              | 1,498.40              | 5.14             | 5.14          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,687.62                | 7.27                      | 233.111           |                    |           |
| 1,600.00                          | 1,600.00              | 1,598.40              | 1,598.40              | 5.50             | 5.50          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,687.12                | 7.78                      | 217.917           |                    |           |
| 1,700.00                          | 1,700.00              | 1,698.40              | 1,698.40              | 5.86             | 5.86          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,686.61                | 8.28                      | 204.582           |                    |           |
| 1,800.00                          | 1,800.00              | 1,798.40              | 1,798.40              | 6.22             | 6.21          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,686.10                | 8.79                      | 192.785           |                    |           |
| 1,900.00                          | 1,900.00              | 1,898.40              | 1,898.40              | 6.58             | 6.57          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,685.60                | 9.30                      | 182.275           |                    |           |
| 2,000.00                          | 2,000.00              | 1,998.40              | 1,998.40              | 6.94             | 6.93          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,685.09                | 9.81                      | 172.851           |                    |           |
| 2,100.00                          | 2,100.00              | 2,098.40              | 2,098.40              | 7.29             | 7.29          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,684.58                | 10.31                     | 164.354           |                    |           |
| 2,200.00                          | 2,200.00              | 2,198.40              | 2,198.40              | 7.65             | 7.65          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,684.08                | 10.82                     | 156.653           |                    |           |
| 2,300.00                          | 2,300.00              | 2,298.40              | 2,298.40              | 8.01             | 8.01          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,683.57                | 11.33                     | 149.641           |                    |           |
| 2,400.00                          | 2,400.00              | 2,398.40              | 2,398.40              | 8.37             | 8.36          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,683.06                | 11.83                     | 143.230           |                    |           |
| 2,500.00                          | 2,500.00              | 2,498.40              | 2,498.40              | 8.73             | 8.72          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,682.55                | 12.34                     | 137.346           |                    |           |
| 2,600.00                          | 2,600.00              | 2,598.40              | 2,598.40              | 9.09             | 9.08          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,682.05                | 12.85                     | 131.927           |                    |           |
| 2,700.00                          | 2,700.00              | 2,698.40              | 2,698.40              | 9.45             | 9.44          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,681.54                | 13.35                     | 126.918           |                    |           |
| 2,800.00                          | 2,800.00              | 2,798.40              | 2,798.40              | 9.80             | 9.80          | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,681.03                | 13.86                     | 122.276           |                    |           |
| 2,900.00                          | 2,900.00              | 2,898.40              | 2,898.40              | 10.16            | 10.16         | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,680.53                | 14.37                     | 117.962           |                    |           |
| 3,000.00                          | 3,000.00              | 2,998.40              | 2,998.40              | 10.52            | 10.52         | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,680.02                | 14.88                     | 113.942           |                    |           |
| 3,100.00                          | 3,100.00              | 3,098.40              | 3,098.40              | 10.88            | 10.87         | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,679.51                | 15.38                     | 110.187           |                    |           |
| 3,200.00                          | 3,200.00              | 3,198.40              | 3,198.40              | 11.24            | 11.23         | -127.01               | -1,020.31                           | -1,353.38    | 1,694.90               | 1,679.01                | 15.89                     | 106.671 CC, ES    |                    |           |
| 3,300.00                          | 3,299.99              | 3,268.34              | 3,268.33              | 11.58            | 11.47         | 104.34                | -1,020.74                           | -1,353.81    | 1,696.09               | 1,679.79                | 16.30                     | 104.057           |                    |           |
| 3,400.00                          | 3,399.91              | 3,337.68              | 3,337.65              | 11.91            | 11.71         | 104.36                | -1,022.06                           | -1,355.14    | 1,699.74               | 1,683.05                | 16.69                     | 101.835           |                    |           |
| 3,500.00                          | 3,499.69              | 3,400.00              | 3,399.91              | 12.25            | 11.91         | 104.39                | -1,024.00                           | -1,357.09    | 1,705.86               | 1,688.80                | 17.06                     | 100.010           |                    |           |
| 3,600.00                          | 3,599.27              | 3,479.49              | 3,479.24              | 12.58            | 12.17         | 104.48                | -1,027.50                           | -1,360.61    | 1,714.38               | 1,696.91                | 17.47                     | 98.142            |                    |           |
| 3,700.00                          | 3,698.57              | 3,578.46              | 3,577.97              | 12.92            | 12.50         | 104.68                | -1,032.37                           | -1,365.52    | 1,724.30               | 1,706.36                | 17.94                     | 96.121            |                    |           |
| 3,800.00                          | 3,797.54              | 3,677.07              | 3,676.34              | 13.27            | 12.83         | 104.94                | -1,037.23                           | -1,370.40    | 1,734.95               | 1,716.54                | 18.41                     | 94.225            |                    |           |
| 3,900.00                          | 3,896.09              | 3,775.25              | 3,774.28              | 13.62            | 13.16         | 105.27                | -1,042.06                           | -1,375.26    | 1,746.39               | 1,727.50                | 18.89                     | 92.445            |                    |           |
| 4,000.00                          | 3,994.16              | 3,872.93              | 3,871.72              | 13.98            | 13.50         | 105.66                | -1,046.87                           | -1,380.10    | 1,758.67               | 1,739.29                | 19.37                     | 90.771            |                    |           |
| 4,100.00                          | 4,091.70              | 3,970.05              | 3,968.60              | 14.35            | 13.83         | 106.11                | -1,051.65                           | -1,384.91    | 1,771.85               | 1,751.98                | 19.86                     | 89.197            |                    |           |
| 4,200.00                          | 4,188.62              | 4,066.53              | 4,064.85              | 14.74            | 14.16         | 106.60                | -1,056.40                           | -1,389.69    | 1,785.99               | 1,765.63                | 20.36                     | 87.715            |                    |           |
| 4,300.00                          | 4,284.86              | 4,162.33              | 4,160.41              | 15.14            | 14.49         | 107.15                | -1,061.11                           | -1,394.44    | 1,801.18               | 1,780.32                | 20.87                     | 86.320            |                    |           |
| 4,400.00                          | 4,380.36              | 4,257.36              | 4,255.21              | 15.55            | 14.82         | 107.73                | -1,065.79                           | -1,399.14    | 1,817.49               | 1,796.11                | 21.38                     | 85.006            |                    |           |
| 4,452.43                          | 4,430.11              | 4,306.86              | 4,304.59              | 15.78            | 14.99         | 108.05                | -1,068.23                           | -1,401.59    | 1,826.52               | 1,804.87                | 21.65                     | 84.350            |                    |           |
| 4,500.00                          | 4,475.14              | 4,351.66              | 4,349.28              | 15.99            | 15.15         | 108.46                | -1,070.43                           | -1,403.81    | 1,834.92               | 1,813.01                | 21.90                     | 83.768            |                    |           |
| 4,600.00                          | 4,569.82              | 4,445.85              | 4,443.24              | 16.44            | 15.47         | 109.32                | -1,075.07                           | -1,408.48    | 1,852.89               | 1,830.45                | 22.44                     | 82.581            |                    |           |
| 4,700.00                          | 4,664.49              | 4,540.03              | 4,537.20              | 16.91            | 15.80         | 110.16                | -1,079.71                           | -1,413.14    | 1,871.30               | 1,848.32                | 22.98                     | 81.441            |                    |           |
| 4,800.00                          | 4,759.16              | 4,634.22              | 4,631.15              | 17.39            | 16.13         | 110.99                | -1,084.34                           | -1,417.81    | 1,890.12               | 1,866.60                | 23.52                     | 80.349            |                    |           |
| 4,900.00                          | 4,853.84              | 4,728.41              | 4,725.11              | 17.87            | 16.47         | 111.81                | -1,088.98                           | -1,422.47    | 1,909.35               | 1,885.27                | 24.08                     | 79.304            |                    |           |
| 5,000.00                          | 4,948.51              | 4,822.59              | 4,819.07              | 18.37            | 16.80         | 112.60                | -1,093.62                           | -1,427.14    | 1,928.97               | 1,904.34                | 24.63                     | 78.305            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,916.78              | 4,913.02              | 18.88            | 17.13         | 113.39                | -1,098.25                           | -1,431.80    | 1,948.97               | 1,923.78                | 25.20                     | 77.352            |                    |           |
| 5,200.00                          | 5,137.85              | 5,010.97              | 5,006.98              | 19.39            | 17.47         | 114.15                | -1,102.89                           | -1,436.47    | 1,969.35               | 1,943.59                | 25.76                     | 76.443            |                    |           |
| 5,300.00                          | 5,232.53              | 5,105.15              | 5,100.94              | 19.92            | 17.80         | 114.91                | -1,107.52                           | -1,441.13    | 1,990.08               | 1,963.75                | 26.33                     | 75.577            |                    |           |
| 5,400.00                          | 5,327.20              | 5,199.34              | 5,194.89              | 20.45            | 18.14         | 115.65                | -1,112.16                           | -1,445.80    | 2,011.16               | 1,984.26                | 26.90                     | 74.753            |                    |           |
| 5,500.00                          | 5,421.87              | 5,293.52              | 5,288.85              | 20.99            | 18.47         | 116.37                | -1,116.80                           | -1,450.46    | 2,032.58               | 2,005.10                | 27.48                     | 73.969            |                    |           |
| 5,600.00                          | 5,516.54              | 5,387.71              | 5,382.80              | 21.53            | 18.81         | 117.08                | -1,121.43                           | -1,455.13    | 2,054.32               | 2,026.27                | 28.06                     | 73.223            |                    |           |
| 5,700.00                          | 5,611.22              | 5,481.90              | 5,476.76              | 22.08            | 19.15         | 117.78                | -1,126.07                           | -1,459.79    | 2,076.38               | 2,047.75                | 28.63                     | 72.513            |                    |           |
| 5,800.00                          | 5,705.89              | 5,576.08              | 5,570.72              | 22.63            | 19.49         | 118.46                | -1,130.71                           | -1,464.46    | 2,098.75               | 2,069.53                | 29.21                     | 71.839            |                    |           |
| 5,900.00                          | 5,800.56              | 5,670.27              | 5,664.67              | 23.19            | 19.83         | 119.13                | -1,135.34                           | -1,469.12    | 2,121.41               | 2,091.61                | 29.80                     | 71.198            |                    |           |
| 6,000.00                          | 5,895.23              | 5,764.46              | 5,758.63              | 23.76            | 20.17         | 119.78                | -1,139.98                           | -1,473.79    | 2,144.36               | 2,113.98                | 30.38                     | 70.588            |                    |           |
| 6,100.00                          | 5,989.91              | 5,858.64              | 5,852.59              | 24.33            | 20.51         | 120.42                | -1,144.62                           | -1,478.45    | 2,167.59               | 2,136.62                | 30.96                     | 70.009            |                    |           |
| 6,200.00                          | 6,084.58              | 5,952.83              | 5,946.54              | 24.90            | 20.85         | 121.05                | -1,149.25                           | -1,483.12    | 2,191.08               | 2,159.54                | 31.54                     | 69.459            |                    |           |
| 6,300.00                          | 6,179.25              | 6,047.01              | 6,040.50              | 25.48            | 21.19         | 121.67                | -1,153.89                           | -1,487.78    | 2,214.84               | 2,182.71                | 32.13                     | 68.937            |                    |           |
| 6,400.00                          | 6,273.92              | 6,141.20              | 6,134.45              | 26.05            | 21.53         | 122.28                | -1,158.52                           | -1,492.45    | 2,238.85               | 2,206.13                | 32.71                     | 68.440            |                    |           |
| 6,500.00                          | 6,368.60              | 6,235.39              | 6,228.41              | 26.64            | 21.87         | 122.87                | -1,163.16                           | -1,497.11    | 2,263.10               | 2,229.80                | 33.30                     | 67.968            |                    |           |
| 6,600.00                          | 6,463.27              | 6,329.57              | 6,322.37              | 27.22            | 22.22         | 123.45                | -1,167.80                           | -1,501.78    | 2,287.59               | 2,253.71                | 33.88                     | 67.519            |                    |           |
| 6,700.00                          | 6,557.94              | 6,423.76              | 6,416.32              | 27.81            | 22.56         | 124.02                | -1,172.43                           | -1,506.44    | 2,312.31               | 2,277.84                | 34.46                     | 67.092            |                    |           |
| 6,800.00                          | 6,652.61              | 6,548.19              | 6,540.48              | 28.40            | 23.01         | 124.76                | -1,178.26                           | -1,512.30    | 2,337.07               | 2,301.92                | 35.15                     | 66.487            |                    |           |
| 6,900.00                          | 6,747.29              | 6,748.65              | 6,740.84              | 29.00            | 23.72         | 126.00                | -1,182.30                           | -1,516.37    | 2,358.89               | 2,322.84                | 36.05                     | 65.433            |                    |           |
| 7,000.00                          | 6,841.96              | 6,848.18              | 6,840.36              | 29.59            | 24.06         | 126.64                | -1,182.31                           | -1,516.38    | 2,378.66               | 2,342.02                | 36.64                     | 64.921            |                    |           |
| 7,100.00                          | 6,936.63              | 6,942.85              | 6,935.03              | 30.19            | 24.39         | 127.24                | -1,182.31                           | -1,516.38    | 2,398.68               | 2,361.47                | 37.21                     | 64.456            |                    |           |
| 7,200.00                          | 7,031.30              | 7,037.52              | 7,029.70              | 30.79            | 24.72         | 127.82                | -1,182.31                           | -1,516.38    | 2,418.97               | 2,381.19                | 37.79                     | 64.015            |                    |           |
| 7,300.00                          | 7,125.98              | 7,132.19              | 7,124.38              | 31.40            | 25.05         | 128.40                | -1,182.31                           | -1,516.38    | 2,439.52               | 2,401.16                | 38.36                     | 63.596            |                    |           |
| 7,400.00                          | 7,220.65              | 7,226.87              | 7,219.05              | 32.00            | 25.38         | 128.97                | -1,182.31                           | -1,516.38    | 2,460.32               | 2,421.39                | 38.93                     | 63.197            |                    |           |
| 7,500.00                          | 7,315.32              | 7,321.54              | 7,313.72              | 32.61            | 25.70         | 129.53                | -1,182.31                           | -1,516.38    | 2,481.36               | 2,441.86                | 39.50                     | 62.819            |                    |           |
| 7,600.00                          | 7,409.99              | 7,416.21              | 7,408.39              | 33.21            | 26.03         | 130.08                | -1,182.31                           | -1,516.38    | 2,502.64               | 2,462.57                | 40.07                     | 62.459            |                    |           |
| 7,700.00                          | 7,504.67              | 7,510.88              | 7,503.07              | 33.82            | 26.36         | 130.62                | -1,182.31                           | -1,516.38    | 2,524.15               | 2,483.51                | 40.64                     | 62.117            |                    |           |
| 7,800.00                          | 7,599.34              | 7,605.56              | 7,597.74              | 34.43            | 26.69         | 131.16                | -1,182.31                           | -1,516.38    | 2,545.88               | 2,504.68                | 41.20                     | 61.792            |                    |           |
| 7,900.00                          | 7,694.01              | 7,700.23              | 7,692.41              | 35.05            | 27.02         | 131.68                | -1,182.31                           | -1,516.38    | 2,567.84               | 2,526.07                | 41.76                     | 61.484            |                    |           |
| 8,000.00                          | 7,788.68              | 7,794.90              | 7,787.08              | 35.66            | 27.35         | 132.20                | -1,182.31                           | -1,516.38    | 2,590.01               | 2,547.68                | 42.33                     | 61.191            |                    |           |
| 8,100.00                          | 7,883.36              | 7,889.57              | 7,881.76              | 36.28            | 27.68         | 132.71                | -1,182.31                           | -1,516.38    | 2,612.39               | 2,569.50                | 42.89                     | 60.912            |                    |           |
| 8,200.00                          | 7,978.03              | 7,984.25              | 7,976.43              | 36.89            | 28.01         | 133.21                | -1,182.31                           | -1,516.38    | 2,634.97               | 2,591.52                | 43.45                     | 60.647            |                    |           |
| 8,300.00                          | 8,072.70              | 8,078.92              | 8,071.10              | 37.51            | 28.34         | 133.70                | -1,182.31                           | -1,516.38    | 2,657.75               | 2,613.74                | 44.01                     | 60.395            |                    |           |
| 8,400.00                          | 8,167.37              | 8,173.59              | 8,165.77              | 38.13            | 28.67         | 134.18                | -1,182.31                           | -1,516.38    | 2,680.72               | 2,636.16                | 44.56                     | 60.155            |                    |           |
| 8,500.00                          | 8,262.05              | 8,268.26              | 8,260.45              | 38.75            | 29.00         | 134.66                | -1,182.31                           | -1,516.38    | 2,703.89               | 2,658.77                | 45.12                     | 59.927            |                    |           |
| 8,600.00                          | 8,356.72              | 8,362.94              | 8,355.12              | 39.37            | 29.33         | 135.13                | -1,182.31                           | -1,516.38    | 2,727.23               | 2,681.56                | 45.67                     | 59.710            |                    |           |
| 8,700.00                          | 8,451.39              | 8,457.61              | 8,449.79              | 39.99            | 29.66         | 135.59                | -1,182.31                           | -1,516.38    | 2,750.76               | 2,704.53                | 46.23                     | 59.504            |                    |           |
| 8,800.00                          | 8,546.07              | 8,552.28              | 8,544.47              | 40.61            | 29.99         | 136.04                | -1,182.31                           | -1,516.38    | 2,774.46               | 2,727.68                | 46.78                     | 59.308            |                    |           |
| 8,875.44                          | 8,617.48              | 8,623.70              | 8,615.88              | 41.08            | 30.24         | 136.38                | -1,182.31                           | -1,516.38    | 2,792.45               | 2,745.25                | 47.20                     | 59.167            |                    |           |
| 8,900.00                          | 8,640.90              | 8,647.12              | 8,639.30              | 41.23            | 30.33         | 136.87                | -1,182.31                           | -1,516.38    | 2,797.95               | 2,750.62                | 47.33                     | 59.116            |                    |           |
| 8,950.00                          | 8,689.44              | 8,695.65              | 8,687.84              | 41.49            | 30.50         | 137.65                | -1,182.31                           | -1,516.38    | 2,806.85               | 2,759.26                | 47.59                     | 58.977            |                    |           |
| 9,000.00                          | 8,738.83              | 8,745.04              | 8,737.23              | 41.70            | 30.67         | 138.14                | -1,182.31                           | -1,516.38    | 2,812.57               | 2,764.73                | 47.84                     | 58.788            |                    |           |
| 9,050.00                          | 8,788.70              | 8,794.92              | 8,787.10              | 41.87            | 30.84         | 138.35                | -1,182.31                           | -1,516.38    | 2,815.07               | 2,766.99                | 48.08                     | 58.551            |                    |           |
| 9,063.30                          | 8,802.00              | 8,808.22              | 8,800.40              | 41.91            | 30.89         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,767.05                | 48.14                     | 58.481            |                    |           |
| 9,100.00                          | 8,838.70              | 8,844.91              | 8,837.10              | 42.00            | 31.02         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,766.88                | 48.30                     | 58.285            |                    |           |
| 9,200.00                          | 8,938.70              | 8,944.91              | 8,937.10              | 42.26            | 31.37         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,766.44                | 48.74                     | 57.757            |                    |           |
| 9,300.00                          | 9,038.70              | 9,044.91              | 9,037.10              | 42.51            | 31.72         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,766.00                | 49.19                     | 57.236            |                    |           |
| 9,400.00                          | 9,138.70              | 9,144.91              | 9,137.10              | 42.77            | 32.07         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,765.56                | 49.63                     | 56.724            |                    |           |
| 9,500.00                          | 9,238.70              | 9,244.91              | 9,237.10              | 43.03            | 32.42         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,765.11                | 50.08                     | 56.219            |                    |           |
| 9,600.00                          | 9,338.70              | 9,344.91              | 9,337.10              | 43.30            | 32.78         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,764.66                | 50.52                     | 55.722            |                    |           |
| 9,700.00                          | 9,438.70              | 9,444.91              | 9,437.10              | 43.56            | 33.13         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,764.22                | 50.97                     | 55.233            |                    |           |
| 9,800.00                          | 9,538.70              | 9,544.91              | 9,537.10              | 43.82            | 33.48         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,763.77                | 51.42                     | 54.750            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,900.00                          | 9,638.70              | 9,644.91              | 9,637.10              | 44.09            | 33.83         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,763.32                | 51.87                     | 54.276            |                    |           |
| 10,000.00                         | 9,738.70              | 9,744.91              | 9,737.10              | 44.36            | 34.18         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,762.87                | 52.32                     | 53.808            |                    |           |
| 10,100.00                         | 9,838.70              | 9,844.91              | 9,837.10              | 44.63            | 34.53         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,762.41                | 52.77                     | 53.347            |                    |           |
| 10,200.00                         | 9,938.70              | 9,944.91              | 9,937.10              | 44.90            | 34.89         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,761.96                | 53.22                     | 52.893            |                    |           |
| 10,300.00                         | 10,038.70             | 10,044.91             | 10,037.10             | 45.17            | 35.24         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,761.51                | 53.68                     | 52.446            |                    |           |
| 10,400.00                         | 10,138.70             | 10,144.91             | 10,137.10             | 45.44            | 35.59         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,761.05                | 54.13                     | 52.005            |                    |           |
| 10,500.00                         | 10,238.70             | 10,244.91             | 10,237.10             | 45.71            | 35.94         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,760.60                | 54.59                     | 51.571            |                    |           |
| 10,600.00                         | 10,338.70             | 10,344.91             | 10,337.10             | 45.99            | 36.30         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,760.14                | 55.05                     | 51.143            |                    |           |
| 10,700.00                         | 10,438.70             | 10,444.91             | 10,437.10             | 46.26            | 36.65         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,759.68                | 55.50                     | 50.722            |                    |           |
| 10,800.00                         | 10,538.70             | 10,544.91             | 10,537.10             | 46.54            | 37.00         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,759.22                | 55.96                     | 50.306            |                    |           |
| 10,900.00                         | 10,638.70             | 10,644.91             | 10,637.10             | 46.82            | 37.36         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,758.76                | 56.42                     | 49.897            |                    |           |
| 11,000.00                         | 10,738.70             | 10,744.91             | 10,737.10             | 47.10            | 37.71         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,758.30                | 56.88                     | 49.493            |                    |           |
| 11,100.00                         | 10,838.70             | 10,844.91             | 10,837.10             | 47.38            | 38.06         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,757.84                | 57.34                     | 49.096            |                    |           |
| 11,200.00                         | 10,938.70             | 10,944.91             | 10,937.10             | 47.66            | 38.42         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,757.38                | 57.80                     | 48.704            |                    |           |
| 11,300.00                         | 11,038.70             | 11,044.91             | 11,037.10             | 47.94            | 38.77         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,756.92                | 58.26                     | 48.317            |                    |           |
| 11,400.00                         | 11,138.70             | 11,144.91             | 11,137.10             | 48.22            | 39.12         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,756.46                | 58.73                     | 47.936            |                    |           |
| 11,500.00                         | 11,238.70             | 11,244.91             | 11,237.10             | 48.51            | 39.48         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,755.99                | 59.19                     | 47.561            |                    |           |
| 11,600.00                         | 11,338.70             | 11,344.91             | 11,337.10             | 48.79            | 39.83         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,755.53                | 59.66                     | 47.190            |                    |           |
| 11,700.00                         | 11,438.70             | 11,444.91             | 11,437.10             | 49.08            | 40.18         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,755.06                | 60.12                     | 46.825            |                    |           |
| 11,753.34                         | 11,492.04             | 11,498.26             | 11,490.44             | 49.23            | 40.37         | -92.98                | -1,182.31                           | -1,516.38    | 2,815.18               | 2,754.81                | 60.37                     | 46.632            |                    |           |
| 11,800.00                         | 11,538.65             | 11,544.86             | 11,537.05             | 49.37            | 40.54         | 87.63                 | -1,182.31                           | -1,516.38    | 2,815.11               | 2,754.51                | 60.59                     | 46.461            |                    |           |
| 11,850.00                         | 11,588.24             | 11,588.53             | 11,580.70             | 49.55            | 40.69         | 87.74                 | -1,183.13                           | -1,516.37    | 2,814.89               | 2,754.07                | 60.82                     | 46.284            |                    |           |
| 11,900.00                         | 11,637.10             | 11,630.29             | 11,622.28             | 49.74            | 40.83         | 87.87                 | -1,186.88                           | -1,516.33    | 2,814.65               | 2,753.60                | 61.05                     | 46.103            |                    |           |
| 11,950.00                         | 11,684.86             | 11,672.36             | 11,663.79             | 49.95            | 40.98         | 88.01                 | -1,193.71                           | -1,516.27    | 2,814.41               | 2,753.10                | 61.30                     | 45.911            |                    |           |
| 12,000.00                         | 11,731.15             | 11,714.81             | 11,705.04             | 50.18            | 41.13         | 88.17                 | -1,203.67                           | -1,516.17    | 2,814.15               | 2,752.58                | 61.57                     | 45.707            |                    |           |
| 12,050.00                         | 11,775.62             | 11,757.67             | 11,745.83             | 50.42            | 41.27         | 88.33                 | -1,216.80                           | -1,516.03    | 2,813.90               | 2,752.04                | 61.85                     | 45.494            |                    |           |
| 12,100.00                         | 11,817.93             | 11,800.00             | 11,785.04             | 50.68            | 41.42         | 88.51                 | -1,232.72                           | -1,515.88    | 2,813.65               | 2,751.50                | 62.15                     | 45.273            |                    |           |
| 12,150.00                         | 11,857.76             | 11,844.83             | 11,825.17             | 50.96            | 41.57         | 88.70                 | -1,252.68                           | -1,515.68    | 2,813.41               | 2,750.95                | 62.47                     | 45.037            |                    |           |
| 12,200.00                         | 11,894.81             | 11,889.24             | 11,863.26             | 51.25            | 41.73         | 88.90                 | -1,275.50                           | -1,515.45    | 2,813.20               | 2,750.40                | 62.80                     | 44.796            |                    |           |
| 12,250.00                         | 11,928.80             | 11,934.28             | 11,899.96             | 51.56            | 41.89         | 89.10                 | -1,301.57                           | -1,515.19    | 2,813.01               | 2,749.86                | 63.15                     | 44.545            |                    |           |
| 12,300.00                         | 11,959.45             | 11,980.01             | 11,935.02             | 51.87            | 42.05         | 89.32                 | -1,330.91                           | -1,514.89    | 2,812.85               | 2,749.34                | 63.51                     | 44.286            |                    |           |
| 12,350.00                         | 11,986.56             | 12,026.48             | 11,968.14             | 52.20            | 42.22         | 89.54                 | -1,363.50                           | -1,514.57    | 2,812.73               | 2,748.84                | 63.90                     | 44.020            |                    |           |
| 12,400.00                         | 12,009.90             | 12,073.77             | 11,999.01             | 52.55            | 42.39         | 89.76                 | -1,399.30                           | -1,514.21    | 2,812.65               | 2,748.36                | 64.30                     | 43.746            |                    |           |
| 12,450.00                         | 12,029.29             | 12,121.94             | 12,027.31             | 52.90            | 42.57         | 89.99                 | -1,438.25                           | -1,513.82    | 2,812.62               | 2,747.91                | 64.71                     | 43.465            |                    |           |
| 12,463.78                         | 12,033.92             | 12,135.38             | 12,034.62             | 53.00            | 42.63         | 90.05                 | -1,449.53                           | -1,513.70    | 2,812.61               | 2,747.79                | 64.83                     | 43.387            |                    |           |
| 12,500.00                         | 12,044.60             | 12,171.05             | 12,052.70             | 53.26            | 42.76         | 90.22                 | -1,480.28                           | -1,513.40    | 2,812.63               | 2,747.49                | 65.14                     | 43.179            |                    |           |
| 12,550.00                         | 12,055.70             | 12,221.18             | 12,074.80             | 53.63            | 42.97         | 90.45                 | -1,525.24                           | -1,512.95    | 2,812.68               | 2,747.10                | 65.58                     | 42.887            |                    |           |
| 12,600.00                         | 12,062.52             | 12,272.37             | 12,093.24             | 54.01            | 43.18         | 90.67                 | -1,572.99                           | -1,512.47    | 2,812.79               | 2,746.75                | 66.04                     | 42.592            |                    |           |
| 12,653.34                         | 12,065.00             | 12,328.25             | 12,108.40             | 54.42            | 43.41         | 90.92                 | -1,626.74                           | -1,511.93    | 2,812.95               | 2,746.41                | 66.54                     | 42.274            |                    |           |
| 12,700.00                         | 12,065.00             | 12,378.57             | 12,117.52             | 54.78            | 43.63         | 91.10                 | -1,676.21                           | -1,511.43    | 2,813.09               | 2,746.10                | 66.99                     | 41.991            |                    |           |
| 12,800.00                         | 12,065.00             | 12,486.36             | 12,123.00             | 55.59            | 44.10         | 91.21                 | -1,783.74                           | -1,510.36    | 2,813.17               | 2,745.18                | 67.99                     | 41.378            |                    |           |
| 12,900.00                         | 12,065.00             | 12,586.36             | 12,123.00             | 56.43            | 44.59         | 91.21                 | -1,883.74                           | -1,509.36    | 2,813.14               | 2,744.15                | 68.99                     | 40.774            |                    |           |
| 13,000.00                         | 12,065.00             | 12,686.36             | 12,123.00             | 57.31            | 45.12         | 91.21                 | -1,983.73                           | -1,508.35    | 2,813.12               | 2,743.06                | 70.06                     | 40.151            |                    |           |
| 13,100.00                         | 12,065.00             | 12,786.36             | 12,123.00             | 58.22            | 45.72         | 91.21                 | -2,083.73                           | -1,507.35    | 2,813.10               | 2,741.90                | 71.19                     | 39.514            |                    |           |
| 13,200.00                         | 12,065.00             | 12,886.36             | 12,123.00             | 59.17            | 46.36         | 91.21                 | -2,183.72                           | -1,506.35    | 2,813.07               | 2,740.69                | 72.38                     | 38.865            |                    |           |
| 13,300.00                         | 12,065.00             | 12,986.36             | 12,123.00             | 60.14            | 47.05         | 91.21                 | -2,283.72                           | -1,505.35    | 2,813.05               | 2,739.43                | 73.62                     | 38.208            |                    |           |
| 13,400.00                         | 12,065.00             | 13,086.36             | 12,123.00             | 61.15            | 47.79         | 91.21                 | -2,383.71                           | -1,504.35    | 2,813.03               | 2,738.11                | 74.92                     | 37.548            |                    |           |
| 13,500.00                         | 12,065.00             | 13,186.36             | 12,123.00             | 62.18            | 48.57         | 91.21                 | -2,483.71                           | -1,503.35    | 2,813.00               | 2,736.74                | 76.26                     | 36.886            |                    |           |
| 13,600.00                         | 12,065.00             | 13,286.36             | 12,123.00             | 63.24            | 49.40         | 91.21                 | -2,583.70                           | -1,502.35    | 2,812.98               | 2,735.32                | 77.65                     | 36.224            |                    |           |
| 13,700.00                         | 12,065.00             | 13,386.36             | 12,123.00             | 64.32            | 50.26         | 91.21                 | -2,683.70                           | -1,501.35    | 2,812.96               | 2,733.87                | 79.09                     | 35.566            |                    |           |
| 13,800.00                         | 12,065.00             | 13,486.36             | 12,123.00             | 65.43            | 51.17         | 91.21                 | -2,783.69                           | -1,500.34    | 2,812.93               | 2,732.36                | 80.57                     | 34.914            |                    |           |
| 13,900.00                         | 12,065.00             | 13,586.36             | 12,123.00             | 66.56            | 52.11         | 91.21                 | -2,883.69                           | -1,499.34    | 2,812.91               | 2,730.82                | 82.09                     | 34.268            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |  |
| 14,000.00                         | 12,065.00             | 13,686.36             | 12,123.00             | 67.71            | 53.09         | 91.21                 | -2,983.68                           | -1,498.34    | 2,812.89               | 2,729.24                | 83.64                     | 33.630            |                    |           |  |
| 14,100.00                         | 12,065.00             | 13,786.36             | 12,123.00             | 68.88            | 54.09         | 91.21                 | -3,083.68                           | -1,497.34    | 2,812.86               | 2,727.63                | 85.23                     | 33.002            |                    |           |  |
| 14,200.00                         | 12,065.00             | 13,886.36             | 12,123.00             | 70.08            | 55.13         | 91.21                 | -3,183.67                           | -1,496.34    | 2,812.84               | 2,725.98                | 86.86                     | 32.384            |                    |           |  |
| 14,300.00                         | 12,065.00             | 13,986.36             | 12,123.00             | 71.29            | 56.20         | 91.21                 | -3,283.67                           | -1,495.34    | 2,812.82               | 2,724.30                | 88.51                     | 31.778            |                    |           |  |
| 14,400.00                         | 12,065.00             | 14,086.36             | 12,123.00             | 72.51            | 57.30         | 91.21                 | -3,383.66                           | -1,494.34    | 2,812.79               | 2,722.59                | 90.20                     | 31.183            |                    |           |  |
| 14,500.00                         | 12,065.00             | 14,186.36             | 12,123.00             | 73.76            | 58.42         | 91.21                 | -3,483.66                           | -1,493.33    | 2,812.77               | 2,720.85                | 91.92                     | 30.601            |                    |           |  |
| 14,600.00                         | 12,065.00             | 14,286.36             | 12,123.00             | 75.02            | 59.57         | 91.21                 | -3,583.65                           | -1,492.33    | 2,812.74               | 2,719.09                | 93.66                     | 30.032            |                    |           |  |
| 14,700.00                         | 12,065.00             | 14,386.36             | 12,123.00             | 76.29            | 60.74         | 91.21                 | -3,683.65                           | -1,491.33    | 2,812.72               | 2,717.30                | 95.43                     | 29.475            |                    |           |  |
| 14,800.00                         | 12,065.00             | 14,486.36             | 12,123.00             | 77.58            | 61.94         | 91.21                 | -3,783.64                           | -1,490.33    | 2,812.70               | 2,715.48                | 97.22                     | 28.932            |                    |           |  |
| 14,900.00                         | 12,065.00             | 14,586.36             | 12,123.00             | 78.89            | 63.15         | 91.21                 | -3,883.64                           | -1,489.33    | 2,812.67               | 2,713.64                | 99.03                     | 28.402            |                    |           |  |
| 15,000.00                         | 12,065.00             | 14,686.36             | 12,123.00             | 80.20            | 64.38         | 91.21                 | -3,983.63                           | -1,488.33    | 2,812.65               | 2,711.78                | 100.87                    | 27.885            |                    |           |  |
| 15,100.00                         | 12,065.00             | 14,786.36             | 12,123.00             | 81.53            | 65.63         | 91.21                 | -4,083.63                           | -1,487.33    | 2,812.63               | 2,709.91                | 102.72                    | 27.381            |                    |           |  |
| 15,200.00                         | 12,065.00             | 14,886.36             | 12,123.00             | 82.87            | 66.90         | 91.21                 | -4,183.62                           | -1,486.33    | 2,812.60               | 2,708.01                | 104.60                    | 26.890            |                    |           |  |
| 15,300.00                         | 12,065.00             | 14,986.36             | 12,123.00             | 84.22            | 68.19         | 91.21                 | -4,283.62                           | -1,485.32    | 2,812.58               | 2,706.09                | 106.49                    | 26.412            |                    |           |  |
| 15,400.00                         | 12,065.00             | 15,086.36             | 12,123.00             | 85.59            | 69.49         | 91.21                 | -4,383.61                           | -1,484.32    | 2,812.56               | 2,704.16                | 108.40                    | 25.946            |                    |           |  |
| 15,500.00                         | 12,065.00             | 15,186.36             | 12,123.00             | 86.96            | 70.80         | 91.21                 | -4,483.61                           | -1,483.32    | 2,812.53               | 2,702.21                | 110.33                    | 25.493            |                    |           |  |
| 15,600.00                         | 12,065.00             | 15,286.36             | 12,123.00             | 88.34            | 72.13         | 91.21                 | -4,583.60                           | -1,482.32    | 2,812.51               | 2,700.24                | 112.27                    | 25.051            |                    |           |  |
| 15,700.00                         | 12,065.00             | 15,386.36             | 12,123.00             | 89.73            | 73.47         | 91.21                 | -4,683.60                           | -1,481.32    | 2,812.49               | 2,698.26                | 114.23                    | 24.622            |                    |           |  |
| 15,800.00                         | 12,065.00             | 15,486.36             | 12,123.00             | 91.13            | 74.83         | 91.21                 | -4,783.59                           | -1,480.32    | 2,812.46               | 2,696.27                | 116.20                    | 24.204            |                    |           |  |
| 15,900.00                         | 12,065.00             | 15,586.36             | 12,123.00             | 92.54            | 76.19         | 91.21                 | -4,883.59                           | -1,479.32    | 2,812.44               | 2,694.26                | 118.18                    | 23.798            |                    |           |  |
| 16,000.00                         | 12,065.00             | 15,686.36             | 12,123.00             | 93.95            | 77.57         | 91.21                 | -4,983.58                           | -1,478.31    | 2,812.42               | 2,692.24                | 120.18                    | 23.402            |                    |           |  |
| 16,100.00                         | 12,065.00             | 15,786.36             | 12,123.00             | 95.38            | 78.96         | 91.21                 | -5,083.58                           | -1,477.31    | 2,812.39               | 2,690.21                | 122.19                    | 23.017            |                    |           |  |
| 16,200.00                         | 12,065.00             | 15,886.36             | 12,123.00             | 96.81            | 80.36         | 91.21                 | -5,183.57                           | -1,476.31    | 2,812.37               | 2,688.16                | 124.21                    | 22.642            |                    |           |  |
| 16,300.00                         | 12,065.00             | 15,986.36             | 12,123.00             | 98.24            | 81.76         | 91.21                 | -5,283.57                           | -1,475.31    | 2,812.35               | 2,686.11                | 126.24                    | 22.278            |                    |           |  |
| 16,400.00                         | 12,065.00             | 16,086.36             | 12,123.00             | 99.69            | 83.18         | 91.21                 | -5,383.56                           | -1,474.31    | 2,812.32               | 2,684.04                | 128.28                    | 21.923            |                    |           |  |
| 16,500.00                         | 12,065.00             | 16,186.36             | 12,123.00             | 101.14           | 84.61         | 91.21                 | -5,483.56                           | -1,473.31    | 2,812.30               | 2,681.97                | 130.33                    | 21.578            |                    |           |  |
| 16,600.00                         | 12,065.00             | 16,286.36             | 12,123.00             | 102.60           | 86.04         | 91.21                 | -5,583.55                           | -1,472.31    | 2,812.28               | 2,679.88                | 132.39                    | 21.242            |                    |           |  |
| 16,700.00                         | 12,065.00             | 16,386.36             | 12,123.00             | 104.06           | 87.48         | 91.21                 | -5,683.55                           | -1,471.30    | 2,812.25               | 2,677.79                | 134.46                    | 20.915            |                    |           |  |
| 16,800.00                         | 12,065.00             | 16,486.36             | 12,123.00             | 105.53           | 88.93         | 91.21                 | -5,783.54                           | -1,470.30    | 2,812.23               | 2,675.69                | 136.54                    | 20.596            |                    |           |  |
| 16,900.00                         | 12,065.00             | 16,586.36             | 12,123.00             | 107.00           | 90.38         | 91.21                 | -5,883.54                           | -1,469.30    | 2,812.21               | 2,673.58                | 138.63                    | 20.286            |                    |           |  |
| 17,000.00                         | 12,065.00             | 16,686.36             | 12,123.00             | 108.48           | 91.84         | 91.21                 | -5,983.53                           | -1,468.30    | 2,812.18               | 2,671.46                | 140.72                    | 19.984            |                    |           |  |
| 17,100.00                         | 12,065.00             | 16,786.36             | 12,123.00             | 109.96           | 93.31         | 91.21                 | -6,083.53                           | -1,467.30    | 2,812.16               | 2,669.34                | 142.82                    | 19.690            |                    |           |  |
| 17,200.00                         | 12,065.00             | 16,886.36             | 12,123.00             | 111.45           | 94.79         | 91.21                 | -6,183.52                           | -1,466.30    | 2,812.14               | 2,667.20                | 144.93                    | 19.403            |                    |           |  |
| 17,300.00                         | 12,065.00             | 16,986.36             | 12,123.00             | 112.94           | 96.26         | 91.21                 | -6,283.52                           | -1,465.30    | 2,812.11               | 2,665.06                | 147.05                    | 19.124            |                    |           |  |
| 17,400.00                         | 12,065.00             | 17,086.36             | 12,123.00             | 114.44           | 97.75         | 91.21                 | -6,383.51                           | -1,464.30    | 2,812.09               | 2,662.92                | 149.17                    | 18.852            |                    |           |  |
| 17,500.00                         | 12,065.00             | 17,186.36             | 12,123.00             | 115.94           | 99.24         | 91.21                 | -6,483.51                           | -1,463.29    | 2,812.06               | 2,660.77                | 151.30                    | 18.586            |                    |           |  |
| 17,600.00                         | 12,065.00             | 17,286.36             | 12,123.00             | 117.45           | 100.74        | 91.21                 | -6,583.50                           | -1,462.29    | 2,812.04               | 2,658.61                | 153.43                    | 18.328            |                    |           |  |
| 17,700.00                         | 12,065.00             | 17,386.36             | 12,123.00             | 118.96           | 102.24        | 91.21                 | -6,683.50                           | -1,461.29    | 2,812.02               | 2,656.44                | 155.57                    | 18.075            |                    |           |  |
| 17,800.00                         | 12,065.00             | 17,486.36             | 12,123.00             | 120.47           | 103.74        | 91.21                 | -6,783.49                           | -1,460.29    | 2,811.99               | 2,654.28                | 157.72                    | 17.829            |                    |           |  |
| 17,900.00                         | 12,065.00             | 17,586.36             | 12,123.00             | 121.99           | 105.25        | 91.21                 | -6,883.49                           | -1,459.29    | 2,811.97               | 2,652.10                | 159.87                    | 17.589            |                    |           |  |
| 18,000.00                         | 12,065.00             | 17,686.36             | 12,123.00             | 123.51           | 106.76        | 91.21                 | -6,983.48                           | -1,458.29    | 2,811.95               | 2,649.92                | 162.03                    | 17.355            |                    |           |  |
| 18,100.00                         | 12,065.00             | 17,786.36             | 12,123.00             | 125.03           | 108.28        | 91.21                 | -7,083.48                           | -1,457.29    | 2,811.92               | 2,647.74                | 164.19                    | 17.126            |                    |           |  |
| 18,200.00                         | 12,065.00             | 17,886.36             | 12,123.00             | 126.56           | 109.80        | 91.21                 | -7,183.47                           | -1,456.28    | 2,811.90               | 2,645.55                | 166.35                    | 16.903            |                    |           |  |
| 18,300.00                         | 12,065.00             | 17,986.36             | 12,123.00             | 128.09           | 111.33        | 91.21                 | -7,283.47                           | -1,455.28    | 2,811.88               | 2,643.35                | 168.52                    | 16.685            |                    |           |  |
| 18,400.00                         | 12,065.00             | 18,086.36             | 12,123.00             | 129.62           | 112.86        | 91.21                 | -7,383.46                           | -1,454.28    | 2,811.85               | 2,641.16                | 170.70                    | 16.473            |                    |           |  |
| 18,500.00                         | 12,065.00             | 18,186.36             | 12,123.00             | 131.16           | 114.39        | 91.21                 | -7,483.46                           | -1,453.28    | 2,811.83               | 2,638.95                | 172.88                    | 16.265            |                    |           |  |
| 18,600.00                         | 12,065.00             | 18,286.36             | 12,123.00             | 132.69           | 115.92        | 91.21                 | -7,583.45                           | -1,452.28    | 2,811.81               | 2,636.75                | 175.06                    | 16.062            |                    |           |  |
| 18,700.00                         | 12,065.00             | 18,386.36             | 12,123.00             | 134.24           | 117.46        | 91.21                 | -7,683.45                           | -1,451.28    | 2,811.78               | 2,634.54                | 177.25                    | 15.864            |                    |           |  |
| 18,800.00                         | 12,065.00             | 18,486.36             | 12,123.00             | 135.78           | 119.00        | 91.21                 | -7,783.44                           | -1,450.28    | 2,811.76               | 2,632.32                | 179.44                    | 15.670            |                    |           |  |
| 18,900.00                         | 12,065.00             | 18,586.36             | 12,123.00             | 137.33           | 120.55        | 91.21                 | -7,883.44                           | -1,449.28    | 2,811.74               | 2,630.11                | 181.63                    | 15.480            |                    |           |  |
| 19,000.00                         | 12,065.00             | 18,686.36             | 12,123.00             | 138.87           | 122.10        | 91.21                 | -7,983.43                           | -1,448.27    | 2,811.71               | 2,627.88                | 183.83                    | 15.295            |                    |           |  |
| 19,100.00                         | 12,065.00             | 18,786.36             | 12,123.00             | 140.43           | 123.65        | 91.21                 | -8,083.43                           | -1,447.27    | 2,811.69               | 2,625.66                | 186.03                    | 15.114            |                    |           |  |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                |                |                |                 |        |                   |                        |              |                 |                  |                    |                   | Tatanka Fed Com - Tatanka Fed Com 601H - OH - Plan #2 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|--------------|-----------------|------------------|--------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                |                |                |                 |        |                   |                        |              |                 |                  |                    |                   | 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)             |                   |                                                       |           |                    |           |
| 19,200.00                         | 12,065.00      | 18,886.36      | 12,123.00      | 141.98          | 125.20 | 91.21             | -8,183.42              | -1,446.27    | 2,811.67        | 2,623.43         | 188.23             | 14.937            |                                                       |           |                    |           |
| 19,300.00                         | 12,065.00      | 18,986.36      | 12,123.00      | 143.53          | 126.75 | 91.21             | -8,283.42              | -1,445.27    | 2,811.64        | 2,621.20         | 190.44             | 14.764            |                                                       |           |                    |           |
| 19,400.00                         | 12,065.00      | 19,086.36      | 12,123.00      | 145.09          | 128.31 | 91.21             | -8,383.41              | -1,444.27    | 2,811.62        | 2,618.97         | 192.65             | 14.594            |                                                       |           |                    |           |
| 19,500.00                         | 12,065.00      | 19,186.36      | 12,123.00      | 146.65          | 129.87 | 91.21             | -8,483.41              | -1,443.27    | 2,811.60        | 2,616.73         | 194.86             | 14.428            |                                                       |           |                    |           |
| 19,600.00                         | 12,065.00      | 19,286.36      | 12,123.00      | 148.21          | 131.43 | 91.21             | -8,583.40              | -1,442.27    | 2,811.57        | 2,614.49         | 197.08             | 14.266            |                                                       |           |                    |           |
| 19,700.00                         | 12,065.00      | 19,386.36      | 12,123.00      | 149.78          | 133.00 | 91.21             | -8,683.40              | -1,441.26    | 2,811.55        | 2,612.25         | 199.30             | 14.107            |                                                       |           |                    |           |
| 19,800.00                         | 12,065.00      | 19,486.36      | 12,123.00      | 151.34          | 134.56 | 91.21             | -8,783.39              | -1,440.26    | 2,811.53        | 2,610.00         | 201.52             | 13.952            |                                                       |           |                    |           |
| 19,900.00                         | 12,065.00      | 19,586.36      | 12,123.00      | 152.91          | 136.13 | 91.21             | -8,883.39              | -1,439.26    | 2,811.50        | 2,607.76         | 203.75             | 13.799            |                                                       |           |                    |           |
| 20,000.00                         | 12,065.00      | 19,686.36      | 12,123.00      | 154.48          | 137.70 | 91.21             | -8,983.38              | -1,438.26    | 2,811.48        | 2,605.51         | 205.97             | 13.650            |                                                       |           |                    |           |
| 20,100.00                         | 12,065.00      | 19,786.36      | 12,123.00      | 156.05          | 139.27 | 91.21             | -9,083.38              | -1,437.26    | 2,811.46        | 2,603.25         | 208.20             | 13.504            |                                                       |           |                    |           |
| 20,200.00                         | 12,065.00      | 19,886.36      | 12,123.00      | 157.62          | 140.85 | 91.21             | -9,183.37              | -1,436.26    | 2,811.43        | 2,601.00         | 210.43             | 13.360            |                                                       |           |                    |           |
| 20,300.00                         | 12,065.00      | 19,986.36      | 12,123.00      | 159.20          | 142.42 | 91.21             | -9,283.37              | -1,435.26    | 2,811.41        | 2,598.74         | 212.66             | 13.220            |                                                       |           |                    |           |
| 20,400.00                         | 12,065.00      | 20,086.36      | 12,123.00      | 160.77          | 144.00 | 91.21             | -9,383.36              | -1,434.26    | 2,811.38        | 2,596.48         | 214.90             | 13.082            |                                                       |           |                    |           |
| 20,500.00                         | 12,065.00      | 20,186.36      | 12,123.00      | 162.35          | 145.58 | 91.21             | -9,483.36              | -1,433.25    | 2,811.36        | 2,594.22         | 217.14             | 12.947            |                                                       |           |                    |           |
| 20,600.00                         | 12,065.00      | 20,286.36      | 12,123.00      | 163.93          | 147.16 | 91.21             | -9,583.35              | -1,432.25    | 2,811.34        | 2,591.96         | 219.38             | 12.815            |                                                       |           |                    |           |
| 20,700.00                         | 12,065.00      | 20,386.36      | 12,123.00      | 165.51          | 148.74 | 91.21             | -9,683.35              | -1,431.25    | 2,811.31        | 2,589.69         | 221.62             | 12.685            |                                                       |           |                    |           |
| 20,800.00                         | 12,065.00      | 20,486.36      | 12,123.00      | 167.09          | 150.33 | 91.21             | -9,783.34              | -1,430.25    | 2,811.29        | 2,587.43         | 223.86             | 12.558            |                                                       |           |                    |           |
| 20,900.00                         | 12,065.00      | 20,586.36      | 12,123.00      | 168.67          | 151.91 | 91.21             | -9,883.34              | -1,429.25    | 2,811.27        | 2,585.16         | 226.11             | 12.433            |                                                       |           |                    |           |
| 21,000.00                         | 12,065.00      | 20,686.36      | 12,123.00      | 170.26          | 153.50 | 91.21             | -9,983.33              | -1,428.25    | 2,811.24        | 2,582.89         | 228.36             | 12.311            |                                                       |           |                    |           |
| 21,100.00                         | 12,065.00      | 20,786.36      | 12,123.00      | 171.84          | 155.09 | 91.21             | -10,083.33             | -1,427.25    | 2,811.22        | 2,580.62         | 230.60             | 12.191            |                                                       |           |                    |           |
| 21,200.00                         | 12,065.00      | 20,886.36      | 12,123.00      | 173.43          | 156.68 | 91.21             | -10,183.32             | -1,426.24    | 2,811.20        | 2,578.34         | 232.86             | 12.073            |                                                       |           |                    |           |
| 21,300.00                         | 12,065.00      | 20,986.36      | 12,123.00      | 175.02          | 158.27 | 91.21             | -10,283.32             | -1,425.24    | 2,811.17        | 2,576.07         | 235.11             | 11.957            |                                                       |           |                    |           |
| 21,400.00                         | 12,065.00      | 21,086.36      | 12,123.00      | 176.60          | 159.86 | 91.21             | -10,383.31             | -1,424.24    | 2,811.15        | 2,573.79         | 237.36             | 11.843            |                                                       |           |                    |           |
| 21,500.00                         | 12,065.00      | 21,186.36      | 12,123.00      | 178.19          | 161.45 | 91.21             | -10,483.31             | -1,423.24    | 2,811.13        | 2,571.51         | 239.62             | 11.732            |                                                       |           |                    |           |
| 21,600.00                         | 12,065.00      | 21,286.36      | 12,123.00      | 179.79          | 163.04 | 91.21             | -10,583.30             | -1,422.24    | 2,811.10        | 2,569.23         | 241.87             | 11.622            |                                                       |           |                    |           |
| 21,700.00                         | 12,065.00      | 21,386.36      | 12,123.00      | 181.38          | 164.64 | 91.21             | -10,683.30             | -1,421.24    | 2,811.08        | 2,566.95         | 244.13             | 11.515            |                                                       |           |                    |           |
| 21,800.00                         | 12,065.00      | 21,486.36      | 12,123.00      | 182.97          | 166.24 | 91.21             | -10,783.29             | -1,420.24    | 2,811.06        | 2,564.66         | 246.39             | 11.409            |                                                       |           |                    |           |
| 21,900.00                         | 12,065.00      | 21,586.36      | 12,123.00      | 184.57          | 167.83 | 91.21             | -10,883.29             | -1,419.24    | 2,811.03        | 2,562.38         | 248.65             | 11.305            |                                                       |           |                    |           |
| 22,000.00                         | 12,065.00      | 21,686.36      | 12,123.00      | 186.16          | 169.43 | 91.21             | -10,983.28             | -1,418.23    | 2,811.01        | 2,560.09         | 250.92             | 11.203            |                                                       |           |                    |           |
| 22,100.00                         | 12,065.00      | 21,786.36      | 12,123.00      | 187.76          | 171.03 | 91.21             | -11,083.28             | -1,417.23    | 2,810.99        | 2,557.81         | 253.18             | 11.103            |                                                       |           |                    |           |
| 22,200.00                         | 12,065.00      | 21,886.36      | 12,123.00      | 189.36          | 172.63 | 91.21             | -11,183.27             | -1,416.23    | 2,810.96        | 2,555.52         | 255.45             | 11.004            |                                                       |           |                    |           |
| 22,300.00                         | 12,065.00      | 21,986.36      | 12,123.00      | 190.95          | 174.23 | 91.21             | -11,283.27             | -1,415.23    | 2,810.94        | 2,553.23         | 257.71             | 10.907            |                                                       |           |                    |           |
| 22,400.00                         | 12,065.00      | 22,086.36      | 12,123.00      | 192.55          | 175.84 | 91.21             | -11,383.26             | -1,414.23    | 2,810.92        | 2,550.94         | 259.98             | 10.812            |                                                       |           |                    |           |
| 22,443.44                         | 12,065.00      | 22,129.15      | 12,123.00      | 193.25          | 176.47 | 91.21             | -11,426.05             | -1,413.80    | 2,810.91        | 2,549.99         | 260.92             | 10.773            |                                                       |           |                    |           |
| 22,445.57                         | 12,065.00      | 22,129.15      | 12,123.00      | 193.28          | 176.47 | 91.21             | -11,426.05             | -1,413.80    | 2,810.91        | 2,549.97         | 260.94             | 10.772 SF         |                                                       |           |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 602H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -90.54                | -0.94                               | -99.98       | 99.99                  |                         |                           |                   |                                                       |           |                    |           |
| 100.00                            | 100.00                | 99.20                 | 99.20                 | 0.13             | 0.12          | -90.54                | -0.94                               | -99.98       | 99.98                  | 99.81                   | 0.18                      | 565.759           |                                                       |           |                    |           |
| 200.00                            | 200.00                | 199.20                | 199.20                | 0.48             | 0.48          | -90.54                | -0.94                               | -99.98       | 99.98                  | 99.30                   | 0.68                      | 146.526           |                                                       |           |                    |           |
| 300.00                            | 300.00                | 299.20                | 299.20                | 0.84             | 0.84          | -90.54                | -0.94                               | -99.98       | 99.98                  | 98.80                   | 1.19                      | 84.069            |                                                       |           |                    |           |
| 400.00                            | 400.00                | 399.20                | 399.20                | 1.20             | 1.20          | -90.54                | -0.94                               | -99.98       | 99.98                  | 98.29                   | 1.70                      | 58.944            |                                                       |           |                    |           |
| 500.00                            | 500.00                | 499.20                | 499.20                | 1.56             | 1.56          | -90.54                | -0.94                               | -99.98       | 99.98                  | 97.78                   | 2.20                      | 45.381            |                                                       |           |                    |           |
| 600.00                            | 600.00                | 599.20                | 599.20                | 1.92             | 1.91          | -90.54                | -0.94                               | -99.98       | 99.98                  | 97.27                   | 2.71                      | 36.892            |                                                       |           |                    |           |
| 700.00                            | 700.00                | 699.20                | 699.20                | 2.28             | 2.27          | -90.54                | -0.94                               | -99.98       | 99.98                  | 96.77                   | 3.22                      | 31.079            |                                                       |           |                    |           |
| 800.00                            | 800.00                | 799.20                | 799.20                | 2.63             | 2.63          | -90.54                | -0.94                               | -99.98       | 99.98                  | 96.26                   | 3.72                      | 26.848            |                                                       |           |                    |           |
| 900.00                            | 900.00                | 899.20                | 899.20                | 2.99             | 2.99          | -90.54                | -0.94                               | -99.98       | 99.98                  | 95.75                   | 4.23                      | 23.631            |                                                       |           |                    |           |
| 1,000.00                          | 1,000.00              | 999.20                | 999.20                | 3.35             | 3.35          | -90.54                | -0.94                               | -99.98       | 99.98                  | 95.25                   | 4.74                      | 21.103            |                                                       |           |                    |           |
| 1,100.00                          | 1,100.00              | 1,099.20              | 1,099.20              | 3.71             | 3.71          | -90.54                | -0.94                               | -99.98       | 99.98                  | 94.74                   | 5.24                      | 19.063            |                                                       |           |                    |           |
| 1,200.00                          | 1,200.00              | 1,199.20              | 1,199.20              | 4.07             | 4.07          | -90.54                | -0.94                               | -99.98       | 99.98                  | 94.23                   | 5.75                      | 17.383            |                                                       |           |                    |           |
| 1,300.00                          | 1,300.00              | 1,299.20              | 1,299.20              | 4.43             | 4.42          | -90.54                | -0.94                               | -99.98       | 99.98                  | 93.73                   | 6.26                      | 15.975            |                                                       |           |                    |           |
| 1,400.00                          | 1,400.00              | 1,399.20              | 1,399.20              | 4.79             | 4.78          | -90.54                | -0.94                               | -99.98       | 99.98                  | 93.22                   | 6.77                      | 14.778            |                                                       |           |                    |           |
| 1,500.00                          | 1,500.00              | 1,499.20              | 1,499.20              | 5.14             | 5.14          | -90.54                | -0.94                               | -99.98       | 99.98                  | 92.71                   | 7.27                      | 13.748            |                                                       |           |                    |           |
| 1,600.00                          | 1,600.00              | 1,599.20              | 1,599.20              | 5.50             | 5.50          | -90.54                | -0.94                               | -99.98       | 99.98                  | 92.20                   | 7.78                      | 12.852            |                                                       |           |                    |           |
| 1,700.00                          | 1,700.00              | 1,699.20              | 1,699.20              | 5.86             | 5.86          | -90.54                | -0.94                               | -99.98       | 99.98                  | 91.70                   | 8.29                      | 12.066            |                                                       |           |                    |           |
| 1,800.00                          | 1,800.00              | 1,799.20              | 1,799.20              | 6.22             | 6.22          | -90.54                | -0.94                               | -99.98       | 99.98                  | 91.19                   | 8.79                      | 11.370            |                                                       |           |                    |           |
| 1,900.00                          | 1,900.00              | 1,899.20              | 1,899.20              | 6.58             | 6.58          | -90.54                | -0.94                               | -99.98       | 99.98                  | 90.68                   | 9.30                      | 10.750            |                                                       |           |                    |           |
| 2,000.00                          | 2,000.00              | 1,999.20              | 1,999.20              | 6.94             | 6.93          | -90.54                | -0.94                               | -99.98       | 99.98                  | 90.18                   | 9.81                      | 10.195            |                                                       |           |                    |           |
| 2,100.00                          | 2,100.00              | 2,099.20              | 2,099.20              | 7.29             | 7.29          | -90.54                | -0.94                               | -99.98       | 99.98                  | 89.67                   | 10.31                     | 9.694             |                                                       |           |                    |           |
| 2,200.00                          | 2,200.00              | 2,199.20              | 2,199.20              | 7.65             | 7.65          | -90.54                | -0.94                               | -99.98       | 99.98                  | 89.16                   | 10.82                     | 9.239             |                                                       |           |                    |           |
| 2,300.00                          | 2,300.00              | 2,299.20              | 2,299.20              | 8.01             | 8.01          | -90.54                | -0.94                               | -99.98       | 99.98                  | 88.66                   | 11.33                     | 8.826             |                                                       |           |                    |           |
| 2,400.00                          | 2,400.00              | 2,399.20              | 2,399.20              | 8.37             | 8.37          | -90.54                | -0.94                               | -99.98       | 99.98                  | 88.15                   | 11.84                     | 8.448             |                                                       |           |                    |           |
| 2,500.00                          | 2,500.00              | 2,499.20              | 2,499.20              | 8.73             | 8.73          | -90.54                | -0.94                               | -99.98       | 99.98                  | 87.64                   | 12.34                     | 8.101             |                                                       |           |                    |           |
| 2,600.00                          | 2,600.00              | 2,599.20              | 2,599.20              | 9.09             | 9.08          | -90.54                | -0.94                               | -99.98       | 99.98                  | 87.14                   | 12.85                     | 7.781             |                                                       |           |                    |           |
| 2,700.00                          | 2,700.00              | 2,699.20              | 2,699.20              | 9.45             | 9.44          | -90.54                | -0.94                               | -99.98       | 99.98                  | 86.63                   | 13.36                     | 7.486             |                                                       |           |                    |           |
| 2,800.00                          | 2,800.00              | 2,799.20              | 2,799.20              | 9.80             | 9.80          | -90.54                | -0.94                               | -99.98       | 99.98                  | 86.12                   | 13.86                     | 7.212             |                                                       |           |                    |           |
| 2,900.00                          | 2,900.00              | 2,899.20              | 2,899.20              | 10.16            | 10.16         | -90.54                | -0.94                               | -99.98       | 99.98                  | 85.61                   | 14.37                     | 6.958             |                                                       |           |                    |           |
| 3,000.00                          | 3,000.00              | 2,999.20              | 2,999.20              | 10.52            | 10.52         | -90.54                | -0.94                               | -99.98       | 99.98                  | 85.11                   | 14.88                     | 6.721             |                                                       |           |                    |           |
| 3,100.00                          | 3,100.00              | 3,099.20              | 3,099.20              | 10.88            | 10.88         | -90.54                | -0.94                               | -99.98       | 99.98                  | 84.60                   | 15.38                     | 6.499             |                                                       |           |                    |           |
| 3,200.00                          | 3,200.00              | 3,199.20              | 3,199.20              | 11.24            | 11.24         | -90.54                | -0.94                               | -99.98       | 99.98                  | 84.09                   | 15.89                     | 6.292 CC, ES      |                                                       |           |                    |           |
| 3,300.00                          | 3,299.99              | 3,299.81              | 3,299.80              | 11.58            | 11.58         | 140.55                | -2.20                               | -99.66       | 100.69                 | 84.32                   | 16.38                     | 6.149             |                                                       |           |                    |           |
| 3,400.00                          | 3,399.91              | 3,400.38              | 3,400.29              | 11.91            | 11.90         | 139.78                | -6.03                               | -98.69       | 102.82                 | 85.98                   | 16.84                     | 6.107             |                                                       |           |                    |           |
| 3,500.00                          | 3,499.69              | 3,500.87              | 3,500.56              | 12.25            | 12.23         | 138.57                | -12.42                              | -97.07       | 106.40                 | 89.10                   | 17.30                     | 6.150             |                                                       |           |                    |           |
| 3,600.00                          | 3,599.27              | 3,601.24              | 3,600.50              | 12.58            | 12.56         | 137.00                | -21.35                              | -94.81       | 111.48                 | 93.71                   | 17.77                     | 6.274             |                                                       |           |                    |           |
| 3,700.00                          | 3,698.57              | 3,701.43              | 3,699.99              | 12.92            | 12.89         | 135.17                | -32.80                              | -91.92       | 118.11                 | 99.86                   | 18.24                     | 6.475             |                                                       |           |                    |           |
| 3,800.00                          | 3,797.54              | 3,801.42              | 3,798.94              | 13.27            | 13.23         | 133.20                | -46.74                              | -88.39       | 126.33                 | 107.61                  | 18.72                     | 6.749             |                                                       |           |                    |           |
| 3,900.00                          | 3,896.09              | 3,901.16              | 3,897.23              | 13.62            | 13.57         | 131.17                | -63.15                              | -84.23       | 136.18                 | 116.98                  | 19.20                     | 7.091             |                                                       |           |                    |           |
| 4,000.00                          | 3,994.16              | 4,000.61              | 3,994.76              | 13.98            | 13.92         | 129.15                | -81.98                              | -79.47       | 147.70                 | 128.00                  | 19.70                     | 7.497             |                                                       |           |                    |           |
| 4,100.00                          | 4,091.70              | 4,099.74              | 4,091.44              | 14.35            | 14.28         | 127.21                | -103.19                             | -74.10       | 160.89                 | 140.68                  | 20.21                     | 7.962             |                                                       |           |                    |           |
| 4,200.00                          | 4,188.62              | 4,198.55              | 4,187.39              | 14.74            | 14.65         | 125.60                | -126.10                             | -68.30       | 175.74                 | 155.01                  | 20.73                     | 8.478             |                                                       |           |                    |           |
| 4,300.00                          | 4,284.86              | 4,297.18              | 4,283.13              | 15.14            | 15.02         | 124.81                | -149.04                             | -62.49       | 192.16                 | 170.89                  | 21.26                     | 9.038             |                                                       |           |                    |           |
| 4,400.00                          | 4,380.36              | 4,395.56              | 4,378.64              | 15.55            | 15.41         | 124.70                | -171.93                             | -56.70       | 210.05                 | 188.25                  | 21.81                     | 9.633             |                                                       |           |                    |           |
| 4,452.43                          | 4,430.11              | 4,447.02              | 4,428.59              | 15.78            | 15.61         | 124.85                | -183.90                             | -53.67       | 220.03                 | 197.93                  | 22.10                     | 9.957             |                                                       |           |                    |           |
| 4,500.00                          | 4,475.14              | 4,493.67              | 4,473.88              | 15.99            | 15.80         | 125.15                | -194.75                             | -50.92       | 229.26                 | 206.90                  | 22.36                     | 10.251            |                                                       |           |                    |           |
| 4,600.00                          | 4,569.82              | 4,591.74              | 4,569.09              | 16.44            | 16.20         | 125.70                | -217.57                             | -45.15       | 248.70                 | 225.76                  | 22.93                     | 10.845            |                                                       |           |                    |           |
| 4,700.00                          | 4,664.49              | 4,689.80              | 4,664.29              | 16.91            | 16.60         | 126.18                | -240.38                             | -39.38       | 268.15                 | 244.64                  | 23.51                     | 11.405            |                                                       |           |                    |           |
| 4,800.00                          | 4,759.16              | 4,787.87              | 4,759.49              | 17.39            | 17.02         | 126.59                | -263.19                             | -33.60       | 287.62                 | 263.52                  | 24.10                     | 11.934            |                                                       |           |                    |           |
| 4,900.00                          | 4,853.84              | 4,885.94              | 4,854.69              | 17.87            | 17.43         | 126.95                | -286.01                             | -27.83       | 307.10                 | 282.40                  | 24.70                     | 12.433            |                                                       |           |                    |           |
| 5,000.00                          | 4,948.51              | 4,984.01              | 4,949.89              | 18.37            | 17.86         | 127.27                | -308.82                             | -22.05       | 326.59                 | 301.29                  | 25.31                     | 12.905            |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,082.07              | 5,045.09              | 18.88            | 18.28         | 127.55                | -331.64                             | -16.28       | 346.09                 | 320.17                  | 25.92                     | 13.351            |                    |           |
| 5,200.00                          | 5,137.85              | 5,180.14              | 5,140.29              | 19.39            | 18.72         | 127.80                | -354.45                             | -10.50       | 365.60                 | 339.06                  | 26.54                     | 13.773            |                    |           |
| 5,300.00                          | 5,232.53              | 5,278.21              | 5,235.50              | 19.92            | 19.15         | 128.02                | -377.26                             | -4.73        | 385.11                 | 357.94                  | 27.17                     | 14.172            |                    |           |
| 5,400.00                          | 5,327.20              | 5,376.27              | 5,330.70              | 20.45            | 19.59         | 128.23                | -400.08                             | 1.04         | 404.63                 | 376.82                  | 27.81                     | 14.550            |                    |           |
| 5,500.00                          | 5,421.87              | 5,474.34              | 5,425.90              | 20.99            | 20.04         | 128.41                | -422.89                             | 6.82         | 424.15                 | 395.70                  | 28.45                     | 14.908            |                    |           |
| 5,600.00                          | 5,516.54              | 5,572.41              | 5,521.10              | 21.53            | 20.48         | 128.58                | -445.70                             | 12.59        | 443.68                 | 414.58                  | 29.10                     | 15.247            |                    |           |
| 5,700.00                          | 5,611.22              | 5,670.48              | 5,616.30              | 22.08            | 20.94         | 128.73                | -468.52                             | 18.37        | 463.21                 | 433.46                  | 29.75                     | 15.569            |                    |           |
| 5,800.00                          | 5,705.89              | 5,768.54              | 5,711.50              | 22.63            | 21.39         | 128.88                | -491.33                             | 24.14        | 482.74                 | 452.33                  | 30.41                     | 15.875            |                    |           |
| 5,900.00                          | 5,800.56              | 5,866.61              | 5,806.71              | 23.19            | 21.85         | 129.01                | -514.14                             | 29.92        | 502.28                 | 471.21                  | 31.07                     | 16.166            |                    |           |
| 6,000.00                          | 5,895.23              | 5,964.68              | 5,901.91              | 23.76            | 22.31         | 129.13                | -536.96                             | 35.69        | 521.82                 | 490.08                  | 31.74                     | 16.442            |                    |           |
| 6,100.00                          | 5,989.91              | 6,062.74              | 5,997.11              | 24.33            | 22.77         | 129.24                | -559.77                             | 41.47        | 541.36                 | 508.95                  | 32.41                     | 16.705            |                    |           |
| 6,200.00                          | 6,084.58              | 6,160.81              | 6,092.31              | 24.90            | 23.23         | 129.34                | -582.59                             | 47.24        | 560.90                 | 527.82                  | 33.08                     | 16.955            |                    |           |
| 6,300.00                          | 6,179.25              | 6,258.88              | 6,187.51              | 25.48            | 23.70         | 129.44                | -605.40                             | 53.01        | 580.44                 | 546.68                  | 33.76                     | 17.194            |                    |           |
| 6,400.00                          | 6,273.92              | 6,356.94              | 6,282.71              | 26.05            | 24.17         | 129.53                | -628.21                             | 58.79        | 599.99                 | 565.55                  | 34.44                     | 17.421            |                    |           |
| 6,500.00                          | 6,368.60              | 6,455.01              | 6,377.91              | 26.64            | 24.64         | 129.62                | -651.03                             | 64.56        | 619.53                 | 584.41                  | 35.12                     | 17.638            |                    |           |
| 6,600.00                          | 6,463.27              | 6,553.08              | 6,473.12              | 27.22            | 25.11         | 129.70                | -673.84                             | 70.34        | 639.08                 | 603.27                  | 35.81                     | 17.846            |                    |           |
| 6,700.00                          | 6,557.94              | 6,651.15              | 6,568.32              | 27.81            | 25.59         | 129.77                | -696.65                             | 76.11        | 658.63                 | 622.13                  | 36.50                     | 18.044            |                    |           |
| 6,800.00                          | 6,652.61              | 6,749.21              | 6,663.52              | 28.40            | 26.07         | 129.84                | -719.47                             | 81.89        | 678.18                 | 640.99                  | 37.19                     | 18.233            |                    |           |
| 6,900.00                          | 6,747.29              | 6,847.28              | 6,758.72              | 29.00            | 26.54         | 129.91                | -742.28                             | 87.66        | 697.73                 | 659.84                  | 37.89                     | 18.415            |                    |           |
| 7,000.00                          | 6,841.96              | 6,945.35              | 6,853.92              | 29.59            | 27.02         | 129.97                | -765.10                             | 93.43        | 717.28                 | 678.70                  | 38.59                     | 18.589            |                    |           |
| 7,100.00                          | 6,936.63              | 7,043.41              | 6,949.12              | 30.19            | 27.50         | 130.03                | -787.91                             | 99.21        | 736.84                 | 697.55                  | 39.29                     | 18.755            |                    |           |
| 7,200.00                          | 7,031.30              | 7,141.48              | 7,044.33              | 30.79            | 27.99         | 130.09                | -810.72                             | 104.98       | 756.39                 | 716.40                  | 39.99                     | 18.915            |                    |           |
| 7,300.00                          | 7,125.98              | 7,239.55              | 7,139.53              | 31.40            | 28.47         | 130.14                | -833.54                             | 110.76       | 775.94                 | 735.25                  | 40.69                     | 19.068            |                    |           |
| 7,400.00                          | 7,220.65              | 7,337.61              | 7,234.73              | 32.00            | 28.96         | 130.20                | -856.35                             | 116.53       | 795.50                 | 754.10                  | 41.40                     | 19.215            |                    |           |
| 7,500.00                          | 7,315.32              | 7,435.68              | 7,329.93              | 32.61            | 29.44         | 130.25                | -879.16                             | 122.31       | 815.05                 | 772.95                  | 42.11                     | 19.357            |                    |           |
| 7,600.00                          | 7,409.99              | 7,533.75              | 7,425.13              | 33.21            | 29.93         | 130.29                | -901.98                             | 128.08       | 834.61                 | 791.79                  | 42.82                     | 19.493            |                    |           |
| 7,700.00                          | 7,504.67              | 7,631.82              | 7,520.33              | 33.82            | 30.42         | 130.34                | -924.79                             | 133.85       | 854.16                 | 810.64                  | 43.53                     | 19.624            |                    |           |
| 7,800.00                          | 7,599.34              | 7,729.88              | 7,615.53              | 34.43            | 30.91         | 130.38                | -947.61                             | 139.63       | 873.72                 | 829.48                  | 44.24                     | 19.750            |                    |           |
| 7,900.00                          | 7,694.01              | 7,827.95              | 7,710.74              | 35.05            | 31.40         | 130.42                | -970.42                             | 145.40       | 893.28                 | 848.32                  | 44.95                     | 19.871            |                    |           |
| 8,000.00                          | 7,788.68              | 7,926.02              | 7,805.94              | 35.66            | 31.89         | 130.46                | -993.23                             | 151.18       | 912.84                 | 867.17                  | 45.67                     | 19.988            |                    |           |
| 8,100.00                          | 7,883.36              | 8,024.08              | 7,901.14              | 36.28            | 32.38         | 130.50                | -1,016.05                           | 156.95       | 932.39                 | 886.01                  | 46.39                     | 20.101            |                    |           |
| 8,200.00                          | 7,978.03              | 8,120.37              | 7,994.83              | 36.89            | 32.85         | 130.59                | -1,037.56                           | 162.40       | 952.03                 | 904.95                  | 47.08                     | 20.221            |                    |           |
| 8,300.00                          | 8,072.70              | 8,216.21              | 8,088.61              | 37.51            | 33.31         | 130.82                | -1,056.71                           | 167.24       | 971.89                 | 924.14                  | 47.75                     | 20.354            |                    |           |
| 8,400.00                          | 8,167.37              | 8,311.72              | 8,182.53              | 38.13            | 33.75         | 131.18                | -1,073.52                           | 171.50       | 991.99                 | 943.60                  | 48.39                     | 20.501            |                    |           |
| 8,500.00                          | 8,262.05              | 8,406.77              | 8,276.40              | 38.75            | 34.16         | 131.66                | -1,087.99                           | 175.16       | 1,012.38               | 963.38                  | 49.00                     | 20.662            |                    |           |
| 8,600.00                          | 8,356.72              | 8,500.00              | 8,368.80              | 39.37            | 34.55         | 132.25                | -1,099.97                           | 178.19       | 1,033.11               | 983.54                  | 49.57                     | 20.843            |                    |           |
| 8,700.00                          | 8,451.39              | 8,595.08              | 8,463.32              | 39.99            | 34.92         | 132.95                | -1,109.93                           | 180.72       | 1,054.24               | 1,004.13                | 50.12                     | 21.036            |                    |           |
| 8,800.00                          | 8,546.07              | 8,688.11              | 8,556.03              | 40.61            | 35.27         | 133.73                | -1,117.47                           | 182.62       | 1,075.87               | 1,025.24                | 50.62                     | 21.252            |                    |           |
| 8,875.44                          | 8,617.48              | 8,757.72              | 8,625.50              | 41.08            | 35.51         | 134.38                | -1,121.68                           | 183.69       | 1,092.54               | 1,041.56                | 50.99                     | 21.428            |                    |           |
| 8,900.00                          | 8,640.90              | 8,780.41              | 8,648.16              | 41.23            | 35.59         | 134.95                | -1,122.79                           | 183.97       | 1,097.69               | 1,046.59                | 51.10                     | 21.481            |                    |           |
| 8,950.00                          | 8,689.44              | 8,827.17              | 8,694.88              | 41.49            | 35.75         | 135.86                | -1,124.66                           | 184.44       | 1,106.00               | 1,054.67                | 51.33                     | 21.549            |                    |           |
| 9,000.00                          | 8,738.83              | 8,874.48              | 8,742.17              | 41.70            | 35.90         | 136.42                | -1,125.98                           | 184.78       | 1,111.33               | 1,059.79                | 51.54                     | 21.561            |                    |           |
| 9,050.00                          | 8,788.70              | 8,922.11              | 8,789.79              | 41.87            | 36.05         | 136.66                | -1,126.74                           | 184.97       | 1,113.62               | 1,061.87                | 51.75                     | 21.518            |                    |           |
| 9,063.30                          | 8,802.00              | 8,934.80              | 8,802.48              | 41.91            | 36.09         | -94.68                | -1,126.85                           | 185.00       | 1,113.72               | 1,061.91                | 51.81                     | 21.497            |                    |           |
| 9,100.00                          | 8,838.70              | 8,970.21              | 8,837.90              | 42.00            | 36.20         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,061.75                | 51.95                     | 21.437            |                    |           |
| 9,200.00                          | 8,938.70              | 9,070.21              | 8,937.90              | 42.26            | 36.49         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,061.34                | 52.35                     | 21.272            |                    |           |
| 9,300.00                          | 9,038.70              | 9,170.21              | 9,037.90              | 42.51            | 36.78         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,060.94                | 52.76                     | 21.109            |                    |           |
| 9,400.00                          | 9,138.70              | 9,270.21              | 9,137.90              | 42.77            | 37.07         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,060.53                | 53.17                     | 20.948            |                    |           |
| 9,500.00                          | 9,238.70              | 9,370.21              | 9,237.90              | 43.03            | 37.36         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,060.13                | 53.57                     | 20.788            |                    |           |
| 9,600.00                          | 9,338.70              | 9,470.21              | 9,337.90              | 43.30            | 37.65         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,059.72                | 53.98                     | 20.630            |                    |           |
| 9,700.00                          | 9,438.70              | 9,570.21              | 9,437.90              | 43.56            | 37.95         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,059.30                | 54.40                     | 20.474            |                    |           |
| 9,800.00                          | 9,538.70              | 9,670.21              | 9,537.90              | 43.82            | 38.25         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,058.89                | 54.81                     | 20.320            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,900.00                          | 9,638.70              | 9,770.21              | 9,637.90              | 44.09            | 38.54         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,058.48                | 55.22                     | 20.167            |                    |           |
| 10,000.00                         | 9,738.70              | 9,870.21              | 9,737.90              | 44.36            | 38.84         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,058.06                | 55.64                     | 20.017            |                    |           |
| 10,100.00                         | 9,838.70              | 9,970.21              | 9,837.90              | 44.63            | 39.14         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,057.64                | 56.06                     | 19.868            |                    |           |
| 10,200.00                         | 9,938.70              | 10,070.21             | 9,937.90              | 44.90            | 39.44         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,057.22                | 56.48                     | 19.720            |                    |           |
| 10,300.00                         | 10,038.70             | 10,170.21             | 10,037.90             | 45.17            | 39.74         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,056.80                | 56.90                     | 19.574            |                    |           |
| 10,400.00                         | 10,138.70             | 10,270.21             | 10,137.90             | 45.44            | 40.04         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,056.38                | 57.32                     | 19.430            |                    |           |
| 10,500.00                         | 10,238.70             | 10,370.21             | 10,237.90             | 45.71            | 40.34         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,055.96                | 57.74                     | 19.288            |                    |           |
| 10,600.00                         | 10,338.70             | 10,470.21             | 10,337.90             | 45.99            | 40.65         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,055.53                | 58.17                     | 19.147            |                    |           |
| 10,700.00                         | 10,438.70             | 10,570.21             | 10,437.90             | 46.26            | 40.95         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,055.11                | 58.59                     | 19.008            |                    |           |
| 10,800.00                         | 10,538.70             | 10,670.21             | 10,537.90             | 46.54            | 41.26         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,054.68                | 59.02                     | 18.870            |                    |           |
| 10,900.00                         | 10,638.70             | 10,770.21             | 10,637.90             | 46.82            | 41.56         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,054.25                | 59.45                     | 18.734            |                    |           |
| 11,000.00                         | 10,738.70             | 10,870.21             | 10,737.90             | 47.10            | 41.87         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,053.82                | 59.88                     | 18.600            |                    |           |
| 11,100.00                         | 10,838.70             | 10,970.21             | 10,837.90             | 47.38            | 42.18         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,053.39                | 60.31                     | 18.467            |                    |           |
| 11,200.00                         | 10,938.70             | 11,070.21             | 10,937.90             | 47.66            | 42.49         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,052.96                | 60.74                     | 18.335            |                    |           |
| 11,300.00                         | 11,038.70             | 11,170.21             | 11,037.90             | 47.94            | 42.80         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,052.53                | 61.17                     | 18.206            |                    |           |
| 11,400.00                         | 11,138.70             | 11,270.21             | 11,137.90             | 48.22            | 43.11         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,052.09                | 61.61                     | 18.077            |                    |           |
| 11,500.00                         | 11,238.70             | 11,370.21             | 11,237.90             | 48.51            | 43.42         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,051.66                | 62.04                     | 17.950            |                    |           |
| 11,600.00                         | 11,338.70             | 11,470.21             | 11,337.90             | 48.79            | 43.73         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,051.22                | 62.48                     | 17.825            |                    |           |
| 11,700.00                         | 11,438.70             | 11,570.21             | 11,437.90             | 49.08            | 44.04         | -94.68                | -1,126.94                           | 185.02       | 1,113.70               | 1,050.78                | 62.92                     | 17.701            |                    |           |
| 11,753.34                         | 11,492.04             | 11,617.70             | 11,485.35             | 49.23            | 44.21         | -94.76                | -1,128.43                           | 185.03       | 1,113.82               | 1,050.68                | 63.14                     | 17.640            |                    |           |
| 11,800.00                         | 11,538.65             | 11,658.34             | 11,525.74             | 49.37            | 44.36         | 85.64                 | -1,132.80                           | 185.08       | 1,114.06               | 1,050.70                | 63.36                     | 17.583            |                    |           |
| 11,850.00                         | 11,588.24             | 11,700.00             | 11,566.73             | 49.55            | 44.54         | 85.50                 | -1,140.23                           | 185.15       | 1,114.27               | 1,050.67                | 63.60                     | 17.520            |                    |           |
| 11,900.00                         | 11,637.10             | 11,744.97             | 11,610.23             | 49.74            | 44.76         | 85.38                 | -1,151.57                           | 185.26       | 1,114.45               | 1,050.55                | 63.89                     | 17.442            |                    |           |
| 11,950.00                         | 11,684.86             | 11,788.11             | 11,651.01             | 49.95            | 44.98         | 85.29                 | -1,165.63                           | 185.40       | 1,114.58               | 1,050.39                | 64.19                     | 17.363            |                    |           |
| 12,000.00                         | 11,731.15             | 11,831.18             | 11,690.55             | 50.18            | 45.23         | 85.24                 | -1,182.68                           | 185.57       | 1,114.66               | 1,050.15                | 64.51                     | 17.278            |                    |           |
| 12,050.00                         | 11,775.62             | 11,874.21             | 11,728.66             | 50.42            | 45.48         | 85.22                 | -1,202.63                           | 185.76       | 1,114.70               | 1,049.84                | 64.85                     | 17.188            |                    |           |
| 12,100.00                         | 11,817.93             | 11,917.24             | 11,765.17             | 50.68            | 45.76         | 85.23                 | -1,225.38                           | 185.99       | 1,114.68               | 1,049.47                | 65.21                     | 17.093            |                    |           |
| 12,150.00                         | 11,857.76             | 11,960.29             | 11,799.88             | 50.96            | 46.05         | 85.27                 | -1,250.83                           | 186.24       | 1,114.61               | 1,049.02                | 65.59                     | 16.992            |                    |           |
| 12,200.00                         | 11,894.81             | 12,000.00             | 11,830.12             | 51.25            | 46.33         | 85.34                 | -1,276.55                           | 186.49       | 1,114.50               | 1,048.55                | 65.95                     | 16.899            |                    |           |
| 12,223.78                         | 11,911.37             | 12,023.94             | 11,847.47             | 51.40            | 46.51         | 85.39                 | -1,293.04                           | 186.65       | 1,114.42               | 1,048.22                | 66.20                     | 16.835            |                    |           |
| 12,250.00                         | 11,928.80             | 12,046.61             | 11,863.25             | 51.56            | 46.68         | 85.45                 | -1,309.32                           | 186.81       | 1,114.33               | 1,047.91                | 66.42                     | 16.777            |                    |           |
| 12,300.00                         | 11,959.45             | 12,089.95             | 11,891.56             | 51.87            | 47.02         | 85.58                 | -1,342.11                           | 187.13       | 1,114.13               | 1,047.26                | 66.86                     | 16.663            |                    |           |
| 12,350.00                         | 11,986.56             | 12,133.44             | 11,917.41             | 52.20            | 47.37         | 85.75                 | -1,377.08                           | 187.47       | 1,113.89               | 1,046.56                | 67.33                     | 16.544            |                    |           |
| 12,400.00                         | 12,009.90             | 12,177.13             | 11,940.62             | 52.55            | 47.73         | 85.94                 | -1,414.08                           | 187.84       | 1,113.62               | 1,045.80                | 67.81                     | 16.422            |                    |           |
| 12,450.00                         | 12,029.29             | 12,221.05             | 11,961.05             | 52.90            | 48.10         | 86.17                 | -1,452.94                           | 188.22       | 1,113.32               | 1,045.00                | 68.32                     | 16.296            |                    |           |
| 12,500.00                         | 12,044.60             | 12,265.24             | 11,978.54             | 53.26            | 48.49         | 86.41                 | -1,493.51                           | 188.62       | 1,113.01               | 1,044.17                | 68.84                     | 16.168            |                    |           |
| 12,550.00                         | 12,055.70             | 12,309.73             | 11,992.94             | 53.63            | 48.89         | 86.69                 | -1,535.59                           | 189.03       | 1,112.69               | 1,043.30                | 69.38                     | 16.037            |                    |           |
| 12,600.00                         | 12,062.52             | 12,354.56             | 12,004.10             | 54.01            | 49.29         | 86.98                 | -1,579.00                           | 189.45       | 1,112.37               | 1,042.43                | 69.94                     | 15.905            |                    |           |
| 12,653.34                         | 12,065.00             | 12,402.81             | 12,012.28             | 54.42            | 49.73         | 87.32                 | -1,626.53                           | 189.92       | 1,112.03               | 1,041.49                | 70.54                     | 15.764            |                    |           |
| 12,700.00                         | 12,065.00             | 12,445.54             | 12,016.17             | 54.78            | 50.12         | 87.52                 | -1,669.07                           | 190.34       | 1,111.84               | 1,040.76                | 71.08                     | 15.642            |                    |           |
| 12,800.00                         | 12,065.00             | 12,542.97             | 12,017.00             | 55.59            | 51.02         | 87.57                 | -1,766.48                           | 191.29       | 1,111.80               | 1,039.49                | 72.31                     | 15.375            |                    |           |
| 12,801.58                         | 12,065.00             | 12,544.55             | 12,017.00             | 55.60            | 51.03         | 87.57                 | -1,768.06                           | 191.31       | 1,111.80               | 1,039.47                | 72.33                     | 15.371            |                    |           |
| 12,900.00                         | 12,065.00             | 12,642.97             | 12,017.00             | 56.43            | 51.97         | 87.57                 | -1,866.47                           | 192.27       | 1,111.80               | 1,038.18                | 73.62                     | 15.102            |                    |           |
| 13,000.00                         | 12,065.00             | 12,742.97             | 12,017.00             | 57.31            | 52.95         | 87.57                 | -1,966.47                           | 193.25       | 1,111.79               | 1,036.81                | 74.98                     | 14.828            |                    |           |
| 13,100.00                         | 12,065.00             | 12,842.97             | 12,017.00             | 58.22            | 53.97         | 87.57                 | -2,066.46                           | 194.23       | 1,111.79               | 1,035.40                | 76.39                     | 14.555            |                    |           |
| 13,200.00                         | 12,065.00             | 12,942.97             | 12,017.00             | 59.17            | 55.02         | 87.57                 | -2,166.46                           | 195.22       | 1,111.79               | 1,033.95                | 77.84                     | 14.283            |                    |           |
| 13,300.00                         | 12,065.00             | 13,042.97             | 12,017.00             | 60.14            | 56.10         | 87.57                 | -2,266.45                           | 196.20       | 1,111.79               | 1,032.45                | 79.33                     | 14.014            |                    |           |
| 13,400.00                         | 12,065.00             | 13,142.97             | 12,017.00             | 61.15            | 57.21         | 87.57                 | -2,366.45                           | 197.18       | 1,111.78               | 1,030.92                | 80.86                     | 13.749            |                    |           |
| 13,500.00                         | 12,065.00             | 13,242.97             | 12,017.00             | 62.18            | 58.34         | 87.57                 | -2,466.44                           | 198.16       | 1,111.78               | 1,029.35                | 82.43                     | 13.487            |                    |           |
| 13,600.00                         | 12,065.00             | 13,342.97             | 12,017.00             | 63.24            | 59.50         | 87.57                 | -2,566.44                           | 199.14       | 1,111.78               | 1,027.74                | 84.04                     | 13.229            |                    |           |
| 13,700.00                         | 12,065.00             | 13,442.97             | 12,017.00             | 64.32            | 60.68         | 87.57                 | -2,666.43                           | 200.12       | 1,111.77               | 1,026.09                | 85.68                     | 12.976            |                    |           |
| 13,800.00                         | 12,065.00             | 13,542.97             | 12,017.00             | 65.43            | 61.88         | 87.57                 | -2,766.43                           | 201.10       | 1,111.77               | 1,024.42                | 87.35                     | 12.728            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 13,900.00                         | 12,065.00             | 13,642.97             | 12,017.00             | 66.56            | 63.10         | 87.57                 | -2,866.42                           | 202.08       | 1,111.77               | 1,022.72                | 89.05                     | 12.485            |                    |           |
| 14,000.00                         | 12,065.00             | 13,742.97             | 12,017.00             | 67.71            | 64.34         | 87.57                 | -2,966.42                           | 203.06       | 1,111.77               | 1,020.99                | 90.78                     | 12.247            |                    |           |
| 14,100.00                         | 12,065.00             | 13,842.97             | 12,017.00             | 68.88            | 65.60         | 87.57                 | -3,066.41                           | 204.04       | 1,111.76               | 1,019.23                | 92.54                     | 12.014            |                    |           |
| 14,200.00                         | 12,065.00             | 13,942.97             | 12,017.00             | 70.08            | 66.87         | 87.57                 | -3,166.41                           | 205.02       | 1,111.76               | 1,017.44                | 94.32                     | 11.788            |                    |           |
| 14,300.00                         | 12,065.00             | 14,042.97             | 12,017.00             | 71.29            | 68.16         | 87.57                 | -3,266.40                           | 206.00       | 1,111.76               | 1,015.64                | 96.12                     | 11.566            |                    |           |
| 14,400.00                         | 12,065.00             | 14,142.97             | 12,017.00             | 72.51            | 69.47         | 87.57                 | -3,366.40                           | 206.98       | 1,111.75               | 1,013.81                | 97.95                     | 11.351            |                    |           |
| 14,500.00                         | 12,065.00             | 14,242.97             | 12,017.00             | 73.76            | 70.79         | 87.57                 | -3,466.39                           | 207.97       | 1,111.75               | 1,011.96                | 99.79                     | 11.140            |                    |           |
| 14,600.00                         | 12,065.00             | 14,342.97             | 12,017.00             | 75.02            | 72.12         | 87.57                 | -3,566.39                           | 208.95       | 1,111.75               | 1,010.09                | 101.66                    | 10.936            |                    |           |
| 14,700.00                         | 12,065.00             | 14,442.97             | 12,017.00             | 76.29            | 73.47         | 87.57                 | -3,666.38                           | 209.93       | 1,111.75               | 1,008.20                | 103.55                    | 10.736            |                    |           |
| 14,800.00                         | 12,065.00             | 14,542.97             | 12,017.00             | 77.58            | 74.83         | 87.57                 | -3,766.38                           | 210.91       | 1,111.74               | 1,006.29                | 105.45                    | 10.543            |                    |           |
| 14,900.00                         | 12,065.00             | 14,642.97             | 12,017.00             | 78.89            | 76.20         | 87.57                 | -3,866.37                           | 211.89       | 1,111.74               | 1,004.37                | 107.37                    | 10.354            |                    |           |
| 15,000.00                         | 12,065.00             | 14,742.97             | 12,017.00             | 80.20            | 77.59         | 87.57                 | -3,966.37                           | 212.87       | 1,111.74               | 1,002.43                | 109.31                    | 10.170            |                    |           |
| 15,100.00                         | 12,065.00             | 14,842.97             | 12,017.00             | 81.53            | 78.98         | 87.57                 | -4,066.36                           | 213.85       | 1,111.73               | 1,000.47                | 111.26                    | 9.992             |                    |           |
| 15,200.00                         | 12,065.00             | 14,942.97             | 12,017.00             | 82.87            | 80.38         | 87.57                 | -4,166.36                           | 214.83       | 1,111.73               | 998.50                  | 113.23                    | 9.818             |                    |           |
| 15,300.00                         | 12,065.00             | 15,042.97             | 12,017.00             | 84.22            | 81.79         | 87.57                 | -4,266.36                           | 215.81       | 1,111.73               | 996.52                  | 115.21                    | 9.650             |                    |           |
| 15,400.00                         | 12,065.00             | 15,142.97             | 12,017.00             | 85.59            | 83.21         | 87.57                 | -4,366.35                           | 216.79       | 1,111.73               | 994.52                  | 117.20                    | 9.486             |                    |           |
| 15,500.00                         | 12,065.00             | 15,242.97             | 12,017.00             | 86.96            | 84.64         | 87.57                 | -4,466.35                           | 217.77       | 1,111.72               | 992.52                  | 119.21                    | 9.326             |                    |           |
| 15,600.00                         | 12,065.00             | 15,342.97             | 12,017.00             | 88.34            | 86.08         | 87.57                 | -4,566.34                           | 218.75       | 1,111.72               | 990.50                  | 121.22                    | 9.171             |                    |           |
| 15,700.00                         | 12,065.00             | 15,442.97             | 12,017.00             | 89.73            | 87.52         | 87.57                 | -4,666.34                           | 219.73       | 1,111.72               | 988.46                  | 123.25                    | 9.020             |                    |           |
| 15,800.00                         | 12,065.00             | 15,542.97             | 12,017.00             | 91.13            | 88.97         | 87.57                 | -4,766.33                           | 220.72       | 1,111.71               | 986.42                  | 125.29                    | 8.873             |                    |           |
| 15,900.00                         | 12,065.00             | 15,642.97             | 12,017.00             | 92.54            | 90.43         | 87.57                 | -4,866.33                           | 221.70       | 1,111.71               | 984.37                  | 127.34                    | 8.730             |                    |           |
| 16,000.00                         | 12,065.00             | 15,742.97             | 12,017.00             | 93.95            | 91.90         | 87.57                 | -4,966.32                           | 222.68       | 1,111.71               | 982.31                  | 129.40                    | 8.591             |                    |           |
| 16,100.00                         | 12,065.00             | 15,842.97             | 12,017.00             | 95.38            | 93.37         | 87.57                 | -5,066.32                           | 223.66       | 1,111.71               | 980.24                  | 131.47                    | 8.456             |                    |           |
| 16,200.00                         | 12,065.00             | 15,942.97             | 12,017.00             | 96.81            | 94.85         | 87.57                 | -5,166.31                           | 224.64       | 1,111.70               | 978.16                  | 133.54                    | 8.325             |                    |           |
| 16,300.00                         | 12,065.00             | 16,042.97             | 12,017.00             | 98.24            | 96.33         | 87.57                 | -5,266.31                           | 225.62       | 1,111.70               | 976.07                  | 135.63                    | 8.197             |                    |           |
| 16,400.00                         | 12,065.00             | 16,142.97             | 12,017.00             | 99.69            | 97.82         | 87.57                 | -5,366.30                           | 226.60       | 1,111.70               | 973.97                  | 137.72                    | 8.072             |                    |           |
| 16,500.00                         | 12,065.00             | 16,242.97             | 12,017.00             | 101.14           | 99.31         | 87.57                 | -5,466.30                           | 227.58       | 1,111.69               | 971.87                  | 139.82                    | 7.951             |                    |           |
| 16,600.00                         | 12,065.00             | 16,342.97             | 12,017.00             | 102.60           | 100.81        | 87.57                 | -5,566.29                           | 228.56       | 1,111.69               | 969.76                  | 141.93                    | 7.833             |                    |           |
| 16,700.00                         | 12,065.00             | 16,442.97             | 12,017.00             | 104.06           | 102.31        | 87.57                 | -5,666.29                           | 229.54       | 1,111.69               | 967.64                  | 144.05                    | 7.718             |                    |           |
| 16,800.00                         | 12,065.00             | 16,542.97             | 12,017.00             | 105.53           | 103.82        | 87.57                 | -5,766.28                           | 230.52       | 1,111.69               | 965.52                  | 146.17                    | 7.606             |                    |           |
| 16,900.00                         | 12,065.00             | 16,642.97             | 12,017.00             | 107.00           | 105.33        | 87.57                 | -5,866.28                           | 231.50       | 1,111.68               | 963.39                  | 148.29                    | 7.496             |                    |           |
| 17,000.00                         | 12,065.00             | 16,742.97             | 12,017.00             | 108.48           | 106.85        | 87.57                 | -5,966.27                           | 232.48       | 1,111.68               | 961.25                  | 150.43                    | 7.390             |                    |           |
