

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		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator <b>[373910]</b>		8. Lease Name and Well No. <b>[330329]</b>
3a. Address	3b. Phone No. (include area code)	9. API Well No. <b>30-025-48580</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory <b>97088</b>
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish
16. No of acres in lease		13. State
17. Spacing Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. in file
19. Proposed Depth		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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

**GCP Rec 03/29/2021**

**KZ**  
**03/30/2021**

SL

(Continued on page 2)

\*(Instructions on page 2)



**Approval Date: 01/15/2021**

## 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 a new 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.





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 <b>30-025-48580</b>		<sup>2</sup> Pool Code <b>97088</b>		<sup>3</sup> Pool Name <b>WC-025 G-08 S2535340;BONE SPRING</b>	
<sup>4</sup> Property Code <b>330329</b>		<sup>5</sup> Property Name TRINITY FEDERAL		<sup>6</sup> Well Number 602H	
<sup>7</sup> OGRID No. 373910		<sup>8</sup> Operator Name FRANKLIN MOUNTAIN ENERGY LLC		<sup>9</sup> Elevation 3099.1'	

<sup>10</sup> Surface Location									
UL or lot no. N	Section 24	Township 25S	Range 35E	Lot Idn	Feet from the 710	North/South line SOUTH	Feet from the 2584	East/West line WEST	County LEA

<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no. C	Section 13	Township 25S	Range 35E	Lot Idn	Feet from the 150	North/South line NORTH	Feet from the 1800	East/West line WEST	County LEA
<sup>12</sup> Dedicated Acres 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>16</sup>

- = SURFACE HOLE LOCATION
- ◆ = KOP/PPP
- = BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED
- △ = SECTION CORNER RE-ESTABLISHED.  
(Not Set on Ground.)

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S49°58'00"W	1021.15'
L2	N00°14'57"W	578.51'

**NAD 83 (SURFACE HOLE LOCATION)**  
LATITUDE = 32°06'38.06" (32.110573°)  
LONGITUDE = 103°19'17.17" (103.321437°)

**NAD 27 (SURFACE HOLE LOCATION)**  
LATITUDE = 32°06'37.60" (32.110446°)  
LONGITUDE = 103°19'15.51" (103.320975°)

**STATE PLANE NAD 83 (N.M. EAST)**  
N: 405433.35' E: 854643.32'

**STATE PLANE NAD 27 (N.M. EAST)**  
N: 405375.10' E: 813456.08'

**NAD 83 (KICK OFF POINT)**  
LATITUDE = 32°06'31.60" (32.108779°)  
LONGITUDE = 103°19'26.30" (103.323973°)

**NAD 27 (KICK OFF POINT)**  
LATITUDE = 32°06'31.15" (32.108652°)  
LONGITUDE = 103°19'24.64" (103.323511°)

**STATE PLANE NAD 83 (N.M. EAST)**  
N: 404773.35' E: 853864.32'

**STATE PLANE NAD 27 (N.M. EAST)**  
N: 404715.12' E: 812677.06'

**NAD 83 (PPP #1)**  
LATITUDE = 32°06'37.33" (32.110368°)  
LONGITUDE = 103°19'26.30" (103.323971°)

**NAD 27 (PPP #1)**  
LATITUDE = 32°06'36.87" (32.110242°)  
LONGITUDE = 103°19'24.63" (103.323509°)

**STATE PLANE NAD 83 (N.M. EAST)**  
N: 405351.76' E: 853859.39'

**STATE PLANE NAD 27 (N.M. EAST)**  
N: 405293.52' E: 812672.15'

**NAD 83 (BOTTOM HOLE LOCATION)**  
LATITUDE = 32°08'14.05" (32.137235°)  
LONGITUDE = 103°19'26.20" (103.323945°)

**NAD 27 (BOTTOM HOLE LOCATION)**  
LATITUDE = 32°08'13.59" (32.137109°)  
LONGITUDE = 103°19'24.53" (103.323481°)

**STATE PLANE NAD 83 (N.M. EAST)**  
N: 415126.03' E: 853776.08'

**STATE PLANE NAD 27 (N.M. EAST)**  
N: 415067.52' E: 812589.23'

**NOTE:**

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

SCALE

DRAWN BY: J.U. 02-18-20  
REV: 2 07-28-20 C.D.  
(ADDED PPPS & LEASE INFO.)

**<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

7/29/2020  
 Signature Date

Shelly Albrecht  
 Printed Name  
 salbrecht@fmellc.com  
 E-mail Address

**<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 9, 2020

Date of Survey  
Signature and Seal of Professional Surveyor:

Certificate Number:

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original  
to Appropriate  
District Office

**GAS CAPTURE PLAN**

Date: 12/2/2020

Original Operator & OGRID No.: Franklin Mountain Energy, LLC 373910  
 Amended - Reason for Amendment: \_\_\_\_\_

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

*Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).*

**Well(s)/Production Facility – Name of facility**

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Trinity Federal 602H	TBD 30-025-48580	N-24-25S-35E	710 FSL 2584 FWL	1100 +/-	Flared	New well; expect to tie-in at IP
Trinity Federal 703H	TBD	N-24-25S-35E	710 FSL 2619 FWL	1100 +/-	Flared	New well; expect to tie-in at IP
Santa Fe Fed Com 704H	TBD	O-24-25S-35E	710 FSL 2626 FEL	1100 +/-	Flared	New well; expect to tie-in at IP

**Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Energy Transfer Company and will be connected to Energy Transfer Company’s gathering system located in Lea County, New Mexico. It will require 3,500’ of pipeline to connect the facility to low/high pressure gathering system. Franklin Mountain Energy, LLC provides (periodically) to Energy Transfer Company a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Franklin Mountain Energy, LLC and Energy Transfer Company have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Energy Transfer Company’s Keystone Gas Processing Facility located in Sec.5, Block B-2, Kermit, Winkler Co., Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

**Flowback Strategy**

After the fracture treatment/completion operations, well(s) will be produced to permanent central tank battery and gas will be sold or flared. Gas sales should start as soon as the wells start producing gas unless there are operational issues on Energy Transfer Company’s system at that time. Based on current information, it is Franklin Mountain Energy’s belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

**Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines



# Trinity Federal 602H

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)	3,099'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,378'	751'			Carbonates
Salado	1,775'	1,354'			Salt, Carbonate & Clastics
Base Salt	-1,026'	4,155'			Shaley Carbonate & Shale
Lamar	-1,792'	4,921'			Carbonate & Clastics
Bell Canyon	-1,844'	4,973'			Sandstone - oil/gas/water
Cherry Canyon	-2,877'	6,006'			Sandstone - oil/gas/water
Brushy Canyon	-4,179'	7,308'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,430'	8,559