| 17,100.00                         | 12,065.00             | 16,842.97             | 12,017.00             | 109.96           | 108.37        | 87.57                 | -6,066.27                           | 233.47       | 1,111.68               | 959.11                  | 152.57                    | 7.286             |                    |           |
| 17,200.00                         | 12,065.00             | 16,942.97             | 12,017.00             | 111.45           | 109.89        | 87.57                 | -6,166.26                           | 234.45       | 1,111.67               | 956.96                  | 154.71                    | 7.185             |                    |           |
| 17,300.00                         | 12,065.00             | 17,042.97             | 12,017.00             | 112.94           | 111.42        | 87.57                 | -6,266.26                           | 235.43       | 1,111.67               | 954.81                  | 156.86                    | 7.087             |                    |           |
| 17,400.00                         | 12,065.00             | 17,142.97             | 12,017.00             | 114.44           | 112.95        | 87.57                 | -6,366.25                           | 236.41       | 1,111.67               | 952.65                  | 159.02                    | 6.991             |                    |           |
| 17,500.00                         | 12,065.00             | 17,242.97             | 12,017.00             | 115.94           | 114.48        | 87.57                 | -6,466.25                           | 237.39       | 1,111.67               | 950.49                  | 161.18                    | 6.897             |                    |           |
| 17,600.00                         | 12,065.00             | 17,342.97             | 12,017.00             | 117.45           | 116.02        | 87.57                 | -6,566.24                           | 238.37       | 1,111.66               | 948.32                  | 163.35                    | 6.806             |                    |           |
| 17,700.00                         | 12,065.00             | 17,442.97             | 12,017.00             | 118.96           | 117.56        | 87.57                 | -6,666.24                           | 239.35       | 1,111.66               | 946.14                  | 165.52                    | 6.716             |                    |           |
| 17,800.00                         | 12,065.00             | 17,542.97             | 12,017.00             | 120.47           | 119.11        | 87.57                 | -6,766.24                           | 240.33       | 1,111.66               | 943.97                  | 167.69                    | 6.629             |                    |           |
| 17,900.00                         | 12,065.00             | 17,642.97             | 12,017.00             | 121.99           | 120.65        | 87.57                 | -6,866.23                           | 241.31       | 1,111.65               | 941.79                  | 169.87                    | 6.544             |                    |           |
| 18,000.00                         | 12,065.00             | 17,742.97             | 12,017.00             | 123.51           | 122.20        | 87.57                 | -6,966.23                           | 242.29       | 1,111.65               | 939.60                  | 172.05                    | 6.461             |                    |           |
| 18,100.00                         | 12,065.00             | 17,842.97             | 12,017.00             | 125.03           | 123.75        | 87.57                 | -7,066.22                           | 243.27       | 1,111.65               | 937.41                  | 174.24                    | 6.380             |                    |           |
| 18,200.00                         | 12,065.00             | 17,942.97             | 12,017.00             | 126.56           | 125.31        | 87.57                 | -7,166.22                           | 244.25       | 1,111.65               | 935.22                  | 176.43                    | 6.301             |                    |           |
| 18,300.00                         | 12,065.00             | 18,042.97             | 12,017.00             | 128.09           | 126.86        | 87.57                 | -7,266.21                           | 245.23       | 1,111.64               | 933.02                  | 178.62                    | 6.223             |                    |           |
| 18,400.00                         | 12,065.00             | 18,142.97             | 12,017.00             | 129.62           | 128.42        | 87.57                 | -7,366.21                           | 246.21       | 1,111.64               | 930.82                  | 180.82                    | 6.148             |                    |           |
| 18,500.00                         | 12,065.00             | 18,242.97             | 12,017.00             | 131.16           | 129.98        | 87.57                 | -7,466.20                           | 247.20       | 1,111.64               | 928.62                  | 183.02                    | 6.074             |                    |           |
| 18,600.00                         | 12,065.00             | 18,342.97             | 12,017.00             | 132.69           | 131.55        | 87.57                 | -7,566.20                           | 248.18       | 1,111.63               | 926.41                  | 185.22                    | 6.002             |                    |           |
| 18,700.00                         | 12,065.00             | 18,442.97             | 12,017.00             | 134.24           | 133.11        | 87.57                 | -7,666.19                           | 249.16       | 1,111.63               | 924.20                  | 187.43                    | 5.931             |                    |           |
| 18,800.00                         | 12,065.00             | 18,542.97             | 12,017.00             | 135.78           | 134.68        | 87.57                 | -7,766.19                           | 250.14       | 1,111.63               | 921.99                  | 189.64                    | 5.862             |                    |           |
| 18,900.00                         | 12,065.00             | 18,642.97             | 12,017.00             | 137.33           | 136.25        | 87.57                 | -7,866.18                           | 251.12       | 1,111.63               | 919.77                  | 191.85                    | 5.794             |                    |           |
| 19,000.00                         | 12,065.00             | 18,742.97             | 12,017.00             | 138.87           | 137.82        | 87.57                 | -7,966.18                           | 252.10       | 1,111.62               | 917.56                  | 194.07                    | 5.728             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 602H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                                               |           |                    |           |
| 19,100.00                         | 12,065.00             | 18,842.97             | 12,017.00             | 140.43           | 139.40        | 87.57                 | -8,066.17                           | 253.08       | 1,111.62               | 915.34                  | 196.28                    | 5.663             |                                                       |           |                    |           |
| 19,200.00                         | 12,065.00             | 18,942.97             | 12,017.00             | 141.98           | 140.97        | 87.57                 | -8,166.17                           | 254.06       | 1,111.62               | 913.11                  | 198.51                    | 5.600             |                                                       |           |                    |           |
| 19,300.00                         | 12,065.00             | 19,042.97             | 12,017.00             | 143.53           | 142.55        | 87.57                 | -8,266.16                           | 255.04       | 1,111.61               | 910.89                  | 200.73                    | 5.538             |                                                       |           |                    |           |
| 19,400.00                         | 12,065.00             | 19,142.97             | 12,017.00             | 145.09           | 144.13        | 87.57                 | -8,366.16                           | 256.02       | 1,111.61               | 908.66                  | 202.95                    | 5.477             |                                                       |           |                    |           |
| 19,500.00                         | 12,065.00             | 19,242.97             | 12,017.00             | 146.65           | 145.71        | 87.57                 | -8,466.15                           | 257.00       | 1,111.61               | 906.43                  | 205.18                    | 5.418             |                                                       |           |                    |           |
| 19,600.00                         | 12,065.00             | 19,342.97             | 12,017.00             | 148.21           | 147.29        | 87.57                 | -8,566.15                           | 257.98       | 1,111.61               | 904.19                  | 207.41                    | 5.359             |                                                       |           |                    |           |
| 19,700.00                         | 12,065.00             | 19,442.97             | 12,017.00             | 149.78           | 148.87        | 87.57                 | -8,666.14                           | 258.96       | 1,111.60               | 901.96                  | 209.65                    | 5.302             |                                                       |           |                    |           |
| 19,800.00                         | 12,065.00             | 19,542.97             | 12,017.00             | 151.34           | 150.46        | 87.57                 | -8,766.14                           | 259.95       | 1,111.60               | 899.72                  | 211.88                    | 5.246             |                                                       |           |                    |           |
| 19,900.00                         | 12,065.00             | 19,642.97             | 12,017.00             | 152.91           | 152.04        | 87.57                 | -8,866.13                           | 260.93       | 1,111.60               | 897.48                  | 214.12                    | 5.192             |                                                       |           |                    |           |
| 20,000.00                         | 12,065.00             | 19,742.97             | 12,017.00             | 154.48           | 153.63        | 87.57                 | -8,966.13                           | 261.91       | 1,111.59               | 895.24                  | 216.36                    | 5.138             |                                                       |           |                    |           |
| 20,100.00                         | 12,065.00             | 19,842.97             | 12,017.00             | 156.05           | 155.22        | 87.57                 | -9,066.12                           | 262.89       | 1,111.59               | 892.99                  | 218.60                    | 5.085             |                                                       |           |                    |           |
| 20,200.00                         | 12,065.00             | 19,942.97             | 12,017.00             | 157.62           | 156.81        | 87.57                 | -9,166.12                           | 263.87       | 1,111.59               | 890.75                  | 220.84                    | 5.033             |                                                       |           |                    |           |
| 20,300.00                         | 12,065.00             | 20,042.97             | 12,017.00             | 159.20           | 158.40        | 87.57                 | -9,266.11                           | 264.85       | 1,111.59               | 888.50                  | 223.08                    | 4.983             |                                                       |           |                    |           |
| 20,400.00                         | 12,065.00             | 20,142.97             | 12,017.00             | 160.77           | 160.00        | 87.57                 | -9,366.11                           | 265.83       | 1,111.58               | 886.25                  | 225.33                    | 4.933             |                                                       |           |                    |           |
| 20,500.00                         | 12,065.00             | 20,242.97             | 12,017.00             | 162.35           | 161.59        | 87.57                 | -9,466.11                           | 266.81       | 1,111.58               | 884.00                  | 227.58                    | 4.884             |                                                       |           |                    |           |
| 20,600.00                         | 12,065.00             | 20,342.97             | 12,017.00             | 163.93           | 163.18        | 87.57                 | -9,566.10                           | 267.79       | 1,111.58               | 881.75                  | 229.83                    | 4.837             |                                                       |           |                    |           |
| 20,700.00                         | 12,065.00             | 20,442.97             | 12,017.00             | 165.51           | 164.78        | 87.57                 | -9,666.10                           | 268.77       | 1,111.57               | 879.49                  | 232.08                    | 4.790             |                                                       |           |                    |           |
| 20,800.00                         | 12,065.00             | 20,542.97             | 12,017.00             | 167.09           | 166.38        | 87.57                 | -9,766.09                           | 269.75       | 1,111.57               | 877.24                  | 234.33                    | 4.744             |                                                       |           |                    |           |
| 20,900.00                         | 12,065.00             | 20,642.97             | 12,017.00             | 168.67           | 167.98        | 87.57                 | -9,866.09                           | 270.73       | 1,111.57               | 874.98                  | 236.59                    | 4.698             |                                                       |           |                    |           |
| 21,000.00                         | 12,065.00             | 20,742.97             | 12,017.00             | 170.26           | 169.58        | 87.57                 | -9,966.08                           | 271.71       | 1,111.57               | 872.72                  | 238.84                    | 4.654             |                                                       |           |                    |           |
| 21,100.00                         | 12,065.00             | 20,842.97             | 12,017.00             | 171.84           | 171.18        | 87.57                 | -10,066.08                          | 272.70       | 1,111.56               | 870.46                  | 241.10                    | 4.610             |                                                       |           |                    |           |
| 21,200.00                         | 12,065.00             | 20,942.97             | 12,017.00             | 173.43           | 172.78        | 87.57                 | -10,166.07                          | 273.68       | 1,111.56               | 868.20                  | 243.36                    | 4.568             |                                                       |           |                    |           |
| 21,300.00                         | 12,065.00             | 21,042.97             | 12,017.00             | 175.02           | 174.38        | 87.57                 | -10,266.07                          | 274.66       | 1,111.56               | 865.94                  | 245.62                    | 4.526             |                                                       |           |                    |           |
| 21,400.00                         | 12,065.00             | 21,142.97             | 12,017.00             | 176.60           | 175.98        | 87.57                 | -10,366.06                          | 275.64       | 1,111.55               | 863.67                  | 247.88                    | 4.484             |                                                       |           |                    |           |
| 21,500.00                         | 12,065.00             | 21,242.97             | 12,017.00             | 178.19           | 177.59        | 87.57                 | -10,466.06                          | 276.62       | 1,111.55               | 861.41                  | 250.14                    | 4.444             |                                                       |           |                    |           |
| 21,600.00                         | 12,065.00             | 21,342.97             | 12,017.00             | 179.79           | 179.19        | 87.57                 | -10,566.05                          | 277.60       | 1,111.55               | 859.14                  | 252.41                    | 4.404             |                                                       |           |                    |           |
| 21,700.00                         | 12,065.00             | 21,442.97             | 12,017.00             | 181.38           | 180.80        | 87.57                 | -10,666.05                          | 278.58       | 1,111.55               | 856.87                  | 254.67                    | 4.365             |                                                       |           |                    |           |
| 21,800.00                         | 12,065.00             | 21,542.97             | 12,017.00             | 182.97           | 182.40        | 87.57                 | -10,766.04                          | 279.56       | 1,111.54               | 854.61                  | 256.94                    | 4.326             |                                                       |           |                    |           |
| 21,900.00                         | 12,065.00             | 21,642.97             | 12,017.00             | 184.57           | 184.01        | 87.57                 | -10,866.04                          | 280.54       | 1,111.54               | 852.33                  | 259.20                    | 4.288             |                                                       |           |                    |           |
| 22,000.00                         | 12,065.00             | 21,742.97             | 12,017.00             | 186.16           | 185.62        | 87.57                 | -10,966.03                          | 281.52       | 1,111.54               | 850.06                  | 261.47                    | 4.251             |                                                       |           |                    |           |
| 22,100.00                         | 12,065.00             | 21,842.97             | 12,017.00             | 187.76           | 187.23        | 87.57                 | -11,066.03                          | 282.50       | 1,111.53               | 847.79                  | 263.74                    | 4.214             |                                                       |           |                    |           |
| 22,200.00                         | 12,065.00             | 21,942.97             | 12,017.00             | 189.36           | 188.84        | 87.57                 | -11,166.02                          | 283.48       | 1,111.53               | 845.52                  | 266.01                    | 4.178             |                                                       |           |                    |           |
| 22,300.00                         | 12,065.00             | 22,042.97             | 12,017.00             | 190.95           | 190.45        | 87.57                 | -11,266.02                          | 284.46       | 1,111.53               | 843.24                  | 268.29                    | 4.143             |                                                       |           |                    |           |
| 22,400.00                         | 12,065.00             | 22,142.97             | 12,017.00             | 192.55           | 192.06        | 87.57                 | -11,366.01                          | 285.45       | 1,111.53               | 840.97                  | 270.56                    | 4.108             |                                                       |           |                    |           |
| 22,444.37                         | 12,065.00             | 22,187.30             | 12,017.00             | 193.26           | 192.77        | 87.57                 | -11,410.35                          | 285.88       | 1,111.52               | 839.96                  | 271.57                    | 4.093 SF          |                                                       |           |                    |           |
| 22,445.57                         | 12,065.00             | 22,187.30             | 12,017.00             | 193.28           | 192.77        | 87.57                 | -11,410.35                          | 285.88       | 1,111.52               | 839.97                  | 271.56                    | 4.093             |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 111.59                | -992.84                             | 2,508.59     | 2,698.27               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 56.60                 | 56.60                 | 0.13             | 0.07          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,697.77                | 0.14                      | N/A               |                    |           |
| 200.00                            | 200.00                | 156.60                | 156.60                | 0.48             | 0.33          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,697.33                | 0.58                      | 4,613.238         |                    |           |
| 300.00                            | 300.00                | 256.60                | 256.60                | 0.84             | 0.69          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,696.83                | 1.09                      | 2,482.173         |                    |           |
| 400.00                            | 400.00                | 356.60                | 356.60                | 1.20             | 1.05          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,696.32                | 1.59                      | 1,694.569         |                    |           |
| 500.00                            | 500.00                | 456.60                | 456.60                | 1.56             | 1.40          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,695.82                | 2.10                      | 1,285.866         |                    |           |
| 600.00                            | 600.00                | 556.60                | 556.60                | 1.92             | 1.76          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,695.31                | 2.60                      | 1,035.857         |                    |           |
| 700.00                            | 700.00                | 656.60                | 656.60                | 2.28             | 2.12          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,694.81                | 3.11                      | 867.190           |                    |           |
| 800.00                            | 800.00                | 756.60                | 756.60                | 2.63             | 2.48          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,694.30                | 3.62                      | 745.737           |                    |           |
| 900.00                            | 900.00                | 856.60                | 856.60                | 2.99             | 2.84          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,693.79                | 4.12                      | 654.114           |                    |           |
| 1,000.00                          | 1,000.00              | 956.60                | 956.60                | 3.35             | 3.20          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,693.29                | 4.63                      | 582.536           |                    |           |
| 1,100.00                          | 1,100.00              | 1,056.60              | 1,056.60              | 3.71             | 3.55          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,692.78                | 5.14                      | 525.075           |                    |           |
| 1,200.00                          | 1,200.00              | 1,156.60              | 1,156.60              | 4.07             | 3.91          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,692.27                | 5.65                      | 477.930           |                    |           |
| 1,300.00                          | 1,300.00              | 1,256.60              | 1,256.60              | 4.43             | 4.27          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,691.76                | 6.15                      | 438.552           |                    |           |
| 1,400.00                          | 1,400.00              | 1,356.60              | 1,356.60              | 4.79             | 4.63          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,691.26                | 6.66                      | 405.168           |                    |           |
| 1,500.00                          | 1,500.00              | 1,456.60              | 1,456.60              | 5.14             | 4.99          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,690.75                | 7.17                      | 376.507           |                    |           |
| 1,600.00                          | 1,600.00              | 1,556.60              | 1,556.60              | 5.50             | 5.35          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,690.24                | 7.67                      | 351.633           |                    |           |
| 1,700.00                          | 1,700.00              | 1,656.60              | 1,656.60              | 5.86             | 5.71          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,689.74                | 8.18                      | 329.841           |                    |           |
| 1,800.00                          | 1,800.00              | 1,756.60              | 1,756.60              | 6.22             | 6.06          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,689.23                | 8.69                      | 310.592           |                    |           |
| 1,900.00                          | 1,900.00              | 1,856.60              | 1,856.60              | 6.58             | 6.42          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,688.72                | 9.19                      | 293.466           |                    |           |
| 2,000.00                          | 2,000.00              | 1,956.60              | 1,956.60              | 6.94             | 6.78          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,688.22                | 9.70                      | 278.130           |                    |           |
| 2,100.00                          | 2,100.00              | 2,056.60              | 2,056.60              | 7.29             | 7.14          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,687.71                | 10.21                     | 264.317           |                    |           |
| 2,200.00                          | 2,200.00              | 2,156.60              | 2,156.60              | 7.65             | 7.50          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,687.20                | 10.71                     | 251.811           |                    |           |
| 2,300.00                          | 2,300.00              | 2,256.60              | 2,256.60              | 8.01             | 7.86          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,686.70                | 11.22                     | 240.435           |                    |           |
| 2,400.00                          | 2,400.00              | 2,356.60              | 2,356.60              | 8.37             | 8.21          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,686.19                | 11.73                     | 230.042           |                    |           |
| 2,500.00                          | 2,500.00              | 2,456.60              | 2,456.60              | 8.73             | 8.57          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,685.68                | 12.23                     | 220.511           |                    |           |
| 2,600.00                          | 2,600.00              | 2,556.60              | 2,556.60              | 9.09             | 8.93          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,685.18                | 12.74                     | 211.738           |                    |           |
| 2,700.00                          | 2,700.00              | 2,656.60              | 2,656.60              | 9.45             | 9.29          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,684.67                | 13.25                     | 203.636           |                    |           |
| 2,800.00                          | 2,800.00              | 2,756.60              | 2,756.60              | 9.80             | 9.65          | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,684.16                | 13.76                     | 196.131           |                    |           |
| 2,900.00                          | 2,900.00              | 2,856.60              | 2,856.60              | 10.16            | 10.01         | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,683.65                | 14.26                     | 189.160           |                    |           |
| 3,000.00                          | 3,000.00              | 2,956.60              | 2,956.60              | 10.52            | 10.37         | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,683.15                | 14.77                     | 182.668           |                    |           |
| 3,100.00                          | 3,100.00              | 3,056.60              | 3,056.60              | 10.88            | 10.72         | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,682.64                | 15.28                     | 176.606           |                    |           |
| 3,200.00                          | 3,200.00              | 3,156.60              | 3,156.60              | 11.24            | 11.08         | 111.59                | -992.84                             | 2,508.59     | 2,697.92               | 2,682.13                | 15.78                     | 170.934           |                    |           |
| 3,300.00                          | 3,299.99              | 3,256.59              | 3,256.59              | 11.58            | 11.44         | -17.08                | -992.84                             | 2,508.59     | 2,696.67               | 2,680.39                | 16.28                     | 165.646           |                    |           |
| 3,400.00                          | 3,399.91              | 3,356.51              | 3,356.51              | 11.91            | 11.80         | -17.12                | -992.84                             | 2,508.59     | 2,692.91               | 2,676.15                | 16.77                     | 160.618           |                    |           |
| 3,500.00                          | 3,499.69              | 3,433.48              | 3,433.48              | 12.25            | 12.07         | -17.18                | -992.86                             | 2,508.74     | 2,686.90               | 2,669.71                | 17.19                     | 156.285           |                    |           |
| 3,600.00                          | 3,599.27              | 3,500.00              | 3,499.99              | 12.58            | 12.30         | -17.26                | -993.00                             | 2,509.89     | 2,679.77               | 2,662.18                | 17.59                     | 152.356           |                    |           |
| 3,700.00                          | 3,698.57              | 3,552.13              | 3,552.09              | 12.92            | 12.48         | -17.34                | -993.21                             | 2,511.60     | 2,671.62               | 2,653.68                | 17.94                     | 148.893           |                    |           |
| 3,800.00                          | 3,797.54              | 3,600.00              | 3,599.91              | 13.27            | 12.64         | -17.44                | -993.48                             | 2,513.79     | 2,662.54               | 2,644.26                | 18.28                     | 145.629           |                    |           |
| 3,900.00                          | 3,896.09              | 3,673.22              | 3,672.99              | 13.62            | 12.89         | -17.59                | -994.04                             | 2,518.28     | 2,652.40               | 2,633.71                | 18.69                     | 141.926           |                    |           |
| 4,000.00                          | 3,994.16              | 3,772.22              | 3,771.74              | 13.98            | 13.23         | -17.81                | -994.89                             | 2,525.14     | 2,640.50               | 2,621.33                | 19.17                     | 137.776           |                    |           |
| 4,100.00                          | 4,091.70              | 3,870.82              | 3,870.11              | 14.35            | 13.57         | -18.06                | -995.74                             | 2,531.97     | 2,626.15               | 2,606.50                | 19.64                     | 133.696           |                    |           |
| 4,200.00                          | 4,188.62              | 3,968.97              | 3,968.01              | 14.74            | 13.91         | -18.34                | -996.58                             | 2,538.78     | 2,609.37               | 2,589.24                | 20.12                     | 129.682           |                    |           |
| 4,300.00                          | 4,284.86              | 4,066.59              | 4,065.40              | 15.14            | 14.25         | -18.66                | -997.42                             | 2,545.54     | 2,590.18               | 2,569.58                | 20.60                     | 125.731           |                    |           |
| 4,400.00                          | 4,380.36              | 4,163.62              | 4,162.19              | 15.55            | 14.59         | -19.01                | -998.25                             | 2,552.27     | 2,568.60               | 2,547.52                | 21.08                     | 121.839           |                    |           |
| 4,452.43                          | 4,430.11              | 4,214.23              | 4,212.68              | 15.78            | 14.77         | -19.21                | -998.69                             | 2,555.77     | 2,556.35               | 2,535.01                | 21.33                     | 119.820           |                    |           |
| 4,500.00                          | 4,475.14              | 4,260.07              | 4,258.41              | 15.99            | 14.93         | -19.34                | -999.08                             | 2,558.95     | 2,544.94               | 2,523.37                | 21.56                     | 118.015           |                    |           |
| 4,600.00                          | 4,569.82              | 4,356.43              | 4,354.53              | 16.44            | 15.27         | -19.62                | -999.91                             | 2,565.63     | 2,521.00               | 2,498.95                | 22.05                     | 114.332           |                    |           |
| 4,700.00                          | 4,664.49              | 4,452.79              | 4,450.65              | 16.91            | 15.61         | -19.90                | -1,000.73                           | 2,572.31     | 2,497.12               | 2,474.58                | 22.54                     | 110.788           |                    |           |
| 4,800.00                          | 4,759.16              | 4,549.14              | 4,546.77              | 17.39            | 15.95         | -20.19                | -1,001.56                           | 2,578.99     | 2,473.30               | 2,450.26                | 23.03                     | 107.378           |                    |           |
| 4,900.00                          | 4,853.84              | 4,645.50              | 4,642.89              | 17.87            | 16.29         | -20.48                | -1,002.39                           | 2,585.66     | 2,449.53               | 2,426.00                | 23.53                     | 104.095           |                    |           |
| 5,000.00                          | 4,948.51              | 4,741.86              | 4,739.02              | 18.37            | 16.64         | -20.78                | -1,003.22                           | 2,592.34     | 2,425.83               | 2,401.80                | 24.03                     | 100.934           |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,838.21              | 4,835.14              | 18.88            | 16.98         | -21.08                | -1,004.04                           | 2,599.02     | 2,402.20               | 2,377.66                | 24.54                     | 97.889            |                    |           |
| 5,200.00                          | 5,137.85              | 4,934.57              | 4,931.26              | 19.39            | 17.32         | -21.39                | -1,004.87                           | 2,605.70     | 2,378.63               | 2,353.58                | 25.05                     | 94.956            |                    |           |
| 5,300.00                          | 5,232.53              | 5,030.93              | 5,027.38              | 19.92            | 17.67         | -21.70                | -1,005.70                           | 2,612.38     | 2,355.12               | 2,329.56                | 25.56                     | 92.129            |                    |           |
| 5,400.00                          | 5,327.20              | 5,127.29              | 5,123.50              | 20.45            | 18.01         | -22.03                | -1,006.53                           | 2,619.05     | 2,331.69               | 2,305.61                | 26.08                     | 89.403            |                    |           |
| 5,500.00                          | 5,421.87              | 5,223.64              | 5,219.62              | 20.99            | 18.36         | -22.35                | -1,007.35                           | 2,625.73     | 2,308.33               | 2,281.73                | 26.60                     | 86.774            |                    |           |
| 5,600.00                          | 5,516.54              | 5,320.00              | 5,315.75              | 21.53            | 18.71         | -22.69                | -1,008.18                           | 2,632.41     | 2,285.05               | 2,257.92                | 27.13                     | 84.238            |                    |           |
| 5,700.00                          | 5,611.22              | 5,416.36              | 5,411.87              | 22.08            | 19.05         | -23.03                | -1,009.01                           | 2,639.09     | 2,261.84               | 2,234.18                | 27.65                     | 81.789            |                    |           |
| 5,800.00                          | 5,705.89              | 5,512.71              | 5,507.99              | 22.63            | 19.40         | -23.38                | -1,009.84                           | 2,645.77     | 2,238.70               | 2,210.52                | 28.19                     | 79.426            |                    |           |
| 5,900.00                          | 5,800.56              | 5,609.07              | 5,604.11              | 23.19            | 19.75         | -23.73                | -1,010.66                           | 2,652.45     | 2,215.65               | 2,186.93                | 28.72                     | 77.143            |                    |           |
| 6,000.00                          | 5,895.23              | 5,705.43              | 5,700.23              | 23.76            | 20.10         | -24.09                | -1,011.49                           | 2,659.12     | 2,192.69               | 2,163.43                | 29.26                     | 74.937            |                    |           |
| 6,100.00                          | 5,989.91              | 5,801.78              | 5,796.36              | 24.33            | 20.45         | -24.46                | -1,012.32                           | 2,665.80     | 2,169.81               | 2,140.01                | 29.80                     | 72.805            |                    |           |
| 6,200.00                          | 6,084.58              | 5,898.14              | 5,892.48              | 24.90            | 20.80         | -24.84                | -1,013.14                           | 2,672.48     | 2,147.02               | 2,116.67                | 30.35                     | 70.744            |                    |           |
| 6,300.00                          | 6,179.25              | 5,994.50              | 5,988.60              | 25.48            | 21.15         | -25.23                | -1,013.97                           | 2,679.16     | 2,124.32               | 2,093.42                | 30.90                     | 68.750            |                    |           |
| 6,400.00                          | 6,273.92              | 6,090.86              | 6,084.72              | 26.05            | 21.50         | -25.62                | -1,014.80                           | 2,685.84     | 2,101.72               | 2,070.27                | 31.45                     | 66.821            |                    |           |
| 6,500.00                          | 6,368.60              | 6,187.21              | 6,180.84              | 26.64            | 21.85         | -26.02                | -1,015.63                           | 2,692.51     | 2,079.22               | 2,047.21                | 32.01                     | 64.955            |                    |           |
| 6,600.00                          | 6,463.27              | 6,283.57              | 6,276.96              | 27.22            | 22.20         | -26.43                | -1,016.45                           | 2,699.19     | 2,056.81               | 2,024.24                | 32.57                     | 63.148            |                    |           |
| 6,700.00                          | 6,557.94              | 6,379.93              | 6,373.09              | 27.81            | 22.55         | -26.85                | -1,017.28                           | 2,705.87     | 2,034.52               | 2,001.38                | 33.14                     | 61.398            |                    |           |
| 6,800.00                          | 6,652.61              | 6,476.28              | 6,469.21              | 28.40            | 22.90         | -27.28                | -1,018.11                           | 2,712.55     | 2,012.33               | 1,978.62                | 33.71                     | 59.703            |                    |           |
| 6,900.00                          | 6,747.29              | 6,572.64              | 6,565.33              | 29.00            | 23.26         | -27.72                | -1,018.94                           | 2,719.23     | 1,990.25               | 1,955.97                | 34.28                     | 58.060            |                    |           |
| 7,000.00                          | 6,841.96              | 6,677.70              | 6,670.13              | 29.59            | 23.64         | -28.21                | -1,019.83                           | 2,726.47     | 1,968.27               | 1,933.40                | 34.88                     | 56.438            |                    |           |
| 7,100.00                          | 6,936.63              | 6,773.36              | 6,765.62              | 30.19            | 24.34         | -29.14                | -1,020.79                           | 2,734.21     | 1,943.54               | 1,907.92                | 35.63                     | 54.555            |                    |           |
| 7,200.00                          | 7,031.30              | 6,869.65              | 6,862.90              | 30.79            | 24.77         | -29.74                | -1,020.84                           | 2,734.59     | 1,915.34               | 1,879.11                | 36.23                     | 52.860            |                    |           |
| 7,300.00                          | 7,125.98              | 6,965.32              | 6,958.58              | 31.40            | 25.10         | -30.22                | -1,020.84                           | 2,734.59     | 1,887.08               | 1,850.27                | 36.81                     | 51.260            |                    |           |
| 7,400.00                          | 7,220.65              | 7,061.99              | 7,055.25              | 32.00            | 25.43         | -30.71                | -1,020.84                           | 2,734.59     | 1,858.94               | 1,821.55                | 37.40                     | 49.707            |                    |           |
| 7,500.00                          | 7,315.32              | 7,157.67              | 7,150.92              | 32.61            | 25.77         | -31.22                | -1,020.84                           | 2,734.59     | 1,830.94               | 1,792.95                | 37.99                     | 48.199            |                    |           |
| 7,600.00                          | 7,409.99              | 7,253.34              | 7,246.59              | 33.21            | 26.10         | -31.74                | -1,020.84                           | 2,734.59     | 1,803.08               | 1,764.50                | 38.58                     | 46.734            |                    |           |
| 7,700.00                          | 7,504.67              | 7,349.01              | 7,342.27              | 33.82            | 26.43         | -32.28                | -1,020.84                           | 2,734.59     | 1,775.36               | 1,736.18                | 39.18                     | 45.311            |                    |           |
| 7,800.00                          | 7,599.34              | 7,444.68              | 7,437.94              | 34.43            | 26.76         | -32.83                | -1,020.84                           | 2,734.59     | 1,747.80               | 1,708.01                | 39.79                     | 43.928            |                    |           |
| 7,900.00                          | 7,694.01              | 7,540.35              | 7,533.61              | 35.05            | 27.09         | -33.40                | -1,020.84                           | 2,734.59     | 1,720.40               | 1,680.00                | 40.40                     | 42.584            |                    |           |
| 8,000.00                          | 7,788.68              | 7,636.02              | 7,629.28              | 35.66            | 27.43         | -33.99                | -1,020.84                           | 2,734.59     | 1,693.17               | 1,652.15                | 41.02                     | 41.279            |                    |           |
| 8,100.00                          | 7,883.36              | 7,731.69              | 7,724.95              | 36.28            | 27.76         | -34.60                | -1,020.84                           | 2,734.59     | 1,666.12               | 1,624.48                | 41.64                     | 40.010            |                    |           |
| 8,200.00                          | 7,978.03              | 7,827.37              | 7,820.63              | 36.89            | 28.09         | -35.23                | -1,020.84                           | 2,734.59     | 1,639.25               | 1,596.98                | 42.27                     | 38.777            |                    |           |
| 8,300.00                          | 8,072.70              | 7,923.04              | 7,916.30              | 37.51            | 28.42         | -35.88                | -1,020.84                           | 2,734.59     | 1,612.58               | 1,569.67                | 42.91                     | 37.578            |                    |           |
| 8,400.00                          | 8,167.37              | 8,018.71              | 8,012.07              | 38.13            | 28.76         | -36.55                | -1,020.84                           | 2,734.59     | 1,586.11               | 1,542.55                | 43.56                     | 36.413            |                    |           |
| 8,500.00                          | 8,262.05              | 8,114.38              | 8,107.74              | 38.75            | 29.09         | -37.24                | -1,020.84                           | 2,734.59     | 1,559.86               | 1,515.65                | 44.21                     | 35.280            |                    |           |
| 8,600.00                          | 8,356.72              | 8,210.05              | 8,203.41              | 39.37            | 29.42         | -37.95                | -1,020.84                           | 2,734.59     | 1,533.84               | 1,488.96                | 44.88                     | 34.180            |                    |           |
| 8,700.00                          | 8,451.39              | 8,305.72              | 8,299.08              | 39.99            | 29.76         | -38.69                | -1,020.84                           | 2,734.59     | 1,508.05               | 1,462.51                | 45.55                     | 33.111            |                    |           |
| 8,800.00                          | 8,546.07              | 8,401.39              | 8,394.75              | 40.61            | 30.09         | -39.45                | -1,020.84                           | 2,734.59     | 1,482.52               | 1,436.29                | 46.23                     | 32.071            |                    |           |
| 8,875.44                          | 8,617.48              | 8,472.80              | 8,466.16              | 41.08            | 30.34         | -40.04                | -1,020.84                           | 2,734.59     | 1,463.43               | 1,416.69                | 46.74                     | 31.307            |                    |           |
| 8,900.00                          | 8,640.90              | 8,496.22              | 8,489.58              | 41.23            | 30.43         | -39.84                | -1,020.84                           | 2,734.59     | 1,457.64               | 1,410.73                | 46.91                     | 31.073            |                    |           |
| 8,950.00                          | 8,689.44              | 8,545.76              | 8,539.12              | 41.49            | 30.60         | -39.54                | -1,020.84                           | 2,734.59     | 1,448.33               | 1,401.10                | 47.23                     | 30.667            |                    |           |
| 9,000.00                          | 8,738.83              | 8,595.15              | 8,588.51              | 41.70            | 30.77         | -39.35                | -1,020.84                           | 2,734.59     | 1,442.38               | 1,394.86                | 47.51                     | 30.357            |                    |           |
| 9,050.00                          | 8,788.70              | 8,645.02              | 8,638.38              | 41.87            | 30.95         | -39.27                | -1,020.84                           | 2,734.59     | 1,439.79               | 1,392.02                | 47.77                     | 30.141            |                    |           |
| 9,063.30                          | 8,802.00              | 8,659.32              | 8,652.68              | 41.91            | 30.99         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,391.84                | 47.83                     | 30.100            |                    |           |
| 9,100.00                          | 8,838.70              | 8,696.02              | 8,689.38              | 42.00            | 31.12         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,391.68                | 47.99                     | 29.998            |                    |           |
| 9,200.00                          | 8,938.70              | 8,796.02              | 8,789.38              | 42.26            | 31.48         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,391.23                | 48.44                     | 29.722            |                    |           |
| 9,300.00                          | 9,038.70              | 8,896.02              | 8,889.38              | 42.51            | 31.83         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,390.78                | 48.89                     | 29.450            |                    |           |
| 9,400.00                          | 9,138.70              | 8,996.02              | 8,989.38              | 42.77            | 32.18         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,390.34                | 49.33                     | 29.182            |                    |           |
| 9,500.00                          | 9,238.70              | 9,096.02              | 9,089.38              | 43.03            | 32.54         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,389.89                | 49.78                     | 28.918            |                    |           |
| 9,600.00                          | 9,338.70              | 9,196.02              | 9,189.38              | 43.30            | 32.89         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,389.44                | 50.23                     | 28.659            |                    |           |
| 9,700.00                          | 9,438.70              | 9,296.02              | 9,289.38              | 43.56            | 33.24         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,388.98                | 50.69                     | 28.403            |                    |           |
| 9,800.00                          | 9,538.70              | 9,396.02              | 9,389.38              | 43.82            | 33.60         | -39.40                | -1,020.84                           | 2,734.59     | 1,439.67               | 1,388.53                | 51.14                     | 28.152            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |  |
| 9,900.00                          | 9,638.70              | 9,603.04              | 9,595.30              | 44.09            | 33.95         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,388.08                | 51.59                     | 27.904            |                    |           |  |
| 10,000.00                         | 9,738.70              | 9,703.04              | 9,695.30              | 44.36            | 34.31         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,387.62                | 52.05                     | 27.660            |                    |           |  |
| 10,100.00                         | 9,838.70              | 9,803.04              | 9,795.30              | 44.63            | 34.66         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,387.17                | 52.50                     | 27.420            |                    |           |  |
| 10,200.00                         | 9,938.70              | 9,903.04              | 9,895.30              | 44.90            | 35.01         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,386.71                | 52.96                     | 27.184            |                    |           |  |
| 10,300.00                         | 10,038.70             | 10,003.04             | 9,995.30              | 45.17            | 35.37         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,386.25                | 53.42                     | 26.951            |                    |           |  |
| 10,400.00                         | 10,138.70             | 10,103.04             | 10,095.30             | 45.44            | 35.72         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,385.79                | 53.88                     | 26.722            |                    |           |  |
| 10,500.00                         | 10,238.70             | 10,203.04             | 10,195.30             | 45.71            | 36.08         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,385.33                | 54.34                     | 26.496            |                    |           |  |
| 10,600.00                         | 10,338.70             | 10,303.04             | 10,295.30             | 45.99            | 36.43         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,384.87                | 54.80                     | 26.273            |                    |           |  |
| 10,700.00                         | 10,438.70             | 10,403.04             | 10,395.30             | 46.26            | 36.79         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,384.41                | 55.26                     | 26.054            |                    |           |  |
| 10,800.00                         | 10,538.70             | 10,503.04             | 10,495.30             | 46.54            | 37.14         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,383.95                | 55.72                     | 25.838            |                    |           |  |
| 10,900.00                         | 10,638.70             | 10,603.04             | 10,595.30             | 46.82            | 37.49         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,383.49                | 56.18                     | 25.625            |                    |           |  |
| 11,000.00                         | 10,738.70             | 10,703.04             | 10,695.30             | 47.10            | 37.85         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,383.03                | 56.64                     | 25.416            |                    |           |  |
| 11,100.00                         | 10,838.70             | 10,803.04             | 10,795.30             | 47.38            | 38.20         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,382.56                | 57.11                     | 25.209            |                    |           |  |
| 11,200.00                         | 10,938.70             | 10,903.04             | 10,895.30             | 47.66            | 38.56         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,382.10                | 57.57                     | 25.006            |                    |           |  |
| 11,300.00                         | 11,038.70             | 11,003.04             | 10,995.30             | 47.94            | 38.91         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,381.63                | 58.04                     | 24.805            |                    |           |  |
| 11,400.00                         | 11,138.70             | 11,103.04             | 11,095.30             | 48.22            | 39.27         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,381.16                | 58.51                     | 24.607            |                    |           |  |
| 11,500.00                         | 11,238.70             | 11,203.04             | 11,195.30             | 48.51            | 39.62         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,380.70                | 58.97                     | 24.413            |                    |           |  |
| 11,600.00                         | 11,338.70             | 11,303.04             | 11,295.30             | 48.79            | 39.98         | 89.40                 | -1,020.84                           | 2,734.59     | 1,439.67               | 1,380.23                | 59.44                     | 24.221            |                    |           |  |
| 11,691.64                         | 11,430.34             | 11,394.71             | 11,386.94             | 49.06            | 40.30         | 89.44                 | -1,021.90                           | 2,734.60     | 1,439.67               | 1,379.81                | 59.86                     | 24.050 CC         |                    |           |  |
| 11,700.00                         | 11,438.70             | 11,403.04             | 11,395.26             | 49.08            | 40.33         | 89.46                 | -1,022.47                           | 2,734.61     | 1,439.67               | 1,379.77                | 59.90                     | 24.036            |                    |           |  |
| 11,753.34                         | 11,492.04             | 11,455.66             | 11,447.47             | 49.23            | 40.50         | 89.72                 | -1,028.84                           | 2,734.67     | 1,439.69               | 1,379.57                | 60.11                     | 23.950            |                    |           |  |
| 11,800.00                         | 11,538.65             | 11,500.82             | 11,491.65             | 49.37            | 40.65         | -89.42                | -1,038.11                           | 2,734.76     | 1,439.75               | 1,379.44                | 60.30                     | 23.876            |                    |           |  |
| 11,850.00                         | 11,588.24             | 11,548.59             | 11,537.44             | 49.55            | 40.80         | -89.10                | -1,051.67                           | 2,734.89     | 1,439.85               | 1,379.33                | 60.52                     | 23.791            |                    |           |  |
| 11,900.00                         | 11,637.10             | 11,595.75             | 11,581.39             | 49.74            | 40.95         | -88.79                | -1,068.75                           | 2,735.06     | 1,440.00               | 1,379.24                | 60.76                     | 23.700            |                    |           |  |
| 11,950.00                         | 11,684.86             | 11,642.36             | 11,623.30             | 49.95            | 41.08         | -88.49                | -1,089.12                           | 2,735.26     | 1,440.18               | 1,379.16                | 61.02                     | 23.603            |                    |           |  |
| 12,000.00                         | 11,731.15             | 11,688.44             | 11,662.97             | 50.18            | 41.22         | -88.20                | -1,112.54                           | 2,735.49     | 1,440.39               | 1,379.10                | 61.29                     | 23.500            |                    |           |  |
| 12,050.00                         | 11,775.62             | 11,734.04             | 11,700.24             | 50.42            | 41.35         | -87.93                | -1,138.78                           | 2,735.74     | 1,440.63               | 1,379.05                | 61.59                     | 23.392            |                    |           |  |
| 12,100.00                         | 11,817.93             | 11,779.20             | 11,734.99             | 50.68            | 41.47         | -87.67                | -1,167.61                           | 2,736.03     | 1,440.89               | 1,378.99                | 61.90                     | 23.279            |                    |           |  |
| 12,150.00                         | 11,857.76             | 11,823.96             | 11,767.08             | 50.96            | 41.60         | -87.42                | -1,198.80                           | 2,736.33     | 1,441.15               | 1,378.92                | 62.22                     | 23.160            |                    |           |  |
| 12,200.00                         | 11,894.81             | 11,868.37             | 11,796.42             | 51.25            | 41.72         | -87.20                | -1,232.11                           | 2,736.66     | 1,441.42               | 1,378.85                | 62.57                     | 23.037            |                    |           |  |
| 12,250.00                         | 11,928.80             | 11,912.45             | 11,822.90             | 51.56            | 41.86         | -86.99                | -1,267.33                           | 2,737.00     | 1,441.68               | 1,378.75                | 62.93                     | 22.908            |                    |           |  |
| 12,300.00                         | 11,959.45             | 11,956.24             | 11,846.45             | 51.87            | 41.99         | -86.81                | -1,304.24                           | 2,737.36     | 1,441.93               | 1,378.62                | 63.31                     | 22.775            |                    |           |  |
| 12,350.00                         | 11,986.56             | 12,000.00             | 11,867.11             | 52.20            | 42.13         | -86.64                | -1,342.81                           | 2,737.74     | 1,442.16               | 1,378.46                | 63.71                     | 22.637            |                    |           |  |
| 12,400.00                         | 12,009.90             | 12,043.12             | 11,884.52             | 52.55            | 42.27         | -86.50                | -1,382.24                           | 2,738.13     | 1,442.37               | 1,378.26                | 64.12                     | 22.496            |                    |           |  |
| 12,450.00                         | 12,029.29             | 12,086.28             | 11,898.93             | 52.90            | 42.42         | -86.38                | -1,422.91                           | 2,738.53     | 1,442.55               | 1,378.01                | 64.54                     | 22.351            |                    |           |  |
| 12,500.00                         | 12,044.60             | 12,129.30             | 11,910.20             | 53.26            | 42.57         | -86.29                | -1,464.41                           | 2,738.93     | 1,442.70               | 1,377.72                | 64.98                     | 22.203            |                    |           |  |
| 12,550.00                         | 12,055.70             | 12,172.20             | 11,918.32             | 53.63            | 42.72         | -86.22                | -1,506.54                           | 2,739.35     | 1,442.81               | 1,377.39                | 65.43                     | 22.053            |                    |           |  |
| 12,600.00                         | 12,062.52             | 12,215.04             | 11,923.25             | 54.01            | 42.88         | -86.18                | -1,549.07                           | 2,739.76     | 1,442.88               | 1,377.00                | 65.88                     | 21.902            |                    |           |  |
| 12,653.34                         | 12,065.00             | 12,260.85             | 11,925.00             | 54.42            | 43.05         | -86.16                | -1,594.83                           | 2,740.21     | 1,442.91               | 1,376.55                | 66.37                     | 21.741            |                    |           |  |
| 12,700.00                         | 12,065.00             | 12,307.51             | 11,925.00             | 54.78            | 43.23         | -86.16                | -1,641.49                           | 2,740.67     | 1,442.91               | 1,376.13                | 66.78                     | 21.606            |                    |           |  |
| 12,800.00                         | 12,065.00             | 12,407.51             | 11,925.00             | 55.59            | 43.65         | -86.16                | -1,741.49                           | 2,741.65     | 1,442.92               | 1,375.19                | 67.72                     | 21.306            |                    |           |  |
| 12,900.00                         | 12,065.00             | 12,507.51             | 11,925.00             | 56.43            | 44.13         | -86.16                | -1,841.48                           | 2,742.63     | 1,442.92               | 1,374.19                | 68.73                     | 20.994            |                    |           |  |
| 13,000.00                         | 12,065.00             | 12,607.51             | 11,925.00             | 57.31            | 44.67         | -86.16                | -1,941.48                           | 2,743.60     | 1,442.92               | 1,373.12                | 69.80                     | 20.672            |                    |           |  |
| 13,100.00                         | 12,065.00             | 12,707.51             | 11,925.00             | 58.22            | 45.26         | -86.16                | -2,041.47                           | 2,744.58     | 1,442.92               | 1,371.99                | 70.93                     | 20.343            |                    |           |  |
| 13,200.00                         | 12,065.00             | 12,807.51             | 11,925.00             | 59.17            | 45.90         | -86.16                | -2,141.47                           | 2,745.56     | 1,442.92               | 1,370.80                | 72.12                     | 20.008            |                    |           |  |
| 13,300.00                         | 12,065.00             | 12,907.51             | 11,925.00             | 60.14            | 46.59         | -86.16                | -2,241.46                           | 2,746.54     | 1,442.92               | 1,369.56                | 73.36                     | 19.669            |                    |           |  |
| 13,400.00                         | 12,065.00             | 13,007.51             | 11,925.00             | 61.15            | 47.33         | -86.16                | -2,341.46                           | 2,747.52     | 1,442.92               | 1,368.27                | 74.66                     | 19.327            |                    |           |  |
| 13,500.00                         | 12,065.00             | 13,107.51             | 11,925.00             | 62.18            | 48.12         | -86.16                | -2,441.45                           | 2,748.50     | 1,442.92               | 1,366.92                | 76.00                     | 18.985            |                    |           |  |
| 13,600.00                         | 12,065.00             | 13,207.51             | 11,925.00             | 63.24            | 48.94         | -86.16                | -2,541.45                           | 2,749.48     | 1,442.93               | 1,365.53                | 77.39                     | 18.644            |                    |           |  |
| 13,700.00                         | 12,065.00             | 13,307.51             | 11,925.00             | 64.32            | 49.81         | -86.16                | -2,641.44                           | 2,750.46     | 1,442.93               | 1,364.10                | 78.83                     | 18.304            |                    |           |  |
| 13,800.00                         | 12,065.00             | 13,407.51             | 11,925.00             | 65.43            | 50.72         | -86.16                | -2,741.44                           | 2,751.44     | 1,442.93               | 1,362.62                | 80.31                     | 17.968            |                    |           |  |
| 13,900.00                         | 12,065.00             | 13,507.51             | 11,925.00             | 66.56            | 51.66         | -86.16                | -2,841.43                           | 2,752.42     | 1,442.93               | 1,361.10                | 81.83                     | 17.634            |                    |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 14,000.00                         | 12,065.00             | 13,607.51             | 11,925.00             | 67.71            | 52.64         | -86.16                | -2,941.43                           | 2,753.40     | 1,442.93               | 1,359.55                | 83.38                     | 17.305            |                    |           |
| 14,100.00                         | 12,065.00             | 13,707.51             | 11,925.00             | 68.88            | 53.65         | -86.16                | -3,041.42                           | 2,754.37     | 1,442.93               | 1,357.96                | 84.97                     | 16.981            |                    |           |
| 14,200.00                         | 12,065.00             | 13,807.51             | 11,925.00             | 70.08            | 54.70         | -86.16                | -3,141.42                           | 2,755.35     | 1,442.93               | 1,356.34                | 86.60                     | 16.663            |                    |           |
| 14,300.00                         | 12,065.00             | 13,907.51             | 11,925.00             | 71.29            | 55.77         | -86.16                | -3,241.41                           | 2,756.33     | 1,442.93               | 1,354.68                | 88.25                     | 16.350            |                    |           |
| 14,400.00                         | 12,065.00             | 14,007.51             | 11,925.00             | 72.51            | 56.87         | -86.16                | -3,341.41                           | 2,757.31     | 1,442.93               | 1,353.00                | 89.94                     | 16.044            |                    |           |
| 14,500.00                         | 12,065.00             | 14,107.51             | 11,925.00             | 73.76            | 57.99         | -86.16                | -3,441.40                           | 2,758.29     | 1,442.94               | 1,351.28                | 91.65                     | 15.744            |                    |           |
| 14,600.00                         | 12,065.00             | 14,207.51             | 11,925.00             | 75.02            | 59.15         | -86.16                | -3,541.40                           | 2,759.27     | 1,442.94               | 1,349.54                | 93.39                     | 15.450            |                    |           |
| 14,700.00                         | 12,065.00             | 14,307.51             | 11,925.00             | 76.29            | 60.32         | -86.16                | -3,641.39                           | 2,760.25     | 1,442.94               | 1,347.78                | 95.16                     | 15.164            |                    |           |
| 14,800.00                         | 12,065.00             | 14,407.51             | 11,925.00             | 77.58            | 61.52         | -86.16                | -3,741.39                           | 2,761.23     | 1,442.94               | 1,345.99                | 96.95                     | 14.884            |                    |           |
| 14,900.00                         | 12,065.00             | 14,507.51             | 11,925.00             | 78.89            | 62.73         | -86.16                | -3,841.38                           | 2,762.21     | 1,442.94               | 1,344.18                | 98.76                     | 14.610            |                    |           |
| 15,000.00                         | 12,065.00             | 14,607.51             | 11,925.00             | 80.20            | 63.97         | -86.16                | -3,941.38                           | 2,763.19     | 1,442.94               | 1,342.35                | 100.60                    | 14.344            |                    |           |
| 15,100.00                         | 12,065.00             | 14,707.51             | 11,925.00             | 81.53            | 65.22         | -86.16                | -4,041.38                           | 2,764.17     | 1,442.94               | 1,340.49                | 102.45                    | 14.084            |                    |           |
| 15,200.00                         | 12,065.00             | 14,807.51             | 11,925.00             | 82.87            | 66.50         | -86.16                | -4,141.37                           | 2,765.14     | 1,442.94               | 1,338.62                | 104.32                    | 13.832            |                    |           |
| 15,300.00                         | 12,065.00             | 14,907.51             | 11,925.00             | 84.22            | 67.78         | -86.16                | -4,241.37                           | 2,766.12     | 1,442.95               | 1,336.73                | 106.21                    | 13.585            |                    |           |
| 15,400.00                         | 12,065.00             | 15,007.51             | 11,925.00             | 85.59            | 69.09         | -86.16                | -4,341.36                           | 2,767.10     | 1,442.95               | 1,334.82                | 108.12                    | 13.346            |                    |           |
| 15,500.00                         | 12,065.00             | 15,107.51             | 11,925.00             | 86.96            | 70.41         | -86.16                | -4,441.36                           | 2,768.08     | 1,442.95               | 1,332.90                | 110.05                    | 13.112            |                    |           |
| 15,600.00                         | 12,065.00             | 15,207.51             | 11,925.00             | 88.34            | 71.74         | -86.16                | -4,541.35                           | 2,769.06     | 1,442.95               | 1,330.96                | 111.99                    | 12.885            |                    |           |
| 15,700.00                         | 12,065.00             | 15,307.51             | 11,925.00             | 89.73            | 73.08         | -86.16                | -4,641.35                           | 2,770.04     | 1,442.95               | 1,329.01                | 113.94                    | 12.664            |                    |           |
| 15,800.00                         | 12,065.00             | 15,407.51             | 11,925.00             | 91.13            | 74.44         | -86.16                | -4,741.34                           | 2,771.02     | 1,442.95               | 1,327.04                | 115.91                    | 12.449            |                    |           |
| 15,900.00                         | 12,065.00             | 15,507.51             | 11,925.00             | 92.54            | 75.81         | -86.16                | -4,841.34                           | 2,772.00     | 1,442.95               | 1,325.06                | 117.89                    | 12.240            |                    |           |
| 16,000.00                         | 12,065.00             | 15,607.51             | 11,925.00             | 93.95            | 77.19         | -86.16                | -4,941.33                           | 2,772.98     | 1,442.95               | 1,323.07                | 119.89                    | 12.036            |                    |           |
| 16,100.00                         | 12,065.00             | 15,707.51             | 11,925.00             | 95.38            | 78.58         | -86.16                | -5,041.33                           | 2,773.96     | 1,442.96               | 1,321.06                | 121.89                    | 11.838            |                    |           |
| 16,200.00                         | 12,065.00             | 15,807.51             | 11,925.00             | 96.81            | 79.98         | -86.16                | -5,141.32                           | 2,774.94     | 1,442.96               | 1,319.05                | 123.91                    | 11.645            |                    |           |
| 16,300.00                         | 12,065.00             | 15,907.51             | 11,925.00             | 98.24            | 81.39         | -86.16                | -5,241.32                           | 2,775.92     | 1,442.96               | 1,317.02                | 125.94                    | 11.457            |                    |           |
| 16,400.00                         | 12,065.00             | 16,007.51             | 11,925.00             | 99.69            | 82.81         | -86.16                | -5,341.31                           | 2,776.89     | 1,442.96               | 1,314.98                | 127.98                    | 11.275            |                    |           |
| 16,500.00                         | 12,065.00             | 16,107.51             | 11,925.00             | 101.14           | 84.24         | -86.16                | -5,441.31                           | 2,777.87     | 1,442.96               | 1,312.93                | 130.03                    | 11.097            |                    |           |
| 16,600.00                         | 12,065.00             | 16,207.51             | 11,925.00             | 102.60           | 85.67         | -86.16                | -5,541.30                           | 2,778.85     | 1,442.96               | 1,310.88                | 132.09                    | 10.924            |                    |           |
| 16,700.00                         | 12,065.00             | 16,307.51             | 11,925.00             | 104.06           | 87.12         | -86.16                | -5,641.30                           | 2,779.83     | 1,442.96               | 1,308.81                | 134.15                    | 10.756            |                    |           |
| 16,800.00                         | 12,065.00             | 16,407.51             | 11,925.00             | 105.53           | 88.57         | -86.16                | -5,741.29                           | 2,780.81     | 1,442.96               | 1,306.73                | 136.23                    | 10.592            |                    |           |
| 16,900.00                         | 12,065.00             | 16,507.51             | 11,925.00             | 107.00           | 90.02         | -86.16                | -5,841.29                           | 2,781.79     | 1,442.97               | 1,304.65                | 138.31                    | 10.433            |                    |           |
| 17,000.00                         | 12,065.00             | 16,607.51             | 11,925.00             | 108.48           | 91.49         | -86.16                | -5,941.28                           | 2,782.77     | 1,442.97               | 1,302.56                | 140.40                    | 10.277            |                    |           |
| 17,100.00                         | 12,065.00             | 16,707.51             | 11,925.00             | 109.96           | 92.96         | -86.16                | -6,041.28                           | 2,783.75     | 1,442.97               | 1,300.46                | 142.50                    | 10.126            |                    |           |
| 17,200.00                         | 12,065.00             | 16,807.51             | 11,925.00             | 111.45           | 94.43         | -86.16                | -6,141.27                           | 2,784.73     | 1,442.97               | 1,298.36                | 144.61                    | 9.978             |                    |           |
| 17,300.00                         | 12,065.00             | 16,907.51             | 11,925.00             | 112.94           | 95.92         | -86.16                | -6,241.27                           | 2,785.71     | 1,442.97               | 1,296.25                | 146.72                    | 9.835             |                    |           |
| 17,400.00                         | 12,065.00             | 17,007.51             | 11,925.00             | 114.44           | 97.40         | -86.16                | -6,341.26                           | 2,786.69     | 1,442.97               | 1,294.13                | 148.84                    | 9.695             |                    |           |
| 17,500.00                         | 12,065.00             | 17,107.51             | 11,925.00             | 115.94           | 98.90         | -86.16                | -6,441.26                           | 2,787.66     | 1,442.97               | 1,292.00                | 150.97                    | 9.558             |                    |           |
| 17,600.00                         | 12,065.00             | 17,207.51             | 11,925.00             | 117.45           | 100.39        | -86.16                | -6,541.26                           | 2,788.64     | 1,442.97               | 1,289.87                | 153.10                    | 9.425             |                    |           |
| 17,700.00                         | 12,065.00             | 17,307.51             | 11,925.00             | 118.96           | 101.89        | -86.16                | -6,641.25                           | 2,789.62     | 1,442.98               | 1,287.74                | 155.24                    | 9.295             |                    |           |
| 17,800.00                         | 12,065.00             | 17,407.51             | 11,925.00             | 120.47           | 103.40        | -86.16                | -6,741.25                           | 2,790.60     | 1,442.98               | 1,285.60                | 157.38                    | 9.169             |                    |           |
| 17,900.00                         | 12,065.00             | 17,507.51             | 11,925.00             | 121.99           | 104.91        | -86.16                | -6,841.24                           | 2,791.58     | 1,442.98               | 1,283.45                | 159.53                    | 9.045             |                    |           |
| 18,000.00                         | 12,065.00             | 17,607.51             | 11,925.00             | 123.51           | 106.43        | -86.16                | -6,941.24                           | 2,792.56     | 1,442.98               | 1,281.30                | 161.68                    | 8.925             |                    |           |
| 18,100.00                         | 12,065.00             | 17,707.51             | 11,925.00             | 125.03           | 107.95        | -86.16                | -7,041.23                           | 2,793.54     | 1,442.98               | 1,279.14                | 163.84                    | 8.807             |                    |           |
| 18,200.00                         | 12,065.00             | 17,807.51             | 11,925.00             | 126.56           | 109.47        | -86.16                | -7,141.23                           | 2,794.52     | 1,442.98               | 1,276.98                | 166.00                    | 8.692             |                    |           |
| 18,300.00                         | 12,065.00             | 17,907.51             | 11,925.00             | 128.09           | 111.00        | -86.16                | -7,241.22                           | 2,795.50     | 1,442.98               | 1,274.81                | 168.17                    | 8.580             |                    |           |
| 18,400.00                         | 12,065.00             | 18,007.51             | 11,925.00             | 129.62           | 112.53        | -86.16                | -7,341.22                           | 2,796.48     | 1,442.98               | 1,272.64                | 170.34                    | 8.471             |                    |           |
| 18,500.00                         | 12,065.00             | 18,107.51             | 11,925.00             | 131.16           | 114.06        | -86.16                | -7,441.21                           | 2,797.46     | 1,442.98               | 1,270.47                | 172.52                    | 8.364             |                    |           |
| 18,600.00                         | 12,065.00             | 18,207.51             | 11,925.00             | 132.69           | 115.60        | -86.16                | -7,541.21                           | 2,798.43     | 1,442.99               | 1,268.29                | 174.70                    | 8.260             |                    |           |
| 18,700.00                         | 12,065.00             | 18,307.51             | 11,925.00             | 134.24           | 117.14        | -86.16                | -7,641.20                           | 2,799.41     | 1,442.99               | 1,266.11                | 176.88                    | 8.158             |                    |           |
| 18,800.00                         | 12,065.00             | 18,407.51             | 11,925.00             | 135.78           | 118.68        | -86.16                | -7,741.20                           | 2,800.39     | 1,442.99               | 1,263.92                | 179.07                    | 8.058             |                    |           |
| 18,900.00                         | 12,065.00             | 18,507.51             | 11,925.00             | 137.33           | 120.23        | -86.16                | -7,841.19                           | 2,801.37     | 1,442.99               | 1,261.73                | 181.26                    | 7.961             |                    |           |
| 19,000.00                         | 12,065.00             | 18,607.51             | 11,925.00             | 138.87           | 121.78        | -86.16                | -7,941.19                           | 2,802.35     | 1,442.99               | 1,259.54                | 183.45                    | 7.866             |                    |           |
| 19,100.00                         | 12,065.00             | 18,707.51             | 11,925.00             | 140.43           | 123.33        | -86.16                | -8,041.18                           | 2,803.33     | 1,442.99               | 1,257.34                | 185.65                    | 7.773             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 19,200.00                         | 12,065.00             | 18,807.51             | 11,925.00             | 141.98           | 124.88        | -86.16                | -8,141.18                           | 2,804.31     | 1,442.99               | 1,255.14                | 187.85                    | 7.682             |                    |           |
| 19,300.00                         | 12,065.00             | 18,907.51             | 11,925.00             | 143.53           | 126.44        | -86.16                | -8,241.17                           | 2,805.29     | 1,442.99               | 1,252.94                | 190.06                    | 7.593             |                    |           |
| 19,400.00                         | 12,065.00             | 19,007.51             | 11,925.00             | 145.09           | 128.00        | -86.16                | -8,341.17                           | 2,806.27     | 1,443.00               | 1,250.73                | 192.26                    | 7.505             |                    |           |
| 19,500.00                         | 12,065.00             | 19,107.51             | 11,925.00             | 146.65           | 129.56        | -86.16                | -8,441.16                           | 2,807.25     | 1,443.00               | 1,248.53                | 194.47                    | 7.420             |                    |           |
| 19,600.00                         | 12,065.00             | 19,207.51             | 11,925.00             | 148.21           | 131.12        | -86.16                | -8,541.16                           | 2,808.23     | 1,443.00               | 1,246.31                | 196.68                    | 7.337             |                    |           |
| 19,700.00                         | 12,065.00             | 19,307.51             | 11,925.00             | 149.78           | 132.69        | -86.16                | -8,641.15                           | 2,809.20     | 1,443.00               | 1,244.10                | 198.90                    | 7.255             |                    |           |
| 19,800.00                         | 12,065.00             | 19,407.51             | 11,925.00             | 151.34           | 134.25        | -86.16                | -8,741.15                           | 2,810.18     | 1,443.00               | 1,241.88                | 201.12                    | 7.175             |                    |           |
| 19,900.00                         | 12,065.00             | 19,507.51             | 11,925.00             | 152.91           | 135.82        | -86.16                | -8,841.15                           | 2,811.16     | 1,443.00               | 1,239.66                | 203.34                    | 7.097             |                    |           |
| 20,000.00                         | 12,065.00             | 19,607.51             | 11,925.00             | 154.48           | 137.40        | -86.16                | -8,941.14                           | 2,812.14     | 1,443.00               | 1,237.44                | 205.56                    | 7.020             |                    |           |
| 20,100.00                         | 12,065.00             | 19,707.51             | 11,925.00             | 156.05           | 138.97        | -86.16                | -9,041.14                           | 2,813.12     | 1,443.00               | 1,235.22                | 207.79                    | 6.945             |                    |           |
| 20,200.00                         | 12,065.00             | 19,807.51             | 11,925.00             | 157.62           | 140.54        | -86.16                | -9,141.13                           | 2,814.10     | 1,443.01               | 1,232.99                | 210.01                    | 6.871             |                    |           |
| 20,300.00                         | 12,065.00             | 19,907.51             | 11,925.00             | 159.20           | 142.12        | -86.16                | -9,241.13                           | 2,815.08     | 1,443.01               | 1,230.76                | 212.24                    | 6.799             |                    |           |
| 20,400.00                         | 12,065.00             | 20,007.51             | 11,925.00             | 160.77           | 143.70        | -86.16                | -9,341.12                           | 2,816.06     | 1,443.01               | 1,228.53                | 214.48                    | 6.728             |                    |           |
| 20,500.00                         | 12,065.00             | 20,107.51             | 11,925.00             | 162.35           | 145.28        | -86.16                | -9,441.12                           | 2,817.04     | 1,443.01               | 1,226.30                | 216.71                    | 6.659             |                    |           |
| 20,600.00                         | 12,065.00             | 20,207.51             | 11,925.00             | 163.93           | 146.86        | -86.16                | -9,541.11                           | 2,818.02     | 1,443.01               | 1,224.07                | 218.94                    | 6.591             |                    |           |
| 20,700.00                         | 12,065.00             | 20,307.51             | 11,925.00             | 165.51           | 148.44        | -86.16                | -9,641.11                           | 2,819.00     | 1,443.01               | 1,221.83                | 221.18                    | 6.524             |                    |           |
| 20,800.00                         | 12,065.00             | 20,407.51             | 11,925.00             | 167.09           | 150.03        | -86.16                | -9,741.10                           | 2,819.97     | 1,443.01               | 1,219.59                | 223.42                    | 6.459             |                    |           |
| 20,900.00                         | 12,065.00             | 20,507.51             | 11,925.00             | 168.67           | 151.62        | -86.16                | -9,841.10                           | 2,820.95     | 1,443.01               | 1,217.35                | 225.66                    | 6.395             |                    |           |
| 21,000.00                         | 12,065.00             | 20,607.51             | 11,925.00             | 170.26           | 153.20        | -86.16                | -9,941.09                           | 2,821.93     | 1,443.02               | 1,215.11                | 227.91                    | 6.332             |                    |           |
| 21,100.00                         | 12,065.00             | 20,707.51             | 11,925.00             | 171.84           | 154.79        | -86.16                | -10,041.09                          | 2,822.91     | 1,443.02               | 1,212.86                | 230.15                    | 6.270             |                    |           |
| 21,200.00                         | 12,065.00             | 20,807.51             | 11,925.00             | 173.43           | 156.38        | -86.16                | -10,141.08                          | 2,823.89     | 1,443.02               | 1,210.62                | 232.40                    | 6.209             |                    |           |
| 21,300.00                         | 12,065.00             | 20,907.51             | 11,925.00             | 175.02           | 157.97        | -86.16                | -10,241.08                          | 2,824.87     | 1,443.02               | 1,208.37                | 234.65                    | 6.150             |                    |           |
| 21,400.00                         | 12,065.00             | 21,007.51             | 11,925.00             | 176.60           | 159.57        | -86.16                | -10,341.07                          | 2,825.85     | 1,443.02               | 1,206.12                | 236.90                    | 6.091             |                    |           |
| 21,500.00                         | 12,065.00             | 21,107.51             | 11,925.00             | 178.19           | 161.16        | -86.16                | -10,441.07                          | 2,826.83     | 1,443.02               | 1,203.87                | 239.15                    | 6.034             |                    |           |
| 21,600.00                         | 12,065.00             | 21,207.51             | 11,925.00             | 179.79           | 162.75        | -86.16                | -10,541.06                          | 2,827.81     | 1,443.02               | 1,201.62                | 241.40                    | 5.978             |                    |           |
| 21,700.00                         | 12,065.00             | 21,307.51             | 11,925.00             | 181.38           | 164.35        | -86.16                | -10,641.06                          | 2,828.79     | 1,443.02               | 1,199.37                | 243.65                    | 5.922             |                    |           |
| 21,800.00                         | 12,065.00             | 21,407.51             | 11,925.00             | 182.97           | 165.95        | -86.16                | -10,741.05                          | 2,829.77     | 1,443.02               | 1,197.11                | 245.91                    | 5.868             |                    |           |
| 21,900.00                         | 12,065.00             | 21,507.51             | 11,925.00             | 184.57           | 167.55        | -86.16                | -10,841.05                          | 2,830.75     | 1,443.03               | 1,194.86                | 248.17                    | 5.815             |                    |           |
| 22,000.00                         | 12,065.00             | 21,607.51             | 11,925.00             | 186.16           | 169.15        | -86.16                | -10,941.04                          | 2,831.72     | 1,443.03               | 1,192.60                | 250.43                    | 5.762             |                    |           |
| 22,100.00                         | 12,065.00             | 21,707.51             | 11,925.00             | 187.76           | 170.75        | -86.16                | -11,041.04                          | 2,832.70     | 1,443.03               | 1,190.34                | 252.69                    | 5.711             |                    |           |
| 22,200.00                         | 12,065.00             | 21,807.51             | 11,925.00             | 189.36           | 172.35        | -86.16                | -11,141.03                          | 2,833.68     | 1,443.03               | 1,188.08                | 254.95                    | 5.660             |                    |           |
| 22,300.00                         | 12,065.00             | 21,907.51             | 11,925.00             | 190.95           | 173.95        | -86.16                | -11,241.03                          | 2,834.66     | 1,443.03               | 1,185.82                | 257.21                    | 5.610             |                    |           |
| 22,400.00                         | 12,065.00             | 22,007.51             | 11,925.00             | 192.55           | 175.55        | -86.16                | -11,341.03                          | 2,835.64     | 1,443.03               | 1,183.56                | 259.47                    | 5.561             |                    |           |
| 22,445.57                         | 12,065.00             | 22,053.08             | 11,925.00             | 193.28           | 176.28        | -86.16                | -11,386.59                          | 2,836.09     | 1,443.03               | 1,182.53                | 260.50                    | 5.539 ES, SF      |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -90.54                | -1.17                               | -124.98      | 124.99                 |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 99.20                 | 99.20                 | 0.13             | 0.12          | -90.54                | -1.17                               | -124.98      | 124.99                 | 124.81                  | 0.18                      | 707.226           |                    |           |
| 200.00                            | 200.00                | 199.20                | 199.20                | 0.48             | 0.48          | -90.54                | -1.17                               | -124.98      | 124.99                 | 124.30                  | 0.68                      | 183.165           |                    |           |
| 300.00                            | 300.00                | 299.20                | 299.20                | 0.84             | 0.84          | -90.54                | -1.17                               | -124.98      | 124.99                 | 123.80                  | 1.19                      | 105.090           |                    |           |
| 400.00                            | 400.00                | 399.20                | 399.20                | 1.20             | 1.20          | -90.54                | -1.17                               | -124.98      | 124.99                 | 123.29                  | 1.70                      | 73.682            |                    |           |
| 500.00                            | 500.00                | 499.20                | 499.20                | 1.56             | 1.56          | -90.54                | -1.17                               | -124.98      | 124.99                 | 122.78                  | 2.20                      | 56.728            |                    |           |
| 600.00                            | 600.00                | 599.20                | 599.20                | 1.92             | 1.91          | -90.54                | -1.17                               | -124.98      | 124.99                 | 122.28                  | 2.71                      | 46.117            |                    |           |
| 700.00                            | 700.00                | 699.20                | 699.20                | 2.28             | 2.27          | -90.54                | -1.17                               | -124.98      | 124.99                 | 121.77                  | 3.22                      | 38.850            |                    |           |
| 800.00                            | 800.00                | 799.20                | 799.20                | 2.63             | 2.63          | -90.54                | -1.17                               | -124.98      | 124.99                 | 121.26                  | 3.72                      | 33.561            |                    |           |
| 900.00                            | 900.00                | 899.20                | 899.20                | 2.99             | 2.99          | -90.54                | -1.17                               | -124.98      | 124.99                 | 120.75                  | 4.23                      | 29.540            |                    |           |
| 1,000.00                          | 1,000.00              | 999.20                | 999.20                | 3.35             | 3.35          | -90.54                | -1.17                               | -124.98      | 124.99                 | 120.25                  | 4.74                      | 26.379            |                    |           |
| 1,100.00                          | 1,100.00              | 1,099.20              | 1,099.20              | 3.71             | 3.71          | -90.54                | -1.17                               | -124.98      | 124.99                 | 119.74                  | 5.24                      | 23.830            |                    |           |
| 1,200.00                          | 1,200.00              | 1,199.20              | 1,199.20              | 4.07             | 4.07          | -90.54                | -1.17                               | -124.98      | 124.99                 | 119.23                  | 5.75                      | 21.729            |                    |           |
| 1,300.00                          | 1,300.00              | 1,299.20              | 1,299.20              | 4.43             | 4.42          | -90.54                | -1.17                               | -124.98      | 124.99                 | 118.73                  | 6.26                      | 19.969            |                    |           |
| 1,400.00                          | 1,400.00              | 1,399.20              | 1,399.20              | 4.79             | 4.78          | -90.54                | -1.17                               | -124.98      | 124.99                 | 118.22                  | 6.77                      | 18.473            |                    |           |
| 1,500.00                          | 1,500.00              | 1,499.20              | 1,499.20              | 5.14             | 5.14          | -90.54                | -1.17                               | -124.98      | 124.99                 | 117.71                  | 7.27                      | 17.185            |                    |           |
| 1,600.00                          | 1,600.00              | 1,599.20              | 1,599.20              | 5.50             | 5.50          | -90.54                | -1.17                               | -124.98      | 124.99                 | 117.21                  | 7.78                      | 16.066            |                    |           |
| 1,700.00                          | 1,700.00              | 1,699.20              | 1,699.20              | 5.86             | 5.86          | -90.54                | -1.17                               | -124.98      | 124.99                 | 116.70                  | 8.29                      | 15.083            |                    |           |
| 1,800.00                          | 1,800.00              | 1,799.20              | 1,799.20              | 6.22             | 6.22          | -90.54                | -1.17                               | -124.98      | 124.99                 | 116.19                  | 8.79                      | 14.213            |                    |           |
| 1,900.00                          | 1,900.00              | 1,899.20              | 1,899.20              | 6.58             | 6.58          | -90.54                | -1.17                               | -124.98      | 124.99                 | 115.68                  | 9.30                      | 13.438            |                    |           |
| 2,000.00                          | 2,000.00              | 1,999.20              | 1,999.20              | 6.94             | 6.93          | -90.54                | -1.17                               | -124.98      | 124.99                 | 115.18                  | 9.81                      | 12.744            |                    |           |
| 2,100.00                          | 2,100.00              | 2,099.20              | 2,099.20              | 7.29             | 7.29          | -90.54                | -1.17                               | -124.98      | 124.99                 | 114.67                  | 10.31                     | 12.117            |                    |           |
| 2,200.00                          | 2,200.00              | 2,199.20              | 2,199.20              | 7.65             | 7.65          | -90.54                | -1.17                               | -124.98      | 124.99                 | 114.16                  | 10.82                     | 11.550            |                    |           |
| 2,300.00                          | 2,300.00              | 2,299.20              | 2,299.20              | 8.01             | 8.01          | -90.54                | -1.17                               | -124.98      | 124.99                 | 113.66                  | 11.33                     | 11.033            |                    |           |
| 2,400.00                          | 2,400.00              | 2,399.20              | 2,399.20              | 8.37             | 8.37          | -90.54                | -1.17                               | -124.98      | 124.99                 | 113.15                  | 11.84                     | 10.560            |                    |           |
| 2,500.00                          | 2,500.00              | 2,499.20              | 2,499.20              | 8.73             | 8.73          | -90.54                | -1.17                               | -124.98      | 124.99                 | 112.64                  | 12.34                     | 10.127            |                    |           |
| 2,600.00                          | 2,600.00              | 2,599.20              | 2,599.20              | 9.09             | 9.08          | -90.54                | -1.17                               | -124.98      | 124.99                 | 112.14                  | 12.85                     | 9.727             |                    |           |
| 2,700.00                          | 2,700.00              | 2,699.20              | 2,699.20              | 9.45             | 9.44          | -90.54                | -1.17                               | -124.98      | 124.99                 | 111.63                  | 13.36                     | 9.358             |                    |           |
| 2,800.00                          | 2,800.00              | 2,799.20              | 2,799.20              | 9.80             | 9.80          | -90.54                | -1.17                               | -124.98      | 124.99                 | 111.12                  | 13.86                     | 9.016             |                    |           |
| 2,900.00                          | 2,900.00              | 2,899.20              | 2,899.20              | 10.16            | 10.16         | -90.54                | -1.17                               | -124.98      | 124.99                 | 110.62                  | 14.37                     | 8.698             |                    |           |
| 3,000.00                          | 3,000.00              | 2,999.20              | 2,999.20              | 10.52            | 10.52         | -90.54                | -1.17                               | -124.98      | 124.99                 | 110.11                  | 14.88                     | 8.401             |                    |           |
| 3,100.00                          | 3,100.00              | 3,099.20              | 3,099.20              | 10.88            | 10.88         | -90.54                | -1.17                               | -124.98      | 124.99                 | 109.60                  | 15.38                     | 8.124             |                    |           |
| 3,200.00                          | 3,200.00              | 3,199.20              | 3,199.20              | 11.24            | 11.24         | -90.54                | -1.17                               | -124.98      | 124.99                 | 109.09                  | 15.89                     | 7.865 CC, ES      |                    |           |
| 3,300.00                          | 3,299.99              | 3,299.19              | 3,299.19              | 11.58            | 11.59         | 141.17                | -1.17                               | -124.98      | 126.00                 | 109.62                  | 16.39                     | 7.689             |                    |           |
| 3,400.00                          | 3,399.91              | 3,399.11              | 3,399.11              | 11.91            | 11.95         | 142.23                | -1.17                               | -124.98      | 129.08                 | 112.21                  | 16.87                     | 7.650             |                    |           |
| 3,500.00                          | 3,499.69              | 3,498.80              | 3,498.79              | 12.25            | 12.29         | 143.35                | -2.44                               | -125.07      | 134.35                 | 117.00                  | 17.35                     | 7.745             |                    |           |
| 3,600.00                          | 3,599.27              | 3,598.42              | 3,598.33              | 12.58            | 12.61         | 143.92                | -6.31                               | -125.32      | 141.82                 | 124.01                  | 17.81                     | 7.963             |                    |           |
| 3,700.00                          | 3,698.57              | 3,697.88              | 3,697.58              | 12.92            | 12.94         | 144.00                | -12.75                              | -125.75      | 151.47                 | 133.19                  | 18.27                     | 8.289             |                    |           |
| 3,800.00                          | 3,797.54              | 3,797.11              | 3,796.40              | 13.27            | 13.26         | 143.67                | -21.75                              | -126.35      | 163.26                 | 144.52                  | 18.74                     | 8.712             |                    |           |
| 3,900.00                          | 3,896.09              | 3,896.01              | 3,894.62              | 13.62            | 13.58         | 143.02                | -33.26                              | -127.12      | 177.20                 | 157.99                  | 19.21                     | 9.224             |                    |           |
| 4,000.00                          | 3,994.16              | 3,994.51              | 3,992.11              | 13.98            | 13.91         | 142.13                | -47.24                              | -128.06      | 193.30                 | 173.62                  | 19.68                     | 9.820             |                    |           |
| 4,100.00                          | 4,091.70              | 4,092.52              | 4,088.73              | 14.35            | 14.25         | 141.09                | -63.64                              | -129.15      | 211.59                 | 191.42                  | 20.16                     | 10.493            |                    |           |
| 4,200.00                          | 4,188.62              | 4,189.96              | 4,184.35              | 14.74            | 14.59         | 139.95                | -82.39                              | -130.40      | 232.07                 | 211.41                  | 20.65                     | 11.237            |                    |           |
| 4,300.00                          | 4,284.86              | 4,286.92              | 4,278.99              | 15.14            | 14.93         | 138.78                | -103.37                             | -131.81      | 254.74                 | 233.59                  | 21.15                     | 12.045            |                    |           |
| 4,400.00                          | 4,380.36              | 4,383.79              | 4,373.40              | 15.55            | 15.29         | 137.96                | -125.02                             | -133.25      | 279.42                 | 257.77                  | 21.66                     | 12.902            |                    |           |
| 4,452.43                          | 4,430.11              | 4,434.39              | 4,422.71              | 15.78            | 15.47         | 137.70                | -136.32                             | -134.01      | 293.13                 | 271.20                  | 21.93                     | 13.367            |                    |           |
| 4,500.00                          | 4,475.14              | 4,480.24              | 4,467.40              | 15.99            | 15.65         | 137.64                | -146.57                             | -134.69      | 305.79                 | 283.62                  | 22.18                     | 13.789            |                    |           |
| 4,600.00                          | 4,569.82              | 4,576.63              | 4,561.34              | 16.44            | 16.01         | 137.54                | -168.10                             | -136.13      | 332.42                 | 309.72                  | 22.71                     | 14.640            |                    |           |
| 4,700.00                          | 4,664.49              | 4,673.02              | 4,655.28              | 16.91            | 16.39         | 137.45                | -189.63                             | -137.57      | 359.05                 | 335.80                  | 23.25                     | 15.445            |                    |           |
| 4,800.00                          | 4,759.16              | 4,769.41              | 4,749.23              | 17.39            | 16.77         | 137.38                | -211.17                             | -139.01      | 385.68                 | 361.88                  | 23.80                     | 16.208            |                    |           |
| 4,900.00                          | 4,853.84              | 4,865.79              | 4,843.17              | 17.87            | 17.15         | 137.31                | -232.70                             | -140.45      | 412.31                 | 387.96                  | 24.35                     | 16.930            |                    |           |
| 5,000.00                          | 4,948.51              | 4,962.18              | 4,937.11              | 18.37            | 17.54         | 137.26                | -254.24                             | -141.88      | 438.94                 | 414.02                  | 24.92                     | 17.613            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,058.57              | 5,031.05              | 18.88            | 17.94         | 137.21                | -275.77                             | -143.32      | 465.57                 | 440.07                  | 25.50                     | 18.261            |                    |           |
| 5,200.00                          | 5,137.85              | 5,154.96              | 5,124.99              | 19.39            | 18.34         | 137.16                | -297.31                             | -144.76      | 492.20                 | 466.12                  | 26.08                     | 18.874            |                    |           |
| 5,300.00                          | 5,232.53              | 5,251.35              | 5,218.93              | 19.92            | 18.74         | 137.12                | -318.84                             | -146.20      | 518.83                 | 492.17                  | 26.67                     | 19.456            |                    |           |
| 5,400.00                          | 5,327.20              | 5,347.74              | 5,312.87              | 20.45            | 19.15         | 137.08                | -340.38                             | -147.64      | 545.46                 | 518.20                  | 27.26                     | 20.009            |                    |           |
| 5,500.00                          | 5,421.87              | 5,444.12              | 5,406.81              | 20.99            | 19.56         | 137.05                | -361.91                             | -149.08      | 572.10                 | 544.23                  | 27.86                     | 20.533            |                    |           |
| 5,600.00                          | 5,516.54              | 5,540.51              | 5,500.75              | 21.53            | 19.98         | 137.02                | -383.45                             | -150.51      | 598.73                 | 570.26                  | 28.47                     | 21.031            |                    |           |
| 5,700.00                          | 5,611.22              | 5,636.90              | 5,594.69              | 22.08            | 20.40         | 136.99                | -404.98                             | -151.95      | 625.36                 | 596.28                  | 29.08                     | 21.504            |                    |           |
| 5,800.00                          | 5,705.89              | 5,733.29              | 5,688.63              | 22.63            | 20.82         | 136.97                | -426.51                             | -153.39      | 651.99                 | 622.29                  | 29.70                     | 21.954            |                    |           |
| 5,900.00                          | 5,800.56              | 5,829.68              | 5,782.57              | 23.19            | 21.25         | 136.94                | -448.05                             | -154.83      | 678.62                 | 648.30                  | 30.32                     | 22.383            |                    |           |
| 6,000.00                          | 5,895.23              | 5,926.06              | 5,876.51              | 23.76            | 21.68         | 136.92                | -469.58                             | -156.27      | 705.25                 | 674.31                  | 30.94                     | 22.791            |                    |           |
| 6,100.00                          | 5,989.91              | 6,022.45              | 5,970.45              | 24.33            | 22.11         | 136.90                | -491.12                             | -157.71      | 731.89                 | 700.31                  | 31.57                     | 23.180            |                    |           |
| 6,200.00                          | 6,084.58              | 6,118.84              | 6,064.40              | 24.90            | 22.54         | 136.88                | -512.65                             | -159.14      | 758.52                 | 726.31                  | 32.21                     | 23.550            |                    |           |
| 6,300.00                          | 6,179.25              | 6,215.23              | 6,158.34              | 25.48            | 22.98         | 136.86                | -534.19                             | -160.58      | 785.15                 | 752.31                  | 32.85                     | 23.904            |                    |           |
| 6,400.00                          | 6,273.92              | 6,311.62              | 6,252.28              | 26.05            | 23.41         | 136.85                | -555.72                             | -162.02      | 811.78                 | 778.30                  | 33.49                     | 24.242            |                    |           |
| 6,500.00                          | 6,368.60              | 6,408.00              | 6,346.22              | 26.64            | 23.85         | 136.83                | -577.26                             | -163.46      | 838.42                 | 804.29                  | 34.13                     | 24.565            |                    |           |
| 6,600.00                          | 6,463.27              | 6,504.39              | 6,440.16              | 27.22            | 24.30         | 136.82                | -598.79                             | -164.90      | 865.05                 | 830.27                  | 34.78                     | 24.873            |                    |           |
| 6,700.00                          | 6,557.94              | 6,600.78              | 6,534.10              | 27.81            | 24.74         | 136.80                | -620.33                             | -166.34      | 891.68                 | 856.25                  | 35.43                     | 25.169            |                    |           |
| 6,800.00                          | 6,652.61              | 6,697.17              | 6,628.04              | 28.40            | 25.19         | 136.79                | -641.86                             | -167.77      | 918.31                 | 882.23                  | 36.08                     | 25.451            |                    |           |
| 6,900.00                          | 6,747.29              | 6,793.56              | 6,721.98              | 29.00            | 25.63         | 136.78                | -663.39                             | -169.21      | 944.95                 | 908.21                  | 36.74                     | 25.722            |                    |           |
| 7,000.00                          | 6,841.96              | 6,889.94              | 6,815.92              | 29.59            | 26.08         | 136.77                | -684.93                             | -170.65      | 971.58                 | 934.19                  | 37.39                     | 25.982            |                    |           |
| 7,100.00                          | 6,936.63              | 6,986.33              | 6,909.86              | 30.19            | 26.53         | 136.76                | -706.46                             | -172.09      | 998.21                 | 960.16                  | 38.06                     | 26.231            |                    |           |
| 7,200.00                          | 7,031.30              | 7,082.72              | 7,003.80              | 30.79            | 26.98         | 136.75                | -728.00                             | -173.53      | 1,024.85               | 986.13                  | 38.72                     | 26.470            |                    |           |
| 7,300.00                          | 7,125.98              | 7,179.11              | 7,097.74              | 31.40            | 27.44         | 136.74                | -749.53                             | -174.97      | 1,051.48               | 1,012.10                | 39.38                     | 26.699            |                    |           |
| 7,400.00                          | 7,220.65              | 7,275.50              | 7,191.68              | 32.00            | 27.89         | 136.73                | -771.07                             | -176.40      | 1,078.11               | 1,038.06                | 40.05                     | 26.920            |                    |           |
| 7,500.00                          | 7,315.32              | 7,371.89              | 7,285.62              | 32.61            | 28.35         | 136.72                | -792.60                             | -177.84      | 1,104.74               | 1,064.03                | 40.72                     | 27.132            |                    |           |
| 7,600.00                          | 7,409.99              | 7,468.27              | 7,379.57              | 33.21            | 28.80         | 136.71                | -814.14                             | -179.28      | 1,131.38               | 1,089.99                | 41.39                     | 27.335            |                    |           |
| 7,700.00                          | 7,504.67              | 7,564.66              | 7,473.51              | 33.82            | 29.26         | 136.70                | -835.67                             | -180.72      | 1,158.01               | 1,115.95                | 42.06                     | 27.532            |                    |           |
| 7,800.00                          | 7,599.34              | 7,661.05              | 7,567.45              | 34.43            | 29.72         | 136.70                | -857.21                             | -182.16      | 1,184.64               | 1,141.91                | 42.73                     | 27.721            |                    |           |
| 7,900.00                          | 7,694.01              | 7,757.44              | 7,661.39              | 35.05            | 30.18         | 136.69                | -878.74                             | -183.60      | 1,211.28               | 1,167.87                | 43.41                     | 27.903            |                    |           |
| 8,000.00                          | 7,788.68              | 7,853.83              | 7,755.33              | 35.66            | 30.64         | 136.68                | -900.27                             | -185.03      | 1,237.91               | 1,193.82                | 44.09                     | 28.078            |                    |           |
| 8,100.00                          | 7,883.36              | 7,950.21              | 7,849.27              | 36.28            | 31.11         | 136.68                | -921.81                             | -186.47      | 1,264.54               | 1,219.78                | 44.77                     | 28.248            |                    |           |
| 8,200.00                          | 7,978.03              | 8,046.60              | 7,943.21              | 36.89            | 31.57         | 136.67                | -943.34                             | -187.91      | 1,291.17               | 1,245.73                | 45.45                     | 28.411            |                    |           |
| 8,300.00                          | 8,072.70              | 8,145.35              | 8,039.55              | 37.51            | 32.04         | 136.68                | -964.97                             | -189.36      | 1,317.76               | 1,271.62                | 46.14                     | 28.562            |                    |           |
| 8,400.00                          | 8,167.37              | 8,245.88              | 8,138.12              | 38.13            | 32.50         | 136.80                | -984.65                             | -190.67      | 1,344.07               | 1,297.25                | 46.82                     | 28.706            |                    |           |
| 8,500.00                          | 8,262.05              | 8,346.36              | 8,237.13              | 38.75            | 32.95         | 137.03                | -1,001.72                           | -191.81      | 1,370.10               | 1,322.62                | 47.48                     | 28.854            |                    |           |
| 8,600.00                          | 8,356.72              | 8,446.67              | 8,336.38              | 39.37            | 33.37         | 137.36                | -1,016.16                           | -192.78      | 1,395.88               | 1,347.76                | 48.12                     | 29.008            |                    |           |
| 8,700.00                          | 8,451.39              | 8,546.65              | 8,435.67              | 39.99            | 33.77         | 137.78                | -1,027.97                           | -193.56      | 1,421.44               | 1,372.71                | 48.73                     | 29.168            |                    |           |
| 8,800.00                          | 8,546.07              | 8,646.19              | 8,534.78              | 40.61            | 34.15         | 138.30                | -1,037.14                           | -194.18      | 1,446.84               | 1,397.52                | 49.32                     | 29.337            |                    |           |
| 8,875.44                          | 8,617.48              | 8,720.90              | 8,609.31              | 41.08            | 34.43         | 138.74                | -1,042.33                           | -194.52      | 1,465.93               | 1,416.19                | 49.74                     | 29.472            |                    |           |
| 8,900.00                          | 8,640.90              | 8,745.30              | 8,633.66              | 41.23            | 34.51         | 139.27                | -1,043.71                           | -194.62      | 1,471.75               | 1,421.87                | 49.87                     | 29.510            |                    |           |
| 8,950.00                          | 8,689.44              | 8,795.66              | 8,683.96              | 41.49            | 34.69         | 140.10                | -1,046.07                           | -194.77      | 1,481.16               | 1,431.02                | 50.14                     | 29.542            |                    |           |
| 9,000.00                          | 8,738.83              | 8,846.70              | 8,734.98              | 41.70            | 34.86         | 140.62                | -1,047.78                           | -194.89      | 1,487.23               | 1,436.84                | 50.39                     | 29.517            |                    |           |
| 9,050.00                          | 8,788.70              | 8,898.12              | 8,786.38              | 41.87            | 35.03         | 140.83                | -1,048.82                           | -194.96      | 1,489.89               | 1,439.27                | 50.62                     | 29.431            |                    |           |
| 9,063.30                          | 8,802.00              | 8,911.82              | 8,800.09              | 41.91            | 35.07         | -90.50                | -1,048.98                           | -194.97      | 1,490.02               | 1,439.34                | 50.68                     | 29.400            |                    |           |
| 9,100.00                          | 8,838.70              | 8,949.63              | 8,837.89              | 42.00            | 35.19         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,439.20                | 50.84                     | 29.308            |                    |           |
| 9,200.00                          | 8,938.70              | 9,049.63              | 8,937.90              | 42.26            | 35.48         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,438.79                | 51.25                     | 29.073            |                    |           |
| 9,300.00                          | 9,038.70              | 9,149.63              | 9,037.90              | 42.51            | 35.78         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,438.37                | 51.67                     | 28.840            |                    |           |
| 9,400.00                          | 9,138.70              | 9,249.63              | 9,137.90              | 42.77            | 36.08         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,437.96                | 52.08                     | 28.611            |                    |           |
| 9,500.00                          | 9,238.70              | 9,349.63              | 9,237.90              | 43.03            | 36.38         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,437.54                | 52.50                     | 28.384            |                    |           |
| 9,600.00                          | 9,338.70              | 9,449.63              | 9,337.90              | 43.30            | 36.68         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,437.12                | 52.91                     | 28.159            |                    |           |
| 9,700.00                          | 9,438.70              | 9,549.63              | 9,437.90              | 43.56            | 36.99         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,436.70                | 53.33                     | 27.938            |                    |           |
| 9,800.00                          | 9,538.70              | 9,649.63              | 9,537.90              | 43.82            | 37.29         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,436.28                | 53.75                     | 27.719            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |  |
| 9,900.00                          | 9,638.70              | 9,749.63              | 9,637.90              | 44.09            | 37.60         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,435.86                | 54.18                     | 27.503            |                    |           |  |
| 10,000.00                         | 9,738.70              | 9,849.63              | 9,737.90              | 44.36            | 37.90         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,435.44                | 54.60                     | 27.289            |                    |           |  |
| 10,100.00                         | 9,838.70              | 9,949.63              | 9,837.90              | 44.63            | 38.21         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,435.01                | 55.03                     | 27.079            |                    |           |  |
| 10,200.00                         | 9,938.70              | 10,049.63             | 9,937.90              | 44.90            | 38.51         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,434.58                | 55.45                     | 26.870            |                    |           |  |
| 10,300.00                         | 10,038.70             | 10,149.63             | 10,037.90             | 45.17            | 38.82         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,434.16                | 55.88                     | 26.664            |                    |           |  |
| 10,400.00                         | 10,138.70             | 10,249.63             | 10,137.90             | 45.44            | 39.13         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,433.73                | 56.31                     | 26.461            |                    |           |  |
| 10,500.00                         | 10,238.70             | 10,349.63             | 10,237.90             | 45.71            | 39.44         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,433.30                | 56.74                     | 26.260            |                    |           |  |
| 10,600.00                         | 10,338.70             | 10,449.63             | 10,337.90             | 45.99            | 39.75         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,432.87                | 57.17                     | 26.062            |                    |           |  |
| 10,700.00                         | 10,438.70             | 10,549.63             | 10,437.90             | 46.26            | 40.06         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,432.43                | 57.61                     | 25.866            |                    |           |  |
| 10,800.00                         | 10,538.70             | 10,649.63             | 10,537.90             | 46.54            | 40.38         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,432.00                | 58.04                     | 25.672            |                    |           |  |
| 10,900.00                         | 10,638.70             | 10,749.63             | 10,637.90             | 46.82            | 40.69         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,431.56                | 58.48                     | 25.481            |                    |           |  |
| 11,000.00                         | 10,738.70             | 10,849.63             | 10,737.90             | 47.10            | 41.00         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,431.13                | 58.91                     | 25.292            |                    |           |  |
| 11,100.00                         | 10,838.70             | 10,949.63             | 10,837.90             | 47.38            | 41.32         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,430.69                | 59.35                     | 25.106            |                    |           |  |
| 11,200.00                         | 10,938.70             | 11,049.63             | 10,937.90             | 47.66            | 41.63         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,430.25                | 59.79                     | 24.922            |                    |           |  |
| 11,300.00                         | 11,038.70             | 11,149.63             | 11,037.90             | 47.94            | 41.95         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,429.81                | 60.23                     | 24.739            |                    |           |  |
| 11,400.00                         | 11,138.70             | 11,249.63             | 11,137.90             | 48.22            | 42.27         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,429.37                | 60.67                     | 24.560            |                    |           |  |
| 11,500.00                         | 11,238.70             | 11,349.63             | 11,237.90             | 48.51            | 42.58         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,428.93                | 61.11                     | 24.382            |                    |           |  |
| 11,600.00                         | 11,338.70             | 11,449.63             | 11,337.90             | 48.79            | 42.90         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,428.48                | 61.56                     | 24.207            |                    |           |  |
| 11,700.00                         | 11,438.70             | 11,549.63             | 11,437.90             | 49.08            | 43.22         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,428.04                | 62.00                     | 24.033            |                    |           |  |
| 11,753.34                         | 11,492.04             | 11,602.97             | 11,491.24             | 49.23            | 43.39         | -90.51                | -1,049.17                           | -194.98      | 1,490.04               | 1,427.80                | 62.24                     | 23.942            |                    |           |  |
| 11,800.00                         | 11,538.65             | 11,649.58             | 11,537.85             | 49.37            | 43.54         | 90.13                 | -1,049.17                           | -194.98      | 1,490.04               | 1,427.60                | 62.44                     | 23.862            |                    |           |  |
| 11,850.00                         | 11,588.24             | 11,699.45             | 11,587.71             | 49.55            | 43.70         | 90.35                 | -1,049.41                           | -194.98      | 1,490.07               | 1,427.40                | 62.67                     | 23.776            |                    |           |  |
| 11,900.00                         | 11,637.10             | 11,750.09             | 11,636.20             | 49.74            | 43.89         | 90.62                 | -1,053.12                           | -194.94      | 1,490.13               | 1,427.20                | 62.93                     | 23.680            |                    |           |  |
| 11,950.00                         | 11,684.86             | 11,801.37             | 11,683.79             | 49.95            | 44.10         | 90.88                 | -1,061.40                           | -194.86      | 1,490.22               | 1,426.99                | 63.23                     | 23.569            |                    |           |  |
| 12,000.00                         | 11,731.15             | 11,853.31             | 11,730.07             | 50.18            | 44.35         | 91.14                 | -1,074.36                           | -194.73      | 1,490.34               | 1,426.77                | 63.56                     | 23.446            |                    |           |  |
| 12,050.00                         | 11,775.62             | 11,905.92             | 11,788.58             | 50.42            | 44.62         | 91.38                 | -1,092.07                           | -194.56      | 1,490.48               | 1,426.54                | 63.94                     | 23.311            |                    |           |  |
| 12,100.00                         | 11,817.93             | 11,959.19             | 11,836.85             | 50.68            | 44.92         | 91.62                 | -1,114.56                           | -194.34      | 1,490.65               | 1,426.30                | 64.35                     | 23.164            |                    |           |  |
| 12,150.00                         | 11,857.76             | 12,013.11             | 11,883.38             | 50.96            | 45.25         | 91.85                 | -1,141.79                           | -194.08      | 1,490.83               | 1,426.03                | 64.80                     | 23.006            |                    |           |  |
| 12,200.00                         | 11,894.81             | 12,067.69             | 11,927.65             | 51.25            | 45.61         | 92.07                 | -1,173.67                           | -193.77      | 1,491.02               | 1,425.74                | 65.29                     | 22.838            |                    |           |  |
| 12,250.00                         | 11,928.80             | 12,122.88             | 11,969.12             | 51.56            | 46.00         | 92.27                 | -1,210.04                           | -193.41      | 1,491.22               | 1,425.41                | 65.81                     | 22.660            |                    |           |  |
| 12,300.00                         | 11,959.45             | 12,178.65             | 12,007.29             | 51.87            | 46.41         | 92.45                 | -1,250.68                           | -193.02      | 1,491.42               | 1,425.06                | 66.36                     | 22.474            |                    |           |  |
| 12,350.00                         | 11,986.56             | 12,234.97             | 12,041.63             | 52.20            | 46.84         | 92.61                 | -1,295.28                           | -192.58      | 1,491.60               | 1,424.66                | 66.95                     | 22.281            |                    |           |  |
| 12,400.00                         | 12,009.90             | 12,291.76             | 12,071.67             | 52.55            | 47.30         | 92.75                 | -1,343.46                           | -192.11      | 1,491.77               | 1,424.21                | 67.56                     | 22.081            |                    |           |  |
| 12,450.00                         | 12,029.29             | 12,348.98             | 12,096.96             | 52.90            | 47.77         | 92.86                 | -1,394.75                           | -191.61      | 1,491.92               | 1,423.72                | 68.20                     | 21.876            |                    |           |  |
| 12,500.00                         | 12,044.60             | 12,406.54             | 12,117.11             | 53.26            | 48.26         | 92.95                 | -1,448.64                           | -191.09      | 1,492.04               | 1,423.18                | 68.86                     | 21.669            |                    |           |  |
| 12,550.00                         | 12,055.70             | 12,464.37             | 12,131.81             | 53.63            | 48.76         | 93.02                 | -1,504.54                           | -190.55      | 1,492.13               | 1,422.59                | 69.53                     | 21.459            |                    |           |  |
| 12,600.00                         | 12,062.52             | 12,522.37             | 12,140.82             | 54.01            | 49.27         | 93.06                 | -1,561.81                           | -189.99      | 1,492.18               | 1,421.96                | 70.22                     | 21.250            |                    |           |  |
| 12,653.34                         | 12,065.00             | 12,584.33             | 12,144.00             | 54.42            | 49.81         | 93.07                 | -1,623.66                           | -189.39      | 1,492.20               | 1,421.24                | 70.96                     | 21.030            |                    |           |  |
| 12,654.25                         | 12,065.00             | 12,585.38             | 12,143.99             | 54.43            | 49.82         | 93.07                 | -1,624.71                           | -189.38      | 1,492.20               | 1,421.23                | 70.97                     | 21.026            |                    |           |  |
| 12,700.00                         | 12,065.00             | 12,630.77             | 12,144.00             | 54.78            | 50.23         | 93.07                 | -1,670.10                           | -188.93      | 1,492.20               | 1,420.67                | 71.53                     | 20.862            |                    |           |  |
| 12,800.00                         | 12,065.00             | 12,730.77             | 12,144.00             | 55.59            | 51.14         | 93.07                 | -1,770.09                           | -187.96      | 1,492.20               | 1,419.41                | 72.79                     | 20.500            |                    |           |  |
| 12,900.00                         | 12,065.00             | 12,830.77             | 12,144.00             | 56.43            | 52.09         | 93.07                 | -1,870.09                           | -186.99      | 1,492.21               | 1,418.10                | 74.10                     | 20.137            |                    |           |  |
| 13,000.00                         | 12,065.00             | 12,930.77             | 12,144.00             | 57.31            | 53.08         | 93.07                 | -1,970.08                           | -186.01      | 1,492.21               | 1,416.74                | 75.47                     | 19.773            |                    |           |  |
| 13,100.00                         | 12,065.00             | 13,030.77             | 12,144.00             | 58.22            | 54.09         | 93.07                 | -2,070.08                           | -185.04      | 1,492.22               | 1,415.34                | 76.88                     | 19.410            |                    |           |  |
| 13,200.00                         | 12,065.00             | 13,130.77             | 12,144.00             | 59.17            | 55.14         | 93.07                 | -2,170.07                           | -184.06      | 1,492.22               | 1,413.89                | 78.33                     | 19.050            |                    |           |  |
| 13,300.00                         | 12,065.00             | 13,230.77             | 12,144.00             | 60.14            | 56.22         | 93.07                 | -2,270.07                           | -183.09      | 1,492.22               | 1,412.39                | 79.83                     | 18.692            |                    |           |  |
| 13,400.00                         | 12,065.00             | 13,330.77             | 12,144.00             | 61.15            | 57.32         | 93.07                 | -2,370.06                           | -182.12      | 1,492.23               | 1,410.86                | 81.37                     | 18.340            |                    |           |  |
| 13,500.00                         | 12,065.00             | 13,430.77             | 12,144.00             | 62.18            | 58.45         | 93.07                 | -2,470.06                           | -181.14      | 1,492.23               | 1,409.29                | 82.94                     | 17.992            |                    |           |  |
| 13,600.00                         | 12,065.00             | 13,530.77             | 12,144.00             | 63.24            | 59.60         | 93.07                 | -2,570.05                           | -180.17      | 1,492.24               | 1,407.69                | 84.55                     | 17.650            |                    |           |  |
| 13,700.00                         | 12,065.00             | 13,630.77             | 12,144.00             | 64.32            | 60.78         | 93.07                 | -2,670.05                           | -179.20      | 1,492.24               | 1,406.05                | 86.19                     | 17.314            |                    |           |  |
| 13,800.00                         | 12,065.00             | 13,730.77             | 12,144.00             | 65.43            | 61.98         | 93.07                 | -2,770.04                           | -178.22      | 1,492.24               | 1,404.39                | 87.86                     | 16.985            |                    |           |  |
| 13,900.00                         | 12,065.00             | 13,830.77             | 12,144.00             | 66.56            | 63.20         | 93.07                 | -2,870.04                           | -177.25      | 1,492.25               | 1,402.69                | 89.56                     | 16.662            |                    |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 14,000.00                         | 12,065.00             | 13,930.77             | 12,144.00             | 67.71            | 64.44         | 93.07                 | -2,970.03                           | -176.27      | 1,492.25               | 1,400.96                | 91.29                     | 16.346            |                    |           |
| 14,100.00                         | 12,065.00             | 14,030.77             | 12,144.00             | 68.88            | 65.69         | 93.07                 | -3,070.03                           | -175.30      | 1,492.26               | 1,399.21                | 93.05                     | 16.038            |                    |           |
| 14,200.00                         | 12,065.00             | 14,130.77             | 12,144.00             | 70.08            | 66.97         | 93.07                 | -3,170.02                           | -174.33      | 1,492.26               | 1,397.43                | 94.83                     | 15.737            |                    |           |
| 14,300.00                         | 12,065.00             | 14,230.77             | 12,144.00             | 71.29            | 68.26         | 93.07                 | -3,270.02                           | -173.35      | 1,492.26               | 1,395.63                | 96.63                     | 15.443            |                    |           |
| 14,400.00                         | 12,065.00             | 14,330.77             | 12,144.00             | 72.51            | 69.56         | 93.07                 | -3,370.01                           | -172.38      | 1,492.27               | 1,393.81                | 98.46                     | 15.156            |                    |           |
| 14,500.00                         | 12,065.00             | 14,430.77             | 12,144.00             | 73.76            | 70.88         | 93.07                 | -3,470.01                           | -171.41      | 1,492.27               | 1,391.97                | 100.31                    | 14.877            |                    |           |
| 14,600.00                         | 12,065.00             | 14,530.77             | 12,144.00             | 75.02            | 72.21         | 93.07                 | -3,570.01                           | -170.43      | 1,492.28               | 1,390.10                | 102.17                    | 14.605            |                    |           |
| 14,700.00                         | 12,065.00             | 14,630.77             | 12,144.00             | 76.29            | 73.56         | 93.07                 | -3,670.00                           | -169.46      | 1,492.28               | 1,388.22                | 104.06                    | 14.341            |                    |           |
| 14,800.00                         | 12,065.00             | 14,730.77             | 12,144.00             | 77.58            | 74.92         | 93.07                 | -3,770.00                           | -168.48      | 1,492.29               | 1,386.32                | 105.96                    | 14.083            |                    |           |
| 14,900.00                         | 12,065.00             | 14,830.77             | 12,144.00             | 78.89            | 76.29         | 93.07                 | -3,869.99                           | -167.51      | 1,492.29               | 1,384.40                | 107.89                    | 13.832            |                    |           |
| 15,000.00                         | 12,065.00             | 14,930.77             | 12,144.00             | 80.20            | 77.67         | 93.07                 | -3,969.99                           | -166.54      | 1,492.29               | 1,382.47                | 109.82                    | 13.588            |                    |           |
| 15,100.00                         | 12,065.00             | 15,030.77             | 12,144.00             | 81.53            | 79.06         | 93.07                 | -4,069.98                           | -165.56      | 1,492.30               | 1,380.52                | 111.77                    | 13.351            |                    |           |
| 15,200.00                         | 12,065.00             | 15,130.77             | 12,144.00             | 82.87            | 80.46         | 93.07                 | -4,169.98                           | -164.59      | 1,492.30               | 1,378.56                | 113.74                    | 13.120            |                    |           |
| 15,300.00                         | 12,065.00             | 15,230.77             | 12,144.00             | 84.22            | 81.87         | 93.07                 | -4,269.97                           | -163.62      | 1,492.31               | 1,376.59                | 115.72                    | 12.896            |                    |           |
| 15,400.00                         | 12,065.00             | 15,330.77             | 12,144.00             | 85.59            | 83.29         | 93.07                 | -4,369.97                           | -162.64      | 1,492.31               | 1,374.60                | 117.71                    | 12.677            |                    |           |
| 15,500.00                         | 12,065.00             | 15,430.77             | 12,144.00             | 86.96            | 84.72         | 93.07                 | -4,469.96                           | -161.67      | 1,492.31               | 1,372.60                | 119.72                    | 12.465            |                    |           |
| 15,600.00                         | 12,065.00             | 15,530.77             | 12,144.00             | 88.34            | 86.16         | 93.07                 | -4,569.96                           | -160.70      | 1,492.32               | 1,370.58                | 121.74                    | 12.259            |                    |           |
| 15,700.00                         | 12,065.00             | 15,630.77             | 12,144.00             | 89.73            | 87.60         | 93.07                 | -4,669.95                           | -159.72      | 1,492.32               | 1,368.56                | 123.76                    | 12.058            |                    |           |
| 15,800.00                         | 12,065.00             | 15,730.77             | 12,144.00             | 91.13            | 89.05         | 93.07                 | -4,769.95                           | -158.75      | 1,492.33               | 1,366.52                | 125.80                    | 11.862            |                    |           |
| 15,900.00                         | 12,065.00             | 15,830.77             | 12,144.00             | 92.54            | 90.51         | 93.07                 | -4,869.94                           | -157.77      | 1,492.33               | 1,364.48                | 127.85                    | 11.672            |                    |           |
| 16,000.00                         | 12,065.00             | 15,930.77             | 12,144.00             | 93.95            | 91.97         | 93.07                 | -4,969.94                           | -156.80      | 1,492.34               | 1,362.43                | 129.91                    | 11.487            |                    |           |
| 16,100.00                         | 12,065.00             | 16,030.77             | 12,144.00             | 95.38            | 93.44         | 93.07                 | -5,069.93                           | -155.83      | 1,492.34               | 1,360.36                | 131.98                    | 11.308            |                    |           |
| 16,200.00                         | 12,065.00             | 16,130.77             | 12,144.00             | 96.81            | 94.92         | 93.07                 | -5,169.93                           | -154.85      | 1,492.34               | 1,358.29                | 134.05                    | 11.132            |                    |           |
| 16,300.00                         | 12,065.00             | 16,230.77             | 12,144.00             | 98.24            | 96.40         | 93.07                 | -5,269.92                           | -153.88      | 1,492.35               | 1,356.21                | 136.14                    | 10.962            |                    |           |
| 16,400.00                         | 12,065.00             | 16,330.77             | 12,144.00             | 99.69            | 97.89         | 93.07                 | -5,369.92                           | -152.91      | 1,492.35               | 1,354.12                | 138.23                    | 10.796            |                    |           |
| 16,500.00                         | 12,065.00             | 16,430.77             | 12,144.00             | 101.14           | 99.38         | 93.07                 | -5,469.92                           | -151.93      | 1,492.36               | 1,352.03                | 140.33                    | 10.635            |                    |           |
| 16,600.00                         | 12,065.00             | 16,530.77             | 12,144.00             | 102.60           | 100.88        | 93.07                 | -5,569.91                           | -150.96      | 1,492.36               | 1,349.92                | 142.44                    | 10.477            |                    |           |
| 16,700.00                         | 12,065.00             | 16,630.77             | 12,144.00             | 104.06           | 102.38        | 93.07                 | -5,669.91                           | -149.98      | 1,492.36               | 1,347.81                | 144.55                    | 10.324            |                    |           |
| 16,800.00                         | 12,065.00             | 16,730.77             | 12,144.00             | 105.53           | 103.89        | 93.07                 | -5,769.90                           | -149.01      | 1,492.37               | 1,345.70                | 146.67                    | 10.175            |                    |           |
| 16,900.00                         | 12,065.00             | 16,830.77             | 12,144.00             | 107.00           | 105.40        | 93.07                 | -5,869.90                           | -148.04      | 1,492.37               | 1,343.58                | 148.80                    | 10.030            |                    |           |
| 17,000.00                         | 12,065.00             | 16,930.77             | 12,144.00             | 108.48           | 106.91        | 93.07                 | -5,969.89                           | -147.06      | 1,492.38               | 1,341.45                | 150.93                    | 9.888             |                    |           |
| 17,100.00                         | 12,065.00             | 17,030.77             | 12,144.00             | 109.96           | 108.43        | 93.07                 | -6,069.89                           | -146.09      | 1,492.38               | 1,339.31                | 153.07                    | 9.750             |                    |           |
| 17,200.00                         | 12,065.00             | 17,130.77             | 12,144.00             | 111.45           | 109.95        | 93.07                 | -6,169.88                           | -145.12      | 1,492.39               | 1,337.17                | 155.21                    | 9.615             |                    |           |
| 17,300.00                         | 12,065.00             | 17,230.77             | 12,144.00             | 112.94           | 111.48        | 93.07                 | -6,269.88                           | -144.14      | 1,492.39               | 1,335.03                | 157.36                    | 9.484             |                    |           |
| 17,400.00                         | 12,065.00             | 17,330.77             | 12,144.00             | 114.44           | 113.01        | 93.07                 | -6,369.87                           | -143.17      | 1,492.39               | 1,332.88                | 159.52                    | 9.356             |                    |           |
| 17,500.00                         | 12,065.00             | 17,430.77             | 12,144.00             | 115.94           | 114.54        | 93.07                 | -6,469.87                           | -142.19      | 1,492.40               | 1,330.72                | 161.68                    | 9.231             |                    |           |
| 17,600.00                         | 12,065.00             | 17,530.77             | 12,144.00             | 117.45           | 116.08        | 93.07                 | -6,569.86                           | -141.22      | 1,492.40               | 1,328.56                | 163.84                    | 9.109             |                    |           |
| 17,700.00                         | 12,065.00             | 17,630.77             | 12,144.00             | 118.96           | 117.62        | 93.07                 | -6,669.86                           | -140.25      | 1,492.41               | 1,326.39                | 166.01                    | 8.990             |                    |           |
| 17,800.00                         | 12,065.00             | 17,730.77             | 12,144.00             | 120.47           | 119.16        | 93.07                 | -6,769.85                           | -139.27      | 1,492.41               | 1,324.22                | 168.19                    | 8.874             |                    |           |
| 17,900.00                         | 12,065.00             | 17,830.77             | 12,144.00             | 121.99           | 120.71        | 93.07                 | -6,869.85                           | -138.30      | 1,492.41               | 1,322.05                | 170.36                    | 8.760             |                    |           |
| 18,000.00                         | 12,065.00             | 17,930.77             | 12,144.00             | 123.51           | 122.26        | 93.07                 | -6,969.84                           | -137.33      | 1,492.42               | 1,319.87                | 172.55                    | 8.649             |                    |           |
| 18,100.00                         | 12,065.00             | 18,030.77             | 12,144.00             | 125.03           | 123.81        | 93.07                 | -7,069.84                           | -136.35      | 1,492.42               | 1,317.69                | 174.73                    | 8.541             |                    |           |
| 18,200.00                         | 12,065.00             | 18,130.77             | 12,144.00             | 126.56           | 125.36        | 93.07                 | -7,169.83                           | -135.38      | 1,492.43               | 1,315.51                | 176.92                    | 8.436             |                    |           |
| 18,300.00                         | 12,065.00             | 18,230.77             | 12,144.00             | 128.09           | 126.92        | 93.07                 | -7,269.83                           | -134.40      | 1,492.43               | 1,313.32                | 179.11                    | 8.332             |                    |           |
| 18,400.00                         | 12,065.00             | 18,330.77             | 12,144.00             | 129.62           | 128.48        | 93.07                 | -7,369.83                           | -133.43      | 1,492.43               | 1,311.12                | 181.31                    | 8.231             |                    |           |
| 18,500.00                         | 12,065.00             | 18,430.77             | 12,144.00             | 131.16           | 130.04        | 93.07                 | -7,469.82                           | -132.46      | 1,492.44               | 1,308.93                | 183.51                    | 8.133             |                    |           |
| 18,600.00                         | 12,065.00             | 18,530.77             | 12,144.00             | 132.69           | 131.60        | 93.07                 | -7,569.82                           | -131.48      | 1,492.44               | 1,306.73                | 185.71                    | 8.036             |                    |           |
| 18,700.00                         | 12,065.00             | 18,630.77             | 12,144.00             | 134.24           | 133.17        | 93.07                 | -7,669.81                           | -130.51      | 1,492.45               | 1,304.53                | 187.92                    | 7.942             |                    |           |
| 18,800.00                         | 12,065.00             | 18,730.77             | 12,144.00             | 135.78           | 134.73        | 93.07                 | -7,769.81                           | -129.54      | 1,492.45               | 1,302.32                | 190.13                    | 7.850             |                    |           |
| 18,900.00                         | 12,065.00             | 18,830.77             | 12,144.00             | 137.33           | 136.30        | 93.07                 | -7,869.80                           | -128.56      | 1,492.46               | 1,300.11                | 192.34                    | 7.759             |                    |           |
| 19,000.00                         | 12,065.00             | 18,930.77             | 12,144.00             | 138.87           | 137.88        | 93.06                 | -7,969.80                           | -127.59      | 1,492.46               | 1,297.90                | 194.56                    | 7.671             |                    |           |
| 19,100.00                         | 12,065.00             | 19,030.77             | 12,144.00             | 140.43           | 139.45        | 93.06                 | -8,069.79                           | -126.61      | 1,492.46               | 1,295.69                | 196.77                    | 7.585             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 702H - OH - Plan #1 |  | Offset Site Error: |  | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|--------------------|--|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |  | 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                                               |  |                    |  |           |  |
| 19,200.00                         | 12,065.00             | 19,130.77             | 12,144.00             | 141.98           | 141.02        | 93.06                 | -8,169.79                           | -125.64      | 1,492.47               | 1,293.47                | 198.99                    | 7.500             |                                                       |  |                    |  |           |  |
| 19,300.00                         | 12,065.00             | 19,230.77             | 12,144.00             | 143.53           | 142.60        | 93.06                 | -8,269.78                           | -124.67      | 1,492.47               | 1,291.26                | 201.22                    | 7.417             |                                                       |  |                    |  |           |  |
| 19,400.00                         | 12,065.00             | 19,330.77             | 12,144.00             | 145.09           | 144.18        | 93.06                 | -8,369.78                           | -123.69      | 1,492.48               | 1,289.04                | 203.44                    | 7.336             |                                                       |  |                    |  |           |  |
| 19,500.00                         | 12,065.00             | 19,430.77             | 12,144.00             | 146.65           | 145.76        | 93.06                 | -8,469.77                           | -122.72      | 1,492.48               | 1,286.81                | 205.67                    | 7.257             |                                                       |  |                    |  |           |  |
| 19,600.00                         | 12,065.00             | 19,530.77             | 12,144.00             | 148.21           | 147.34        | 93.06                 | -8,569.77                           | -121.75      | 1,492.48               | 1,284.59                | 207.90                    | 7.179             |                                                       |  |                    |  |           |  |
| 19,700.00                         | 12,065.00             | 19,630.77             | 12,144.00             | 149.78           | 148.92        | 93.06                 | -8,669.76                           | -120.77      | 1,492.49               | 1,282.36                | 210.13                    | 7.103             |                                                       |  |                    |  |           |  |
| 19,800.00                         | 12,065.00             | 19,730.77             | 12,144.00             | 151.34           | 150.51        | 93.06                 | -8,769.76                           | -119.80      | 1,492.49               | 1,280.13                | 212.36                    | 7.028             |                                                       |  |                    |  |           |  |
| 19,900.00                         | 12,065.00             | 19,830.77             | 12,144.00             | 152.91           | 152.09        | 93.06                 | -8,869.75                           | -118.82      | 1,492.50               | 1,277.90                | 214.60                    | 6.955             |                                                       |  |                    |  |           |  |
| 20,000.00                         | 12,065.00             | 19,930.77             | 12,144.00             | 154.48           | 153.68        | 93.06                 | -8,969.75                           | -117.85      | 1,492.50               | 1,275.66                | 216.84                    | 6.883             |                                                       |  |                    |  |           |  |
| 20,100.00                         | 12,065.00             | 20,030.77             | 12,144.00             | 156.05           | 155.27        | 93.06                 | -9,069.74                           | -116.88      | 1,492.51               | 1,273.43                | 219.08                    | 6.813             |                                                       |  |                    |  |           |  |
| 20,200.00                         | 12,065.00             | 20,130.77             | 12,144.00             | 157.62           | 156.86        | 93.06                 | -9,169.74                           | -115.90      | 1,492.51               | 1,271.19                | 221.32                    | 6.744             |                                                       |  |                    |  |           |  |
| 20,300.00                         | 12,065.00             | 20,230.77             | 12,144.00             | 159.20           | 158.45        | 93.06                 | -9,269.74                           | -114.93      | 1,492.51               | 1,268.95                | 223.57                    | 6.676             |                                                       |  |                    |  |           |  |
| 20,400.00                         | 12,065.00             | 20,330.77             | 12,144.00             | 160.77           | 160.04        | 93.06                 | -9,369.73                           | -113.96      | 1,492.52               | 1,266.71                | 225.81                    | 6.610             |                                                       |  |                    |  |           |  |
| 20,500.00                         | 12,065.00             | 20,430.77             | 12,144.00             | 162.35           | 161.64        | 93.06                 | -9,469.73                           | -112.98      | 1,492.52               | 1,264.46                | 228.06                    | 6.544             |                                                       |  |                    |  |           |  |
| 20,600.00                         | 12,065.00             | 20,530.77             | 12,144.00             | 163.93           | 163.23        | 93.06                 | -9,569.72                           | -112.01      | 1,492.53               | 1,262.22                | 230.31                    | 6.481             |                                                       |  |                    |  |           |  |
| 20,700.00                         | 12,065.00             | 20,630.77             | 12,144.00             | 165.51           | 164.83        | 93.06                 | -9,669.72                           | -111.03      | 1,492.53               | 1,259.97                | 232.56                    | 6.418             |                                                       |  |                    |  |           |  |
| 20,800.00                         | 12,065.00             | 20,730.77             | 12,144.00             | 167.09           | 166.42        | 93.06                 | -9,769.71                           | -110.06      | 1,492.53               | 1,257.72                | 234.81                    | 6.356             |                                                       |  |                    |  |           |  |
| 20,900.00                         | 12,065.00             | 20,830.77             | 12,144.00             | 168.67           | 168.02        | 93.06                 | -9,869.71                           | -109.09      | 1,492.54               | 1,255.47                | 237.07                    | 6.296             |                                                       |  |                    |  |           |  |
| 21,000.00                         | 12,065.00             | 20,930.77             | 12,144.00             | 170.26           | 169.62        | 93.06                 | -9,969.70                           | -108.11      | 1,492.54               | 1,253.22                | 239.32                    | 6.237             |                                                       |  |                    |  |           |  |
| 21,100.00                         | 12,065.00             | 21,030.77             | 12,144.00             | 171.84           | 171.22        | 93.06                 | -10,069.70                          | -107.14      | 1,492.55               | 1,250.97                | 241.58                    | 6.178             |                                                       |  |                    |  |           |  |
| 21,200.00                         | 12,065.00             | 21,130.77             | 12,144.00             | 173.43           | 172.82        | 93.06                 | -10,169.69                          | -106.17      | 1,492.55               | 1,248.71                | 243.84                    | 6.121             |                                                       |  |                    |  |           |  |
| 21,300.00                         | 12,065.00             | 21,230.77             | 12,144.00             | 175.02           | 174.42        | 93.06                 | -10,269.69                          | -105.19      | 1,492.55               | 1,246.46                | 246.10                    | 6.065             |                                                       |  |                    |  |           |  |
| 21,400.00                         | 12,065.00             | 21,330.77             | 12,144.00             | 176.60           | 176.03        | 93.06                 | -10,369.68                          | -104.22      | 1,492.56               | 1,244.20                | 248.36                    | 6.010             |                                                       |  |                    |  |           |  |
| 21,500.00                         | 12,065.00             | 21,430.77             | 12,144.00             | 178.19           | 177.63        | 93.06                 | -10,469.68                          | -103.24      | 1,492.56               | 1,241.94                | 250.62                    | 5.955             |                                                       |  |                    |  |           |  |
| 21,600.00                         | 12,065.00             | 21,530.77             | 12,144.00             | 179.79           | 179.23        | 93.06                 | -10,569.67                          | -102.27      | 1,492.57               | 1,239.68                | 252.88                    | 5.902             |                                                       |  |                    |  |           |  |
| 21,700.00                         | 12,065.00             | 21,630.77             | 12,144.00             | 181.38           | 180.84        | 93.06                 | -10,669.67                          | -101.30      | 1,492.57               | 1,237.42                | 255.15                    | 5.850             |                                                       |  |                    |  |           |  |
| 21,800.00                         | 12,065.00             | 21,730.77             | 12,144.00             | 182.97           | 182.45        | 93.06                 | -10,769.66                          | -100.32      | 1,492.58               | 1,235.16                | 257.42                    | 5.798             |                                                       |  |                    |  |           |  |
| 21,900.00                         | 12,065.00             | 21,830.77             | 12,144.00             | 184.57           | 184.05        | 93.06                 | -10,869.66                          | -99.35       | 1,492.58               | 1,232.90                | 259.68                    | 5.748             |                                                       |  |                    |  |           |  |
| 22,000.00                         | 12,065.00             | 21,930.77             | 12,144.00             | 186.16           | 185.66        | 93.06                 | -10,969.65                          | -98.38       | 1,492.58               | 1,230.63                | 261.95                    | 5.698             |                                                       |  |                    |  |           |  |
| 22,100.00                         | 12,065.00             | 22,030.77             | 12,144.00             | 187.76           | 187.27        | 93.06                 | -11,069.65                          | -97.40       | 1,492.59               | 1,228.37                | 264.22                    | 5.649             |                                                       |  |                    |  |           |  |
| 22,200.00                         | 12,065.00             | 22,130.77             | 12,144.00             | 189.36           | 188.88        | 93.06                 | -11,169.65                          | -96.43       | 1,492.59               | 1,226.10                | 266.49                    | 5.601             |                                                       |  |                    |  |           |  |
| 22,300.00                         | 12,065.00             | 22,230.77             | 12,144.00             | 190.95           | 190.49        | 93.06                 | -11,269.64                          | -95.45       | 1,492.60               | 1,223.83                | 268.76                    | 5.554             |                                                       |  |                    |  |           |  |
| 22,400.00                         | 12,065.00             | 22,330.77             | 12,144.00             | 192.55           | 192.04        | 93.06                 | -11,369.64                          | -94.48       | 1,492.60               | 1,221.60                | 271.00                    | 5.508             |                                                       |  |                    |  |           |  |
| 22,403.05                         | 12,065.00             | 22,333.82             | 12,144.00             | 192.60           | 192.09        | 93.06                 | -11,372.68                          | -94.45       | 1,492.60               | 1,221.54                | 271.06                    | 5.507             |                                                       |  |                    |  |           |  |
| 22,445.57                         | 12,065.00             | 22,375.46             | 12,144.00             | 193.28           | 192.68        | 93.06                 | -11,414.32                          | -94.05       | 1,492.60               | 1,220.65                | 271.96                    | 5.488 SF          |                                                       |  |                    |  |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |              |              |              |                 |        |              |                        |              |                |                 |                   |            | Tatanka Fed Com - Tatanka Fed Com 703H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|--------------|--------------|--------------|-----------------|--------|--------------|------------------------|--------------|----------------|-----------------|-------------------|------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |              |              |              |                 |        |              |                        |              |                |                 |                   |            | Offset Well Error:                                    | 0.00 usft |                    |           |
| Reference                         |              | Offset       |              | Semi Major Axis |        |              | Distance               |              |                |                 |                   |            | Warning                                               |           |                    |           |
| Measured Depth                    | Vertical     | Measured     | Vertical     | Reference       | Offset | Highside     | Offset Wellbore Centre |              | Between        | Between         | Minimum           | Separation |                                                       |           |                    |           |
| Depth (usft)                      | Depth (usft) | Depth (usft) | Depth (usft) | (usft)          | (usft) | Toolface (°) | +N/-S (usft)           | +E/-W (usft) | Centres (usft) | Ellipses (usft) | Separation (usft) | Factor     |                                                       |           |                    |           |
| 0.00                              | 0.00         | 0.00         | 0.00         | 0.00            | 0.00   | -90.54       | -0.47                  | -49.99       | 49.99          |                 |                   |            |                                                       |           |                    |           |
| 100.00                            | 100.00       | 99.90        | 99.90        | 0.13            | 0.13   | -90.54       | -0.47                  | -49.99       | 49.99          | 49.81           | 0.18              | 281.891    |                                                       |           |                    |           |
| 200.00                            | 200.00       | 199.90       | 199.90       | 0.48            | 0.48   | -90.54       | -0.47                  | -49.99       | 49.99          | 49.31           | 0.68              | 73.073     |                                                       |           |                    |           |
| 300.00                            | 300.00       | 299.90       | 299.90       | 0.84            | 0.84   | -90.54       | -0.47                  | -49.99       | 49.99          | 48.80           | 1.19              | 41.972     |                                                       |           |                    |           |
| 400.00                            | 400.00       | 399.90       | 399.90       | 1.20            | 1.20   | -90.54       | -0.47                  | -49.99       | 49.99          | 48.29           | 1.70              | 29.441     |                                                       |           |                    |           |
| 500.00                            | 500.00       | 499.90       | 499.90       | 1.56            | 1.56   | -90.54       | -0.47                  | -49.99       | 49.99          | 47.79           | 2.21              | 22.672     |                                                       |           |                    |           |
| 600.00                            | 600.00       | 599.90       | 599.90       | 1.92            | 1.92   | -90.54       | -0.47                  | -49.99       | 49.99          | 47.28           | 2.71              | 18.434     |                                                       |           |                    |           |
| 700.00                            | 700.00       | 699.90       | 699.90       | 2.28            | 2.28   | -90.54       | -0.47                  | -49.99       | 49.99          | 46.77           | 3.22              | 15.531     |                                                       |           |                    |           |
| 800.00                            | 800.00       | 799.90       | 799.90       | 2.63            | 2.63   | -90.54       | -0.47                  | -49.99       | 49.99          | 46.27           | 3.73              | 13.418     |                                                       |           |                    |           |
| 900.00                            | 900.00       | 899.90       | 899.90       | 2.99            | 2.99   | -90.54       | -0.47                  | -49.99       | 49.99          | 45.76           | 4.23              | 11.811     |                                                       |           |                    |           |
| 1,000.00                          | 1,000.00     | 999.90       | 999.90       | 3.35            | 3.35   | -90.54       | -0.47                  | -49.99       | 49.99          | 45.25           | 4.74              | 10.547     |                                                       |           |                    |           |
| 1,100.00                          | 1,100.00     | 1,099.90     | 1,099.90     | 3.71            | 3.71   | -90.54       | -0.47                  | -49.99       | 49.99          | 44.75           | 5.25              | 9.528      |                                                       |           |                    |           |
| 1,200.00                          | 1,200.00     | 1,199.90     | 1,199.90     | 4.07            | 4.07   | -90.54       | -0.47                  | -49.99       | 49.99          | 44.24           | 5.75              | 8.689      |                                                       |           |                    |           |
| 1,300.00                          | 1,300.00     | 1,299.90     | 1,299.90     | 4.43            | 4.43   | -90.54       | -0.47                  | -49.99       | 49.99          | 43.73           | 6.26              | 7.985      |                                                       |           |                    |           |
| 1,400.00                          | 1,400.00     | 1,399.90     | 1,399.90     | 4.79            | 4.79   | -90.54       | -0.47                  | -49.99       | 49.99          | 43.22           | 6.77              | 7.387      |                                                       |           |                    |           |
| 1,500.00                          | 1,500.00     | 1,499.90     | 1,499.90     | 5.14            | 5.14   | -90.54       | -0.47                  | -49.99       | 49.99          | 42.72           | 7.27              | 6.872      |                                                       |           |                    |           |
| 1,600.00                          | 1,600.00     | 1,599.90     | 1,599.90     | 5.50            | 5.50   | -90.54       | -0.47                  | -49.99       | 49.99          | 42.21           | 7.78              | 6.424      |                                                       |           |                    |           |
| 1,700.00                          | 1,700.00     | 1,699.90     | 1,699.90     | 5.86            | 5.86   | -90.54       | -0.47                  | -49.99       | 49.99          | 41.70           | 8.29              | 6.032      |                                                       |           |                    |           |
| 1,800.00                          | 1,800.00     | 1,799.90     | 1,799.90     | 6.22            | 6.22   | -90.54       | -0.47                  | -49.99       | 49.99          | 41.20           | 8.80              | 5.684      |                                                       |           |                    |           |
| 1,900.00                          | 1,900.00     | 1,899.90     | 1,899.90     | 6.58            | 6.58   | -90.54       | -0.47                  | -49.99       | 49.99          | 40.69           | 9.30              | 5.374      |                                                       |           |                    |           |
| 2,000.00                          | 2,000.00     | 1,999.90     | 1,999.90     | 6.94            | 6.94   | -90.54       | -0.47                  | -49.99       | 49.99          | 40.18           | 9.81              | 5.096      |                                                       |           |                    |           |
| 2,100.00                          | 2,100.00     | 2,099.90     | 2,099.90     | 7.29            | 7.29   | -90.54       | -0.47                  | -49.99       | 49.99          | 39.68           | 10.32             | 4.846      |                                                       |           |                    |           |
| 2,200.00                          | 2,200.00     | 2,199.90     | 2,199.90     | 7.65            | 7.65   | -90.54       | -0.47                  | -49.99       | 49.99          | 39.17           | 10.82             | 4.619      |                                                       |           |                    |           |
| 2,300.00                          | 2,300.00     | 2,299.90     | 2,299.90     | 8.01            | 8.01   | -90.54       | -0.47                  | -49.99       | 49.99          | 38.66           | 11.33             | 4.412      |                                                       |           |                    |           |
| 2,400.00                          | 2,400.00     | 2,399.90     | 2,399.90     | 8.37            | 8.37   | -90.54       | -0.47                  | -49.99       | 49.99          | 38.16           | 11.84             | 4.223      |                                                       |           |                    |           |
| 2,500.00                          | 2,500.00     | 2,499.90     | 2,499.90     | 8.73            | 8.73   | -90.54       | -0.47                  | -49.99       | 49.99          | 37.65           | 12.34             | 4.050      |                                                       |           |                    |           |
| 2,600.00                          | 2,600.00     | 2,599.90     | 2,599.90     | 9.09            | 9.09   | -90.54       | -0.47                  | -49.99       | 49.99          | 37.14           | 12.85             | 3.890      |                                                       |           |                    |           |
| 2,700.00                          | 2,700.00     | 2,699.90     | 2,699.90     | 9.45            | 9.45   | -90.54       | -0.47                  | -49.99       | 49.99          | 36.63           | 13.36             | 3.742      |                                                       |           |                    |           |
| 2,800.00                          | 2,800.00     | 2,799.90     | 2,799.90     | 9.80            | 9.80   | -90.54       | -0.47                  | -49.99       | 49.99          | 36.13           | 13.86             | 3.606      |                                                       |           |                    |           |
| 2,900.00                          | 2,900.00     | 2,899.90     | 2,899.90     | 10.16           | 10.16  | -90.54       | -0.47                  | -49.99       | 49.99          | 35.62           | 14.37             | 3.478      |                                                       |           |                    |           |
| 3,000.00                          | 3,000.00     | 2,999.90     | 2,999.90     | 10.52           | 10.52  | -90.54       | -0.47                  | -49.99       | 49.99          | 35.11           | 14.88             | 3.360      |                                                       |           |                    |           |
| 3,100.00                          | 3,100.00     | 3,099.90     | 3,099.90     | 10.88           | 10.88  | -90.54       | -0.47                  | -49.99       | 49.99          | 34.61           | 15.39             | 3.249      |                                                       |           |                    |           |
| 3,200.00                          | 3,200.00     | 3,199.90     | 3,199.90     | 11.24           | 11.24  | -90.54       | -0.47                  | -49.99       | 49.99          | 34.10           | 15.89             | 3.146 CC   |                                                       |           |                    |           |
| 3,300.00                          | 3,299.99     | 3,300.72     | 3,300.71     | 11.58           | 11.58  | 140.57       | -1.50                  | -49.15       | 50.19          | 33.81           | 16.38             | 3.064 ES   |                                                       |           |                    |           |
| 3,400.00                          | 3,399.91     | 3,401.54     | 3,401.44     | 11.91           | 11.91  | 139.87       | -4.60                  | -46.64       | 50.77          | 33.93           | 16.84             | 3.016      |                                                       |           |                    |           |
| 3,500.00                          | 3,499.69     | 3,502.34     | 3,502.03     | 12.25           | 12.25  | 138.74       | -9.75                  | -42.45       | 51.76          | 34.46           | 17.29             | 2.993      |                                                       |           |                    |           |
| 3,600.00                          | 3,599.27     | 3,603.13     | 3,602.38     | 12.58           | 12.58  | 137.22       | -16.97                 | -36.59       | 53.17          | 35.42           | 17.75             | 2.996      |                                                       |           |                    |           |
| 3,700.00                          | 3,698.57     | 3,703.90     | 3,702.44     | 12.92           | 12.92  | 135.39       | -26.23                 | -29.06       | 55.03          | 36.82           | 18.21             | 3.022      |                                                       |           |                    |           |
| 3,800.00                          | 3,797.54     | 3,804.64     | 3,802.12     | 13.27           | 13.27  | 133.32       | -37.53                 | -19.88       | 57.37          | 38.70           | 18.68             | 3.072      |                                                       |           |                    |           |
| 3,900.00                          | 3,896.09     | 3,905.36     | 3,901.35     | 13.62           | 13.62  | 131.09       | -50.87                 | -9.04        | 60.23          | 41.07           | 19.15             | 3.144      |                                                       |           |                    |           |
| 4,000.00                          | 3,994.16     | 4,006.03     | 4,000.06     | 13.98           | 13.98  | 128.76       | -66.23                 | 3.44         | 63.61          | 43.97           | 19.64             | 3.238      |                                                       |           |                    |           |
| 4,100.00                          | 4,091.70     | 4,106.66     | 4,098.17     | 14.35           | 14.35  | 126.41       | -83.59                 | 17.55        | 67.55          | 47.39           | 20.15             | 3.351      |                                                       |           |                    |           |
| 4,200.00                          | 4,188.62     | 4,207.25     | 4,195.62     | 14.74           | 14.73  | 124.09       | -102.95                | 33.27        | 72.06          | 51.37           | 20.69             | 3.483      |                                                       |           |                    |           |
| 4,300.00                          | 4,284.86     | 4,307.77     | 4,292.31     | 15.14           | 15.13  | 121.85       | -124.27                | 50.60        | 77.14          | 55.90           | 21.24             | 3.631      |                                                       |           |                    |           |
| 4,400.00                          | 4,380.36     | 4,407.57     | 4,387.96     | 15.55           | 15.54  | 120.63       | -146.36                | 68.55        | 83.25          | 61.42           | 21.82             | 3.814      |                                                       |           |                    |           |
| 4,452.43                          | 4,430.11     | 4,459.86     | 4,438.08     | 15.78           | 15.76  | 120.64       | -157.94                | 77.96        | 86.99          | 64.86           | 22.13             | 3.931      |                                                       |           |                    |           |
| 4,500.00                          | 4,475.14     | 4,507.30     | 4,483.55     | 15.99           | 15.96  | 120.87       | -168.44                | 86.49        | 90.55          | 68.15           | 22.41             | 4.042      |                                                       |           |                    |           |
| 4,600.00                          | 4,569.82     | 4,607.02     | 4,579.12     | 16.44           | 16.39  | 121.30       | -190.52                | 104.43       | 98.04          | 75.05           | 23.00             | 4.263      |                                                       |           |                    |           |
| 4,700.00                          | 4,664.49     | 4,706.73     | 4,674.69     | 16.91           | 16.84  | 121.67       | -212.60                | 122.36       | 105.54         | 81.94           | 23.61             | 4.471      |                                                       |           |                    |           |
| 4,800.00                          | 4,759.16     | 4,806.45     | 4,770.27     | 17.39           | 17.29  | 121.99       | -234.67                | 140.30       | 113.04         | 88.82           | 24.22             | 4.667      |                                                       |           |                    |           |
| 4,900.00                          | 4,853.84     | 4,906.17     | 4,865.84     | 17.87           | 17.75  | 122.27       | -256.75                | 158.24       | 120.55         | 95.69           | 24.85             | 4.850      |                                                       |           |                    |           |
| 5,000.00                          | 4,948.51     | 5,005.88     | 4,961.41     | 18.37           | 18.21  | 122.52       | -278.83                | 176.18       | 128.05         | 102.56          | 25.49             | 5.023      |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,105.60              | 5,056.99              | 18.88            | 18.68         | 122.74                | -300.91                             | 194.11       | 135.56                 | 109.42                  | 26.14                     | 5.185             |                    |           |
| 5,200.00                          | 5,137.85              | 5,205.32              | 5,152.56              | 19.39            | 19.16         | 122.93                | -322.98                             | 212.05       | 143.07                 | 116.27                  | 26.80                     | 5.338             |                    |           |
| 5,300.00                          | 5,232.53              | 5,305.03              | 5,248.13              | 19.92            | 19.65         | 123.11                | -345.06                             | 229.99       | 150.58                 | 123.12                  | 27.47                     | 5.482             |                    |           |
| 5,400.00                          | 5,327.20              | 5,404.75              | 5,343.70              | 20.45            | 20.14         | 123.27                | -367.14                             | 247.93       | 158.10                 | 129.95                  | 28.14                     | 5.618             |                    |           |
| 5,500.00                          | 5,421.87              | 5,504.46              | 5,439.28              | 20.99            | 20.64         | 123.42                | -389.21                             | 265.86       | 165.61                 | 136.79                  | 28.82                     | 5.746             |                    |           |
| 5,600.00                          | 5,516.54              | 5,604.18              | 5,534.85              | 21.53            | 21.14         | 123.55                | -411.29                             | 283.80       | 173.12                 | 143.62                  | 29.51                     | 5.867             |                    |           |
| 5,700.00                          | 5,611.22              | 5,703.90              | 5,630.42              | 22.08            | 21.65         | 123.67                | -433.37                             | 301.74       | 180.64                 | 150.44                  | 30.20                     | 5.981             |                    |           |
| 5,800.00                          | 5,705.89              | 5,803.61              | 5,726.00              | 22.63            | 22.16         | 123.78                | -455.44                             | 319.68       | 188.16                 | 157.26                  | 30.90                     | 6.089             |                    |           |
| 5,900.00                          | 5,800.56              | 5,903.33              | 5,821.57              | 23.19            | 22.67         | 123.89                | -477.52                             | 337.61       | 195.67                 | 164.07                  | 31.61                     | 6.191             |                    |           |
| 6,000.00                          | 5,895.23              | 6,003.05              | 5,917.14              | 23.76            | 23.19         | 123.98                | -499.60                             | 355.55       | 203.19                 | 170.88                  | 32.31                     | 6.288             |                    |           |
| 6,100.00                          | 5,989.91              | 6,102.76              | 6,012.72              | 24.33            | 23.71         | 124.07                | -521.67                             | 373.49       | 210.71                 | 177.68                  | 33.03                     | 6.380             |                    |           |
| 6,200.00                          | 6,084.58              | 6,202.48              | 6,108.29              | 24.90            | 24.23         | 124.16                | -543.75                             | 391.43       | 218.23                 | 184.48                  | 33.75                     | 6.467             |                    |           |
| 6,300.00                          | 6,179.25              | 6,302.20              | 6,203.86              | 25.48            | 24.76         | 124.23                | -565.83                             | 409.36       | 225.75                 | 191.28                  | 34.47                     | 6.550             |                    |           |
| 6,400.00                          | 6,273.92              | 6,401.91              | 6,299.44              | 26.05            | 25.29         | 124.31                | -587.91                             | 427.30       | 233.27                 | 198.07                  | 35.19                     | 6.628             |                    |           |
| 6,500.00                          | 6,368.60              | 6,501.63              | 6,395.01              | 26.64            | 25.82         | 124.37                | -609.98                             | 445.24       | 240.79                 | 204.87                  | 35.92                     | 6.703             |                    |           |
| 6,600.00                          | 6,463.27              | 6,601.35              | 6,490.58              | 27.22            | 26.36         | 124.44                | -632.06                             | 463.18       | 248.31                 | 211.65                  | 36.66                     | 6.774             |                    |           |
| 6,700.00                          | 6,557.94              | 6,701.06              | 6,586.16              | 27.81            | 26.89         | 124.50                | -654.14                             | 481.11       | 255.83                 | 218.44                  | 37.39                     | 6.842             |                    |           |
| 6,800.00                          | 6,652.61              | 6,800.78              | 6,681.73              | 28.40            | 27.43         | 124.55                | -676.21                             | 499.05       | 263.35                 | 225.22                  | 38.13                     | 6.907             |                    |           |
| 6,900.00                          | 6,747.29              | 6,900.50              | 6,777.30              | 29.00            | 27.98         | 124.61                | -698.29                             | 516.99       | 270.87                 | 232.00                  | 38.87                     | 6.968             |                    |           |
| 7,000.00                          | 6,841.96              | 7,000.21              | 6,872.87              | 29.59            | 28.52         | 124.66                | -720.37                             | 534.93       | 278.39                 | 238.78                  | 39.62                     | 7.027             |                    |           |
| 7,100.00                          | 6,936.63              | 7,099.93              | 6,968.45              | 30.19            | 29.06         | 124.71                | -742.44                             | 552.86       | 285.91                 | 245.55                  | 40.36                     | 7.084             |                    |           |
| 7,200.00                          | 7,031.30              | 7,199.64              | 7,064.02              | 30.79            | 29.61         | 124.75                | -764.52                             | 570.80       | 293.44                 | 252.33                  | 41.11                     | 7.138             |                    |           |
| 7,300.00                          | 7,125.98              | 7,299.36              | 7,159.59              | 31.40            | 30.16         | 124.79                | -786.60                             | 588.74       | 300.96                 | 259.10                  | 41.86                     | 7.189             |                    |           |
| 7,400.00                          | 7,220.65              | 7,399.08              | 7,255.17              | 32.00            | 30.71         | 124.84                | -808.68                             | 606.68       | 308.48                 | 265.87                  | 42.61                     | 7.239             |                    |           |
| 7,500.00                          | 7,315.32              | 7,498.79              | 7,350.74              | 32.61            | 31.26         | 124.87                | -830.75                             | 624.61       | 316.00                 | 272.63                  | 43.37                     | 7.286             |                    |           |
| 7,600.00                          | 7,409.99              | 7,598.51              | 7,446.31              | 33.21            | 31.82         | 124.91                | -852.83                             | 642.55       | 323.52                 | 279.40                  | 44.13                     | 7.332             |                    |           |
| 7,700.00                          | 7,504.67              | 7,698.23              | 7,541.89              | 33.82            | 32.37         | 124.95                | -874.91                             | 660.49       | 331.05                 | 286.16                  | 44.88                     | 7.376             |                    |           |
| 7,800.00                          | 7,599.34              | 7,797.94              | 7,637.46              | 34.43            | 32.93         | 124.98                | -896.98                             | 678.43       | 338.57                 | 292.92                  | 45.64                     | 7.418             |                    |           |
| 7,900.00                          | 7,694.01              | 7,897.38              | 7,732.77              | 35.05            | 33.48         | 125.02                | -918.99                             | 696.31       | 346.10                 | 299.69                  | 46.41                     | 7.458             |                    |           |
| 8,000.00                          | 7,788.68              | 7,993.53              | 7,825.31              | 35.66            | 34.01         | 125.25                | -939.23                             | 712.76       | 354.20                 | 307.08                  | 47.12                     | 7.517             |                    |           |
| 8,100.00                          | 7,883.36              | 8,089.40              | 7,918.21              | 36.28            | 34.51         | 125.83                | -957.61                             | 727.68       | 363.33                 | 315.55                  | 47.77                     | 7.605             |                    |           |
| 8,200.00                          | 7,978.03              | 8,184.87              | 8,011.28              | 36.89            | 34.98         | 126.71                | -974.10                             | 741.09       | 373.54                 | 325.18                  | 48.36                     | 7.724             |                    |           |
| 8,300.00                          | 8,072.70              | 8,279.81              | 8,104.34              | 37.51            | 35.43         | 127.87                | -988.71                             | 752.95       | 384.94                 | 336.06                  | 48.88                     | 7.875             |                    |           |
| 8,400.00                          | 8,167.37              | 8,374.13              | 8,197.21              | 38.13            | 35.86         | 129.25                | -1,001.44                           | 763.30       | 397.62                 | 348.29                  | 49.33                     | 8.060             |                    |           |
| 8,500.00                          | 8,262.05              | 8,467.70              | 8,289.73              | 38.75            | 36.26         | 130.82                | -1,012.31                           | 772.13       | 411.73                 | 362.01                  | 49.72                     | 8.281             |                    |           |
| 8,600.00                          | 8,356.72              | 8,560.44              | 8,381.73              | 39.37            | 36.64         | 132.54                | -1,021.34                           | 779.46       | 427.39                 | 377.34                  | 50.05                     | 8.540             |                    |           |
| 8,700.00                          | 8,451.39              | 8,652.24              | 8,473.05              | 39.99            | 36.99         | 134.37                | -1,028.57                           | 785.34       | 444.73                 | 394.42                  | 50.31                     | 8.840             |                    |           |
| 8,800.00                          | 8,546.07              | 8,743.01              | 8,563.55              | 40.61            | 37.31         | 136.28                | -1,034.04                           | 789.79       | 463.87                 | 413.35                  | 50.52                     | 9.183             |                    |           |
| 8,875.44                          | 8,617.48              | 8,810.75              | 8,631.18              | 41.08            | 37.55         | 137.75                | -1,037.04                           | 792.22       | 479.57                 | 428.93                  | 50.64                     | 9.470             |                    |           |
| 8,900.00                          | 8,640.90              | 8,832.80              | 8,653.21              | 41.23            | 37.62         | 138.53                | -1,037.81                           | 792.85       | 484.53                 | 433.86                  | 50.68                     | 9.561             |                    |           |
| 8,950.00                          | 8,689.44              | 8,878.19              | 8,698.57              | 41.49            | 37.76         | 139.75                | -1,039.09                           | 793.89       | 492.58                 | 441.80                  | 50.78                     | 9.700             |                    |           |
| 9,000.00                          | 8,738.83              | 8,924.07              | 8,744.44              | 41.70            | 37.90         | 140.51                | -1,039.96                           | 794.60       | 497.74                 | 446.84                  | 50.91                     | 9.777             |                    |           |
| 9,050.00                          | 8,788.70              | 8,970.23              | 8,790.59              | 41.87            | 38.04         | 140.82                | -1,040.41                           | 794.96       | 499.94                 | 448.88                  | 51.06                     | 9.791             |                    |           |
| 9,063.30                          | 8,802.00              | 8,982.53              | 8,802.89              | 41.91            | 38.08         | -90.51                | -1,040.46                           | 795.00       | 500.02                 | 448.92                  | 51.10                     | 9.784             |                    |           |
| 9,082.33                          | 8,821.02              | 9,000.57              | 8,820.92              | 41.96            | 38.13         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 448.84                  | 51.17                     | 9.771             |                    |           |
| 9,100.00                          | 8,838.70              | 9,018.24              | 8,838.60              | 42.00            | 38.18         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 448.77                  | 51.24                     | 9.757             |                    |           |
| 9,200.00                          | 8,938.70              | 9,118.24              | 8,938.60              | 42.26            | 38.46         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 448.36                  | 51.65                     | 9.680             |                    |           |
| 9,300.00                          | 9,038.70              | 9,218.24              | 9,038.60              | 42.51            | 38.73         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 447.95                  | 52.06                     | 9.604             |                    |           |
| 9,400.00                          | 9,138.70              | 9,318.24              | 9,138.60              | 42.77            | 39.02         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 447.53                  | 52.48                     | 9.528             |                    |           |
| 9,500.00                          | 9,238.70              | 9,418.24              | 9,238.60              | 43.03            | 39.30         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 447.12                  | 52.89                     | 9.453             |                    |           |
| 9,600.00                          | 9,338.70              | 9,518.24              | 9,338.60              | 43.30            | 39.58         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 446.70                  | 53.31                     | 9.380             |                    |           |
| 9,700.00                          | 9,438.70              | 9,618.24              | 9,438.60              | 43.56            | 39.87         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 446.29                  | 53.72                     | 9.307             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,800.00                          | 9,538.70              | 9,718.24              | 9,538.60              | 43.82            | 40.15         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 445.87                  | 54.14                     | 9.235             |                    |           |
| 9,900.00                          | 9,638.70              | 9,818.24              | 9,638.60              | 44.09            | 40.44         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 445.45                  | 54.56                     | 9.164             |                    |           |
| 10,000.00                         | 9,738.70              | 9,918.24              | 9,738.60              | 44.36            | 40.73         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 445.02                  | 54.99                     | 9.094             |                    |           |
| 10,100.00                         | 9,838.70              | 10,018.24             | 9,838.60              | 44.63            | 41.02         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 444.60                  | 55.41                     | 9.024             |                    |           |
| 10,200.00                         | 9,938.70              | 10,118.24             | 9,938.60              | 44.90            | 41.31         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 444.18                  | 55.83                     | 8.955             |                    |           |
| 10,300.00                         | 10,038.70             | 10,218.24             | 10,038.60             | 45.17            | 41.60         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 443.75                  | 56.26                     | 8.888             |                    |           |
| 10,400.00                         | 10,138.70             | 10,318.24             | 10,138.60             | 45.44            | 41.89         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 443.32                  | 56.69                     | 8.821             |                    |           |
| 10,500.00                         | 10,238.70             | 10,418.24             | 10,238.60             | 45.71            | 42.18         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 442.90                  | 57.11                     | 8.754             |                    |           |
| 10,600.00                         | 10,338.70             | 10,518.24             | 10,338.60             | 45.99            | 42.48         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 442.47                  | 57.54                     | 8.689             |                    |           |
| 10,700.00                         | 10,438.70             | 10,618.24             | 10,438.60             | 46.26            | 42.77         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 442.03                  | 57.98                     | 8.624             |                    |           |
| 10,800.00                         | 10,538.70             | 10,718.24             | 10,538.60             | 46.54            | 43.07         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 441.60                  | 58.41                     | 8.561             |                    |           |
| 10,900.00                         | 10,638.70             | 10,818.24             | 10,638.60             | 46.82            | 43.37         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 441.17                  | 58.84                     | 8.498             |                    |           |
| 11,000.00                         | 10,738.70             | 10,918.24             | 10,738.60             | 47.10            | 43.67         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 440.73                  | 59.28                     | 8.435             |                    |           |
| 11,100.00                         | 10,838.70             | 11,018.24             | 10,838.60             | 47.38            | 43.97         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 440.30                  | 59.71                     | 8.374             |                    |           |
| 11,200.00                         | 10,938.70             | 11,118.24             | 10,938.60             | 47.66            | 44.27         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 439.86                  | 60.15                     | 8.313             |                    |           |
| 11,300.00                         | 11,038.70             | 11,218.24             | 11,038.60             | 47.94            | 44.57         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 439.42                  | 60.59                     | 8.253             |                    |           |
| 11,400.00                         | 11,138.70             | 11,318.24             | 11,138.60             | 48.22            | 44.87         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 438.98                  | 61.03                     | 8.193             |                    |           |
| 11,500.00                         | 11,238.70             | 11,418.24             | 11,238.60             | 48.51            | 45.17         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 438.54                  | 61.47                     | 8.135             |                    |           |
| 11,600.00                         | 11,338.70             | 11,518.24             | 11,338.60             | 48.79            | 45.47         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 438.10                  | 61.91                     | 8.077             |                    |           |
| 11,700.00                         | 11,438.70             | 11,618.24             | 11,438.60             | 49.08            | 45.78         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 437.66                  | 62.35                     | 8.019             |                    |           |
| 11,753.34                         | 11,492.04             | 11,671.58             | 11,491.94             | 49.23            | 45.94         | -90.51                | -1,040.47                           | 795.01       | 500.01                 | 437.42                  | 62.59                     | 7.989             |                    |           |
| 11,754.76                         | 11,493.46             | 11,673.00             | 11,493.36             | 49.24            | 45.95         | 90.05                 | -1,040.47                           | 795.01       | 500.01                 | 437.42                  | 62.59                     | 7.988             |                    |           |
| 11,800.00                         | 11,538.65             | 11,718.19             | 11,538.55             | 49.37            | 46.08         | 90.26                 | -1,040.47                           | 795.01       | 500.02                 | 437.25                  | 62.76                     | 7.967             |                    |           |
| 11,850.00                         | 11,588.24             | 11,767.78             | 11,588.14             | 49.55            | 46.24         | 90.97                 | -1,040.47                           | 795.01       | 500.08                 | 437.19                  | 62.90                     | 7.951             |                    |           |
| 11,900.00                         | 11,637.10             | 11,816.64             | 11,637.00             | 49.74            | 46.38         | 92.11                 | -1,040.47                           | 795.01       | 500.37                 | 437.41                  | 62.96                     | 7.947             |                    |           |
| 11,950.00                         | 11,684.86             | 11,864.40             | 11,684.76             | 49.95            | 46.53         | 93.65                 | -1,040.47                           | 795.01       | 501.15                 | 438.19                  | 62.97                     | 7.959             |                    |           |
| 12,000.00                         | 11,731.15             | 11,910.69             | 11,731.05             | 50.18            | 46.67         | 95.47                 | -1,040.47                           | 795.01       | 502.78                 | 439.87                  | 62.91                     | 7.992             |                    |           |
| 12,050.00                         | 11,775.62             | 11,955.84             | 11,776.20             | 50.42            | 46.81         | 97.51                 | -1,040.49                           | 795.01       | 505.68                 | 442.87                  | 62.81                     | 8.051             |                    |           |
| 12,100.00                         | 11,817.93             | 12,007.44             | 11,827.70             | 50.68            | 46.99         | 99.90                 | -1,043.28                           | 795.04       | 509.87                 | 447.07                  | 62.81                     | 8.118             |                    |           |
| 12,150.00                         | 11,857.76             | 12,061.90             | 11,881.56             | 50.96            | 47.19         | 102.28                | -1,051.23                           | 795.12       | 515.13                 | 452.24                  | 62.89                     | 8.191             |                    |           |
| 12,200.00                         | 11,894.81             | 12,119.67             | 11,937.59             | 51.25            | 47.44         | 104.63                | -1,065.21                           | 795.25       | 521.31                 | 458.27                  | 63.04                     | 8.269             |                    |           |
| 12,250.00                         | 11,928.80             | 12,181.23             | 11,995.42             | 51.56            | 47.74         | 106.94                | -1,086.23                           | 795.46       | 528.24                 | 465.00                  | 63.25                     | 8.352             |                    |           |
| 12,300.00                         | 11,959.45             | 12,247.09             | 12,054.40             | 51.87            | 48.09         | 109.20                | -1,115.44                           | 795.74       | 535.67                 | 472.21                  | 63.46                     | 8.441             |                    |           |
| 12,350.00                         | 11,986.56             | 12,317.74             | 12,113.50             | 52.20            | 48.49         | 111.38                | -1,154.07                           | 796.12       | 543.31                 | 479.65                  | 63.66                     | 8.534             |                    |           |
| 12,400.00                         | 12,009.90             | 12,393.59             | 12,171.13             | 52.55            | 48.97         | 113.42                | -1,203.29                           | 796.60       | 550.81                 | 486.96                  | 63.84                     | 8.628             |                    |           |
| 12,450.00                         | 12,029.29             | 12,474.86             | 12,225.10             | 52.90            | 49.51         | 115.28                | -1,263.97                           | 797.20       | 557.78                 | 493.74                  | 64.03                     | 8.711             |                    |           |
| 12,500.00                         | 12,044.60             | 12,561.46             | 12,272.54             | 53.26            | 50.13         | 116.86                | -1,336.32                           | 797.91       | 563.81                 | 499.51                  | 64.31                     | 8.768             |                    |           |
| 12,550.00                         | 12,055.70             | 12,652.84             | 12,310.18             | 53.63            | 50.83         | 118.09                | -1,419.48                           | 798.72       | 568.51                 | 503.73                  | 64.78                     | 8.777             |                    |           |
| 12,600.00                         | 12,062.52             | 12,747.89             | 12,334.80             | 54.01            | 51.58         | 118.88                | -1,511.17                           | 799.62       | 571.52                 | 505.95                  | 65.58                     | 8.715             |                    |           |
| 12,653.34                         | 12,065.00             | 12,851.51             | 12,344.00             | 54.42            | 52.43         | 119.17                | -1,614.23                           | 800.63       | 572.63                 | 505.72                  | 66.90                     | 8.559             |                    |           |
| 12,656.86                         | 12,065.00             | 12,858.36             | 12,343.95             | 54.45            | 52.48         | 119.17                | -1,621.08                           | 800.69       | 572.61                 | 505.61                  | 67.01                     | 8.545             |                    |           |
| 12,700.00                         | 12,065.00             | 12,897.76             | 12,344.00             | 54.78            | 52.81         | 119.17                | -1,660.48                           | 801.08       | 572.63                 | 505.24                  | 67.39                     | 8.497             |                    |           |
| 12,800.00                         | 12,065.00             | 12,997.76             | 12,344.00             | 55.59            | 53.66         | 119.17                | -1,760.47                           | 802.06       | 572.63                 | 504.14                  | 68.48                     | 8.361             |                    |           |
| 12,900.00                         | 12,065.00             | 13,097.76             | 12,344.00             | 56.43            | 54.55         | 119.17                | -1,860.47                           | 803.04       | 572.63                 | 503.00                  | 69.62                     | 8.225             |                    |           |
| 13,000.00                         | 12,065.00             | 13,197.76             | 12,344.00             | 57.31            | 55.48         | 119.17                | -1,960.47                           | 804.01       | 572.62                 | 501.82                  | 70.80                     | 8.087             |                    |           |
| 13,100.00                         | 12,065.00             | 13,297.76             | 12,344.00             | 58.22            | 56.44         | 119.17                | -2,060.46                           | 804.99       | 572.62                 | 500.60                  | 72.02                     | 7.950             |                    |           |
| 13,200.00                         | 12,065.00             | 13,397.76             | 12,344.00             | 59.17            | 57.43         | 119.17                | -2,160.46                           | 805.97       | 572.62                 | 499.34                  | 73.28                     | 7.814             |                    |           |
| 13,300.00                         | 12,065.00             | 13,497.76             | 12,344.00             | 60.14            | 58.45         | 119.17                | -2,260.45                           | 806.95       | 572.62                 | 498.05                  | 74.58                     | 7.678             |                    |           |
| 13,400.00                         | 12,065.00             | 13,597.76             | 12,344.00             | 61.15            | 59.50         | 119.17                | -2,360.45                           | 807.93       | 572.62                 | 496.72                  | 75.90                     | 7.544             |                    |           |
| 13,500.00                         | 12,065.00             | 13,697.76             | 12,344.00             | 62.18            | 60.57         | 119.17                | -2,460.44                           | 808.91       | 572.62                 | 495.36                  | 77.26                     | 7.411             |                    |           |
| 13,600.00                         | 12,065.00             | 13,797.76             | 12,344.00             | 63.24            | 61.67         | 119.17                | -2,560.44                           | 809.89       | 572.62                 | 493.97                  | 78.65                     | 7.281             |                    |           |
| 13,700.00                         | 12,065.00             | 13,897.76             | 12,344.00             | 64.32            | 62.80         | 119.17                | -2,660.43                           | 810.87       | 572.62                 | 492.55                  | 80.07                     | 7.152             |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 703H - OH - Plan #1 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                                                       |           |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |           |                    |           |
| 13,800.00                         | 12,065.00             | 13,997.76             | 12,344.00             | 65.43            | 63.95         | 119.17                | -2,760.43                           | 811.84       | 572.62                 | 491.11                  | 81.51                     | 7.025             |                                                       |           |                    |           |
| 13,900.00                         | 12,065.00             | 14,097.76             | 12,344.00             | 66.56            | 65.12         | 119.17                | -2,860.42                           | 812.82       | 572.62                 | 489.64                  | 82.98                     | 6.901             |                                                       |           |                    |           |
| 14,000.00                         | 12,065.00             | 14,197.76             | 12,344.00             | 67.71            | 66.31         | 119.17                | -2,960.42                           | 813.80       | 572.62                 | 488.15                  | 84.47                     | 6.779             |                                                       |           |                    |           |
| 14,100.00                         | 12,065.00             | 14,297.76             | 12,344.00             | 68.88            | 67.51         | 119.17                | -3,060.41                           | 814.78       | 572.62                 | 486.63                  | 85.99                     | 6.659             |                                                       |           |                    |           |
| 14,200.00                         | 12,065.00             | 14,397.76             | 12,344.00             | 70.08            | 68.74         | 119.17                | -3,160.41                           | 815.76       | 572.62                 | 485.09                  | 87.52                     | 6.542             |                                                       |           |                    |           |
| 14,300.00                         | 12,065.00             | 14,497.76             | 12,344.00             | 71.29            | 69.99         | 119.17                | -3,260.40                           | 816.74       | 572.62                 | 483.54                  | 89.08                     | 6.428             |                                                       |           |                    |           |
| 14,400.00                         | 12,065.00             | 14,597.76             | 12,344.00             | 72.51            | 71.25         | 119.17                | -3,360.40                           | 817.72       | 572.61                 | 481.96                  | 90.65                     | 6.316             |                                                       |           |                    |           |
| 14,500.00                         | 12,065.00             | 14,697.76             | 12,344.00             | 73.76            | 72.53         | 119.17                | -3,460.39                           | 818.69       | 572.61                 | 480.37                  | 92.25                     | 6.207             |                                                       |           |                    |           |
| 14,600.00                         | 12,065.00             | 14,797.76             | 12,344.00             | 75.02            | 73.82         | 119.17                | -3,560.39                           | 819.67       | 572.61                 | 478.76                  | 93.86                     | 6.101             |                                                       |           |                    |           |
| 14,700.00                         | 12,065.00             | 14,897.76             | 12,344.00             | 76.29            | 75.12         | 119.17                | -3,660.38                           | 820.65       | 572.61                 | 477.13                  | 95.48                     | 5.997             |                                                       |           |                    |           |
| 14,800.00                         | 12,065.00             | 14,997.76             | 12,344.00             | 77.58            | 76.44         | 119.17                | -3,760.38                           | 821.63       | 572.61                 | 475.49                  | 97.12                     | 5.896             |                                                       |           |                    |           |
| 14,900.00                         | 12,065.00             | 15,097.76             | 12,344.00             | 78.89            | 77.78         | 119.17                | -3,860.37                           | 822.61       | 572.61                 | 473.84                  | 98.78                     | 5.797             |                                                       |           |                    |           |
| 15,000.00                         | 12,065.00             | 15,197.76             | 12,344.00             | 80.20            | 79.12         | 119.17                | -3,960.37                           | 823.59       | 572.61                 | 472.17                  | 100.44                    | 5.701             |                                                       |           |                    |           |
| 15,100.00                         | 12,065.00             | 15,297.76             | 12,344.00             | 81.53            | 80.47         | 119.17                | -4,060.36                           | 824.57       | 572.61                 | 470.49                  | 102.12                    | 5.607             |                                                       |           |                    |           |
| 15,200.00                         | 12,065.00             | 15,397.76             | 12,344.00             | 82.87            | 81.84         | 119.17                | -4,160.36                           | 825.55       | 572.61                 | 468.79                  | 103.82                    | 5.516             |                                                       |           |                    |           |
| 15,300.00                         | 12,065.00             | 15,497.76             | 12,344.00             | 84.22            | 83.22         | 119.17                | -4,260.36                           | 826.52       | 572.61                 | 467.09                  | 105.52                    | 5.427             |                                                       |           |                    |           |
| 15,400.00                         | 12,065.00             | 15,597.76             | 12,344.00             | 85.59            | 84.60         | 119.17                | -4,360.35                           | 827.50       | 572.61                 | 465.38                  | 107.23                    | 5.340             |                                                       |           |                    |           |
| 15,500.00                         | 12,065.00             | 15,697.76             | 12,344.00             | 86.96            | 86.00         | 119.17                | -4,460.35                           | 828.48       | 572.61                 | 463.65                  | 108.95                    | 5.255             |                                                       |           |                    |           |
| 15,600.00                         | 12,065.00             | 15,797.76             | 12,344.00             | 88.34            | 87.40         | 119.17                | -4,560.34                           | 829.46       | 572.61                 | 461.92                  | 110.69                    | 5.173             |                                                       |           |                    |           |
| 15,700.00                         | 12,065.00             | 15,897.76             | 12,344.00             | 89.73            | 88.82         | 119.17                | -4,660.34                           | 830.44       | 572.61                 | 460.18                  | 112.43                    | 5.093             |                                                       |           |                    |           |
| 15,800.00                         | 12,065.00             | 15,997.76             | 12,344.00             | 91.13            | 90.24         | 119.17                | -4,760.33                           | 831.42       | 572.61                 | 458.43                  | 114.18                    | 5.015             |                                                       |           |                    |           |
| 15,900.00                         | 12,065.00             | 16,097.76             | 12,344.00             | 92.54            | 91.67         | 119.17                | -4,860.33                           | 832.40       | 572.60                 | 456.67                  | 115.93                    | 4.939             |                                                       |           |                    |           |
| 16,000.00                         | 12,065.00             | 16,197.76             | 12,344.00             | 93.95            | 93.10         | 119.17                | -4,960.32                           | 833.38       | 572.60                 | 454.91                  | 117.70                    | 4.865             |                                                       |           |                    |           |
| 16,100.00                         | 12,065.00             | 16,297.76             | 12,344.00             | 95.38            | 94.55         | 119.17                | -5,060.32                           | 834.35       | 572.60                 | 453.13                  | 119.47                    | 4.793             |                                                       |           |                    |           |
| 16,200.00                         | 12,065.00             | 16,397.76             | 12,344.00             | 96.81            | 96.00         | 119.17                | -5,160.31                           | 835.33       | 572.60                 | 451.36                  | 121.25                    | 4.723             |                                                       |           |                    |           |
| 16,300.00                         | 12,065.00             | 16,497.76             | 12,344.00             | 98.24            | 97.45         | 119.17                | -5,260.31                           | 836.31       | 572.60                 | 449.57                  | 123.03                    | 4.654             |                                                       |           |                    |           |
| 16,400.00                         | 12,065.00             | 16,597.76             | 12,344.00             | 99.69            | 98.92         | 119.17                | -5,360.30                           | 837.29       | 572.60                 | 447.78                  | 124.82                    | 4.587             |                                                       |           |                    |           |
| 16,500.00                         | 12,065.00             | 16,697.76             | 12,344.00             | 101.14           | 100.39        | 119.17                | -5,460.30                           | 838.27       | 572.60                 | 445.99                  | 126.61                    | 4.522             |                                                       |           |                    |           |
| 16,600.00                         | 12,065.00             | 16,797.76             | 12,344.00             | 102.60           | 101.86        | 119.17                | -5,560.29                           | 839.25       | 572.60                 | 444.19                  | 128.41                    | 4.459             |                                                       |           |                    |           |
| 16,700.00                         | 12,065.00             | 16,897.76             | 12,344.00             | 104.06           | 103.34        | 119.17                | -5,660.29                           | 840.23       | 572.60                 | 442.38                  | 130.22                    | 4.397             |                                                       |           |                    |           |
| 16,800.00                         | 12,065.00             | 16,997.76             | 12,344.00             | 105.53           | 104.82        | 119.17                | -5,760.28                           | 841.20       | 572.60                 | 440.57                  | 132.03                    | 4.337             |                                                       |           |                    |           |
| 16,900.00                         | 12,065.00             | 17,097.76             | 12,344.00             | 107.00           | 106.31        | 119.17                | -5,860.28                           | 842.18       | 572.60                 | 438.76                  | 133.84                    | 4.278             |                                                       |           |                    |           |
| 17,000.00                         | 12,065.00             | 17,197.76             | 12,344.00             | 108.48           | 107.81        | 119.17                | -5,960.27                           | 843.16       | 572.60                 | 436.94                  | 135.66                    | 4.221             |                                                       |           |                    |           |
| 17,100.00                         | 12,065.00             | 17,297.76             | 12,344.00             | 109.96           | 109.31        | 119.17                | -6,060.27                           | 844.14       | 572.60                 | 435.12                  | 137.48                    | 4.165             |                                                       |           |                    |           |
| 17,200.00                         | 12,065.00             | 17,397.76             | 12,344.00             | 111.45           | 110.81        | 119.17                | -6,160.26                           | 845.12       | 572.60                 | 433.29                  | 139.30                    | 4.110             |                                                       |           |                    |           |
| 17,300.00                         | 12,065.00             | 17,497.76             | 12,344.00             | 112.94           | 112.32        | 119.17                | -6,260.26                           | 846.10       | 572.59                 | 431.47                  | 141.13                    | 4.057             |                                                       |           |                    |           |
| 17,400.00                         | 12,065.00             | 17,597.76             | 12,344.00             | 114.44           | 113.83        | 119.17                | -6,360.25                           | 847.08       | 572.59                 | 429.63                  | 142.96                    | 4.005             |                                                       |           |                    |           |
| 17,500.00                         | 12,065.00             | 17,697.76             | 12,344.00             | 115.94           | 115.34        | 119.17                | -6,460.25                           | 848.06       | 572.59                 | 427.80                  | 144.79                    | 3.955             |                                                       |           |                    |           |
| 17,600.00                         | 12,065.00             | 17,797.76             | 12,344.00             | 117.45           | 116.86        | 119.17                | -6,560.24                           | 849.03       | 572.59                 | 425.97                  | 146.63                    | 3.905             |                                                       |           |                    |           |
| 17,700.00                         | 12,065.00             | 17,897.76             | 12,344.00             | 118.96           | 118.38        | 119.17                | -6,660.24                           | 850.01       | 572.59                 | 424.13                  | 148.46                    | 3.857             |                                                       |           |                    |           |
| 17,800.00                         | 12,065.00             | 17,997.76             | 12,344.00             | 120.47           | 119.91        | 119.17                | -6,760.24                           | 850.99       | 572.59                 | 422.29                  | 150.30                    | 3.810             |                                                       |           |                    |           |
| 17,900.00                         | 12,065.00             | 18,097.76             | 12,344.00             | 121.99           | 121.44        | 119.17                | -6,860.23                           | 851.97       | 572.59                 | 420.44                  | 152.15                    | 3.763             |                                                       |           |                    |           |
| 18,000.00                         | 12,065.00             | 18,197.76             | 12,344.00             | 123.51           | 122.97        | 119.17                | -6,960.23                           | 852.95       | 572.59                 | 418.60                  | 153.99                    | 3.718             |                                                       |           |                    |           |
| 18,100.00                         | 12,065.00             | 18,297.76             | 12,344.00             | 125.03           | 124.50        | 119.17                | -7,060.22                           | 853.93       | 572.59                 | 416.75                  | 155.83                    | 3.674             |                                                       |           |                    |           |
| 18,200.00                         | 12,065.00             | 18,397.76             | 12,344.00             | 126.56           | 126.04        | 119.17                | -7,160.22                           | 854.91       | 572.59                 | 414.91                  | 157.68                    | 3.631             |                                                       |           |                    |           |
| 18,300.00                         | 12,065.00             | 18,497.76             | 12,344.00             | 128.09           | 127.58        | 119.17                | -7,260.21                           | 855.89       | 572.59                 | 413.06                  | 159.53                    | 3.589             |                                                       |           |                    |           |
| 18,400.00                         | 12,065.00             | 18,597.76             | 12,344.00             | 129.62           | 129.13        | 119.17                | -7,360.21                           | 856.86       | 572.59                 | 411.21                  | 161.38                    | 3.548             |                                                       |           |                    |           |
| 18,500.00                         | 12,065.00             | 18,697.76             | 12,344.00             | 131.16           | 130.67        | 119.17                | -7,460.20                           | 857.84       | 572.59                 | 409.36                  | 163.23                    | 3.508             |                                                       |           |                    |           |
| 18,600.00                         | 12,065.00             | 18,797.76             | 12,344.00             | 132.69           | 132.22        | 119.17                | -7,560.20                           | 858.82       | 572.59                 | 407.50                  | 165.08                    | 3.469             |                                                       |           |                    |           |
| 18,700.00                         | 12,065.00             | 18,897.76             | 12,344.00             | 134.24           | 133.77        | 119.17                | -7,660.19                           | 859.80       | 572.58                 | 405.65                  | 166.93                    | 3.430             |                                                       |           |                    |           |
| 18,800.00                         | 12,065.00             | 18,997.76             | 12,344.00             | 135.78           | 135.33        | 119.17                | -7,760.19                           | 860.78       | 572.58                 | 403.80                  | 168.79                    | 3.392             |                                                       |           |                    |           |
| 18,900.00                         | 12,065.00             | 19,097.76             | 12,344.00             | 137.33           | 136.88        | 119.17                | -7,860.18                           | 861.76       | 572.58                 | 401.94                  | 170.64                    | 3.356             |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 703H - OH - Plan #1 |  | Offset Site Error: |  | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|--------------------|--|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |  | 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                                               |  |                    |  |           |
| 19,000.00                         | 12,065.00             | 19,197.76             | 12,344.00             | 138.87           | 138.44        | 119.17                | -7,960.18                           | 862.74       | 572.58                 | 400.09                  | 172.49                    | 3.319             |                                                       |  |                    |  |           |
| 19,100.00                         | 12,065.00             | 19,297.76             | 12,344.00             | 140.43           | 140.00        | 119.17                | -8,060.17                           | 863.72       | 572.58                 | 398.23                  | 174.35                    | 3.284             |                                                       |  |                    |  |           |
| 19,200.00                         | 12,065.00             | 19,397.76             | 12,344.00             | 141.98           | 141.56        | 119.17                | -8,160.17                           | 864.69       | 572.58                 | 396.38                  | 176.20                    | 3.250             |                                                       |  |                    |  |           |
| 19,300.00                         | 12,065.00             | 19,497.76             | 12,344.00             | 143.53           | 143.13        | 119.17                | -8,260.16                           | 865.67       | 572.58                 | 394.52                  | 178.06                    | 3.216             |                                                       |  |                    |  |           |
| 19,400.00                         | 12,065.00             | 19,597.76             | 12,344.00             | 145.09           | 144.70        | 119.17                | -8,360.16                           | 866.65       | 572.58                 | 392.67                  | 179.91                    | 3.183             |                                                       |  |                    |  |           |
| 19,500.00                         | 12,065.00             | 19,697.76             | 12,344.00             | 146.65           | 146.26        | 119.17                | -8,460.15                           | 867.63       | 572.58                 | 390.81                  | 181.77                    | 3.150             |                                                       |  |                    |  |           |
| 19,600.00                         | 12,065.00             | 19,797.76             | 12,344.00             | 148.21           | 147.83        | 119.17                | -8,560.15                           | 868.61       | 572.58                 | 388.96                  | 183.62                    | 3.118             |                                                       |  |                    |  |           |
| 19,700.00                         | 12,065.00             | 19,897.76             | 12,344.00             | 149.78           | 149.41        | 119.17                | -8,660.14                           | 869.59       | 572.58                 | 387.10                  | 185.47                    | 3.087             |                                                       |  |                    |  |           |
| 19,800.00                         | 12,065.00             | 19,997.76             | 12,344.00             | 151.34           | 150.98        | 119.17                | -8,760.14                           | 870.57       | 572.58                 | 385.25                  | 187.33                    | 3.057             |                                                       |  |                    |  |           |
| 19,900.00                         | 12,065.00             | 20,097.76             | 12,344.00             | 152.91           | 152.55        | 119.17                | -8,860.13                           | 871.54       | 572.58                 | 383.39                  | 189.18                    | 3.027             |                                                       |  |                    |  |           |
| 20,000.00                         | 12,065.00             | 20,197.76             | 12,344.00             | 154.48           | 154.13        | 119.17                | -8,960.13                           | 872.52       | 572.58                 | 381.54                  | 191.04                    | 2.997             |                                                       |  |                    |  |           |
| 20,100.00                         | 12,065.00             | 20,297.76             | 12,344.00             | 156.05           | 155.71        | 119.17                | -9,060.13                           | 873.50       | 572.57                 | 379.69                  | 192.89                    | 2.968             |                                                       |  |                    |  |           |
| 20,200.00                         | 12,065.00             | 20,397.76             | 12,344.00             | 157.62           | 157.29        | 119.17                | -9,160.12                           | 874.48       | 572.57                 | 377.83                  | 194.74                    | 2.940             |                                                       |  |                    |  |           |
| 20,300.00                         | 12,065.00             | 20,497.76             | 12,344.00             | 159.20           | 158.87        | 119.17                | -9,260.12                           | 875.46       | 572.57                 | 375.98                  | 196.59                    | 2.913             |                                                       |  |                    |  |           |
| 20,400.00                         | 12,065.00             | 20,597.76             | 12,344.00             | 160.77           | 160.45        | 119.17                | -9,360.11                           | 876.44       | 572.57                 | 374.13                  | 198.44                    | 2.885             |                                                       |  |                    |  |           |
| 20,500.00                         | 12,065.00             | 20,697.76             | 12,344.00             | 162.35           | 162.04        | 119.17                | -9,460.11                           | 877.42       | 572.57                 | 372.28                  | 200.29                    | 2.859             |                                                       |  |                    |  |           |
| 20,600.00                         | 12,065.00             | 20,797.76             | 12,344.00             | 163.93           | 163.62        | 119.17                | -9,560.10                           | 878.40       | 572.57                 | 370.43                  | 202.14                    | 2.833             |                                                       |  |                    |  |           |
| 20,700.00                         | 12,065.00             | 20,897.76             | 12,344.00             | 165.51           | 165.21        | 119.17                | -9,660.10                           | 879.37       | 572.57                 | 368.58                  | 203.99                    | 2.807             |                                                       |  |                    |  |           |
| 20,800.00                         | 12,065.00             | 20,997.76             | 12,344.00             | 167.09           | 166.80        | 119.17                | -9,760.09                           | 880.35       | 572.57                 | 366.73                  | 205.84                    | 2.782             |                                                       |  |                    |  |           |
| 20,900.00                         | 12,065.00             | 21,097.76             | 12,344.00             | 168.67           | 168.39        | 119.17                | -9,860.09                           | 881.33       | 572.57                 | 364.89                  | 207.68                    | 2.757             |                                                       |  |                    |  |           |
| 21,000.00                         | 12,065.00             | 21,197.76             | 12,344.00             | 170.26           | 169.98        | 119.17                | -9,960.08                           | 882.31       | 572.57                 | 363.04                  | 209.53                    | 2.733             |                                                       |  |                    |  |           |
| 21,100.00                         | 12,065.00             | 21,297.76             | 12,344.00             | 171.84           | 171.57        | 119.17                | -10,060.08                          | 883.29       | 572.57                 | 361.20                  | 211.37                    | 2.709             |                                                       |  |                    |  |           |
| 21,200.00                         | 12,065.00             | 21,397.76             | 12,344.00             | 173.43           | 173.16        | 119.17                | -10,160.07                          | 884.27       | 572.57                 | 359.35                  | 213.21                    | 2.685             |                                                       |  |                    |  |           |
| 21,300.00                         | 12,065.00             | 21,497.76             | 12,344.00             | 175.02           | 174.75        | 119.17                | -10,260.07                          | 885.25       | 572.57                 | 357.51                  | 215.06                    | 2.662             |                                                       |  |                    |  |           |
| 21,400.00                         | 12,065.00             | 21,597.76             | 12,344.00             | 176.60           | 176.35        | 119.17                | -10,360.06                          | 886.23       | 572.57                 | 355.67                  | 216.90                    | 2.640             |                                                       |  |                    |  |           |
| 21,500.00                         | 12,065.00             | 21,697.76             | 12,344.00             | 178.19           | 177.94        | 119.17                | -10,460.06                          | 887.20       | 572.56                 | 353.83                  | 218.73                    | 2.618             |                                                       |  |                    |  |           |
| 21,600.00                         | 12,065.00             | 21,797.76             | 12,344.00             | 179.79           | 179.54        | 119.17                | -10,560.05                          | 888.18       | 572.56                 | 351.99                  | 220.57                    | 2.596             |                                                       |  |                    |  |           |
| 21,700.00                         | 12,065.00             | 21,897.76             | 12,344.00             | 181.38           | 181.14        | 119.17                | -10,660.05                          | 889.16       | 572.56                 | 350.16                  | 222.41                    | 2.574             |                                                       |  |                    |  |           |
| 21,800.00                         | 12,065.00             | 21,997.76             | 12,344.00             | 182.97           | 182.74        | 119.17                | -10,760.04                          | 890.14       | 572.56                 | 348.32                  | 224.24                    | 2.553             |                                                       |  |                    |  |           |
| 21,900.00                         | 12,065.00             | 22,097.76             | 12,344.00             | 184.57           | 184.34        | 119.17                | -10,860.04                          | 891.12       | 572.56                 | 346.49                  | 226.07                    | 2.533             |                                                       |  |                    |  |           |
| 22,000.00                         | 12,065.00             | 22,197.76             | 12,344.00             | 186.16           | 185.94        | 119.17                | -10,960.03                          | 892.10       | 572.56                 | 344.66                  | 227.91                    | 2.512             |                                                       |  |                    |  |           |
| 22,100.00                         | 12,065.00             | 22,297.76             | 12,344.00             | 187.76           | 187.54        | 119.17                | -11,060.03                          | 893.08       | 572.56                 | 342.83                  | 229.73                    | 2.492             |                                                       |  |                    |  |           |
| 22,200.00                         | 12,065.00             | 22,397.76             | 12,344.00             | 189.36           | 189.14        | 119.17                | -11,160.02                          | 894.05       | 572.56                 | 341.00                  | 231.56                    | 2.473             |                                                       |  |                    |  |           |
| 22,300.00                         | 12,065.00             | 22,497.76             | 12,344.00             | 190.95           | 190.74        | 119.17                | -11,260.02                          | 895.03       | 572.56                 | 339.17                  | 233.39                    | 2.453             |                                                       |  |                    |  |           |
| 22,400.00                         | 12,065.00             | 22,597.76             | 12,344.00             | 192.55           | 192.35        | 119.17                | -11,360.02                          | 896.01       | 572.56                 | 337.35                  | 235.21                    | 2.434             |                                                       |  |                    |  |           |
| 22,443.89                         | 12,065.00             | 22,641.65             | 12,344.00             | 193.25           | 193.00        | 119.17                | -11,403.90                          | 896.44       | 572.56                 | 336.56                  | 236.00                    | 2.426 SF          |                                                       |  |                    |  |           |
| 22,445.57                         | 12,065.00             | 22,642.51             | 12,344.00             | 193.28           | 193.01        | 119.17                | -11,404.76                          | 896.45       | 572.56                 | 336.58                  | 235.98                    | 2.426             |                                                       |  |                    |  |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 112.00                | -993.35                             | 2,458.60     | 2,652.03               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 57.70                 | 57.70                 | 0.13             | 0.07          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,651.54                | 0.14                      | N/A               |                    |           |
| 200.00                            | 200.00                | 157.70                | 157.70                | 0.48             | 0.33          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,651.10                | 0.59                      | 4,517.023         |                    |           |
| 300.00                            | 300.00                | 257.70                | 257.70                | 0.84             | 0.69          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,650.60                | 1.09                      | 2,434.053         |                    |           |
| 400.00                            | 400.00                | 357.70                | 357.70                | 1.20             | 1.05          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,650.10                | 1.59                      | 1,662.826         |                    |           |
| 500.00                            | 500.00                | 457.70                | 457.70                | 1.56             | 1.41          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,649.59                | 2.10                      | 1,262.245         |                    |           |
| 600.00                            | 600.00                | 557.70                | 557.70                | 1.92             | 1.77          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,649.08                | 2.61                      | 1,017.066         |                    |           |
| 700.00                            | 700.00                | 657.70                | 657.70                | 2.28             | 2.12          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,648.58                | 3.11                      | 851.595           |                    |           |
| 800.00                            | 800.00                | 757.70                | 757.70                | 2.63             | 2.48          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,648.07                | 3.62                      | 732.412           |                    |           |
| 900.00                            | 900.00                | 857.70                | 857.70                | 2.99             | 2.84          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,647.56                | 4.13                      | 642.484           |                    |           |
| 1,000.00                          | 1,000.00              | 957.70                | 957.70                | 3.35             | 3.20          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,647.06                | 4.63                      | 572.218           |                    |           |
| 1,100.00                          | 1,100.00              | 1,057.70              | 1,057.70              | 3.71             | 3.56          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,646.55                | 5.14                      | 515.804           |                    |           |
| 1,200.00                          | 1,200.00              | 1,157.70              | 1,157.70              | 4.07             | 3.92          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,646.04                | 5.65                      | 469.513           |                    |           |
| 1,300.00                          | 1,300.00              | 1,257.70              | 1,257.70              | 4.43             | 4.28          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,645.54                | 6.15                      | 430.846           |                    |           |
| 1,400.00                          | 1,400.00              | 1,357.70              | 1,357.70              | 4.79             | 4.63          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,645.03                | 6.66                      | 398.062           |                    |           |
| 1,500.00                          | 1,500.00              | 1,457.70              | 1,457.70              | 5.14             | 4.99          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,644.52                | 7.17                      | 369.914           |                    |           |
| 1,600.00                          | 1,600.00              | 1,557.70              | 1,557.70              | 5.50             | 5.35          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,644.01                | 7.68                      | 345.484           |                    |           |
| 1,700.00                          | 1,700.00              | 1,657.70              | 1,657.70              | 5.86             | 5.71          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,643.51                | 8.18                      | 324.080           |                    |           |
| 1,800.00                          | 1,800.00              | 1,757.70              | 1,757.70              | 6.22             | 6.07          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,643.00                | 8.69                      | 305.174           |                    |           |
| 1,900.00                          | 1,900.00              | 1,857.70              | 1,857.70              | 6.58             | 6.43          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,642.49                | 9.20                      | 288.351           |                    |           |
| 2,000.00                          | 2,000.00              | 1,957.70              | 1,957.70              | 6.94             | 6.78          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,641.99                | 9.70                      | 273.287           |                    |           |
| 2,100.00                          | 2,100.00              | 2,057.70              | 2,057.70              | 7.29             | 7.14          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,641.48                | 10.21                     | 259.718           |                    |           |
| 2,200.00                          | 2,200.00              | 2,157.70              | 2,157.70              | 7.65             | 7.50          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,640.97                | 10.72                     | 247.433           |                    |           |
| 2,300.00                          | 2,300.00              | 2,257.70              | 2,257.70              | 8.01             | 7.86          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,640.47                | 11.22                     | 236.257           |                    |           |
| 2,400.00                          | 2,400.00              | 2,357.70              | 2,357.70              | 8.37             | 8.22          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,639.96                | 11.73                     | 226.047           |                    |           |
| 2,500.00                          | 2,500.00              | 2,457.70              | 2,457.70              | 8.73             | 8.58          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,639.45                | 12.24                     | 216.684           |                    |           |
| 2,600.00                          | 2,600.00              | 2,557.70              | 2,557.70              | 9.09             | 8.94          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,638.95                | 12.74                     | 208.065           |                    |           |
| 2,700.00                          | 2,700.00              | 2,657.70              | 2,657.70              | 9.45             | 9.29          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,638.44                | 13.25                     | 200.105           |                    |           |
| 2,800.00                          | 2,800.00              | 2,757.70              | 2,757.70              | 9.80             | 9.65          | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,637.93                | 13.76                     | 192.732           |                    |           |
| 2,900.00                          | 2,900.00              | 2,857.70              | 2,857.70              | 10.16            | 10.01         | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,637.42                | 14.27                     | 185.883           |                    |           |
| 3,000.00                          | 3,000.00              | 2,957.70              | 2,957.70              | 10.52            | 10.37         | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,636.92                | 14.77                     | 179.504           |                    |           |
| 3,100.00                          | 3,100.00              | 3,057.70              | 3,057.70              | 10.88            | 10.73         | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,636.41                | 15.28                     | 173.548           |                    |           |
| 3,200.00                          | 3,200.00              | 3,157.70              | 3,157.70              | 11.24            | 11.09         | 112.00                | -993.35                             | 2,458.60     | 2,651.69               | 2,635.90                | 15.79                     | 167.975           |                    |           |
| 3,300.00                          | 3,299.99              | 3,355.36              | 3,355.32              | 11.58            | 11.78         | -16.66                | -993.52                             | 2,455.45     | 2,649.37               | 2,632.87                | 16.51                     | 160.501           |                    |           |
| 3,400.00                          | 3,399.91              | 3,576.97              | 3,576.34              | 11.91            | 12.54         | -16.61                | -994.34                             | 2,439.81     | 2,638.71               | 2,621.47                | 17.24                     | 153.055           |                    |           |
| 3,500.00                          | 3,499.69              | 3,882.39              | 3,878.77              | 12.25            | 13.62         | -16.42                | -996.54                             | 2,397.89     | 2,619.52               | 2,601.43                | 18.10                     | 144.760           |                    |           |
| 3,600.00                          | 3,599.27              | 4,028.21              | 4,021.85              | 12.58            | 14.16         | -16.34                | -998.01                             | 2,369.84     | 2,593.30               | 2,574.65                | 18.64                     | 139.090           |                    |           |
| 3,700.00                          | 3,698.57              | 4,123.80              | 4,115.55              | 12.92            | 14.53         | -16.35                | -999.01                             | 2,350.92     | 2,564.38               | 2,545.27                | 19.11                     | 134.171           |                    |           |
| 3,800.00                          | 3,797.54              | 4,218.68              | 4,208.54              | 13.27            | 14.89         | -16.39                | -999.99                             | 2,332.14     | 2,533.08               | 2,513.50                | 19.58                     | 129.368           |                    |           |
| 3,900.00                          | 3,896.09              | 4,312.77              | 4,300.76              | 13.62            | 15.26         | -16.46                | -1,000.97                           | 2,313.51     | 2,499.41               | 2,479.37                | 20.05                     | 124.677           |                    |           |
| 4,000.00                          | 3,994.16              | 4,406.01              | 4,392.15              | 13.98            | 15.63         | -16.55                | -1,001.94                           | 2,295.05     | 2,463.39               | 2,442.88                | 20.51                     | 120.091           |                    |           |
| 4,100.00                          | 4,091.70              | 4,498.34              | 4,482.65              | 14.35            | 15.99         | -16.67                | -1,002.90                           | 2,276.78     | 2,425.05               | 2,404.07                | 20.98                     | 115.606           |                    |           |
| 4,200.00                          | 4,188.62              | 4,589.69              | 4,572.19              | 14.74            | 16.36         | -16.83                | -1,003.85                           | 2,258.69     | 2,384.40               | 2,362.96                | 21.44                     | 111.217           |                    |           |
| 4,300.00                          | 4,284.86              | 4,680.00              | 4,660.71              | 15.14            | 16.73         | -17.02                | -1,004.79                           | 2,240.81     | 2,341.47               | 2,319.57                | 21.90                     | 106.918           |                    |           |
| 4,400.00                          | 4,380.36              | 4,769.21              | 4,748.15              | 15.55            | 17.10         | -17.25                | -1,005.72                           | 2,223.15     | 2,296.30               | 2,273.94                | 22.36                     | 102.705           |                    |           |
| 4,452.43                          | 4,430.11              | 4,815.53              | 4,793.54              | 15.78            | 17.29         | -17.38                | -1,006.20                           | 2,213.99     | 2,271.73               | 2,249.13                | 22.60                     | 100.527           |                    |           |
| 4,500.00                          | 4,475.14              | 4,857.40              | 4,834.59              | 15.99            | 17.46         | -17.39                | -1,006.63                           | 2,205.70     | 2,249.16               | 2,226.35                | 22.82                     | 98.582            |                    |           |
| 4,600.00                          | 4,569.82              | 4,945.43              | 4,920.87              | 16.44            | 17.83         | -17.42                | -1,007.55                           | 2,188.27     | 2,201.72               | 2,178.45                | 23.27                     | 94.605            |                    |           |
| 4,700.00                          | 4,664.49              | 5,033.45              | 5,007.14              | 16.91            | 18.20         | -17.45                | -1,008.46                           | 2,170.85     | 2,154.28               | 2,130.55                | 23.73                     | 90.769            |                    |           |
| 4,800.00                          | 4,759.16              | 5,121.48              | 5,093.42              | 17.39            | 18.57         | -17.48                | -1,009.38                           | 2,153.42     | 2,106.84               | 2,082.64                | 24.20                     | 87.066            |                    |           |
| 4,900.00                          | 4,853.84              | 5,209.50              | 5,179.70              | 17.87            | 18.95         | -17.51                | -1,010.29                           | 2,136.00     | 2,059.40               | 2,034.73                | 24.67                     | 83.492            |                    |           |
| 5,000.00                          | 4,948.51              | 5,297.52              | 5,265.98              | 18.37            | 19.32         | -17.54                | -1,011.21                           | 2,118.57     | 2,011.96               | 1,986.82                | 25.14                     | 80.041            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,385.55              | 5,352.26              | 18.88            | 19.70         | -17.58                | -1,012.12                           | 2,101.14     | 1,964.52               | 1,938.91                | 25.61                     | 76.708            |                    |           |
| 5,200.00                          | 5,137.85              | 5,473.57              | 5,438.53              | 19.39            | 20.08         | -17.61                | -1,013.04                           | 2,083.72     | 1,917.08               | 1,890.99                | 26.09                     | 73.488            |                    |           |
| 5,300.00                          | 5,232.53              | 5,561.60              | 5,524.81              | 19.92            | 20.47         | -17.65                | -1,013.95                           | 2,066.29     | 1,869.64               | 1,843.07                | 26.57                     | 70.377            |                    |           |
| 5,400.00                          | 5,327.20              | 5,649.62              | 5,611.09              | 20.45            | 20.85         | -17.69                | -1,014.87                           | 2,048.87     | 1,822.20               | 1,795.15                | 27.05                     | 67.372            |                    |           |
| 5,500.00                          | 5,421.87              | 5,737.65              | 5,697.37              | 20.99            | 21.24         | -17.73                | -1,015.78                           | 2,031.44     | 1,774.76               | 1,747.23                | 27.53                     | 64.466            |                    |           |
| 5,600.00                          | 5,516.54              | 5,825.67              | 5,783.65              | 21.53            | 21.62         | -17.78                | -1,016.70                           | 2,014.02     | 1,727.33               | 1,699.31                | 28.02                     | 61.656            |                    |           |
| 5,700.00                          | 5,611.22              | 5,913.70              | 5,869.92              | 22.08            | 22.01         | -17.82                | -1,017.62                           | 1,996.59     | 1,679.89               | 1,651.39                | 28.50                     | 58.937            |                    |           |
| 5,800.00                          | 5,705.89              | 6,001.72              | 5,956.20              | 22.63            | 22.40         | -17.87                | -1,018.53                           | 1,979.17     | 1,632.46               | 1,603.46                | 28.99                     | 56.305            |                    |           |
| 5,900.00                          | 5,800.56              | 6,089.75              | 6,042.48              | 23.19            | 22.79         | -17.92                | -1,019.45                           | 1,961.74     | 1,585.02               | 1,555.54                | 29.49                     | 53.757            |                    |           |
| 6,000.00                          | 5,895.23              | 6,177.77              | 6,128.76              | 23.76            | 23.18         | -17.98                | -1,020.36                           | 1,944.32     | 1,537.59               | 1,507.61                | 29.98                     | 51.289            |                    |           |
| 6,100.00                          | 5,989.91              | 6,265.80              | 6,215.03              | 24.33            | 23.58         | -18.04                | -1,021.28                           | 1,926.89     | 1,490.16               | 1,459.68                | 30.47                     | 48.898            |                    |           |
| 6,200.00                          | 6,084.58              | 6,353.82              | 6,301.31              | 24.90            | 23.97         | -18.10                | -1,022.19                           | 1,909.47     | 1,442.73               | 1,411.76                | 30.97                     | 46.581            |                    |           |
| 6,300.00                          | 6,179.25              | 6,441.85              | 6,387.59              | 25.48            | 24.37         | -18.17                | -1,023.11                           | 1,892.04     | 1,395.30               | 1,363.83                | 31.47                     | 44.335            |                    |           |
| 6,400.00                          | 6,273.92              | 6,529.87              | 6,473.87              | 26.05            | 24.76         | -18.24                | -1,024.02                           | 1,874.61     | 1,347.87               | 1,315.90                | 31.97                     | 42.157            |                    |           |
| 6,500.00                          | 6,368.60              | 6,617.90              | 6,560.15              | 26.64            | 25.16         | -18.32                | -1,024.94                           | 1,857.19     | 1,300.45               | 1,267.97                | 32.48                     | 40.044            |                    |           |
| 6,600.00                          | 6,463.27              | 6,705.92              | 6,646.42              | 27.22            | 25.56         | -18.40                | -1,025.85                           | 1,839.76     | 1,253.02               | 1,220.05                | 32.98                     | 37.994            |                    |           |
| 6,700.00                          | 6,557.94              | 6,793.95              | 6,732.70              | 27.81            | 25.96         | -18.49                | -1,026.77                           | 1,822.34     | 1,205.60               | 1,172.12                | 33.49                     | 36.003            |                    |           |
| 6,800.00                          | 6,652.61              | 6,885.18              | 6,802.61              | 28.40            | 26.28         | -18.58                | -1,027.48                           | 1,808.71     | 1,158.75               | 1,124.72                | 34.03                     | 34.054            |                    |           |
| 6,900.00                          | 6,747.29              | 6,935.28              | 6,871.65              | 29.00            | 26.58         | -18.70                | -1,028.12                           | 1,796.57     | 1,113.36               | 1,078.78                | 34.57                     | 32.201            |                    |           |
| 7,000.00                          | 6,841.96              | 7,000.00              | 6,935.58              | 29.59            | 26.86         | -18.85                | -1,028.65                           | 1,786.47     | 1,069.50               | 1,034.37                | 35.14                     | 30.440            |                    |           |
| 7,100.00                          | 6,936.63              | 7,078.90              | 7,013.73              | 30.19            | 27.19         | -19.09                | -1,029.22                           | 1,775.64     | 1,027.16               | 991.49                  | 35.67                     | 28.793            |                    |           |
| 7,200.00                          | 7,031.30              | 7,152.38              | 7,086.70              | 30.79            | 27.48         | -19.36                | -1,029.67                           | 1,767.00     | 986.45                 | 950.23                  | 36.22                     | 27.233            |                    |           |
| 7,300.00                          | 7,125.98              | 7,226.93              | 7,160.88              | 31.40            | 27.77         | -19.68                | -1,030.06                           | 1,759.66     | 947.40                 | 910.62                  | 36.77                     | 25.763            |                    |           |
| 7,400.00                          | 7,220.65              | 7,300.00              | 7,233.72              | 32.00            | 28.05         | -20.07                | -1,030.36                           | 1,753.88     | 910.06                 | 872.73                  | 37.33                     | 24.381            |                    |           |
| 7,500.00                          | 7,315.32              | 7,379.10              | 7,312.67              | 32.61            | 28.33         | -20.55                | -1,030.61                           | 1,749.19     | 874.48                 | 836.61                  | 37.87                     | 23.090            |                    |           |
| 7,600.00                          | 7,409.99              | 7,456.63              | 7,390.15              | 33.21            | 28.60         | -21.10                | -1,030.77                           | 1,746.18     | 840.74                 | 802.32                  | 38.42                     | 21.882            |                    |           |
| 7,700.00                          | 7,504.67              | 7,535.08              | 7,468.58              | 33.82            | 28.86         | -21.74                | -1,030.84                           | 1,744.73     | 808.91                 | 769.93                  | 38.97                     | 20.756            |                    |           |
| 7,800.00                          | 7,599.34              | 7,623.54              | 7,557.04              | 34.43            | 29.15         | -22.55                | -1,030.85                           | 1,744.60     | 778.70                 | 739.17                  | 39.53                     | 19.699            |                    |           |
| 7,900.00                          | 7,694.01              | 7,718.21              | 7,651.71              | 35.05            | 29.46         | -23.49                | -1,030.85                           | 1,744.60     | 748.82                 | 708.72                  | 40.10                     | 18.673            |                    |           |
| 8,000.00                          | 7,788.68              | 7,812.88              | 7,746.38              | 35.66            | 29.76         | -24.50                | -1,030.85                           | 1,744.60     | 719.15                 | 678.46                  | 40.69                     | 17.675            |                    |           |
| 8,100.00                          | 7,883.36              | 7,907.55              | 7,841.06              | 36.28            | 30.07         | -25.60                | -1,030.85                           | 1,744.60     | 689.70                 | 648.41                  | 41.29                     | 16.705            |                    |           |
| 8,200.00                          | 7,978.03              | 8,002.23              | 7,935.73              | 36.89            | 30.38         | -26.79                | -1,030.85                           | 1,744.60     | 660.50                 | 618.60                  | 41.90                     | 15.764            |                    |           |
| 8,300.00                          | 8,072.70              | 8,096.90              | 8,030.40              | 37.51            | 30.69         | -28.09                | -1,030.85                           | 1,744.60     | 631.60                 | 589.07                  | 42.53                     | 14.850            |                    |           |
| 8,400.00                          | 8,167.37              | 8,191.57              | 8,125.07              | 38.13            | 31.00         | -29.52                | -1,030.85                           | 1,744.60     | 603.03                 | 559.84                  | 43.19                     | 13.963            |                    |           |
| 8,500.00                          | 8,262.05              | 8,286.25              | 8,219.75              | 38.75            | 31.31         | -31.08                | -1,030.85                           | 1,744.60     | 574.85                 | 530.98                  | 43.87                     | 13.104            |                    |           |
| 8,600.00                          | 8,356.72              | 8,380.92              | 8,314.42              | 39.37            | 31.62         | -32.79                | -1,030.85                           | 1,744.60     | 547.11                 | 502.53                  | 44.58                     | 12.273            |                    |           |
| 8,700.00                          | 8,451.39              | 8,475.59              | 8,409.09              | 39.99            | 31.93         | -34.68                | -1,030.85                           | 1,744.60     | 519.89                 | 474.56                  | 45.32                     | 11.470            |                    |           |
| 8,800.00                          | 8,546.07              | 8,570.26              | 8,503.77              | 40.61            | 32.24         | -36.77                | -1,030.85                           | 1,744.60     | 493.26                 | 447.15                  | 46.11                     | 10.697            |                    |           |
| 8,875.44                          | 8,617.48              | 8,641.68              | 8,575.18              | 41.08            | 32.48         | -38.49                | -1,030.85                           | 1,744.60     | 473.64                 | 426.90                  | 46.74                     | 10.134            |                    |           |
| 8,900.00                          | 8,640.90              | 8,665.10              | 8,598.60              | 41.23            | 32.55         | -38.67                | -1,030.85                           | 1,744.60     | 467.74                 | 420.80                  | 46.94                     | 9.964             |                    |           |
| 8,950.00                          | 8,689.44              | 8,713.63              | 8,647.14              | 41.49            | 32.71         | -38.98                | -1,030.85                           | 1,744.60     | 458.32                 | 411.00                  | 47.32                     | 9.685             |                    |           |
| 9,000.00                          | 8,738.83              | 8,763.02              | 8,696.53              | 41.70            | 32.88         | -39.21                | -1,030.85                           | 1,744.60     | 452.34                 | 404.68                  | 47.65                     | 9.492             |                    |           |
| 9,050.00                          | 8,788.70              | 8,812.90              | 8,746.40              | 41.87            | 33.04         | -39.31                | -1,030.85                           | 1,744.60     | 449.75                 | 401.82                  | 47.93                     | 9.384             |                    |           |
| 9,063.30                          | 8,802.00              | 8,826.20              | 8,759.70              | 41.91            | 33.09         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 401.64                  | 47.99                     | 9.369             |                    |           |
| 9,100.00                          | 8,838.70              | 8,862.90              | 8,796.40              | 42.00            | 33.21         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 401.48                  | 48.15                     | 9.338             |                    |           |
| 9,200.00                          | 8,938.70              | 8,962.90              | 8,896.40              | 42.26            | 33.54         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 401.04                  | 48.59                     | 9.253             |                    |           |
| 9,300.00                          | 9,038.70              | 9,062.90              | 8,996.40              | 42.51            | 33.87         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 400.59                  | 49.04                     | 9.169             |                    |           |
| 9,400.00                          | 9,138.70              | 9,162.90              | 9,096.40              | 42.77            | 34.20         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 400.15                  | 49.48                     | 9.086             |                    |           |
| 9,500.00                          | 9,238.70              | 9,262.90              | 9,196.40              | 43.03            | 34.54         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 399.70                  | 49.93                     | 9.005             |                    |           |
| 9,600.00                          | 9,338.70              | 9,362.90              | 9,296.40              | 43.30            | 34.87         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 399.25                  | 50.38                     | 8.925             |                    |           |
| 9,700.00                          | 9,438.70              | 9,462.90              | 9,396.40              | 43.56            | 35.20         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 398.80                  | 50.83                     | 8.846             |                    |           |
| 9,800.00                          | 9,538.70              | 9,562.90              | 9,496.40              | 43.82            | 35.54         | -39.34                | -1,030.85                           | 1,744.60     | 449.63                 | 398.35                  | 51.28                     | 8.769             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design      Tatanka Fed Com - Tatanka Fed Com 704H - OH - Plan #2 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|--------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD                                        |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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            |           |
| 9,900.00                                                                 | 9,638.70              | 9,662.90              | 9,596.40              | 44.09            | 35.87         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 397.90                  | 51.73                     | 8.692             |                    |           |
| 10,000.00                                                                | 9,738.70              | 9,762.90              | 9,696.40              | 44.36            | 36.21         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 397.45                  | 52.18                     | 8.617             |                    |           |
| 10,100.00                                                                | 9,838.70              | 9,862.90              | 9,796.40              | 44.63            | 36.55         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 397.00                  | 52.63                     | 8.543             |                    |           |
| 10,200.00                                                                | 9,938.70              | 9,962.90              | 9,896.40              | 44.90            | 36.88         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 396.54                  | 53.09                     | 8.470             |                    |           |
| 10,300.00                                                                | 10,038.70             | 10,062.90             | 9,996.40              | 45.17            | 37.22         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 396.09                  | 53.54                     | 8.398             |                    |           |
| 10,400.00                                                                | 10,138.70             | 10,162.90             | 10,096.40             | 45.44            | 37.56         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 395.63                  | 54.00                     | 8.327             |                    |           |
| 10,500.00                                                                | 10,238.70             | 10,262.90             | 10,196.40             | 45.71            | 37.89         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 395.18                  | 54.45                     | 8.257             |                    |           |
| 10,600.00                                                                | 10,338.70             | 10,362.90             | 10,296.40             | 45.99            | 38.23         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 394.72                  | 54.91                     | 8.188             |                    |           |
| 10,700.00                                                                | 10,438.70             | 10,462.90             | 10,396.40             | 46.26            | 38.57         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 394.26                  | 55.37                     | 8.121             |                    |           |
| 10,800.00                                                                | 10,538.70             | 10,562.90             | 10,496.40             | 46.54            | 38.91         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 393.80                  | 55.83                     | 8.054             |                    |           |
| 10,900.00                                                                | 10,638.70             | 10,662.90             | 10,596.40             | 46.82            | 39.25         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 393.34                  | 56.29                     | 7.988             |                    |           |
| 11,000.00                                                                | 10,738.70             | 10,762.90             | 10,696.40             | 47.10            | 39.59         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 392.88                  | 56.75                     | 7.923             |                    |           |
| 11,100.00                                                                | 10,838.70             | 10,862.90             | 10,796.40             | 47.38            | 39.93         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 392.42                  | 57.21                     | 7.859             |                    |           |
| 11,200.00                                                                | 10,938.70             | 10,962.90             | 10,896.40             | 47.66            | 40.27         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 391.96                  | 57.67                     | 7.796             |                    |           |
| 11,300.00                                                                | 11,038.70             | 11,062.90             | 10,996.40             | 47.94            | 40.61         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 391.49                  | 58.14                     | 7.734             |                    |           |
| 11,400.00                                                                | 11,138.70             | 11,162.90             | 11,096.40             | 48.22            | 40.95         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 391.03                  | 58.60                     | 7.673             |                    |           |
| 11,500.00                                                                | 11,238.70             | 11,262.90             | 11,196.40             | 48.51            | 41.29         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 390.57                  | 59.06                     | 7.613             |                    |           |
| 11,600.00                                                                | 11,338.70             | 11,362.90             | 11,296.40             | 48.79            | 41.63         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 390.10                  | 59.53                     | 7.553             |                    |           |
| 11,700.00                                                                | 11,438.70             | 11,462.90             | 11,396.40             | 49.08            | 41.97         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 389.63                  | 60.00                     | 7.494             |                    |           |
| 11,753.34                                                                | 11,492.04             | 11,516.24             | 11,449.74             | 49.23            | 42.16         | 89.34                 | -1,030.85                           | 1,744.60     | 449.63                 | 389.39                  | 60.24                     | 7.463 CC          |                    |           |
| 11,753.95                                                                | 11,492.64             | 11,516.84             | 11,450.34             | 49.23            | 42.16         | -90.10                | -1,030.85                           | 1,744.60     | 449.63                 | 389.38                  | 60.25                     | 7.463             |                    |           |
| 11,800.00                                                                | 11,538.65             | 11,562.84             | 11,496.35             | 49.37            | 42.31         | -90.34                | -1,030.85                           | 1,744.60     | 449.64                 | 389.14                  | 60.49                     | 7.433             |                    |           |
| 11,850.00                                                                | 11,588.24             | 11,612.59             | 11,546.09             | 49.55            | 42.48         | -91.11                | -1,030.94                           | 1,744.60     | 449.71                 | 388.89                  | 60.83                     | 7.394             |                    |           |
| 11,900.00                                                                | 11,637.10             | 11,663.13             | 11,596.52             | 49.74            | 42.65         | -92.05                | -1,034.05                           | 1,744.63     | 449.92                 | 388.74                  | 61.19                     | 7.353             |                    |           |
| 11,950.00                                                                | 11,684.86             | 11,714.37             | 11,647.16             | 49.95            | 42.81         | -92.99                | -1,041.73                           | 1,744.71     | 450.26                 | 388.70                  | 61.55                     | 7.315             |                    |           |
| 12,000.00                                                                | 11,731.15             | 11,766.32             | 11,697.60             | 50.18            | 42.97         | -93.91                | -1,054.10                           | 1,744.83     | 450.70                 | 388.78                  | 61.92                     | 7.278             |                    |           |
| 12,050.00                                                                | 11,775.62             | 11,818.99             | 11,747.38             | 50.42            | 43.13         | -94.80                | -1,071.25                           | 1,745.00     | 451.24                 | 388.96                  | 62.29                     | 7.245             |                    |           |
| 12,100.00                                                                | 11,817.93             | 11,872.40             | 11,796.03             | 50.68            | 43.28         | -95.66                | -1,093.23                           | 1,745.21     | 451.87                 | 389.23                  | 62.64                     | 7.214             |                    |           |
| 12,150.00                                                                | 11,857.76             | 11,926.53             | 11,843.04             | 50.96            | 43.43         | -96.48                | -1,120.04                           | 1,745.47     | 452.57                 | 389.59                  | 62.98                     | 7.186             |                    |           |
| 12,200.00                                                                | 11,894.81             | 11,981.38             | 11,887.87             | 51.25            | 43.57         | -97.25                | -1,151.59                           | 1,745.78     | 453.31                 | 390.02                  | 63.29                     | 7.162             |                    |           |
| 12,250.00                                                                | 11,928.80             | 12,036.92             | 11,929.99             | 51.56            | 43.70         | -97.96                | -1,187.76                           | 1,746.14     | 454.06                 | 390.49                  | 63.58                     | 7.142             |                    |           |
| 12,300.00                                                                | 11,959.45             | 12,093.11             | 11,968.83             | 51.87            | 43.83         | -98.61                | -1,228.34                           | 1,746.54     | 454.81                 | 390.97                  | 63.84                     | 7.124             |                    |           |
| 12,350.00                                                                | 11,986.56             | 12,149.92             | 12,003.87             | 52.20            | 43.96         | -99.19                | -1,273.02                           | 1,746.98     | 455.53                 | 391.44                  | 64.08                     | 7.108             |                    |           |
| 12,400.00                                                                | 12,009.90             | 12,207.27             | 12,034.59             | 52.55            | 44.08         | -99.69                | -1,321.42                           | 1,747.45     | 456.18                 | 391.87                  | 64.31                     | 7.094             |                    |           |
| 12,450.00                                                                | 12,029.29             | 12,265.11             | 12,060.50             | 52.90            | 44.21         | -100.11               | -1,373.10                           | 1,747.96     | 456.76                 | 392.23                  | 64.53                     | 7.078             |                    |           |
| 12,500.00                                                                | 12,044.60             | 12,323.34             | 12,081.20             | 53.26            | 44.34         | -100.44               | -1,427.50                           | 1,748.49     | 457.22                 | 392.47                  | 64.75                     | 7.061             |                    |           |
| 12,550.00                                                                | 12,055.70             | 12,381.88             | 12,096.34             | 53.63            | 44.49         | -100.68               | -1,484.01                           | 1,749.05     | 457.57                 | 392.59                  | 64.99                     | 7.041             |                    |           |
| 12,600.00                                                                | 12,062.52             | 12,440.62             | 12,105.66             | 54.01            | 44.66         | -100.82               | -1,541.99                           | 1,749.61     | 457.78                 | 392.54                  | 65.24                     | 7.017             |                    |           |
| 12,653.34                                                                | 12,065.00             | 12,503.41             | 12,109.00             | 54.42            | 44.85         | -100.86               | -1,604.65                           | 1,750.23     | 457.85                 | 392.30                  | 65.55                     | 6.985             |                    |           |
| 12,656.23                                                                | 12,065.00             | 12,506.81             | 12,108.98             | 54.44            | 44.86         | -100.86               | -1,608.06                           | 1,750.26     | 457.85                 | 392.28                  | 65.57                     | 6.983             |                    |           |
| 12,700.00                                                                | 12,065.00             | 12,549.94             | 12,109.00             | 54.78            | 45.01         | -100.86               | -1,651.18                           | 1,750.68     | 457.85                 | 391.90                  | 65.96                     | 6.942             |                    |           |
| 12,800.00                                                                | 12,065.00             | 12,649.94             | 12,109.00             | 55.59            | 45.39         | -100.86               | -1,751.17                           | 1,751.67     | 457.86                 | 391.00                  | 66.86                     | 6.848             |                    |           |
| 12,900.00                                                                | 12,065.00             | 12,749.94             | 12,109.00             | 56.43            | 45.84         | -100.86               | -1,851.17                           | 1,752.65     | 457.86                 | 390.03                  | 67.83                     | 6.750             |                    |           |
| 13,000.00                                                                | 12,065.00             | 12,849.94             | 12,109.00             | 57.31            | 46.34         | -100.86               | -1,951.16                           | 1,753.63     | 457.86                 | 389.00                  | 68.86                     | 6.649             |                    |           |
| 13,100.00                                                                | 12,065.00             | 12,949.94             | 12,109.00             | 58.22            | 46.90         | -100.86               | -2,051.16                           | 1,754.61     | 457.87                 | 387.91                  | 69.95                     | 6.545             |                    |           |
| 13,200.00                                                                | 12,065.00             | 13,049.94             | 12,109.00             | 59.17            | 47.51         | -100.86               | -2,151.15                           | 1,755.59     | 457.87                 | 386.77                  | 71.10                     | 6.440             |                    |           |
| 13,300.00                                                                | 12,065.00             | 13,149.94             | 12,109.00             | 60.14            | 48.18         | -100.86               | -2,251.15                           | 1,756.57     | 457.87                 | 385.57                  | 72.30                     | 6.333             |                    |           |
| 13,400.00                                                                | 12,065.00             | 13,249.94             | 12,109.00             | 61.15            | 48.89         | -100.86               | -2,351.14                           | 1,757.55     | 457.87                 | 384.32                  | 73.56                     | 6.225             |                    |           |
| 13,500.00                                                                | 12,065.00             | 13,349.94             | 12,109.00             | 62.18            | 49.64         | -100.86               | -2,451.14                           | 1,758.53     | 457.88                 | 383.01                  | 74.86                     | 6.116             |                    |           |
| 13,600.00                                                                | 12,065.00             | 13,449.94             | 12,109.00             | 63.24            | 50.44         | -100.86               | -2,551.13                           | 1,759.51     | 457.88                 | 381.67                  | 76.21                     | 6.008             |                    |           |
| 13,700.00                                                                | 12,065.00             | 13,549.94             | 12,109.00             | 64.32            | 51.28         | -100.86               | -2,651.13                           | 1,760.49     | 457.88                 | 380.27                  | 77.61                     | 5.900             |                    |           |
| 13,800.00                                                                | 12,065.00             | 13,649.94             | 12,109.00             | 65.43            | 52.16         | -100.86               | -2,751.12                           | 1,761.47     | 457.89                 | 378.84                  | 79.05                     | 5.793             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 13,900.00                         | 12,065.00             | 13,749.94             | 12,109.00             | 66.56            | 53.08         | -100.86               | -2,851.12                           | 1,762.45     | 457.89                 | 377.37                  | 80.52                     | 5.687             |                    |           |
| 14,000.00                         | 12,065.00             | 13,849.94             | 12,109.00             | 67.71            | 54.03         | -100.86               | -2,951.11                           | 1,763.44     | 457.89                 | 375.86                  | 82.04                     | 5.582             |                    |           |
| 14,100.00                         | 12,065.00             | 13,949.94             | 12,109.00             | 68.88            | 55.02         | -100.86               | -3,051.11                           | 1,764.42     | 457.89                 | 374.31                  | 83.58                     | 5.478             |                    |           |
| 14,200.00                         | 12,065.00             | 14,049.94             | 12,109.00             | 70.08            | 56.03         | -100.86               | -3,151.10                           | 1,765.40     | 457.90                 | 372.73                  | 85.17                     | 5.377             |                    |           |
| 14,300.00                         | 12,065.00             | 14,149.94             | 12,109.00             | 71.29            | 57.08         | -100.86               | -3,251.10                           | 1,766.38     | 457.90                 | 371.12                  | 86.78                     | 5.277             |                    |           |
| 14,400.00                         | 12,065.00             | 14,249.94             | 12,109.00             | 72.51            | 58.16         | -100.86               | -3,351.09                           | 1,767.36     | 457.90                 | 369.48                  | 88.42                     | 5.179             |                    |           |
| 14,500.00                         | 12,065.00             | 14,349.94             | 12,109.00             | 73.76            | 59.26         | -100.86               | -3,451.09                           | 1,768.34     | 457.91                 | 367.81                  | 90.09                     | 5.083             |                    |           |
| 14,600.00                         | 12,065.00             | 14,449.94             | 12,109.00             | 75.02            | 60.38         | -100.86               | -3,551.08                           | 1,769.32     | 457.91                 | 366.12                  | 91.79                     | 4.989             |                    |           |
| 14,700.00                         | 12,065.00             | 14,549.94             | 12,109.00             | 76.29            | 61.53         | -100.86               | -3,651.08                           | 1,770.30     | 457.91                 | 364.40                  | 93.52                     | 4.897             |                    |           |
| 14,800.00                         | 12,065.00             | 14,649.94             | 12,109.00             | 77.58            | 62.71         | -100.86               | -3,751.07                           | 1,771.28     | 457.91                 | 362.65                  | 95.26                     | 4.807             |                    |           |
| 14,900.00                         | 12,065.00             | 14,749.94             | 12,109.00             | 78.89            | 63.90         | -100.86               | -3,851.07                           | 1,772.26     | 457.92                 | 360.89                  | 97.03                     | 4.719             |                    |           |
| 15,000.00                         | 12,065.00             | 14,849.94             | 12,109.00             | 80.20            | 65.11         | -100.86               | -3,951.07                           | 1,773.24     | 457.92                 | 359.10                  | 98.82                     | 4.634             |                    |           |
| 15,100.00                         | 12,065.00             | 14,949.94             | 12,109.00             | 81.53            | 66.35         | -100.86               | -4,051.06                           | 1,774.22     | 457.92                 | 357.29                  | 100.63                    | 4.551             |                    |           |
| 15,200.00                         | 12,065.00             | 15,049.94             | 12,109.00             | 82.87            | 67.60         | -100.86               | -4,151.06                           | 1,775.21     | 457.93                 | 355.47                  | 102.46                    | 4.469             |                    |           |
| 15,300.00                         | 12,065.00             | 15,149.94             | 12,109.00             | 84.22            | 68.87         | -100.86               | -4,251.05                           | 1,776.19     | 457.93                 | 353.63                  | 104.30                    | 4.390             |                    |           |
| 15,400.00                         | 12,065.00             | 15,249.94             | 12,109.00             | 85.59            | 70.15         | -100.86               | -4,351.05                           | 1,777.17     | 457.93                 | 351.76                  | 106.17                    | 4.313             |                    |           |
| 15,500.00                         | 12,065.00             | 15,349.94             | 12,109.00             | 86.96            | 71.45         | -100.86               | -4,451.04                           | 1,778.15     | 457.93                 | 349.89                  | 108.05                    | 4.238             |                    |           |
| 15,600.00                         | 12,065.00             | 15,449.94             | 12,109.00             | 88.34            | 72.76         | -100.86               | -4,551.04                           | 1,779.13     | 457.94                 | 348.00                  | 109.94                    | 4.165             |                    |           |
| 15,700.00                         | 12,065.00             | 15,549.94             | 12,109.00             | 89.73            | 74.09         | -100.86               | -4,651.03                           | 1,780.11     | 457.94                 | 346.09                  | 111.85                    | 4.094             |                    |           |
| 15,800.00                         | 12,065.00             | 15,649.94             | 12,109.00             | 91.13            | 75.43         | -100.86               | -4,751.03                           | 1,781.09     | 457.94                 | 344.17                  | 113.77                    | 4.025             |                    |           |
| 15,900.00                         | 12,065.00             | 15,749.94             | 12,109.00             | 92.54            | 76.78         | -100.86               | -4,851.02                           | 1,782.07     | 457.95                 | 342.24                  | 115.71                    | 3.958             |                    |           |
| 16,000.00                         | 12,065.00             | 15,849.94             | 12,109.00             | 93.95            | 78.14         | -100.86               | -4,951.02                           | 1,783.05     | 457.95                 | 340.30                  | 117.65                    | 3.892             |                    |           |
| 16,100.00                         | 12,065.00             | 15,949.94             | 12,109.00             | 95.38            | 79.52         | -100.86               | -5,051.01                           | 1,784.03     | 457.95                 | 338.34                  | 119.61                    | 3.829             |                    |           |
| 16,200.00                         | 12,065.00             | 16,049.94             | 12,109.00             | 96.81            | 80.90         | -100.86               | -5,151.01                           | 1,785.01     | 457.96                 | 336.37                  | 121.58                    | 3.767             |                    |           |
| 16,300.00                         | 12,065.00             | 16,149.94             | 12,109.00             | 98.24            | 82.29         | -100.86               | -5,251.00                           | 1,785.99     | 457.96                 | 334.40                  | 123.56                    | 3.706             |                    |           |
| 16,400.00                         | 12,065.00             | 16,249.94             | 12,109.00             | 99.69            | 83.70         | -100.86               | -5,351.00                           | 1,786.98     | 457.96                 | 332.41                  | 125.55                    | 3.648             |                    |           |
| 16,500.00                         | 12,065.00             | 16,349.94             | 12,109.00             | 101.14           | 85.11         | -100.86               | -5,450.99                           | 1,787.96     | 457.96                 | 330.41                  | 127.55                    | 3.590             |                    |           |
| 16,600.00                         | 12,065.00             | 16,449.94             | 12,109.00             | 102.60           | 86.53         | -100.86               | -5,550.99                           | 1,788.94     | 457.97                 | 328.41                  | 129.56                    | 3.535             |                    |           |
| 16,700.00                         | 12,065.00             | 16,549.94             | 12,109.00             | 104.06           | 87.96         | -100.86               | -5,650.98                           | 1,789.92     | 457.97                 | 326.39                  | 131.58                    | 3.481             |                    |           |
| 16,800.00                         | 12,065.00             | 16,649.94             | 12,109.00             | 105.53           | 89.40         | -100.86               | -5,750.98                           | 1,790.90     | 457.97                 | 324.37                  | 133.60                    | 3.428             |                    |           |
| 16,900.00                         | 12,065.00             | 16,749.94             | 12,109.00             | 107.00           | 90.84         | -100.86               | -5,850.97                           | 1,791.88     | 457.98                 | 322.34                  | 135.63                    | 3.377             |                    |           |
| 17,000.00                         | 12,065.00             | 16,849.94             | 12,109.00             | 108.48           | 92.29         | -100.86               | -5,950.97                           | 1,792.86     | 457.98                 | 320.31                  | 137.67                    | 3.327             |                    |           |
| 17,100.00                         | 12,065.00             | 16,949.94             | 12,109.00             | 109.96           | 93.75         | -100.86               | -6,050.96                           | 1,793.84     | 457.98                 | 318.26                  | 139.72                    | 3.278             |                    |           |
| 17,200.00                         | 12,065.00             | 17,049.94             | 12,109.00             | 111.45           | 95.21         | -100.86               | -6,150.96                           | 1,794.82     | 457.98                 | 316.21                  | 141.77                    | 3.230             |                    |           |
| 17,300.00                         | 12,065.00             | 17,149.94             | 12,109.00             | 112.94           | 96.68         | -100.86               | -6,250.95                           | 1,795.80     | 457.99                 | 314.15                  | 143.83                    | 3.184             |                    |           |
| 17,400.00                         | 12,065.00             | 17,249.94             | 12,109.00             | 114.44           | 98.16         | -100.86               | -6,350.95                           | 1,796.78     | 457.99                 | 312.09                  | 145.90                    | 3.139             |                    |           |
| 17,500.00                         | 12,065.00             | 17,349.94             | 12,109.00             | 115.94           | 99.64         | -100.86               | -6,450.94                           | 1,797.76     | 457.99                 | 310.02                  | 147.97                    | 3.095             |                    |           |
| 17,600.00                         | 12,065.00             | 17,449.94             | 12,109.00             | 117.45           | 101.13        | -100.86               | -6,550.94                           | 1,798.75     | 458.00                 | 307.95                  | 150.05                    | 3.052             |                    |           |
| 17,700.00                         | 12,065.00             | 17,549.94             | 12,109.00             | 118.96           | 102.62        | -100.86               | -6,650.94                           | 1,799.73     | 458.00                 | 305.87                  | 152.13                    | 3.011             |                    |           |
| 17,800.00                         | 12,065.00             | 17,649.94             | 12,109.00             | 120.47           | 104.12        | -100.86               | -6,750.93                           | 1,800.71     | 458.00                 | 303.79                  | 154.21                    | 2.970             |                    |           |
| 17,900.00                         | 12,065.00             | 17,749.94             | 12,109.00             | 121.99           | 105.62        | -100.86               | -6,850.93                           | 1,801.69     | 458.00                 | 301.70                  | 156.31                    | 2.930             |                    |           |
| 18,000.00                         | 12,065.00             | 17,849.94             | 12,109.00             | 123.51           | 107.12        | -100.86               | -6,950.92                           | 1,802.67     | 458.01                 | 299.61                  | 158.40                    | 2.891             |                    |           |
| 18,100.00                         | 12,065.00             | 17,949.94             | 12,109.00             | 125.03           | 108.63        | -100.86               | -7,050.92                           | 1,803.65     | 458.01                 | 297.51                  | 160.50                    | 2.854             |                    |           |
| 18,200.00                         | 12,065.00             | 18,049.94             | 12,109.00             | 126.56           | 110.15        | -100.86               | -7,150.91                           | 1,804.63     | 458.01                 | 295.41                  | 162.61                    | 2.817             |                    |           |
| 18,300.00                         | 12,065.00             | 18,149.94             | 12,109.00             | 128.09           | 111.66        | -100.86               | -7,250.91                           | 1,805.61     | 458.02                 | 293.30                  | 164.71                    | 2.781             |                    |           |
| 18,400.00                         | 12,065.00             | 18,249.94             | 12,109.00             | 129.62           | 113.18        | -100.86               | -7,350.90                           | 1,806.59     | 458.02                 | 291.19                  | 166.83                    | 2.745             |                    |           |
| 18,500.00                         | 12,065.00             | 18,349.94             | 12,109.00             | 131.16           | 114.71        | -100.86               | -7,450.90                           | 1,807.57     | 458.02                 | 289.08                  | 168.94                    | 2.711             |                    |           |
| 18,600.00                         | 12,065.00             | 18,449.94             | 12,109.00             | 132.69           | 116.24        | -100.86               | -7,550.89                           | 1,808.55     | 458.02                 | 286.96                  | 171.06                    | 2.678             |                    |           |
| 18,700.00                         | 12,065.00             | 18,549.94             | 12,109.00             | 134.24           | 117.77        | -100.86               | -7,650.89                           | 1,809.53     | 458.03                 | 284.85                  | 173.18                    | 2.645             |                    |           |
| 18,800.00                         | 12,065.00             | 18,649.94             | 12,109.00             | 135.78           | 119.31        | -100.86               | -7,750.88                           | 1,810.52     | 458.03                 | 282.72                  | 175.31                    | 2.613             |                    |           |
| 18,900.00                         | 12,065.00             | 18,749.94             | 12,109.00             | 137.33           | 120.84        | -100.86               | -7,850.88                           | 1,811.50     | 458.03                 | 280.60                  | 177.44                    | 2.581             |                    |           |
| 19,000.00                         | 12,065.00             | 18,849.94             | 12,109.00             | 138.87           | 122.38        | -100.86               | -7,950.87                           | 1,812.48     | 458.04                 | 278.47                  | 179.57                    | 2.551             |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 704H - OH - Plan #2 |         | Offset Site Error: |  | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|--|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         | 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 |                                                       |         |                    |  |           |
| 19,100.00                         | 12,065.00             | 18,949.94             | 12,109.00             | 140.43           | 123.93        | -100.86               | -8,050.87                           | 1,813.46     | 458.04                 | 276.34                  | 181.70                    | 2.521             |                                                       |         |                    |  |           |
| 19,200.00                         | 12,065.00             | 19,049.94             | 12,109.00             | 141.98           | 125.47        | -100.86               | -8,150.86                           | 1,814.44     | 458.04                 | 274.21                  | 183.83                    | 2.492             |                                                       |         |                    |  |           |
| 19,300.00                         | 12,065.00             | 19,149.94             | 12,109.00             | 143.53           | 127.02        | -100.86               | -8,250.86                           | 1,815.42     | 458.04                 | 272.07                  | 185.97                    | 2.463             |                                                       |         |                    |  |           |
| 19,400.00                         | 12,065.00             | 19,249.94             | 12,109.00             | 145.09           | 128.58        | -100.86               | -8,350.85                           | 1,816.40     | 458.05                 | 269.93                  | 188.11                    | 2.435             |                                                       |         |                    |  |           |
| 19,500.00                         | 12,065.00             | 19,349.94             | 12,109.00             | 146.65           | 130.13        | -100.86               | -8,450.85                           | 1,817.38     | 458.05                 | 267.79                  | 190.26                    | 2.408             |                                                       |         |                    |  |           |
| 19,600.00                         | 12,065.00             | 19,449.94             | 12,109.00             | 148.21           | 131.69        | -100.86               | -8,550.84                           | 1,818.36     | 458.05                 | 265.65                  | 192.40                    | 2.381             |                                                       |         |                    |  |           |
| 19,700.00                         | 12,065.00             | 19,549.94             | 12,109.00             | 149.78           | 133.25        | -100.86               | -8,650.84                           | 1,819.34     | 458.06                 | 263.51                  | 194.55                    | 2.354             |                                                       |         |                    |  |           |
| 19,800.00                         | 12,065.00             | 19,649.94             | 12,109.00             | 151.34           | 134.81        | -100.86               | -8,750.83                           | 1,820.32     | 458.06                 | 261.36                  | 196.69                    | 2.329             |                                                       |         |                    |  |           |
| 19,900.00                         | 12,065.00             | 19,749.94             | 12,109.00             | 152.91           | 136.37        | -100.86               | -8,850.83                           | 1,821.30     | 458.06                 | 259.22                  | 198.84                    | 2.304             |                                                       |         |                    |  |           |
| 20,000.00                         | 12,065.00             | 19,849.94             | 12,109.00             | 154.48           | 137.94        | -100.86               | -8,950.82                           | 1,822.29     | 458.07                 | 257.07                  | 201.00                    | 2.279             |                                                       |         |                    |  |           |
| 20,100.00                         | 12,065.00             | 19,949.94             | 12,109.00             | 156.05           | 139.50        | -100.86               | -9,050.82                           | 1,823.27     | 458.07                 | 254.92                  | 203.15                    | 2.255             |                                                       |         |                    |  |           |
| 20,200.00                         | 12,065.00             | 20,049.94             | 12,109.00             | 157.62           | 141.07        | -100.86               | -9,150.82                           | 1,824.25     | 458.07                 | 252.77                  | 205.30                    | 2.231             |                                                       |         |                    |  |           |
| 20,300.00                         | 12,065.00             | 20,149.94             | 12,109.00             | 159.20           | 142.64        | -100.86               | -9,250.81                           | 1,825.23     | 458.07                 | 250.61                  | 207.46                    | 2.208             |                                                       |         |                    |  |           |
| 20,400.00                         | 12,065.00             | 20,249.94             | 12,109.00             | 160.77           | 144.22        | -100.86               | -9,350.81                           | 1,826.21     | 458.08                 | 248.46                  | 209.62                    | 2.185             |                                                       |         |                    |  |           |
| 20,500.00                         | 12,065.00             | 20,349.94             | 12,109.00             | 162.35           | 145.79        | -100.86               | -9,450.80                           | 1,827.19     | 458.08                 | 246.30                  | 211.77                    | 2.163             |                                                       |         |                    |  |           |
| 20,600.00                         | 12,065.00             | 20,449.94             | 12,109.00             | 163.93           | 147.37        | -100.86               | -9,550.80                           | 1,828.17     | 458.08                 | 244.15                  | 213.93                    | 2.141             |                                                       |         |                    |  |           |
| 20,700.00                         | 12,065.00             | 20,549.94             | 12,109.00             | 165.51           | 148.94        | -100.86               | -9,650.79                           | 1,829.15     | 458.09                 | 241.99                  | 216.09                    | 2.120             |                                                       |         |                    |  |           |
| 20,800.00                         | 12,065.00             | 20,649.94             | 12,109.00             | 167.09           | 150.52        | -100.86               | -9,750.79                           | 1,830.13     | 458.09                 | 239.83                  | 218.26                    | 2.099             |                                                       |         |                    |  |           |
| 20,900.00                         | 12,065.00             | 20,749.94             | 12,109.00             | 168.67           | 152.10        | -100.86               | -9,850.78                           | 1,831.11     | 458.09                 | 237.67                  | 220.42                    | 2.078             |                                                       |         |                    |  |           |
| 21,000.00                         | 12,065.00             | 20,849.94             | 12,109.00             | 170.26           | 153.69        | -100.86               | -9,950.78                           | 1,832.09     | 458.09                 | 235.51                  | 222.58                    | 2.058             |                                                       |         |                    |  |           |
| 21,100.00                         | 12,065.00             | 20,949.94             | 12,109.00             | 171.84           | 155.27        | -100.86               | -10,050.77                          | 1,833.07     | 458.10                 | 233.35                  | 224.75                    | 2.038             |                                                       |         |                    |  |           |
| 21,200.00                         | 12,065.00             | 21,049.94             | 12,109.00             | 173.43           | 156.86        | -100.86               | -10,150.77                          | 1,834.06     | 458.10                 | 231.19                  | 226.91                    | 2.019             |                                                       |         |                    |  |           |
| 21,300.00                         | 12,065.00             | 21,149.94             | 12,109.00             | 175.02           | 158.44        | -100.86               | -10,250.76                          | 1,835.04     | 458.10                 | 229.03                  | 229.07                    | 2.000             |                                                       |         |                    |  |           |
| 21,400.00                         | 12,065.00             | 21,249.94             | 12,109.00             | 176.60           | 160.03        | -100.86               | -10,350.76                          | 1,836.02     | 458.11                 | 226.87                  | 231.24                    | 1.981             |                                                       |         |                    |  |           |
| 21,500.00                         | 12,065.00             | 21,349.94             | 12,109.00             | 178.19           | 161.62        | -100.86               | -10,450.75                          | 1,837.00     | 458.11                 | 224.70                  | 233.41                    | 1.963             |                                                       |         |                    |  |           |
| 21,600.00                         | 12,065.00             | 21,449.94             | 12,109.00             | 179.79           | 163.21        | -100.86               | -10,550.75                          | 1,837.98     | 458.11                 | 222.54                  | 235.57                    | 1.945             |                                                       |         |                    |  |           |
| 21,700.00                         | 12,065.00             | 21,549.94             | 12,109.00             | 181.38           | 164.80        | -100.86               | -10,650.74                          | 1,838.96     | 458.11                 | 220.37                  | 237.74                    | 1.927             |                                                       |         |                    |  |           |
| 21,800.00                         | 12,065.00             | 21,649.94             | 12,109.00             | 182.97           | 166.40        | -100.86               | -10,750.74                          | 1,839.94     | 458.12                 | 218.21                  | 239.91                    | 1.910             |                                                       |         |                    |  |           |
| 21,900.00                         | 12,065.00             | 21,749.94             | 12,109.00             | 184.57           | 167.99        | -100.86               | -10,850.73                          | 1,840.92     | 458.12                 | 216.05                  | 242.07                    | 1.892             |                                                       |         |                    |  |           |
| 22,000.00                         | 12,065.00             | 21,849.94             | 12,109.00             | 186.16           | 169.58        | -100.86               | -10,950.73                          | 1,841.90     | 458.12                 | 213.88                  | 244.24                    | 1.876             |                                                       |         |                    |  |           |
| 22,100.00                         | 12,065.00             | 21,949.94             | 12,109.00             | 187.76           | 171.18        | -100.86               | -11,050.72                          | 1,842.88     | 458.13                 | 211.72                  | 246.41                    | 1.859             |                                                       |         |                    |  |           |
| 22,200.00                         | 12,065.00             | 22,049.94             | 12,109.00             | 189.36           | 172.78        | -100.86               | -11,150.72                          | 1,843.86     | 458.13                 | 209.55                  | 248.58                    | 1.843             |                                                       |         |                    |  |           |
| 22,300.00                         | 12,065.00             | 22,149.94             | 12,109.00             | 190.95           | 174.38        | -100.86               | -11,250.71                          | 1,844.84     | 458.13                 | 207.39                  | 250.74                    | 1.827             |                                                       |         |                    |  |           |
| 22,400.00                         | 12,065.00             | 22,249.94             | 12,109.00             | 192.55           | 175.98        | -100.86               | -11,350.71                          | 1,845.83     | 458.13                 | 205.22                  | 252.91                    | 1.811             |                                                       |         |                    |  |           |
| 22,445.57                         | 12,065.00             | 22,295.51             | 12,109.00             | 193.28           | 176.70        | -100.86               | -11,396.28                          | 1,846.27     | 458.14                 | 204.24                  | 253.90                    | 1.804 ES, SF      |                                                       |         |                    |  |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                | Tatanka Fed Com - Tatanka Fed Com 705H - OH - Plan #2 |                |                 |        |                   |                        |                 |                  |                    |                   |           | Offset Site Error: 0.00 usft |  |
|-----------------------------------|----------------|-------------------------------------------------------|----------------|-----------------|--------|-------------------|------------------------|-----------------|------------------|--------------------|-------------------|-----------|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                |                                                       |                |                 |        |                   |                        |                 |                  |                    |                   |           | 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)            |           |                              |  |
| 0.00                              | 0.00           | 0.00                                                  | 0.00           | 0.00            | 0.00   | 111.39            | -992.59                | 2,533.58        | 2,721.43         |                    |                   |           |                              |  |
| 100.00                            | 100.00         | 55.90                                                 | 55.90          | 0.13            | 0.07   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,720.93           | 0.14              | N/A       |                              |  |
| 200.00                            | 200.00         | 155.90                                                | 155.90         | 0.48            | 0.33   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,720.49           | 0.58              | 4,664.048 |                              |  |
| 300.00                            | 300.00         | 255.90                                                | 255.90         | 0.84            | 0.68   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,719.99           | 1.09              | 2,507.135 |                              |  |
| 400.00                            | 400.00         | 355.90                                                | 355.90         | 1.20            | 1.04   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,719.49           | 1.59              | 1,710.885 |                              |  |
| 500.00                            | 500.00         | 455.90                                                | 455.90         | 1.56            | 1.40   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,718.98           | 2.10              | 1,297.943 |                              |  |
| 600.00                            | 600.00         | 555.90                                                | 555.90         | 1.92            | 1.76   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,718.47           | 2.60              | 1,045.431 |                              |  |
| 700.00                            | 700.00         | 655.90                                                | 655.90         | 2.28            | 2.12   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,717.97           | 3.11              | 875.115   |                              |  |
| 800.00                            | 800.00         | 755.90                                                | 755.90         | 2.63            | 2.48   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,717.46           | 3.62              | 752.497   |                              |  |
| 900.00                            | 900.00         | 855.90                                                | 855.90         | 2.99            | 2.84   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,716.95           | 4.12              | 660.006   |                              |  |
| 1,000.00                          | 1,000.00       | 955.90                                                | 955.90         | 3.35            | 3.19   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,716.45           | 4.63              | 587.757   |                              |  |
| 1,100.00                          | 1,100.00       | 1,055.90                                              | 1,055.90       | 3.71            | 3.55   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,715.94           | 5.14              | 529.761   |                              |  |
| 1,200.00                          | 1,200.00       | 1,155.90                                              | 1,155.90       | 4.07            | 3.91   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,715.43           | 5.64              | 482.181   |                              |  |
| 1,300.00                          | 1,300.00       | 1,255.90                                              | 1,255.90       | 4.43            | 4.27   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,714.93           | 6.15              | 442.442   |                              |  |
| 1,400.00                          | 1,400.00       | 1,355.90                                              | 1,355.90       | 4.79            | 4.63   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,714.42           | 6.66              | 408.754   |                              |  |
| 1,500.00                          | 1,500.00       | 1,455.90                                              | 1,455.90       | 5.14            | 4.99   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,713.91           | 7.16              | 379.832   |                              |  |
| 1,600.00                          | 1,600.00       | 1,555.90                                              | 1,555.90       | 5.50            | 5.34   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,713.41           | 7.67              | 354.732   |                              |  |
| 1,700.00                          | 1,700.00       | 1,655.90                                              | 1,655.90       | 5.86            | 5.70   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,712.90           | 8.18              | 332.744   |                              |  |
| 1,800.00                          | 1,800.00       | 1,755.90                                              | 1,755.90       | 6.22            | 6.06   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,712.39           | 8.68              | 313.322   |                              |  |
| 1,900.00                          | 1,900.00       | 1,855.90                                              | 1,855.90       | 6.58            | 6.42   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,711.89           | 9.19              | 296.042   |                              |  |
| 2,000.00                          | 2,000.00       | 1,955.90                                              | 1,955.90       | 6.94            | 6.78   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,711.38           | 9.70              | 280.568   |                              |  |
| 2,100.00                          | 2,100.00       | 2,055.90                                              | 2,055.90       | 7.29            | 7.14   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,710.87           | 10.21             | 266.632   |                              |  |
| 2,200.00                          | 2,200.00       | 2,155.90                                              | 2,155.90       | 7.65            | 7.50   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,710.37           | 10.71             | 254.014   |                              |  |
| 2,300.00                          | 2,300.00       | 2,255.90                                              | 2,255.90       | 8.01            | 7.85   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,709.86           | 11.22             | 242.537   |                              |  |
| 2,400.00                          | 2,400.00       | 2,355.90                                              | 2,355.90       | 8.37            | 8.21   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,709.35           | 11.73             | 232.052   |                              |  |
| 2,500.00                          | 2,500.00       | 2,455.90                                              | 2,455.90       | 8.73            | 8.57   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,708.84           | 12.23             | 222.436   |                              |  |
| 2,600.00                          | 2,600.00       | 2,555.90                                              | 2,555.90       | 9.09            | 8.93   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,708.34           | 12.74             | 213.585   |                              |  |
| 2,700.00                          | 2,700.00       | 2,655.90                                              | 2,655.90       | 9.45            | 9.29   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,707.83           | 13.25             | 205.411   |                              |  |
| 2,800.00                          | 2,800.00       | 2,755.90                                              | 2,755.90       | 9.80            | 9.65   | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,707.32           | 13.75             | 197.840   |                              |  |
| 2,900.00                          | 2,900.00       | 2,855.90                                              | 2,855.90       | 10.16           | 10.00  | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,706.82           | 14.26             | 190.808   |                              |  |
| 3,000.00                          | 3,000.00       | 2,955.90                                              | 2,955.90       | 10.52           | 10.36  | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,706.31           | 14.77             | 184.258   |                              |  |
| 3,100.00                          | 3,100.00       | 3,055.90                                              | 3,055.90       | 10.88           | 10.72  | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,705.80           | 15.27             | 178.143   |                              |  |
| 3,200.00                          | 3,200.00       | 3,155.90                                              | 3,155.90       | 11.24           | 11.08  | 111.39            | -992.59                | 2,533.58        | 2,721.08         | 2,705.30           | 15.78             | 172.420   |                              |  |
| 3,300.00                          | 3,299.99       | 3,255.89                                              | 3,255.89       | 11.58           | 11.44  | -17.28            | -992.59                | 2,533.58        | 2,719.83         | 2,703.55           | 16.28             | 167.087   |                              |  |
| 3,400.00                          | 3,399.91       | 3,332.66                                              | 3,332.66       | 11.91           | 11.71  | -17.31            | -992.63                | 2,533.71        | 2,716.32         | 2,699.61           | 16.70             | 162.627   |                              |  |
| 3,500.00                          | 3,499.69       | 3,400.00                                              | 3,399.99       | 12.25           | 11.94  | -17.36            | -992.97                | 2,534.83        | 2,711.71         | 2,694.61           | 17.10             | 158.580   |                              |  |
| 3,600.00                          | 3,599.27       | 3,449.58                                              | 3,449.54       | 12.58           | 12.11  | -17.42            | -993.44                | 2,536.38        | 2,706.08         | 2,688.64           | 17.45             | 155.109   |                              |  |
| 3,700.00                          | 3,698.57       | 3,500.00                                              | 3,499.91       | 12.92           | 12.28  | -17.49            | -994.11                | 2,538.59        | 2,699.54         | 2,681.75           | 17.79             | 151.732   |                              |  |
| 3,800.00                          | 3,797.54       | 3,566.50                                              | 3,566.28       | 13.27           | 12.51  | -17.59            | -995.28                | 2,542.47        | 2,691.99         | 2,673.81           | 18.18             | 148.099   |                              |  |
| 3,900.00                          | 3,896.09       | 3,624.95                                              | 3,624.56       | 13.62           | 12.71  | -17.70            | -996.59                | 2,546.80        | 2,683.50         | 2,664.96           | 18.54             | 144.744   |                              |  |
| 4,000.00                          | 3,994.16       | 3,700.00                                              | 3,699.27       | 13.98           | 12.96  | -17.86            | -998.66                | 2,553.61        | 2,674.15         | 2,655.20           | 18.95             | 141.133   |                              |  |
| 4,100.00                          | 4,091.70       | 3,741.83                                              | 3,740.85       | 14.35           | 13.11  | -17.97            | -999.99                | 2,558.01        | 2,663.67         | 2,644.41           | 19.26             | 138.296   |                              |  |
| 4,200.00                          | 4,188.62       | 3,800.00                                              | 3,798.57       | 14.74           | 13.31  | -18.13            | -1,002.06              | 2,564.86        | 2,652.34         | 2,632.73           | 19.62             | 135.195   |                              |  |
| 4,300.00                          | 4,284.86       | 3,885.64                                              | 3,883.43       | 15.14           | 13.61  | -18.37            | -1,005.42              | 2,575.92        | 2,639.75         | 2,619.69           | 20.06             | 131.590   |                              |  |
| 4,400.00                          | 4,380.36       | 3,983.99                                              | 3,980.87       | 15.55           | 13.96  | -18.67            | -1,009.28              | 2,588.69        | 2,624.81         | 2,604.27           | 20.54             | 127.763   |                              |  |
| 4,452.43                          | 4,430.11       | 4,035.36                                              | 4,031.77       | 15.78           | 14.14  | -18.83            | -1,011.30              | 2,595.35        | 2,616.02         | 2,595.22           | 20.80             | 125.774   |                              |  |
| 4,500.00                          | 4,475.14       | 4,081.91                                              | 4,077.89       | 15.99           | 14.31  | -18.95            | -1,013.13              | 2,601.39        | 2,607.75         | 2,586.72           | 21.03             | 123.994   |                              |  |
| 4,600.00                          | 4,569.82       | 4,179.77                                              | 4,174.84       | 16.44           | 14.66  | -19.20            | -1,016.98              | 2,614.09        | 2,590.39         | 2,568.87           | 21.52             | 120.361   |                              |  |
| 4,700.00                          | 4,664.49       | 4,277.62                                              | 4,271.79       | 16.91           | 15.02  | -19.45            | -1,020.82              | 2,626.79        | 2,573.08         | 2,551.07           | 22.02             | 116.867   |                              |  |
| 4,800.00                          | 4,759.16       | 4,375.47                                              | 4,368.74       | 17.39           | 15.37  | -19.70            | -1,024.67              | 2,639.49        | 2,555.83         | 2,533.31           | 22.52             | 113.506   |                              |  |
| 4,900.00                          | 4,853.84       | 4,473.32                                              | 4,465.69       | 17.87           | 15.74  | -19.96            | -1,028.52              | 2,652.19        | 2,538.62         | 2,515.60           | 23.02             | 110.271   |                              |  |
| 5,000.00                          | 4,948.51       | 4,571.18                                              | 4,562.63       | 18.37           | 16.10  | -20.22            | -1,032.37              | 2,664.89        | 2,521.46         | 2,497.93           | 23.53             | 107.158   |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,669.03              | 4,659.58              | 18.88            | 16.47         | -20.48                | -1,036.21                           | 2,677.59     | 2,504.36               | 2,480.32                | 24.04                     | 104.161           |                    |           |
| 5,200.00                          | 5,137.85              | 4,766.88              | 4,756.53              | 19.39            | 16.83         | -20.75                | -1,040.06                           | 2,690.29     | 2,487.31               | 2,462.75                | 24.56                     | 101.275           |                    |           |
| 5,300.00                          | 5,232.53              | 4,864.74              | 4,853.48              | 19.92            | 17.20         | -21.02                | -1,043.91                           | 2,702.99     | 2,470.31               | 2,445.23                | 25.08                     | 98.495            |                    |           |
| 5,400.00                          | 5,327.20              | 4,962.59              | 4,950.43              | 20.45            | 17.58         | -21.30                | -1,047.75                           | 2,715.69     | 2,453.37               | 2,427.76                | 25.60                     | 95.816            |                    |           |
| 5,500.00                          | 5,421.87              | 5,060.44              | 5,047.38              | 20.99            | 17.95         | -21.58                | -1,051.60                           | 2,728.39     | 2,436.48               | 2,410.35                | 26.13                     | 93.234            |                    |           |
| 5,600.00                          | 5,516.54              | 5,158.29              | 5,144.33              | 21.53            | 18.32         | -21.86                | -1,055.45                           | 2,741.09     | 2,419.66               | 2,392.99                | 26.66                     | 90.743            |                    |           |
| 5,700.00                          | 5,611.22              | 5,256.15              | 5,241.28              | 22.08            | 18.70         | -22.15                | -1,059.29                           | 2,753.79     | 2,402.89               | 2,375.69                | 27.20                     | 88.341            |                    |           |
| 5,800.00                          | 5,705.89              | 5,354.00              | 5,338.22              | 22.63            | 19.08         | -22.44                | -1,063.14                           | 2,766.49     | 2,386.18               | 2,358.44                | 27.74                     | 86.023            |                    |           |
| 5,900.00                          | 5,800.56              | 5,451.85              | 5,435.17              | 23.19            | 19.46         | -22.73                | -1,066.99                           | 2,779.19     | 2,369.53               | 2,341.25                | 28.28                     | 83.785            |                    |           |
| 6,000.00                          | 5,895.23              | 5,549.70              | 5,532.12              | 23.76            | 19.84         | -23.03                | -1,070.83                           | 2,791.89     | 2,352.95               | 2,324.12                | 28.83                     | 81.624            |                    |           |
| 6,100.00                          | 5,989.91              | 5,647.56              | 5,629.07              | 24.33            | 20.22         | -23.34                | -1,074.68                           | 2,804.59     | 2,336.43               | 2,307.05                | 29.38                     | 79.536            |                    |           |
| 6,200.00                          | 6,084.58              | 5,745.41              | 5,726.02              | 24.90            | 20.60         | -23.64                | -1,078.53                           | 2,817.29     | 2,319.98               | 2,290.05                | 29.93                     | 77.518            |                    |           |
| 6,300.00                          | 6,179.25              | 5,843.26              | 5,822.97              | 25.48            | 20.99         | -23.95                | -1,082.37                           | 2,829.99     | 2,303.59               | 2,273.10                | 30.48                     | 75.568            |                    |           |
| 6,400.00                          | 6,273.92              | 5,941.11              | 5,919.92              | 26.05            | 21.37         | -24.27                | -1,086.22                           | 2,842.68     | 2,287.27               | 2,256.23                | 31.04                     | 73.682            |                    |           |
| 6,500.00                          | 6,368.60              | 6,038.97              | 6,016.86              | 26.64            | 21.76         | -24.59                | -1,090.07                           | 2,855.38     | 2,271.02               | 2,239.41                | 31.60                     | 71.857            |                    |           |
| 6,600.00                          | 6,463.27              | 6,136.82              | 6,113.81              | 27.22            | 22.14         | -24.92                | -1,093.91                           | 2,868.08     | 2,254.84               | 2,222.67                | 32.17                     | 70.090            |                    |           |
| 6,700.00                          | 6,557.94              | 6,234.67              | 6,210.76              | 27.81            | 22.53         | -25.25                | -1,097.76                           | 2,880.78     | 2,238.74               | 2,206.00                | 32.74                     | 68.380            |                    |           |
| 6,800.00                          | 6,652.61              | 6,332.52              | 6,307.71              | 28.40            | 22.92         | -25.58                | -1,101.61                           | 2,893.48     | 2,222.71               | 2,189.40                | 33.31                     | 66.724            |                    |           |
| 6,900.00                          | 6,747.29              | 6,430.38              | 6,404.66              | 29.00            | 23.31         | -25.92                | -1,105.45                           | 2,906.18     | 2,206.75               | 2,172.87                | 33.89                     | 65.120            |                    |           |
| 7,000.00                          | 6,841.96              | 6,528.23              | 6,501.61              | 29.59            | 23.70         | -26.26                | -1,109.30                           | 2,918.88     | 2,190.88               | 2,156.41                | 34.47                     | 63.565            |                    |           |
| 7,100.00                          | 6,936.63              | 6,626.08              | 6,598.56              | 30.19            | 24.09         | -26.61                | -1,113.15                           | 2,931.58     | 2,175.08               | 2,140.03                | 35.05                     | 62.058            |                    |           |
| 7,200.00                          | 7,031.30              | 6,723.93              | 6,695.51              | 30.79            | 24.48         | -26.97                | -1,116.99                           | 2,944.28     | 2,159.36               | 2,123.73                | 35.64                     | 60.597            |                    |           |
| 7,300.00                          | 7,125.98              | 6,821.79              | 6,792.45              | 31.40            | 24.87         | -27.32                | -1,120.84                           | 2,956.98     | 2,143.73               | 2,107.51                | 36.22                     | 59.179            |                    |           |
| 7,400.00                          | 7,220.65              | 6,919.64              | 6,889.40              | 32.00            | 25.27         | -27.69                | -1,124.69                           | 2,969.68     | 2,128.18               | 2,091.36                | 36.82                     | 57.803            |                    |           |
| 7,500.00                          | 7,315.32              | 7,022.83              | 6,991.64              | 32.61            | 25.68         | -28.08                | -1,128.74                           | 2,983.06     | 2,112.71               | 2,075.29                | 37.43                     | 56.446            |                    |           |
| 7,600.00                          | 7,409.99              | 7,237.81              | 7,205.40              | 33.21            | 26.51         | -28.93                | -1,135.29                           | 3,004.69     | 2,094.36               | 2,056.06                | 38.30                     | 54.681            |                    |           |
| 7,700.00                          | 7,504.67              | 7,447.30              | 7,414.61              | 33.82            | 27.27         | -29.83                | -1,138.31                           | 3,014.67     | 2,070.76               | 2,031.70                | 39.06                     | 53.009            |                    |           |
| 7,800.00                          | 7,599.34              | 7,587.94              | 7,555.24              | 34.43            | 27.75         | -30.49                | -1,138.59                           | 3,015.58     | 2,043.01               | 2,003.32                | 39.69                     | 51.470            |                    |           |
| 7,900.00                          | 7,694.01              | 7,682.61              | 7,649.91              | 35.05            | 28.07         | -30.95                | -1,138.59                           | 3,015.58     | 2,014.95               | 1,974.66                | 40.28                     | 50.018            |                    |           |
| 8,000.00                          | 7,788.68              | 7,777.29              | 7,744.58              | 35.66            | 28.39         | -31.42                | -1,138.59                           | 3,015.58     | 1,987.00               | 1,946.12                | 40.88                     | 48.604            |                    |           |
| 8,100.00                          | 7,883.36              | 7,871.96              | 7,839.26              | 36.28            | 28.70         | -31.90                | -1,138.59                           | 3,015.58     | 1,959.19               | 1,917.71                | 41.48                     | 47.229            |                    |           |
| 8,200.00                          | 7,978.03              | 7,966.63              | 7,933.93              | 36.89            | 29.02         | -32.40                | -1,138.59                           | 3,015.58     | 1,931.52               | 1,889.43                | 42.09                     | 45.890            |                    |           |
| 8,300.00                          | 8,072.70              | 8,061.30              | 8,028.60              | 37.51            | 29.34         | -32.91                | -1,138.59                           | 3,015.58     | 1,903.98               | 1,861.28                | 42.70                     | 44.587            |                    |           |
| 8,400.00                          | 8,167.37              | 8,155.98              | 8,123.27              | 38.13            | 29.66         | -33.44                | -1,138.59                           | 3,015.58     | 1,876.60               | 1,833.28                | 43.32                     | 43.318            |                    |           |
| 8,500.00                          | 8,262.05              | 8,250.65              | 8,217.95              | 38.75            | 29.99         | -33.98                | -1,138.59                           | 3,015.58     | 1,849.37               | 1,805.42                | 43.95                     | 42.083            |                    |           |
| 8,600.00                          | 8,356.72              | 8,345.32              | 8,312.62              | 39.37            | 30.31         | -34.53                | -1,138.59                           | 3,015.58     | 1,822.30               | 1,777.73                | 44.58                     | 40.880            |                    |           |
| 8,700.00                          | 8,451.39              | 8,439.99              | 8,407.29              | 39.99            | 30.63         | -35.11                | -1,138.59                           | 3,015.58     | 1,795.41               | 1,750.19                | 45.21                     | 39.709            |                    |           |
| 8,800.00                          | 8,546.07              | 8,534.67              | 8,501.97              | 40.61            | 30.95         | -35.70                | -1,138.59                           | 3,015.58     | 1,768.69               | 1,722.83                | 45.86                     | 38.568            |                    |           |
| 8,875.44                          | 8,617.48              | 8,606.08              | 8,573.38              | 41.08            | 31.19         | -36.15                | -1,138.59                           | 3,015.58     | 1,748.65               | 1,702.30                | 46.35                     | 37.727            |                    |           |
| 8,900.00                          | 8,640.90              | 8,629.50              | 8,596.80              | 41.23            | 31.27         | -35.92                | -1,138.59                           | 3,015.58     | 1,742.56               | 1,696.06                | 46.51                     | 37.469            |                    |           |
| 8,950.00                          | 8,689.44              | 8,678.04              | 8,645.34              | 41.49            | 31.44         | -35.57                | -1,138.59                           | 3,015.58     | 1,732.77               | 1,685.96                | 46.81                     | 37.017            |                    |           |
| 9,000.00                          | 8,738.83              | 8,727.43              | 8,694.73              | 41.70            | 31.61         | -35.35                | -1,138.59                           | 3,015.58     | 1,726.49               | 1,679.40                | 47.09                     | 36.665            |                    |           |
| 9,050.00                          | 8,788.70              | 8,777.30              | 8,744.60              | 41.87            | 31.78         | -35.25                | -1,138.59                           | 3,015.58     | 1,723.76               | 1,676.42                | 47.34                     | 36.414            |                    |           |
| 9,063.30                          | 8,802.00              | 8,790.60              | 8,757.90              | 41.91            | 31.82         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,676.24                | 47.40                     | 36.365            |                    |           |
| 9,100.00                          | 8,838.70              | 8,827.30              | 8,794.60              | 42.00            | 31.95         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,676.07                | 47.56                     | 36.239            |                    |           |
| 9,200.00                          | 8,938.70              | 8,927.30              | 8,894.60              | 42.26            | 32.29         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,675.63                | 48.01                     | 35.902            |                    |           |
| 9,300.00                          | 9,038.70              | 9,027.30              | 8,994.60              | 42.51            | 32.63         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,675.18                | 48.46                     | 35.570            |                    |           |
| 9,400.00                          | 9,138.70              | 9,127.30              | 9,094.60              | 42.77            | 32.98         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,674.73                | 48.91                     | 35.243            |                    |           |
| 9,500.00                          | 9,238.70              | 9,227.30              | 9,194.60              | 43.03            | 33.32         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,674.28                | 49.36                     | 34.921            |                    |           |
| 9,600.00                          | 9,338.70              | 9,327.30              | 9,294.60              | 43.30            | 33.66         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,673.83                | 49.81                     | 34.605            |                    |           |
| 9,700.00                          | 9,438.70              | 9,427.30              | 9,394.60              | 43.56            | 34.00         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,673.37                | 50.26                     | 34.293            |                    |           |
| 9,800.00                          | 9,538.70              | 9,527.30              | 9,494.60              | 43.82            | 34.35         | -93.41                | -1,138.59                           | 3,015.58     | 1,723.64               | 1,672.92                | 50.72                     | 33.986            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design         |                       | Tatanka Fed Com - Tatanka Fed Com 705H - OH - Plan #2 |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------|-----------------------|-------------------------------------------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program:       |                       | 0-OWSG (Rev2) MWD                                     |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,900.00              | 9,638.70              | 9,627.30                                              | 9,594.60              | 44.09            | 34.69         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,672.47                | 51.17                     | 33.684            |                    |           |
| 10,000.00             | 9,738.70              | 9,727.30                                              | 9,694.60              | 44.36            | 35.04         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,672.01                | 51.63                     | 33.387            |                    |           |
| 10,100.00             | 9,838.70              | 9,827.30                                              | 9,794.60              | 44.63            | 35.38         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,671.55                | 52.08                     | 33.094            |                    |           |
| 10,200.00             | 9,938.70              | 9,927.30                                              | 9,894.60              | 44.90            | 35.73         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,671.10                | 52.54                     | 32.806            |                    |           |
| 10,300.00             | 10,038.70             | 10,027.30                                             | 9,994.60              | 45.17            | 36.07         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,670.64                | 53.00                     | 32.522            |                    |           |
| 10,400.00             | 10,138.70             | 10,127.30                                             | 10,094.60             | 45.44            | 36.42         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,670.18                | 53.46                     | 32.243            |                    |           |
| 10,500.00             | 10,238.70             | 10,227.30                                             | 10,194.60             | 45.71            | 36.76         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,669.72                | 53.92                     | 31.968            |                    |           |
| 10,600.00             | 10,338.70             | 10,327.30                                             | 10,294.60             | 45.99            | 37.11         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,669.26                | 54.38                     | 31.697            |                    |           |
| 10,700.00             | 10,438.70             | 10,427.30                                             | 10,394.60             | 46.26            | 37.45         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,668.79                | 54.84                     | 31.430            |                    |           |
| 10,800.00             | 10,538.70             | 10,527.30                                             | 10,494.60             | 46.54            | 37.80         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,668.33                | 55.30                     | 31.167            |                    |           |
| 10,900.00             | 10,638.70             | 10,627.30                                             | 10,594.60             | 46.82            | 38.15         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,667.87                | 55.77                     | 30.908            |                    |           |
| 11,000.00             | 10,738.70             | 10,727.30                                             | 10,694.60             | 47.10            | 38.49         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,667.40                | 56.23                     | 30.653            |                    |           |
| 11,100.00             | 10,838.70             | 10,827.30                                             | 10,794.60             | 47.38            | 38.84         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,666.94                | 56.70                     | 30.401            |                    |           |
| 11,200.00             | 10,938.70             | 10,927.30                                             | 10,894.60             | 47.66            | 39.19         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,666.47                | 57.16                     | 30.154            |                    |           |
| 11,300.00             | 11,038.70             | 11,027.30                                             | 10,994.60             | 47.94            | 39.54         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,666.01                | 57.63                     | 29.910            |                    |           |
| 11,400.00             | 11,138.70             | 11,127.30                                             | 11,094.60             | 48.22            | 39.88         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,665.54                | 58.09                     | 29.669            |                    |           |
| 11,500.00             | 11,238.70             | 11,227.30                                             | 11,194.60             | 48.51            | 40.23         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,665.07                | 58.56                     | 29.432            |                    |           |
| 11,600.00             | 11,338.70             | 11,327.30                                             | 11,294.60             | 48.79            | 40.58         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,664.61                | 59.03                     | 29.199            |                    |           |
| 11,700.00             | 11,438.70             | 11,427.30                                             | 11,394.60             | 49.08            | 40.93         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,664.14                | 59.50                     | 28.969            |                    |           |
| 11,753.34             | 11,492.04             | 11,480.64                                             | 11,447.94             | 49.23            | 41.11         | 93.41                 | -1,138.59                           | 3,015.58     | 1,723.64               | 1,663.89                | 59.75                     | 28.847            |                    |           |
| 11,800.00             | 11,538.65             | 11,519.62                                             | 11,486.89             | 49.37            | 41.24         | -86.04                | -1,139.78                           | 3,015.59     | 1,723.60               | 1,663.63                | 59.97                     | 28.740            |                    |           |
| 11,850.00             | 11,588.24             | 11,561.04                                             | 11,528.10             | 49.55            | 41.38         | -86.09                | -1,143.93                           | 3,015.63     | 1,723.52               | 1,663.29                | 60.23                     | 28.617            |                    |           |
| 11,900.00             | 11,637.10             | 11,600.00                                             | 11,566.48             | 49.74            | 41.51         | -86.15                | -1,150.55                           | 3,015.70     | 1,723.39               | 1,662.89                | 60.50                     | 28.485            |                    |           |
| 11,950.00             | 11,684.86             | 11,644.15                                             | 11,609.32             | 49.95            | 41.66         | -86.25                | -1,161.17                           | 3,015.80     | 1,723.21               | 1,662.41                | 60.79                     | 28.345            |                    |           |
| 12,000.00             | 11,731.15             | 11,685.91                                             | 11,648.98             | 50.18            | 41.80         | -86.36                | -1,174.23                           | 3,015.93     | 1,722.99               | 1,661.88                | 61.11                     | 28.197            |                    |           |
| 12,050.00             | 11,775.62             | 11,727.86                                             | 11,687.75             | 50.42            | 41.94         | -86.50                | -1,190.23                           | 3,016.09     | 1,722.73               | 1,661.29                | 61.43                     | 28.042            |                    |           |
| 12,100.00             | 11,817.93             | 11,770.03                                             | 11,725.44             | 50.68            | 42.08         | -86.67                | -1,209.12                           | 3,016.27     | 1,722.44               | 1,660.66                | 61.78                     | 27.880            |                    |           |
| 12,150.00             | 11,857.76             | 11,812.47                                             | 11,761.87             | 50.96            | 42.21         | -86.85                | -1,230.87                           | 3,016.48     | 1,722.13               | 1,659.98                | 62.14                     | 27.713            |                    |           |
| 12,200.00             | 11,894.81             | 11,855.22                                             | 11,796.83             | 51.25            | 42.35         | -87.06                | -1,255.45                           | 3,016.73     | 1,721.80               | 1,659.28                | 62.52                     | 27.540            |                    |           |
| 12,250.00             | 11,928.80             | 11,900.00                                             | 11,831.38             | 51.56            | 42.49         | -87.30                | -1,283.92                           | 3,017.01     | 1,721.46               | 1,658.55                | 62.91                     | 27.364            |                    |           |
| 12,300.00             | 11,959.45             | 11,941.80                                             | 11,861.54             | 51.87            | 42.62         | -87.53                | -1,312.86                           | 3,017.29     | 1,721.13               | 1,657.81                | 63.32                     | 27.181            |                    |           |
| 12,350.00             | 11,986.56             | 11,985.73                                             | 11,890.87             | 52.20            | 42.76         | -87.80                | -1,345.55                           | 3,017.61     | 1,720.81               | 1,657.06                | 63.74                     | 26.997            |                    |           |
| 12,400.00             | 12,009.90             | 12,030.15                                             | 11,917.89             | 52.55            | 42.90         | -88.08                | -1,380.78                           | 3,017.95     | 1,720.50               | 1,656.33                | 64.17                     | 26.811            |                    |           |
| 12,450.00             | 12,029.29             | 12,075.10                                             | 11,942.37             | 52.90            | 43.05         | -88.37                | -1,418.47                           | 3,018.32     | 1,720.22               | 1,655.61                | 64.61                     | 26.624            |                    |           |
| 12,500.00             | 12,044.60             | 12,120.65                                             | 11,964.09             | 53.26            | 43.20         | -88.67                | -1,458.48                           | 3,018.72     | 1,719.98               | 1,654.92                | 65.06                     | 26.437            |                    |           |
| 12,550.00             | 12,055.70             | 12,166.83                                             | 11,982.80             | 53.63            | 43.37         | -88.99                | -1,500.69                           | 3,019.13     | 1,719.78               | 1,654.27                | 65.51                     | 26.253            |                    |           |
| 12,600.00             | 12,062.52             | 12,213.71                                             | 11,998.25             | 54.01            | 43.55         | -89.31                | -1,544.94                           | 3,019.56     | 1,719.63               | 1,653.68                | 65.96                     | 26.072            |                    |           |
| 12,653.34             | 12,065.00             | 12,264.55                                             | 12,010.85             | 54.42            | 43.74         | -89.67                | -1,594.17                           | 3,020.05     | 1,719.54               | 1,653.11                | 66.43                     | 25.885            |                    |           |
| 12,700.00             | 12,065.00             | 12,310.07                                             | 12,018.40             | 54.78            | 43.93         | -89.92                | -1,639.05                           | 3,020.49     | 1,719.51               | 1,652.66                | 66.85                     | 25.724            |                    |           |
| 12,718.65             | 12,065.00             | 12,328.55                                             | 12,020.44             | 54.93            | 44.00         | -89.98                | -1,657.42                           | 3,020.67     | 1,719.51               | 1,652.49                | 67.02                     | 25.658 CC         |                    |           |
| 12,800.00             | 12,065.00             | 12,409.94                                             | 12,023.00             | 55.59            | 44.35         | -90.07                | -1,738.72                           | 3,021.46     | 1,719.51               | 1,651.73                | 67.78                     | 25.370            |                    |           |
| 12,900.00             | 12,065.00             | 12,509.94                                             | 12,023.00             | 56.43            | 44.82         | -90.07                | -1,838.72                           | 3,022.44     | 1,719.51               | 1,650.74                | 68.77                     | 25.003            |                    |           |
| 13,000.00             | 12,065.00             | 12,609.94                                             | 12,023.00             | 57.31            | 45.34         | -90.07                | -1,938.71                           | 3,023.43     | 1,719.52               | 1,649.68                | 69.83                     | 24.623            |                    |           |
| 13,100.00             | 12,065.00             | 12,709.94                                             | 12,023.00             | 58.22            | 45.92         | -90.07                | -2,038.71                           | 3,024.41     | 1,719.52               | 1,648.57                | 70.95                     | 24.235            |                    |           |
| 13,200.00             | 12,065.00             | 12,809.94                                             | 12,023.00             | 59.17            | 46.55         | -90.07                | -2,138.70                           | 3,025.39     | 1,719.52               | 1,647.39                | 72.13                     | 23.839            |                    |           |
| 13,300.00             | 12,065.00             | 12,909.94                                             | 12,023.00             | 60.14            | 47.22         | -90.07                | -2,238.70                           | 3,026.37     | 1,719.52               | 1,646.16                | 73.37                     | 23.437            |                    |           |
| 13,400.00             | 12,065.00             | 13,009.94                                             | 12,023.00             | 61.15            | 47.95         | -90.07                | -2,338.69                           | 3,027.35     | 1,719.53               | 1,644.87                | 74.65                     | 23.033            |                    |           |
| 13,500.00             | 12,065.00             | 13,109.94                                             | 12,023.00             | 62.18            | 48.71         | -90.07                | -2,438.69                           | 3,028.33     | 1,719.53               | 1,643.54                | 75.99                     | 22.628            |                    |           |
| 13,600.00             | 12,065.00             | 13,209.94                                             | 12,023.00             | 63.24            | 49.53         | -90.07                | -2,538.68                           | 3,029.31     | 1,719.53               | 1,642.15                | 77.38                     | 22.223            |                    |           |
| 13,700.00             | 12,065.00             | 13,309.94                                             | 12,023.00             | 64.32            | 50.38         | -90.07                | -2,638.68                           | 3,030.29     | 1,719.53               | 1,640.73                | 78.81                     | 21.820            |                    |           |
| 13,800.00             | 12,065.00             | 13,409.94                                             | 12,023.00             | 65.43            | 51.27         | -90.07                | -2,738.67                           | 3,031.27     | 1,719.54               | 1,639.26                | 80.28                     | 21.420            |                    |           |
| 13,900.00             | 12,065.00             | 13,509.94                                             | 12,023.00             | 66.56            | 52.20         | -90.07                | -2,838.67                           | 3,032.25     | 1,719.54               | 1,637.75                | 81.79                     | 21.024            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 14,000.00                         | 12,065.00             | 13,609.94             | 12,023.00             | 67.71            | 53.16         | -90.07                | -2,938.67                           | 3,033.23     | 1,719.54               | 1,636.20                | 83.34                     | 20.634            |                    |           |
| 14,100.00                         | 12,065.00             | 13,709.94             | 12,023.00             | 68.88            | 54.16         | -90.07                | -3,038.66                           | 3,034.21     | 1,719.54               | 1,634.62                | 84.92                     | 20.248            |                    |           |
| 14,200.00                         | 12,065.00             | 13,809.94             | 12,023.00             | 70.08            | 55.19         | -90.07                | -3,138.66                           | 3,035.19     | 1,719.55               | 1,633.00                | 86.54                     | 19.869            |                    |           |
| 14,300.00                         | 12,065.00             | 13,909.94             | 12,023.00             | 71.29            | 56.24         | -90.07                | -3,238.65                           | 3,036.17     | 1,719.55               | 1,631.35                | 88.19                     | 19.497            |                    |           |
| 14,400.00                         | 12,065.00             | 14,009.94             | 12,023.00             | 72.51            | 57.33         | -90.07                | -3,338.65                           | 3,037.15     | 1,719.55               | 1,629.67                | 89.88                     | 19.132            |                    |           |
| 14,500.00                         | 12,065.00             | 14,109.94             | 12,023.00             | 73.76            | 58.44         | -90.07                | -3,438.64                           | 3,038.13     | 1,719.55               | 1,627.97                | 91.59                     | 18.775            |                    |           |
| 14,600.00                         | 12,065.00             | 14,209.94             | 12,023.00             | 75.02            | 59.58         | -90.07                | -3,538.64                           | 3,039.11     | 1,719.56               | 1,626.23                | 93.33                     | 18.425            |                    |           |
| 14,700.00                         | 12,065.00             | 14,309.94             | 12,023.00             | 76.29            | 60.74         | -90.07                | -3,638.63                           | 3,040.09     | 1,719.56               | 1,624.47                | 95.09                     | 18.083            |                    |           |
| 14,800.00                         | 12,065.00             | 14,409.94             | 12,023.00             | 77.58            | 61.92         | -90.07                | -3,738.63                           | 3,041.07     | 1,719.56               | 1,622.68                | 96.88                     | 17.750            |                    |           |
| 14,900.00                         | 12,065.00             | 14,509.94             | 12,023.00             | 78.89            | 63.13         | -90.07                | -3,838.62                           | 3,042.05     | 1,719.56               | 1,620.88                | 98.69                     | 17.424            |                    |           |
| 15,000.00                         | 12,065.00             | 14,609.94             | 12,023.00             | 80.20            | 64.35         | -90.07                | -3,938.62                           | 3,043.03     | 1,719.57               | 1,619.05                | 100.52                    | 17.107            |                    |           |
| 15,100.00                         | 12,065.00             | 14,709.94             | 12,023.00             | 81.53            | 65.59         | -90.07                | -4,038.61                           | 3,044.01     | 1,719.57               | 1,617.20                | 102.37                    | 16.797            |                    |           |
| 15,200.00                         | 12,065.00             | 14,809.94             | 12,023.00             | 82.87            | 66.85         | -90.07                | -4,138.61                           | 3,044.99     | 1,719.57               | 1,615.33                | 104.25                    | 16.495            |                    |           |
| 15,300.00                         | 12,065.00             | 14,909.94             | 12,023.00             | 84.22            | 68.13         | -90.07                | -4,238.60                           | 3,045.97     | 1,719.57               | 1,613.44                | 106.14                    | 16.202            |                    |           |
| 15,400.00                         | 12,065.00             | 15,009.94             | 12,023.00             | 85.59            | 69.42         | -90.07                | -4,338.60                           | 3,046.96     | 1,719.58               | 1,611.53                | 108.04                    | 15.916            |                    |           |
| 15,500.00                         | 12,065.00             | 15,109.94             | 12,023.00             | 86.96            | 70.73         | -90.07                | -4,438.59                           | 3,047.94     | 1,719.58               | 1,609.61                | 109.97                    | 15.637            |                    |           |
| 15,600.00                         | 12,065.00             | 15,209.94             | 12,023.00             | 88.34            | 72.05         | -90.07                | -4,538.59                           | 3,048.92     | 1,719.58               | 1,607.67                | 111.91                    | 15.366            |                    |           |
| 15,700.00                         | 12,065.00             | 15,309.94             | 12,023.00             | 89.73            | 73.39         | -90.07                | -4,638.58                           | 3,049.90     | 1,719.58               | 1,605.72                | 113.86                    | 15.102            |                    |           |
| 15,800.00                         | 12,065.00             | 15,409.94             | 12,023.00             | 91.13            | 74.74         | -90.07                | -4,738.58                           | 3,050.88     | 1,719.59               | 1,603.76                | 115.83                    | 14.846            |                    |           |
| 15,900.00                         | 12,065.00             | 15,509.94             | 12,023.00             | 92.54            | 76.10         | -90.07                | -4,838.57                           | 3,051.86     | 1,719.59               | 1,601.78                | 117.81                    | 14.596            |                    |           |
| 16,000.00                         | 12,065.00             | 15,609.94             | 12,023.00             | 93.95            | 77.47         | -90.07                | -4,938.57                           | 3,052.84     | 1,719.59               | 1,599.78                | 119.81                    | 14.353            |                    |           |
| 16,100.00                         | 12,065.00             | 15,709.94             | 12,023.00             | 95.38            | 78.85         | -90.07                | -5,038.56                           | 3,053.82     | 1,719.59               | 1,597.78                | 121.82                    | 14.116            |                    |           |
| 16,200.00                         | 12,065.00             | 15,809.94             | 12,023.00             | 96.81            | 80.24         | -90.07                | -5,138.56                           | 3,054.80     | 1,719.60               | 1,595.76                | 123.83                    | 13.886            |                    |           |
| 16,300.00                         | 12,065.00             | 15,909.94             | 12,023.00             | 98.24            | 81.64         | -90.07                | -5,238.55                           | 3,055.78     | 1,719.60               | 1,593.74                | 125.86                    | 13.662            |                    |           |
| 16,400.00                         | 12,065.00             | 16,009.94             | 12,023.00             | 99.69            | 83.05         | -90.07                | -5,338.55                           | 3,056.76     | 1,719.60               | 1,591.70                | 127.90                    | 13.444            |                    |           |
| 16,500.00                         | 12,065.00             | 16,109.94             | 12,023.00             | 101.14           | 84.47         | -90.07                | -5,438.54                           | 3,057.74     | 1,719.60               | 1,589.65                | 129.95                    | 13.232            |                    |           |
| 16,600.00                         | 12,065.00             | 16,209.94             | 12,023.00             | 102.60           | 85.90         | -90.07                | -5,538.54                           | 3,058.72     | 1,719.61               | 1,587.59                | 132.01                    | 13.026            |                    |           |
| 16,700.00                         | 12,065.00             | 16,309.94             | 12,023.00             | 104.06           | 87.34         | -90.07                | -5,638.54                           | 3,059.70     | 1,719.61               | 1,585.53                | 134.08                    | 12.825            |                    |           |
| 16,800.00                         | 12,065.00             | 16,409.94             | 12,023.00             | 105.53           | 88.78         | -90.07                | -5,738.53                           | 3,060.68     | 1,719.61               | 1,583.45                | 136.16                    | 12.629            |                    |           |
| 16,900.00                         | 12,065.00             | 16,509.94             | 12,023.00             | 107.00           | 90.23         | -90.07                | -5,838.53                           | 3,061.66     | 1,719.62               | 1,581.37                | 138.25                    | 12.439            |                    |           |
| 17,000.00                         | 12,065.00             | 16,609.94             | 12,023.00             | 108.48           | 91.69         | -90.07                | -5,938.52                           | 3,062.64     | 1,719.62               | 1,579.28                | 140.34                    | 12.253            |                    |           |
| 17,100.00                         | 12,065.00             | 16,709.94             | 12,023.00             | 109.96           | 93.15         | -90.07                | -6,038.52                           | 3,063.62     | 1,719.62               | 1,577.18                | 142.44                    | 12.073            |                    |           |
| 17,200.00                         | 12,065.00             | 16,809.94             | 12,023.00             | 111.45           | 94.62         | -90.07                | -6,138.51                           | 3,064.60     | 1,719.62               | 1,575.08                | 144.55                    | 11.897            |                    |           |
| 17,300.00                         | 12,065.00             | 16,909.94             | 12,023.00             | 112.94           | 96.10         | -90.07                | -6,238.51                           | 3,065.58     | 1,719.63               | 1,572.96                | 146.66                    | 11.725            |                    |           |
| 17,400.00                         | 12,065.00             | 17,009.94             | 12,023.00             | 114.44           | 97.58         | -90.07                | -6,338.50                           | 3,066.56     | 1,719.63               | 1,570.84                | 148.78                    | 11.558            |                    |           |
| 17,500.00                         | 12,065.00             | 17,109.94             | 12,023.00             | 115.94           | 99.07         | -90.07                | -6,438.50                           | 3,067.54     | 1,719.63               | 1,568.72                | 150.91                    | 11.395            |                    |           |
| 17,600.00                         | 12,065.00             | 17,209.94             | 12,023.00             | 117.45           | 100.56        | -90.07                | -6,538.49                           | 3,068.52     | 1,719.63               | 1,566.59                | 153.05                    | 11.236            |                    |           |
| 17,700.00                         | 12,065.00             | 17,309.94             | 12,023.00             | 118.96           | 102.06        | -90.07                | -6,638.49                           | 3,069.51     | 1,719.64               | 1,564.45                | 155.19                    | 11.081            |                    |           |
| 17,800.00                         | 12,065.00             | 17,409.94             | 12,023.00             | 120.47           | 103.56        | -90.07                | -6,738.48                           | 3,070.49     | 1,719.64               | 1,562.31                | 157.33                    | 10.930            |                    |           |
| 17,900.00                         | 12,065.00             | 17,509.94             | 12,023.00             | 121.99           | 105.06        | -90.07                | -6,838.48                           | 3,071.47     | 1,719.64               | 1,560.16                | 159.48                    | 10.783            |                    |           |
| 18,000.00                         | 12,065.00             | 17,609.94             | 12,023.00             | 123.51           | 106.57        | -90.07                | -6,938.47                           | 3,072.45     | 1,719.64               | 1,558.01                | 161.64                    | 10.639            |                    |           |
| 18,100.00                         | 12,065.00             | 17,709.94             | 12,023.00             | 125.03           | 108.09        | -90.07                | -7,038.47                           | 3,073.43     | 1,719.65               | 1,555.85                | 163.80                    | 10.499            |                    |           |
| 18,200.00                         | 12,065.00             | 17,809.94             | 12,023.00             | 126.56           | 109.61        | -90.07                | -7,138.46                           | 3,074.41     | 1,719.65               | 1,553.68                | 165.96                    | 10.362            |                    |           |
| 18,300.00                         | 12,065.00             | 17,909.94             | 12,023.00             | 128.09           | 111.13        | -90.07                | -7,238.46                           | 3,075.39     | 1,719.65               | 1,551.52                | 168.13                    | 10.228            |                    |           |
| 18,400.00                         | 12,065.00             | 18,009.94             | 12,023.00             | 129.62           | 112.66        | -90.07                | -7,338.45                           | 3,076.37     | 1,719.65               | 1,549.35                | 170.31                    | 10.097            |                    |           |
| 18,500.00                         | 12,065.00             | 18,109.94             | 12,023.00             | 131.16           | 114.19        | -90.07                | -7,438.45                           | 3,077.35     | 1,719.66               | 1,547.17                | 172.49                    | 9.970             |                    |           |
| 18,600.00                         | 12,065.00             | 18,209.94             | 12,023.00             | 132.69           | 115.72        | -90.07                | -7,538.44                           | 3,078.33     | 1,719.66               | 1,544.99                | 174.67                    | 9.845             |                    |           |
| 18,700.00                         | 12,065.00             | 18,309.94             | 12,023.00             | 134.24           | 117.25        | -90.07                | -7,638.44                           | 3,079.31     | 1,719.66               | 1,542.81                | 176.86                    | 9.724             |                    |           |
| 18,800.00                         | 12,065.00             | 18,409.94             | 12,023.00             | 135.78           | 118.79        | -90.07                | -7,738.43                           | 3,080.29     | 1,719.66               | 1,540.62                | 179.05                    | 9.605             |                    |           |
| 18,900.00                         | 12,065.00             | 18,509.94             | 12,023.00             | 137.33           | 120.34        | -90.07                | -7,838.43                           | 3,081.27     | 1,719.67               | 1,538.43                | 181.24                    | 9.488             |                    |           |
| 19,000.00                         | 12,065.00             | 18,609.94             | 12,023.00             | 138.87           | 121.88        | -90.07                | -7,938.42                           | 3,082.25     | 1,719.67               | 1,536.23                | 183.44                    | 9.375             |                    |           |
| 19,100.00                         | 12,065.00             | 18,709.94             | 12,023.00             | 140.43           | 123.43        | -90.07                | -8,038.42                           | 3,083.23     | 1,719.67               | 1,534.03                | 185.64                    | 9.264             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 19,200.00                         | 12,065.00             | 18,809.94             | 12,023.00             | 141.98           | 124.98        | -90.07                | -8,138.42                           | 3,084.21     | 1,719.67               | 1,531.83                | 187.84                    | 9.155             |                    |           |
| 19,300.00                         | 12,065.00             | 18,909.94             | 12,023.00             | 143.53           | 126.53        | -90.07                | -8,238.41                           | 3,085.19     | 1,719.68               | 1,529.63                | 190.05                    | 9.049             |                    |           |
| 19,400.00                         | 12,065.00             | 19,009.94             | 12,023.00             | 145.09           | 128.09        | -90.07                | -8,338.41                           | 3,086.17     | 1,719.68               | 1,527.42                | 192.26                    | 8.945             |                    |           |
| 19,500.00                         | 12,065.00             | 19,109.94             | 12,023.00             | 146.65           | 129.64        | -90.07                | -8,438.40                           | 3,087.15     | 1,719.68               | 1,525.21                | 194.47                    | 8.843             |                    |           |
| 19,600.00                         | 12,065.00             | 19,209.94             | 12,023.00             | 148.21           | 131.20        | -90.07                | -8,538.40                           | 3,088.13     | 1,719.68               | 1,522.99                | 196.69                    | 8.743             |                    |           |
| 19,700.00                         | 12,065.00             | 19,309.94             | 12,023.00             | 149.78           | 132.77        | -90.07                | -8,638.39                           | 3,089.11     | 1,719.69               | 1,520.78                | 198.91                    | 8.646             |                    |           |
| 19,800.00                         | 12,065.00             | 19,409.94             | 12,023.00             | 151.34           | 134.33        | -90.07                | -8,738.39                           | 3,090.09     | 1,719.69               | 1,518.56                | 201.13                    | 8.550             |                    |           |
| 19,900.00                         | 12,065.00             | 19,509.94             | 12,023.00             | 152.91           | 135.90        | -90.07                | -8,838.38                           | 3,091.07     | 1,719.69               | 1,516.34                | 203.35                    | 8.457             |                    |           |
| 20,000.00                         | 12,065.00             | 19,609.94             | 12,023.00             | 154.48           | 137.47        | -90.07                | -8,938.38                           | 3,092.05     | 1,719.69               | 1,514.11                | 205.58                    | 8.365             |                    |           |
| 20,100.00                         | 12,065.00             | 19,709.94             | 12,023.00             | 156.05           | 139.04        | -90.07                | -9,038.37                           | 3,093.04     | 1,719.70               | 1,511.89                | 207.81                    | 8.275             |                    |           |
| 20,200.00                         | 12,065.00             | 19,809.94             | 12,023.00             | 157.62           | 140.61        | -90.07                | -9,138.37                           | 3,094.02     | 1,719.70               | 1,509.66                | 210.04                    | 8.188             |                    |           |
| 20,300.00                         | 12,065.00             | 19,909.94             | 12,023.00             | 159.20           | 142.18        | -90.07                | -9,238.36                           | 3,095.00     | 1,719.70               | 1,507.43                | 212.27                    | 8.101             |                    |           |
| 20,400.00                         | 12,065.00             | 20,009.94             | 12,023.00             | 160.77           | 143.76        | -90.07                | -9,338.36                           | 3,095.98     | 1,719.70               | 1,505.20                | 214.51                    | 8.017             |                    |           |
| 20,500.00                         | 12,065.00             | 20,109.94             | 12,023.00             | 162.35           | 145.34        | -90.07                | -9,438.35                           | 3,096.96     | 1,719.71               | 1,502.96                | 216.75                    | 7.934             |                    |           |
| 20,600.00                         | 12,065.00             | 20,209.94             | 12,023.00             | 163.93           | 146.91        | -90.07                | -9,538.35                           | 3,097.94     | 1,719.71               | 1,500.72                | 218.99                    | 7.853             |                    |           |
| 20,700.00                         | 12,065.00             | 20,309.94             | 12,023.00             | 165.51           | 148.50        | -90.07                | -9,638.34                           | 3,098.92     | 1,719.71               | 1,498.48                | 221.23                    | 7.774             |                    |           |
| 20,800.00                         | 12,065.00             | 20,409.94             | 12,023.00             | 167.09           | 150.08        | -90.07                | -9,738.34                           | 3,099.90     | 1,719.71               | 1,496.24                | 223.47                    | 7.695             |                    |           |
| 20,900.00                         | 12,065.00             | 20,509.94             | 12,023.00             | 168.67           | 151.66        | -90.07                | -9,838.33                           | 3,100.88     | 1,719.72               | 1,494.00                | 225.72                    | 7.619             |                    |           |
| 21,000.00                         | 12,065.00             | 20,609.94             | 12,023.00             | 170.26           | 153.25        | -90.07                | -9,938.33                           | 3,101.86     | 1,719.72               | 1,491.76                | 227.96                    | 7.544             |                    |           |
| 21,100.00                         | 12,065.00             | 20,709.94             | 12,023.00             | 171.84           | 154.83        | -90.07                | -10,038.32                          | 3,102.84     | 1,719.72               | 1,489.51                | 230.21                    | 7.470             |                    |           |
| 21,200.00                         | 12,065.00             | 20,809.94             | 12,023.00             | 173.43           | 156.42        | -90.07                | -10,138.32                          | 3,103.82     | 1,719.72               | 1,487.26                | 232.46                    | 7.398             |                    |           |
| 21,300.00                         | 12,065.00             | 20,909.94             | 12,023.00             | 175.02           | 158.01        | -90.07                | -10,238.31                          | 3,104.80     | 1,719.73               | 1,485.01                | 234.72                    | 7.327             |                    |           |
| 21,400.00                         | 12,065.00             | 21,009.94             | 12,023.00             | 176.60           | 159.60        | -90.07                | -10,338.31                          | 3,105.78     | 1,719.73               | 1,482.76                | 236.97                    | 7.257             |                    |           |
| 21,500.00                         | 12,065.00             | 21,109.94             | 12,023.00             | 178.19           | 161.19        | -90.07                | -10,438.30                          | 3,106.76     | 1,719.73               | 1,480.51                | 239.23                    | 7.189             |                    |           |
| 21,600.00                         | 12,065.00             | 21,209.94             | 12,023.00             | 179.79           | 162.78        | -90.07                | -10,538.30                          | 3,107.74     | 1,719.73               | 1,478.25                | 241.48                    | 7.122             |                    |           |
| 21,700.00                         | 12,065.00             | 21,309.94             | 12,023.00             | 181.38           | 164.38        | -90.07                | -10,638.30                          | 3,108.72     | 1,719.74               | 1,476.00                | 243.74                    | 7.056             |                    |           |
| 21,800.00                         | 12,065.00             | 21,409.94             | 12,023.00             | 182.97           | 165.97        | -90.07                | -10,738.29                          | 3,109.70     | 1,719.74               | 1,473.74                | 246.00                    | 6.991             |                    |           |
| 21,900.00                         | 12,065.00             | 21,509.94             | 12,023.00             | 184.57           | 167.57        | -90.07                | -10,838.29                          | 3,110.68     | 1,719.74               | 1,471.48                | 248.26                    | 6.927             |                    |           |
| 22,000.00                         | 12,065.00             | 21,609.94             | 12,023.00             | 186.16           | 169.17        | -90.07                | -10,938.28                          | 3,111.66     | 1,719.74               | 1,469.22                | 250.52                    | 6.865             |                    |           |
| 22,100.00                         | 12,065.00             | 21,709.94             | 12,023.00             | 187.76           | 170.77        | -90.07                | -11,038.28                          | 3,112.64     | 1,719.75               | 1,466.96                | 252.79                    | 6.803             |                    |           |
| 22,200.00                         | 12,065.00             | 21,809.94             | 12,023.00             | 189.36           | 172.36        | -90.07                | -11,138.27                          | 3,113.62     | 1,719.75               | 1,464.70                | 255.05                    | 6.743             |                    |           |
| 22,300.00                         | 12,065.00             | 21,909.94             | 12,023.00             | 190.95           | 173.96        | -90.07                | -11,238.27                          | 3,114.60     | 1,719.75               | 1,462.43                | 257.32                    | 6.683             |                    |           |
| 22,400.00                         | 12,065.00             | 22,009.94             | 12,023.00             | 192.55           | 175.55        | -90.07                | -11,338.26                          | 3,115.59     | 1,719.75               | 1,460.18                | 259.58                    | 6.625             |                    |           |
| 22,445.57                         | 12,065.00             | 22,055.51             | 12,023.00             | 193.28           | 176.20        | -90.07                | -11,383.83                          | 3,116.03     | 1,719.76               | 1,459.20                | 260.56                    | 6.600 ES, SF      |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 801H - OH - Plan #2 |  | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               |                         |                           |                   |                                                       |  |                              |  |
| 100.00                            | 100.00                | 98.20                 | 98.20                 | 0.13             | 0.12          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,674.68                | 0.18                      | 9,524.641         |                                                       |  |                              |  |
| 200.00                            | 200.00                | 198.20                | 198.20                | 0.48             | 0.48          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,674.18                | 0.68                      | 2,463.600         |                                                       |  |                              |  |
| 300.00                            | 300.00                | 298.20                | 298.20                | 0.84             | 0.84          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,673.67                | 1.19                      | 1,411.251         |                                                       |  |                              |  |
| 400.00                            | 400.00                | 398.20                | 398.20                | 1.20             | 1.19          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,673.17                | 1.69                      | 988.851           |                                                       |  |                              |  |
| 500.00                            | 500.00                | 498.20                | 498.20                | 1.56             | 1.55          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,672.66                | 2.20                      | 761.059           |                                                       |  |                              |  |
| 600.00                            | 600.00                | 598.20                | 598.20                | 1.92             | 1.91          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,672.15                | 2.71                      | 618.565           |                                                       |  |                              |  |
| 700.00                            | 700.00                | 698.20                | 698.20                | 2.28             | 2.27          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,671.65                | 3.21                      | 521.016           |                                                       |  |                              |  |
| 800.00                            | 800.00                | 798.20                | 798.20                | 2.63             | 2.63          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,671.14                | 3.72                      | 450.042           |                                                       |  |                              |  |
| 900.00                            | 900.00                | 898.20                | 898.20                | 2.99             | 2.99          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,670.63                | 4.23                      | 396.087           |                                                       |  |                              |  |
| 1,000.00                          | 1,000.00              | 998.20                | 998.20                | 3.35             | 3.35          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,670.12                | 4.74                      | 353.684           |                                                       |  |                              |  |
| 1,100.00                          | 1,100.00              | 1,098.20              | 1,098.20              | 3.71             | 3.70          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,669.62                | 5.24                      | 319.482           |                                                       |  |                              |  |
| 1,200.00                          | 1,200.00              | 1,198.20              | 1,198.20              | 4.07             | 4.06          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,669.11                | 5.75                      | 291.311           |                                                       |  |                              |  |
| 1,300.00                          | 1,300.00              | 1,298.20              | 1,298.20              | 4.43             | 4.42          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,668.60                | 6.26                      | 267.706           |                                                       |  |                              |  |
| 1,400.00                          | 1,400.00              | 1,398.20              | 1,398.20              | 4.79             | 4.78          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,668.10                | 6.76                      | 247.640           |                                                       |  |                              |  |
| 1,500.00                          | 1,500.00              | 1,498.20              | 1,498.20              | 5.14             | 5.14          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,667.59                | 7.27                      | 230.372           |                                                       |  |                              |  |
| 1,600.00                          | 1,600.00              | 1,598.20              | 1,598.20              | 5.50             | 5.50          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,667.08                | 7.78                      | 215.355           |                                                       |  |                              |  |
| 1,700.00                          | 1,700.00              | 1,698.20              | 1,698.20              | 5.86             | 5.85          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,666.58                | 8.28                      | 202.176           |                                                       |  |                              |  |
| 1,800.00                          | 1,800.00              | 1,798.20              | 1,798.20              | 6.22             | 6.21          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,666.07                | 8.79                      | 190.517           |                                                       |  |                              |  |
| 1,900.00                          | 1,900.00              | 1,898.20              | 1,898.20              | 6.58             | 6.57          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,665.56                | 9.30                      | 180.130           |                                                       |  |                              |  |
| 2,000.00                          | 2,000.00              | 1,998.20              | 1,998.20              | 6.94             | 6.93          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,665.06                | 9.81                      | 170.817           |                                                       |  |                              |  |
| 2,100.00                          | 2,100.00              | 2,098.20              | 2,098.20              | 7.29             | 7.29          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,664.55                | 10.31                     | 162.419           |                                                       |  |                              |  |
| 2,200.00                          | 2,200.00              | 2,198.20              | 2,198.20              | 7.65             | 7.65          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,664.04                | 10.82                     | 154.808           |                                                       |  |                              |  |
| 2,300.00                          | 2,300.00              | 2,298.20              | 2,298.20              | 8.01             | 8.01          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,663.53                | 11.33                     | 147.879           |                                                       |  |                              |  |
| 2,400.00                          | 2,400.00              | 2,398.20              | 2,398.20              | 8.37             | 8.36          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,663.03                | 11.83                     | 141.543           |                                                       |  |                              |  |
| 2,500.00                          | 2,500.00              | 2,498.20              | 2,498.20              | 8.73             | 8.72          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,662.52                | 12.34                     | 135.728           |                                                       |  |                              |  |
| 2,600.00                          | 2,600.00              | 2,598.20              | 2,598.20              | 9.09             | 9.08          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,662.01                | 12.85                     | 130.372           |                                                       |  |                              |  |
| 2,700.00                          | 2,700.00              | 2,698.20              | 2,698.20              | 9.45             | 9.44          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,661.51                | 13.35                     | 125.423           |                                                       |  |                              |  |
| 2,800.00                          | 2,800.00              | 2,798.20              | 2,798.20              | 9.80             | 9.80          | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,661.00                | 13.86                     | 120.835           |                                                       |  |                              |  |
| 2,900.00                          | 2,900.00              | 2,898.20              | 2,898.20              | 10.16            | 10.16         | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,660.49                | 14.37                     | 116.572           |                                                       |  |                              |  |
| 3,000.00                          | 3,000.00              | 2,998.20              | 2,998.20              | 10.52            | 10.51         | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,659.99                | 14.87                     | 112.599           |                                                       |  |                              |  |
| 3,100.00                          | 3,100.00              | 3,098.20              | 3,098.20              | 10.88            | 10.87         | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,659.48                | 15.38                     | 108.888           |                                                       |  |                              |  |
| 3,200.00                          | 3,200.00              | 3,198.20              | 3,198.20              | 11.24            | 11.23         | -127.52               | -1,020.08                           | -1,328.38    | 1,674.86               | 1,658.97                | 15.89                     | 105.413 CC        |                                                       |  |                              |  |
| 3,300.00                          | 3,299.99              | 3,298.19              | 3,298.19              | 11.58            | 11.59         | 103.86                | -1,020.08                           | -1,328.38    | 1,675.17               | 1,658.79                | 16.38                     | 102.239 ES        |                                                       |  |                              |  |
| 3,400.00                          | 3,399.91              | 3,370.15              | 3,370.14              | 11.91            | 11.84         | 103.94                | -1,020.22                           | -1,329.01    | 1,676.94               | 1,660.14                | 16.79                     | 99.857            |                                                       |  |                              |  |
| 3,500.00                          | 3,499.69              | 3,441.33              | 3,441.30              | 12.25            | 12.08         | 104.06                | -1,020.65                           | -1,330.93    | 1,681.04               | 1,663.85                | 17.19                     | 97.767            |                                                       |  |                              |  |
| 3,600.00                          | 3,599.27              | 3,512.10              | 3,511.99              | 12.58            | 12.32         | 104.22                | -1,021.36                           | -1,334.13    | 1,687.52               | 1,669.93                | 17.59                     | 95.937            |                                                       |  |                              |  |
| 3,700.00                          | 3,698.57              | 3,588.58              | 3,588.31              | 12.92            | 12.58         | 104.46                | -1,022.44                           | -1,338.95    | 1,696.35               | 1,678.35                | 18.00                     | 94.237            |                                                       |  |                              |  |
| 3,800.00                          | 3,797.54              | 3,686.67              | 3,686.16              | 13.27            | 12.92         | 104.87                | -1,023.94                           | -1,345.64    | 1,706.48               | 1,688.00                | 18.48                     | 92.351            |                                                       |  |                              |  |
| 3,900.00                          | 3,896.09              | 3,784.25              | 3,783.50              | 13.62            | 13.26         | 105.33                | -1,025.42                           | -1,352.28    | 1,717.46               | 1,698.50                | 18.96                     | 90.586            |                                                       |  |                              |  |
| 4,000.00                          | 3,994.16              | 3,881.23              | 3,880.25              | 13.98            | 13.59         | 105.85                | -1,026.90                           | -1,358.89    | 1,729.36               | 1,709.91                | 19.44                     | 88.936            |                                                       |  |                              |  |
| 4,100.00                          | 4,091.70              | 3,977.56              | 3,976.34              | 14.35            | 13.93         | 106.43                | -1,028.36                           | -1,365.45    | 1,742.26               | 1,722.33                | 19.94                     | 87.392            |                                                       |  |                              |  |
| 4,200.00                          | 4,188.62              | 4,073.17              | 4,071.72              | 14.74            | 14.26         | 107.05                | -1,029.82                           | -1,371.96    | 1,756.25               | 1,735.82                | 20.43                     | 85.949            |                                                       |  |                              |  |
| 4,300.00                          | 4,284.86              | 4,167.99              | 4,166.31              | 15.14            | 14.59         | 107.71                | -1,031.26                           | -1,378.42    | 1,771.40               | 1,750.47                | 20.94                     | 84.601            |                                                       |  |                              |  |
| 4,400.00                          | 4,380.36              | 4,261.96              | 4,260.05              | 15.55            | 14.92         | 108.40                | -1,032.69                           | -1,384.83    | 1,787.82               | 1,766.37                | 21.45                     | 83.343            |                                                       |  |                              |  |
| 4,452.43                          | 4,430.11              | 4,310.87              | 4,308.84              | 15.78            | 15.09         | 108.78                | -1,033.43                           | -1,388.16    | 1,796.96               | 1,775.24                | 21.72                     | 82.718            |                                                       |  |                              |  |
| 4,500.00                          | 4,475.14              | 4,355.13              | 4,352.99              | 15.99            | 15.25         | 109.24                | -1,034.11                           | -1,391.17    | 1,805.49               | 1,783.52                | 21.97                     | 82.168            |                                                       |  |                              |  |
| 4,600.00                          | 4,569.82              | 4,448.16              | 4,445.79              | 16.44            | 15.58         | 110.21                | -1,035.52                           | -1,397.51    | 1,823.84               | 1,801.34                | 22.50                     | 81.049            |                                                       |  |                              |  |
| 4,700.00                          | 4,664.49              | 4,541.20              | 4,538.60              | 16.91            | 15.91         | 111.16                | -1,036.94                           | -1,403.85    | 1,842.73               | 1,819.69                | 23.04                     | 79.983            |                                                       |  |                              |  |
| 4,800.00                          | 4,759.16              | 4,634.23              | 4,631.41              | 17.39            | 16.24         | 112.09                | -1,038.36                           | -1,410.18    | 1,862.16               | 1,838.58                | 23.58                     | 78.968            |                                                       |  |                              |  |
| 4,900.00                          | 4,853.84              | 4,727.26              | 4,724.22              | 17.87            | 16.57         | 113.00                | -1,039.77                           | -1,416.52    | 1,882.10               | 1,857.97                | 24.13                     | 78.003            |                                                       |  |                              |  |
| 5,000.00                          | 4,948.51              | 4,820.30              | 4,817.03              | 18.37            | 16.90         | 113.89                | -1,041.19                           | -1,422.86    | 1,902.53               | 1,877.85                | 24.68                     | 77.088            |                                                       |  |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 801H - OH - Plan #2 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         | 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 |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 5,100.00                          | 5,043.18              | 4,913.33              | 4,909.83              | 18.88            | 17.23         | 114.77                | -1,042.60                           | -1,429.20    | 1,923.45               | 1,898.21                | 25.24                     | 76.221            |                                                       |         |                    |           |
| 5,200.00                          | 5,137.85              | 5,006.37              | 5,002.64              | 19.39            | 17.57         | 115.63                | -1,044.02                           | -1,435.54    | 1,944.83               | 1,919.04                | 25.79                     | 75.400            |                                                       |         |                    |           |
| 5,300.00                          | 5,232.53              | 5,099.40              | 5,095.45              | 19.92            | 17.90         | 116.47                | -1,045.43                           | -1,441.87    | 1,966.67               | 1,940.32                | 26.35                     | 74.624            |                                                       |         |                    |           |
| 5,400.00                          | 5,327.20              | 5,192.44              | 5,188.26              | 20.45            | 18.23         | 117.30                | -1,046.85                           | -1,448.21    | 1,988.94               | 1,962.03                | 26.92                     | 73.891            |                                                       |         |                    |           |
| 5,500.00                          | 5,421.87              | 5,285.47              | 5,281.06              | 20.99            | 18.57         | 118.11                | -1,048.27                           | -1,454.55    | 2,011.64               | 1,984.15                | 27.48                     | 73.198            |                                                       |         |                    |           |
| 5,600.00                          | 5,516.54              | 5,378.51              | 5,373.87              | 21.53            | 18.90         | 118.90                | -1,049.68                           | -1,460.89    | 2,034.74               | 2,006.69                | 28.05                     | 72.545            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 5,700.00                          | 5,611.22              | 5,471.54              | 5,466.68              | 22.08            | 19.24         | 119.68                | -1,051.10                           | -1,467.22    | 2,058.23               | 2,029.62                | 28.62                     | 71.928            |                                                       |         |                    |           |
| 5,800.00                          | 5,705.89              | 5,564.58              | 5,559.49              | 22.63            | 19.58         | 120.44                | -1,052.51                           | -1,473.56    | 2,082.11               | 2,052.93                | 29.18                     | 71.347            |                                                       |         |                    |           |
| 5,900.00                          | 5,800.56              | 5,657.61              | 5,652.30              | 23.19            | 19.91         | 121.18                | -1,053.93                           | -1,479.90    | 2,106.35               | 2,076.60                | 29.75                     | 70.799            |                                                       |         |                    |           |
| 6,000.00                          | 5,895.23              | 5,750.65              | 5,745.10              | 23.76            | 20.25         | 121.91                | -1,055.35                           | -1,486.24    | 2,130.95               | 2,100.63                | 30.32                     | 70.283            |                                                       |         |                    |           |
| 6,100.00                          | 5,989.91              | 5,843.68              | 5,837.91              | 24.33            | 20.59         | 122.62                | -1,056.76                           | -1,492.57    | 2,155.90               | 2,125.01                | 30.89                     | 69.796            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 6,200.00                          | 6,084.58              | 5,936.72              | 5,930.72              | 24.90            | 20.93         | 123.32                | -1,058.18                           | -1,498.91    | 2,181.17               | 2,149.71                | 31.46                     | 69.339            |                                                       |         |                    |           |
| 6,300.00                          | 6,179.25              | 6,029.75              | 6,023.53              | 25.48            | 21.27         | 124.00                | -1,059.59                           | -1,505.25    | 2,206.76               | 2,174.74                | 32.03                     | 68.907            |                                                       |         |                    |           |
| 6,400.00                          | 6,273.92              | 6,211.41              | 6,204.92              | 26.05            | 21.92         | 125.29                | -1,061.70                           | -1,514.69    | 2,231.41               | 2,198.53                | 32.88                     | 67.861            |                                                       |         |                    |           |
| 6,500.00                          | 6,368.60              | 6,373.31              | 6,366.80              | 26.64            | 22.49         | 126.40                | -1,062.08                           | -1,516.38    | 2,251.77               | 2,218.13                | 33.65                     | 66.923            |                                                       |         |                    |           |
| 6,600.00                          | 6,463.27              | 6,467.98              | 6,461.47              | 27.22            | 22.82         | 127.03                | -1,062.08                           | -1,516.38    | 2,271.70               | 2,237.48                | 34.22                     | 66.383            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 6,700.00                          | 6,557.94              | 6,562.66              | 6,556.14              | 27.81            | 23.15         | 127.65                | -1,062.08                           | -1,516.38    | 2,291.91               | 2,257.12                | 34.79                     | 65.871            |                                                       |         |                    |           |
| 6,800.00                          | 6,652.61              | 6,657.33              | 6,650.81              | 28.40            | 23.49         | 128.26                | -1,062.08                           | -1,516.38    | 2,312.39               | 2,277.02                | 35.37                     | 65.384            |                                                       |         |                    |           |
| 6,900.00                          | 6,747.29              | 6,752.00              | 6,745.49              | 29.00            | 23.82         | 128.87                | -1,062.08                           | -1,516.38    | 2,333.14               | 2,297.20                | 35.94                     | 64.922            |                                                       |         |                    |           |
| 7,000.00                          | 6,841.96              | 6,846.67              | 6,840.16              | 29.59            | 24.15         | 129.46                | -1,062.08                           | -1,516.38    | 2,354.14               | 2,317.63                | 36.51                     | 64.484            |                                                       |         |                    |           |
| 7,100.00                          | 6,936.63              | 6,941.35              | 6,934.83              | 30.19            | 24.48         | 130.04                | -1,062.08                           | -1,516.38    | 2,375.39               | 2,338.32                | 37.08                     | 64.068            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 7,200.00                          | 7,031.30              | 7,036.02              | 7,029.50              | 30.79            | 24.82         | 130.61                | -1,062.08                           | -1,516.38    | 2,396.89               | 2,359.24                | 37.64                     | 63.672            |                                                       |         |                    |           |
| 7,300.00                          | 7,125.98              | 7,130.69              | 7,124.18              | 31.40            | 25.15         | 131.17                | -1,062.08                           | -1,516.38    | 2,418.62               | 2,380.41                | 38.21                     | 63.297            |                                                       |         |                    |           |
| 7,400.00                          | 7,220.65              | 7,225.36              | 7,218.85              | 32.00            | 25.48         | 131.72                | -1,062.08                           | -1,516.38    | 2,440.59               | 2,401.81                | 38.78                     | 62.941            |                                                       |         |                    |           |
| 7,500.00                          | 7,315.32              | 7,320.04              | 7,313.52              | 32.61            | 25.82         | 132.27                | -1,062.08                           | -1,516.38    | 2,462.78               | 2,423.44                | 39.34                     | 62.602            |                                                       |         |                    |           |
| 7,600.00                          | 7,409.99              | 7,414.71              | 7,408.19              | 33.21            | 26.15         | 132.80                | -1,062.08                           | -1,516.38    | 2,485.19               | 2,445.29                | 39.90                     | 62.281            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 7,700.00                          | 7,504.67              | 7,509.38              | 7,502.87              | 33.82            | 26.48         | 133.33                | -1,062.08                           | -1,516.38    | 2,507.82               | 2,467.35                | 40.46                     | 61.976            |                                                       |         |                    |           |
| 7,800.00                          | 7,599.34              | 7,604.05              | 7,597.54              | 34.43            | 26.82         | 133.84                | -1,062.08                           | -1,516.38    | 2,530.65               | 2,489.63                | 41.02                     | 61.687            |                                                       |         |                    |           |
| 7,900.00                          | 7,694.01              | 7,698.73              | 7,692.21              | 35.05            | 27.15         | 134.35                | -1,062.08                           | -1,516.38    | 2,553.68               | 2,512.10                | 41.58                     | 61.412            |                                                       |         |                    |           |
| 8,000.00                          | 7,788.68              | 7,793.40              | 7,786.88              | 35.66            | 27.49         | 134.85                | -1,062.08                           | -1,516.38    | 2,576.91               | 2,534.77                | 42.14                     | 61.151            |                                                       |         |                    |           |
| 8,100.00                          | 7,883.36              | 7,888.07              | 7,881.56              | 36.28            | 27.82         | 135.34                | -1,062.08                           | -1,516.38    | 2,600.34               | 2,557.64                | 42.70                     | 60.902            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 8,200.00                          | 7,978.03              | 7,982.74              | 7,976.23              | 36.89            | 28.15         | 135.82                | -1,062.08                           | -1,516.38    | 2,623.94               | 2,580.69                | 43.25                     | 60.666            |                                                       |         |                    |           |
| 8,300.00                          | 8,072.70              | 8,077.42              | 8,070.90              | 37.51            | 28.49         | 136.29                | -1,062.08                           | -1,516.38    | 2,647.73               | 2,603.93                | 43.81                     | 60.441            |                                                       |         |                    |           |
| 8,400.00                          | 8,167.37              | 8,172.09              | 8,165.57              | 38.13            | 28.82         | 136.76                | -1,062.08                           | -1,516.38    | 2,671.70               | 2,627.34                | 44.36                     | 60.228            |                                                       |         |                    |           |
| 8,500.00                          | 8,262.05              | 8,266.76              | 8,260.25              | 38.75            | 29.16         | 137.21                | -1,062.08                           | -1,516.38    | 2,695.84               | 2,650.92                | 44.91                     | 60.025            |                                                       |         |                    |           |
| 8,600.00                          | 8,356.72              | 8,361.43              | 8,354.92              | 39.37            | 29.49         | 137.66                | -1,062.08                           | -1,516.38    | 2,720.14               | 2,674.68                | 45.46                     | 59.832            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 8,700.00                          | 8,451.39              | 8,456.11              | 8,449.59              | 39.99            | 29.83         | 138.11                | -1,062.08                           | -1,516.38    | 2,744.61               | 2,698.59                | 46.01                     | 59.649            |                                                       |         |                    |           |
| 8,800.00                          | 8,546.07              | 8,550.78              | 8,544.27              | 40.61            | 30.16         | 138.54                | -1,062.08                           | -1,516.38    | 2,769.23               | 2,722.67                | 46.56                     | 59.475            |                                                       |         |                    |           |
| 8,875.44                          | 8,617.48              | 8,622.20              | 8,615.68              | 41.08            | 30.42         | 138.86                | -1,062.08                           | -1,516.38    | 2,787.91               | 2,740.94                | 46.97                     | 59.350            |                                                       |         |                    |           |
| 8,900.00                          | 8,640.90              | 8,645.61              | 8,639.10              | 41.23            | 30.50         | 139.35                | -1,062.08                           | -1,516.38    | 2,793.62               | 2,746.52                | 47.11                     | 59.304            |                                                       |         |                    |           |
| 8,950.00                          | 8,689.44              | 8,694.15              | 8,687.64              | 41.49            | 30.67         | 140.11                | -1,062.08                           | -1,516.38    | 2,802.86               | 2,755.49                | 47.37                     | 59.170            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 9,000.00                          | 8,738.83              | 8,743.54              | 8,737.03              | 41.70            | 30.84         | 140.59                | -1,062.08                           | -1,516.38    | 2,808.79               | 2,761.17                | 47.62                     | 58.984            |                                                       |         |                    |           |
| 9,050.00                          | 8,788.70              | 8,793.41              | 8,786.90              | 41.87            | 31.02         | 140.80                | -1,062.08                           | -1,516.38    | 2,811.38               | 2,763.52                | 47.86                     | 58.744            |                                                       |         |                    |           |
| 9,063.30                          | 8,802.00              | 8,806.71              | 8,800.20              | 41.91            | 31.07         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,763.58                | 47.92                     | 58.673            |                                                       |         |                    |           |
| 9,100.00                          | 8,838.70              | 8,843.41              | 8,836.90              | 42.00            | 31.20         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,763.42                | 48.08                     | 58.473            |                                                       |         |                    |           |
| 9,200.00                          | 8,938.70              | 8,943.41              | 8,936.90              | 42.26            | 31.55         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,762.97                | 48.53                     | 57.934            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 9,300.00                          | 9,038.70              | 9,043.41              | 9,036.90              | 42.51            | 31.91         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,762.52                | 48.98                     | 57.404            |                                                       |         |                    |           |
| 9,400.00                          | 9,138.70              | 9,143.41              | 9,136.90              | 42.77            | 32.26         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,762.07                | 49.43                     | 56.883            |                                                       |         |                    |           |
| 9,500.00                          | 9,238.70              | 9,243.41              | 9,236.90              | 43.03            | 32.62         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,761.62                | 49.88                     | 56.369            |                                                       |         |                    |           |
| 9,600.00                          | 9,338.70              | 9,343.41              | 9,336.90              | 43.30            | 32.97         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,761.17                | 50.33                     | 55.863            |                                                       |         |                    |           |
| 9,700.00                          | 9,438.70              | 9,443.41              | 9,436.90              | 43.56            | 33.33         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,760.72                | 50.78                     | 55.366            |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         |                    |           |
| 9,800.00                          | 9,538.70              | 9,543.41              | 9,536.90              | 43.82            | 33.68         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,760.27                | 51.23                     | 54.876            |                                                       |         |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,900.00                          | 9,638.70              | 9,643.41              | 9,636.90              | 44.09            | 34.04         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,759.81                | 51.69                     | 54.393            |                    |           |
| 10,000.00                         | 9,738.70              | 9,743.41              | 9,736.90              | 44.36            | 34.39         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,759.36                | 52.14                     | 53.918            |                    |           |
| 10,100.00                         | 9,838.70              | 9,843.41              | 9,836.90              | 44.63            | 34.75         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,758.90                | 52.60                     | 53.450            |                    |           |
| 10,200.00                         | 9,938.70              | 9,943.41              | 9,936.90              | 44.90            | 35.10         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,758.44                | 53.06                     | 52.990            |                    |           |
| 10,300.00                         | 10,038.70             | 10,043.41             | 10,036.90             | 45.17            | 35.46         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,757.99                | 53.52                     | 52.536            |                    |           |
| 10,400.00                         | 10,138.70             | 10,143.41             | 10,136.90             | 45.44            | 35.81         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,757.53                | 53.97                     | 52.089            |                    |           |
| 10,500.00                         | 10,238.70             | 10,243.41             | 10,236.90             | 45.71            | 36.17         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,757.07                | 54.43                     | 51.649            |                    |           |
| 10,600.00                         | 10,338.70             | 10,343.41             | 10,336.90             | 45.99            | 36.52         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,756.61                | 54.90                     | 51.216            |                    |           |
| 10,700.00                         | 10,438.70             | 10,443.41             | 10,436.90             | 46.26            | 36.88         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,756.14                | 55.36                     | 50.789            |                    |           |
| 10,800.00                         | 10,538.70             | 10,543.41             | 10,536.90             | 46.54            | 37.23         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,755.68                | 55.82                     | 50.368            |                    |           |
| 10,900.00                         | 10,638.70             | 10,643.41             | 10,636.90             | 46.82            | 37.59         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,755.22                | 56.28                     | 49.954            |                    |           |
| 11,000.00                         | 10,738.70             | 10,743.41             | 10,736.90             | 47.10            | 37.94         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,754.76                | 56.75                     | 49.546            |                    |           |
| 11,100.00                         | 10,838.70             | 10,843.41             | 10,836.90             | 47.38            | 38.30         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,754.29                | 57.21                     | 49.143            |                    |           |
| 11,200.00                         | 10,938.70             | 10,943.41             | 10,936.90             | 47.66            | 38.65         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,753.83                | 57.68                     | 48.747            |                    |           |
| 11,300.00                         | 11,038.70             | 11,043.41             | 11,036.90             | 47.94            | 39.01         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,753.36                | 58.14                     | 48.356            |                    |           |
| 11,400.00                         | 11,138.70             | 11,143.41             | 11,136.90             | 48.22            | 39.37         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,752.89                | 58.61                     | 47.971            |                    |           |
| 11,500.00                         | 11,238.70             | 11,243.41             | 11,236.90             | 48.51            | 39.72         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,752.43                | 59.08                     | 47.592            |                    |           |
| 11,600.00                         | 11,338.70             | 11,343.41             | 11,336.90             | 48.79            | 40.08         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,751.96                | 59.54                     | 47.218            |                    |           |
| 11,700.00                         | 11,438.70             | 11,443.41             | 11,436.90             | 49.08            | 40.43         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,751.49                | 60.01                     | 46.849            |                    |           |
| 11,753.34                         | 11,492.04             | 11,496.75             | 11,490.24             | 49.23            | 40.62         | -90.53                | -1,062.08                           | -1,516.38    | 2,811.50               | 2,751.24                | 60.26                     | 46.655            |                    |           |
| 11,800.00                         | 11,538.65             | 11,543.36             | 11,536.85             | 49.37            | 40.79         | 90.07                 | -1,062.08                           | -1,516.38    | 2,811.50               | 2,751.02                | 60.48                     | 46.483            |                    |           |
| 11,850.00                         | 11,588.24             | 11,592.95             | 11,586.44             | 49.55            | 40.97         | 90.19                 | -1,062.08                           | -1,516.38    | 2,811.52               | 2,750.79                | 60.73                     | 46.296            |                    |           |
| 11,900.00                         | 11,637.10             | 11,641.82             | 11,635.30             | 49.74            | 41.14         | 90.40                 | -1,062.08                           | -1,516.38    | 2,811.57               | 2,750.59                | 60.98                     | 46.106            |                    |           |
| 11,950.00                         | 11,684.86             | 11,689.57             | 11,683.06             | 49.95            | 41.31         | 90.67                 | -1,062.08                           | -1,516.38    | 2,811.72               | 2,750.48                | 61.24                     | 45.915            |                    |           |
| 12,000.00                         | 11,731.15             | 11,735.86             | 11,729.35             | 50.18            | 41.47         | 90.99                 | -1,062.08                           | -1,516.38    | 2,812.01               | 2,750.52                | 61.50                     | 45.726            |                    |           |
| 12,050.00                         | 11,775.62             | 11,780.33             | 11,773.82             | 50.42            | 41.63         | 91.35                 | -1,062.08                           | -1,516.38    | 2,812.54               | 2,750.78                | 61.76                     | 45.541            |                    |           |
| 12,100.00                         | 11,817.93             | 11,822.65             | 11,816.13             | 50.68            | 41.78         | 91.73                 | -1,062.08                           | -1,516.38    | 2,813.39               | 2,751.37                | 62.02                     | 45.363            |                    |           |
| 12,150.00                         | 11,857.76             | 11,862.48             | 11,855.96             | 50.96            | 41.93         | 92.09                 | -1,062.08                           | -1,516.38    | 2,814.66               | 2,752.38                | 62.28                     | 45.194            |                    |           |
| 12,200.00                         | 11,894.81             | 11,899.53             | 11,893.01             | 51.25            | 42.06         | 92.42                 | -1,062.08                           | -1,516.38    | 2,816.45               | 2,753.91                | 62.54                     | 45.038            |                    |           |
| 12,250.00                         | 11,928.80             | 11,933.51             | 11,927.00             | 51.56            | 42.18         | 92.68                 | -1,062.08                           | -1,516.38    | 2,818.86               | 2,756.07                | 62.79                     | 44.896            |                    |           |
| 12,300.00                         | 11,959.45             | 11,964.17             | 11,957.65             | 51.87            | 42.29         | 92.86                 | -1,062.08                           | -1,516.38    | 2,821.98               | 2,758.95                | 63.03                     | 44.772            |                    |           |
| 12,350.00                         | 11,986.56             | 11,991.27             | 11,984.76             | 52.20            | 42.38         | 92.93                 | -1,062.08                           | -1,516.38    | 2,825.91               | 2,762.64                | 63.26                     | 44.668            |                    |           |
| 12,400.00                         | 12,009.90             | 12,014.61             | 12,008.10             | 52.55            | 42.47         | 92.87                 | -1,062.08                           | -1,516.38    | 2,830.71               | 2,767.22                | 63.49                     | 44.587            |                    |           |
| 12,450.00                         | 12,029.29             | 12,034.01             | 12,027.49             | 52.90            | 42.54         | 92.66                 | -1,062.08                           | -1,516.38    | 2,836.44               | 2,772.74                | 63.70                     | 44.529            |                    |           |
| 12,500.00                         | 12,044.60             | 12,049.31             | 12,042.80             | 53.26            | 42.59         | 92.28                 | -1,062.08                           | -1,516.38    | 2,843.12               | 2,779.23                | 63.89                     | 44.498            |                    |           |
| 12,550.00                         | 12,055.70             | 12,060.42             | 12,053.90             | 53.63            | 42.63         | 91.72                 | -1,062.08                           | -1,516.38    | 2,850.78               | 2,786.71                | 64.07                     | 44.494            |                    |           |
| 12,600.00                         | 12,062.52             | 12,067.23             | 12,060.72             | 54.01            | 42.66         | 90.99                 | -1,062.08                           | -1,516.38    | 2,859.39               | 2,795.16                | 64.23                     | 44.517            |                    |           |
| 12,653.34                         | 12,065.00             | 12,069.71             | 12,063.20             | 54.42            | 42.66         | 90.00                 | -1,062.08                           | -1,516.38    | 2,869.57               | 2,805.19                | 64.38                     | 44.573            |                    |           |
| 12,700.00                         | 12,065.00             | 12,069.71             | 12,063.20             | 54.78            | 42.66         | 90.00                 | -1,062.08                           | -1,516.38    | 2,879.27               | 2,814.78                | 64.50                     | 44.642            |                    |           |
| 12,800.00                         | 12,065.00             | 13,221.96             | 12,740.00             | 55.59            | 46.42         | 103.54                | -1,783.41                           | -1,509.24    | 2,891.73               | 2,823.00                | 68.73                     | 42.072            |                    |           |
| 12,900.00                         | 12,065.00             | 13,321.96             | 12,740.00             | 56.43            | 46.88         | 103.54                | -1,883.40                           | -1,508.25    | 2,891.72               | 2,822.02                | 69.70                     | 41.489            |                    |           |
| 13,000.00                         | 12,065.00             | 13,421.96             | 12,740.00             | 57.31            | 47.39         | 103.54                | -1,983.40                           | -1,507.26    | 2,891.71               | 2,820.98                | 70.73                     | 40.886            |                    |           |
| 13,100.00                         | 12,065.00             | 13,521.96             | 12,740.00             | 58.22            | 47.95         | 103.54                | -2,083.39                           | -1,506.27    | 2,891.70               | 2,819.89                | 71.81                     | 40.268            |                    |           |
| 13,200.00                         | 12,065.00             | 13,621.96             | 12,740.00             | 59.17            | 48.56         | 103.54                | -2,183.39                           | -1,505.28    | 2,891.69               | 2,818.73                | 72.95                     | 39.638            |                    |           |
| 13,300.00                         | 12,065.00             | 13,721.96             | 12,740.00             | 60.14            | 49.21         | 103.54                | -2,283.38                           | -1,504.29    | 2,891.67               | 2,817.53                | 74.14                     | 39.000            |                    |           |
| 13,400.00                         | 12,065.00             | 13,821.96             | 12,740.00             | 61.15            | 49.92         | 103.54                | -2,383.38                           | -1,503.30    | 2,891.66               | 2,816.27                | 75.39                     | 38.357            |                    |           |
| 13,500.00                         | 12,065.00             | 13,921.96             | 12,740.00             | 62.18            | 50.66         | 103.54                | -2,483.37                           | -1,502.31    | 2,891.65               | 2,814.97                | 76.68                     | 37.710            |                    |           |
| 13,600.00                         | 12,065.00             | 14,021.96             | 12,740.00             | 63.24            | 51.45         | 103.54                | -2,583.37                           | -1,501.32    | 2,891.64               | 2,813.62                | 78.02                     | 37.064            |                    |           |
| 13,700.00                         | 12,065.00             | 14,121.96             | 12,740.00             | 64.32            | 52.28         | 103.54                | -2,683.36                           | -1,500.33    | 2,891.63               | 2,812.23                | 79.40                     | 36.419            |                    |           |
| 13,800.00                         | 12,065.00             | 14,221.96             | 12,740.00             | 65.43            | 53.15         | 103.54                | -2,783.36                           | -1,499.34    | 2,891.62               | 2,810.80                | 80.82                     | 35.778            |                    |           |
| 13,900.00                         | 12,065.00             | 14,321.96             | 12,740.00             | 66.56            | 54.05         | 103.54                | -2,883.35                           | -1,498.35    | 2,891.61               | 2,809.32                | 82.28                     | 35.143            |                    |           |
| 14,000.00                         | 12,065.00             | 14,421.96             | 12,740.00             | 67.71            | 54.99         | 103.54                | -2,983.35                           | -1,497.36    | 2,891.59               | 2,807.82                | 83.78                     | 34.515            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design      Tatanka Fed Com - Tatanka Fed Com 801H - OH - Plan #2 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|--------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program:      0-OWSG (Rev2) MWD                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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            |           |
| 14,100.00                                                                | 12,065.00             | 14,521.96             | 12,740.00             | 68.88            | 55.96         | 103.54                | -3,083.34                           | -1,496.37    | 2,891.58               | 2,806.27                | 85.31                     | 33.895            |                    |           |
| 14,200.00                                                                | 12,065.00             | 14,621.96             | 12,740.00             | 70.08            | 56.97         | 103.54                | -3,183.34                           | -1,495.38    | 2,891.57               | 2,804.70                | 86.88                     | 33.284            |                    |           |
| 14,300.00                                                                | 12,065.00             | 14,721.96             | 12,740.00             | 71.29            | 58.00         | 103.54                | -3,283.33                           | -1,494.39    | 2,891.56               | 2,803.09                | 88.47                     | 32.683            |                    |           |
| 14,400.00                                                                | 12,065.00             | 14,821.96             | 12,740.00             | 72.51            | 59.06         | 103.54                | -3,383.33                           | -1,493.40    | 2,891.55               | 2,801.45                | 90.10                     | 32.093            |                    |           |
| 14,500.00                                                                | 12,065.00             | 14,921.96             | 12,740.00             | 73.76            | 60.15         | 103.54                | -3,483.32                           | -1,492.42    | 2,891.54               | 2,799.79                | 91.75                     | 31.515            |                    |           |
| 14,600.00                                                                | 12,065.00             | 15,021.96             | 12,740.00             | 75.02            | 61.26         | 103.54                | -3,583.32                           | -1,491.43    | 2,891.52               | 2,798.09                | 93.43                     | 30.948            |                    |           |
| 14,700.00                                                                | 12,065.00             | 15,121.96             | 12,740.00             | 76.29            | 62.40         | 103.54                | -3,683.31                           | -1,490.44    | 2,891.51               | 2,796.38                | 95.14                     | 30.394            |                    |           |
| 14,800.00                                                                | 12,065.00             | 15,221.96             | 12,740.00             | 77.58            | 63.55         | 103.54                | -3,783.31                           | -1,489.45    | 2,891.50               | 2,794.64                | 96.86                     | 29.851            |                    |           |
| 14,900.00                                                                | 12,065.00             | 15,321.96             | 12,740.00             | 78.89            | 64.73         | 103.54                | -3,883.30                           | -1,488.46    | 2,891.49               | 2,792.88                | 98.61                     | 29.321            |                    |           |
| 15,000.00                                                                | 12,065.00             | 15,421.96             | 12,740.00             | 80.20            | 65.94         | 103.54                | -3,983.30                           | -1,487.47    | 2,891.48               | 2,791.09                | 100.39                    | 28.803            |                    |           |
| 15,100.00                                                                | 12,065.00             | 15,521.96             | 12,740.00             | 81.53            | 67.16         | 103.54                | -4,083.29                           | -1,486.48    | 2,891.47               | 2,789.29                | 102.18                    | 28.298            |                    |           |
| 15,200.00                                                                | 12,065.00             | 15,621.96             | 12,740.00             | 82.87            | 68.39         | 103.54                | -4,183.29                           | -1,485.49    | 2,891.46               | 2,787.46                | 103.99                    | 27.805            |                    |           |
| 15,300.00                                                                | 12,065.00             | 15,721.96             | 12,740.00             | 84.22            | 69.65         | 103.54                | -4,283.28                           | -1,484.50    | 2,891.44               | 2,785.62                | 105.82                    | 27.324            |                    |           |
| 15,400.00                                                                | 12,065.00             | 15,821.96             | 12,740.00             | 85.59            | 70.92         | 103.54                | -4,383.28                           | -1,483.51    | 2,891.43               | 2,783.76                | 107.67                    | 26.855            |                    |           |
| 15,500.00                                                                | 12,065.00             | 15,921.96             | 12,740.00             | 86.96            | 72.21         | 103.54                | -4,483.27                           | -1,482.52    | 2,891.42               | 2,781.89                | 109.53                    | 26.397            |                    |           |
| 15,600.00                                                                | 12,065.00             | 16,021.96             | 12,740.00             | 88.34            | 73.51         | 103.54                | -4,583.27                           | -1,481.53    | 2,891.41               | 2,780.00                | 111.41                    | 25.952            |                    |           |
| 15,700.00                                                                | 12,065.00             | 16,121.96             | 12,740.00             | 89.73            | 74.82         | 103.54                | -4,683.26                           | -1,480.54    | 2,891.40               | 2,778.09                | 113.31                    | 25.518            |                    |           |
| 15,800.00                                                                | 12,065.00             | 16,221.96             | 12,740.00             | 91.13            | 76.15         | 103.54                | -4,783.26                           | -1,479.55    | 2,891.39               | 2,776.17                | 115.22                    | 25.095            |                    |           |
| 15,900.00                                                                | 12,065.00             | 16,321.96             | 12,740.00             | 92.54            | 77.49         | 103.54                | -4,883.25                           | -1,478.56    | 2,891.38               | 2,774.24                | 117.14                    | 24.683            |                    |           |
| 16,000.00                                                                | 12,065.00             | 16,421.96             | 12,740.00             | 93.95            | 78.84         | 103.54                | -4,983.25                           | -1,477.57    | 2,891.36               | 2,772.29                | 119.07                    | 24.282            |                    |           |
| 16,100.00                                                                | 12,065.00             | 16,521.96             | 12,740.00             | 95.38            | 80.21         | 103.54                | -5,083.24                           | -1,476.58    | 2,891.35               | 2,770.33                | 121.02                    | 23.891            |                    |           |
| 16,200.00                                                                | 12,065.00             | 16,621.96             | 12,740.00             | 96.81            | 81.58         | 103.54                | -5,183.24                           | -1,475.59    | 2,891.34               | 2,768.36                | 122.98                    | 23.511            |                    |           |
| 16,300.00                                                                | 12,065.00             | 16,721.96             | 12,740.00             | 98.24            | 82.97         | 103.54                | -5,283.24                           | -1,474.60    | 2,891.33               | 2,766.38                | 124.95                    | 23.140            |                    |           |
| 16,400.00                                                                | 12,065.00             | 16,821.96             | 12,740.00             | 99.69            | 84.36         | 103.54                | -5,383.23                           | -1,473.61    | 2,891.32               | 2,764.39                | 126.93                    | 22.779            |                    |           |
| 16,500.00                                                                | 12,065.00             | 16,921.96             | 12,740.00             | 101.14           | 85.76         | 103.54                | -5,483.23                           | -1,472.62    | 2,891.31               | 2,762.39                | 128.92                    | 22.427            |                    |           |
| 16,600.00                                                                | 12,065.00             | 17,021.96             | 12,740.00             | 102.60           | 87.17         | 103.54                | -5,583.22                           | -1,471.63    | 2,891.29               | 2,760.38                | 130.92                    | 22.085            |                    |           |
| 16,700.00                                                                | 12,065.00             | 17,121.96             | 12,740.00             | 104.06           | 88.60         | 103.54                | -5,683.22                           | -1,470.64    | 2,891.28               | 2,758.36                | 132.93                    | 21.751            |                    |           |
| 16,800.00                                                                | 12,065.00             | 17,221.96             | 12,740.00             | 105.53           | 90.02         | 103.54                | -5,783.21                           | -1,469.65    | 2,891.27               | 2,756.33                | 134.94                    | 21.426            |                    |           |
| 16,900.00                                                                | 12,065.00             | 17,321.96             | 12,740.00             | 107.00           | 91.46         | 103.54                | -5,883.21                           | -1,468.66    | 2,891.26               | 2,754.29                | 136.97                    | 21.109            |                    |           |
| 17,000.00                                                                | 12,065.00             | 17,421.96             | 12,740.00             | 108.48           | 92.90         | 103.54                | -5,983.20                           | -1,467.67    | 2,891.25               | 2,752.25                | 139.00                    | 20.800            |                    |           |
| 17,100.00                                                                | 12,065.00             | 17,521.96             | 12,740.00             | 109.96           | 94.35         | 103.54                | -6,083.20                           | -1,466.68    | 2,891.24               | 2,750.19                | 141.04                    | 20.499            |                    |           |
| 17,200.00                                                                | 12,065.00             | 17,621.96             | 12,740.00             | 111.45           | 95.81         | 103.54                | -6,183.19                           | -1,465.69    | 2,891.23               | 2,748.13                | 143.09                    | 20.205            |                    |           |
| 17,300.00                                                                | 12,065.00             | 17,721.96             | 12,740.00             | 112.94           | 97.27         | 103.54                | -6,283.19                           | -1,464.70    | 2,891.21               | 2,746.07                | 145.15                    | 19.919            |                    |           |
| 17,400.00                                                                | 12,065.00             | 17,821.96             | 12,740.00             | 114.44           | 98.74         | 103.54                | -6,383.18                           | -1,463.71    | 2,891.20               | 2,743.99                | 147.21                    | 19.640            |                    |           |
| 17,500.00                                                                | 12,065.00             | 17,921.96             | 12,740.00             | 115.94           | 100.21        | 103.54                | -6,483.18                           | -1,462.72    | 2,891.19               | 2,741.91                | 149.28                    | 19.368            |                    |           |
| 17,600.00                                                                | 12,065.00             | 18,021.96             | 12,740.00             | 117.45           | 101.69        | 103.54                | -6,583.17                           | -1,461.73    | 2,891.18               | 2,739.83                | 151.35                    | 19.102            |                    |           |
| 17,700.00                                                                | 12,065.00             | 18,121.96             | 12,740.00             | 118.96           | 103.18        | 103.54                | -6,683.17                           | -1,460.74    | 2,891.17               | 2,737.74                | 153.43                    | 18.843            |                    |           |
| 17,800.00                                                                | 12,065.00             | 18,221.96             | 12,740.00             | 120.47           | 104.67        | 103.54                | -6,783.16                           | -1,459.75    | 2,891.16               | 2,735.64                | 155.52                    | 18.591            |                    |           |
| 17,900.00                                                                | 12,065.00             | 18,321.96             | 12,740.00             | 121.99           | 106.16        | 103.54                | -6,883.16                           | -1,458.76    | 2,891.15               | 2,733.54                | 157.61                    | 18.344            |                    |           |
| 18,000.00                                                                | 12,065.00             | 18,421.96             | 12,740.00             | 123.51           | 107.66        | 103.54                | -6,983.15                           | -1,457.77    | 2,891.13               | 2,731.43                | 159.70                    | 18.103            |                    |           |
| 18,100.00                                                                | 12,065.00             | 18,521.96             | 12,740.00             | 125.03           | 109.16        | 103.54                | -7,083.15                           | -1,456.79    | 2,891.12               | 2,729.32                | 161.80                    | 17.868            |                    |           |
| 18,200.00                                                                | 12,065.00             | 18,621.96             | 12,740.00             | 126.56           | 110.67        | 103.54                | -7,183.14                           | -1,455.80    | 2,891.11               | 2,727.20                | 163.91                    | 17.639            |                    |           |
| 18,300.00                                                                | 12,065.00             | 18,721.96             | 12,740.00             | 128.09           | 112.18        | 103.54                | -7,283.14                           | -1,454.81    | 2,891.10               | 2,725.08                | 166.02                    | 17.414            |                    |           |
| 18,400.00                                                                | 12,065.00             | 18,821.96             | 12,740.00             | 129.62           | 113.70        | 103.54                | -7,383.13                           | -1,453.82    | 2,891.09               | 2,722.95                | 168.13                    | 17.195            |                    |           |
| 18,500.00                                                                | 12,065.00             | 18,921.96             | 12,740.00             | 131.16           | 115.22        | 103.54                | -7,483.13                           | -1,452.83    | 2,891.08               | 2,720.82                | 170.25                    | 16.981            |                    |           |
| 18,600.00                                                                | 12,065.00             | 19,021.96             | 12,740.00             | 132.69           | 116.74        | 103.54                | -7,583.12                           | -1,451.84    | 2,891.06               | 2,718.69                | 172.37                    | 16.772            |                    |           |
| 18,700.00                                                                | 12,065.00             | 19,121.96             | 12,740.00             | 134.24           | 118.27        | 103.54                | -7,683.12                           | -1,450.85    | 2,891.05               | 2,716.55                | 174.50                    | 16.567            |                    |           |
| 18,800.00                                                                | 12,065.00             | 19,221.96             | 12,740.00             | 135.78           | 119.80        | 103.54                | -7,783.11                           | -1,449.86    | 2,891.04               | 2,714.41                | 176.63                    | 16.368            |                    |           |
| 18,900.00                                                                | 12,065.00             | 19,321.96             | 12,740.00             | 137.33           | 121.33        | 103.54                | -7,883.11                           | -1,448.87    | 2,891.03               | 2,712.26                | 178.77                    | 16.172            |                    |           |
| 19,000.00                                                                | 12,065.00             | 19,421.96             | 12,740.00             | 138.87           | 122.87        | 103.54                | -7,983.10                           | -1,447.88    | 2,891.02               | 2,710.11                | 180.90                    | 15.981            |                    |           |
| 19,100.00                                                                | 12,065.00             | 19,521.96             | 12,740.00             | 140.43           | 124.40        | 103.54                | -8,083.10                           | -1,446.89    | 2,891.01               | 2,707.96                | 183.05                    | 15.794            |                    |           |
| 19,200.00                                                                | 12,065.00             | 19,621.96             | 12,740.00             | 141.98           | 125.95        | 103.54                | -8,183.09                           | -1,445.90    | 2,891.00               | 2,705.80                | 185.19                    | 15.611            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 801H - OH - Plan #2 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |         | 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 |                                                       |         |                    |           |
| 19,300.00                         | 12,065.00             | 19,721.96             | 12,740.00             | 143.53           | 127.49        | 103.54                | -8,283.09                           | -1,444.91    | 2,890.98               | 2,703.65                | 187.34                    | 15.432            |                                                       |         |                    |           |
| 19,400.00                         | 12,065.00             | 19,821.96             | 12,740.00             | 145.09           | 129.04        | 103.54                | -8,383.08                           | -1,443.92    | 2,890.97               | 2,701.48                | 189.49                    | 15.257            |                                                       |         |                    |           |
| 19,500.00                         | 12,065.00             | 19,921.96             | 12,740.00             | 146.65           | 130.59        | 103.54                | -8,483.08                           | -1,442.93    | 2,890.96               | 2,699.32                | 191.64                    | 15.085            |                                                       |         |                    |           |
| 19,600.00                         | 12,065.00             | 20,021.96             | 12,740.00             | 148.21           | 132.14        | 103.54                | -8,583.07                           | -1,441.94    | 2,890.95               | 2,697.15                | 193.80                    | 14.917            |                                                       |         |                    |           |
| 19,700.00                         | 12,065.00             | 20,121.96             | 12,740.00             | 149.78           | 133.69        | 103.54                | -8,683.07                           | -1,440.95    | 2,890.94               | 2,694.98                | 195.96                    | 14.753            |                                                       |         |                    |           |
| 19,800.00                         | 12,065.00             | 20,221.96             | 12,740.00             | 151.34           | 135.25        | 103.54                | -8,783.06                           | -1,439.96    | 2,890.93               | 2,692.80                | 198.12                    | 14.592            |                                                       |         |                    |           |
| 19,900.00                         | 12,065.00             | 20,321.96             | 12,740.00             | 152.91           | 136.81        | 103.54                | -8,883.06                           | -1,438.97    | 2,890.91               | 2,690.63                | 200.29                    | 14.434            |                                                       |         |                    |           |
| 20,000.00                         | 12,065.00             | 20,421.96             | 12,740.00             | 154.48           | 138.37        | 103.54                | -8,983.05                           | -1,437.98    | 2,890.90               | 2,688.45                | 202.46                    | 14.279            |                                                       |         |                    |           |
| 20,100.00                         | 12,065.00             | 20,521.96             | 12,740.00             | 156.05           | 139.93        | 103.54                | -9,083.05                           | -1,436.99    | 2,890.89               | 2,686.27                | 204.63                    | 14.128            |                                                       |         |                    |           |
| 20,200.00                         | 12,065.00             | 20,621.96             | 12,740.00             | 157.62           | 141.50        | 103.54                | -9,183.04                           | -1,436.00    | 2,890.88               | 2,684.08                | 206.80                    | 13.979            |                                                       |         |                    |           |
| 20,300.00                         | 12,065.00             | 20,721.96             | 12,740.00             | 159.20           | 143.07        | 103.54                | -9,283.04                           | -1,435.01    | 2,890.87               | 2,681.90                | 208.97                    | 13.834            |                                                       |         |                    |           |
| 20,400.00                         | 12,065.00             | 20,821.96             | 12,740.00             | 160.77           | 144.64        | 103.54                | -9,383.03                           | -1,434.02    | 2,890.86               | 2,679.71                | 211.15                    | 13.691            |                                                       |         |                    |           |
| 20,500.00                         | 12,065.00             | 20,921.96             | 12,740.00             | 162.35           | 146.21        | 103.54                | -9,483.03                           | -1,433.03    | 2,890.85               | 2,677.52                | 213.33                    | 13.551            |                                                       |         |                    |           |
| 20,600.00                         | 12,065.00             | 21,021.96             | 12,740.00             | 163.93           | 147.78        | 103.54                | -9,583.02                           | -1,432.04    | 2,890.83               | 2,675.33                | 215.51                    | 13.414            |                                                       |         |                    |           |
| 20,700.00                         | 12,065.00             | 21,121.96             | 12,740.00             | 165.51           | 149.35        | 103.54                | -9,683.02                           | -1,431.05    | 2,890.82               | 2,673.13                | 217.69                    | 13.280            |                                                       |         |                    |           |
| 20,800.00                         | 12,065.00             | 21,221.96             | 12,740.00             | 167.09           | 150.93        | 103.54                | -9,783.01                           | -1,430.06    | 2,890.81               | 2,670.94                | 219.87                    | 13.148            |                                                       |         |                    |           |
| 20,900.00                         | 12,065.00             | 21,321.96             | 12,740.00             | 168.67           | 152.51        | 103.54                | -9,883.01                           | -1,429.07    | 2,890.80               | 2,668.74                | 222.06                    | 13.018            |                                                       |         |                    |           |
| 21,000.00                         | 12,065.00             | 21,421.96             | 12,740.00             | 170.26           | 154.09        | 103.54                | -9,983.00                           | -1,428.08    | 2,890.79               | 2,666.54                | 224.25                    | 12.891            |                                                       |         |                    |           |
| 21,100.00                         | 12,065.00             | 21,521.96             | 12,740.00             | 171.84           | 155.67        | 103.54                | -10,083.00                          | -1,427.09    | 2,890.78               | 2,664.34                | 226.43                    | 12.767            |                                                       |         |                    |           |
| 21,200.00                         | 12,065.00             | 21,621.96             | 12,740.00             | 173.43           | 157.25        | 103.54                | -10,183.00                          | -1,426.10    | 2,890.77               | 2,662.14                | 228.63                    | 12.644            |                                                       |         |                    |           |
| 21,300.00                         | 12,065.00             | 21,721.96             | 12,740.00             | 175.02           | 158.83        | 103.54                | -10,282.99                          | -1,425.11    | 2,890.75               | 2,659.94                | 230.82                    | 12.524            |                                                       |         |                    |           |
| 21,400.00                         | 12,065.00             | 21,821.96             | 12,740.00             | 176.60           | 160.42        | 103.54                | -10,382.99                          | -1,424.12    | 2,890.74               | 2,657.73                | 233.01                    | 12.406            |                                                       |         |                    |           |
| 21,500.00                         | 12,065.00             | 21,921.96             | 12,740.00             | 178.19           | 162.01        | 103.54                | -10,482.98                          | -1,423.13    | 2,890.73               | 2,655.52                | 235.21                    | 12.290            |                                                       |         |                    |           |
| 21,600.00                         | 12,065.00             | 22,021.96             | 12,740.00             | 179.79           | 163.59        | 103.54                | -10,582.98                          | -1,422.14    | 2,890.72               | 2,653.31                | 237.41                    | 12.176            |                                                       |         |                    |           |
| 21,700.00                         | 12,065.00             | 22,121.96             | 12,740.00             | 181.38           | 165.18        | 103.54                | -10,682.97                          | -1,421.15    | 2,890.71               | 2,651.10                | 239.60                    | 12.065            |                                                       |         |                    |           |
| 21,800.00                         | 12,065.00             | 22,221.96             | 12,740.00             | 182.97           | 166.77        | 103.54                | -10,782.97                          | -1,420.17    | 2,890.70               | 2,648.89                | 241.80                    | 11.955            |                                                       |         |                    |           |
| 21,900.00                         | 12,065.00             | 22,321.96             | 12,740.00             | 184.57           | 168.36        | 103.54                | -10,882.96                          | -1,419.18    | 2,890.68               | 2,646.68                | 244.01                    | 11.847            |                                                       |         |                    |           |
| 22,000.00                         | 12,065.00             | 22,421.96             | 12,740.00             | 186.16           | 169.96        | 103.54                | -10,982.96                          | -1,418.19    | 2,890.67               | 2,644.46                | 246.21                    | 11.741            |                                                       |         |                    |           |
| 22,100.00                         | 12,065.00             | 22,521.96             | 12,740.00             | 187.76           | 171.55        | 103.54                | -11,082.95                          | -1,417.20    | 2,890.66               | 2,642.25                | 248.41                    | 11.636            |                                                       |         |                    |           |
| 22,200.00                         | 12,065.00             | 22,621.96             | 12,740.00             | 189.36           | 173.14        | 103.54                | -11,182.95                          | -1,416.21    | 2,890.65               | 2,640.03                | 250.62                    | 11.534            |                                                       |         |                    |           |
| 22,300.00                         | 12,065.00             | 22,721.96             | 12,740.00             | 190.95           | 174.74        | 103.54                | -11,282.94                          | -1,415.22    | 2,890.64               | 2,637.81                | 252.83                    | 11.433            |                                                       |         |                    |           |
| 22,400.00                         | 12,065.00             | 22,821.96             | 12,740.00             | 192.55           | 176.30        | 103.54                | -11,382.94                          | -1,414.23    | 2,890.63               | 2,635.62                | 255.01                    | 11.335            |                                                       |         |                    |           |
| 22,441.68                         | 12,065.00             | 22,863.63             | 12,740.00             | 193.22           | 176.89        | 103.54                | -11,424.61                          | -1,413.81    | 2,890.62               | 2,634.74                | 255.88                    | 11.297            |                                                       |         |                    |           |
| 22,445.57                         | 12,065.00             | 22,865.07             | 12,740.00             | 193.28           | 176.91        | 103.54                | -11,426.05                          | -1,413.80    | 2,890.62               | 2,634.69                | 255.93                    | 11.295 SF         |                                                       |         |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 98.20                 | 98.20                 | 0.13             | 0.12          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,654.79                | 0.18                      | 9,411.483         |                    |           |
| 200.00                            | 200.00                | 198.20                | 198.20                | 0.48             | 0.48          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,654.28                | 0.68                      | 2,434.331         |                    |           |
| 300.00                            | 300.00                | 298.20                | 298.20                | 0.84             | 0.84          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,653.78                | 1.19                      | 1,394.484         |                    |           |
| 400.00                            | 400.00                | 398.20                | 398.20                | 1.20             | 1.19          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,653.27                | 1.69                      | 977.103           |                    |           |
| 500.00                            | 500.00                | 498.20                | 498.20                | 1.56             | 1.55          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,652.76                | 2.20                      | 752.017           |                    |           |
| 600.00                            | 600.00                | 598.20                | 598.20                | 1.92             | 1.91          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,652.25                | 2.71                      | 611.217           |                    |           |
| 700.00                            | 700.00                | 698.20                | 698.20                | 2.28             | 2.27          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,651.75                | 3.21                      | 514.826           |                    |           |
| 800.00                            | 800.00                | 798.20                | 798.20                | 2.63             | 2.63          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,651.24                | 3.72                      | 444.696           |                    |           |
| 900.00                            | 900.00                | 898.20                | 898.20                | 2.99             | 2.99          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,650.73                | 4.23                      | 391.381           |                    |           |
| 1,000.00                          | 1,000.00              | 998.20                | 998.20                | 3.35             | 3.35          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,650.23                | 4.74                      | 349.482           |                    |           |
| 1,100.00                          | 1,100.00              | 1,098.20              | 1,098.20              | 3.71             | 3.70          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,649.72                | 5.24                      | 315.686           |                    |           |
| 1,200.00                          | 1,200.00              | 1,198.20              | 1,198.20              | 4.07             | 4.06          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,649.21                | 5.75                      | 287.850           |                    |           |
| 1,300.00                          | 1,300.00              | 1,298.20              | 1,298.20              | 4.43             | 4.42          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,648.71                | 6.26                      | 264.526           |                    |           |
| 1,400.00                          | 1,400.00              | 1,398.20              | 1,398.20              | 4.79             | 4.78          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,648.20                | 6.76                      | 244.698           |                    |           |
| 1,500.00                          | 1,500.00              | 1,498.20              | 1,498.20              | 5.14             | 5.14          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,647.69                | 7.27                      | 227.635           |                    |           |
| 1,600.00                          | 1,600.00              | 1,598.20              | 1,598.20              | 5.50             | 5.50          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,647.18                | 7.78                      | 212.797           |                    |           |
| 1,700.00                          | 1,700.00              | 1,698.20              | 1,698.20              | 5.86             | 5.85          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,646.68                | 8.28                      | 199.774           |                    |           |
| 1,800.00                          | 1,800.00              | 1,798.20              | 1,798.20              | 6.22             | 6.21          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,646.17                | 8.79                      | 188.254           |                    |           |
| 1,900.00                          | 1,900.00              | 1,898.20              | 1,898.20              | 6.58             | 6.57          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,645.66                | 9.30                      | 177.990           |                    |           |
| 2,000.00                          | 2,000.00              | 1,998.20              | 1,998.20              | 6.94             | 6.93          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,645.16                | 9.81                      | 168.787           |                    |           |
| 2,100.00                          | 2,100.00              | 2,098.20              | 2,098.20              | 7.29             | 7.29          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,644.65                | 10.31                     | 160.489           |                    |           |
| 2,200.00                          | 2,200.00              | 2,198.20              | 2,198.20              | 7.65             | 7.65          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,644.14                | 10.82                     | 152.969           |                    |           |
| 2,300.00                          | 2,300.00              | 2,298.20              | 2,298.20              | 8.01             | 8.01          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,643.64                | 11.33                     | 146.122           |                    |           |
| 2,400.00                          | 2,400.00              | 2,398.20              | 2,398.20              | 8.37             | 8.36          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,643.13                | 11.83                     | 139.862           |                    |           |
| 2,500.00                          | 2,500.00              | 2,498.20              | 2,498.20              | 8.73             | 8.72          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,642.62                | 12.34                     | 134.116           |                    |           |
| 2,600.00                          | 2,600.00              | 2,598.20              | 2,598.20              | 9.09             | 9.08          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,642.12                | 12.85                     | 128.823           |                    |           |
| 2,700.00                          | 2,700.00              | 2,698.20              | 2,698.20              | 9.45             | 9.44          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,641.61                | 13.35                     | 123.933           |                    |           |
| 2,800.00                          | 2,800.00              | 2,798.20              | 2,798.20              | 9.80             | 9.80          | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,641.10                | 13.86                     | 119.400           |                    |           |
| 2,900.00                          | 2,900.00              | 2,898.20              | 2,898.20              | 10.16            | 10.16         | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,640.59                | 14.37                     | 115.187           |                    |           |
| 3,000.00                          | 3,000.00              | 2,998.20              | 2,998.20              | 10.52            | 10.51         | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,640.09                | 14.87                     | 111.261           |                    |           |
| 3,100.00                          | 3,100.00              | 3,098.20              | 3,098.20              | 10.88            | 10.87         | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,639.58                | 15.38                     | 107.594           |                    |           |
| 3,200.00                          | 3,200.00              | 3,198.20              | 3,198.20              | 11.24            | 11.23         | -128.04               | -1,019.84                           | -1,303.39    | 1,654.96               | 1,639.07                | 15.89                     | 104.161           |                    |           |
| 3,300.00                          | 3,299.99              | 3,345.76              | 3,345.72              | 11.58            | 11.74         | 103.32                | -1,019.99                           | -1,300.61    | 1,653.85               | 1,637.36                | 16.49                     | 100.309           |                    |           |
| 3,400.00                          | 3,399.91              | 3,494.02              | 3,493.73              | 11.91            | 12.25         | 103.37                | -1,020.45                           | -1,292.10    | 1,650.42               | 1,633.36                | 17.06                     | 96.730            |                    |           |
| 3,500.00                          | 3,499.69              | 3,641.92              | 3,640.93              | 12.25            | 12.77         | 103.45                | -1,021.21                           | -1,277.89    | 1,644.67               | 1,627.05                | 17.63                     | 93.297            |                    |           |
| 3,600.00                          | 3,599.27              | 3,789.29              | 3,786.95              | 12.58            | 13.29         | 103.58                | -1,022.27                           | -1,258.09    | 1,636.63               | 1,618.44                | 18.19                     | 89.993            |                    |           |
| 3,700.00                          | 3,698.57              | 3,911.16              | 3,907.12              | 12.92            | 13.73         | 103.74                | -1,023.36                           | -1,237.83    | 1,626.71               | 1,608.01                | 18.70                     | 86.967            |                    |           |
| 3,800.00                          | 3,797.54              | 4,010.65              | 4,005.14              | 13.27            | 14.09         | 103.97                | -1,024.28                           | -1,220.78    | 1,617.09               | 1,597.90                | 19.20                     | 84.236            |                    |           |
| 3,900.00                          | 3,896.09              | 4,110.11              | 4,103.12              | 13.62            | 14.46         | 104.29                | -1,025.19                           | -1,203.74    | 1,608.11               | 1,588.42                | 19.70                     | 81.647            |                    |           |
| 4,000.00                          | 3,994.16              | 4,209.45              | 4,200.99              | 13.98            | 14.84         | 104.69                | -1,026.11                           | -1,186.72    | 1,599.81               | 1,579.61                | 20.20                     | 79.193            |                    |           |
| 4,100.00                          | 4,091.70              | 4,308.62              | 4,298.68              | 14.35            | 15.22         | 105.17                | -1,027.02                           | -1,169.73    | 1,592.21               | 1,571.50                | 20.71                     | 76.864            |                    |           |
| 4,200.00                          | 4,188.62              | 4,407.53              | 4,396.13              | 14.74            | 15.60         | 105.74                | -1,027.93                           | -1,152.78    | 1,585.39               | 1,564.16                | 21.24                     | 74.654            |                    |           |
| 4,300.00                          | 4,284.86              | 4,506.14              | 4,493.28              | 15.14            | 15.98         | 106.38                | -1,028.84                           | -1,135.89    | 1,579.41               | 1,557.64                | 21.77                     | 72.558            |                    |           |
| 4,400.00                          | 4,380.36              | 4,604.36              | 4,590.04              | 15.55            | 16.36         | 107.10                | -1,029.74                           | -1,119.06    | 1,574.34               | 1,552.03                | 22.31                     | 70.569            |                    |           |
| 4,452.43                          | 4,430.11              | 4,655.68              | 4,640.60              | 15.78            | 16.57         | 107.51                | -1,030.21                           | -1,110.27    | 1,572.08               | 1,549.48                | 22.60                     | 69.569            |                    |           |
| 4,500.00                          | 4,475.14              | 4,702.19              | 4,686.42              | 15.99            | 16.75         | 107.86                | -1,030.64                           | -1,102.30    | 1,570.19               | 1,547.33                | 22.86                     | 68.683            |                    |           |
| 4,600.00                          | 4,569.82              | 4,799.95              | 4,782.73              | 16.44            | 17.14         | 108.60                | -1,031.54                           | -1,085.55    | 1,566.41               | 1,542.99                | 23.42                     | 66.874            |                    |           |
| 4,700.00                          | 4,664.49              | 4,897.71              | 4,879.04              | 16.91            | 17.53         | 109.34                | -1,032.44                           | -1,068.80    | 1,562.91               | 1,538.92                | 23.99                     | 65.140            |                    |           |
| 4,800.00                          | 4,759.16              | 4,995.47              | 4,975.35              | 17.39            | 17.92         | 110.09                | -1,033.34                           | -1,052.05    | 1,559.69               | 1,535.12                | 24.57                     | 63.480            |                    |           |
| 4,900.00                          | 4,853.84              | 5,093.23              | 5,071.67              | 17.87            | 18.32         | 110.84                | -1,034.24                           | -1,035.30    | 1,556.74               | 1,531.59                | 25.15                     | 61.892            |                    |           |
| 5,000.00                          | 4,948.51              | 5,191.00              | 5,167.98              | 18.37            | 18.72         | 111.59                | -1,035.14                           | -1,018.55    | 1,554.08               | 1,528.34                | 25.74                     | 60.375            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |              |              |              |                 |        |              |                        |              |                |                 |                   |            | Tatanka Fed Com - Tatanka Fed Com 802H - OH - Plan #2 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|--------------|--------------|--------------|-----------------|--------|--------------|------------------------|--------------|----------------|-----------------|-------------------|------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |              |              |              |                 |        |              |                        |              |                |                 |                   |            |                                                       |         | Offset Well Error: | 0.00 usft |
| Reference                         |              | Offset       |              | Semi Major Axis |        |              | Distance               |              |                |                 |                   |            |                                                       | Warning |                    |           |
| Measured Depth                    | Vertical     | Measured     | Vertical     | Reference       | Offset | Highside     | Offset Wellbore Centre |              | Between        | Between         | Minimum           | Separation |                                                       |         |                    |           |
| Depth (usft)                      | Depth (usft) | Depth (usft) | Depth (usft) | (usft)          | (usft) | Toolface (°) | +N/-S (usft)           | +E/-W (usft) | Centres (usft) | Ellipses (usft) | Separation (usft) | Factor     |                                                       |         |                    |           |
| 5,100.00                          | 5,043.18     | 5,288.76     | 5,264.29     | 18.88           | 19.12  | 112.34       | -1,036.04              | -1,001.80    | 1,551.69       | 1,525.36        | 26.33             | 58.926     |                                                       |         |                    |           |
| 5,200.00                          | 5,137.85     | 5,386.52     | 5,360.60     | 19.39           | 19.52  | 113.10       | -1,036.94              | -985.05      | 1,549.58       | 1,522.66        | 26.93             | 57.543     |                                                       |         |                    |           |
| 5,300.00                          | 5,232.53     | 5,484.28     | 5,456.92     | 19.92           | 19.92  | 113.86       | -1,037.84              | -968.30      | 1,547.76       | 1,520.23        | 27.53             | 56.223     |                                                       |         |                    |           |
| 5,400.00                          | 5,327.20     | 5,582.05     | 5,553.23     | 20.45           | 20.33  | 114.62       | -1,038.74              | -951.55      | 1,546.23       | 1,518.09        | 28.13             | 54.965     |                                                       |         |                    |           |
| 5,500.00                          | 5,421.87     | 5,679.81     | 5,649.54     | 20.99           | 20.74  | 115.38       | -1,039.64              | -934.80      | 1,544.97       | 1,516.24        | 28.74             | 53.766     |                                                       |         |                    |           |
| 5,600.00                          | 5,516.54     | 5,777.57     | 5,745.85     | 21.53           | 21.15  | 116.14       | -1,040.54              | -918.05      | 1,544.01       | 1,514.67        | 29.34             | 52.623     |                                                       |         |                    |           |
| 5,700.00                          | 5,611.22     | 5,875.33     | 5,842.17     | 22.08           | 21.56  | 116.90       | -1,041.44              | -901.29      | 1,543.33       | 1,513.38        | 29.95             | 51.535     |                                                       |         |                    |           |
| 5,800.00                          | 5,705.89     | 5,973.10     | 5,938.48     | 22.63           | 21.97  | 117.67       | -1,042.34              | -884.54      | 1,542.93       | 1,512.38        | 30.55             | 50.498     |                                                       |         |                    |           |
| 5,887.43                          | 5,788.66     | 6,058.57     | 6,022.68     | 23.12           | 22.33  | 118.34       | -1,043.12              | -869.90      | 1,542.82       | 1,511.74        | 31.09             | 49.632     | CC                                                    |         |                    |           |
| 5,900.00                          | 5,800.56     | 6,070.86     | 6,034.79     | 23.19           | 22.38  | 118.43       | -1,043.24              | -867.79      | 1,542.82       | 1,511.66        | 31.16             | 49.510     |                                                       |         |                    |           |
| 6,000.00                          | 5,895.23     | 6,168.62     | 6,131.10     | 23.76           | 22.79  | 119.20       | -1,044.14              | -851.04      | 1,543.00       | 1,511.24        | 31.77             | 48.570     |                                                       |         |                    |           |
| 6,100.00                          | 5,989.91     | 6,266.38     | 6,227.42     | 24.33           | 23.21  | 119.96       | -1,045.04              | -834.29      | 1,543.47       | 1,511.10        | 32.38             | 47.674     | ES                                                    |         |                    |           |
| 6,200.00                          | 6,084.58     | 6,364.14     | 6,323.73     | 24.90           | 23.62  | 120.72       | -1,045.94              | -817.54      | 1,544.22       | 1,511.24        | 32.98             | 46.821     |                                                       |         |                    |           |
| 6,300.00                          | 6,179.25     | 6,461.91     | 6,420.04     | 25.48           | 24.04  | 121.48       | -1,046.84              | -800.79      | 1,545.26       | 1,511.68        | 33.59             | 46.009     |                                                       |         |                    |           |
| 6,400.00                          | 6,273.92     | 6,559.67     | 6,516.35     | 26.05           | 24.46  | 122.24       | -1,047.74              | -784.04      | 1,546.59       | 1,512.40        | 34.19             | 45.235     |                                                       |         |                    |           |
| 6,500.00                          | 6,368.60     | 6,657.43     | 6,612.67     | 26.64           | 24.87  | 123.00       | -1,048.64              | -767.29      | 1,548.19       | 1,513.40        | 34.79             | 44.499     |                                                       |         |                    |           |
| 6,600.00                          | 6,463.27     | 6,755.19     | 6,708.98     | 27.22           | 25.29  | 123.76       | -1,049.53              | -750.54      | 1,550.09       | 1,514.70        | 35.39             | 43.798     |                                                       |         |                    |           |
| 6,700.00                          | 6,557.94     | 6,852.96     | 6,805.29     | 27.81           | 25.71  | 124.52       | -1,050.43              | -733.79      | 1,552.26       | 1,516.27        | 35.99             | 43.131     |                                                       |         |                    |           |
| 6,800.00                          | 6,652.61     | 6,934.70     | 6,885.86     | 28.40           | 26.06  | 125.15       | -1,051.17              | -720.01      | 1,555.02       | 1,518.45        | 36.57             | 42.524     |                                                       |         |                    |           |
| 6,900.00                          | 6,747.29     | 7,000.00     | 6,950.40     | 29.00           | 26.34  | 125.67       | -1,051.71              | -710.08      | 1,559.63       | 1,522.51        | 37.12             | 42.019     |                                                       |         |                    |           |
| 7,000.00                          | 6,841.96     | 7,075.32     | 7,025.03     | 29.59           | 26.64  | 126.28       | -1,052.25              | -699.99      | 1,566.22       | 1,528.55        | 37.67             | 41.581     |                                                       |         |                    |           |
| 7,100.00                          | 6,936.63     | 7,145.09     | 7,094.34     | 30.19           | 26.92  | 126.86       | -1,052.68              | -691.96      | 1,574.82       | 1,536.63        | 38.19             | 41.234     |                                                       |         |                    |           |
| 7,200.00                          | 7,031.30     | 7,214.44     | 7,163.36     | 30.79           | 27.19  | 127.44       | -1,053.04              | -685.23      | 1,585.44       | 1,546.74        | 38.70             | 40.966     |                                                       |         |                    |           |
| 7,300.00                          | 7,125.98     | 7,283.33     | 7,232.03     | 31.40           | 27.45  | 128.02       | -1,053.34              | -679.79      | 1,598.06       | 1,558.87        | 39.20             | 40.772     |                                                       |         |                    |           |
| 7,400.00                          | 7,220.65     | 7,351.72     | 7,300.29     | 32.00           | 27.70  | 128.61       | -1,053.56              | -675.61      | 1,612.69       | 1,573.02        | 39.67             | 40.651     |                                                       |         |                    |           |
| 7,500.00                          | 7,315.32     | 7,419.57     | 7,368.08     | 32.61           | 27.94  | 129.19       | -1,053.72              | -672.67      | 1,629.32       | 1,589.19        | 40.13             | 40.600     |                                                       |         |                    |           |
| 7,600.00                          | 7,409.99     | 7,500.00     | 7,448.48     | 33.21           | 28.21  | 129.89       | -1,053.82              | -670.74      | 1,648.01       | 1,607.39        | 40.62             | 40.571     |                                                       |         |                    |           |
| 7,700.00                          | 7,504.67     | 7,554.38     | 7,502.87     | 33.82           | 28.39  | 130.36       | -1,053.84              | -670.39      | 1,668.51       | 1,627.51        | 41.00             | 40.695     |                                                       |         |                    |           |
| 7,800.00                          | 7,599.34     | 7,649.06     | 7,597.54     | 34.43           | 28.71  | 131.16       | -1,053.84              | -670.39      | 1,690.19       | 1,648.66        | 41.53             | 40.698     |                                                       |         |                    |           |
| 7,900.00                          | 7,694.01     | 7,743.73     | 7,692.21     | 35.05           | 29.02  | 131.95       | -1,053.84              | -670.39      | 1,712.21       | 1,670.15        | 42.06             | 40.711     |                                                       |         |                    |           |
| 8,000.00                          | 7,788.68     | 7,838.40     | 7,786.88     | 35.66           | 29.33  | 132.72       | -1,053.84              | -670.39      | 1,734.54       | 1,691.95        | 42.58             | 40.732     |                                                       |         |                    |           |
| 8,100.00                          | 7,883.36     | 7,933.07     | 7,881.56     | 36.28           | 29.64  | 133.47       | -1,053.84              | -670.39      | 1,757.18       | 1,714.07        | 43.11             | 40.760     |                                                       |         |                    |           |
| 8,200.00                          | 7,978.03     | 8,027.75     | 7,976.23     | 36.89           | 29.96  | 134.20       | -1,053.84              | -670.39      | 1,780.11       | 1,736.47        | 43.63             | 40.796     |                                                       |         |                    |           |
| 8,300.00                          | 8,072.70     | 8,122.42     | 8,070.90     | 37.51           | 30.27  | 134.92       | -1,053.84              | -670.39      | 1,803.32       | 1,759.16        | 44.16             | 40.838     |                                                       |         |                    |           |
| 8,400.00                          | 8,167.37     | 8,217.09     | 8,165.57     | 38.13           | 30.59  | 135.61       | -1,053.84              | -670.39      | 1,826.81       | 1,782.13        | 44.68             | 40.886     |                                                       |         |                    |           |
| 8,500.00                          | 8,262.05     | 8,311.76     | 8,260.25     | 38.75           | 30.90  | 136.29       | -1,053.84              | -670.39      | 1,850.56       | 1,805.36        | 45.20             | 40.940     |                                                       |         |                    |           |
| 8,600.00                          | 8,356.72     | 8,406.44     | 8,354.92     | 39.37           | 31.22  | 136.96       | -1,053.84              | -670.39      | 1,874.56       | 1,828.84        | 45.72             | 40.998     |                                                       |         |                    |           |
| 8,700.00                          | 8,451.39     | 8,501.11     | 8,449.59     | 39.99           | 31.54  | 137.60       | -1,053.84              | -670.39      | 1,898.81       | 1,852.57        | 46.24             | 41.062     |                                                       |         |                    |           |
| 8,800.00                          | 8,546.07     | 8,595.78     | 8,544.27     | 40.61           | 31.85  | 138.24       | -1,053.84              | -670.39      | 1,923.29       | 1,876.53        | 46.76             | 41.129     |                                                       |         |                    |           |
| 8,875.44                          | 8,617.48     | 8,667.20     | 8,615.68     | 41.08           | 32.09  | 138.70       | -1,053.84              | -670.39      | 1,941.91       | 1,894.75        | 47.15             | 41.183     |                                                       |         |                    |           |
| 8,900.00                          | 8,640.90     | 8,690.62     | 8,639.10     | 41.23           | 32.17  | 139.23       | -1,053.84              | -670.39      | 1,947.61       | 1,900.33        | 47.28             | 41.194     |                                                       |         |                    |           |
| 8,950.00                          | 8,689.44     | 8,739.15     | 8,687.64     | 41.49           | 32.33  | 140.06       | -1,053.84              | -670.39      | 1,956.83       | 1,909.30        | 47.53             | 41.170     |                                                       |         |                    |           |
| 9,000.00                          | 8,738.83     | 8,788.54     | 8,737.03     | 41.70           | 32.50  | 140.58       | -1,053.84              | -670.39      | 1,962.76       | 1,914.99        | 47.77             | 41.085     |                                                       |         |                    |           |
| 9,050.00                          | 8,788.70     | 8,838.42     | 8,786.90     | 41.87           | 32.67  | 140.81       | -1,053.84              | -670.39      | 1,965.35       | 1,917.34        | 48.01             | 40.939     |                                                       |         |                    |           |
| 9,063.30                          | 8,802.00     | 8,851.72     | 8,800.20     | 41.91           | 32.71  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,917.40        | 48.07             | 40.891     |                                                       |         |                    |           |
| 9,100.00                          | 8,838.70     | 8,888.41     | 8,836.90     | 42.00           | 32.83  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,917.24        | 48.23             | 40.753     |                                                       |         |                    |           |
| 9,200.00                          | 8,938.70     | 8,988.41     | 8,936.90     | 42.26           | 33.17  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,916.80        | 48.67             | 40.382     |                                                       |         |                    |           |
| 9,300.00                          | 9,038.70     | 9,088.41     | 9,036.90     | 42.51           | 33.51  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,916.35        | 49.12             | 40.017     |                                                       |         |                    |           |
| 9,400.00                          | 9,138.70     | 9,188.41     | 9,136.90     | 42.77           | 33.85  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,915.91        | 49.56             | 39.657     |                                                       |         |                    |           |
| 9,500.00                          | 9,238.70     | 9,288.41     | 9,236.90     | 43.03           | 34.18  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,915.46        | 50.01             | 39.302     |                                                       |         |                    |           |
| 9,600.00                          | 9,338.70     | 9,388.41     | 9,336.90     | 43.30           | 34.52  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,915.01        | 50.46             | 38.953     |                                                       |         |                    |           |
| 9,700.00                          | 9,438.70     | 9,488.41     | 9,436.90     | 43.56           | 34.86  | -90.52       | -1,053.84              | -670.39      | 1,965.47       | 1,914.56        | 50.91             | 38.610     |                                                       |         |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,800.00                          | 9,538.70              | 9,588.41              | 9,536.90              | 43.82            | 35.20         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,914.11                | 51.36                     | 38.271            |                    |           |
| 9,900.00                          | 9,638.70              | 9,688.41              | 9,636.90              | 44.09            | 35.54         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,913.66                | 51.81                     | 37.938            |                    |           |
| 10,000.00                         | 9,738.70              | 9,788.41              | 9,736.90              | 44.36            | 35.88         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,913.21                | 52.26                     | 37.610            |                    |           |
| 10,100.00                         | 9,838.70              | 9,888.41              | 9,836.90              | 44.63            | 36.22         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,912.76                | 52.71                     | 37.286            |                    |           |
| 10,200.00                         | 9,938.70              | 9,988.41              | 9,936.90              | 44.90            | 36.56         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,912.30                | 53.17                     | 36.968            |                    |           |
| 10,300.00                         | 10,038.70             | 10,088.41             | 10,036.90             | 45.17            | 36.90         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,911.85                | 53.62                     | 36.654            |                    |           |
| 10,400.00                         | 10,138.70             | 10,188.41             | 10,136.90             | 45.44            | 37.24         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,911.39                | 54.08                     | 36.345            |                    |           |
| 10,500.00                         | 10,238.70             | 10,288.41             | 10,236.90             | 45.71            | 37.58         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,910.94                | 54.54                     | 36.040            |                    |           |
| 10,600.00                         | 10,338.70             | 10,388.41             | 10,336.90             | 45.99            | 37.93         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,910.48                | 54.99                     | 35.740            |                    |           |
| 10,700.00                         | 10,438.70             | 10,488.41             | 10,436.90             | 46.26            | 38.27         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,910.02                | 55.45                     | 35.444            |                    |           |
| 10,800.00                         | 10,538.70             | 10,588.41             | 10,536.90             | 46.54            | 38.61         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,909.56                | 55.91                     | 35.153            |                    |           |
| 10,900.00                         | 10,638.70             | 10,688.41             | 10,636.90             | 46.82            | 38.95         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,909.10                | 56.37                     | 34.866            |                    |           |
| 11,000.00                         | 10,738.70             | 10,788.41             | 10,736.90             | 47.10            | 39.30         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,908.64                | 56.83                     | 34.583            |                    |           |
| 11,100.00                         | 10,838.70             | 10,888.41             | 10,836.90             | 47.38            | 39.64         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,908.18                | 57.30                     | 34.304            |                    |           |
| 11,200.00                         | 10,938.70             | 10,988.41             | 10,936.90             | 47.66            | 39.98         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,907.71                | 57.76                     | 34.030            |                    |           |
| 11,300.00                         | 11,038.70             | 11,088.41             | 11,036.90             | 47.94            | 40.33         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,907.25                | 58.22                     | 33.759            |                    |           |
| 11,400.00                         | 11,138.70             | 11,188.41             | 11,136.90             | 48.22            | 40.67         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,906.79                | 58.69                     | 33.492            |                    |           |
| 11,500.00                         | 11,238.70             | 11,288.41             | 11,236.90             | 48.51            | 41.02         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,906.32                | 59.15                     | 33.228            |                    |           |
| 11,600.00                         | 11,338.70             | 11,388.41             | 11,336.90             | 48.79            | 41.36         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,905.86                | 59.62                     | 32.969            |                    |           |
| 11,700.00                         | 11,438.70             | 11,488.41             | 11,436.90             | 49.08            | 41.71         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,905.39                | 60.08                     | 32.713            |                    |           |
| 11,753.34                         | 11,492.04             | 11,541.76             | 11,490.24             | 49.23            | 41.89         | -90.52                | -1,053.84                           | -670.39      | 1,965.47               | 1,905.14                | 60.33                     | 32.578            |                    |           |
| 11,800.00                         | 11,538.65             | 11,588.36             | 11,536.85             | 49.37            | 42.05         | 90.10                 | -1,053.84                           | -670.39      | 1,965.47               | 1,904.92                | 60.55                     | 32.460            |                    |           |
| 11,850.00                         | 11,588.24             | 11,637.96             | 11,586.44             | 49.55            | 42.22         | 90.27                 | -1,053.84                           | -670.39      | 1,965.49               | 1,904.71                | 60.79                     | 32.334            |                    |           |
| 11,900.00                         | 11,637.10             | 11,686.82             | 11,635.30             | 49.74            | 42.39         | 90.57                 | -1,053.84                           | -670.39      | 1,965.57               | 1,904.54                | 61.03                     | 32.208            |                    |           |
| 11,950.00                         | 11,684.86             | 11,734.58             | 11,683.06             | 49.95            | 42.56         | 90.96                 | -1,053.84                           | -670.39      | 1,965.78               | 1,904.51                | 61.27                     | 32.084            |                    |           |
| 12,000.00                         | 11,731.15             | 11,780.87             | 11,729.35             | 50.18            | 42.72         | 91.42                 | -1,053.84                           | -670.39      | 1,966.20               | 1,904.69                | 61.51                     | 31.966            |                    |           |
| 12,050.00                         | 11,775.62             | 11,825.34             | 11,773.82             | 50.42            | 42.87         | 91.94                 | -1,053.84                           | -670.39      | 1,966.96               | 1,905.21                | 61.75                     | 31.855            |                    |           |
| 12,100.00                         | 11,817.93             | 11,867.65             | 11,816.13             | 50.68            | 43.02         | 92.47                 | -1,053.84                           | -670.39      | 1,968.17               | 1,906.19                | 61.98                     | 31.755            |                    |           |
| 12,150.00                         | 11,857.76             | 11,907.48             | 11,855.96             | 50.96            | 43.15         | 92.99                 | -1,053.84                           | -670.39      | 1,969.98               | 1,907.78                | 62.21                     | 31.667            |                    |           |
| 12,200.00                         | 11,894.81             | 11,944.53             | 11,893.01             | 51.25            | 43.28         | 93.45                 | -1,053.84                           | -670.39      | 1,972.54               | 1,910.11                | 62.43                     | 31.596            |                    |           |
| 12,250.00                         | 11,928.80             | 11,978.51             | 11,927.00             | 51.56            | 43.40         | 93.83                 | -1,053.84                           | -670.39      | 1,975.98               | 1,913.34                | 62.64                     | 31.544            |                    |           |
| 12,300.00                         | 11,959.45             | 12,009.17             | 11,957.65             | 51.87            | 43.51         | 94.09                 | -1,053.84                           | -670.39      | 1,980.43               | 1,917.59                | 62.84                     | 31.514            |                    |           |
| 12,350.00                         | 11,986.56             | 12,036.27             | 11,984.76             | 52.20            | 43.60         | 94.19                 | -1,053.84                           | -670.39      | 1,986.02               | 1,922.99                | 63.03                     | 31.509            |                    |           |
| 12,400.00                         | 12,009.90             | 12,059.61             | 12,008.10             | 52.55            | 43.68         | 94.10                 | -1,053.84                           | -670.39      | 1,992.84               | 1,929.64                | 63.20                     | 31.530            |                    |           |
| 12,450.00                         | 12,029.29             | 12,079.01             | 12,027.49             | 52.90            | 43.75         | 93.80                 | -1,053.84                           | -670.39      | 2,000.97               | 1,937.61                | 63.36                     | 31.580            |                    |           |
| 12,500.00                         | 12,044.60             | 12,094.32             | 12,042.80             | 53.26            | 43.80         | 93.26                 | -1,053.84                           | -670.39      | 2,010.44               | 1,946.94                | 63.50                     | 31.661            |                    |           |
| 12,550.00                         | 12,055.70             | 12,151.22             | 12,099.62             | 53.63            | 43.98         | 93.76                 | -1,056.54                           | -670.36      | 2,021.13               | 1,957.32                | 63.81                     | 31.673            |                    |           |
| 12,600.00                         | 12,062.52             | 12,274.39             | 12,219.99             | 54.01            | 44.37         | 95.94                 | -1,081.52                           | -670.12      | 2,032.70               | 1,968.33                | 64.37                     | 31.581            |                    |           |
| 12,653.34                         | 12,065.00             | 12,997.14             | 12,617.00             | 54.42            | 46.33         | 105.74                | -1,628.35                           | -664.71      | 2,041.94               | 1,974.66                | 67.29                     | 30.347            |                    |           |
| 12,700.00                         | 12,065.00             | 13,043.80             | 12,617.00             | 54.78            | 46.50         | 105.74                | -1,675.01                           | -664.25      | 2,041.94               | 1,974.25                | 67.69                     | 30.164            |                    |           |
| 12,800.00                         | 12,065.00             | 13,143.80             | 12,617.00             | 55.59            | 46.89         | 105.74                | -1,775.00                           | -663.26      | 2,041.93               | 1,973.32                | 68.61                     | 29.763            |                    |           |
| 12,900.00                         | 12,065.00             | 13,243.80             | 12,617.00             | 56.43            | 47.34         | 105.74                | -1,875.00                           | -662.27      | 2,041.92               | 1,972.34                | 69.58                     | 29.346            |                    |           |
| 13,000.00                         | 12,065.00             | 13,343.80             | 12,617.00             | 57.31            | 47.84         | 105.74                | -1,974.99                           | -661.29      | 2,041.91               | 1,971.30                | 70.61                     | 28.917            |                    |           |
| 13,100.00                         | 12,065.00             | 13,443.80             | 12,617.00             | 58.22            | 48.39         | 105.74                | -2,074.99                           | -660.30      | 2,041.90               | 1,970.20                | 71.70                     | 28.477            |                    |           |
| 13,200.00                         | 12,065.00             | 13,543.80             | 12,617.00             | 59.17            | 49.00         | 105.74                | -2,174.98                           | -659.31      | 2,041.89               | 1,969.04                | 72.85                     | 28.029            |                    |           |
| 13,300.00                         | 12,065.00             | 13,643.80             | 12,617.00             | 60.14            | 49.65         | 105.74                | -2,274.98                           | -658.32      | 2,041.88               | 1,967.83                | 74.05                     | 27.576            |                    |           |
| 13,400.00                         | 12,065.00             | 13,743.80             | 12,617.00             | 61.15            | 50.35         | 105.74                | -2,374.97                           | -657.33      | 2,041.87               | 1,966.58                | 75.29                     | 27.120            |                    |           |
| 13,500.00                         | 12,065.00             | 13,843.80             | 12,617.00             | 62.18            | 51.09         | 105.74                | -2,474.97                           | -656.35      | 2,041.86               | 1,965.28                | 76.58                     | 26.662            |                    |           |
| 13,600.00                         | 12,065.00             | 13,943.80             | 12,617.00             | 63.24            | 51.87         | 105.74                | -2,574.96                           | -655.36      | 2,041.85               | 1,963.93                | 77.92                     | 26.204            |                    |           |
| 13,700.00                         | 12,065.00             | 14,043.80             | 12,617.00             | 64.32            | 52.69         | 105.74                | -2,674.96                           | -654.37      | 2,041.84               | 1,962.54                | 79.30                     | 25.749            |                    |           |
| 13,800.00                         | 12,065.00             | 14,143.80             | 12,617.00             | 65.43            | 53.56         | 105.74                | -2,774.96                           | -653.38      | 2,041.83               | 1,961.11                | 80.72                     | 25.297            |                    |           |
| 13,900.00                         | 12,065.00             | 14,243.80             | 12,617.00             | 66.56            | 54.46         | 105.74                | -2,874.95                           | -652.39      | 2,041.82               | 1,959.65                | 82.17                     | 24.848            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |  |
| 14,000.00                         | 12,065.00             | 14,343.80             | 12,617.00             | 67.71            | 55.39         | 105.74                | -2,974.95                           | -651.40      | 2,041.81               | 1,958.15                | 83.66                     | 24.405            |                    |           |  |
| 14,100.00                         | 12,065.00             | 14,443.80             | 12,617.00             | 68.88            | 56.36         | 105.74                | -3,074.94                           | -650.42      | 2,041.80               | 1,956.61                | 85.19                     | 23.967            |                    |           |  |
| 14,200.00                         | 12,065.00             | 14,543.80             | 12,617.00             | 70.08            | 57.35         | 105.74                | -3,174.94                           | -649.43      | 2,041.79               | 1,955.04                | 86.75                     | 23.536            |                    |           |  |
| 14,300.00                         | 12,065.00             | 14,643.80             | 12,617.00             | 71.29            | 58.38         | 105.74                | -3,274.93                           | -648.44      | 2,041.78               | 1,953.44                | 88.34                     | 23.113            |                    |           |  |
| 14,400.00                         | 12,065.00             | 14,743.80             | 12,617.00             | 72.51            | 59.44         | 105.74                | -3,374.93                           | -647.45      | 2,041.77               | 1,951.81                | 89.96                     | 22.697            |                    |           |  |
| 14,500.00                         | 12,065.00             | 14,843.80             | 12,617.00             | 73.76            | 60.52         | 105.74                | -3,474.92                           | -646.46      | 2,041.76               | 1,950.16                | 91.60                     | 22.289            |                    |           |  |
| 14,600.00                         | 12,065.00             | 14,943.80             | 12,617.00             | 75.02            | 61.63         | 105.74                | -3,574.92                           | -645.47      | 2,041.75               | 1,948.48                | 93.27                     | 21.890            |                    |           |  |
| 14,700.00                         | 12,065.00             | 15,043.80             | 12,617.00             | 76.29            | 62.76         | 105.74                | -3,674.91                           | -644.49      | 2,041.74               | 1,946.77                | 94.97                     | 21.499            |                    |           |  |
| 14,800.00                         | 12,065.00             | 15,143.80             | 12,617.00             | 77.58            | 63.91         | 105.74                | -3,774.91                           | -643.50      | 2,041.73               | 1,945.04                | 96.69                     | 21.117            |                    |           |  |
| 14,900.00                         | 12,065.00             | 15,243.80             | 12,617.00             | 78.89            | 65.09         | 105.74                | -3,874.90                           | -642.51      | 2,041.72               | 1,943.29                | 98.43                     | 20.743            |                    |           |  |
| 15,000.00                         | 12,065.00             | 15,343.80             | 12,617.00             | 80.20            | 66.28         | 105.74                | -3,974.90                           | -641.52      | 2,041.71               | 1,941.52                | 100.19                    | 20.378            |                    |           |  |
| 15,100.00                         | 12,065.00             | 15,443.80             | 12,617.00             | 81.53            | 67.50         | 105.74                | -4,074.89                           | -640.53      | 2,041.70               | 1,939.73                | 101.97                    | 20.022            |                    |           |  |
| 15,200.00                         | 12,065.00             | 15,543.80             | 12,617.00             | 82.87            | 68.73         | 105.74                | -4,174.89                           | -639.55      | 2,041.69               | 1,937.92                | 103.77                    | 19.675            |                    |           |  |
| 15,300.00                         | 12,065.00             | 15,643.80             | 12,617.00             | 84.22            | 69.98         | 105.74                | -4,274.88                           | -638.56      | 2,041.68               | 1,936.09                | 105.59                    | 19.336            |                    |           |  |
| 15,400.00                         | 12,065.00             | 15,743.80             | 12,617.00             | 85.59            | 71.25         | 105.74                | -4,374.88                           | -637.57      | 2,041.67               | 1,934.24                | 107.43                    | 19.005            |                    |           |  |
| 15,500.00                         | 12,065.00             | 15,843.80             | 12,617.00             | 86.96            | 72.53         | 105.74                | -4,474.87                           | -636.58      | 2,041.66               | 1,932.38                | 109.28                    | 18.683            |                    |           |  |
| 15,600.00                         | 12,065.00             | 15,943.80             | 12,617.00             | 88.34            | 73.83         | 105.74                | -4,574.87                           | -635.59      | 2,041.65               | 1,930.51                | 111.14                    | 18.369            |                    |           |  |
| 15,700.00                         | 12,065.00             | 16,043.80             | 12,617.00             | 89.73            | 75.14         | 105.74                | -4,674.86                           | -634.60      | 2,041.64               | 1,928.62                | 113.02                    | 18.064            |                    |           |  |
| 15,800.00                         | 12,065.00             | 16,143.80             | 12,617.00             | 91.13            | 76.46         | 105.74                | -4,774.86                           | -633.62      | 2,041.63               | 1,926.71                | 114.92                    | 17.766            |                    |           |  |
| 15,900.00                         | 12,065.00             | 16,243.80             | 12,617.00             | 92.54            | 77.80         | 105.74                | -4,874.85                           | -632.63      | 2,041.62               | 1,924.79                | 116.83                    | 17.475            |                    |           |  |
| 16,000.00                         | 12,065.00             | 16,343.80             | 12,617.00             | 93.95            | 79.15         | 105.74                | -4,974.85                           | -631.64      | 2,041.61               | 1,922.86                | 118.75                    | 17.193            |                    |           |  |
| 16,100.00                         | 12,065.00             | 16,443.80             | 12,617.00             | 95.38            | 80.51         | 105.74                | -5,074.84                           | -630.65      | 2,041.60               | 1,920.92                | 120.68                    | 16.917            |                    |           |  |
| 16,200.00                         | 12,065.00             | 16,543.80             | 12,617.00             | 96.81            | 81.88         | 105.74                | -5,174.84                           | -629.66      | 2,041.59               | 1,918.97                | 122.62                    | 16.649            |                    |           |  |
| 16,300.00                         | 12,065.00             | 16,643.80             | 12,617.00             | 98.24            | 83.26         | 105.74                | -5,274.83                           | -628.67      | 2,041.58               | 1,917.00                | 124.58                    | 16.388            |                    |           |  |
| 16,400.00                         | 12,065.00             | 16,743.80             | 12,617.00             | 99.69            | 84.65         | 105.74                | -5,374.83                           | -627.69      | 2,041.57               | 1,915.03                | 126.54                    | 16.134            |                    |           |  |
| 16,500.00                         | 12,065.00             | 16,843.80             | 12,617.00             | 101.14           | 86.05         | 105.74                | -5,474.82                           | -626.70      | 2,041.56               | 1,913.05                | 128.51                    | 15.886            |                    |           |  |
| 16,600.00                         | 12,065.00             | 16,943.80             | 12,617.00             | 102.60           | 87.46         | 105.74                | -5,574.82                           | -625.71      | 2,041.55               | 1,911.05                | 130.50                    | 15.644            |                    |           |  |
| 16,700.00                         | 12,065.00             | 17,043.80             | 12,617.00             | 104.06           | 88.87         | 105.74                | -5,674.81                           | -624.72      | 2,041.54               | 1,909.05                | 132.49                    | 15.409            |                    |           |  |
| 16,800.00                         | 12,065.00             | 17,143.80             | 12,617.00             | 105.53           | 90.30         | 105.74                | -5,774.81                           | -623.73      | 2,041.53               | 1,907.04                | 134.49                    | 15.180            |                    |           |  |
| 16,900.00                         | 12,065.00             | 17,243.80             | 12,617.00             | 107.00           | 91.73         | 105.74                | -5,874.80                           | -622.75      | 2,041.52               | 1,905.02                | 136.50                    | 14.956            |                    |           |  |
| 17,000.00                         | 12,065.00             | 17,343.80             | 12,617.00             | 108.48           | 93.17         | 105.74                | -5,974.80                           | -621.76      | 2,041.51               | 1,903.00                | 138.51                    | 14.739            |                    |           |  |
| 17,100.00                         | 12,065.00             | 17,443.80             | 12,617.00             | 109.96           | 94.62         | 105.74                | -6,074.79                           | -620.77      | 2,041.50               | 1,900.96                | 140.54                    | 14.526            |                    |           |  |
| 17,200.00                         | 12,065.00             | 17,543.80             | 12,617.00             | 111.45           | 96.07         | 105.74                | -6,174.79                           | -619.78      | 2,041.49               | 1,898.92                | 142.57                    | 14.320            |                    |           |  |
| 17,300.00                         | 12,065.00             | 17,643.80             | 12,617.00             | 112.94           | 97.53         | 105.74                | -6,274.78                           | -618.79      | 2,041.48               | 1,896.88                | 144.60                    | 14.118            |                    |           |  |
| 17,400.00                         | 12,065.00             | 17,743.80             | 12,617.00             | 114.44           | 99.00         | 105.74                | -6,374.78                           | -617.80      | 2,041.47               | 1,894.82                | 146.65                    | 13.921            |                    |           |  |
| 17,500.00                         | 12,065.00             | 17,843.80             | 12,617.00             | 115.94           | 100.47        | 105.74                | -6,474.77                           | -616.82      | 2,041.46               | 1,892.76                | 148.70                    | 13.729            |                    |           |  |
| 17,600.00                         | 12,065.00             | 17,943.80             | 12,617.00             | 117.45           | 101.94        | 105.74                | -6,574.77                           | -615.83      | 2,041.45               | 1,890.70                | 150.76                    | 13.542            |                    |           |  |
| 17,700.00                         | 12,065.00             | 18,043.80             | 12,617.00             | 118.96           | 103.43        | 105.74                | -6,674.76                           | -614.84      | 2,041.44               | 1,888.62                | 152.82                    | 13.359            |                    |           |  |
| 17,800.00                         | 12,065.00             | 18,143.80             | 12,617.00             | 120.47           | 104.91        | 105.74                | -6,774.76                           | -613.85      | 2,041.43               | 1,886.55                | 154.88                    | 13.180            |                    |           |  |
| 17,900.00                         | 12,065.00             | 18,243.80             | 12,617.00             | 121.99           | 106.41        | 105.74                | -6,874.75                           | -612.86      | 2,041.42               | 1,884.47                | 156.96                    | 13.006            |                    |           |  |
| 18,000.00                         | 12,065.00             | 18,343.80             | 12,617.00             | 123.51           | 107.90        | 105.74                | -6,974.75                           | -611.87      | 2,041.41               | 1,882.38                | 159.03                    | 12.836            |                    |           |  |
| 18,100.00                         | 12,065.00             | 18,443.80             | 12,617.00             | 125.03           | 109.40        | 105.74                | -7,074.75                           | -610.89      | 2,041.40               | 1,880.29                | 161.11                    | 12.670            |                    |           |  |
| 18,200.00                         | 12,065.00             | 18,543.80             | 12,617.00             | 126.56           | 110.91        | 105.74                | -7,174.74                           | -609.90      | 2,041.39               | 1,878.19                | 163.20                    | 12.508            |                    |           |  |
| 18,300.00                         | 12,065.00             | 18,643.80             | 12,617.00             | 128.09           | 112.42        | 105.74                | -7,274.74                           | -608.91      | 2,041.38               | 1,876.09                | 165.29                    | 12.350            |                    |           |  |
| 18,400.00                         | 12,065.00             | 18,743.80             | 12,617.00             | 129.62           | 113.93        | 105.74                | -7,374.73                           | -607.92      | 2,041.37               | 1,873.98                | 167.39                    | 12.195            |                    |           |  |
| 18,500.00                         | 12,065.00             | 18,843.80             | 12,617.00             | 131.16           | 115.45        | 105.74                | -7,474.73                           | -606.93      | 2,041.36               | 1,871.87                | 169.49                    | 12.044            |                    |           |  |
| 18,600.00                         | 12,065.00             | 18,943.80             | 12,617.00             | 132.69           | 116.97        | 105.74                | -7,574.72                           | -605.95      | 2,041.35               | 1,869.76                | 171.59                    | 11.897            |                    |           |  |
| 18,700.00                         | 12,065.00             | 19,043.80             | 12,617.00             | 134.24           | 118.49        | 105.74                | -7,674.72                           | -604.96      | 2,041.34               | 1,867.64                | 173.70                    | 11.752            |                    |           |  |
| 18,800.00                         | 12,065.00             | 19,143.80             | 12,617.00             | 135.78           | 120.02        | 105.74                | -7,774.71                           | -603.97      | 2,041.33               | 1,865.52                | 175.81                    | 11.611            |                    |           |  |
| 18,900.00                         | 12,065.00             | 19,243.80             | 12,617.00             | 137.33           | 121.55        | 105.74                | -7,874.71                           | -602.98      | 2,041.32               | 1,863.40                | 177.92                    | 11.473            |                    |           |  |
| 19,000.00                         | 12,065.00             | 19,343.80             | 12,617.00             | 138.87           | 123.09        | 105.74                | -7,974.70                           | -601.99      | 2,041.31               | 1,861.27                | 180.04                    | 11.338            |                    |           |  |
| 19,100.00                         | 12,065.00             | 19,443.80             | 12,617.00             | 140.43           | 124.62        | 105.74                | -8,074.70                           | -601.00      | 2,041.30               | 1,859.14                | 182.16                    | 11.206            |                    |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |           |           |           |                 |        |          |                 |         |          |          |            | Tatanka Fed Com - Tatanka Fed Com 802H - OH - Plan #2 |         | Offset Site Error: |  | 0.00 usft |
|-----------------------------------|-----------|-----------|-----------|-----------------|--------|----------|-----------------|---------|----------|----------|------------|-------------------------------------------------------|---------|--------------------|--|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |           |           |           |                 |        |          |                 |         |          |          |            |                                                       |         | Offset Well Error: |  | 0.00 usft |
| Reference                         |           | Offset    |           | Semi Major Axis |        | Distance |                 |         |          |          |            |                                                       |         |                    |  |           |
| Measured Depth                    | Vertical  | Measured  | Vertical  | Reference       | Offset | Highside | Offset Wellbore | Centre  | Between  | Between  | Minimum    | Separation                                            | Warning |                    |  |           |
| Depth                             | Depth     | Depth     | Depth     |                 |        | Toolface | +N/-S           | +E/-W   | Centres  | Ellipses | Separation | Factor                                                |         |                    |  |           |
| (usft)                            | (usft)    | (usft)    | (usft)    | (usft)          | (usft) | (°)      | (usft)          | (usft)  | (usft)   | (usft)   | (usft)     |                                                       |         |                    |  |           |
| 19,200.00                         | 12,065.00 | 19,543.80 | 12,617.00 | 141.98          | 126.16 | 105.74   | -8,174.69       | -600.02 | 2,041.29 | 1,857.00 | 184.29     | 11.077                                                |         |                    |  |           |
| 19,300.00                         | 12,065.00 | 19,643.80 | 12,617.00 | 143.53          | 127.71 | 105.74   | -8,274.69       | -599.03 | 2,041.28 | 1,854.87 | 186.42     | 10.950                                                |         |                    |  |           |
| 19,400.00                         | 12,065.00 | 19,743.80 | 12,617.00 | 145.09          | 129.25 | 105.74   | -8,374.68       | -598.04 | 2,041.27 | 1,852.73 | 188.55     | 10.826                                                |         |                    |  |           |
| 19,500.00                         | 12,065.00 | 19,843.80 | 12,617.00 | 146.65          | 130.80 | 105.74   | -8,474.68       | -597.05 | 2,041.26 | 1,850.58 | 190.68     | 10.705                                                |         |                    |  |           |
| 19,600.00                         | 12,065.00 | 19,943.80 | 12,617.00 | 148.21          | 132.35 | 105.74   | -8,574.67       | -596.06 | 2,041.25 | 1,848.44 | 192.81     | 10.587                                                |         |                    |  |           |
| 19,700.00                         | 12,065.00 | 20,043.80 | 12,617.00 | 149.78          | 133.90 | 105.74   | -8,674.67       | -595.07 | 2,041.24 | 1,846.29 | 194.95     | 10.470                                                |         |                    |  |           |
| 19,800.00                         | 12,065.00 | 20,143.80 | 12,617.00 | 151.34          | 135.46 | 105.74   | -8,774.66       | -594.09 | 2,041.23 | 1,844.14 | 197.09     | 10.357                                                |         |                    |  |           |
| 19,900.00                         | 12,065.00 | 20,243.80 | 12,617.00 | 152.91          | 137.02 | 105.74   | -8,874.66       | -593.10 | 2,041.22 | 1,841.98 | 199.24     | 10.245                                                |         |                    |  |           |
| 20,000.00                         | 12,065.00 | 20,343.80 | 12,617.00 | 154.48          | 138.58 | 105.74   | -8,974.65       | -592.11 | 2,041.21 | 1,839.83 | 201.38     | 10.136                                                |         |                    |  |           |
| 20,100.00                         | 12,065.00 | 20,443.80 | 12,617.00 | 156.05          | 140.14 | 105.74   | -9,074.65       | -591.12 | 2,041.20 | 1,837.67 | 203.53     | 10.029                                                |         |                    |  |           |
| 20,200.00                         | 12,065.00 | 20,543.80 | 12,617.00 | 157.62          | 141.70 | 105.74   | -9,174.64       | -590.13 | 2,041.19 | 1,835.51 | 205.68     | 9.924                                                 |         |                    |  |           |
| 20,300.00                         | 12,065.00 | 20,643.80 | 12,617.00 | 159.20          | 143.27 | 105.74   | -9,274.64       | -589.14 | 2,041.18 | 1,833.35 | 207.84     | 9.821                                                 |         |                    |  |           |
| 20,400.00                         | 12,065.00 | 20,743.80 | 12,617.00 | 160.77          | 144.84 | 105.74   | -9,374.63       | -588.16 | 2,041.17 | 1,831.18 | 209.99     | 9.720                                                 |         |                    |  |           |
| 20,500.00                         | 12,065.00 | 20,843.80 | 12,617.00 | 162.35          | 146.40 | 105.74   | -9,474.63       | -587.17 | 2,041.16 | 1,829.01 | 212.15     | 9.621                                                 |         |                    |  |           |
| 20,600.00                         | 12,065.00 | 20,943.80 | 12,617.00 | 163.93          | 147.98 | 105.74   | -9,574.62       | -586.18 | 2,041.15 | 1,826.85 | 214.31     | 9.524                                                 |         |                    |  |           |
| 20,700.00                         | 12,065.00 | 21,043.80 | 12,617.00 | 165.51          | 149.55 | 105.74   | -9,674.62       | -585.19 | 2,041.14 | 1,824.68 | 216.47     | 9.429                                                 |         |                    |  |           |
| 20,800.00                         | 12,065.00 | 21,143.80 | 12,617.00 | 167.09          | 151.12 | 105.74   | -9,774.61       | -584.20 | 2,041.13 | 1,822.50 | 218.63     | 9.336                                                 |         |                    |  |           |
| 20,900.00                         | 12,065.00 | 21,243.80 | 12,617.00 | 168.67          | 152.70 | 105.74   | -9,874.61       | -583.22 | 2,041.12 | 1,820.33 | 220.79     | 9.244                                                 |         |                    |  |           |
| 21,000.00                         | 12,065.00 | 21,343.80 | 12,617.00 | 170.26          | 154.28 | 105.74   | -9,974.60       | -582.23 | 2,041.11 | 1,818.15 | 222.96     | 9.155                                                 |         |                    |  |           |
| 21,100.00                         | 12,065.00 | 21,443.80 | 12,617.00 | 171.84          | 155.86 | 105.74   | -10,074.60      | -581.24 | 2,041.10 | 1,815.98 | 225.13     | 9.067                                                 |         |                    |  |           |
| 21,200.00                         | 12,065.00 | 21,543.80 | 12,617.00 | 173.43          | 157.44 | 105.74   | -10,174.59      | -580.25 | 2,041.09 | 1,813.80 | 227.29     | 8.980                                                 |         |                    |  |           |
| 21,300.00                         | 12,065.00 | 21,643.80 | 12,617.00 | 175.02          | 159.02 | 105.74   | -10,274.59      | -579.26 | 2,041.08 | 1,811.62 | 229.46     | 8.895                                                 |         |                    |  |           |
| 21,400.00                         | 12,065.00 | 21,743.80 | 12,617.00 | 176.60          | 160.60 | 105.74   | -10,374.58      | -578.27 | 2,041.07 | 1,809.44 | 231.64     | 8.812                                                 |         |                    |  |           |
| 21,500.00                         | 12,065.00 | 21,843.80 | 12,617.00 | 178.19          | 162.19 | 105.74   | -10,474.58      | -577.29 | 2,041.06 | 1,807.25 | 233.81     | 8.730                                                 |         |                    |  |           |
| 21,600.00                         | 12,065.00 | 21,943.80 | 12,617.00 | 179.79          | 163.78 | 105.74   | -10,574.57      | -576.30 | 2,041.05 | 1,805.07 | 235.99     | 8.649                                                 |         |                    |  |           |
| 21,700.00                         | 12,065.00 | 22,043.80 | 12,617.00 | 181.38          | 165.36 | 105.74   | -10,674.57      | -575.31 | 2,041.04 | 1,802.88 | 238.16     | 8.570                                                 |         |                    |  |           |
| 21,800.00                         | 12,065.00 | 22,143.80 | 12,617.00 | 182.97          | 166.95 | 105.74   | -10,774.56      | -574.32 | 2,041.03 | 1,800.69 | 240.34     | 8.492                                                 |         |                    |  |           |
| 21,900.00                         | 12,065.00 | 22,243.80 | 12,617.00 | 184.57          | 168.54 | 105.74   | -10,874.56      | -573.33 | 2,041.02 | 1,798.50 | 242.52     | 8.416                                                 |         |                    |  |           |
| 22,000.00                         | 12,065.00 | 22,343.80 | 12,617.00 | 186.16          | 170.13 | 105.74   | -10,974.55      | -572.34 | 2,041.01 | 1,796.31 | 244.70     | 8.341                                                 |         |                    |  |           |
| 22,100.00                         | 12,065.00 | 22,443.80 | 12,617.00 | 187.76          | 171.73 | 105.74   | -11,074.55      | -571.36 | 2,041.00 | 1,794.12 | 246.88     | 8.267                                                 |         |                    |  |           |
| 22,200.00                         | 12,065.00 | 22,543.80 | 12,617.00 | 189.36          | 173.32 | 105.74   | -11,174.55      | -570.37 | 2,040.99 | 1,791.93 | 249.06     | 8.195                                                 |         |                    |  |           |
| 22,300.00                         | 12,065.00 | 22,643.80 | 12,617.00 | 190.95          | 174.92 | 105.74   | -11,274.54      | -569.38 | 2,040.98 | 1,789.73 | 251.25     | 8.123                                                 |         |                    |  |           |
| 22,400.00                         | 12,065.00 | 22,743.80 | 12,617.00 | 192.55          | 176.44 | 105.74   | -11,374.54      | -568.39 | 2,040.97 | 1,787.59 | 253.38     | 8.055                                                 |         |                    |  |           |
| 22,441.29                         | 12,065.00 | 22,785.09 | 12,617.00 | 193.21          | 177.03 | 105.74   | -11,415.83      | -567.98 | 2,040.97 | 1,786.74 | 254.23     | 8.028                                                 |         |                    |  |           |
| 22,445.57                         | 12,065.00 | 22,787.51 | 12,617.00 | 193.28          | 177.07 | 105.74   | -11,418.24      | -567.96 | 2,040.97 | 1,786.69 | 254.28     | 8.026 SF                                              |         |                    |  |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -90.53                | -0.70                               | -74.99       | 74.99                  |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 99.70                 | 99.70                 | 0.13             | 0.13          | -90.53                | -0.70                               | -74.99       | 74.99                  | 74.82                   | 0.18                      | 423.287           |                    |           |
| 200.00                            | 200.00                | 199.70                | 199.70                | 0.48             | 0.48          | -90.53                | -0.70                               | -74.99       | 74.99                  | 74.31                   | 0.68                      | 109.699           |                    |           |
| 300.00                            | 300.00                | 299.70                | 299.70                | 0.84             | 0.84          | -90.53                | -0.70                               | -74.99       | 74.99                  | 73.80                   | 1.19                      | 62.989            |                    |           |
| 400.00                            | 400.00                | 399.70                | 399.70                | 1.20             | 1.20          | -90.53                | -0.70                               | -74.99       | 74.99                  | 73.30                   | 1.70                      | 44.178            |                    |           |
| 500.00                            | 500.00                | 499.70                | 499.70                | 1.56             | 1.56          | -90.53                | -0.70                               | -74.99       | 74.99                  | 72.79                   | 2.20                      | 34.018            |                    |           |
| 600.00                            | 600.00                | 599.70                | 599.70                | 1.92             | 1.92          | -90.53                | -0.70                               | -74.99       | 74.99                  | 72.28                   | 2.71                      | 27.658            |                    |           |
| 700.00                            | 700.00                | 699.70                | 699.70                | 2.28             | 2.28          | -90.53                | -0.70                               | -74.99       | 74.99                  | 71.77                   | 3.22                      | 23.301            |                    |           |
| 800.00                            | 800.00                | 799.70                | 799.70                | 2.63             | 2.63          | -90.53                | -0.70                               | -74.99       | 74.99                  | 71.27                   | 3.73                      | 20.130            |                    |           |
| 900.00                            | 900.00                | 899.70                | 899.70                | 2.99             | 2.99          | -90.53                | -0.70                               | -74.99       | 74.99                  | 70.76                   | 4.23                      | 17.719            |                    |           |
| 1,000.00                          | 1,000.00              | 999.70                | 999.70                | 3.35             | 3.35          | -90.53                | -0.70                               | -74.99       | 74.99                  | 70.25                   | 4.74                      | 15.824            |                    |           |
| 1,100.00                          | 1,100.00              | 1,099.70              | 1,099.70              | 3.71             | 3.71          | -90.53                | -0.70                               | -74.99       | 74.99                  | 69.75                   | 5.25                      | 14.295            |                    |           |
| 1,200.00                          | 1,200.00              | 1,199.70              | 1,199.70              | 4.07             | 4.07          | -90.53                | -0.70                               | -74.99       | 74.99                  | 69.24                   | 5.75                      | 13.035            |                    |           |
| 1,300.00                          | 1,300.00              | 1,299.70              | 1,299.70              | 4.43             | 4.43          | -90.53                | -0.70                               | -74.99       | 74.99                  | 68.73                   | 6.26                      | 11.979            |                    |           |
| 1,400.00                          | 1,400.00              | 1,399.70              | 1,399.70              | 4.79             | 4.78          | -90.53                | -0.70                               | -74.99       | 74.99                  | 68.23                   | 6.77                      | 11.082            |                    |           |
| 1,500.00                          | 1,500.00              | 1,499.70              | 1,499.70              | 5.14             | 5.14          | -90.53                | -0.70                               | -74.99       | 74.99                  | 67.72                   | 7.27                      | 10.310            |                    |           |
| 1,600.00                          | 1,600.00              | 1,599.70              | 1,599.70              | 5.50             | 5.50          | -90.53                | -0.70                               | -74.99       | 74.99                  | 67.21                   | 7.78                      | 9.638             |                    |           |
| 1,700.00                          | 1,700.00              | 1,699.70              | 1,699.70              | 5.86             | 5.86          | -90.53                | -0.70                               | -74.99       | 74.99                  | 66.71                   | 8.29                      | 9.048             |                    |           |
| 1,800.00                          | 1,800.00              | 1,799.70              | 1,799.70              | 6.22             | 6.22          | -90.53                | -0.70                               | -74.99       | 74.99                  | 66.20                   | 8.79                      | 8.527             |                    |           |
| 1,900.00                          | 1,900.00              | 1,899.70              | 1,899.70              | 6.58             | 6.58          | -90.53                | -0.70                               | -74.99       | 74.99                  | 65.69                   | 9.30                      | 8.062             |                    |           |
| 2,000.00                          | 2,000.00              | 1,999.70              | 1,999.70              | 6.94             | 6.94          | -90.53                | -0.70                               | -74.99       | 74.99                  | 65.18                   | 9.81                      | 7.645             |                    |           |
| 2,100.00                          | 2,100.00              | 2,099.70              | 2,099.70              | 7.29             | 7.29          | -90.53                | -0.70                               | -74.99       | 74.99                  | 64.68                   | 10.32                     | 7.270             |                    |           |
| 2,200.00                          | 2,200.00              | 2,199.70              | 2,199.70              | 7.65             | 7.65          | -90.53                | -0.70                               | -74.99       | 74.99                  | 64.17                   | 10.82                     | 6.929             |                    |           |
| 2,300.00                          | 2,300.00              | 2,299.70              | 2,299.70              | 8.01             | 8.01          | -90.53                | -0.70                               | -74.99       | 74.99                  | 63.66                   | 11.33                     | 6.619             |                    |           |
| 2,400.00                          | 2,400.00              | 2,399.70              | 2,399.70              | 8.37             | 8.37          | -90.53                | -0.70                               | -74.99       | 74.99                  | 63.16                   | 11.84                     | 6.336             |                    |           |
| 2,500.00                          | 2,500.00              | 2,499.70              | 2,499.70              | 8.73             | 8.73          | -90.53                | -0.70                               | -74.99       | 74.99                  | 62.65                   | 12.34                     | 6.075             |                    |           |
| 2,600.00                          | 2,600.00              | 2,599.70              | 2,599.70              | 9.09             | 9.09          | -90.53                | -0.70                               | -74.99       | 74.99                  | 62.14                   | 12.85                     | 5.836             |                    |           |
| 2,700.00                          | 2,700.00              | 2,699.70              | 2,699.70              | 9.45             | 9.44          | -90.53                | -0.70                               | -74.99       | 74.99                  | 61.64                   | 13.36                     | 5.614             |                    |           |
| 2,800.00                          | 2,800.00              | 2,799.70              | 2,799.70              | 9.80             | 9.80          | -90.53                | -0.70                               | -74.99       | 74.99                  | 61.13                   | 13.86                     | 5.409             |                    |           |
| 2,900.00                          | 2,900.00              | 2,899.70              | 2,899.70              | 10.16            | 10.16         | -90.53                | -0.70                               | -74.99       | 74.99                  | 60.62                   | 14.37                     | 5.218             |                    |           |
| 3,000.00                          | 3,000.00              | 2,999.70              | 2,999.70              | 10.52            | 10.52         | -90.53                | -0.70                               | -74.99       | 74.99                  | 60.11                   | 14.88                     | 5.040             |                    |           |
| 3,100.00                          | 3,100.00              | 3,099.70              | 3,099.70              | 10.88            | 10.88         | -90.53                | -0.70                               | -74.99       | 74.99                  | 59.61                   | 15.39                     | 4.874             |                    |           |
| 3,200.00                          | 3,200.00              | 3,199.70              | 3,199.70              | 11.24            | 11.24         | -90.53                | -0.70                               | -74.99       | 74.99                  | 59.10                   | 15.89                     | 4.719 CC, ES      |                    |           |
| 3,300.00                          | 3,299.99              | 3,299.69              | 3,299.69              | 11.58            | 11.60         | 141.42                | -0.70                               | -74.99       | 76.01                  | 59.62                   | 16.39                     | 4.638 SF          |                    |           |
| 3,400.00                          | 3,399.91              | 3,400.26              | 3,400.25              | 11.91            | 11.94         | 142.27                | -1.96                               | -74.61       | 78.71                  | 61.84                   | 16.86                     | 4.667             |                    |           |
| 3,500.00                          | 3,499.69              | 3,500.84              | 3,500.74              | 12.25            | 12.26         | 142.41                | -5.75                               | -73.45       | 82.67                  | 65.34                   | 17.33                     | 4.771             |                    |           |
| 3,600.00                          | 3,599.27              | 3,601.39              | 3,601.08              | 12.58            | 12.59         | 141.93                | -12.06                              | -71.51       | 87.88                  | 70.10                   | 17.79                     | 4.940             |                    |           |
| 3,700.00                          | 3,698.57              | 3,701.88              | 3,701.14              | 12.92            | 12.92         | 140.95                | -20.90                              | -68.81       | 94.37                  | 76.12                   | 18.26                     | 5.170             |                    |           |
| 3,800.00                          | 3,797.54              | 3,802.27              | 3,800.82              | 13.27            | 13.25         | 139.59                | -32.23                              | -65.34       | 102.17                 | 83.44                   | 18.73                     | 5.456             |                    |           |
| 3,900.00                          | 3,896.09              | 3,902.53              | 3,900.03              | 13.62            | 13.59         | 137.99                | -46.05                              | -61.12       | 111.31                 | 92.11                   | 19.20                     | 5.796             |                    |           |
| 4,000.00                          | 3,994.16              | 4,002.61              | 3,998.66              | 13.98            | 13.93         | 136.24                | -62.32                              | -56.14       | 121.84                 | 102.15                  | 19.69                     | 6.187             |                    |           |
| 4,100.00                          | 4,091.70              | 4,102.50              | 4,096.61              | 14.35            | 14.28         | 134.44                | -81.02                              | -50.42       | 133.79                 | 113.60                  | 20.19                     | 6.626             |                    |           |
| 4,200.00                          | 4,188.62              | 4,202.04              | 4,193.69              | 14.74            | 14.64         | 132.65                | -102.04                             | -43.99       | 147.19                 | 126.48                  | 20.70                     | 7.109             |                    |           |
| 4,300.00                          | 4,284.86              | 4,300.85              | 4,289.87              | 15.14            | 15.01         | 131.52                | -123.72                             | -37.35       | 162.28                 | 141.05                  | 21.23                     | 7.645             |                    |           |
| 4,400.00                          | 4,380.36              | 4,399.43              | 4,385.81              | 15.55            | 15.38         | 131.17                | -145.35                             | -30.74       | 179.11                 | 157.35                  | 21.76                     | 8.231             |                    |           |
| 4,452.43                          | 4,430.11              | 4,450.98              | 4,435.99              | 15.78            | 15.58         | 131.23                | -156.67                             | -27.28       | 188.61                 | 166.56                  | 22.04                     | 8.556             |                    |           |
| 4,500.00                          | 4,475.14              | 4,497.72              | 4,481.48              | 15.99            | 15.77         | 131.45                | -166.92                             | -24.14       | 197.44                 | 175.14                  | 22.30                     | 8.853             |                    |           |
| 4,600.00                          | 4,569.82              | 4,595.97              | 4,577.11              | 16.44            | 16.15         | 131.84                | -188.48                             | -17.54       | 216.02                 | 193.17                  | 22.86                     | 9.451             |                    |           |
| 4,700.00                          | 4,664.49              | 4,694.22              | 4,672.73              | 16.91            | 16.55         | 132.17                | -210.04                             | -10.95       | 234.61                 | 211.19                  | 23.42                     | 10.018            |                    |           |
| 4,800.00                          | 4,759.16              | 4,792.47              | 4,768.36              | 17.39            | 16.95         | 132.45                | -231.60                             | -4.35        | 253.21                 | 229.21                  | 23.99                     | 10.554            |                    |           |
| 4,900.00                          | 4,853.84              | 4,890.72              | 4,863.99              | 17.87            | 17.35         | 132.70                | -253.16                             | 2.24         | 271.81                 | 247.23                  | 24.57                     | 11.061            |                    |           |
| 5,000.00                          | 4,948.51              | 4,988.97              | 4,959.61              | 18.37            | 17.76         | 132.91                | -274.72                             | 8.84         | 290.41                 | 265.25                  | 25.16                     | 11.541            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,087.21              | 5,055.24              | 18.88            | 18.18         | 133.09                | -296.28                             | 15.43        | 309.02                 | 283.26                  | 25.76                     | 11.996            |                    |           |
| 5,200.00                          | 5,137.85              | 5,185.46              | 5,150.87              | 19.39            | 18.60         | 133.26                | -317.84                             | 22.03        | 327.63                 | 301.26                  | 26.36                     | 12.427            |                    |           |
| 5,300.00                          | 5,232.53              | 5,283.71              | 5,246.50              | 19.92            | 19.02         | 133.41                | -339.39                             | 28.63        | 346.24                 | 319.26                  | 26.98                     | 12.835            |                    |           |
| 5,400.00                          | 5,327.20              | 5,381.96              | 5,342.12              | 20.45            | 19.45         | 133.54                | -360.95                             | 35.22        | 364.85                 | 337.26                  | 27.59                     | 13.222            |                    |           |
| 5,500.00                          | 5,421.87              | 5,480.21              | 5,437.75              | 20.99            | 19.89         | 133.66                | -382.51                             | 41.82        | 383.47                 | 355.25                  | 28.22                     | 13.590            |                    |           |
| 5,600.00                          | 5,516.54              | 5,578.46              | 5,533.38              | 21.53            | 20.32         | 133.77                | -404.07                             | 48.41        | 402.09                 | 373.24                  | 28.85                     | 13.939            |                    |           |
| 5,700.00                          | 5,611.22              | 5,676.71              | 5,629.00              | 22.08            | 20.76         | 133.87                | -425.63                             | 55.01        | 420.71                 | 391.23                  | 29.48                     | 14.271            |                    |           |
| 5,800.00                          | 5,705.89              | 5,774.96              | 5,724.63              | 22.63            | 21.20         | 133.96                | -447.19                             | 61.60        | 439.33                 | 409.21                  | 30.12                     | 14.587            |                    |           |
| 5,900.00                          | 5,800.56              | 5,873.21              | 5,820.26              | 23.19            | 21.65         | 134.04                | -468.75                             | 68.20        | 457.95                 | 427.19                  | 30.76                     | 14.888            |                    |           |
| 6,000.00                          | 5,895.23              | 5,971.45              | 5,915.89              | 23.76            | 22.10         | 134.12                | -490.31                             | 74.79        | 476.57                 | 445.16                  | 31.41                     | 15.174            |                    |           |
| 6,100.00                          | 5,989.91              | 6,069.70              | 6,011.51              | 24.33            | 22.55         | 134.19                | -511.87                             | 81.39        | 495.19                 | 463.14                  | 32.06                     | 15.447            |                    |           |
| 6,200.00                          | 6,084.58              | 6,167.95              | 6,107.14              | 24.90            | 23.00         | 134.26                | -533.43                             | 87.99        | 513.82                 | 481.10                  | 32.71                     | 15.707            |                    |           |
| 6,300.00                          | 6,179.25              | 6,266.20              | 6,202.77              | 25.48            | 23.46         | 134.32                | -554.99                             | 94.58        | 532.44                 | 499.07                  | 33.37                     | 15.955            |                    |           |
| 6,400.00                          | 6,273.92              | 6,364.45              | 6,298.39              | 26.05            | 23.91         | 134.37                | -576.54                             | 101.18       | 551.07                 | 517.03                  | 34.03                     | 16.192            |                    |           |
| 6,500.00                          | 6,368.60              | 6,462.70              | 6,394.02              | 26.64            | 24.37         | 134.43                | -598.10                             | 107.77       | 569.69                 | 534.99                  | 34.70                     | 16.419            |                    |           |
| 6,600.00                          | 6,463.27              | 6,560.95              | 6,489.65              | 27.22            | 24.83         | 134.48                | -619.66                             | 114.37       | 588.32                 | 552.95                  | 35.36                     | 16.636            |                    |           |
| 6,700.00                          | 6,557.94              | 6,659.20              | 6,585.28              | 27.81            | 25.30         | 134.52                | -641.22                             | 120.96       | 606.94                 | 570.91                  | 36.04                     | 16.843            |                    |           |
| 6,800.00                          | 6,652.61              | 6,757.45              | 6,680.90              | 28.40            | 25.76         | 134.57                | -662.78                             | 127.56       | 625.57                 | 588.86                  | 36.71                     | 17.042            |                    |           |
| 6,900.00                          | 6,747.29              | 6,855.69              | 6,776.53              | 29.00            | 26.23         | 134.61                | -684.34                             | 134.15       | 644.19                 | 606.81                  | 37.38                     | 17.232            |                    |           |
| 7,000.00                          | 6,841.96              | 6,953.94              | 6,872.16              | 29.59            | 26.70         | 134.65                | -705.90                             | 140.75       | 662.82                 | 624.76                  | 38.06                     | 17.415            |                    |           |
| 7,100.00                          | 6,936.63              | 7,052.19              | 6,967.79              | 30.19            | 27.16         | 134.69                | -727.46                             | 147.34       | 681.45                 | 642.71                  | 38.74                     | 17.590            |                    |           |
| 7,200.00                          | 7,031.30              | 7,150.44              | 7,063.41              | 30.79            | 27.64         | 134.72                | -749.02                             | 153.94       | 700.08                 | 660.65                  | 39.42                     | 17.758            |                    |           |
| 7,300.00                          | 7,125.98              | 7,248.69              | 7,159.04              | 31.40            | 28.11         | 134.76                | -770.58                             | 160.54       | 718.70                 | 678.60                  | 40.11                     | 17.920            |                    |           |
| 7,400.00                          | 7,220.65              | 7,346.94              | 7,254.67              | 32.00            | 28.58         | 134.79                | -792.13                             | 167.13       | 737.33                 | 696.54                  | 40.79                     | 18.076            |                    |           |
| 7,500.00                          | 7,315.32              | 7,445.19              | 7,350.29              | 32.61            | 29.06         | 134.82                | -813.69                             | 173.73       | 755.96                 | 714.48                  | 41.48                     | 18.225            |                    |           |
| 7,600.00                          | 7,409.99              | 7,543.44              | 7,445.92              | 33.21            | 29.53         | 134.85                | -835.25                             | 180.32       | 774.59                 | 732.42                  | 42.17                     | 18.369            |                    |           |
| 7,700.00                          | 7,504.67              | 7,641.69              | 7,541.55              | 33.82            | 30.01         | 134.87                | -856.81                             | 186.92       | 793.22                 | 750.36                  | 42.86                     | 18.507            |                    |           |
| 7,800.00                          | 7,599.34              | 7,739.93              | 7,637.18              | 34.43            | 30.48         | 134.90                | -878.37                             | 193.51       | 811.84                 | 768.29                  | 43.55                     | 18.641            |                    |           |
| 7,900.00                          | 7,694.01              | 7,838.18              | 7,732.80              | 35.05            | 30.96         | 134.92                | -899.93                             | 200.11       | 830.47                 | 786.23                  | 44.25                     | 18.769            |                    |           |
| 8,000.00                          | 7,788.68              | 7,936.43              | 7,828.43              | 35.66            | 31.44         | 134.95                | -921.49                             | 206.70       | 849.10                 | 804.16                  | 44.94                     | 18.894            |                    |           |
| 8,100.00                          | 7,883.36              | 8,034.68              | 7,924.06              | 36.28            | 31.92         | 134.97                | -943.05                             | 213.30       | 867.73                 | 822.09                  | 45.64                     | 19.013            |                    |           |
| 8,200.00                          | 7,978.03              | 8,129.72              | 8,016.69              | 36.89            | 32.38         | 135.03                | -963.36                             | 219.51       | 886.49                 | 840.18                  | 46.31                     | 19.143            |                    |           |
| 8,300.00                          | 8,072.70              | 8,223.23              | 8,108.30              | 37.51            | 32.82         | 135.22                | -981.28                             | 225.00       | 905.73                 | 858.78                  | 46.95                     | 19.292            |                    |           |
| 8,400.00                          | 8,167.37              | 8,316.35              | 8,199.96              | 38.13            | 33.24         | 135.55                | -996.99                             | 229.80       | 925.49                 | 877.94                  | 47.56                     | 19.461            |                    |           |
| 8,500.00                          | 8,262.05              | 8,408.98              | 8,291.50              | 38.75            | 33.64         | 136.00                | -1,010.49                           | 233.93       | 945.82                 | 897.68                  | 48.13                     | 19.650            |                    |           |
| 8,600.00                          | 8,356.72              | 8,500.00              | 8,381.76              | 39.37            | 34.01         | 136.55                | -1,021.69                           | 237.36       | 966.75                 | 918.08                  | 48.67                     | 19.863            |                    |           |
| 8,700.00                          | 8,451.39              | 8,592.35              | 8,473.60              | 39.99            | 34.37         | 137.21                | -1,030.94                           | 240.19       | 988.34                 | 939.16                  | 49.19                     | 20.093            |                    |           |
| 8,800.00                          | 8,546.07              | 8,682.89              | 8,563.85              | 40.61            | 34.71         | 137.96                | -1,037.96                           | 242.33       | 1,010.67               | 961.00                  | 49.67                     | 20.349            |                    |           |
| 8,875.44                          | 8,617.48              | 8,750.62              | 8,631.45              | 41.08            | 34.95         | 138.57                | -1,041.86                           | 243.53       | 1,028.04               | 978.03                  | 50.00                     | 20.559            |                    |           |
| 8,900.00                          | 8,640.90              | 8,772.69              | 8,653.49              | 41.23            | 35.03         | 139.13                | -1,042.89                           | 243.84       | 1,033.41               | 983.30                  | 50.11                     | 20.622            |                    |           |
| 8,950.00                          | 8,689.44              | 8,818.17              | 8,698.94              | 41.49            | 35.18         | 140.00                | -1,044.61                           | 244.37       | 1,042.07               | 991.75                  | 50.33                     | 20.707            |                    |           |
| 9,000.00                          | 8,738.83              | 8,864.19              | 8,744.94              | 41.70            | 35.33         | 140.54                | -1,045.84                           | 244.75       | 1,047.61               | 997.08                  | 50.53                     | 20.731            |                    |           |
| 9,050.00                          | 8,788.70              | 8,910.51              | 8,791.26              | 41.87            | 35.48         | 140.75                | -1,046.53                           | 244.96       | 1,049.98               | 999.24                  | 50.74                     | 20.694            |                    |           |
| 9,063.30                          | 8,802.00              | 8,922.85              | 8,803.60              | 41.91            | 35.52         | -90.58                | -1,046.63                           | 244.99       | 1,050.07               | 999.28                  | 50.79                     | 20.675            |                    |           |
| 9,100.00                          | 8,838.70              | 8,957.66              | 8,838.40              | 42.00            | 35.62         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 999.11                  | 50.93                     | 20.616            |                    |           |
| 9,200.00                          | 8,938.70              | 9,057.66              | 8,938.40              | 42.26            | 35.92         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 998.70                  | 51.34                     | 20.451            |                    |           |
| 9,300.00                          | 9,038.70              | 9,157.66              | 9,038.40              | 42.51            | 36.21         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 998.29                  | 51.76                     | 20.288            |                    |           |
| 9,400.00                          | 9,138.70              | 9,257.66              | 9,138.40              | 42.77            | 36.51         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 997.87                  | 52.17                     | 20.127            |                    |           |
| 9,500.00                          | 9,238.70              | 9,357.66              | 9,238.40              | 43.03            | 36.81         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 997.46                  | 52.59                     | 19.968            |                    |           |
| 9,600.00                          | 9,338.70              | 9,457.66              | 9,338.40              | 43.30            | 37.11         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 997.04                  | 53.00                     | 19.810            |                    |           |
| 9,700.00                          | 9,438.70              | 9,557.66              | 9,438.40              | 43.56            | 37.41         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 996.62                  | 53.42                     | 19.655            |                    |           |
| 9,800.00                          | 9,538.70              | 9,657.66              | 9,538.40              | 43.82            | 37.71         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 996.20                  | 53.84                     | 19.502            |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,900.00                          | 9,638.70              | 9,757.66              | 9,638.40              | 44.09            | 38.01         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 995.78                  | 54.27                     | 19.350            |                    |           |
| 10,000.00                         | 9,738.70              | 9,857.66              | 9,738.40              | 44.36            | 38.31         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 995.36                  | 54.69                     | 19.200            |                    |           |
| 10,100.00                         | 9,838.70              | 9,957.66              | 9,838.40              | 44.63            | 38.62         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 994.93                  | 55.11                     | 19.052            |                    |           |
| 10,200.00                         | 9,938.70              | 10,057.66             | 9,938.40              | 44.90            | 38.92         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 994.50                  | 55.54                     | 18.906            |                    |           |
| 10,300.00                         | 10,038.70             | 10,157.66             | 10,038.40             | 45.17            | 39.23         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 994.08                  | 55.97                     | 18.762            |                    |           |
| 10,400.00                         | 10,138.70             | 10,257.66             | 10,138.40             | 45.44            | 39.53         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 993.65                  | 56.40                     | 18.619            |                    |           |
| 10,500.00                         | 10,238.70             | 10,357.66             | 10,238.40             | 45.71            | 39.84         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 993.22                  | 56.83                     | 18.478            |                    |           |
| 10,600.00                         | 10,338.70             | 10,457.66             | 10,338.40             | 45.99            | 40.15         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 992.79                  | 57.26                     | 18.339            |                    |           |
| 10,700.00                         | 10,438.70             | 10,557.66             | 10,438.40             | 46.26            | 40.46         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 992.35                  | 57.69                     | 18.202            |                    |           |
| 10,800.00                         | 10,538.70             | 10,657.66             | 10,538.40             | 46.54            | 40.77         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 991.92                  | 58.12                     | 18.066            |                    |           |
| 10,900.00                         | 10,638.70             | 10,757.66             | 10,638.40             | 46.82            | 41.08         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 991.49                  | 58.56                     | 17.932            |                    |           |
| 11,000.00                         | 10,738.70             | 10,857.66             | 10,738.40             | 47.10            | 41.39         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 991.05                  | 58.99                     | 17.799            |                    |           |
| 11,100.00                         | 10,838.70             | 10,957.66             | 10,838.40             | 47.38            | 41.70         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 990.61                  | 59.43                     | 17.668            |                    |           |
| 11,200.00                         | 10,938.70             | 11,057.66             | 10,938.40             | 47.66            | 42.02         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 990.17                  | 59.87                     | 17.539            |                    |           |
| 11,300.00                         | 11,038.70             | 11,157.66             | 11,038.40             | 47.94            | 42.33         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 989.74                  | 60.31                     | 17.411            |                    |           |
| 11,400.00                         | 11,138.70             | 11,257.66             | 11,138.40             | 48.22            | 42.64         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 989.29                  | 60.75                     | 17.285            |                    |           |
| 11,500.00                         | 11,238.70             | 11,357.66             | 11,238.40             | 48.51            | 42.96         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 988.85                  | 61.19                     | 17.160            |                    |           |
| 11,600.00                         | 11,338.70             | 11,457.66             | 11,338.40             | 48.79            | 43.28         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 988.41                  | 61.63                     | 17.037            |                    |           |
| 11,700.00                         | 11,438.70             | 11,557.66             | 11,438.40             | 49.08            | 43.59         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 987.97                  | 62.08                     | 16.915            |                    |           |
| 11,753.34                         | 11,492.04             | 11,611.00             | 11,491.74             | 49.23            | 43.76         | -90.58                | -1,046.70                           | 245.01       | 1,050.04               | 987.73                  | 62.31                     | 16.851            |                    |           |
| 11,775.59                         | 11,514.28             | 11,633.24             | 11,513.98             | 49.30            | 43.83         | 90.00                 | -1,046.70                           | 245.01       | 1,050.04               | 987.63                  | 62.41                     | 16.824            |                    |           |
| 11,800.00                         | 11,538.65             | 11,657.60             | 11,538.35             | 49.37            | 43.91         | 90.08                 | -1,046.70                           | 245.01       | 1,050.05               | 987.53                  | 62.52                     | 16.796            |                    |           |
| 11,850.00                         | 11,588.24             | 11,707.20             | 11,587.94             | 49.55            | 44.07         | 90.41                 | -1,046.70                           | 245.01       | 1,050.07               | 987.35                  | 62.72                     | 16.742            |                    |           |
| 11,900.00                         | 11,637.10             | 11,756.06             | 11,636.80             | 49.74            | 44.22         | 90.96                 | -1,046.70                           | 245.01       | 1,050.20               | 987.29                  | 62.91                     | 16.693            |                    |           |
| 11,950.00                         | 11,684.86             | 11,803.82             | 11,684.56             | 49.95            | 44.37         | 91.69                 | -1,046.70                           | 245.01       | 1,050.56               | 987.48                  | 63.09                     | 16.653            |                    |           |
| 12,000.00                         | 11,731.15             | 11,850.11             | 11,730.85             | 50.18            | 44.52         | 92.57                 | -1,046.70                           | 245.01       | 1,051.32               | 988.08                  | 63.24                     | 16.623            |                    |           |
| 12,050.00                         | 11,775.62             | 11,894.58             | 11,775.32             | 50.42            | 44.66         | 93.54                 | -1,046.70                           | 245.01       | 1,052.70               | 989.31                  | 63.38                     | 16.608            |                    |           |
| 12,100.00                         | 11,817.93             | 11,936.89             | 11,817.63             | 50.68            | 44.80         | 94.54                 | -1,046.70                           | 245.01       | 1,054.92               | 991.42                  | 63.50                     | 16.612            |                    |           |
| 12,150.00                         | 11,857.76             | 11,976.72             | 11,857.46             | 50.96            | 44.92         | 95.51                 | -1,046.70                           | 245.01       | 1,058.24               | 994.64                  | 63.60                     | 16.639            |                    |           |
| 12,200.00                         | 11,894.81             | 12,013.77             | 11,894.51             | 51.25            | 45.04         | 96.38                 | -1,046.70                           | 245.01       | 1,062.93               | 999.26                  | 63.67                     | 16.694            |                    |           |
| 12,250.00                         | 11,928.80             | 12,047.75             | 11,928.50             | 51.56            | 45.15         | 97.09                 | -1,046.70                           | 245.01       | 1,069.24               | 1,005.52                | 63.72                     | 16.781            |                    |           |
| 12,300.00                         | 11,959.45             | 12,078.41             | 11,959.15             | 51.87            | 45.25         | 97.57                 | -1,046.70                           | 245.01       | 1,077.38               | 1,013.64                | 63.74                     | 16.903            |                    |           |
| 12,350.00                         | 11,986.56             | 12,105.51             | 11,986.26             | 52.20            | 45.34         | 97.76                 | -1,046.70                           | 245.01       | 1,087.55               | 1,023.82                | 63.74                     | 17.063            |                    |           |
| 12,400.00                         | 12,009.90             | 12,128.85             | 12,009.60             | 52.55            | 45.41         | 97.60                 | -1,046.70                           | 245.01       | 1,099.89               | 1,036.18                | 63.71                     | 17.265            |                    |           |
| 12,450.00                         | 12,029.29             | 12,148.25             | 12,028.99             | 52.90            | 45.47         | 97.04                 | -1,046.70                           | 245.01       | 1,114.47               | 1,050.82                | 63.65                     | 17.508            |                    |           |
| 12,500.00                         | 12,044.60             | 12,163.56             | 12,044.30             | 53.26            | 45.52         | 96.05                 | -1,046.70                           | 245.01       | 1,131.30               | 1,067.72                | 63.58                     | 17.794            |                    |           |
| 12,550.00                         | 12,055.70             | 12,188.51             | 12,069.24             | 53.63            | 45.61         | 95.32                 | -1,047.35                           | 245.02       | 1,150.14               | 1,086.57                | 63.57                     | 18.093            |                    |           |
| 12,600.00                         | 12,062.52             | 12,327.44             | 12,206.07             | 54.01            | 46.18         | 100.23                | -1,069.21                           | 245.26       | 1,170.47               | 1,106.29                | 64.18                     | 18.237            |                    |           |
| 12,653.34                         | 12,065.00             | 13,067.03             | 12,620.00             | 54.42            | 51.51         | 117.89                | -1,620.36                           | 251.26       | 1,187.27               | 1,119.77                | 67.50                     | 17.588            |                    |           |
| 12,700.00                         | 12,065.00             | 13,113.69             | 12,620.00             | 54.78            | 51.91         | 117.89                | -1,667.01                           | 251.77       | 1,187.23               | 1,119.22                | 68.01                     | 17.457            |                    |           |
| 12,800.00                         | 12,065.00             | 13,213.69             | 12,620.00             | 55.59            | 52.79         | 117.89                | -1,767.01                           | 252.85       | 1,187.13               | 1,118.01                | 69.12                     | 17.174            |                    |           |
| 12,900.00                         | 12,065.00             | 13,313.69             | 12,620.00             | 56.43            | 53.71         | 117.89                | -1,867.00                           | 253.94       | 1,187.03               | 1,116.75                | 70.28                     | 16.890            |                    |           |
| 13,000.00                         | 12,065.00             | 13,413.69             | 12,620.00             | 57.31            | 54.67         | 117.89                | -1,967.00                           | 255.03       | 1,186.93               | 1,115.45                | 71.48                     | 16.604            |                    |           |
| 13,100.00                         | 12,065.00             | 13,513.69             | 12,620.00             | 58.22            | 55.65         | 117.90                | -2,066.99                           | 256.12       | 1,186.83               | 1,114.11                | 72.73                     | 16.319            |                    |           |
| 13,200.00                         | 12,065.00             | 13,613.69             | 12,620.00             | 59.17            | 56.67         | 117.90                | -2,166.98                           | 257.21       | 1,186.73               | 1,112.72                | 74.01                     | 16.035            |                    |           |
| 13,300.00                         | 12,065.00             | 13,713.69             | 12,620.00             | 60.14            | 57.72         | 117.90                | -2,266.98                           | 258.30       | 1,186.64               | 1,111.31                | 75.33                     | 15.752            |                    |           |
| 13,400.00                         | 12,065.00             | 13,813.69             | 12,620.00             | 61.15            | 58.79         | 117.90                | -2,366.97                           | 259.39       | 1,186.54               | 1,109.85                | 76.69                     | 15.473            |                    |           |
| 13,500.00                         | 12,065.00             | 13,913.69             | 12,620.00             | 62.18            | 59.89         | 117.91                | -2,466.97                           | 260.48       | 1,186.44               | 1,108.37                | 78.08                     | 15.196            |                    |           |
| 13,600.00                         | 12,065.00             | 14,013.69             | 12,620.00             | 63.24            | 61.02         | 117.91                | -2,566.96                           | 261.57       | 1,186.34               | 1,106.85                | 79.49                     | 14.924            |                    |           |
| 13,700.00                         | 12,065.00             | 14,113.69             | 12,620.00             | 64.32            | 62.17         | 117.91                | -2,666.95                           | 262.66       | 1,186.24               | 1,105.30                | 80.94                     | 14.655            |                    |           |
| 13,800.00                         | 12,065.00             | 14,213.69             | 12,620.00             | 65.43            | 63.34         | 117.91                | -2,766.95                           | 263.74       | 1,186.15               | 1,103.73                | 82.42                     | 14.391            |                    |           |
| 13,900.00                         | 12,065.00             | 14,313.69             | 12,620.00             | 66.56            | 64.53         | 117.92                | -2,866.94                           | 264.83       | 1,186.05               | 1,102.12                | 83.92                     | 14.132            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 14,000.00                         | 12,065.00             | 14,413.69             | 12,620.00             | 67.71            | 65.74         | 117.92                | -2,966.94                           | 265.92       | 1,185.95               | 1,100.50                | 85.45                     | 13.878            |                    |           |
| 14,100.00                         | 12,065.00             | 14,513.69             | 12,620.00             | 68.88            | 66.97         | 117.92                | -3,066.93                           | 267.01       | 1,185.85               | 1,098.85                | 87.01                     | 13.630            |                    |           |
| 14,200.00                         | 12,065.00             | 14,613.69             | 12,620.00             | 70.08            | 68.22         | 117.92                | -3,166.92                           | 268.10       | 1,185.75               | 1,097.17                | 88.58                     | 13.386            |                    |           |
| 14,300.00                         | 12,065.00             | 14,713.69             | 12,620.00             | 71.29            | 69.49         | 117.93                | -3,266.92                           | 269.19       | 1,185.65               | 1,095.48                | 90.18                     | 13.148            |                    |           |
| 14,400.00                         | 12,065.00             | 14,813.69             | 12,620.00             | 72.51            | 70.77         | 117.93                | -3,366.91                           | 270.28       | 1,185.56               | 1,093.76                | 91.79                     | 12.915            |                    |           |
| 14,500.00                         | 12,065.00             | 14,913.69             | 12,620.00             | 73.76            | 72.07         | 117.93                | -3,466.91                           | 271.37       | 1,185.46               | 1,092.03                | 93.43                     | 12.688            |                    |           |
| 14,600.00                         | 12,065.00             | 15,013.69             | 12,620.00             | 75.02            | 73.38         | 117.93                | -3,566.90                           | 272.46       | 1,185.36               | 1,090.28                | 95.08                     | 12.467            |                    |           |
| 14,700.00                         | 12,065.00             | 15,113.69             | 12,620.00             | 76.29            | 74.70         | 117.94                | -3,666.89                           | 273.55       | 1,185.26               | 1,088.51                | 96.75                     | 12.251            |                    |           |
| 14,800.00                         | 12,065.00             | 15,213.69             | 12,620.00             | 77.58            | 76.04         | 117.94                | -3,766.89                           | 274.63       | 1,185.16               | 1,086.73                | 98.44                     | 12.040            |                    |           |
| 14,900.00                         | 12,065.00             | 15,313.69             | 12,620.00             | 78.89            | 77.39         | 117.94                | -3,866.88                           | 275.72       | 1,185.07               | 1,084.93                | 100.14                    | 11.834            |                    |           |
| 15,000.00                         | 12,065.00             | 15,413.69             | 12,620.00             | 80.20            | 78.75         | 117.94                | -3,966.88                           | 276.81       | 1,184.97               | 1,083.12                | 101.85                    | 11.634            |                    |           |
| 15,100.00                         | 12,065.00             | 15,513.69             | 12,620.00             | 81.53            | 80.12         | 117.95                | -4,066.87                           | 277.90       | 1,184.87               | 1,081.29                | 103.58                    | 11.439            |                    |           |
| 15,200.00                         | 12,065.00             | 15,613.69             | 12,620.00             | 82.87            | 81.50         | 117.95                | -4,166.86                           | 278.99       | 1,184.77               | 1,079.45                | 105.32                    | 11.249            |                    |           |
| 15,300.00                         | 12,065.00             | 15,713.69             | 12,620.00             | 84.22            | 82.89         | 117.95                | -4,266.86                           | 280.08       | 1,184.67               | 1,077.59                | 107.08                    | 11.064            |                    |           |
| 15,400.00                         | 12,065.00             | 15,813.69             | 12,620.00             | 85.59            | 84.30         | 117.95                | -4,366.85                           | 281.17       | 1,184.58               | 1,075.73                | 108.84                    | 10.883            |                    |           |
| 15,500.00                         | 12,065.00             | 15,913.69             | 12,620.00             | 86.96            | 85.71         | 117.96                | -4,466.85                           | 282.26       | 1,184.48               | 1,073.86                | 110.62                    | 10.708            |                    |           |
| 15,600.00                         | 12,065.00             | 16,013.69             | 12,620.00             | 88.34            | 87.12         | 117.96                | -4,566.84                           | 283.35       | 1,184.38               | 1,071.97                | 112.41                    | 10.537            |                    |           |
| 15,700.00                         | 12,065.00             | 16,113.69             | 12,620.00             | 89.73            | 88.55         | 117.96                | -4,666.83                           | 284.44       | 1,184.28               | 1,070.08                | 114.20                    | 10.370            |                    |           |
| 15,800.00                         | 12,065.00             | 16,213.69             | 12,620.00             | 91.13            | 89.99         | 117.96                | -4,766.83                           | 285.52       | 1,184.18               | 1,068.17                | 116.01                    | 10.208            |                    |           |
| 15,900.00                         | 12,065.00             | 16,313.69             | 12,620.00             | 92.54            | 91.43         | 117.97                | -4,866.82                           | 286.61       | 1,184.08               | 1,066.26                | 117.83                    | 10.049            |                    |           |
| 16,000.00                         | 12,065.00             | 16,413.69             | 12,620.00             | 93.95            | 92.88         | 117.97                | -4,966.82                           | 287.70       | 1,183.99               | 1,064.33                | 119.65                    | 9.895             |                    |           |
| 16,100.00                         | 12,065.00             | 16,513.69             | 12,620.00             | 95.38            | 94.33         | 117.97                | -5,066.81                           | 288.79       | 1,183.89               | 1,062.41                | 121.48                    | 9.745             |                    |           |
| 16,200.00                         | 12,065.00             | 16,613.69             | 12,620.00             | 96.81            | 95.79         | 117.98                | -5,166.80                           | 289.88       | 1,183.79               | 1,060.47                | 123.32                    | 9.599             |                    |           |
| 16,300.00                         | 12,065.00             | 16,713.69             | 12,620.00             | 98.24            | 97.26         | 117.98                | -5,266.80                           | 290.97       | 1,183.69               | 1,058.52                | 125.17                    | 9.457             |                    |           |
| 16,400.00                         | 12,065.00             | 16,813.69             | 12,620.00             | 99.69            | 98.74         | 117.98                | -5,366.79                           | 292.06       | 1,183.59               | 1,056.57                | 127.02                    | 9.318             |                    |           |
| 16,500.00                         | 12,065.00             | 16,913.69             | 12,620.00             | 101.14           | 100.21        | 117.98                | -5,466.79                           | 293.15       | 1,183.50               | 1,054.61                | 128.88                    | 9.183             |                    |           |
| 16,600.00                         | 12,065.00             | 17,013.69             | 12,620.00             | 102.60           | 101.70        | 117.99                | -5,566.78                           | 294.24       | 1,183.40               | 1,052.65                | 130.75                    | 9.051             |                    |           |
| 16,700.00                         | 12,065.00             | 17,113.69             | 12,620.00             | 104.06           | 103.19        | 117.99                | -5,666.77                           | 295.33       | 1,183.30               | 1,050.68                | 132.62                    | 8.922             |                    |           |
| 16,800.00                         | 12,065.00             | 17,213.69             | 12,620.00             | 105.53           | 104.68        | 117.99                | -5,766.77                           | 296.41       | 1,183.20               | 1,048.70                | 134.50                    | 8.797             |                    |           |
| 16,900.00                         | 12,065.00             | 17,313.69             | 12,620.00             | 107.00           | 106.18        | 117.99                | -5,866.76                           | 297.50       | 1,183.10               | 1,046.72                | 136.38                    | 8.675             |                    |           |
| 17,000.00                         | 12,065.00             | 17,413.69             | 12,620.00             | 108.48           | 107.69        | 118.00                | -5,966.76                           | 298.59       | 1,183.00               | 1,044.73                | 138.27                    | 8.556             |                    |           |
| 17,100.00                         | 12,065.00             | 17,513.69             | 12,620.00             | 109.96           | 109.19        | 118.00                | -6,066.75                           | 299.68       | 1,182.91               | 1,042.74                | 140.16                    | 8.439             |                    |           |
| 17,200.00                         | 12,065.00             | 17,613.69             | 12,620.00             | 111.45           | 110.71        | 118.00                | -6,166.74                           | 300.77       | 1,182.81               | 1,040.75                | 142.06                    | 8.326             |                    |           |
| 17,300.00                         | 12,065.00             | 17,713.69             | 12,620.00             | 112.94           | 112.22        | 118.00                | -6,266.74                           | 301.86       | 1,182.71               | 1,038.75                | 143.96                    | 8.215             |                    |           |
| 17,400.00                         | 12,065.00             | 17,813.69             | 12,620.00             | 114.44           | 113.74        | 118.01                | -6,366.73                           | 302.95       | 1,182.61               | 1,036.74                | 145.87                    | 8.107             |                    |           |
| 17,500.00                         | 12,065.00             | 17,913.69             | 12,620.00             | 115.94           | 115.27        | 118.01                | -6,466.73                           | 304.04       | 1,182.51               | 1,034.73                | 147.78                    | 8.002             |                    |           |
| 17,600.00                         | 12,065.00             | 18,013.69             | 12,620.00             | 117.45           | 116.79        | 118.01                | -6,566.72                           | 305.13       | 1,182.42               | 1,032.72                | 149.70                    | 7.899             |                    |           |
| 17,700.00                         | 12,065.00             | 18,113.69             | 12,620.00             | 118.96           | 118.32        | 118.01                | -6,666.71                           | 306.22       | 1,182.32               | 1,030.70                | 151.61                    | 7.798             |                    |           |
| 17,800.00                         | 12,065.00             | 18,213.69             | 12,620.00             | 120.47           | 119.86        | 118.02                | -6,766.71                           | 307.30       | 1,182.22               | 1,028.68                | 153.54                    | 7.700             |                    |           |
| 17,900.00                         | 12,065.00             | 18,313.69             | 12,620.00             | 121.99           | 121.39        | 118.02                | -6,866.70                           | 308.39       | 1,182.12               | 1,026.66                | 155.46                    | 7.604             |                    |           |
| 18,000.00                         | 12,065.00             | 18,413.69             | 12,620.00             | 123.51           | 122.93        | 118.02                | -6,966.70                           | 309.48       | 1,182.02               | 1,024.64                | 157.39                    | 7.510             |                    |           |
| 18,100.00                         | 12,065.00             | 18,513.69             | 12,620.00             | 125.03           | 124.47        | 118.02                | -7,066.69                           | 310.57       | 1,181.93               | 1,022.61                | 159.32                    | 7.419             |                    |           |
| 18,200.00                         | 12,065.00             | 18,613.69             | 12,620.00             | 126.56           | 126.02        | 118.03                | -7,166.68                           | 311.66       | 1,181.83               | 1,020.57                | 161.25                    | 7.329             |                    |           |
| 18,300.00                         | 12,065.00             | 18,713.69             | 12,620.00             | 128.09           | 127.57        | 118.03                | -7,266.68                           | 312.75       | 1,181.73               | 1,018.54                | 163.19                    | 7.241             |                    |           |
| 18,400.00                         | 12,065.00             | 18,813.69             | 12,620.00             | 129.62           | 129.12        | 118.03                | -7,366.67                           | 313.84       | 1,181.63               | 1,016.50                | 165.13                    | 7.156             |                    |           |
| 18,500.00                         | 12,065.00             | 18,913.69             | 12,620.00             | 131.16           | 130.67        | 118.03                | -7,466.67                           | 314.93       | 1,181.53               | 1,014.46                | 167.07                    | 7.072             |                    |           |
| 18,600.00                         | 12,065.00             | 19,013.69             | 12,620.00             | 132.69           | 132.23        | 118.04                | -7,566.66                           | 316.02       | 1,181.44               | 1,012.42                | 169.01                    | 6.990             |                    |           |
| 18,700.00                         | 12,065.00             | 19,113.69             | 12,620.00             | 134.24           | 133.78        | 118.04                | -7,666.65                           | 317.11       | 1,181.34               | 1,010.38                | 170.96                    | 6.910             |                    |           |
| 18,800.00                         | 12,065.00             | 19,213.69             | 12,620.00             | 135.78           | 135.34        | 118.04                | -7,766.65                           | 318.19       | 1,181.24               | 1,008.33                | 172.91                    | 6.832             |                    |           |
| 18,900.00                         | 12,065.00             | 19,313.69             | 12,620.00             | 137.33           | 136.91        | 118.04                | -7,866.64                           | 319.28       | 1,181.14               | 1,006.28                | 174.86                    | 6.755             |                    |           |
| 19,000.00                         | 12,065.00             | 19,413.69             | 12,620.00             | 138.87           | 138.47        | 118.05                | -7,966.64                           | 320.37       | 1,181.04               | 1,004.23                | 176.81                    | 6.680             |                    |           |
| 19,100.00                         | 12,065.00             | 19,513.69             | 12,620.00             | 140.43           | 140.04        | 118.05                | -8,066.63                           | 321.46       | 1,180.94               | 1,002.18                | 178.76                    | 6.606             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                |                |                |                 |        |                   |                        |              |                 |                  |                    |                   | Tatanka Fed Com - Tatanka Fed Com 803H - OH - Plan #1 |  | Offset Site Error: |  | 0.00 usft |
|-----------------------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|--------------|-----------------|------------------|--------------------|-------------------|-------------------------------------------------------|--|--------------------|--|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                |                |                |                 |        |                   |                        |              |                 |                  |                    |                   |                                                       |  | Offset Well Error: |  | 0.00 usft |
| Reference                         |                | Offset         |                | Semi Major Axis |        | Distance          |                        |              |                 |                  |                    |                   |                                                       |  |                    |  |           |
| Measured Depth                    | Vertical Depth | Measured Depth | Vertical Depth | Reference       | Offset | Highside Toolface | Offset Wellbore Centre |              | Between Centres | Between Ellipses | Minimum Separation | Separation Factor | Warning                                               |  |                    |  |           |
| (usft)                            | (usft)         | (usft)         | (usft)         | (usft)          | (usft) | (°)               | +N/-S (usft)           | +E/-W (usft) | (usft)          | (usft)           | (usft)             |                   |                                                       |  |                    |  |           |
| 19,200.00                         | 12,065.00      | 19,613.69      | 12,620.00      | 141.98          | 141.60 | 118.05            | -8,166.62              | 322.55       | 1,180.85        | 1,000.13         | 180.72             | 6.534             |                                                       |  |                    |  |           |
| 19,300.00                         | 12,065.00      | 19,713.69      | 12,620.00      | 143.53          | 143.17 | 118.05            | -8,266.62              | 323.64       | 1,180.75        | 998.07           | 182.68             | 6.464             |                                                       |  |                    |  |           |
| 19,400.00                         | 12,065.00      | 19,813.69      | 12,620.00      | 145.09          | 144.74 | 118.06            | -8,366.61              | 324.73       | 1,180.65        | 996.02           | 184.64             | 6.394             |                                                       |  |                    |  |           |
| 19,500.00                         | 12,065.00      | 19,913.69      | 12,620.00      | 146.65          | 146.32 | 118.06            | -8,466.61              | 325.82       | 1,180.55        | 993.96           | 186.59             | 6.327             |                                                       |  |                    |  |           |
| 19,600.00                         | 12,065.00      | 20,013.69      | 12,620.00      | 148.21          | 147.89 | 118.06            | -8,566.60              | 326.91       | 1,180.45        | 991.90           | 188.56             | 6.260             |                                                       |  |                    |  |           |
| 19,700.00                         | 12,065.00      | 20,113.69      | 12,620.00      | 149.78          | 149.47 | 118.06            | -8,666.59              | 328.00       | 1,180.36        | 989.84           | 190.52             | 6.195             |                                                       |  |                    |  |           |
| 19,800.00                         | 12,065.00      | 20,213.69      | 12,620.00      | 151.34          | 151.05 | 118.07            | -8,766.59              | 329.08       | 1,180.26        | 987.77           | 192.48             | 6.132             |                                                       |  |                    |  |           |
| 19,900.00                         | 12,065.00      | 20,313.69      | 12,620.00      | 152.91          | 152.63 | 118.07            | -8,866.58              | 330.17       | 1,180.16        | 985.71           | 194.45             | 6.069             |                                                       |  |                    |  |           |
| 20,000.00                         | 12,065.00      | 20,413.69      | 12,620.00      | 154.48          | 154.21 | 118.07            | -8,966.58              | 331.26       | 1,180.06        | 983.65           | 196.42             | 6.008             |                                                       |  |                    |  |           |
| 20,100.00                         | 12,065.00      | 20,513.69      | 12,620.00      | 156.05          | 155.79 | 118.07            | -9,066.57              | 332.35       | 1,179.96        | 981.58           | 198.38             | 5.948             |                                                       |  |                    |  |           |
| 20,200.00                         | 12,065.00      | 20,613.69      | 12,620.00      | 157.62          | 157.38 | 118.08            | -9,166.56              | 333.44       | 1,179.87        | 979.52           | 200.35             | 5.889             |                                                       |  |                    |  |           |
| 20,300.00                         | 12,065.00      | 20,713.69      | 12,620.00      | 159.20          | 158.96 | 118.08            | -9,266.56              | 334.53       | 1,179.77        | 977.45           | 202.32             | 5.831             |                                                       |  |                    |  |           |
| 20,400.00                         | 12,065.00      | 20,813.69      | 12,620.00      | 160.77          | 160.55 | 118.08            | -9,366.55              | 335.62       | 1,179.67        | 975.38           | 204.29             | 5.774             |                                                       |  |                    |  |           |
| 20,500.00                         | 12,065.00      | 20,913.69      | 12,620.00      | 162.35          | 162.14 | 118.08            | -9,466.55              | 336.71       | 1,179.57        | 973.31           | 206.26             | 5.719             |                                                       |  |                    |  |           |
| 20,600.00                         | 12,065.00      | 21,013.69      | 12,620.00      | 163.93          | 163.73 | 118.09            | -9,566.54              | 337.80       | 1,179.47        | 971.24           | 208.23             | 5.664             |                                                       |  |                    |  |           |
| 20,700.00                         | 12,065.00      | 21,113.69      | 12,620.00      | 165.51          | 165.32 | 118.09            | -9,666.53              | 338.89       | 1,179.38        | 969.17           | 210.20             | 5.611             |                                                       |  |                    |  |           |
| 20,800.00                         | 12,065.00      | 21,213.68      | 12,620.00      | 167.09          | 166.91 | 118.09            | -9,766.53              | 339.97       | 1,179.28        | 967.10           | 212.18             | 5.558             |                                                       |  |                    |  |           |
| 20,900.00                         | 12,065.00      | 21,313.68      | 12,620.00      | 168.67          | 168.50 | 118.09            | -9,866.52              | 341.06       | 1,179.18        | 965.03           | 214.15             | 5.506             |                                                       |  |                    |  |           |
| 21,000.00                         | 12,065.00      | 21,413.68      | 12,620.00      | 170.26          | 170.10 | 118.10            | -9,966.52              | 342.15       | 1,179.08        | 962.95           | 216.13             | 5.456             |                                                       |  |                    |  |           |
| 21,100.00                         | 12,065.00      | 21,513.68      | 12,620.00      | 171.84          | 171.69 | 118.10            | -10,066.51             | 343.24       | 1,178.98        | 960.88           | 218.10             | 5.406             |                                                       |  |                    |  |           |
| 21,200.00                         | 12,065.00      | 21,613.68      | 12,620.00      | 173.43          | 173.29 | 118.10            | -10,166.50             | 344.33       | 1,178.89        | 958.81           | 220.08             | 5.357             |                                                       |  |                    |  |           |
| 21,300.00                         | 12,065.00      | 21,713.68      | 12,620.00      | 175.02          | 174.89 | 118.10            | -10,266.50             | 345.42       | 1,178.79        | 956.74           | 222.05             | 5.309             |                                                       |  |                    |  |           |
| 21,400.00                         | 12,065.00      | 21,813.68      | 12,620.00      | 176.60          | 176.49 | 118.11            | -10,366.49             | 346.51       | 1,178.69        | 954.66           | 224.03             | 5.261             |                                                       |  |                    |  |           |
| 21,500.00                         | 12,065.00      | 21,913.68      | 12,620.00      | 178.19          | 178.09 | 118.11            | -10,466.49             | 347.60       | 1,178.59        | 952.59           | 226.00             | 5.215             |                                                       |  |                    |  |           |
| 21,600.00                         | 12,065.00      | 22,013.68      | 12,620.00      | 179.79          | 179.69 | 118.11            | -10,566.48             | 348.69       | 1,178.49        | 950.51           | 227.98             | 5.169             |                                                       |  |                    |  |           |
| 21,700.00                         | 12,065.00      | 22,113.68      | 12,620.00      | 181.38          | 181.29 | 118.11            | -10,666.47             | 349.78       | 1,178.40        | 948.44           | 229.96             | 5.124             |                                                       |  |                    |  |           |
| 21,800.00                         | 12,065.00      | 22,213.68      | 12,620.00      | 182.97          | 182.89 | 118.12            | -10,766.47             | 350.86       | 1,178.30        | 946.36           | 231.93             | 5.080             |                                                       |  |                    |  |           |
| 21,900.00                         | 12,065.00      | 22,313.68      | 12,620.00      | 184.57          | 184.49 | 118.12            | -10,866.46             | 351.95       | 1,178.20        | 944.29           | 233.91             | 5.037             |                                                       |  |                    |  |           |
| 22,000.00                         | 12,065.00      | 22,413.68      | 12,620.00      | 186.16          | 186.10 | 118.12            | -10,966.46             | 353.04       | 1,178.10        | 942.21           | 235.89             | 4.994             |                                                       |  |                    |  |           |
| 22,100.00                         | 12,065.00      | 22,513.68      | 12,620.00      | 187.76          | 187.70 | 118.12            | -11,066.45             | 354.13       | 1,178.00        | 940.14           | 237.87             | 4.952             |                                                       |  |                    |  |           |
| 22,200.00                         | 12,065.00      | 22,613.68      | 12,620.00      | 189.36          | 189.31 | 118.13            | -11,166.44             | 355.22       | 1,177.91        | 938.06           | 239.84             | 4.911             |                                                       |  |                    |  |           |
| 22,300.00                         | 12,065.00      | 22,713.68      | 12,620.00      | 190.95          | 190.91 | 118.13            | -11,266.44             | 356.31       | 1,177.81        | 935.99           | 241.82             | 4.871             |                                                       |  |                    |  |           |
| 22,400.00                         | 12,065.00      | 22,813.68      | 12,620.00      | 192.55          | 192.52 | 118.13            | -11,366.43             | 357.40       | 1,177.71        | 933.91           | 243.80             | 4.831             |                                                       |  |                    |  |           |
| 22,443.49                         | 12,065.00      | 22,856.94      | 12,620.00      | 193.25          | 193.22 | 118.13            | -11,409.69             | 357.87       | 1,177.67        | 933.01           | 244.65             | 4.814             |                                                       |  |                    |  |           |
| 22,445.57                         | 12,065.00      | 22,856.94      | 12,620.00      | 193.28          | 193.22 | 118.13            | -11,409.69             | 357.87       | 1,177.67        | 933.02           | 244.64             | 4.814             |                                                       |  |                    |  |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | -90.53                | -0.23                               | -25.00       | 25.00                  |                         |                           |                   |                    |           |
| 100.00                            | 100.00                | 99.90                 | 99.90                 | 0.13             | 0.13          | -90.53                | -0.23                               | -25.00       | 25.00                  | 24.82                   | 0.18                      | 140.973           |                    |           |
| 200.00                            | 200.00                | 199.90                | 199.90                | 0.48             | 0.48          | -90.53                | -0.23                               | -25.00       | 25.00                  | 24.32                   | 0.68                      | 36.544            |                    |           |
| 300.00                            | 300.00                | 299.90                | 299.90                | 0.84             | 0.84          | -90.53                | -0.23                               | -25.00       | 25.00                  | 23.81                   | 1.19                      | 20.990            |                    |           |
| 400.00                            | 400.00                | 399.90                | 399.90                | 1.20             | 1.20          | -90.53                | -0.23                               | -25.00       | 25.00                  | 23.30                   | 1.70                      | 14.723            |                    |           |
| 500.00                            | 500.00                | 499.90                | 499.90                | 1.56             | 1.56          | -90.53                | -0.23                               | -25.00       | 25.00                  | 22.80                   | 2.21                      | 11.338            |                    |           |
| 600.00                            | 600.00                | 599.90                | 599.90                | 1.92             | 1.92          | -90.53                | -0.23                               | -25.00       | 25.00                  | 22.29                   | 2.71                      | 9.219             |                    |           |
| 700.00                            | 700.00                | 699.90                | 699.90                | 2.28             | 2.28          | -90.53                | -0.23                               | -25.00       | 25.00                  | 21.78                   | 3.22                      | 7.767             |                    |           |
| 800.00                            | 800.00                | 799.90                | 799.90                | 2.63             | 2.63          | -90.53                | -0.23                               | -25.00       | 25.00                  | 21.28                   | 3.73                      | 6.710             |                    |           |
| 900.00                            | 900.00                | 899.90                | 899.90                | 2.99             | 2.99          | -90.53                | -0.23                               | -25.00       | 25.00                  | 20.77                   | 4.23                      | 5.906             |                    |           |
| 1,000.00                          | 1,000.00              | 999.90                | 999.90                | 3.35             | 3.35          | -90.53                | -0.23                               | -25.00       | 25.00                  | 20.26                   | 4.74                      | 5.275             |                    |           |
| 1,100.00                          | 1,100.00              | 1,099.90              | 1,099.90              | 3.71             | 3.71          | -90.53                | -0.23                               | -25.00       | 25.00                  | 19.75                   | 5.25                      | 4.765             |                    |           |
| 1,200.00                          | 1,200.00              | 1,199.90              | 1,199.90              | 4.07             | 4.07          | -90.53                | -0.23                               | -25.00       | 25.00                  | 19.25                   | 5.75                      | 4.345             |                    |           |
| 1,300.00                          | 1,300.00              | 1,299.90              | 1,299.90              | 4.43             | 4.43          | -90.53                | -0.23                               | -25.00       | 25.00                  | 18.74                   | 6.26                      | 3.993             |                    |           |
| 1,400.00                          | 1,400.00              | 1,399.90              | 1,399.90              | 4.79             | 4.79          | -90.53                | -0.23                               | -25.00       | 25.00                  | 18.23                   | 6.77                      | 3.694             |                    |           |
| 1,500.00                          | 1,500.00              | 1,499.90              | 1,499.90              | 5.14             | 5.14          | -90.53                | -0.23                               | -25.00       | 25.00                  | 17.73                   | 7.27                      | 3.437             |                    |           |
| 1,600.00                          | 1,600.00              | 1,599.90              | 1,599.90              | 5.50             | 5.50          | -90.53                | -0.23                               | -25.00       | 25.00                  | 17.22                   | 7.78                      | 3.213             |                    |           |
| 1,700.00                          | 1,700.00              | 1,699.90              | 1,699.90              | 5.86             | 5.86          | -90.53                | -0.23                               | -25.00       | 25.00                  | 16.71                   | 8.29                      | 3.016             |                    |           |
| 1,800.00                          | 1,800.00              | 1,799.90              | 1,799.90              | 6.22             | 6.22          | -90.53                | -0.23                               | -25.00       | 25.00                  | 16.21                   | 8.80                      | 2.843             |                    |           |
| 1,900.00                          | 1,900.00              | 1,899.90              | 1,899.90              | 6.58             | 6.58          | -90.53                | -0.23                               | -25.00       | 25.00                  | 15.70                   | 9.30                      | 2.688             |                    |           |
| 2,000.00                          | 2,000.00              | 1,999.90              | 1,999.90              | 6.94             | 6.94          | -90.53                | -0.23                               | -25.00       | 25.00                  | 15.19                   | 9.81                      | 2.549             |                    |           |
| 2,100.00                          | 2,100.00              | 2,099.90              | 2,099.90              | 7.29             | 7.29          | -90.53                | -0.23                               | -25.00       | 25.00                  | 14.68                   | 10.32                     | 2.423             |                    |           |
| 2,200.00                          | 2,200.00              | 2,199.90              | 2,199.90              | 7.65             | 7.65          | -90.53                | -0.23                               | -25.00       | 25.00                  | 14.18                   | 10.82                     | 2.310             |                    |           |
| 2,300.00                          | 2,300.00              | 2,299.90              | 2,299.90              | 8.01             | 8.01          | -90.53                | -0.23                               | -25.00       | 25.00                  | 13.67                   | 11.33                     | 2.207             |                    |           |
| 2,400.00                          | 2,400.00              | 2,399.90              | 2,399.90              | 8.37             | 8.37          | -90.53                | -0.23                               | -25.00       | 25.00                  | 13.16                   | 11.84                     | 2.112             |                    |           |
| 2,500.00                          | 2,500.00              | 2,499.90              | 2,499.90              | 8.73             | 8.73          | -90.53                | -0.23                               | -25.00       | 25.00                  | 12.66                   | 12.34                     | 2.025             |                    |           |
| 2,600.00                          | 2,600.00              | 2,599.90              | 2,599.90              | 9.09             | 9.09          | -90.53                | -0.23                               | -25.00       | 25.00                  | 12.15                   | 12.85                     | 1.945             |                    |           |
| 2,700.00                          | 2,700.00              | 2,699.90              | 2,699.90              | 9.45             | 9.45          | -90.53                | -0.23                               | -25.00       | 25.00                  | 11.64                   | 13.36                     | 1.872             |                    |           |
| 2,800.00                          | 2,800.00              | 2,799.90              | 2,799.90              | 9.80             | 9.80          | -90.53                | -0.23                               | -25.00       | 25.00                  | 11.14                   | 13.86                     | 1.803             |                    |           |
| 2,900.00                          | 2,900.00              | 2,899.90              | 2,899.90              | 10.16            | 10.16         | -90.53                | -0.23                               | -25.00       | 25.00                  | 10.63                   | 14.37                     | 1.740             |                    |           |
| 3,000.00                          | 3,000.00              | 2,999.90              | 2,999.90              | 10.52            | 10.52         | -90.53                | -0.23                               | -25.00       | 25.00                  | 10.12                   | 14.88                     | 1.680             |                    |           |
| 3,100.00                          | 3,100.00              | 3,099.90              | 3,099.90              | 10.88            | 10.88         | -90.53                | -0.23                               | -25.00       | 25.00                  | 9.62                    | 15.39                     | 1.625             |                    |           |
| 3,200.00                          | 3,200.00              | 3,199.90              | 3,199.90              | 11.24            | 11.24         | -90.53                | -0.23                               | -25.00       | 25.00                  | 9.11                    | 15.89                     | 1.573 CC, ES, SF  |                    |           |
| 3,300.00                          | 3,299.99              | 3,299.89              | 3,299.89              | 11.58            | 11.60         | 142.62                | -0.23                               | -25.00       | 26.03                  | 9.64                    | 16.39                     | 1.588             |                    |           |
| 3,400.00                          | 3,399.91              | 3,400.41              | 3,400.40              | 11.91            | 11.94         | 145.73                | -1.11                               | -24.02       | 28.20                  | 11.34                   | 16.86                     | 1.672             |                    |           |
| 3,500.00                          | 3,499.69              | 3,500.99              | 3,500.90              | 12.25            | 12.27         | 148.12                | -3.77                               | -21.07       | 30.51                  | 13.20                   | 17.31                     | 1.763             |                    |           |
| 3,600.00                          | 3,599.27              | 3,601.65              | 3,601.34              | 12.58            | 12.61         | 149.92                | -8.20                               | -16.16       | 32.93                  | 15.19                   | 17.75                     | 1.856             |                    |           |
| 3,700.00                          | 3,698.57              | 3,702.37              | 3,701.63              | 12.92            | 12.94         | 151.25                | -14.41                              | -9.28        | 35.45                  | 17.27                   | 18.17                     | 1.950             |                    |           |
| 3,800.00                          | 3,797.54              | 3,803.16              | 3,801.71              | 13.27            | 13.29         | 152.17                | -22.39                              | -0.42        | 38.04                  | 19.44                   | 18.59                     | 2.046             |                    |           |
| 3,900.00                          | 3,896.09              | 3,904.02              | 3,901.51              | 13.62            | 13.63         | 152.78                | -32.15                              | 10.39        | 40.69                  | 21.69                   | 19.01                     | 2.141             |                    |           |
| 4,000.00                          | 3,994.16              | 4,004.94              | 4,000.95              | 13.98            | 13.99         | 153.11                | -43.67                              | 23.17        | 43.40                  | 23.99                   | 19.41                     | 2.236             |                    |           |
| 4,100.00                          | 4,091.70              | 4,105.93              | 4,099.96              | 14.35            | 14.35         | 153.22                | -56.96                              | 37.91        | 46.16                  | 26.35                   | 19.81                     | 2.330             |                    |           |
| 4,200.00                          | 4,188.62              | 4,206.98              | 4,198.48              | 14.74            | 14.73         | 153.14                | -72.00                              | 54.59        | 48.98                  | 28.76                   | 20.21                     | 2.423             |                    |           |
| 4,300.00                          | 4,284.86              | 4,308.09              | 4,296.43              | 15.14            | 15.11         | 152.90                | -88.80                              | 73.22        | 51.83                  | 31.22                   | 20.61                     | 2.514             |                    |           |
| 4,400.00                          | 4,380.36              | 4,409.26              | 4,393.74              | 15.55            | 15.52         | 152.54                | -107.34                             | 93.78        | 54.74                  | 33.72                   | 21.02                     | 2.604             |                    |           |
| 4,452.43                          | 4,430.11              | 4,462.33              | 4,444.47              | 15.78            | 15.74         | 152.30                | -117.75                             | 105.33       | 56.28                  | 35.05                   | 21.23                     | 2.651             |                    |           |
| 4,500.00                          | 4,475.14              | 4,510.50              | 4,490.34              | 15.99            | 15.94         | 151.93                | -127.61                             | 116.26       | 57.43                  | 36.00                   | 21.43                     | 2.680             |                    |           |
| 4,600.00                          | 4,569.82              | 4,611.78              | 4,586.15              | 16.44            | 16.38         | 150.16                | -149.60                             | 140.64       | 58.20                  | 36.34                   | 21.87                     | 2.662             |                    |           |
| 4,700.00                          | 4,664.49              | 4,712.51              | 4,680.61              | 16.91            | 16.84         | 147.04                | -173.03                             | 166.62       | 57.03                  | 34.62                   | 22.41                     | 2.545             |                    |           |
| 4,800.00                          | 4,759.16              | 4,812.44              | 4,774.14              | 17.39            | 17.32         | 143.49                | -196.59                             | 192.75       | 55.64                  | 32.54                   | 23.09                     | 2.409             |                    |           |
| 4,900.00                          | 4,853.84              | 4,912.37              | 4,867.67              | 17.87            | 17.81         | 139.78                | -220.15                             | 218.88       | 54.47                  | 30.65                   | 23.82                     | 2.287             |                    |           |
| 5,000.00                          | 4,948.51              | 5,012.30              | 4,961.20              | 18.37            | 18.31         | 135.92                | -243.71                             | 245.01       | 53.54                  | 28.95                   | 24.59                     | 2.177             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,112.23              | 5,054.73              | 18.88            | 18.83         | 131.94                | -267.27                             | 271.14       | 52.87                  | 27.46                   | 25.41                     | 2.081             |                    |           |
| 5,200.00                          | 5,137.85              | 5,212.16              | 5,148.26              | 19.39            | 19.35         | 127.88                | -290.83                             | 297.26       | 52.45                  | 26.18                   | 26.27                     | 1.997             |                    |           |
| 5,300.00                          | 5,232.53              | 5,312.09              | 5,241.80              | 19.92            | 19.89         | 123.77                | -314.39                             | 323.39       | 52.30                  | 25.14                   | 27.16                     | 1.925             |                    |           |
| 5,305.08                          | 5,237.34              | 5,317.17              | 5,246.55              | 19.94            | 19.92         | 123.56                | -315.59                             | 324.72       | 52.30                  | 25.09                   | 27.21                     | 1.922             |                    |           |
| 5,400.00                          | 5,327.20              | 5,412.02              | 5,335.33              | 20.45            | 20.44         | 119.67                | -337.95                             | 349.52       | 52.42                  | 24.34                   | 28.09                     | 1.866             |                    |           |
| 5,500.00                          | 5,421.87              | 5,511.95              | 5,428.86              | 20.99            | 20.99         | 115.60                | -361.51                             | 375.65       | 52.81                  | 23.78                   | 29.03                     | 1.819             |                    |           |
| 5,600.00                          | 5,516.54              | 5,611.88              | 5,522.39              | 21.53            | 21.56         | 111.61                | -385.07                             | 401.78       | 53.46                  | 23.49                   | 29.97                     | 1.784             |                    |           |
| 5,700.00                          | 5,611.22              | 5,711.81              | 5,615.92              | 22.08            | 22.13         | 107.74                | -408.63                             | 427.90       | 54.36                  | 23.45                   | 30.92                     | 1.758             |                    |           |
| 5,800.00                          | 5,705.89              | 5,811.74              | 5,709.45              | 22.63            | 22.70         | 104.00                | -432.19                             | 454.03       | 55.51                  | 23.66                   | 31.85                     | 1.743             |                    |           |
| 5,900.00                          | 5,800.56              | 5,911.67              | 5,802.98              | 23.19            | 23.29         | 100.44                | -455.75                             | 480.16       | 56.88                  | 24.12                   | 32.75                     | 1.736             |                    |           |
| 6,000.00                          | 5,895.23              | 6,011.59              | 5,896.52              | 23.76            | 23.88         | 97.05                 | -479.31                             | 506.29       | 58.46                  | 24.82                   | 33.64                     | 1.738             |                    |           |
| 6,100.00                          | 5,989.91              | 6,111.52              | 5,990.05              | 24.33            | 24.47         | 93.85                 | -502.87                             | 532.41       | 60.23                  | 25.73                   | 34.50                     | 1.746             |                    |           |
| 6,200.00                          | 6,084.58              | 6,211.45              | 6,083.58              | 24.90            | 25.08         | 90.85                 | -526.43                             | 558.54       | 62.18                  | 26.85                   | 35.33                     | 1.760             |                    |           |
| 6,300.00                          | 6,179.25              | 6,311.38              | 6,177.11              | 25.48            | 25.68         | 88.03                 | -549.99                             | 584.67       | 64.29                  | 28.16                   | 36.13                     | 1.779             |                    |           |
| 6,400.00                          | 6,273.92              | 6,411.31              | 6,270.64              | 26.05            | 26.29         | 85.40                 | -573.55                             | 610.80       | 66.54                  | 29.63                   | 36.91                     | 1.803             |                    |           |
| 6,500.00                          | 6,368.60              | 6,511.24              | 6,364.17              | 26.64            | 26.90         | 82.94                 | -597.11                             | 636.93       | 68.93                  | 31.26                   | 37.66                     | 1.830             |                    |           |
| 6,600.00                          | 6,463.27              | 6,611.17              | 6,457.70              | 27.22            | 27.52         | 80.65                 | -620.67                             | 663.05       | 71.43                  | 33.03                   | 38.40                     | 1.860             |                    |           |
| 6,700.00                          | 6,557.94              | 6,711.10              | 6,551.24              | 27.81            | 28.14         | 78.52                 | -644.23                             | 689.18       | 74.04                  | 34.92                   | 39.12                     | 1.892             |                    |           |
| 6,800.00                          | 6,652.61              | 6,811.03              | 6,644.77              | 28.40            | 28.77         | 76.54                 | -667.80                             | 715.31       | 76.75                  | 36.91                   | 39.83                     | 1.927             |                    |           |
| 6,900.00                          | 6,747.29              | 6,910.96              | 6,738.30              | 29.00            | 29.40         | 74.70                 | -691.36                             | 741.44       | 79.54                  | 39.01                   | 40.53                     | 1.962             |                    |           |
| 7,000.00                          | 6,841.96              | 7,010.89              | 6,831.83              | 29.59            | 30.03         | 72.98                 | -714.92                             | 767.56       | 82.40                  | 41.19                   | 41.22                     | 1.999             |                    |           |
| 7,100.00                          | 6,936.63              | 7,110.82              | 6,925.36              | 30.19            | 30.66         | 71.38                 | -738.48                             | 793.69       | 85.34                  | 43.44                   | 41.90                     | 2.037             |                    |           |
| 7,200.00                          | 7,031.30              | 7,210.75              | 7,018.89              | 30.79            | 31.30         | 69.88                 | -762.04                             | 819.82       | 88.34                  | 45.76                   | 42.58                     | 2.075             |                    |           |
| 7,300.00                          | 7,125.98              | 7,310.68              | 7,112.42              | 31.40            | 31.94         | 68.49                 | -785.60                             | 845.95       | 91.40                  | 48.15                   | 43.25                     | 2.113             |                    |           |
| 7,400.00                          | 7,220.65              | 7,410.61              | 7,205.96              | 32.00            | 32.58         | 67.19                 | -809.16                             | 872.08       | 94.50                  | 50.59                   | 43.92                     | 2.152             |                    |           |
| 7,500.00                          | 7,315.32              | 7,510.54              | 7,299.49              | 32.61            | 33.22         | 65.97                 | -832.72                             | 898.20       | 97.65                  | 53.07                   | 44.58                     | 2.190             |                    |           |
| 7,600.00                          | 7,409.99              | 7,610.46              | 7,393.02              | 33.21            | 33.86         | 64.82                 | -856.28                             | 924.33       | 100.84                 | 55.60                   | 45.24                     | 2.229             |                    |           |
| 7,700.00                          | 7,504.67              | 7,710.76              | 7,486.93              | 33.82            | 34.51         | 63.79                 | -879.86                             | 950.49       | 104.03                 | 58.10                   | 45.93                     | 2.265             |                    |           |
| 7,800.00                          | 7,599.34              | 7,812.11              | 7,582.49              | 34.43            | 35.15         | 63.73                 | -902.45                             | 975.54       | 106.27                 | 59.49                   | 46.78                     | 2.272             |                    |           |
| 7,900.00                          | 7,694.01              | 7,913.45              | 7,678.92              | 35.05            | 35.76         | 64.92                 | -923.34                             | 998.70       | 107.23                 | 59.43                   | 47.80                     | 2.243             |                    |           |
| 8,000.00                          | 7,788.68              | 8,014.64              | 7,775.99              | 35.66            | 36.33         | 67.37                 | -942.47                             | 1,019.92     | 107.05                 | 58.09                   | 48.97                     | 2.186             |                    |           |
| 8,100.00                          | 7,883.36              | 8,115.55              | 7,873.50              | 36.28            | 36.88         | 71.13                 | -959.83                             | 1,039.17     | 106.04                 | 55.77                   | 50.27                     | 2.109             |                    |           |
| 8,200.00                          | 7,978.03              | 8,216.02              | 7,971.24              | 36.89            | 37.40         | 76.31                 | -975.40                             | 1,056.43     | 104.69                 | 53.03                   | 51.66                     | 2.027             |                    |           |
| 8,300.00                          | 8,072.70              | 8,315.93              | 8,069.01              | 37.51            | 37.88         | 82.96                 | -989.17                             | 1,071.70     | 103.71                 | 50.71                   | 53.00                     | 1.957             |                    |           |
| 8,335.40                          | 8,106.22              | 8,351.13              | 8,103.59              | 37.73            | 38.05         | 85.65                 | -993.61                             | 1,076.62     | 103.61                 | 50.19                   | 53.42                     | 1.940             |                    |           |
| 8,400.00                          | 8,167.37              | 8,415.14              | 8,166.60              | 38.13            | 38.34         | 91.00                 | -1,001.14                           | 1,084.97     | 104.00                 | 49.95                   | 54.06                     | 1.924             |                    |           |
| 8,500.00                          | 8,262.05              | 8,513.53              | 8,263.80              | 38.75            | 38.76         | 100.13                | -1,011.33                           | 1,096.28     | 106.63                 | 52.10                   | 54.53                     | 1.955             |                    |           |
| 8,600.00                          | 8,356.72              | 8,610.99              | 8,360.44              | 39.37            | 39.15         | 109.76                | -1,019.77                           | 1,105.63     | 112.58                 | 58.30                   | 54.28                     | 2.074             |                    |           |
| 8,700.00                          | 8,451.39              | 8,707.39              | 8,456.31              | 39.99            | 39.52         | 119.19                | -1,026.49                           | 1,113.09     | 122.57                 | 69.12                   | 53.45                     | 2.293             |                    |           |
| 8,800.00                          | 8,546.07              | 8,802.64              | 8,551.26              | 40.61            | 39.85         | 127.82                | -1,031.54                           | 1,118.68     | 136.89                 | 84.53                   | 52.37                     | 2.614             |                    |           |
| 8,875.44                          | 8,617.48              | 8,873.67              | 8,622.17              | 41.08            | 40.08         | 133.59                | -1,034.27                           | 1,121.71     | 150.53                 | 98.97                   | 51.56                     | 2.920             |                    |           |
| 8,900.00                          | 8,640.90              | 8,896.77              | 8,645.25              | 41.23            | 40.16         | 135.53                | -1,034.96                           | 1,122.49     | 155.11                 | 103.77                  | 51.34                     | 3.021             |                    |           |
| 8,950.00                          | 8,689.44              | 8,944.32              | 8,692.77              | 41.49            | 40.30         | 138.45                | -1,036.11                           | 1,123.75     | 162.72                 | 111.67                  | 51.05                     | 3.187             |                    |           |
| 9,000.00                          | 8,738.83              | 8,992.38              | 8,740.82              | 41.70            | 40.44         | 140.18                | -1,036.86                           | 1,124.59     | 167.73                 | 116.78                  | 50.95                     | 3.292             |                    |           |
| 9,050.00                          | 8,788.70              | 9,040.72              | 8,789.15              | 41.87            | 40.57         | 140.90                | -1,037.21                           | 1,124.97     | 169.91                 | 118.93                  | 50.99                     | 3.332             |                    |           |
| 9,063.30                          | 8,802.00              | 9,053.60              | 8,802.03              | 41.91            | 40.61         | -90.41                | -1,037.23                           | 1,125.00     | 170.01                 | 118.98                  | 51.02                     | 3.332             |                    |           |
| 9,077.07                          | 8,815.77              | 9,067.24              | 8,815.67              | 41.94            | 40.65         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 118.93                  | 51.07                     | 3.329             |                    |           |
| 9,100.00                          | 8,838.70              | 9,090.17              | 8,838.60              | 42.00            | 40.71         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 118.84                  | 51.17                     | 3.323             |                    |           |
| 9,200.00                          | 8,938.70              | 9,190.17              | 8,938.60              | 42.26            | 40.97         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 118.43                  | 51.58                     | 3.296             |                    |           |
| 9,300.00                          | 9,038.70              | 9,290.17              | 9,038.60              | 42.51            | 41.24         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 118.01                  | 51.99                     | 3.270             |                    |           |
| 9,400.00                          | 9,138.70              | 9,390.17              | 9,138.60              | 42.77            | 41.50         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 117.60                  | 52.41                     | 3.244             |                    |           |
| 9,500.00                          | 9,238.70              | 9,490.17              | 9,238.60              | 43.03            | 41.77         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 117.18                  | 52.82                     | 3.218             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,600.00                          | 9,338.70              | 9,590.17              | 9,338.60              | 43.30            | 42.04         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 116.76                  | 53.24                     | 3.193             |                    |           |
| 9,700.00                          | 9,438.70              | 9,690.17              | 9,438.60              | 43.56            | 42.31         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 116.34                  | 53.66                     | 3.168             |                    |           |
| 9,800.00                          | 9,538.70              | 9,790.17              | 9,538.60              | 43.82            | 42.58         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 115.92                  | 54.08                     | 3.144             |                    |           |
| 9,900.00                          | 9,638.70              | 9,890.17              | 9,638.60              | 44.09            | 42.85         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 115.50                  | 54.50                     | 3.119             |                    |           |
| 10,000.00                         | 9,738.70              | 9,990.17              | 9,738.60              | 44.36            | 43.13         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 115.08                  | 54.93                     | 3.095             |                    |           |
| 10,100.00                         | 9,838.70              | 10,090.17             | 9,838.60              | 44.63            | 43.40         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 114.65                  | 55.35                     | 3.071             |                    |           |
| 10,200.00                         | 9,938.70              | 10,190.17             | 9,938.60              | 44.90            | 43.68         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 114.23                  | 55.78                     | 3.048             |                    |           |
| 10,300.00                         | 10,038.70             | 10,290.17             | 10,038.60             | 45.17            | 43.96         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 113.80                  | 56.21                     | 3.025             |                    |           |
| 10,400.00                         | 10,138.70             | 10,390.17             | 10,138.60             | 45.44            | 44.24         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 113.37                  | 56.63                     | 3.002             |                    |           |
| 10,500.00                         | 10,238.70             | 10,490.17             | 10,238.60             | 45.71            | 44.52         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 112.94                  | 57.06                     | 2.979             |                    |           |
| 10,600.00                         | 10,338.70             | 10,590.17             | 10,338.60             | 45.99            | 44.80         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 112.51                  | 57.50                     | 2.957             |                    |           |
| 10,700.00                         | 10,438.70             | 10,690.17             | 10,438.60             | 46.26            | 45.08         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 112.08                  | 57.93                     | 2.935             |                    |           |
| 10,800.00                         | 10,538.70             | 10,790.17             | 10,538.60             | 46.54            | 45.37         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 111.64                  | 58.36                     | 2.913             |                    |           |
| 10,900.00                         | 10,638.70             | 10,890.17             | 10,638.60             | 46.82            | 45.65         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 111.21                  | 58.80                     | 2.891             |                    |           |
| 11,000.00                         | 10,738.70             | 10,990.17             | 10,738.60             | 47.10            | 45.94         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 110.77                  | 59.23                     | 2.870             |                    |           |
| 11,100.00                         | 10,838.70             | 11,090.17             | 10,838.60             | 47.38            | 46.22         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 110.33                  | 59.67                     | 2.849             |                    |           |
| 11,200.00                         | 10,938.70             | 11,190.17             | 10,938.60             | 47.66            | 46.51         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 109.89                  | 60.11                     | 2.828             |                    |           |
| 11,300.00                         | 11,038.70             | 11,290.17             | 11,038.60             | 47.94            | 46.80         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 109.46                  | 60.55                     | 2.808             |                    |           |
| 11,400.00                         | 11,138.70             | 11,390.17             | 11,138.60             | 48.22            | 47.09         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 109.01                  | 60.99                     | 2.787             |                    |           |
| 11,500.00                         | 11,238.70             | 11,490.17             | 11,238.60             | 48.51            | 47.38         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 108.57                  | 61.43                     | 2.767             |                    |           |
| 11,600.00                         | 11,338.70             | 11,590.17             | 11,338.60             | 48.79            | 47.67         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 108.13                  | 61.87                     | 2.748             |                    |           |
| 11,700.00                         | 11,438.70             | 11,690.17             | 11,438.60             | 49.08            | 47.96         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 107.69                  | 62.32                     | 2.728             |                    |           |
| 11,753.34                         | 11,492.04             | 11,743.51             | 11,491.94             | 49.23            | 48.12         | -90.41                | -1,037.23                           | 1,125.00     | 170.00                 | 107.45                  | 62.55                     | 2.718             |                    |           |
| 11,754.54                         | 11,493.24             | 11,744.71             | 11,493.14             | 49.24            | 48.12         | 90.15                 | -1,037.23                           | 1,125.00     | 170.00                 | 107.44                  | 62.56                     | 2.717             |                    |           |
| 11,800.00                         | 11,538.65             | 11,790.11             | 11,538.55             | 49.37            | 48.26         | 90.78                 | -1,037.23                           | 1,125.00     | 170.02                 | 107.37                  | 62.65                     | 2.714             |                    |           |
| 11,850.00                         | 11,588.24             | 11,839.71             | 11,588.14             | 49.55            | 48.40         | 92.84                 | -1,037.23                           | 1,125.00     | 170.22                 | 107.70                  | 62.52                     | 2.723             |                    |           |
| 11,900.00                         | 11,637.10             | 11,888.57             | 11,637.00             | 49.74            | 48.54         | 96.20                 | -1,037.23                           | 1,125.00     | 171.07                 | 108.91                  | 62.16                     | 2.752             |                    |           |
| 11,950.00                         | 11,684.86             | 11,936.33             | 11,684.76             | 49.95            | 48.69         | 100.62                | -1,037.23                           | 1,125.00     | 173.34                 | 111.71                  | 61.63                     | 2.812             |                    |           |
| 12,000.00                         | 11,731.15             | 11,982.62             | 11,731.05             | 50.18            | 48.82         | 105.74                | -1,037.23                           | 1,125.00     | 177.99                 | 116.95                  | 61.04                     | 2.916             |                    |           |
| 12,050.00                         | 11,775.62             | 12,027.09             | 11,775.52             | 50.42            | 48.95         | 111.11                | -1,037.23                           | 1,125.00     | 186.03                 | 125.53                  | 60.50                     | 3.075             |                    |           |
| 12,100.00                         | 11,817.93             | 12,069.40             | 11,817.83             | 50.68            | 49.08         | 116.30                | -1,037.23                           | 1,125.00     | 198.33                 | 138.18                  | 60.15                     | 3.297             |                    |           |
| 12,150.00                         | 11,857.76             | 12,109.23             | 11,857.66             | 50.96            | 49.20         | 120.93                | -1,037.23                           | 1,125.00     | 215.44                 | 155.38                  | 60.06                     | 3.587             |                    |           |
| 12,200.00                         | 11,894.81             | 12,155.13             | 11,903.55             | 51.25            | 49.33         | 126.02                | -1,038.04                           | 1,125.01     | 237.13                 | 176.64                  | 60.48                     | 3.921             |                    |           |
| 12,250.00                         | 11,928.80             | 12,210.20             | 11,958.31             | 51.56            | 49.52         | 131.34                | -1,043.61                           | 1,125.09     | 261.25                 | 200.13                  | 61.12                     | 4.275             |                    |           |
| 12,300.00                         | 11,959.45             | 12,271.05             | 12,017.90             | 51.87            | 49.76         | 136.16                | -1,055.84                           | 1,125.25     | 286.74                 | 225.24                  | 61.50                     | 4.663             |                    |           |
| 12,350.00                         | 11,986.56             | 12,339.34             | 12,082.78             | 52.20            | 50.06         | 140.56                | -1,077.00                           | 1,125.53     | 312.71                 | 251.35                  | 61.37                     | 5.096             |                    |           |
| 12,400.00                         | 12,009.90             | 12,417.19             | 12,153.07             | 52.55            | 50.44         | 144.58                | -1,110.32                           | 1,125.98     | 338.27                 | 277.77                  | 60.50                     | 5.591             |                    |           |
| 12,450.00                         | 12,029.29             | 12,507.15             | 12,227.79             | 52.90            | 50.93         | 148.21                | -1,160.25                           | 1,126.65     | 362.38                 | 303.68                  | 58.70                     | 6.174             |                    |           |
| 12,500.00                         | 12,044.60             | 12,589.69             | 12,288.45             | 53.26            | 51.42         | 150.52                | -1,216.09                           | 1,127.41     | 383.72                 | 326.77                  | 56.95                     | 6.738             |                    |           |
| 12,550.00                         | 12,055.70             | 12,733.33             | 12,373.54             | 53.63            | 52.37         | 153.88                | -1,331.27                           | 1,128.95     | 400.98                 | 348.61                  | 52.38                     | 7.656             |                    |           |
| 12,600.00                         | 12,062.52             | 12,870.47             | 12,425.39             | 54.01            | 53.35         | 155.56                | -1,457.86                           | 1,130.66     | 412.33                 | 363.11                  | 49.23                     | 8.376             |                    |           |
| 12,653.34                         | 12,065.00             | 13,027.75             | 12,445.99             | 54.42            | 54.55         | 156.22                | -1,613.28                           | 1,132.75     | 416.44                 | 368.21                  | 48.23                     | 8.635             |                    |           |
| 12,700.00                         | 12,065.00             | 13,072.32             | 12,446.00             | 54.78            | 54.91         | 156.25                | -1,657.84                           | 1,133.35     | 416.38                 | 367.92                  | 48.45                     | 8.593             |                    |           |
| 12,800.00                         | 12,065.00             | 13,172.32             | 12,446.00             | 55.59            | 55.72         | 156.29                | -1,757.83                           | 1,134.69     | 416.23                 | 367.26                  | 48.97                     | 8.499             |                    |           |
| 12,900.00                         | 12,065.00             | 13,272.32             | 12,446.00             | 56.43            | 56.57         | 156.34                | -1,857.82                           | 1,136.04     | 416.08                 | 366.56                  | 49.52                     | 8.403             |                    |           |
| 13,000.00                         | 12,065.00             | 13,372.32             | 12,446.00             | 57.31            | 57.45         | 156.38                | -1,957.81                           | 1,137.38     | 415.93                 | 365.85                  | 50.09                     | 8.304             |                    |           |
| 13,100.00                         | 12,065.00             | 13,472.31             | 12,446.00             | 58.22            | 58.37         | 156.43                | -2,057.80                           | 1,138.73     | 415.79                 | 365.11                  | 50.68                     | 8.204             |                    |           |
| 13,200.00                         | 12,065.00             | 13,572.31             | 12,446.00             | 59.17            | 59.32         | 156.48                | -2,157.79                           | 1,140.07     | 415.64                 | 364.34                  | 51.30                     | 8.102             |                    |           |
| 13,300.00                         | 12,065.00             | 13,672.31             | 12,446.00             | 60.14            | 60.30         | 156.52                | -2,257.78                           | 1,141.41     | 415.50                 | 363.56                  | 51.94                     | 8.000             |                    |           |
| 13,400.00                         | 12,065.00             | 13,772.31             | 12,446.00             | 61.15            | 61.31         | 156.57                | -2,357.77                           | 1,142.76     | 415.35                 | 362.75                  | 52.60                     | 7.897             |                    |           |
| 13,500.00                         | 12,065.00             | 13,872.31             | 12,446.00             | 62.18            | 62.35         | 156.62                | -2,457.76                           | 1,144.10     | 415.20                 | 361.93                  | 53.27                     | 7.794             |                    |           |
| 13,600.00                         | 12,065.00             | 13,972.31             | 12,446.00             | 63.24            | 63.41         | 156.66                | -2,557.75                           | 1,145.45     | 415.06                 | 361.09                  | 53.97                     | 7.691             |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 804H - OH - Plan #1 |  | Offset Site Error: 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|--|------------------------------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                                                       |  |                              |  |
|                                   |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   |                                                       |  |                              |  |
| 13,700.00                         | 12,065.00             | 14,072.31             | 12,446.00             | 64.32            | 64.50         | 156.71                | -2,657.74                           | 1,146.79     | 414.91                 | 360.23                  | 54.68                     | 7.588             |                                                       |  |                              |  |
| 13,800.00                         | 12,065.00             | 14,172.31             | 12,446.00             | 65.43            | 65.61         | 156.76                | -2,757.73                           | 1,148.14     | 414.77                 | 359.36                  | 55.41                     | 7.485             |                                                       |  |                              |  |
| 13,900.00                         | 12,065.00             | 14,272.31             | 12,446.00             | 66.56            | 66.75         | 156.80                | -2,857.72                           | 1,149.48     | 414.62                 | 358.47                  | 56.16                     | 7.383             |                                                       |  |                              |  |
| 14,000.00                         | 12,065.00             | 14,372.31             | 12,446.00             | 67.71            | 67.90         | 156.85                | -2,957.72                           | 1,150.83     | 414.48                 | 357.56                  | 56.92                     | 7.282             |                                                       |  |                              |  |
| 14,100.00                         | 12,065.00             | 14,472.31             | 12,446.00             | 68.88            | 69.08         | 156.90                | -3,057.71                           | 1,152.17     | 414.33                 | 356.64                  | 57.69                     | 7.182             |                                                       |  |                              |  |
| 14,200.00                         | 12,065.00             | 14,572.31             | 12,446.00             | 70.08            | 70.28         | 156.94                | -3,157.70                           | 1,153.52     | 414.19                 | 355.71                  | 58.48                     | 7.082             |                                                       |  |                              |  |
| 14,300.00                         | 12,065.00             | 14,672.31             | 12,446.00             | 71.29            | 71.49         | 156.99                | -3,257.69                           | 1,154.86     | 414.05                 | 354.76                  | 59.28                     | 6.984             |                                                       |  |                              |  |
| 14,400.00                         | 12,065.00             | 14,772.31             | 12,446.00             | 72.51            | 72.72         | 157.04                | -3,357.68                           | 1,156.21     | 413.90                 | 353.81                  | 60.10                     | 6.887             |                                                       |  |                              |  |
| 14,500.00                         | 12,065.00             | 14,872.31             | 12,446.00             | 73.76            | 73.97         | 157.08                | -3,457.67                           | 1,157.55     | 413.76                 | 352.84                  | 60.92                     | 6.792             |                                                       |  |                              |  |
| 14,600.00                         | 12,065.00             | 14,972.30             | 12,446.00             | 75.02            | 75.23         | 157.13                | -3,557.66                           | 1,158.90     | 413.62                 | 351.86                  | 61.76                     | 6.698             |                                                       |  |                              |  |
| 14,700.00                         | 12,065.00             | 15,072.30             | 12,446.00             | 76.29            | 76.51         | 157.18                | -3,657.65                           | 1,160.24     | 413.48                 | 350.87                  | 62.60                     | 6.605             |                                                       |  |                              |  |
| 14,800.00                         | 12,065.00             | 15,172.30             | 12,446.00             | 77.58            | 77.80         | 157.22                | -3,757.64                           | 1,161.59     | 413.33                 | 349.88                  | 63.46                     | 6.514             |                                                       |  |                              |  |
| 14,900.00                         | 12,065.00             | 15,272.30             | 12,446.00             | 78.89            | 79.11         | 157.27                | -3,857.63                           | 1,162.93     | 413.19                 | 348.87                  | 64.32                     | 6.424             |                                                       |  |                              |  |
| 15,000.00                         | 12,065.00             | 15,372.30             | 12,446.00             | 80.20            | 80.43         | 157.32                | -3,957.62                           | 1,164.28     | 413.05                 | 347.85                  | 65.20                     | 6.336             |                                                       |  |                              |  |
| 15,100.00                         | 12,065.00             | 15,472.30             | 12,446.00             | 81.53            | 81.76         | 157.36                | -4,057.61                           | 1,165.62     | 412.91                 | 346.83                  | 66.08                     | 6.249             |                                                       |  |                              |  |
| 15,200.00                         | 12,065.00             | 15,572.30             | 12,446.00             | 82.87            | 83.10         | 157.41                | -4,157.60                           | 1,166.97     | 412.77                 | 345.80                  | 66.97                     | 6.164             |                                                       |  |                              |  |
| 15,300.00                         | 12,065.00             | 15,672.30             | 12,446.00             | 84.22            | 84.45         | 157.46                | -4,257.59                           | 1,168.31     | 412.63                 | 344.76                  | 67.87                     | 6.080             |                                                       |  |                              |  |
| 15,400.00                         | 12,065.00             | 15,772.30             | 12,446.00             | 85.59            | 85.82         | 157.50                | -4,357.58                           | 1,169.65     | 412.49                 | 343.72                  | 68.77                     | 5.998             |                                                       |  |                              |  |
| 15,500.00                         | 12,065.00             | 15,872.30             | 12,446.00             | 86.96            | 87.19         | 157.55                | -4,457.57                           | 1,171.00     | 412.35                 | 342.67                  | 69.68                     | 5.918             |                                                       |  |                              |  |
| 15,600.00                         | 12,065.00             | 15,972.30             | 12,446.00             | 88.34            | 88.57         | 157.60                | -4,557.56                           | 1,172.34     | 412.21                 | 341.61                  | 70.60                     | 5.839             |                                                       |  |                              |  |
| 15,700.00                         | 12,065.00             | 16,072.30             | 12,446.00             | 89.73            | 89.97         | 157.65                | -4,657.55                           | 1,173.69     | 412.07                 | 340.55                  | 71.52                     | 5.762             |                                                       |  |                              |  |
| 15,800.00                         | 12,065.00             | 16,172.30             | 12,446.00             | 91.13            | 91.37         | 157.69                | -4,757.54                           | 1,175.03     | 411.93                 | 339.48                  | 72.45                     | 5.686             |                                                       |  |                              |  |
| 15,900.00                         | 12,065.00             | 16,272.30             | 12,446.00             | 92.54            | 92.78         | 157.74                | -4,857.53                           | 1,176.38     | 411.79                 | 338.41                  | 73.38                     | 5.612             |                                                       |  |                              |  |
| 16,000.00                         | 12,065.00             | 16,372.30             | 12,446.00             | 93.95            | 94.19         | 157.79                | -4,957.52                           | 1,177.72     | 411.65                 | 337.33                  | 74.32                     | 5.539             |                                                       |  |                              |  |
| 16,100.00                         | 12,065.00             | 16,472.29             | 12,446.00             | 95.38            | 95.62         | 157.83                | -5,057.51                           | 1,179.07     | 411.51                 | 336.25                  | 75.27                     | 5.467             |                                                       |  |                              |  |
| 16,200.00                         | 12,065.00             | 16,572.29             | 12,446.00             | 96.81            | 97.05         | 157.88                | -5,157.50                           | 1,180.41     | 411.37                 | 335.16                  | 76.21                     | 5.398             |                                                       |  |                              |  |
| 16,300.00                         | 12,065.00             | 16,672.29             | 12,446.00             | 98.24            | 98.49         | 157.93                | -5,257.49                           | 1,181.76     | 411.23                 | 334.07                  | 77.17                     | 5.329             |                                                       |  |                              |  |
| 16,400.00                         | 12,065.00             | 16,772.29             | 12,446.00             | 99.69            | 99.94         | 157.98                | -5,357.48                           | 1,183.10     | 411.10                 | 332.97                  | 78.12                     | 5.262             |                                                       |  |                              |  |
| 16,500.00                         | 12,065.00             | 16,872.29             | 12,446.00             | 101.14           | 101.39        | 158.02                | -5,457.47                           | 1,184.45     | 410.96                 | 331.88                  | 79.08                     | 5.197             |                                                       |  |                              |  |
| 16,600.00                         | 12,065.00             | 16,972.29             | 12,446.00             | 102.60           | 102.85        | 158.07                | -5,557.46                           | 1,185.79     | 410.82                 | 330.78                  | 80.05                     | 5.132             |                                                       |  |                              |  |
| 16,700.00                         | 12,065.00             | 17,072.29             | 12,446.00             | 104.06           | 104.31        | 158.12                | -5,657.45                           | 1,187.14     | 410.69                 | 329.67                  | 81.01                     | 5.069             |                                                       |  |                              |  |
| 16,800.00                         | 12,065.00             | 17,172.29             | 12,446.00             | 105.53           | 105.78        | 158.17                | -5,757.44                           | 1,188.48     | 410.55                 | 328.56                  | 81.99                     | 5.008             |                                                       |  |                              |  |
| 16,900.00                         | 12,065.00             | 17,272.29             | 12,446.00             | 107.00           | 107.25        | 158.21                | -5,857.43                           | 1,189.83     | 410.41                 | 327.45                  | 82.96                     | 4.947             |                                                       |  |                              |  |
| 17,000.00                         | 12,065.00             | 17,372.29             | 12,446.00             | 108.48           | 108.73        | 158.26                | -5,957.42                           | 1,191.17     | 410.28                 | 326.34                  | 83.94                     | 4.888             |                                                       |  |                              |  |
| 17,100.00                         | 12,065.00             | 17,472.29             | 12,446.00             | 109.96           | 110.22        | 158.31                | -6,057.41                           | 1,192.52     | 410.14                 | 325.23                  | 84.91                     | 4.830             |                                                       |  |                              |  |
| 17,200.00                         | 12,065.00             | 17,572.29             | 12,446.00             | 111.45           | 111.71        | 158.36                | -6,157.40                           | 1,193.86     | 410.00                 | 324.11                  | 85.90                     | 4.773             |                                                       |  |                              |  |
| 17,300.00                         | 12,065.00             | 17,672.29             | 12,446.00             | 112.94           | 113.20        | 158.40                | -6,257.39                           | 1,195.20     | 409.87                 | 322.99                  | 86.88                     | 4.718             |                                                       |  |                              |  |
| 17,400.00                         | 12,065.00             | 17,772.29             | 12,446.00             | 114.44           | 114.70        | 158.45                | -6,357.38                           | 1,196.55     | 409.73                 | 321.87                  | 87.87                     | 4.663             |                                                       |  |                              |  |
| 17,500.00                         | 12,065.00             | 17,872.28             | 12,446.00             | 115.94           | 116.20        | 158.50                | -6,457.38                           | 1,197.89     | 409.60                 | 320.74                  | 88.86                     | 4.610             |                                                       |  |                              |  |
| 17,600.00                         | 12,065.00             | 17,972.28             | 12,446.00             | 117.45           | 117.71        | 158.55                | -6,557.37                           | 1,199.24     | 409.47                 | 319.62                  | 89.85                     | 4.557             |                                                       |  |                              |  |
| 17,700.00                         | 12,065.00             | 18,072.28             | 12,446.00             | 118.96           | 119.22        | 158.60                | -6,657.36                           | 1,200.58     | 409.33                 | 318.49                  | 90.84                     | 4.506             |                                                       |  |                              |  |
| 17,800.00                         | 12,065.00             | 18,172.28             | 12,446.00             | 120.47           | 120.74        | 158.64                | -6,757.35                           | 1,201.93     | 409.20                 | 317.36                  | 91.84                     | 4.456             |                                                       |  |                              |  |
| 17,900.00                         | 12,065.00             | 18,272.28             | 12,446.00             | 121.99           | 122.25        | 158.69                | -6,857.34                           | 1,203.27     | 409.06                 | 316.23                  | 92.84                     | 4.406             |                                                       |  |                              |  |
| 18,000.00                         | 12,065.00             | 18,372.28             | 12,446.00             | 123.51           | 123.77        | 158.74                | -6,957.33                           | 1,204.62     | 408.93                 | 315.10                  | 93.83                     | 4.358             |                                                       |  |                              |  |
| 18,100.00                         | 12,065.00             | 18,472.28             | 12,446.00             | 125.03           | 125.30        | 158.79                | -7,057.32                           | 1,205.96     | 408.80                 | 313.97                  | 94.83                     | 4.311             |                                                       |  |                              |  |
| 18,200.00                         | 12,065.00             | 18,572.28             | 12,446.00             | 126.56           | 126.83        | 158.84                | -7,157.31                           | 1,207.31     | 408.67                 | 312.83                  | 95.84                     | 4.264             |                                                       |  |                              |  |
| 18,300.00                         | 12,065.00             | 18,672.28             | 12,446.00             | 128.09           | 128.36        | 158.88                | -7,257.30                           | 1,208.65     | 408.53                 | 311.69                  | 96.84                     | 4.219             |                                                       |  |                              |  |
| 18,400.00                         | 12,065.00             | 18,772.28             | 12,446.00             | 129.62           | 129.89        | 158.93                | -7,357.29                           | 1,210.00     | 408.40                 | 310.56                  | 97.84                     | 4.174             |                                                       |  |                              |  |
| 18,500.00                         | 12,065.00             | 18,872.28             | 12,446.00             | 131.16           | 131.43        | 158.98                | -7,457.28                           | 1,211.34     | 408.27                 | 309.42                  | 98.85                     | 4.130             |                                                       |  |                              |  |
| 18,600.00                         | 12,065.00             | 18,972.28             | 12,446.00             | 132.69           | 132.97        | 159.03                | -7,557.27                           | 1,212.69     | 408.14                 | 308.28                  | 99.86                     | 4.087             |                                                       |  |                              |  |
| 18,700.00                         | 12,065.00             | 19,072.28             | 12,446.00             | 134.24           | 134.51        | 159.08                | -7,657.26                           | 1,214.03     | 408.01                 | 307.14                  | 100.87                    | 4.045             |                                                       |  |                              |  |
| 18,800.00                         | 12,065.00             | 19,172.28             | 12,446.00             | 135.78           | 136.06        | 159.12                | -7,757.25                           | 1,215.38     | 407.88                 | 306.00                  | 101.88                    | 4.004             |                                                       |  |                              |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Tatanka Fed Com - Tatanka Fed Com 804H - OH - Plan #1 |         | Offset Site Error: |  | 0.00 usft |  |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------------------------------------------|---------|--------------------|--|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                                                       |         | 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 |                    |  |           |  |
| 18,900.00                         | 12,065.00             | 19,272.28             | 12,446.00             | 137.33           | 137.60        | 159.17                | -7,857.24                           | 1,216.72     | 407.75                 | 304.86                  | 102.89                    | 3.963                                                 |         |                    |  |           |  |
| 19,000.00                         | 12,065.00             | 19,372.27             | 12,446.00             | 138.87           | 139.15        | 159.22                | -7,957.23                           | 1,218.07     | 407.62                 | 303.72                  | 103.90                    | 3.923                                                 |         |                    |  |           |  |
| 19,100.00                         | 12,065.00             | 19,472.27             | 12,446.00             | 140.43           | 140.70        | 159.27                | -8,057.22                           | 1,219.41     | 407.49                 | 302.57                  | 104.91                    | 3.884                                                 |         |                    |  |           |  |
| 19,200.00                         | 12,065.00             | 19,572.27             | 12,446.00             | 141.98           | 142.26        | 159.32                | -8,157.21                           | 1,220.75     | 407.36                 | 301.43                  | 105.93                    | 3.846                                                 |         |                    |  |           |  |
| 19,300.00                         | 12,065.00             | 19,672.27             | 12,446.00             | 143.53           | 143.82        | 159.36                | -8,257.20                           | 1,222.10     | 407.23                 | 300.29                  | 106.94                    | 3.808                                                 |         |                    |  |           |  |
| 19,400.00                         | 12,065.00             | 19,772.27             | 12,446.00             | 145.09           | 145.37        | 159.41                | -8,357.19                           | 1,223.44     | 407.10                 | 299.14                  | 107.95                    | 3.771                                                 |         |                    |  |           |  |
| 19,500.00                         | 12,065.00             | 19,872.27             | 12,446.00             | 146.65           | 146.93        | 159.46                | -8,457.18                           | 1,224.79     | 406.97                 | 298.00                  | 108.97                    | 3.735                                                 |         |                    |  |           |  |
| 19,600.00                         | 12,065.00             | 19,972.27             | 12,446.00             | 148.21           | 148.50        | 159.51                | -8,557.17                           | 1,226.13     | 406.84                 | 296.85                  | 109.99                    | 3.699                                                 |         |                    |  |           |  |
| 19,700.00                         | 12,065.00             | 20,072.27             | 12,446.00             | 149.78           | 150.06        | 159.56                | -8,657.16                           | 1,227.48     | 406.71                 | 295.71                  | 111.01                    | 3.664                                                 |         |                    |  |           |  |
| 19,800.00                         | 12,065.00             | 20,172.27             | 12,446.00             | 151.34           | 151.63        | 159.61                | -8,757.15                           | 1,228.82     | 406.58                 | 294.56                  | 112.02                    | 3.629                                                 |         |                    |  |           |  |
| 19,900.00                         | 12,065.00             | 20,272.27             | 12,446.00             | 152.91           | 153.20        | 159.66                | -8,857.14                           | 1,230.17     | 406.46                 | 293.41                  | 113.04                    | 3.596                                                 |         |                    |  |           |  |
| 20,000.00                         | 12,065.00             | 20,372.27             | 12,446.00             | 154.48           | 154.77        | 159.70                | -8,957.13                           | 1,231.51     | 406.33                 | 292.27                  | 114.06                    | 3.562                                                 |         |                    |  |           |  |
| 20,100.00                         | 12,065.00             | 20,472.27             | 12,446.00             | 156.05           | 156.34        | 159.75                | -9,057.12                           | 1,232.86     | 406.20                 | 291.12                  | 115.08                    | 3.530                                                 |         |                    |  |           |  |
| 20,200.00                         | 12,065.00             | 20,572.27             | 12,446.00             | 157.62           | 157.91        | 159.80                | -9,157.11                           | 1,234.20     | 406.07                 | 289.97                  | 116.10                    | 3.498                                                 |         |                    |  |           |  |
| 20,300.00                         | 12,065.00             | 20,672.27             | 12,446.00             | 159.20           | 159.49        | 159.85                | -9,257.10                           | 1,235.55     | 405.95                 | 288.82                  | 117.12                    | 3.466                                                 |         |                    |  |           |  |
| 20,400.00                         | 12,065.00             | 20,772.27             | 12,446.00             | 160.77           | 161.06        | 159.90                | -9,357.09                           | 1,236.89     | 405.82                 | 287.68                  | 118.15                    | 3.435                                                 |         |                    |  |           |  |
| 20,500.00                         | 12,065.00             | 20,872.26             | 12,446.00             | 162.35           | 162.64        | 159.95                | -9,457.08                           | 1,238.24     | 405.70                 | 286.53                  | 119.17                    | 3.404                                                 |         |                    |  |           |  |
| 20,600.00                         | 12,065.00             | 20,972.26             | 12,446.00             | 163.93           | 164.22        | 160.00                | -9,557.07                           | 1,239.58     | 405.57                 | 285.38                  | 120.19                    | 3.374                                                 |         |                    |  |           |  |
| 20,700.00                         | 12,065.00             | 21,072.26             | 12,446.00             | 165.51           | 165.80        | 160.04                | -9,657.06                           | 1,240.93     | 405.44                 | 284.23                  | 121.21                    | 3.345                                                 |         |                    |  |           |  |
| 20,800.00                         | 12,065.00             | 21,172.26             | 12,446.00             | 167.09           | 167.38        | 160.09                | -9,757.05                           | 1,242.27     | 405.32                 | 283.08                  | 122.24                    | 3.316                                                 |         |                    |  |           |  |
| 20,900.00                         | 12,065.00             | 21,272.26             | 12,446.00             | 168.67           | 168.97        | 160.14                | -9,857.05                           | 1,243.62     | 405.19                 | 281.93                  | 123.26                    | 3.287                                                 |         |                    |  |           |  |
| 21,000.00                         | 12,065.00             | 21,372.26             | 12,446.00             | 170.26           | 170.55        | 160.19                | -9,957.04                           | 1,244.96     | 405.07                 | 280.79                  | 124.28                    | 3.259                                                 |         |                    |  |           |  |
| 21,100.00                         | 12,065.00             | 21,472.26             | 12,446.00             | 171.84           | 172.14        | 160.24                | -10,057.03                          | 1,246.30     | 404.95                 | 279.64                  | 125.31                    | 3.232                                                 |         |                    |  |           |  |
| 21,200.00                         | 12,065.00             | 21,572.26             | 12,446.00             | 173.43           | 173.73        | 160.29                | -10,157.02                          | 1,247.65     | 404.82                 | 278.49                  | 126.33                    | 3.204                                                 |         |                    |  |           |  |
| 21,300.00                         | 12,065.00             | 21,672.26             | 12,446.00             | 175.02           | 175.32        | 160.34                | -10,257.01                          | 1,248.99     | 404.70                 | 277.34                  | 127.36                    | 3.178                                                 |         |                    |  |           |  |
| 21,400.00                         | 12,065.00             | 21,772.26             | 12,446.00             | 176.60           | 176.91        | 160.39                | -10,357.00                          | 1,250.34     | 404.58                 | 276.19                  | 128.38                    | 3.151                                                 |         |                    |  |           |  |
| 21,500.00                         | 12,065.00             | 21,872.26             | 12,446.00             | 178.19           | 178.50        | 160.44                | -10,456.99                          | 1,251.68     | 404.45                 | 275.04                  | 129.41                    | 3.125                                                 |         |                    |  |           |  |
| 21,600.00                         | 12,065.00             | 21,972.26             | 12,446.00             | 179.79           | 180.09        | 160.48                | -10,556.98                          | 1,253.03     | 404.33                 | 273.89                  | 130.44                    | 3.100                                                 |         |                    |  |           |  |
| 21,700.00                         | 12,065.00             | 22,072.26             | 12,446.00             | 181.38           | 181.68        | 160.53                | -10,656.97                          | 1,254.37     | 404.21                 | 272.74                  | 131.46                    | 3.075                                                 |         |                    |  |           |  |
| 21,800.00                         | 12,065.00             | 22,172.26             | 12,446.00             | 182.97           | 183.28        | 160.58                | -10,756.96                          | 1,255.72     | 404.09                 | 271.60                  | 132.49                    | 3.050                                                 |         |                    |  |           |  |
| 21,900.00                         | 12,065.00             | 22,272.26             | 12,446.00             | 184.57           | 184.87        | 160.63                | -10,856.95                          | 1,257.06     | 403.96                 | 270.45                  | 133.52                    | 3.026                                                 |         |                    |  |           |  |
| 22,000.00                         | 12,065.00             | 22,372.25             | 12,446.00             | 186.16           | 186.47        | 160.68                | -10,956.94                          | 1,258.41     | 403.84                 | 269.30                  | 134.54                    | 3.002                                                 |         |                    |  |           |  |
| 22,100.00                         | 12,065.00             | 22,472.25             | 12,446.00             | 187.76           | 188.06        | 160.73                | -11,056.93                          | 1,259.75     | 403.72                 | 268.15                  | 135.57                    | 2.978                                                 |         |                    |  |           |  |
| 22,200.00                         | 12,065.00             | 22,572.25             | 12,446.00             | 189.36           | 189.66        | 160.78                | -11,156.92                          | 1,261.10     | 403.60                 | 267.00                  | 136.60                    | 2.955                                                 |         |                    |  |           |  |
| 22,300.00                         | 12,065.00             | 22,672.25             | 12,446.00             | 190.95           | 191.26        | 160.83                | -11,256.91                          | 1,262.44     | 403.48                 | 265.85                  | 137.62                    | 2.932                                                 |         |                    |  |           |  |
| 22,400.00                         | 12,065.00             | 22,772.25             | 12,446.00             | 192.55           | 192.86        | 160.88                | -11,356.90                          | 1,263.79     | 403.36                 | 264.71                  | 138.65                    | 2.909                                                 |         |                    |  |           |  |
| 22,441.85                         | 12,065.00             | 22,814.10             | 12,446.00             | 193.22           | 193.53        | 160.90                | -11,398.75                          | 1,264.35     | 403.31                 | 264.23                  | 139.08                    | 2.900                                                 |         |                    |  |           |  |
| 22,445.57                         | 12,065.00             | 22,817.13             | 12,446.00             | 193.28           | 193.58        | 160.90                | -11,401.77                          | 1,264.39     | 403.30                 | 264.19                  | 139.11                    | 2.899                                                 |         |                    |  |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 805H - OH - Plan #2 |         | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|---------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   |                                                       |         | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                                                       |         |                    |           |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |         |                    |           |
| 0.00                              | 0.00                  | 0.00                  | 0.00                  | 0.00             | 0.00          | 111.79                | -993.09                | 2,483.59     | 2,675.13               |                         |                           |                   |                                                       |         |                    |           |
| 100.00                            | 100.00                | 56.90                 | 56.90                 | 0.13             | 0.07          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,674.64                | 0.14                      | N/A               |                                                       |         |                    |           |
| 200.00                            | 200.00                | 156.90                | 156.90                | 0.48             | 0.33          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,674.19                | 0.59                      | 4,568.953         |                                                       |         |                    |           |
| 300.00                            | 300.00                | 256.90                | 256.90                | 0.84             | 0.69          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,673.69                | 1.09                      | 2,459.348         |                                                       |         |                    |           |
| 400.00                            | 400.00                | 356.90                | 356.90                | 1.20             | 1.05          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,673.19                | 1.59                      | 1,679.291         |                                                       |         |                    |           |
| 500.00                            | 500.00                | 456.90                | 456.90                | 1.56             | 1.40          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,672.68                | 2.10                      | 1,274.401         |                                                       |         |                    |           |
| 600.00                            | 600.00                | 556.90                | 556.90                | 1.92             | 1.76          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,672.17                | 2.61                      | 1,026.687         |                                                       |         |                    |           |
| 700.00                            | 700.00                | 656.90                | 656.90                | 2.28             | 2.12          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,671.67                | 3.11                      | 859.550           |                                                       |         |                    |           |
| 800.00                            | 800.00                | 756.90                | 756.90                | 2.63             | 2.48          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,671.16                | 3.62                      | 739.191           |                                                       |         |                    |           |
| 900.00                            | 900.00                | 856.90                | 856.90                | 2.99             | 2.84          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,670.65                | 4.13                      | 648.388           |                                                       |         |                    |           |
| 1,000.00                          | 1,000.00              | 956.90                | 956.90                | 3.35             | 3.20          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,670.15                | 4.63                      | 577.448           |                                                       |         |                    |           |
| 1,100.00                          | 1,100.00              | 1,056.90              | 1,056.90              | 3.71             | 3.56          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,669.64                | 5.14                      | 520.497           |                                                       |         |                    |           |
| 1,200.00                          | 1,200.00              | 1,156.90              | 1,156.90              | 4.07             | 3.91          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,669.13                | 5.65                      | 473.769           |                                                       |         |                    |           |
| 1,300.00                          | 1,300.00              | 1,256.90              | 1,256.90              | 4.43             | 4.27          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,668.63                | 6.15                      | 434.738           |                                                       |         |                    |           |
| 1,400.00                          | 1,400.00              | 1,356.90              | 1,356.90              | 4.79             | 4.63          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,668.12                | 6.66                      | 401.649           |                                                       |         |                    |           |
| 1,500.00                          | 1,500.00              | 1,456.90              | 1,456.90              | 5.14             | 4.99          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,667.61                | 7.17                      | 373.239           |                                                       |         |                    |           |
| 1,600.00                          | 1,600.00              | 1,556.90              | 1,556.90              | 5.50             | 5.35          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,667.11                | 7.67                      | 348.583           |                                                       |         |                    |           |
| 1,700.00                          | 1,700.00              | 1,656.90              | 1,656.90              | 5.86             | 5.71          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,666.60                | 8.18                      | 326.982           |                                                       |         |                    |           |
| 1,800.00                          | 1,800.00              | 1,756.90              | 1,756.90              | 6.22             | 6.06          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,666.09                | 8.69                      | 307.902           |                                                       |         |                    |           |
| 1,900.00                          | 1,900.00              | 1,856.90              | 1,856.90              | 6.58             | 6.42          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,665.59                | 9.19                      | 290.926           |                                                       |         |                    |           |
| 2,000.00                          | 2,000.00              | 1,956.90              | 1,956.90              | 6.94             | 6.78          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,665.08                | 9.70                      | 275.723           |                                                       |         |                    |           |
| 2,100.00                          | 2,100.00              | 2,056.90              | 2,056.90              | 7.29             | 7.14          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,664.57                | 10.21                     | 262.031           |                                                       |         |                    |           |
| 2,200.00                          | 2,200.00              | 2,156.90              | 2,156.90              | 7.65             | 7.50          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,664.07                | 10.71                     | 249.634           |                                                       |         |                    |           |
| 2,300.00                          | 2,300.00              | 2,256.90              | 2,256.90              | 8.01             | 7.86          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,663.56                | 11.22                     | 238.357           |                                                       |         |                    |           |
| 2,400.00                          | 2,400.00              | 2,356.90              | 2,356.90              | 8.37             | 8.22          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,663.05                | 11.73                     | 228.055           |                                                       |         |                    |           |
| 2,500.00                          | 2,500.00              | 2,456.90              | 2,456.90              | 8.73             | 8.57          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,662.54                | 12.24                     | 218.606           |                                                       |         |                    |           |
| 2,600.00                          | 2,600.00              | 2,556.90              | 2,556.90              | 9.09             | 8.93          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,662.04                | 12.74                     | 209.910           |                                                       |         |                    |           |
| 2,700.00                          | 2,700.00              | 2,656.90              | 2,656.90              | 9.45             | 9.29          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,661.53                | 13.25                     | 201.878           |                                                       |         |                    |           |
| 2,800.00                          | 2,800.00              | 2,756.90              | 2,756.90              | 9.80             | 9.65          | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,661.02                | 13.76                     | 194.439           |                                                       |         |                    |           |
| 2,900.00                          | 2,900.00              | 2,856.90              | 2,856.90              | 10.16            | 10.01         | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,660.52                | 14.26                     | 187.528           |                                                       |         |                    |           |
| 3,000.00                          | 3,000.00              | 2,956.90              | 2,956.90              | 10.52            | 10.37         | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,660.01                | 14.77                     | 181.092           |                                                       |         |                    |           |
| 3,100.00                          | 3,100.00              | 3,056.90              | 3,056.90              | 10.88            | 10.73         | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,659.50                | 15.28                     | 175.083           |                                                       |         |                    |           |
| 3,200.00                          | 3,200.00              | 3,156.90              | 3,156.90              | 11.24            | 11.08         | 111.79                | -993.09                | 2,483.59     | 2,674.78               | 2,659.00                | 15.78                     | 169.460           |                                                       |         |                    |           |
| 3,300.00                          | 3,299.99              | 3,256.89              | 3,256.89              | 11.58            | 11.44         | -16.88                | -993.09                | 2,483.59     | 2,673.53               | 2,657.25                | 16.28                     | 164.217           |                                                       |         |                    |           |
| 3,400.00                          | 3,399.91              | 3,451.06              | 3,451.02              | 11.91            | 12.12         | -16.92                | -993.35                | 2,480.61     | 2,668.77               | 2,651.78                | 16.98                     | 157.140           |                                                       |         |                    |           |
| 3,500.00                          | 3,499.69              | 3,703.20              | 3,702.45              | 12.25            | 12.99         | -16.90                | -994.94                | 2,462.42     | 2,655.95               | 2,638.17                | 17.78                     | 149.403           |                                                       |         |                    |           |
| 3,600.00                          | 3,599.27              | 3,801.55              | 3,800.27              | 12.58            | 13.33         | -16.94                | -995.83                | 2,452.25     | 2,638.01               | 2,619.76                | 18.25                     | 144.561           |                                                       |         |                    |           |
| 3,700.00                          | 3,698.57              | 3,899.44              | 3,897.63              | 12.92            | 13.67         | -17.00                | -996.71                | 2,442.14     | 2,617.61               | 2,598.89                | 18.72                     | 139.832           |                                                       |         |                    |           |
| 3,800.00                          | 3,797.54              | 3,996.79              | 3,994.46              | 13.27            | 14.02         | -17.09                | -997.59                | 2,432.08     | 2,594.76               | 2,575.57                | 19.19                     | 135.211           |                                                       |         |                    |           |
| 3,900.00                          | 3,896.09              | 4,093.54              | 4,090.69              | 13.62            | 14.36         | -17.22                | -998.46                | 2,422.09     | 2,569.49               | 2,549.83                | 19.66                     | 130.692           |                                                       |         |                    |           |
| 4,000.00                          | 3,994.16              | 4,189.62              | 4,186.25              | 13.98            | 14.70         | -17.37                | -999.33                | 2,412.16     | 2,541.81               | 2,521.68                | 20.13                     | 126.269           |                                                       |         |                    |           |
| 4,100.00                          | 4,091.70              | 4,284.97              | 4,281.09              | 14.35            | 15.05         | -17.56                | -1,000.19              | 2,402.31     | 2,511.74               | 2,491.14                | 20.60                     | 121.937           |                                                       |         |                    |           |
| 4,200.00                          | 4,188.62              | 4,379.52              | 4,375.13              | 14.74            | 15.39         | -17.78                | -1,001.04              | 2,392.54     | 2,479.30               | 2,458.23                | 21.07                     | 117.692           |                                                       |         |                    |           |
| 4,300.00                          | 4,284.86              | 4,473.21              | 4,468.31              | 15.14            | 15.73         | -18.03                | -1,001.89              | 2,382.87     | 2,444.51               | 2,422.98                | 21.53                     | 113.528           |                                                       |         |                    |           |
| 4,400.00                          | 4,380.36              | 4,565.97              | 4,560.57              | 15.55            | 16.07         | -18.33                | -1,002.72              | 2,373.28     | 2,407.41               | 2,385.41                | 22.00                     | 109.441           |                                                       |         |                    |           |
| 4,452.43                          | 4,430.11              | 4,614.21              | 4,608.55              | 15.78            | 16.24         | -18.50                | -1,003.16              | 2,368.30     | 2,387.04               | 2,364.80                | 22.24                     | 107.325           |                                                       |         |                    |           |
| 4,500.00                          | 4,475.14              | 4,657.86              | 4,651.96              | 15.99            | 16.40         | -18.57                | -1,003.55              | 2,363.79     | 2,368.28               | 2,345.81                | 22.46                     | 105.435           |                                                       |         |                    |           |
| 4,600.00                          | 4,569.82              | 4,749.60              | 4,743.21              | 16.44            | 16.74         | -18.71                | -1,004.38              | 2,354.31     | 2,328.84               | 2,305.91                | 22.93                     | 101.574           |                                                       |         |                    |           |
| 4,700.00                          | 4,664.49              | 4,841.35              | 4,834.46              | 16.91            | 17.08         | -18.85                | -1,005.21              | 2,344.83     | 2,289.42               | 2,266.02                | 23.40                     | 97.852            |                                                       |         |                    |           |
| 4,800.00                          | 4,759.16              | 4,933.09              | 4,925.71              | 17.39            | 17.41         | -19.00                | -1,006.04              | 2,335.35     | 2,250.01               | 2,226.14                | 23.87                     | 94.263            |                                                       |         |                    |           |
| 4,900.00                          | 4,853.84              | 5,024.84              | 5,016.96              | 17.87            | 17.75         | -19.16                | -1,006.87              | 2,325.88     | 2,210.61               | 2,186.27                | 24.35                     | 90.801            |                                                       |         |                    |           |
| 5,000.00                          | 4,948.51              | 5,116.58              | 5,108.22              | 18.37            | 18.09         | -19.32                | -1,007.69              | 2,316.40     | 2,171.23               | 2,146.41                | 24.82                     | 87.462            |                                                       |         |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 5,208.33              | 5,199.47              | 18.88            | 18.43         | -19.48                | -1,008.52                           | 2,306.92     | 2,131.86               | 2,106.56                | 25.31                     | 84.239            |                    |           |
| 5,200.00                          | 5,137.85              | 5,300.08              | 5,290.72              | 19.39            | 18.78         | -19.65                | -1,009.35                           | 2,297.44     | 2,092.51               | 2,066.72                | 25.79                     | 81.127            |                    |           |
| 5,300.00                          | 5,232.53              | 5,391.82              | 5,381.97              | 19.92            | 19.12         | -19.83                | -1,010.18                           | 2,287.96     | 2,053.18               | 2,026.90                | 26.28                     | 78.123            |                    |           |
| 5,400.00                          | 5,327.20              | 5,483.57              | 5,473.22              | 20.45            | 19.46         | -20.02                | -1,011.00                           | 2,278.48     | 2,013.86               | 1,987.09                | 26.77                     | 75.221            |                    |           |
| 5,500.00                          | 5,421.87              | 5,575.31              | 5,564.47              | 20.99            | 19.81         | -20.21                | -1,011.83                           | 2,269.01     | 1,974.56               | 1,947.30                | 27.27                     | 72.416            |                    |           |
| 5,600.00                          | 5,516.54              | 5,667.06              | 5,655.72              | 21.53            | 20.15         | -20.41                | -1,012.66                           | 2,259.53     | 1,935.28               | 1,907.52                | 27.76                     | 69.706            |                    |           |
| 5,700.00                          | 5,611.22              | 5,758.80              | 5,746.97              | 22.08            | 20.50         | -20.62                | -1,013.49                           | 2,250.05     | 1,896.03               | 1,867.76                | 28.26                     | 67.085            |                    |           |
| 5,800.00                          | 5,705.89              | 5,850.55              | 5,838.22              | 22.63            | 20.84         | -20.84                | -1,014.32                           | 2,240.57     | 1,856.79               | 1,828.03                | 28.77                     | 64.549            |                    |           |
| 5,900.00                          | 5,800.56              | 5,942.30              | 5,929.47              | 23.19            | 21.19         | -21.07                | -1,015.14                           | 2,231.09     | 1,817.58               | 1,788.31                | 29.27                     | 62.096            |                    |           |
| 6,000.00                          | 5,895.23              | 6,034.04              | 6,020.73              | 23.76            | 21.54         | -21.30                | -1,015.97                           | 2,221.61     | 1,778.40               | 1,748.62                | 29.78                     | 59.722            |                    |           |
| 6,100.00                          | 5,989.91              | 6,125.79              | 6,111.98              | 24.33            | 21.89         | -21.55                | -1,016.80                           | 2,212.14     | 1,739.24               | 1,708.95                | 30.29                     | 57.425            |                    |           |
| 6,200.00                          | 6,084.58              | 6,217.53              | 6,203.23              | 24.90            | 22.23         | -21.81                | -1,017.63                           | 2,202.66     | 1,700.11               | 1,669.31                | 30.80                     | 55.199            |                    |           |
| 6,300.00                          | 6,179.25              | 6,309.28              | 6,294.48              | 25.48            | 22.58         | -22.08                | -1,018.45                           | 2,193.18     | 1,661.01               | 1,629.69                | 31.31                     | 53.043            |                    |           |
| 6,400.00                          | 6,273.92              | 6,401.02              | 6,385.73              | 26.05            | 22.93         | -22.37                | -1,019.28                           | 2,183.70     | 1,621.94               | 1,590.11                | 31.83                     | 50.953            |                    |           |
| 6,500.00                          | 6,368.60              | 6,492.77              | 6,476.98              | 26.64            | 23.28         | -22.67                | -1,020.11                           | 2,174.22     | 1,582.91               | 1,550.56                | 32.35                     | 48.926            |                    |           |
| 6,600.00                          | 6,463.27              | 6,584.52              | 6,568.23              | 27.22            | 23.63         | -22.98                | -1,020.94                           | 2,164.75     | 1,543.92               | 1,511.05                | 32.88                     | 46.960            |                    |           |
| 6,700.00                          | 6,557.94              | 6,676.26              | 6,659.48              | 27.81            | 23.98         | -23.31                | -1,021.77                           | 2,155.27     | 1,504.97               | 1,471.57                | 33.40                     | 45.053            |                    |           |
| 6,800.00                          | 6,652.61              | 6,768.01              | 6,750.73              | 28.40            | 24.33         | -23.66                | -1,022.59                           | 2,145.79     | 1,466.07               | 1,432.13                | 33.93                     | 43.203            |                    |           |
| 6,900.00                          | 6,747.29              | 6,859.75              | 6,841.98              | 29.00            | 24.68         | -24.02                | -1,023.42                           | 2,136.31     | 1,427.21               | 1,392.74                | 34.47                     | 41.407            |                    |           |
| 7,000.00                          | 6,841.96              | 6,951.50              | 6,933.24              | 29.59            | 25.03         | -24.41                | -1,024.25                           | 2,126.83     | 1,388.41               | 1,353.40                | 35.01                     | 39.663            |                    |           |
| 7,100.00                          | 6,936.63              | 7,043.24              | 7,024.49              | 30.19            | 25.38         | -24.81                | -1,025.08                           | 2,117.35     | 1,349.66               | 1,314.12                | 35.55                     | 37.969            |                    |           |
| 7,200.00                          | 7,031.30              | 7,123.07              | 7,103.88              | 30.79            | 25.69         | -25.19                | -1,025.80                           | 2,109.11     | 1,311.03               | 1,274.93                | 36.10                     | 36.317            |                    |           |
| 7,300.00                          | 7,125.98              | 7,200.00              | 7,180.47              | 31.40            | 25.98         | -25.58                | -1,026.43                           | 2,101.93     | 1,273.37               | 1,236.71                | 36.66                     | 34.733            |                    |           |
| 7,400.00                          | 7,220.65              | 7,272.77              | 7,253.04              | 32.00            | 26.25         | -25.99                | -1,026.89                           | 2,096.55     | 1,237.43               | 1,200.20                | 37.23                     | 33.237            |                    |           |
| 7,500.00                          | 7,315.32              | 7,344.38              | 7,324.55              | 32.61            | 26.51         | -26.44                | -1,027.24                           | 2,092.61     | 1,203.23               | 1,165.43                | 37.80                     | 31.828            |                    |           |
| 7,600.00                          | 7,409.99              | 7,416.80              | 7,396.92              | 33.21            | 26.77         | -26.93                | -1,027.47                           | 2,089.98     | 1,170.82               | 1,132.44                | 38.38                     | 30.506            |                    |           |
| 7,700.00                          | 7,504.67              | 7,500.00              | 7,480.10              | 33.82            | 27.07         | -27.55                | -1,027.59                           | 2,088.64     | 1,140.32               | 1,101.36                | 38.96                     | 29.267            |                    |           |
| 7,800.00                          | 7,599.34              | 7,576.14              | 7,556.24              | 34.43            | 27.33         | -28.16                | -1,027.59                           | 2,088.59     | 1,111.30               | 1,071.75                | 39.55                     | 28.099            |                    |           |
| 7,900.00                          | 7,694.01              | 7,670.81              | 7,650.91              | 35.05            | 27.65         | -28.95                | -1,027.59                           | 2,088.59     | 1,082.67               | 1,042.52                | 40.15                     | 26.963            |                    |           |
| 8,000.00                          | 7,788.68              | 7,765.49              | 7,745.58              | 35.66            | 27.98         | -29.79                | -1,027.59                           | 2,088.59     | 1,054.25               | 1,013.48                | 40.77                     | 25.860            |                    |           |
| 8,100.00                          | 7,883.36              | 7,860.16              | 7,840.26              | 36.28            | 28.30         | -30.67                | -1,027.59                           | 2,088.59     | 1,026.05               | 984.66                  | 41.39                     | 24.788            |                    |           |
| 8,200.00                          | 7,978.03              | 7,954.83              | 7,934.93              | 36.89            | 28.63         | -31.60                | -1,027.59                           | 2,088.59     | 998.10                 | 956.07                  | 42.03                     | 23.748            |                    |           |
| 8,300.00                          | 8,072.70              | 8,049.50              | 8,029.60              | 37.51            | 28.95         | -32.58                | -1,027.59                           | 2,088.59     | 970.40                 | 927.72                  | 42.68                     | 22.738            |                    |           |
| 8,400.00                          | 8,167.37              | 8,144.18              | 8,124.27              | 38.13            | 29.28         | -33.62                | -1,027.59                           | 2,088.59     | 943.00                 | 899.66                  | 43.34                     | 21.758            |                    |           |
| 8,500.00                          | 8,262.05              | 8,238.85              | 8,218.95              | 38.75            | 29.61         | -34.71                | -1,027.59                           | 2,088.59     | 915.90                 | 871.89                  | 44.02                     | 20.808            |                    |           |
| 8,600.00                          | 8,356.72              | 8,333.52              | 8,313.62              | 39.37            | 29.93         | -35.87                | -1,027.59                           | 2,088.59     | 889.15                 | 844.44                  | 44.71                     | 19.888            |                    |           |
| 8,700.00                          | 8,451.39              | 8,428.19              | 8,408.29              | 39.99            | 30.26         | -37.10                | -1,027.59                           | 2,088.59     | 862.77                 | 817.35                  | 45.42                     | 18.996            |                    |           |
| 8,800.00                          | 8,546.07              | 8,522.87              | 8,502.97              | 40.61            | 30.59         | -38.41                | -1,027.59                           | 2,088.59     | 836.79                 | 790.65                  | 46.15                     | 18.133            |                    |           |
| 8,875.44                          | 8,617.48              | 8,594.28              | 8,574.38              | 41.08            | 30.84         | -39.44                | -1,027.59                           | 2,088.59     | 817.49                 | 770.78                  | 46.71                     | 17.501            |                    |           |
| 8,900.00                          | 8,640.90              | 8,617.70              | 8,597.80              | 41.23            | 30.92         | -39.39                | -1,027.59                           | 2,088.59     | 811.66                 | 764.77                  | 46.89                     | 17.309            |                    |           |
| 8,950.00                          | 8,689.44              | 8,666.24              | 8,646.34              | 41.49            | 31.09         | -39.31                | -1,027.59                           | 2,088.59     | 802.31                 | 755.08                  | 47.23                     | 16.986            |                    |           |
| 9,000.00                          | 8,738.83              | 8,715.63              | 8,695.73              | 41.70            | 31.26         | -39.28                | -1,027.59                           | 2,088.59     | 796.34                 | 748.80                  | 47.54                     | 16.751            |                    |           |
| 9,050.00                          | 8,788.70              | 8,765.50              | 8,745.60              | 41.87            | 31.43         | -39.27                | -1,027.59                           | 2,088.59     | 793.75                 | 745.95                  | 47.80                     | 16.606            |                    |           |
| 9,063.30                          | 8,802.00              | 8,778.80              | 8,758.90              | 41.91            | 31.48         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 745.77                  | 47.86                     | 16.582            |                    |           |
| 9,100.00                          | 8,838.70              | 8,815.50              | 8,795.60              | 42.00            | 31.60         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 745.61                  | 48.02                     | 16.526            |                    |           |
| 9,200.00                          | 8,938.70              | 8,915.50              | 8,895.60              | 42.26            | 31.95         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 745.17                  | 48.47                     | 16.374            |                    |           |
| 9,300.00                          | 9,038.70              | 9,015.50              | 8,995.60              | 42.51            | 32.30         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 744.72                  | 48.91                     | 16.225            |                    |           |
| 9,400.00                          | 9,138.70              | 9,115.50              | 9,095.60              | 42.77            | 32.65         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 744.27                  | 49.36                     | 16.078            |                    |           |
| 9,500.00                          | 9,238.70              | 9,215.50              | 9,195.60              | 43.03            | 32.99         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 743.82                  | 49.81                     | 15.933            |                    |           |
| 9,600.00                          | 9,338.70              | 9,315.50              | 9,295.60              | 43.30            | 33.34         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 743.38                  | 50.26                     | 15.791            |                    |           |
| 9,700.00                          | 9,438.70              | 9,415.50              | 9,395.60              | 43.56            | 33.69         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 742.92                  | 50.71                     | 15.650            |                    |           |
| 9,800.00                          | 9,538.70              | 9,515.50              | 9,495.60              | 43.82            | 34.04         | -39.39                | -1,027.59                           | 2,088.59     | 793.63                 | 742.47                  | 51.16                     | 15.512            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design         |                       | Tatanka Fed Com - Tatanka Fed Com 805H - OH - Plan #2 |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------|-----------------------|-------------------------------------------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program:       |                       | 0-OWSG (Rev2) MWD                                     |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 9,900.00              | 9,638.70              | 9,615.50                                              | 9,595.60              | 44.09            | 34.39         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 742.02                  | 51.61                     | 15.376            |                    |           |
| 10,000.00             | 9,738.70              | 9,715.50                                              | 9,695.60              | 44.36            | 34.73         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 741.57                  | 52.07                     | 15.242            |                    |           |
| 10,100.00             | 9,838.70              | 9,815.50                                              | 9,795.60              | 44.63            | 35.08         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 741.11                  | 52.52                     | 15.110            |                    |           |
| 10,200.00             | 9,938.70              | 9,915.50                                              | 9,895.60              | 44.90            | 35.43         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 740.66                  | 52.98                     | 14.980            |                    |           |
| 10,300.00             | 10,038.70             | 10,015.50                                             | 9,995.60              | 45.17            | 35.78         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 740.20                  | 53.44                     | 14.852            |                    |           |
| 10,400.00             | 10,138.70             | 10,115.50                                             | 10,095.60             | 45.44            | 36.13         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 739.74                  | 53.89                     | 14.726            |                    |           |
| 10,500.00             | 10,238.70             | 10,215.50                                             | 10,195.60             | 45.71            | 36.48         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 739.28                  | 54.35                     | 14.602            |                    |           |
| 10,600.00             | 10,338.70             | 10,315.50                                             | 10,295.60             | 45.99            | 36.83         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 738.82                  | 54.81                     | 14.480            |                    |           |
| 10,700.00             | 10,438.70             | 10,415.50                                             | 10,395.60             | 46.26            | 37.18         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 738.36                  | 55.27                     | 14.359            |                    |           |
| 10,800.00             | 10,538.70             | 10,515.50                                             | 10,495.60             | 46.54            | 37.53         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 737.90                  | 55.73                     | 14.240            |                    |           |
| 10,900.00             | 10,638.70             | 10,615.50                                             | 10,595.60             | 46.82            | 37.88         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 737.44                  | 56.19                     | 14.123            |                    |           |
| 11,000.00             | 10,738.70             | 10,715.50                                             | 10,695.60             | 47.10            | 38.23         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 736.98                  | 56.66                     | 14.008            |                    |           |
| 11,100.00             | 10,838.70             | 10,815.50                                             | 10,795.60             | 47.38            | 38.58         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 736.52                  | 57.12                     | 13.895            |                    |           |
| 11,200.00             | 10,938.70             | 10,915.50                                             | 10,895.60             | 47.66            | 38.93         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 736.05                  | 57.58                     | 13.783            |                    |           |
| 11,300.00             | 11,038.70             | 11,015.50                                             | 10,995.60             | 47.94            | 39.29         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 735.59                  | 58.05                     | 13.672            |                    |           |
| 11,400.00             | 11,138.70             | 11,115.50                                             | 11,095.60             | 48.22            | 39.64         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 735.12                  | 58.51                     | 13.564            |                    |           |
| 11,500.00             | 11,238.70             | 11,215.50                                             | 11,195.60             | 48.51            | 39.99         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 734.66                  | 58.98                     | 13.456            |                    |           |
| 11,600.00             | 11,338.70             | 11,315.50                                             | 11,295.60             | 48.79            | 40.34         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 734.19                  | 59.44                     | 13.351            |                    |           |
| 11,700.00             | 11,438.70             | 11,415.50                                             | 11,395.60             | 49.08            | 40.69         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 733.72                  | 59.91                     | 13.247            |                    |           |
| 11,753.34             | 11,492.04             | 11,468.84                                             | 11,448.94             | 49.23            | 40.88         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 733.47                  | 60.16                     | 13.192 CC         |                    |           |
| 11,753.37             | 11,492.07             | 11,468.87                                             | 11,448.97             | 49.23            | 40.88         | 89.39                 | -1,027.59                           | 2,088.59     | 793.63                 | 733.47                  | 60.16                     | 13.192            |                    |           |
| 11,800.00             | 11,538.65             | 11,515.45                                             | 11,495.55             | 49.37            | 41.04         | -90.18                | -1,027.59                           | 2,088.59     | 793.64                 | 733.24                  | 60.40                     | 13.140            |                    |           |
| 11,850.00             | 11,588.24             | 11,565.04                                             | 11,545.14             | 49.55            | 41.22         | -90.63                | -1,027.59                           | 2,088.59     | 793.68                 | 732.98                  | 60.70                     | 13.075            |                    |           |
| 11,900.00             | 11,637.10             | 11,613.90                                             | 11,594.00             | 49.74            | 41.39         | -91.35                | -1,027.59                           | 2,088.59     | 793.87                 | 732.82                  | 61.05                     | 13.003            |                    |           |
| 11,950.00             | 11,684.86             | 11,661.66                                             | 11,641.76             | 49.95            | 41.56         | -92.31                | -1,027.59                           | 2,088.59     | 794.37                 | 732.92                  | 61.45                     | 12.927            |                    |           |
| 12,000.00             | 11,731.15             | 11,707.95                                             | 11,688.05             | 50.18            | 41.72         | -93.47                | -1,027.59                           | 2,088.59     | 795.40                 | 733.51                  | 61.89                     | 12.852            |                    |           |
| 12,050.00             | 11,775.62             | 11,752.42                                             | 11,732.52             | 50.42            | 41.88         | -94.74                | -1,027.59                           | 2,088.59     | 797.24                 | 734.87                  | 62.37                     | 12.782            |                    |           |
| 12,100.00             | 11,817.93             | 11,794.73                                             | 11,774.83             | 50.68            | 42.02         | -96.06                | -1,027.59                           | 2,088.59     | 800.21                 | 737.31                  | 62.90                     | 12.722            |                    |           |
| 12,150.00             | 11,857.76             | 11,834.56                                             | 11,814.66             | 50.96            | 42.16         | -97.33                | -1,027.59                           | 2,088.59     | 804.63                 | 741.17                  | 63.46                     | 12.679            |                    |           |
| 12,200.00             | 11,894.81             | 11,871.61                                             | 11,851.71             | 51.25            | 42.29         | -98.47                | -1,027.59                           | 2,088.59     | 810.83                 | 746.78                  | 64.06                     | 12.658            |                    |           |
| 12,250.00             | 11,928.80             | 11,905.60                                             | 11,885.70             | 51.56            | 42.41         | -99.39                | -1,027.59                           | 2,088.59     | 819.13                 | 754.46                  | 64.67                     | 12.666            |                    |           |
| 12,300.00             | 11,959.45             | 11,936.26                                             | 11,916.35             | 51.87            | 42.52         | -100.01               | -1,027.59                           | 2,088.59     | 829.78                 | 764.48                  | 65.30                     | 12.708            |                    |           |
| 12,350.00             | 11,986.56             | 11,977.52                                             | 11,957.61             | 52.20            | 42.66         | -101.08               | -1,028.30                           | 2,088.60     | 842.88                 | 776.96                  | 65.92                     | 12.787            |                    |           |
| 12,400.00             | 12,009.90             | 12,036.71                                             | 12,016.47             | 52.55            | 42.85         | -102.95               | -1,034.30                           | 2,088.66     | 857.81                 | 791.35                  | 66.45                     | 12.908            |                    |           |
| 12,450.00             | 12,029.29             | 12,109.58                                             | 12,087.59             | 52.90            | 43.09         | -105.32               | -1,049.96                           | 2,088.81     | 874.15                 | 807.37                  | 66.78                     | 13.091            |                    |           |
| 12,500.00             | 12,044.60             | 12,205.46                                             | 12,177.07             | 53.26            | 43.38         | -108.53               | -1,084.06                           | 2,089.14     | 891.27                 | 824.62                  | 66.65                     | 13.373            |                    |           |
| 12,550.00             | 12,055.70             | 12,341.78                                             | 12,291.82             | 53.63            | 43.75         | -112.94               | -1,157.06                           | 2,089.86     | 907.93                 | 842.34                  | 65.59                     | 13.843            |                    |           |
| 12,600.00             | 12,062.52             | 12,546.78                                             | 12,424.15             | 54.01            | 44.27         | -118.16               | -1,312.18                           | 2,091.38     | 921.55                 | 858.57                  | 62.97                     | 14.634            |                    |           |
| 12,653.34             | 12,065.00             | 12,852.83                                             | 12,501.98             | 54.42            | 45.24         | -121.17               | -1,604.41                           | 2,094.24     | 927.56                 | 867.60                  | 59.96                     | 15.468            |                    |           |
| 12,654.37             | 12,065.00             | 12,830.09                                             | 12,501.19             | 54.43            | 45.16         | -121.13               | -1,581.70                           | 2,094.02     | 927.37                 | 867.23                  | 60.14                     | 15.420            |                    |           |
| 12,700.00             | 12,065.00             | 12,896.23                                             | 12,502.00             | 54.78            | 45.40         | -121.17               | -1,647.81                           | 2,094.67     | 927.56                 | 867.25                  | 60.31                     | 15.379            |                    |           |
| 12,800.00             | 12,065.00             | 12,996.23                                             | 12,502.00             | 55.59            | 45.81         | -121.17               | -1,747.80                           | 2,095.65     | 927.57                 | 866.50                  | 61.06                     | 15.191            |                    |           |
| 12,900.00             | 12,065.00             | 13,096.23                                             | 12,502.00             | 56.43            | 46.27         | -121.17               | -1,847.80                           | 2,096.63     | 927.57                 | 865.70                  | 61.87                     | 14.992            |                    |           |
| 13,000.00             | 12,065.00             | 13,196.23                                             | 12,502.00             | 57.31            | 46.79         | -121.17               | -1,947.79                           | 2,097.61     | 927.57                 | 864.84                  | 62.73                     | 14.786            |                    |           |
| 13,100.00             | 12,065.00             | 13,296.23                                             | 12,502.00             | 58.22            | 47.36         | -121.17               | -2,047.79                           | 2,098.59     | 927.57                 | 863.92                  | 63.65                     | 14.573            |                    |           |
| 13,200.00             | 12,065.00             | 13,396.23                                             | 12,502.00             | 59.17            | 47.97         | -121.17               | -2,147.78                           | 2,099.57     | 927.57                 | 862.95                  | 64.62                     | 14.354            |                    |           |
| 13,300.00             | 12,065.00             | 13,496.23                                             | 12,502.00             | 60.14            | 48.63         | -121.17               | -2,247.78                           | 2,100.55     | 927.58                 | 861.93                  | 65.64                     | 14.131            |                    |           |
| 13,400.00             | 12,065.00             | 13,596.23                                             | 12,502.00             | 61.15            | 49.34         | -121.17               | -2,347.77                           | 2,101.53     | 927.58                 | 860.87                  | 66.71                     | 13.905            |                    |           |
| 13,500.00             | 12,065.00             | 13,696.23                                             | 12,502.00             | 62.18            | 50.10         | -121.17               | -2,447.77                           | 2,102.51     | 927.58                 | 859.76                  | 67.82                     | 13.676            |                    |           |
| 13,600.00             | 12,065.00             | 13,796.23                                             | 12,502.00             | 63.24            | 50.89         | -121.17               | -2,547.76                           | 2,103.49     | 927.58                 | 858.60                  | 68.98                     | 13.447            |                    |           |
| 13,700.00             | 12,065.00             | 13,896.23                                             | 12,502.00             | 64.32            | 51.73         | -121.17               | -2,647.76                           | 2,104.47     | 927.58                 | 857.41                  | 70.17                     | 13.218            |                    |           |
| 13,800.00             | 12,065.00             | 13,996.23                                             | 12,502.00             | 65.43            | 52.60         | -121.17               | -2,747.75                           | 2,105.45     | 927.59                 | 856.18                  | 71.41                     | 12.990            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 13,900.00                         | 12,065.00             | 14,096.23             | 12,502.00             | 66.56            | 53.51         | -121.17               | -2,847.75                           | 2,106.43     | 927.59                 | 854.91                  | 72.68                     | 12.763            |                    |           |
| 14,000.00                         | 12,065.00             | 14,196.23             | 12,502.00             | 67.71            | 54.46         | -121.17               | -2,947.74                           | 2,107.41     | 927.59                 | 853.61                  | 73.99                     | 12.537            |                    |           |
| 14,100.00                         | 12,065.00             | 14,296.23             | 12,502.00             | 68.88            | 55.44         | -121.17               | -3,047.74                           | 2,108.39     | 927.59                 | 852.27                  | 75.32                     | 12.315            |                    |           |
| 14,200.00                         | 12,065.00             | 14,396.23             | 12,502.00             | 70.08            | 56.45         | -121.17               | -3,147.73                           | 2,109.38     | 927.60                 | 850.90                  | 76.69                     | 12.095            |                    |           |
| 14,300.00                         | 12,065.00             | 14,496.23             | 12,502.00             | 71.29            | 57.49         | -121.17               | -3,247.73                           | 2,110.36     | 927.60                 | 849.51                  | 78.09                     | 11.879            |                    |           |
| 14,400.00                         | 12,065.00             | 14,596.23             | 12,502.00             | 72.51            | 58.56         | -121.17               | -3,347.72                           | 2,111.34     | 927.60                 | 848.08                  | 79.52                     | 11.666            |                    |           |
| 14,500.00                         | 12,065.00             | 14,696.23             | 12,502.00             | 73.76            | 59.65         | -121.17               | -3,447.72                           | 2,112.32     | 927.60                 | 846.63                  | 80.97                     | 11.457            |                    |           |
| 14,600.00                         | 12,065.00             | 14,796.23             | 12,502.00             | 75.02            | 60.77         | -121.17               | -3,547.71                           | 2,113.30     | 927.60                 | 845.16                  | 82.44                     | 11.252            |                    |           |
| 14,700.00                         | 12,065.00             | 14,896.23             | 12,502.00             | 76.29            | 61.91         | -121.17               | -3,647.71                           | 2,114.28     | 927.61                 | 843.66                  | 83.94                     | 11.051            |                    |           |
| 14,800.00                         | 12,065.00             | 14,996.23             | 12,502.00             | 77.58            | 63.08         | -121.17               | -3,747.70                           | 2,115.26     | 927.61                 | 842.15                  | 85.46                     | 10.854            |                    |           |
| 14,900.00                         | 12,065.00             | 15,096.23             | 12,502.00             | 78.89            | 64.27         | -121.17               | -3,847.70                           | 2,116.24     | 927.61                 | 840.60                  | 87.01                     | 10.662            |                    |           |
| 15,000.00                         | 12,065.00             | 15,196.23             | 12,502.00             | 80.20            | 65.47         | -121.17               | -3,947.70                           | 2,117.22     | 927.61                 | 839.05                  | 88.57                     | 10.474            |                    |           |
| 15,100.00                         | 12,065.00             | 15,296.23             | 12,502.00             | 81.53            | 66.70         | -121.17               | -4,047.69                           | 2,118.20     | 927.61                 | 837.47                  | 90.14                     | 10.290            |                    |           |
| 15,200.00                         | 12,065.00             | 15,396.23             | 12,502.00             | 82.87            | 67.95         | -121.17               | -4,147.69                           | 2,119.18     | 927.62                 | 835.87                  | 91.74                     | 10.111            |                    |           |
| 15,300.00                         | 12,065.00             | 15,496.23             | 12,502.00             | 84.22            | 69.21         | -121.17               | -4,247.68                           | 2,120.16     | 927.62                 | 834.26                  | 93.36                     | 9.936             |                    |           |
| 15,400.00                         | 12,065.00             | 15,596.23             | 12,502.00             | 85.59            | 70.48         | -121.17               | -4,347.68                           | 2,121.14     | 927.62                 | 832.63                  | 94.99                     | 9.766             |                    |           |
| 15,500.00                         | 12,065.00             | 15,696.23             | 12,502.00             | 86.96            | 71.78         | -121.17               | -4,447.67                           | 2,122.12     | 927.62                 | 830.99                  | 96.63                     | 9.600             |                    |           |
| 15,600.00                         | 12,065.00             | 15,796.23             | 12,502.00             | 88.34            | 73.08         | -121.17               | -4,547.67                           | 2,123.10     | 927.62                 | 829.34                  | 98.28                     | 9.438             |                    |           |
| 15,700.00                         | 12,065.00             | 15,896.23             | 12,502.00             | 89.73            | 74.40         | -121.17               | -4,647.66                           | 2,124.08     | 927.63                 | 827.67                  | 99.96                     | 9.280             |                    |           |
| 15,800.00                         | 12,065.00             | 15,996.23             | 12,502.00             | 91.13            | 75.74         | -121.17               | -4,747.66                           | 2,125.06     | 927.63                 | 825.99                  | 101.64                    | 9.127             |                    |           |
| 15,900.00                         | 12,065.00             | 16,096.23             | 12,502.00             | 92.54            | 77.08         | -121.17               | -4,847.65                           | 2,126.04     | 927.63                 | 824.30                  | 103.33                    | 8.977             |                    |           |
| 16,000.00                         | 12,065.00             | 16,196.23             | 12,502.00             | 93.95            | 78.44         | -121.17               | -4,947.65                           | 2,127.02     | 927.63                 | 822.59                  | 105.04                    | 8.831             |                    |           |
| 16,100.00                         | 12,065.00             | 16,296.23             | 12,502.00             | 95.38            | 79.81         | -121.17               | -5,047.64                           | 2,128.00     | 927.63                 | 820.88                  | 106.76                    | 8.689             |                    |           |
| 16,200.00                         | 12,065.00             | 16,396.23             | 12,502.00             | 96.81            | 81.19         | -121.17               | -5,147.64                           | 2,128.98     | 927.64                 | 819.15                  | 108.48                    | 8.551             |                    |           |
| 16,300.00                         | 12,065.00             | 16,496.23             | 12,502.00             | 98.24            | 82.58         | -121.17               | -5,247.63                           | 2,129.96     | 927.64                 | 817.42                  | 110.22                    | 8.416             |                    |           |
| 16,400.00                         | 12,065.00             | 16,596.23             | 12,502.00             | 99.69            | 83.98         | -121.17               | -5,347.63                           | 2,130.94     | 927.64                 | 815.68                  | 111.96                    | 8.285             |                    |           |
| 16,500.00                         | 12,065.00             | 16,696.23             | 12,502.00             | 101.14           | 85.39         | -121.17               | -5,447.62                           | 2,131.92     | 927.64                 | 813.93                  | 113.72                    | 8.158             |                    |           |
| 16,600.00                         | 12,065.00             | 16,796.23             | 12,502.00             | 102.60           | 86.80         | -121.17               | -5,547.62                           | 2,132.90     | 927.64                 | 812.17                  | 115.48                    | 8.033             |                    |           |
| 16,700.00                         | 12,065.00             | 16,896.23             | 12,502.00             | 104.06           | 88.23         | -121.17               | -5,647.61                           | 2,133.88     | 927.65                 | 810.40                  | 117.25                    | 7.912             |                    |           |
| 16,800.00                         | 12,065.00             | 16,996.23             | 12,502.00             | 105.53           | 89.66         | -121.17               | -5,747.61                           | 2,134.86     | 927.65                 | 808.63                  | 119.02                    | 7.794             |                    |           |
| 16,900.00                         | 12,065.00             | 17,096.23             | 12,502.00             | 107.00           | 91.10         | -121.17               | -5,847.60                           | 2,135.84     | 927.65                 | 806.85                  | 120.80                    | 7.679             |                    |           |
| 17,000.00                         | 12,065.00             | 17,196.23             | 12,502.00             | 108.48           | 92.55         | -121.17               | -5,947.60                           | 2,136.82     | 927.65                 | 805.06                  | 122.59                    | 7.567             |                    |           |
| 17,100.00                         | 12,065.00             | 17,296.23             | 12,502.00             | 109.96           | 94.00         | -121.17               | -6,047.59                           | 2,137.80     | 927.66                 | 803.27                  | 124.39                    | 7.458             |                    |           |
| 17,200.00                         | 12,065.00             | 17,396.23             | 12,502.00             | 111.45           | 95.46         | -121.17               | -6,147.59                           | 2,138.78     | 927.66                 | 801.47                  | 126.19                    | 7.351             |                    |           |
| 17,300.00                         | 12,065.00             | 17,496.23             | 12,502.00             | 112.94           | 96.93         | -121.17               | -6,247.58                           | 2,139.76     | 927.66                 | 799.66                  | 128.00                    | 7.248             |                    |           |
| 17,400.00                         | 12,065.00             | 17,596.23             | 12,502.00             | 114.44           | 98.40         | -121.17               | -6,347.58                           | 2,140.74     | 927.66                 | 797.85                  | 129.81                    | 7.146             |                    |           |
| 17,500.00                         | 12,065.00             | 17,696.23             | 12,502.00             | 115.94           | 99.87         | -121.17               | -6,447.58                           | 2,141.73     | 927.66                 | 796.04                  | 131.63                    | 7.048             |                    |           |
| 17,600.00                         | 12,065.00             | 17,796.23             | 12,502.00             | 117.45           | 101.36        | -121.17               | -6,547.57                           | 2,142.71     | 927.67                 | 794.22                  | 133.45                    | 6.952             |                    |           |
| 17,700.00                         | 12,065.00             | 17,896.23             | 12,502.00             | 118.96           | 102.85        | -121.17               | -6,647.57                           | 2,143.69     | 927.67                 | 792.39                  | 135.27                    | 6.858             |                    |           |
| 17,800.00                         | 12,065.00             | 17,996.23             | 12,502.00             | 120.47           | 104.34        | -121.17               | -6,747.56                           | 2,144.67     | 927.67                 | 790.57                  | 137.10                    | 6.766             |                    |           |
| 17,900.00                         | 12,065.00             | 18,096.23             | 12,502.00             | 121.99           | 105.84        | -121.17               | -6,847.56                           | 2,145.65     | 927.67                 | 788.73                  | 138.94                    | 6.677             |                    |           |
| 18,000.00                         | 12,065.00             | 18,196.23             | 12,502.00             | 123.51           | 107.34        | -121.17               | -6,947.55                           | 2,146.63     | 927.67                 | 786.90                  | 140.77                    | 6.590             |                    |           |
| 18,100.00                         | 12,065.00             | 18,296.23             | 12,502.00             | 125.03           | 108.85        | -121.17               | -7,047.55                           | 2,147.61     | 927.68                 | 785.06                  | 142.62                    | 6.505             |                    |           |
| 18,200.00                         | 12,065.00             | 18,396.23             | 12,502.00             | 126.56           | 110.36        | -121.17               | -7,147.54                           | 2,148.59     | 927.68                 | 783.22                  | 144.46                    | 6.422             |                    |           |
| 18,300.00                         | 12,065.00             | 18,496.23             | 12,502.00             | 128.09           | 111.87        | -121.17               | -7,247.54                           | 2,149.57     | 927.68                 | 781.37                  | 146.31                    | 6.341             |                    |           |
| 18,400.00                         | 12,065.00             | 18,596.23             | 12,502.00             | 129.62           | 113.39        | -121.17               | -7,347.53                           | 2,150.55     | 927.68                 | 779.52                  | 148.16                    | 6.261             |                    |           |
| 18,500.00                         | 12,065.00             | 18,696.23             | 12,502.00             | 131.16           | 114.91        | -121.17               | -7,447.53                           | 2,151.53     | 927.68                 | 777.67                  | 150.01                    | 6.184             |                    |           |
| 18,600.00                         | 12,065.00             | 18,796.23             | 12,502.00             | 132.69           | 116.44        | -121.17               | -7,547.52                           | 2,152.51     | 927.69                 | 775.82                  | 151.87                    | 6.108             |                    |           |
| 18,700.00                         | 12,065.00             | 18,896.23             | 12,502.00             | 134.24           | 117.97        | -121.17               | -7,647.52                           | 2,153.49     | 927.69                 | 773.96                  | 153.73                    | 6.034             |                    |           |
| 18,800.00                         | 12,065.00             | 18,996.23             | 12,502.00             | 135.78           | 119.50        | -121.17               | -7,747.51                           | 2,154.47     | 927.69                 | 772.10                  | 155.59                    | 5.962             |                    |           |
| 18,900.00                         | 12,065.00             | 19,096.23             | 12,502.00             | 137.33           | 121.03        | -121.17               | -7,847.51                           | 2,155.45     | 927.69                 | 770.24                  | 157.46                    | 5.892             |                    |           |
| 19,000.00                         | 12,065.00             | 19,196.23             | 12,502.00             | 138.87           | 122.57        | -121.17               | -7,947.50                           | 2,156.43     | 927.69                 | 768.37                  | 159.32                    | 5.823             |                    |           |

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





## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                |                |                |                 |        |                   |                        |                 |                  |                    |                   | Tatanka Fed Com - Tatanka Fed Com 805H - OH - Plan #2 |  | Offset Site Error: |  | 0.00 usft |  |
|-----------------------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|-----------------|------------------|--------------------|-------------------|-------------------------------------------------------|--|--------------------|--|-----------|--|
| Survey Program: 0-OWSG (Rev2) MWD |                |                |                |                 |        |                   |                        |                 |                  |                    |                   |                                                       |  | Offset Well Error: |  | 0.00 usft |  |
| Reference                         |                | Offset         |                | Semi Major Axis |        |                   | Distance               |                 |                  |                    |                   |                                                       |  |                    |  |           |  |
| Measured Depth                    | Vertical Depth | Measured Depth | Vertical Depth | Reference       | Offset | Highside Toolface | Offset Wellbore Centre | Between Centres | Between Ellipses | Minimum Separation | Separation Factor | Warning                                               |  |                    |  |           |  |
| (usft)                            | (usft)         | (usft)         | (usft)         | (usft)          | (usft) | (°)               | +N/-S (usft)           | +E/-W (usft)    | (usft)           | (usft)             | (usft)            |                                                       |  |                    |  |           |  |
| 19,100.00                         | 12,065.00      | 19,296.23      | 12,502.00      | 140.43          | 124.11 | -121.17           | -8,047.50              | 2,157.41        | 927.70           | 766.51             | 161.19            | 5.755                                                 |  |                    |  |           |  |
| 19,200.00                         | 12,065.00      | 19,396.23      | 12,502.00      | 141.98          | 125.66 | -121.17           | -8,147.49              | 2,158.39        | 927.70           | 764.64             | 163.06            | 5.689                                                 |  |                    |  |           |  |
| 19,300.00                         | 12,065.00      | 19,496.23      | 12,502.00      | 143.53          | 127.21 | -121.17           | -8,247.49              | 2,159.37        | 927.70           | 762.77             | 164.93            | 5.625                                                 |  |                    |  |           |  |
| 19,400.00                         | 12,065.00      | 19,596.23      | 12,502.00      | 145.09          | 128.76 | -121.17           | -8,347.48              | 2,160.35        | 927.70           | 760.90             | 166.81            | 5.562                                                 |  |                    |  |           |  |
| 19,500.00                         | 12,065.00      | 19,696.23      | 12,502.00      | 146.65          | 130.31 | -121.17           | -8,447.48              | 2,161.33        | 927.70           | 759.02             | 168.68            | 5.500                                                 |  |                    |  |           |  |
| 19,600.00                         | 12,065.00      | 19,796.23      | 12,502.00      | 148.21          | 131.86 | -121.17           | -8,547.47              | 2,162.31        | 927.71           | 757.15             | 170.56            | 5.439                                                 |  |                    |  |           |  |
| 19,700.00                         | 12,065.00      | 19,896.23      | 12,502.00      | 149.78          | 133.42 | -121.17           | -8,647.47              | 2,163.29        | 927.71           | 755.27             | 172.44            | 5.380                                                 |  |                    |  |           |  |
| 19,800.00                         | 12,065.00      | 19,996.23      | 12,502.00      | 151.34          | 134.98 | -121.17           | -8,747.46              | 2,164.27        | 927.71           | 753.40             | 174.32            | 5.322                                                 |  |                    |  |           |  |
| 19,900.00                         | 12,065.00      | 20,096.23      | 12,502.00      | 152.91          | 136.54 | -121.17           | -8,847.46              | 2,165.25        | 927.71           | 751.52             | 176.20            | 5.265                                                 |  |                    |  |           |  |
| 20,000.00                         | 12,065.00      | 20,196.23      | 12,502.00      | 154.48          | 138.10 | -121.17           | -8,947.46              | 2,166.23        | 927.72           | 749.64             | 178.08            | 5.210                                                 |  |                    |  |           |  |
| 20,100.00                         | 12,065.00      | 20,296.23      | 12,502.00      | 156.05          | 139.67 | -121.17           | -9,047.45              | 2,167.21        | 927.72           | 747.76             | 179.96            | 5.155                                                 |  |                    |  |           |  |
| 20,200.00                         | 12,065.00      | 20,396.23      | 12,502.00      | 157.62          | 141.23 | -121.17           | -9,147.45              | 2,168.19        | 927.72           | 745.88             | 181.84            | 5.102                                                 |  |                    |  |           |  |
| 20,300.00                         | 12,065.00      | 20,496.23      | 12,502.00      | 159.20          | 142.80 | -121.17           | -9,247.44              | 2,169.17        | 927.72           | 743.99             | 183.73            | 5.049                                                 |  |                    |  |           |  |
| 20,400.00                         | 12,065.00      | 20,596.23      | 12,502.00      | 160.77          | 144.37 | -121.16           | -9,347.44              | 2,170.15        | 927.72           | 742.11             | 185.61            | 4.998                                                 |  |                    |  |           |  |
| 20,500.00                         | 12,065.00      | 20,696.23      | 12,502.00      | 162.35          | 145.95 | -121.16           | -9,447.43              | 2,171.13        | 927.73           | 740.23             | 187.50            | 4.948                                                 |  |                    |  |           |  |
| 20,600.00                         | 12,065.00      | 20,796.23      | 12,502.00      | 163.93          | 147.52 | -121.16           | -9,547.43              | 2,172.11        | 927.73           | 738.34             | 189.39            | 4.899                                                 |  |                    |  |           |  |
| 20,700.00                         | 12,065.00      | 20,896.23      | 12,502.00      | 165.51          | 149.10 | -121.16           | -9,647.42              | 2,173.10        | 927.73           | 736.46             | 191.27            | 4.850                                                 |  |                    |  |           |  |
| 20,800.00                         | 12,065.00      | 20,996.23      | 12,502.00      | 167.09          | 150.68 | -121.16           | -9,747.42              | 2,174.08        | 927.73           | 734.57             | 193.16            | 4.803                                                 |  |                    |  |           |  |
| 20,900.00                         | 12,065.00      | 21,096.23      | 12,502.00      | 168.67          | 152.25 | -121.16           | -9,847.41              | 2,175.06        | 927.73           | 732.68             | 195.05            | 4.756                                                 |  |                    |  |           |  |
| 21,000.00                         | 12,065.00      | 21,196.23      | 12,502.00      | 170.26          | 153.84 | -121.16           | -9,947.41              | 2,176.04        | 927.74           | 730.80             | 196.94            | 4.711                                                 |  |                    |  |           |  |
| 21,100.00                         | 12,065.00      | 21,296.23      | 12,502.00      | 171.84          | 155.42 | -121.16           | -10,047.40             | 2,177.02        | 927.74           | 728.91             | 198.83            | 4.666                                                 |  |                    |  |           |  |
| 21,200.00                         | 12,065.00      | 21,396.23      | 12,502.00      | 173.43          | 157.00 | -121.16           | -10,147.40             | 2,178.00        | 927.74           | 727.02             | 200.72            | 4.622                                                 |  |                    |  |           |  |
| 21,300.00                         | 12,065.00      | 21,496.23      | 12,502.00      | 175.02          | 158.59 | -121.16           | -10,247.39             | 2,178.98        | 927.74           | 725.13             | 202.61            | 4.579                                                 |  |                    |  |           |  |
| 21,400.00                         | 12,065.00      | 21,596.23      | 12,502.00      | 176.60          | 160.17 | -121.16           | -10,347.39             | 2,179.96        | 927.74           | 723.24             | 204.50            | 4.537                                                 |  |                    |  |           |  |
| 21,500.00                         | 12,065.00      | 21,696.23      | 12,502.00      | 178.19          | 161.76 | -121.16           | -10,447.38             | 2,180.94        | 927.75           | 721.36             | 206.39            | 4.495                                                 |  |                    |  |           |  |
| 21,600.00                         | 12,065.00      | 21,796.23      | 12,502.00      | 179.79          | 163.35 | -121.16           | -10,547.38             | 2,181.92        | 927.75           | 719.47             | 208.28            | 4.454                                                 |  |                    |  |           |  |
| 21,700.00                         | 12,065.00      | 21,896.23      | 12,502.00      | 181.38          | 164.94 | -121.16           | -10,647.37             | 2,182.90        | 927.75           | 717.58             | 210.17            | 4.414                                                 |  |                    |  |           |  |
| 21,800.00                         | 12,065.00      | 21,996.23      | 12,502.00      | 182.97          | 166.53 | -121.16           | -10,747.37             | 2,183.88        | 927.75           | 715.69             | 212.06            | 4.375                                                 |  |                    |  |           |  |
| 21,900.00                         | 12,065.00      | 22,096.23      | 12,502.00      | 184.57          | 168.12 | -121.16           | -10,847.36             | 2,184.86        | 927.75           | 713.80             | 213.95            | 4.336                                                 |  |                    |  |           |  |
| 22,000.00                         | 12,065.00      | 22,196.23      | 12,502.00      | 186.16          | 169.72 | -121.16           | -10,947.36             | 2,185.84        | 927.76           | 711.91             | 215.84            | 4.298                                                 |  |                    |  |           |  |
| 22,100.00                         | 12,065.00      | 22,296.23      | 12,502.00      | 187.76          | 171.31 | -121.16           | -11,047.35             | 2,186.82        | 927.76           | 710.02             | 217.73            | 4.261                                                 |  |                    |  |           |  |
| 22,200.00                         | 12,065.00      | 22,396.23      | 12,502.00      | 189.36          | 172.91 | -121.16           | -11,147.35             | 2,187.80        | 927.76           | 708.14             | 219.62            | 4.224                                                 |  |                    |  |           |  |
| 22,300.00                         | 12,065.00      | 22,496.23      | 12,502.00      | 190.95          | 174.51 | -121.16           | -11,247.34             | 2,188.78        | 927.76           | 706.25             | 221.51            | 4.188                                                 |  |                    |  |           |  |
| 22,400.00                         | 12,065.00      | 22,596.23      | 12,502.00      | 192.55          | 176.10 | -121.16           | -11,347.34             | 2,189.76        | 927.77           | 704.36             | 223.40            | 4.153                                                 |  |                    |  |           |  |
| 22,445.57                         | 12,065.00      | 22,641.80      | 12,502.00      | 193.28          | 176.76 | -121.16           | -11,392.91             | 2,190.21        | 927.77           | 703.58             | 224.19            | 4.138 ES, SF                                          |  |                    |  |           |  |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 806H - OH - Plan #2 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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                  | 0.00                  | 0.00             | 0.00          | 111.20                | -992.34                             | 2,558.58     | 2,744.66               |                         |                           |                   |                                                       |           |                    |           |
| 100.00                            | 100.00                | 54.10                 | 54.10                 | 0.13             | 0.07          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,744.14                | 0.14                      | N/A               |                                                       |           |                    |           |
| 200.00                            | 200.00                | 154.10                | 154.10                | 0.48             | 0.32          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,743.70                | 0.58                      | 4,732.853         |                                                       |           |                    |           |
| 300.00                            | 300.00                | 254.10                | 254.10                | 0.84             | 0.68          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,743.20                | 1.08                      | 2,537.999         |                                                       |           |                    |           |
| 400.00                            | 400.00                | 354.10                | 354.10                | 1.20             | 1.04          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,742.69                | 1.59                      | 1,730.067         |                                                       |           |                    |           |
| 500.00                            | 500.00                | 454.10                | 454.10                | 1.56             | 1.39          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,742.19                | 2.09                      | 1,311.705         |                                                       |           |                    |           |
| 600.00                            | 600.00                | 554.10                | 554.10                | 1.92             | 1.75          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,741.68                | 2.60                      | 1,056.113         |                                                       |           |                    |           |
| 700.00                            | 700.00                | 654.10                | 654.10                | 2.28             | 2.11          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,741.17                | 3.11                      | 883.826           |                                                       |           |                    |           |
| 800.00                            | 800.00                | 754.10                | 754.10                | 2.63             | 2.47          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,740.67                | 3.61                      | 759.841           |                                                       |           |                    |           |
| 900.00                            | 900.00                | 854.10                | 854.10                | 2.99             | 2.83          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,740.16                | 4.12                      | 666.350           |                                                       |           |                    |           |
| 1,000.00                          | 1,000.00              | 954.10                | 954.10                | 3.35             | 3.19          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,739.65                | 4.63                      | 593.339           |                                                       |           |                    |           |
| 1,100.00                          | 1,100.00              | 1,054.10              | 1,054.10              | 3.71             | 3.55          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,739.15                | 5.13                      | 534.743           |                                                       |           |                    |           |
| 1,200.00                          | 1,200.00              | 1,154.10              | 1,154.10              | 4.07             | 3.90          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,738.64                | 5.64                      | 486.678           |                                                       |           |                    |           |
| 1,300.00                          | 1,300.00              | 1,254.10              | 1,254.10              | 4.43             | 4.26          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,738.13                | 6.15                      | 446.540           |                                                       |           |                    |           |
| 1,400.00                          | 1,400.00              | 1,354.10              | 1,354.10              | 4.79             | 4.62          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,737.63                | 6.65                      | 412.517           |                                                       |           |                    |           |
| 1,500.00                          | 1,500.00              | 1,454.10              | 1,454.10              | 5.14             | 4.98          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,737.12                | 7.16                      | 383.311           |                                                       |           |                    |           |
| 1,600.00                          | 1,600.00              | 1,554.10              | 1,554.10              | 5.50             | 5.34          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,736.61                | 7.67                      | 357.967           |                                                       |           |                    |           |
| 1,700.00                          | 1,700.00              | 1,654.10              | 1,654.10              | 5.86             | 5.70          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,736.11                | 8.17                      | 335.766           |                                                       |           |                    |           |
| 1,800.00                          | 1,800.00              | 1,754.10              | 1,754.10              | 6.22             | 6.05          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,735.60                | 8.68                      | 316.157           |                                                       |           |                    |           |
| 1,900.00                          | 1,900.00              | 1,854.10              | 1,854.10              | 6.58             | 6.41          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,735.09                | 9.19                      | 298.713           |                                                       |           |                    |           |
| 2,000.00                          | 2,000.00              | 1,954.10              | 1,954.10              | 6.94             | 6.77          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,734.59                | 9.69                      | 283.092           |                                                       |           |                    |           |
| 2,100.00                          | 2,100.00              | 2,054.10              | 2,054.10              | 7.29             | 7.13          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,734.08                | 10.20                     | 269.024           |                                                       |           |                    |           |
| 2,200.00                          | 2,200.00              | 2,154.10              | 2,154.10              | 7.65             | 7.49          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,733.57                | 10.71                     | 256.288           |                                                       |           |                    |           |
| 2,300.00                          | 2,300.00              | 2,254.10              | 2,254.10              | 8.01             | 7.85          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,733.06                | 11.21                     | 244.704           |                                                       |           |                    |           |
| 2,400.00                          | 2,400.00              | 2,354.10              | 2,354.10              | 8.37             | 8.21          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,732.56                | 11.72                     | 234.121           |                                                       |           |                    |           |
| 2,500.00                          | 2,500.00              | 2,454.10              | 2,454.10              | 8.73             | 8.56          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,732.05                | 12.23                     | 224.415           |                                                       |           |                    |           |
| 2,600.00                          | 2,600.00              | 2,554.10              | 2,554.10              | 9.09             | 8.92          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,731.54                | 12.74                     | 215.483           |                                                       |           |                    |           |
| 2,700.00                          | 2,700.00              | 2,654.10              | 2,654.10              | 9.45             | 9.28          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,731.04                | 13.24                     | 207.234           |                                                       |           |                    |           |
| 2,800.00                          | 2,800.00              | 2,754.10              | 2,754.10              | 9.80             | 9.64          | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,730.53                | 13.75                     | 199.593           |                                                       |           |                    |           |
| 2,900.00                          | 2,900.00              | 2,854.10              | 2,854.10              | 10.16            | 10.00         | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,730.02                | 14.26                     | 192.496           |                                                       |           |                    |           |
| 3,000.00                          | 3,000.00              | 2,954.10              | 2,954.10              | 10.52            | 10.36         | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,729.52                | 14.76                     | 185.886           |                                                       |           |                    |           |
| 3,100.00                          | 3,100.00              | 3,054.10              | 3,054.10              | 10.88            | 10.72         | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,729.01                | 15.27                     | 179.715           |                                                       |           |                    |           |
| 3,200.00                          | 3,200.00              | 3,154.10              | 3,154.10              | 11.24            | 11.07         | 111.20                | -992.34                             | 2,558.58     | 2,744.28               | 2,728.50                | 15.78                     | 173.940           |                                                       |           |                    |           |
| 3,300.00                          | 3,299.99              | 3,232.13              | 3,232.13              | 11.58            | 11.35         | -17.47                | -992.35                             | 2,558.71     | 2,743.25               | 2,727.03                | 16.22                     | 169.174           |                                                       |           |                    |           |
| 3,400.00                          | 3,399.91              | 3,300.00              | 3,299.99              | 11.91            | 11.59         | -17.51                | -992.41                             | 2,559.89     | 2,741.06               | 2,724.45                | 16.61                     | 164.980           |                                                       |           |                    |           |
| 3,500.00                          | 3,499.69              | 3,350.90              | 3,350.86              | 12.25            | 11.76         | -17.55                | -992.51                             | 2,561.56     | 2,737.82               | 2,720.86                | 16.97                     | 161.376           |                                                       |           |                    |           |
| 3,600.00                          | 3,599.27              | 3,400.00              | 3,399.91              | 12.58            | 11.93         | -17.62                | -992.64                             | 2,563.81     | 2,733.62               | 2,716.31                | 17.31                     | 157.935           |                                                       |           |                    |           |
| 3,700.00                          | 3,698.57              | 3,469.55              | 3,469.33              | 12.92            | 12.17         | -17.72                | -992.88                             | 2,568.07     | 2,728.35               | 2,710.65                | 17.70                     | 154.112           |                                                       |           |                    |           |
| 3,800.00                          | 3,797.54              | 3,528.82              | 3,528.41              | 13.27            | 12.37         | -17.83                | -993.15                             | 2,572.70     | 2,722.11               | 2,704.04                | 18.07                     | 150.641           |                                                       |           |                    |           |
| 3,900.00                          | 3,896.09              | 3,600.00              | 3,599.27              | 13.62            | 12.62         | -17.99                | -993.53                             | 2,579.47     | 2,714.92               | 2,696.45                | 18.47                     | 147.001           |                                                       |           |                    |           |
| 4,000.00                          | 3,994.16              | 3,651.25              | 3,650.20              | 13.98            | 12.80         | -18.13                | -993.86                             | 2,585.16     | 2,706.65               | 2,687.84                | 18.81                     | 143.896           |                                                       |           |                    |           |
| 4,100.00                          | 4,091.70              | 3,743.36              | 3,741.67              | 14.35            | 13.12         | -18.38                | -994.47                             | 2,596.00     | 2,696.81               | 2,677.54                | 19.27                     | 139.949           |                                                       |           |                    |           |
| 4,200.00                          | 4,188.62              | 3,841.97              | 3,839.59              | 14.74            | 13.47         | -18.68                | -995.14                             | 2,607.60     | 2,684.56               | 2,664.81                | 19.75                     | 135.913           |                                                       |           |                    |           |
| 4,300.00                          | 4,284.86              | 3,940.15              | 3,937.09              | 15.14            | 13.82         | -19.01                | -995.79                             | 2,619.16     | 2,669.89               | 2,649.66                | 20.24                     | 131.938           |                                                       |           |                    |           |
| 4,400.00                          | 4,380.36              | 4,037.83              | 4,034.09              | 15.55            | 14.17         | -19.37                | -996.45                             | 2,630.65     | 2,652.85               | 2,632.12                | 20.72                     | 128.021           |                                                       |           |                    |           |
| 4,452.43                          | 4,430.11              | 4,088.83              | 4,084.73              | 15.78            | 14.36         | -19.58                | -996.79                             | 2,636.65     | 2,642.96               | 2,621.99                | 20.98                     | 125.988           |                                                       |           |                    |           |
| 4,500.00                          | 4,475.14              | 4,135.02              | 4,130.60              | 15.99            | 14.52         | -19.72                | -997.10                             | 2,642.09     | 2,633.71               | 2,612.50                | 21.21                     | 124.170           |                                                       |           |                    |           |
| 4,600.00                          | 4,569.82              | 4,232.13              | 4,227.03              | 16.44            | 14.88         | -20.03                | -997.75                             | 2,653.51     | 2,614.31               | 2,592.61                | 21.70                     | 120.462           |                                                       |           |                    |           |
| 4,700.00                          | 4,664.49              | 4,329.24              | 4,323.46              | 16.91            | 15.23         | -20.34                | -998.40                             | 2,664.94     | 2,594.99               | 2,572.79                | 22.20                     | 116.897           |                                                       |           |                    |           |
| 4,800.00                          | 4,759.16              | 4,426.34              | 4,419.89              | 17.39            | 15.59         | -20.66                | -999.06                             | 2,676.37     | 2,575.75               | 2,553.05                | 22.70                     | 113.468           |                                                       |           |                    |           |
| 4,900.00                          | 4,853.84              | 4,523.45              | 4,516.32              | 17.87            | 15.95         | -20.98                | -999.71                             | 2,687.79     | 2,556.58               | 2,533.38                | 23.21                     | 110.169           |                                                       |           |                    |           |
| 5,000.00                          | 4,948.51              | 4,620.56              | 4,612.75              | 18.37            | 16.31         | -21.30                | -1,000.36                           | 2,699.22     | 2,537.50               | 2,513.78                | 23.72                     | 106.995           |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 5,100.00                          | 5,043.18              | 4,717.66              | 4,709.18              | 18.88            | 16.67         | -21.63                | -1,001.01                           | 2,710.65     | 2,518.49               | 2,494.26                | 24.23                     | 103.941           |                    |           |
| 5,200.00                          | 5,137.85              | 4,814.77              | 4,805.61              | 19.39            | 17.04         | -21.97                | -1,001.66                           | 2,722.07     | 2,499.57               | 2,474.82                | 24.75                     | 101.000           |                    |           |
| 5,300.00                          | 5,232.53              | 4,911.88              | 4,902.04              | 19.92            | 17.40         | -22.31                | -1,002.31                           | 2,733.50     | 2,480.73               | 2,455.46                | 25.27                     | 98.167            |                    |           |
| 5,400.00                          | 5,327.20              | 5,008.98              | 4,998.47              | 20.45            | 17.77         | -22.65                | -1,002.96                           | 2,744.93     | 2,461.99               | 2,436.19                | 25.80                     | 95.438            |                    |           |
| 5,500.00                          | 5,421.87              | 5,106.09              | 5,094.90              | 20.99            | 18.13         | -23.00                | -1,003.62                           | 2,756.35     | 2,443.33               | 2,417.00                | 26.33                     | 92.808            |                    |           |
| 5,600.00                          | 5,516.54              | 5,203.20              | 5,191.33              | 21.53            | 18.50         | -23.36                | -1,004.27                           | 2,767.78     | 2,424.76               | 2,397.90                | 26.86                     | 90.272            |                    |           |
| 5,700.00                          | 5,611.22              | 5,300.30              | 5,287.76              | 22.08            | 18.87         | -23.72                | -1,004.92                           | 2,779.20     | 2,406.29               | 2,378.89                | 27.40                     | 87.827            |                    |           |
| 5,800.00                          | 5,705.89              | 5,397.41              | 5,384.19              | 22.63            | 19.24         | -24.09                | -1,005.57                           | 2,790.63     | 2,387.91               | 2,359.97                | 27.94                     | 85.467            |                    |           |
| 5,900.00                          | 5,800.56              | 5,494.52              | 5,480.62              | 23.19            | 19.61         | -24.46                | -1,006.22                           | 2,802.06     | 2,369.63               | 2,341.15                | 28.48                     | 83.190            |                    |           |
| 6,000.00                          | 5,895.23              | 5,591.62              | 5,577.05              | 23.76            | 19.98         | -24.84                | -1,006.87                           | 2,813.48     | 2,351.45               | 2,322.42                | 29.03                     | 80.991            |                    |           |
| 6,100.00                          | 5,989.91              | 5,688.73              | 5,673.48              | 24.33            | 20.36         | -25.22                | -1,007.53                           | 2,824.91     | 2,333.38               | 2,303.79                | 29.59                     | 78.868            |                    |           |
| 6,200.00                          | 6,084.58              | 5,785.84              | 5,769.91              | 24.90            | 20.73         | -25.61                | -1,008.18                           | 2,836.34     | 2,315.41               | 2,285.26                | 30.14                     | 76.816            |                    |           |
| 6,300.00                          | 6,179.25              | 5,882.94              | 5,866.34              | 25.48            | 21.10         | -26.00                | -1,008.83                           | 2,847.76     | 2,297.54               | 2,266.84                | 30.70                     | 74.833            |                    |           |
| 6,400.00                          | 6,273.92              | 5,980.05              | 5,962.77              | 26.05            | 21.48         | -26.41                | -1,009.48                           | 2,859.19     | 2,279.79               | 2,248.52                | 31.27                     | 72.916            |                    |           |
| 6,500.00                          | 6,368.60              | 6,077.16              | 6,059.20              | 26.64            | 21.85         | -26.81                | -1,010.13                           | 2,870.62     | 2,262.15               | 2,230.32                | 31.83                     | 71.062            |                    |           |
| 6,600.00                          | 6,463.27              | 6,174.26              | 6,155.63              | 27.22            | 22.23         | -27.23                | -1,010.78                           | 2,882.04     | 2,244.62               | 2,212.22                | 32.41                     | 69.268            |                    |           |
| 6,700.00                          | 6,557.94              | 6,271.37              | 6,252.06              | 27.81            | 22.61         | -27.64                | -1,011.43                           | 2,893.47     | 2,227.22               | 2,194.24                | 32.98                     | 67.532            |                    |           |
| 6,800.00                          | 6,652.61              | 6,368.48              | 6,348.49              | 28.40            | 22.98         | -28.07                | -1,012.09                           | 2,904.90     | 2,209.93               | 2,176.37                | 33.56                     | 65.851            |                    |           |
| 6,900.00                          | 6,747.29              | 6,465.58              | 6,444.92              | 29.00            | 23.36         | -28.50                | -1,012.74                           | 2,916.32     | 2,192.77               | 2,158.63                | 34.14                     | 64.223            |                    |           |
| 7,000.00                          | 6,841.96              | 6,562.69              | 6,541.35              | 29.59            | 23.74         | -28.94                | -1,013.39                           | 2,927.75     | 2,175.74               | 2,141.01                | 34.73                     | 62.647            |                    |           |
| 7,100.00                          | 6,936.63              | 6,659.80              | 6,637.78              | 30.19            | 24.12         | -29.39                | -1,014.04                           | 2,939.18     | 2,158.83               | 2,123.51                | 35.32                     | 61.119            |                    |           |
| 7,200.00                          | 7,031.30              | 6,756.90              | 6,734.21              | 30.79            | 24.50         | -29.84                | -1,014.69                           | 2,950.60     | 2,142.06               | 2,106.14                | 35.92                     | 59.638            |                    |           |
| 7,300.00                          | 7,125.98              | 6,854.01              | 6,830.64              | 31.40            | 24.88         | -30.30                | -1,015.34                           | 2,962.03     | 2,125.42               | 2,088.90                | 36.52                     | 58.203            |                    |           |
| 7,400.00                          | 7,220.65              | 6,951.12              | 6,927.07              | 32.00            | 25.26         | -30.77                | -1,016.00                           | 2,973.46     | 2,108.92               | 2,071.80                | 37.12                     | 56.811            |                    |           |
| 7,500.00                          | 7,315.32              | 7,048.22              | 7,023.50              | 32.61            | 25.64         | -31.24                | -1,016.65                           | 2,984.88     | 2,092.57               | 2,054.84                | 37.73                     | 55.462            |                    |           |
| 7,600.00                          | 7,409.99              | 7,228.94              | 7,203.28              | 33.21            | 26.33         | -32.14                | -1,017.68                           | 3,003.06     | 2,074.94               | 2,036.40                | 38.54                     | 53.841            |                    |           |
| 7,700.00                          | 7,504.67              | 7,437.02              | 7,411.07              | 33.82            | 27.09         | -33.19                | -1,018.28                           | 3,013.55     | 2,052.35               | 2,013.03                | 39.33                     | 52.186            |                    |           |
| 7,800.00                          | 7,599.34              | 7,579.40              | 7,553.44              | 34.43            | 27.58         | -33.93                | -1,018.34                           | 3,014.58     | 2,025.60               | 1,985.62                | 39.98                     | 50.669            |                    |           |
| 7,900.00                          | 7,694.01              | 7,674.07              | 7,648.11              | 35.05            | 27.90         | -34.43                | -1,018.34                           | 3,014.58     | 1,998.51               | 1,957.92                | 40.58                     | 49.244            |                    |           |
| 8,000.00                          | 7,788.68              | 7,768.74              | 7,742.78              | 35.66            | 28.22         | -34.95                | -1,018.34                           | 3,014.58     | 1,971.57               | 1,930.38                | 41.20                     | 47.858            |                    |           |
| 8,100.00                          | 7,883.36              | 7,863.42              | 7,837.46              | 36.28            | 28.54         | -35.49                | -1,018.34                           | 3,014.58     | 1,944.80               | 1,902.98                | 41.82                     | 46.509            |                    |           |
| 8,200.00                          | 7,978.03              | 7,958.09              | 7,932.13              | 36.89            | 28.87         | -36.03                | -1,018.34                           | 3,014.58     | 1,918.19               | 1,875.75                | 42.44                     | 45.198            |                    |           |
| 8,300.00                          | 8,072.70              | 8,052.76              | 8,026.80              | 37.51            | 29.19         | -36.60                | -1,018.34                           | 3,014.58     | 1,891.75               | 1,848.68                | 43.07                     | 43.923            |                    |           |
| 8,400.00                          | 8,167.37              | 8,147.43              | 8,121.47              | 38.13            | 29.52         | -37.18                | -1,018.34                           | 3,014.58     | 1,865.50               | 1,821.79                | 43.71                     | 42.682            |                    |           |
| 8,500.00                          | 8,262.05              | 8,242.11              | 8,216.15              | 38.75            | 29.84         | -37.77                | -1,018.34                           | 3,014.58     | 1,839.44               | 1,795.09                | 44.35                     | 41.475            |                    |           |
| 8,600.00                          | 8,356.72              | 8,336.78              | 8,310.82              | 39.37            | 30.16         | -38.38                | -1,018.34                           | 3,014.58     | 1,813.57               | 1,768.57                | 45.00                     | 40.300            |                    |           |
| 8,700.00                          | 8,451.39              | 8,431.45              | 8,405.49              | 39.99            | 30.49         | -39.01                | -1,018.34                           | 3,014.58     | 1,787.91               | 1,742.25                | 45.66                     | 39.158            |                    |           |
| 8,800.00                          | 8,546.07              | 8,526.12              | 8,500.17              | 40.61            | 30.82         | -39.65                | -1,018.34                           | 3,014.58     | 1,762.46               | 1,716.14                | 46.32                     | 38.047            |                    |           |
| 8,875.44                          | 8,617.48              | 8,597.54              | 8,571.58              | 41.08            | 31.06         | -40.15                | -1,018.34                           | 3,014.58     | 1,743.42               | 1,696.59                | 46.83                     | 37.228            |                    |           |
| 8,900.00                          | 8,640.90              | 8,620.96              | 8,595.00              | 41.23            | 31.14         | -39.92                | -1,018.34                           | 3,014.58     | 1,737.63               | 1,690.64                | 46.99                     | 36.977            |                    |           |
| 8,950.00                          | 8,689.44              | 8,669.49              | 8,643.54              | 41.49            | 31.31         | -39.57                | -1,018.34                           | 3,014.58     | 1,728.33               | 1,681.03                | 47.30                     | 36.537            |                    |           |
| 9,000.00                          | 8,738.83              | 8,718.89              | 8,692.93              | 41.70            | 31.48         | -39.35                | -1,018.34                           | 3,014.58     | 1,722.38               | 1,674.79                | 47.59                     | 36.196            |                    |           |
| 9,050.00                          | 8,788.70              | 8,768.76              | 8,742.80              | 41.87            | 31.65         | -39.25                | -1,018.34                           | 3,014.58     | 1,719.79               | 1,671.95                | 47.84                     | 35.952            |                    |           |
| 9,063.30                          | 8,802.00              | 8,782.06              | 8,756.10              | 41.91            | 31.70         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,671.77                | 47.90                     | 35.904            |                    |           |
| 9,100.00                          | 8,838.70              | 8,818.76              | 8,792.80              | 42.00            | 31.82         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,671.61                | 48.06                     | 35.782            |                    |           |
| 9,200.00                          | 8,938.70              | 8,918.76              | 8,892.80              | 42.26            | 32.17         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,671.17                | 48.50                     | 35.455            |                    |           |
| 9,300.00                          | 9,038.70              | 9,018.76              | 8,992.80              | 42.51            | 32.51         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,670.72                | 48.95                     | 35.132            |                    |           |
| 9,400.00                          | 9,138.70              | 9,118.76              | 9,092.80              | 42.77            | 32.86         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,670.28                | 49.40                     | 34.814            |                    |           |
| 9,500.00                          | 9,238.70              | 9,218.76              | 9,192.80              | 43.03            | 33.20         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,669.83                | 49.84                     | 34.501            |                    |           |
| 9,600.00                          | 9,338.70              | 9,318.76              | 9,292.80              | 43.30            | 33.55         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,669.38                | 50.29                     | 34.194            |                    |           |
| 9,700.00                          | 9,438.70              | 9,418.76              | 9,392.80              | 43.56            | 33.90         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,668.93                | 50.74                     | 33.890            |                    |           |
| 9,800.00                          | 9,538.70              | 9,518.76              | 9,492.80              | 43.82            | 34.24         | -39.41                | -1,018.34                           | 3,014.58     | 1,719.67               | 1,668.48                | 51.19                     | 33.592            |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | Tatanka Fed Com - Tatanka Fed Com 806H - OH - Plan #2 |           | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|-------------------------------------------------------|-----------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                        |              |                        |                         |                           |                   | 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 |              | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                                                       |           |                    |           |
|                                   |                       |                       |                       |                  |               |                       | +N/-S (usft)           | +E/-W (usft) |                        |                         |                           |                   |                                                       |           |                    |           |
| 9,900.00                          | 9,638.70              | 9,618.76              | 9,592.80              | 44.09            | 34.59         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,668.03                | 51.65                     | 33.298            |                                                       |           |                    |           |
| 10,000.00                         | 9,738.70              | 9,718.76              | 9,692.80              | 44.36            | 34.94         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,667.57                | 52.10                     | 33.008            |                                                       |           |                    |           |
| 10,100.00                         | 9,838.70              | 9,818.76              | 9,792.80              | 44.63            | 35.28         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,667.12                | 52.55                     | 32.723            |                                                       |           |                    |           |
| 10,200.00                         | 9,938.70              | 9,918.76              | 9,892.80              | 44.90            | 35.63         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,666.66                | 53.01                     | 32.442            |                                                       |           |                    |           |
| 10,300.00                         | 10,038.70             | 10,018.76             | 9,992.80              | 45.17            | 35.98         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,666.21                | 53.46                     | 32.165            |                                                       |           |                    |           |
| 10,400.00                         | 10,138.70             | 10,118.76             | 10,092.80             | 45.44            | 36.33         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,665.75                | 53.92                     | 31.893            |                                                       |           |                    |           |
| 10,500.00                         | 10,238.70             | 10,218.76             | 10,192.80             | 45.71            | 36.67         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,665.29                | 54.38                     | 31.624            |                                                       |           |                    |           |
| 10,600.00                         | 10,338.70             | 10,318.76             | 10,292.80             | 45.99            | 37.02         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,664.83                | 54.84                     | 31.360            |                                                       |           |                    |           |
| 10,700.00                         | 10,438.70             | 10,418.76             | 10,392.80             | 46.26            | 37.37         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,664.37                | 55.30                     | 31.099            |                                                       |           |                    |           |
| 10,800.00                         | 10,538.70             | 10,518.76             | 10,492.80             | 46.54            | 37.72         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,663.91                | 55.76                     | 30.842            |                                                       |           |                    |           |
| 10,900.00                         | 10,638.70             | 10,618.76             | 10,592.80             | 46.82            | 38.07         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,663.45                | 56.22                     | 30.589            |                                                       |           |                    |           |
| 11,000.00                         | 10,738.70             | 10,718.76             | 10,692.80             | 47.10            | 38.42         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,662.99                | 56.68                     | 30.340            |                                                       |           |                    |           |
| 11,100.00                         | 10,838.70             | 10,818.76             | 10,792.80             | 47.38            | 38.77         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,662.53                | 57.14                     | 30.094            |                                                       |           |                    |           |
| 11,200.00                         | 10,938.70             | 10,918.76             | 10,892.80             | 47.66            | 39.12         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,662.06                | 57.61                     | 29.852            |                                                       |           |                    |           |
| 11,300.00                         | 11,038.70             | 11,018.76             | 10,992.80             | 47.94            | 39.47         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,661.60                | 58.07                     | 29.614            |                                                       |           |                    |           |
| 11,400.00                         | 11,138.70             | 11,118.76             | 11,092.80             | 48.22            | 39.81         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,661.14                | 58.54                     | 29.378            |                                                       |           |                    |           |
| 11,500.00                         | 11,238.70             | 11,218.76             | 11,192.80             | 48.51            | 40.16         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,660.67                | 59.00                     | 29.147            |                                                       |           |                    |           |
| 11,600.00                         | 11,338.70             | 11,318.76             | 11,292.80             | 48.79            | 40.51         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,660.20                | 59.47                     | 28.918            |                                                       |           |                    |           |
| 11,700.00                         | 11,438.70             | 11,418.76             | 11,392.80             | 49.08            | 40.86         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,659.74                | 59.93                     | 28.693            |                                                       |           |                    |           |
| 11,753.34                         | 11,492.04             | 11,472.10             | 11,446.14             | 49.23            | 41.05         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,659.49                | 60.18                     | 28.574 CC         |                                                       |           |                    |           |
| 11,753.40                         | 11,492.09             | 11,472.15             | 11,446.19             | 49.23            | 41.05         | 89.41                 | -1,018.34              | 3,014.58     | 1,719.67               | 1,659.49                | 60.18                     | 28.574            |                                                       |           |                    |           |
| 11,800.00                         | 11,538.65             | 11,518.71             | 11,492.75             | 49.37            | 41.21         | -90.09                | -1,018.34              | 3,014.58     | 1,719.67               | 1,659.26                | 60.41                     | 28.464            |                                                       |           |                    |           |
| 11,850.00                         | 11,588.24             | 11,568.30             | 11,542.34             | 49.55            | 41.39         | -90.29                | -1,018.34              | 3,014.58     | 1,719.69               | 1,659.00                | 60.69                     | 28.334            |                                                       |           |                    |           |
| 11,900.00                         | 11,637.10             | 11,617.16             | 11,591.20             | 49.74            | 41.56         | -90.63                | -1,018.34              | 3,014.58     | 1,719.78               | 1,658.78                | 61.00                     | 28.192            |                                                       |           |                    |           |
| 11,950.00                         | 11,684.86             | 11,664.92             | 11,638.96             | 49.95            | 41.73         | -91.07                | -1,018.34              | 3,014.58     | 1,720.01               | 1,658.67                | 61.34                     | 28.040            |                                                       |           |                    |           |
| 12,000.00                         | 11,731.15             | 11,711.21             | 11,685.25             | 50.18            | 41.89         | -91.61                | -1,018.34              | 3,014.58     | 1,720.49               | 1,658.78                | 61.71                     | 27.882            |                                                       |           |                    |           |
| 12,050.00                         | 11,775.62             | 11,755.68             | 11,729.72             | 50.42            | 42.05         | -92.20                | -1,018.34              | 3,014.58     | 1,721.35               | 1,659.25                | 62.10                     | 27.719            |                                                       |           |                    |           |
| 12,100.00                         | 11,817.93             | 11,797.99             | 11,772.03             | 50.68            | 42.19         | -92.81                | -1,018.34              | 3,014.58     | 1,722.73               | 1,660.21                | 62.52                     | 27.556            |                                                       |           |                    |           |
| 12,150.00                         | 11,857.76             | 11,840.78             | 11,814.82             | 50.96            | 42.34         | -93.46                | -1,018.48              | 3,014.58     | 1,724.78               | 1,661.82                | 62.96                     | 27.394            |                                                       |           |                    |           |
| 12,200.00                         | 11,894.81             | 11,893.75             | 11,867.64             | 51.25            | 42.52         | -94.28                | -1,022.11              | 3,014.62     | 1,727.44               | 1,664.02                | 63.41                     | 27.241            |                                                       |           |                    |           |
| 12,250.00                         | 11,928.80             | 11,951.26             | 11,924.36             | 51.56            | 42.70         | -95.13                | -1,031.55              | 3,014.71     | 1,730.60               | 1,666.74                | 63.86                     | 27.100            |                                                       |           |                    |           |
| 12,300.00                         | 11,959.45             | 12,014.43             | 11,985.20             | 51.87            | 42.90         | -96.02                | -1,048.40              | 3,014.87     | 1,734.21               | 1,669.93                | 64.29                     | 26.975            |                                                       |           |                    |           |
| 12,350.00                         | 11,986.56             | 12,084.60             | 12,050.15             | 52.20            | 43.11         | -96.95                | -1,074.84              | 3,015.13     | 1,738.16               | 1,673.48                | 64.68                     | 26.873            |                                                       |           |                    |           |
| 12,400.00                         | 12,009.90             | 12,163.38             | 12,118.59             | 52.55            | 43.34         | -97.93                | -1,113.72              | 3,015.51     | 1,742.29               | 1,677.28                | 65.01                     | 26.800            |                                                       |           |                    |           |
| 12,450.00                         | 12,029.29             | 12,252.48             | 12,188.74             | 52.90            | 43.57         | -98.94                | -1,168.51              | 3,016.05     | 1,746.38               | 1,681.13                | 65.25                     | 26.763            |                                                       |           |                    |           |
| 12,500.00                         | 12,044.60             | 12,353.39             | 12,256.84             | 53.26            | 43.83         | -99.94                | -1,242.80              | 3,016.78     | 1,750.15               | 1,684.76                | 65.40                     | 26.762            |                                                       |           |                    |           |
| 12,550.00                         | 12,055.70             | 12,466.62             | 12,316.40             | 53.63            | 44.12         | -100.82               | -1,338.87              | 3,017.72     | 1,753.26               | 1,687.81                | 65.45                     | 26.786            |                                                       |           |                    |           |
| 12,600.00                         | 12,062.52             | 12,590.68             | 12,358.62             | 54.01            | 44.49         | -101.45               | -1,455.27              | 3,018.86     | 1,755.34               | 1,689.86                | 65.49                     | 26.805            |                                                       |           |                    |           |
| 12,653.34                         | 12,065.00             | 12,730.19             | 12,374.99             | 54.42            | 44.96         | -101.69               | -1,593.46              | 3,020.21     | 1,756.12               | 1,690.52                | 65.59                     | 26.773            |                                                       |           |                    |           |
| 12,654.72                         | 12,065.00             | 12,721.51             | 12,374.84             | 54.43            | 44.93         | -101.69               | -1,584.78              | 3,020.12     | 1,756.11               | 1,690.47                | 65.63                     | 26.756            |                                                       |           |                    |           |
| 12,700.00                         | 12,065.00             | 12,775.49             | 12,375.00             | 54.78            | 45.13         | -101.69               | -1,638.76              | 3,020.65     | 1,756.12               | 1,690.13                | 65.99                     | 26.613            |                                                       |           |                    |           |
| 12,800.00                         | 12,065.00             | 12,875.49             | 12,375.00             | 55.59            | 45.54         | -101.69               | -1,738.75              | 3,021.63     | 1,756.12               | 1,689.25                | 66.87                     | 26.262            |                                                       |           |                    |           |
| 12,900.00                         | 12,065.00             | 12,975.49             | 12,375.00             | 56.43            | 46.01         | -101.69               | -1,838.75              | 3,022.61     | 1,756.12               | 1,688.30                | 67.82                     | 25.895            |                                                       |           |                    |           |
| 13,000.00                         | 12,065.00             | 13,075.49             | 12,375.00             | 57.31            | 46.53         | -101.69               | -1,938.74              | 3,023.59     | 1,756.12               | 1,687.29                | 68.83                     | 25.516            |                                                       |           |                    |           |
| 13,100.00                         | 12,065.00             | 13,175.49             | 12,375.00             | 58.22            | 47.10         | -101.69               | -2,038.74              | 3,024.57     | 1,756.12               | 1,686.23                | 69.90                     | 25.125            |                                                       |           |                    |           |
| 13,200.00                         | 12,065.00             | 13,275.49             | 12,375.00             | 59.17            | 47.71         | -101.69               | -2,138.73              | 3,025.55     | 1,756.12               | 1,685.10                | 71.02                     | 24.726            |                                                       |           |                    |           |
| 13,300.00                         | 12,065.00             | 13,375.49             | 12,375.00             | 60.14            | 48.38         | -101.69               | -2,238.73              | 3,026.52     | 1,756.12               | 1,683.91                | 72.21                     | 24.321            |                                                       |           |                    |           |
| 13,400.00                         | 12,065.00             | 13,475.49             | 12,375.00             | 61.15            | 49.09         | -101.69               | -2,338.72              | 3,027.50     | 1,756.12               | 1,682.68                | 73.44                     | 23.911            |                                                       |           |                    |           |
| 13,500.00                         | 12,065.00             | 13,575.49             | 12,375.00             | 62.18            | 49.85         | -101.69               | -2,438.72              | 3,028.48     | 1,756.12               | 1,681.39                | 74.73                     | 23.499            |                                                       |           |                    |           |
| 13,600.00                         | 12,065.00             | 13,675.49             | 12,375.00             | 63.24            | 50.65         | -101.69               | -2,538.71              | 3,029.46     | 1,756.12               | 1,680.06                | 76.06                     | 23.087            |                                                       |           |                    |           |
| 13,700.00                         | 12,065.00             | 13,775.49             | 12,375.00             | 64.32            | 51.49         | -101.69               | -2,638.71              | 3,030.44     | 1,756.13               | 1,678.68                | 77.44                     | 22.676            |                                                       |           |                    |           |
| 13,800.00                         | 12,065.00             | 13,875.49             | 12,375.00             | 65.43            | 52.37         | -101.69               | -2,738.70              | 3,031.42     | 1,756.13               | 1,677.26                | 78.87                     | 22.267            |                                                       |           |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 13,900.00                         | 12,065.00             | 13,975.49             | 12,375.00             | 66.56            | 53.29         | -101.69               | -2,838.70                           | 3,032.40     | 1,756.13               | 1,675.80                | 80.33                     | 21.862            |                    |           |
| 14,000.00                         | 12,065.00             | 14,075.49             | 12,375.00             | 67.71            | 54.24         | -101.69               | -2,938.69                           | 3,033.38     | 1,756.13               | 1,674.30                | 81.83                     | 21.461            |                    |           |
| 14,100.00                         | 12,065.00             | 14,175.49             | 12,375.00             | 68.88            | 55.22         | -101.69               | -3,038.69                           | 3,034.35     | 1,756.13               | 1,672.76                | 83.37                     | 21.065            |                    |           |
| 14,200.00                         | 12,065.00             | 14,275.49             | 12,375.00             | 70.08            | 56.23         | -101.69               | -3,138.68                           | 3,035.33     | 1,756.13               | 1,671.19                | 84.94                     | 20.676            |                    |           |
| 14,300.00                         | 12,065.00             | 14,375.49             | 12,375.00             | 71.29            | 57.28         | -101.69               | -3,238.68                           | 3,036.31     | 1,756.13               | 1,669.59                | 86.54                     | 20.293            |                    |           |
| 14,400.00                         | 12,065.00             | 14,475.49             | 12,375.00             | 72.51            | 58.35         | -101.69               | -3,338.67                           | 3,037.29     | 1,756.13               | 1,667.96                | 88.17                     | 19.917            |                    |           |
| 14,500.00                         | 12,065.00             | 14,575.49             | 12,375.00             | 73.76            | 59.45         | -101.69               | -3,438.67                           | 3,038.27     | 1,756.13               | 1,666.30                | 89.83                     | 19.549            |                    |           |
| 14,600.00                         | 12,065.00             | 14,675.49             | 12,375.00             | 75.02            | 60.57         | -101.69               | -3,538.66                           | 3,039.25     | 1,756.13               | 1,664.61                | 91.52                     | 19.188            |                    |           |
| 14,700.00                         | 12,065.00             | 14,775.49             | 12,375.00             | 76.29            | 61.72         | -101.69               | -3,638.66                           | 3,040.23     | 1,756.13               | 1,662.90                | 93.24                     | 18.835            |                    |           |
| 14,800.00                         | 12,065.00             | 14,875.49             | 12,375.00             | 77.58            | 62.89         | -101.69               | -3,738.65                           | 3,041.21     | 1,756.13               | 1,661.16                | 94.98                     | 18.490            |                    |           |
| 14,900.00                         | 12,065.00             | 14,975.49             | 12,375.00             | 78.89            | 64.08         | -101.69               | -3,838.65                           | 3,042.18     | 1,756.14               | 1,659.39                | 96.74                     | 18.153            |                    |           |
| 15,000.00                         | 12,065.00             | 15,075.49             | 12,375.00             | 80.20            | 65.29         | -101.69               | -3,938.65                           | 3,043.16     | 1,756.14               | 1,657.61                | 98.53                     | 17.824            |                    |           |
| 15,100.00                         | 12,065.00             | 15,175.49             | 12,375.00             | 81.53            | 66.52         | -101.69               | -4,038.64                           | 3,044.14     | 1,756.14               | 1,655.81                | 100.33                    | 17.503            |                    |           |
| 15,200.00                         | 12,065.00             | 15,275.49             | 12,375.00             | 82.87            | 67.77         | -101.69               | -4,138.64                           | 3,045.12     | 1,756.14               | 1,653.98                | 102.16                    | 17.191            |                    |           |
| 15,300.00                         | 12,065.00             | 15,375.49             | 12,375.00             | 84.22            | 69.03         | -101.69               | -4,238.63                           | 3,046.10     | 1,756.14               | 1,652.14                | 104.00                    | 16.886            |                    |           |
| 15,400.00                         | 12,065.00             | 15,475.49             | 12,375.00             | 85.59            | 70.31         | -101.69               | -4,338.63                           | 3,047.08     | 1,756.14               | 1,650.28                | 105.86                    | 16.590            |                    |           |
| 15,500.00                         | 12,065.00             | 15,575.49             | 12,375.00             | 86.96            | 71.61         | -101.69               | -4,438.62                           | 3,048.06     | 1,756.14               | 1,648.41                | 107.73                    | 16.301            |                    |           |
| 15,600.00                         | 12,065.00             | 15,675.49             | 12,375.00             | 88.34            | 72.92         | -101.69               | -4,538.62                           | 3,049.03     | 1,756.14               | 1,646.51                | 109.63                    | 16.019            |                    |           |
| 15,700.00                         | 12,065.00             | 15,775.49             | 12,375.00             | 89.73            | 74.25         | -101.69               | -4,638.61                           | 3,050.01     | 1,756.14               | 1,644.61                | 111.54                    | 15.745            |                    |           |
| 15,800.00                         | 12,065.00             | 15,875.49             | 12,375.00             | 91.13            | 75.58         | -101.69               | -4,738.61                           | 3,050.99     | 1,756.14               | 1,642.68                | 113.46                    | 15.478            |                    |           |
| 15,900.00                         | 12,065.00             | 15,975.49             | 12,375.00             | 92.54            | 76.93         | -101.69               | -4,838.60                           | 3,051.97     | 1,756.14               | 1,640.75                | 115.39                    | 15.219            |                    |           |
| 16,000.00                         | 12,065.00             | 16,075.49             | 12,375.00             | 93.95            | 78.29         | -101.69               | -4,938.60                           | 3,052.95     | 1,756.14               | 1,638.80                | 117.34                    | 14.966            |                    |           |
| 16,100.00                         | 12,065.00             | 16,175.49             | 12,375.00             | 95.38            | 79.66         | -101.69               | -5,038.59                           | 3,053.93     | 1,756.14               | 1,636.84                | 119.30                    | 14.720            |                    |           |
| 16,200.00                         | 12,065.00             | 16,275.49             | 12,375.00             | 96.81            | 81.05         | -101.69               | -5,138.59                           | 3,054.91     | 1,756.15               | 1,634.87                | 121.27                    | 14.481            |                    |           |
| 16,300.00                         | 12,065.00             | 16,375.49             | 12,375.00             | 98.24            | 82.44         | -101.69               | -5,238.58                           | 3,055.89     | 1,756.15               | 1,632.89                | 123.26                    | 14.248            |                    |           |
| 16,400.00                         | 12,065.00             | 16,475.49             | 12,375.00             | 99.69            | 83.84         | -101.69               | -5,338.58                           | 3,056.86     | 1,756.15               | 1,630.90                | 125.25                    | 14.021            |                    |           |
| 16,500.00                         | 12,065.00             | 16,575.49             | 12,375.00             | 101.14           | 85.25         | -101.69               | -5,438.57                           | 3,057.84     | 1,756.15               | 1,628.89                | 127.25                    | 13.800            |                    |           |
| 16,600.00                         | 12,065.00             | 16,675.49             | 12,375.00             | 102.60           | 86.67         | -101.69               | -5,538.57                           | 3,058.82     | 1,756.15               | 1,626.88                | 129.27                    | 13.585            |                    |           |
| 16,700.00                         | 12,065.00             | 16,775.49             | 12,375.00             | 104.06           | 88.10         | -101.69               | -5,638.56                           | 3,059.80     | 1,756.15               | 1,624.86                | 131.29                    | 13.376            |                    |           |
| 16,800.00                         | 12,065.00             | 16,875.49             | 12,375.00             | 105.53           | 89.53         | -101.69               | -5,738.56                           | 3,060.78     | 1,756.15               | 1,622.83                | 133.32                    | 13.172            |                    |           |
| 16,900.00                         | 12,065.00             | 16,975.49             | 12,375.00             | 107.00           | 90.97         | -101.69               | -5,838.55                           | 3,061.76     | 1,756.15               | 1,620.79                | 135.36                    | 12.974            |                    |           |
| 17,000.00                         | 12,065.00             | 17,075.49             | 12,375.00             | 108.48           | 92.42         | -101.69               | -5,938.55                           | 3,062.74     | 1,756.15               | 1,618.74                | 137.41                    | 12.781            |                    |           |
| 17,100.00                         | 12,065.00             | 17,175.49             | 12,375.00             | 109.96           | 93.88         | -101.69               | -6,038.54                           | 3,063.72     | 1,756.15               | 1,616.69                | 139.46                    | 12.592            |                    |           |
| 17,200.00                         | 12,065.00             | 17,275.49             | 12,375.00             | 111.45           | 95.34         | -101.69               | -6,138.54                           | 3,064.69     | 1,756.15               | 1,614.63                | 141.52                    | 12.409            |                    |           |
| 17,300.00                         | 12,065.00             | 17,375.49             | 12,375.00             | 112.94           | 96.81         | -101.69               | -6,238.54                           | 3,065.67     | 1,756.15               | 1,612.56                | 143.59                    | 12.230            |                    |           |
| 17,400.00                         | 12,065.00             | 17,475.49             | 12,375.00             | 114.44           | 98.28         | -101.69               | -6,338.53                           | 3,066.65     | 1,756.15               | 1,610.48                | 145.67                    | 12.056            |                    |           |
| 17,500.00                         | 12,065.00             | 17,575.49             | 12,375.00             | 115.94           | 99.76         | -101.69               | -6,438.53                           | 3,067.63     | 1,756.16               | 1,608.40                | 147.75                    | 11.886            |                    |           |
| 17,600.00                         | 12,065.00             | 17,675.49             | 12,375.00             | 117.45           | 101.25        | -101.69               | -6,538.52                           | 3,068.61     | 1,756.16               | 1,606.32                | 149.84                    | 11.720            |                    |           |
| 17,700.00                         | 12,065.00             | 17,775.49             | 12,375.00             | 118.96           | 102.74        | -101.69               | -6,638.52                           | 3,069.59     | 1,756.16               | 1,604.22                | 151.93                    | 11.559            |                    |           |
| 17,800.00                         | 12,065.00             | 17,875.49             | 12,375.00             | 120.47           | 104.23        | -101.69               | -6,738.51                           | 3,070.57     | 1,756.16               | 1,602.13                | 154.03                    | 11.401            |                    |           |
| 17,900.00                         | 12,065.00             | 17,975.49             | 12,375.00             | 121.99           | 105.73        | -101.69               | -6,838.51                           | 3,071.54     | 1,756.16               | 1,600.02                | 156.14                    | 11.248            |                    |           |
| 18,000.00                         | 12,065.00             | 18,075.49             | 12,375.00             | 123.51           | 107.23        | -101.69               | -6,938.50                           | 3,072.52     | 1,756.16               | 1,597.91                | 158.24                    | 11.098            |                    |           |
| 18,100.00                         | 12,065.00             | 18,175.49             | 12,375.00             | 125.03           | 108.74        | -101.69               | -7,038.50                           | 3,073.50     | 1,756.16               | 1,595.80                | 160.36                    | 10.951            |                    |           |
| 18,200.00                         | 12,065.00             | 18,275.49             | 12,375.00             | 126.56           | 110.26        | -101.69               | -7,138.49                           | 3,074.48     | 1,756.16               | 1,593.68                | 162.48                    | 10.809            |                    |           |
| 18,300.00                         | 12,065.00             | 18,375.49             | 12,375.00             | 128.09           | 111.77        | -101.69               | -7,238.49                           | 3,075.46     | 1,756.16               | 1,591.56                | 164.60                    | 10.669            |                    |           |
| 18,400.00                         | 12,065.00             | 18,475.49             | 12,375.00             | 129.62           | 113.29        | -101.69               | -7,338.48                           | 3,076.44     | 1,756.16               | 1,589.43                | 166.73                    | 10.533            |                    |           |
| 18,500.00                         | 12,065.00             | 18,575.49             | 12,375.00             | 131.16           | 114.82        | -101.69               | -7,438.48                           | 3,077.42     | 1,756.16               | 1,587.30                | 168.86                    | 10.400            |                    |           |
| 18,600.00                         | 12,065.00             | 18,675.49             | 12,375.00             | 132.69           | 116.34        | -101.69               | -7,538.47                           | 3,078.40     | 1,756.16               | 1,585.17                | 171.00                    | 10.270            |                    |           |
| 18,700.00                         | 12,065.00             | 18,775.49             | 12,375.00             | 134.24           | 117.87        | -101.69               | -7,638.47                           | 3,079.37     | 1,756.17               | 1,583.03                | 173.14                    | 10.143            |                    |           |
| 18,800.00                         | 12,065.00             | 18,875.49             | 12,375.00             | 135.78           | 119.41        | -101.69               | -7,738.46                           | 3,080.35     | 1,756.17               | 1,580.89                | 175.28                    | 10.019            |                    |           |
| 18,900.00                         | 12,065.00             | 18,975.49             | 12,375.00             | 137.33           | 120.94        | -101.69               | -7,838.46                           | 3,081.33     | 1,756.17               | 1,578.74                | 177.43                    | 9.898             |                    |           |
| 19,000.00                         | 12,065.00             | 19,075.49             | 12,375.00             | 138.87           | 122.48        | -101.69               | -7,938.45                           | 3,082.31     | 1,756.17               | 1,576.59                | 179.58                    | 9.779             |                    |           |

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



## Total Directional Services

### Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

| Offset Design                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-OWSG (Rev2) MWD |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 |                    |           |
| 19,100.00                         | 12,065.00             | 19,175.49             | 12,375.00             | 140.43           | 124.03        | -101.69               | -8,038.45                           | 3,083.29     | 1,756.17               | 1,574.43                | 181.73                    | 9.663             |                    |           |
| 19,200.00                         | 12,065.00             | 19,275.49             | 12,375.00             | 141.98           | 125.57        | -101.69               | -8,138.44                           | 3,084.27     | 1,756.17               | 1,572.28                | 183.89                    | 9.550             |                    |           |
| 19,300.00                         | 12,065.00             | 19,375.49             | 12,375.00             | 143.53           | 127.12        | -101.69               | -8,238.44                           | 3,085.25     | 1,756.17               | 1,570.12                | 186.05                    | 9.439             |                    |           |
| 19,400.00                         | 12,065.00             | 19,475.49             | 12,375.00             | 145.09           | 128.67        | -101.69               | -8,338.43                           | 3,086.23     | 1,756.17               | 1,567.95                | 188.22                    | 9.331             |                    |           |
| 19,500.00                         | 12,065.00             | 19,575.49             | 12,375.00             | 146.65           | 130.22        | -101.69               | -8,438.43                           | 3,087.20     | 1,756.17               | 1,565.79                | 190.38                    | 9.224             |                    |           |
| 19,600.00                         | 12,065.00             | 19,675.49             | 12,375.00             | 148.21           | 131.78        | -101.69               | -8,538.43                           | 3,088.18     | 1,756.17               | 1,563.62                | 192.55                    | 9.121             |                    |           |
| 19,700.00                         | 12,065.00             | 19,775.49             | 12,375.00             | 149.78           | 133.34        | -101.69               | -8,638.42                           | 3,089.16     | 1,756.17               | 1,561.45                | 194.72                    | 9.019             |                    |           |
| 19,800.00                         | 12,065.00             | 19,875.49             | 12,375.00             | 151.34           | 134.90        | -101.69               | -8,738.42                           | 3,090.14     | 1,756.17               | 1,559.28                | 196.90                    | 8.919             |                    |           |
| 19,900.00                         | 12,065.00             | 19,975.49             | 12,375.00             | 152.91           | 136.46        | -101.69               | -8,838.41                           | 3,091.12     | 1,756.17               | 1,557.10                | 199.07                    | 8.822             |                    |           |
| 20,000.00                         | 12,065.00             | 20,075.49             | 12,375.00             | 154.48           | 138.02        | -101.69               | -8,938.41                           | 3,092.10     | 1,756.18               | 1,554.92                | 201.25                    | 8.726             |                    |           |
| 20,100.00                         | 12,065.00             | 20,175.49             | 12,375.00             | 156.05           | 139.59        | -101.69               | -9,038.40                           | 3,093.08     | 1,756.18               | 1,552.74                | 203.43                    | 8.633             |                    |           |
| 20,200.00                         | 12,065.00             | 20,275.49             | 12,375.00             | 157.62           | 141.16        | -101.69               | -9,138.40                           | 3,094.05     | 1,756.18               | 1,550.56                | 205.62                    | 8.541             |                    |           |
| 20,300.00                         | 12,065.00             | 20,375.49             | 12,375.00             | 159.20           | 142.73        | -101.69               | -9,238.39                           | 3,095.03     | 1,756.18               | 1,548.38                | 207.80                    | 8.451             |                    |           |
| 20,400.00                         | 12,065.00             | 20,475.49             | 12,375.00             | 160.77           | 144.30        | -101.69               | -9,338.39                           | 3,096.01     | 1,756.18               | 1,546.19                | 209.99                    | 8.363             |                    |           |
| 20,500.00                         | 12,065.00             | 20,575.49             | 12,375.00             | 162.35           | 145.88        | -101.69               | -9,438.38                           | 3,096.99     | 1,756.18               | 1,544.00                | 212.18                    | 8.277             |                    |           |
| 20,600.00                         | 12,065.00             | 20,675.49             | 12,375.00             | 163.93           | 147.45        | -101.69               | -9,538.38                           | 3,097.97     | 1,756.18               | 1,541.81                | 214.37                    | 8.192             |                    |           |
| 20,700.00                         | 12,065.00             | 20,775.49             | 12,375.00             | 165.51           | 149.03        | -101.69               | -9,638.37                           | 3,098.95     | 1,756.18               | 1,539.62                | 216.57                    | 8.109             |                    |           |
| 20,800.00                         | 12,065.00             | 20,875.49             | 12,375.00             | 167.09           | 150.61        | -101.69               | -9,738.37                           | 3,099.93     | 1,756.18               | 1,537.42                | 218.76                    | 8.028             |                    |           |
| 20,900.00                         | 12,065.00             | 20,975.49             | 12,375.00             | 168.67           | 152.19        | -101.69               | -9,838.36                           | 3,100.91     | 1,756.18               | 1,535.22                | 220.96                    | 7.948             |                    |           |
| 21,000.00                         | 12,065.00             | 21,075.49             | 12,375.00             | 170.26           | 153.77        | -101.69               | -9,938.36                           | 3,101.88     | 1,756.18               | 1,533.02                | 223.16                    | 7.870             |                    |           |
| 21,100.00                         | 12,065.00             | 21,175.49             | 12,375.00             | 171.84           | 155.35        | -101.69               | -10,038.35                          | 3,102.86     | 1,756.18               | 1,530.82                | 225.36                    | 7.793             |                    |           |
| 21,200.00                         | 12,065.00             | 21,275.49             | 12,375.00             | 173.43           | 156.94        | -101.69               | -10,138.35                          | 3,103.84     | 1,756.19               | 1,528.62                | 227.56                    | 7.717             |                    |           |
| 21,300.00                         | 12,065.00             | 21,375.49             | 12,375.00             | 175.02           | 158.52        | -101.69               | -10,238.34                          | 3,104.82     | 1,756.19               | 1,526.42                | 229.77                    | 7.643             |                    |           |
| 21,400.00                         | 12,065.00             | 21,475.49             | 12,375.00             | 176.60           | 160.11        | -101.69               | -10,338.34                          | 3,105.80     | 1,756.19               | 1,524.21                | 231.97                    | 7.571             |                    |           |
| 21,500.00                         | 12,065.00             | 21,575.49             | 12,375.00             | 178.19           | 161.70        | -101.69               | -10,438.33                          | 3,106.78     | 1,756.19               | 1,522.01                | 234.18                    | 7.499             |                    |           |
| 21,600.00                         | 12,065.00             | 21,675.49             | 12,375.00             | 179.79           | 163.29        | -101.69               | -10,538.33                          | 3,107.76     | 1,756.19               | 1,519.80                | 236.39                    | 7.429             |                    |           |
| 21,700.00                         | 12,065.00             | 21,775.49             | 12,375.00             | 181.38           | 164.88        | -101.69               | -10,638.32                          | 3,108.74     | 1,756.19               | 1,517.59                | 238.60                    | 7.361             |                    |           |
| 21,800.00                         | 12,065.00             | 21,875.49             | 12,375.00             | 182.97           | 166.47        | -101.69               | -10,738.32                          | 3,109.71     | 1,756.19               | 1,515.38                | 240.81                    | 7.293             |                    |           |
| 21,900.00                         | 12,065.00             | 21,975.49             | 12,375.00             | 184.57           | 168.06        | -101.69               | -10,838.32                          | 3,110.69     | 1,756.19               | 1,513.17                | 243.02                    | 7.227             |                    |           |
| 22,000.00                         | 12,065.00             | 22,075.49             | 12,375.00             | 186.16           | 169.66        | -101.69               | -10,938.31                          | 3,111.67     | 1,756.19               | 1,510.96                | 245.23                    | 7.161             |                    |           |
| 22,100.00                         | 12,065.00             | 22,175.49             | 12,375.00             | 187.76           | 171.25        | -101.69               | -11,038.31                          | 3,112.65     | 1,756.19               | 1,508.74                | 247.45                    | 7.097             |                    |           |
| 22,200.00                         | 12,065.00             | 22,275.49             | 12,375.00             | 189.36           | 172.85        | -101.69               | -11,138.30                          | 3,113.63     | 1,756.19               | 1,506.53                | 249.66                    | 7.034             |                    |           |
| 22,300.00                         | 12,065.00             | 22,375.49             | 12,375.00             | 190.95           | 174.45        | -101.69               | -11,238.30                          | 3,114.61     | 1,756.19               | 1,504.31                | 251.88                    | 6.972             |                    |           |
| 22,400.00                         | 12,065.00             | 22,475.49             | 12,375.00             | 192.55           | 176.05        | -101.69               | -11,338.29                          | 3,115.59     | 1,756.19               | 1,502.09                | 254.10                    | 6.911             |                    |           |
| 22,445.57                         | 12,065.00             | 22,521.06             | 12,375.00             | 193.28           | 176.74        | -101.69               | -11,383.86                          | 3,116.03     | 1,756.20               | 1,501.11                | 255.08                    | 6.885 ES, SF      |                    |           |

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





# Total Directional Services

## Anticollision Report

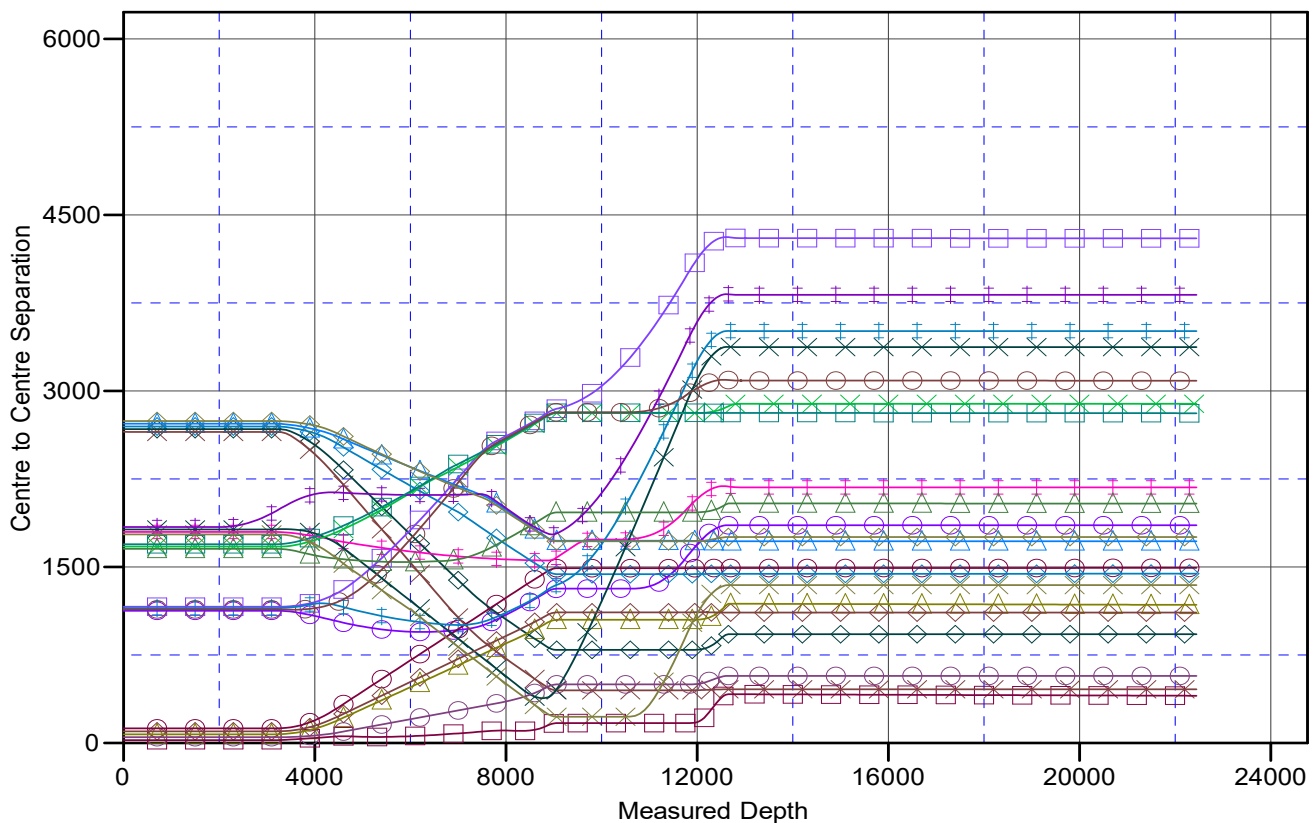


|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

Reference Depths are relative to 3136.1' GE + 30' KB @ 3166.10usft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -104.333334

Coordinates are relative to: Tatanka Fed Com 603H  
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone  
 Grid Convergence at Surface is: 0.53°

### Ladder Plot



### LEGEND

|                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|
| Tatanka Fed Com 502H, OH, Plan #1 V0 | Tatanka Fed Com 604H, OH, Plan #2 V0 | Tatanka Fed Com 104H, OH, Plan #1 V0 |
| Tatanka Fed Com 805H, OH, Plan #2 V0 | Tatanka Fed Com 103H, OH, Plan #1 V0 | Tatanka Fed Com 601H, OH, Plan #2 V0 |
| Tatanka Fed Com 704H, OH, Plan #2 V0 | Tatanka Fed Com 705H, OH, Plan #2 V0 | Tatanka Fed Com 703H, OH, Plan #1 V0 |
| Tatanka Fed Com 803H, OH, Plan #1 V0 | Tatanka Fed Com 801H, OH, Plan #1 V0 | Tatanka Fed Com 501H, OH, Plan #1 V0 |
| Tatanka Fed Com 504H, OH, Plan #1 V0 | Tatanka Fed Com 102H, OH, Plan #1 V0 | Tatanka Fed Com 602H, OH, Plan #1 V0 |
| Tatanka Fed Com 101H, OH, Plan #1 V0 | Tatanka Fed Com 802H, OH, Plan #2 V0 | Tatanka Fed Com 806H, OH, Plan #2 V0 |
| Tatanka Fed Com 702H, OH, Plan #1 V0 | Tatanka Fed Com 804H, OH, Plan #1 V0 | Tatanka Fed Com 503H, OH, Plan #1 V0 |

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



# Total Directional Services

## Anticollision Report



|                           |                          |                                     |                                   |
|---------------------------|--------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>           | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Tatanka Fed Com 603H         |
| <b>Project:</b>           | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Reference Site:</b>    | Tatanka Fed Com          | <b>MD Reference:</b>                | 3136.1' GE + 30' KB @ 3166.10usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                              |
| <b>Reference Well:</b>    | Tatanka Fed Com 603H     | <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> | OH                       | <b>Database:</b>                    | EDM 5000.15 Single User Db        |
| <b>Reference Design:</b>  | Plan #1                  | <b>Offset TVD Reference:</b>        | Offset Datum                      |

Reference Depths are relative to 3136.1' GE + 30' KB @ 3166.10usft

Offset Depths are relative to Offset Datum

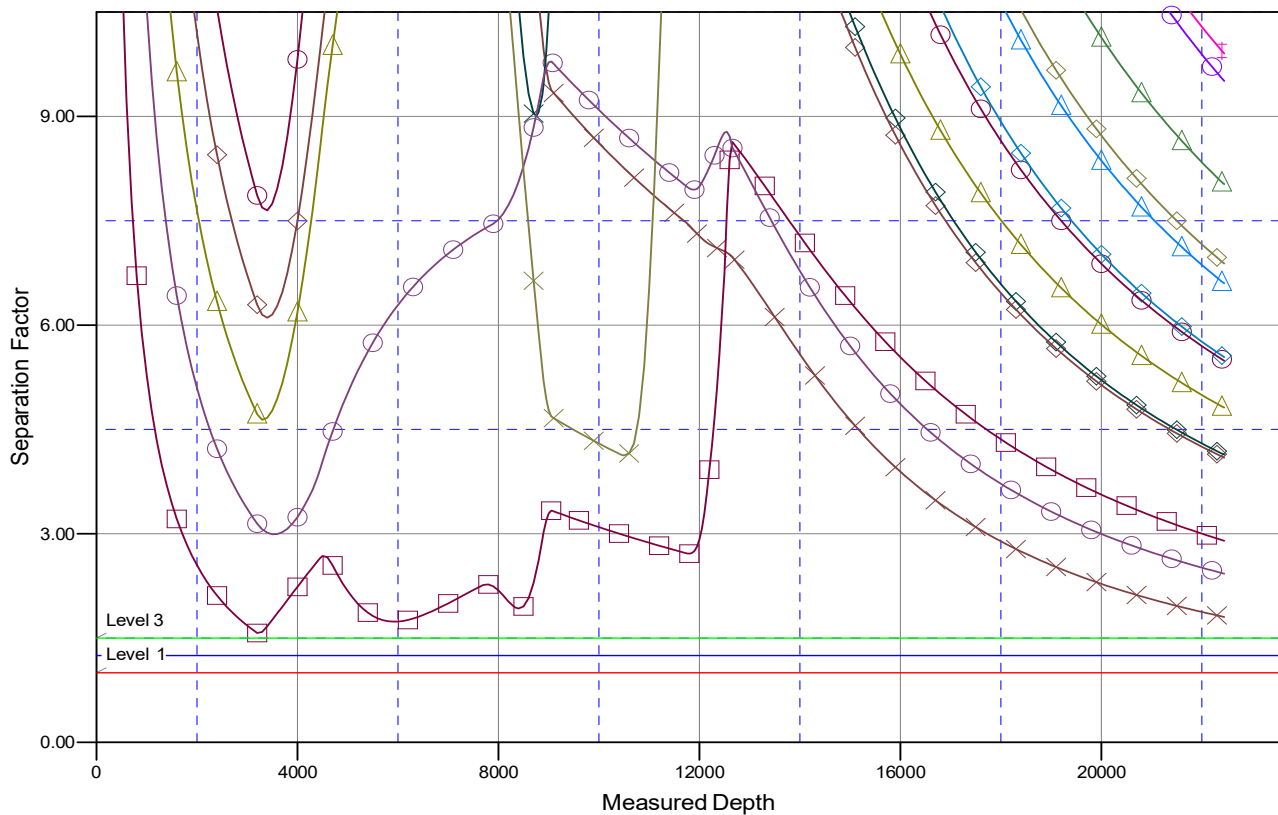
Central Meridian is -104.333334

Coordinates are relative to: Tatanka Fed Com 603H

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

Grid Convergence at Surface is: 0.53°

## Separation Factor Plot



### LEGEND

|                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|
| Tatanka Fed Com 502H, OH, Plan #1 V0 | Tatanka Fed Com 604H, OH, Plan #2 V0 | Tatanka Fed Com 104H, OH, Plan #1 V0 |
| Tatanka Fed Com 805H, OH, Plan #2 V0 | Tatanka Fed Com 103H, OH, Plan #1 V0 | Tatanka Fed Com 601H, OH, Plan #2 V0 |
| Tatanka Fed Com 704H, OH, Plan #2 V0 | Tatanka Fed Com 705H, OH, Plan #2 V0 | Tatanka Fed Com 703H, OH, Plan #1 V0 |
| Tatanka Fed Com 803H, OH, Plan #1 V0 | Tatanka Fed Com 801H, OH, Plan #2 V0 | Tatanka Fed Com 501H, OH, Plan #1 V0 |
| Tatanka Fed Com 504H, OH, Plan #1 V0 | Tatanka Fed Com 102H, OH, Plan #1 V0 | Tatanka Fed Com 602H, OH, Plan #1 V0 |
| Tatanka Fed Com 101H, OH, Plan #1 V0 | Tatanka Fed Com 802H, OH, Plan #2 V0 | Tatanka Fed Com 806H, OH, Plan #2 V0 |
| Tatanka Fed Com 702H, OH, Plan #1 V0 | Tatanka Fed Com 804H, OH, Plan #1 V0 | Tatanka Fed Com 503H, OH, Plan #1 V0 |

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

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

|                  |                              |
|------------------|------------------------------|
| OPERATOR'S NAME: | Franklin Mountain Energy LLC |
| LEASE NO.:       | NMNM12280                    |
| COUNTY:          | Lea County                   |

**Wells:**

Tatanka Fed Com 601H  
Tatanka Fed Com 801H  
Tatanka Fed Com 802H  
Tatanka Fed Com 502H  
Tatanka Fed Com 501H  
Tatanka Fed Com 102H  
Tatanka Fed Com 101H  
Tatanka Fed Com 603H

Tatanka Fed Com 804H  
Tatanka Fed Com 703H  
Tatanka Fed Com 803H  
Tatanka Fed Com 602H  
Tatanka Fed Com 702H  
Tatanka Fed Com 104H  
Tatanka Fed Com 103H  
Tatanka Fed Com 504H

Tatanka Fed Com 503H  
Tatanka Fed Com 806H  
Tatanka Fed Com 705H  
Tatanka Fed Com 604H  
Tatanka Fed Com 805H  
Tatanka Fed Com 704H

**TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - Watershed
  - Range
  - Lesser Prairie Chicken
  - VRM IV
- ☐ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
  - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be

responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

#### IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

#### V. SPECIAL REQUIREMENT(S)

##### **Watershed:**

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

##### **TANK BATTERY:**

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

##### **BURIED/SURFACE LINE(S):**

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

##### **ELECTRIC LINE(S):**

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or

floodplains and must span across the features at a distance away that would not promote further erosion.

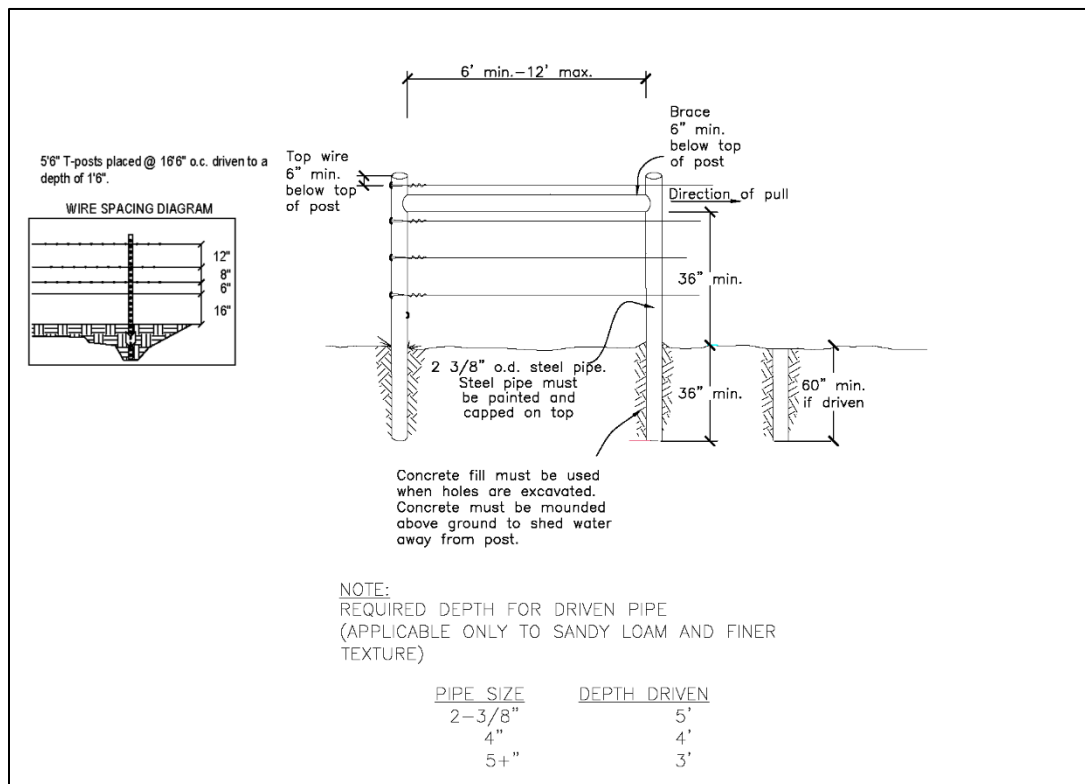
### **Range:**

### **Cattleguards**

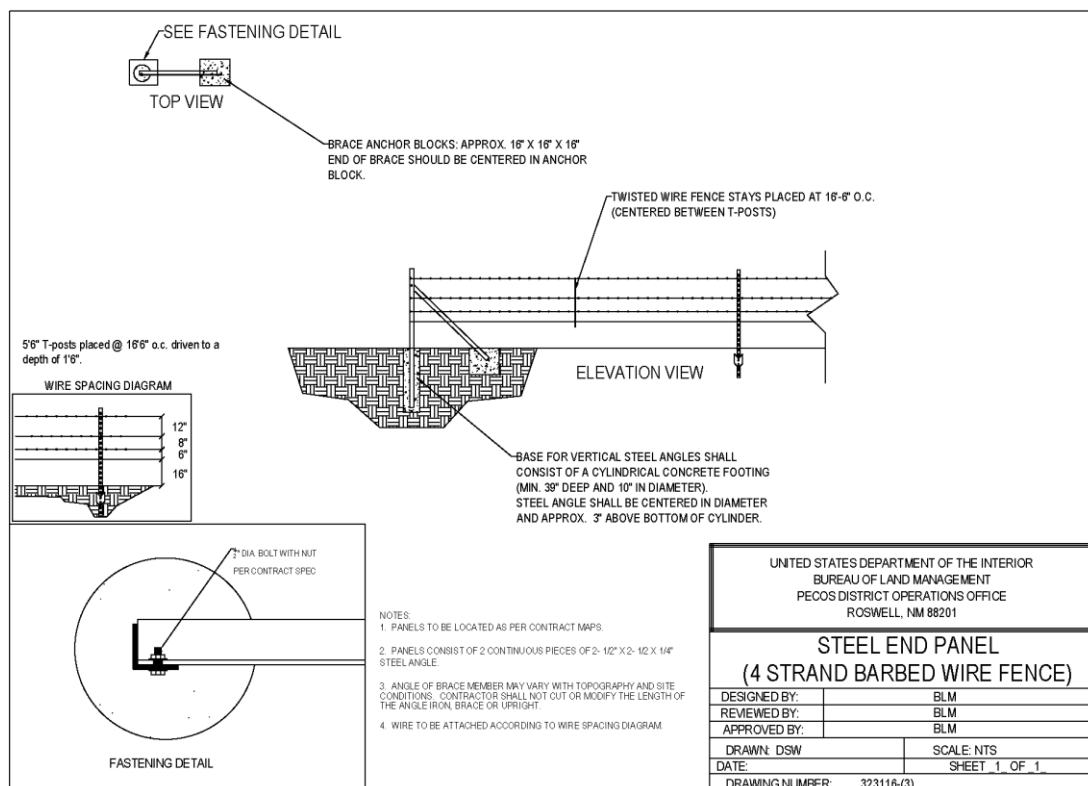
Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

### **Fence Requirement**

Where entry granted across a fence line, the fence must be H-braced or angle iron braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall consult the private surface landowner or the grazing allotment holder prior to cutting any fence(s).







### **Livestock Watering Requirement**

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

### **Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:**

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

### **Timing Limitation Exceptions:**

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary

Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Ground-level Abandoned Well Marker to avoid raptor perching:

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

#### **VRM IV:**

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, Carlsbad Canyon from the BLM Standard Environmental Color Chart (CC-001: June 2008).

Short-term mitigation measures include painting all above-ground structures that are not subject to safety requirements (including meter housing) Carlsbad Canyon, which is a flat non-reflective paint color listed in the BLM Standard Environmental Color Chart (CC-001: June 2013). Long-term mitigation measures include the removal of wells and associated infrastructure following abandonment (end of cost-effective production). Previously impacted areas will be reclaimed by removing structures and caliche pads, returning disturbed areas to natural grade, and revegetating with an approved BLM seed mixture; thereby eliminating visual impacts.

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

### **C. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

**D. FEDERAL MINERAL MATERIALS PIT**

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

**E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

**F. EXCLOSURE FENCING (CELLARS & PITS)**

**Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

**G. ON LEASE ACCESS ROADS**

**Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

**Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

**Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

**Ditching**

Ditching shall be required on both sides of the road.

### Turnouts

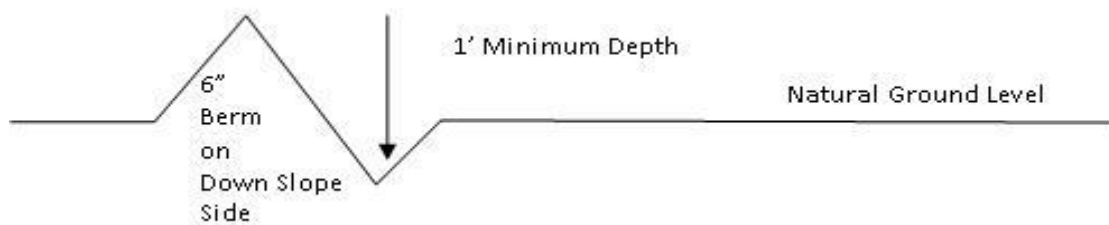
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

**Cross Section of a Typical Lead-off Ditch**



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

### Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

**Construction Steps**

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

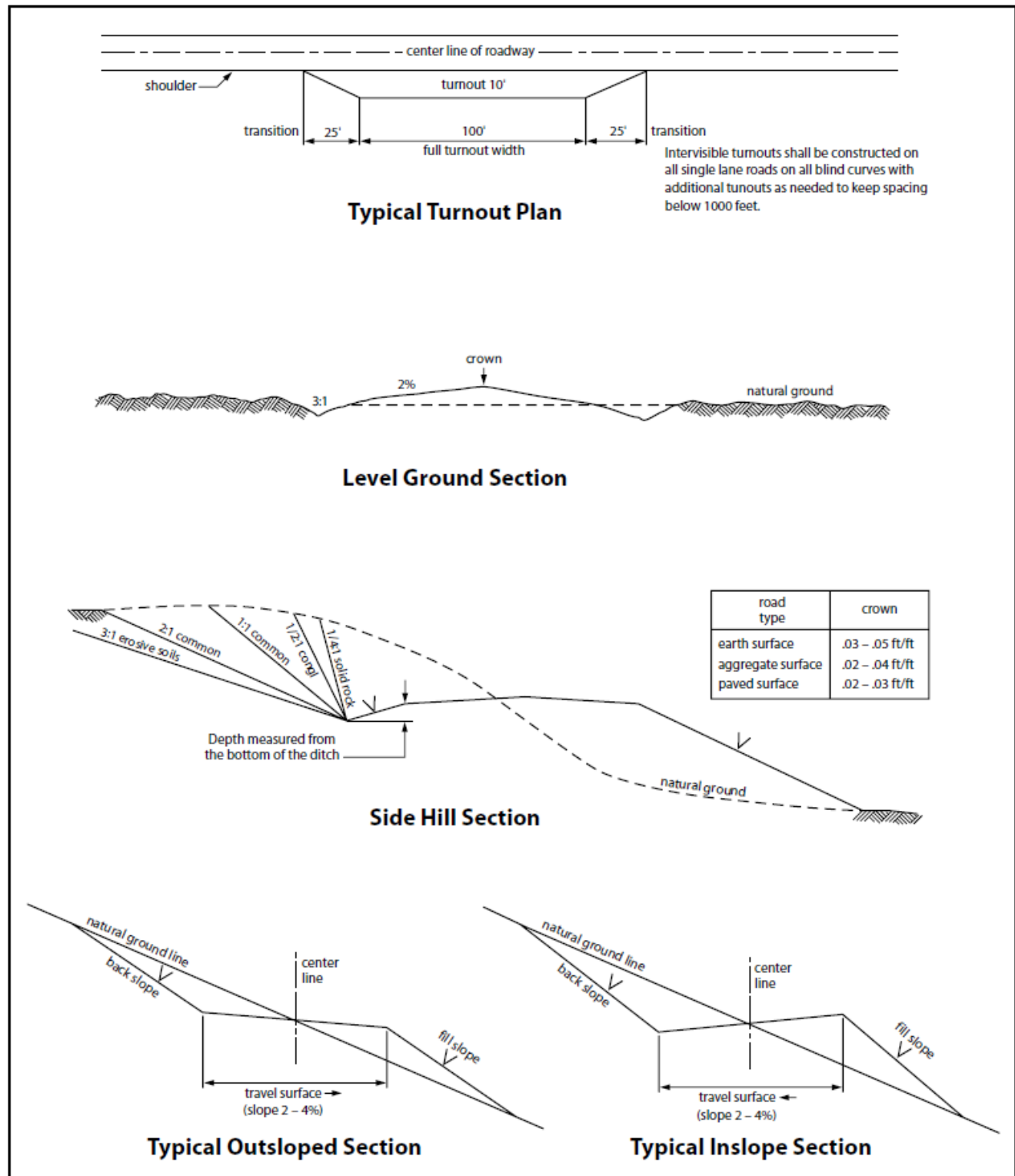


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.



## VII. PRODUCTION (POST DRILLING)

### A. WELL STRUCTURES & FACILITIES

#### Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

**B. PIPELINES**

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, siting valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

**BURIED PIPELINE STIPULATIONS**

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C.

9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

☐ Seed Mixture 1

☒ Seed Mixture 2

☐ Seed Mixture 2/LPC

☐ Seed Mixture 3

☐ Seed Mixture 4

☐ Seed Mixture Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 17 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

17. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

18. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

19. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

20. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

#### STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

**A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter

enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing
  - (2) Earth-disturbing and earth-moving work
  - (3) Blasting
  - (4) Vandalism and sabotage;

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of 30 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the



surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 16 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

16. The holder is hereby obligated to comply with procedures established in the Native American

Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

17. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

18. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

19. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

#### **C. ELECTRIC LINES**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

#### **STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES**

**A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-

way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 11 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

11. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

12. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

13. Special Stipulations:

For reclamation remove poles, lines, transformer, etc. and dispose of properly.  
Fill in any holes from the poles removed.

## **VIII. INTERIM RECLAMATION**

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

#### **IX. FINAL ABANDONMENT & RECLAMATION**

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

**Seed Mixture 2, for Sandy Sites**

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

**Species**

|                                                     | <u>lb/acre</u> |
|-----------------------------------------------------|----------------|
| Sand dropseed ( <i>Sporobolus cryptandrus</i> )     | 1.0            |
| Sand love grass ( <i>Eragrostis trichodes</i> )     | 1.0            |
| Plains bristlegrass ( <i>Setaria macrostachya</i> ) | 2.0            |

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

|                         |                                     |
|-------------------------|-------------------------------------|
| <b>OPERATOR'S NAME:</b> | <b>Franklin Mountain Energy LLC</b> |
| <b>LEASE NO.:</b>       | <b>NMNM12280</b>                    |
| <b>LOCATION:</b>        | Section 35, T.25 S., R.35 E., NMMPM |
| <b>COUNTY:</b>          | Lea County, New Mexico              |
| <b>Sundry ID:</b>       | N/A                                 |

|                              |                             |
|------------------------------|-----------------------------|
| <b>WELL NAME &amp; NO.:</b>  | <b>Tatanka Fed Com 602H</b> |
| <b>SURFACE HOLE FOOTAGE:</b> | 998'S & 1807'W              |
| <b>BOTTOM HOLE FOOTAGE:</b>  | 150'S & 2080'W              |

|                              |                             |
|------------------------------|-----------------------------|
| <b>WELL NAME &amp; NO.:</b>  | <b>Tatanka Fed Com 603H</b> |
| <b>SURFACE HOLE FOOTAGE:</b> | 998'S & 1907'W              |
| <b>BOTTOM HOLE FOOTAGE:</b>  | 150'S & 2100'E              |

COA

|                               |                                                   |                                            |                                          |
|-------------------------------|---------------------------------------------------|--------------------------------------------|------------------------------------------|
| H2S                           | <input checked="" type="checkbox"/> Yes           | <input type="checkbox"/> No                |                                          |
| Potash                        | <input checked="" type="checkbox"/> None          | <input type="checkbox"/> Secretary         | <input type="checkbox"/> R-111-P         |
| Cave/Karst Potential          | <input checked="" type="checkbox"/> Low           | <input type="checkbox"/> Medium            | <input type="checkbox"/> High            |
| Cave/Karst Potential          | <input type="checkbox"/> Critical                 |                                            |                                          |
| Variance                      | <input checked="" type="checkbox"/> None          | <input type="checkbox"/> Flex Hose         | <input type="checkbox"/> Other           |
| Wellhead                      | <input type="checkbox"/> Conventional             | <input type="checkbox"/> Multibowl         | <input checked="" type="checkbox"/> Both |
| Wellhead Variance             | <input type="checkbox"/> Diverter                 |                                            |                                          |
| Other                         | <input checked="" type="checkbox"/> 4 String Area | <input type="checkbox"/> Capitan Reef      | <input type="checkbox"/> WIPP            |
| Other                         | <input checked="" type="checkbox"/> Fluid Filled  | <input type="checkbox"/> Pilot Hole        | <input type="checkbox"/> Open Annulus    |
| Cementing                     | <input type="checkbox"/> Cement Squeeze           | <input type="checkbox"/> EchoMeter         |                                          |
| Special Requirements          | <input type="checkbox"/> Water Disposal           | <input checked="" type="checkbox"/> COM    | <input type="checkbox"/> Unit            |
| Special Requirements Variance | <input type="checkbox"/> Break Testing            | <input type="checkbox"/> Offline Cementing |                                          |

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Strawn** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

**B. CASING**

1. The **13-3/8** inch surface casing shall be set at approximately **1110 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and 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 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.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.

**Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

## C. PRESSURE CONTROL

1.

### Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi.**
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** intermediate casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** inch intermediate casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

### Option 2:

- a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. 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. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. 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.
  - v. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

**D. SPECIAL REQUIREMENT (S)****Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 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. 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.
- 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.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

1. 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. 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 Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. 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 be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. 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.

## A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). 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.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. 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.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. 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. 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.
7. 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.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

## B. PRESSURE CONTROL



1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires 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.
4. 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 OOGO2.III.A.2.i 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.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. 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).

- b. 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, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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 Onshore Order No. 2.

C. DRILLING MUD

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.

D. WASTE MATERIAL AND FLUIDS

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.

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

**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 88315

**CONDITIONS**

|                                                                                 |                                                                       |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Operator:<br>Franklin Mountain Energy LLC<br>44 Cook Street<br>Denver, CO 80206 | OGRID:<br>373910                                                      |
|                                                                                 | Action Number:<br>88315                                               |
|                                                                                 | Action Type:<br>[C-101] BLM - Federal/Indian Land Lease (Form 3160-3) |

**CONDITIONS**

| Created By | Condition                                                                                                                                                                                                                                                            | Condition Date |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| pkautz     | Will require a File As Drilled C-102 and a Directional Survey with the C-104                                                                                                                                                                                         | 3/16/2022      |
| pkautz     | 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 | 3/16/2022      |
| pkautz     | 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                  | 3/16/2022      |
| pkautz     | Cement is required to circulate on both surface and intermediate1 strings of casing                                                                                                                                                                                  | 3/16/2022      |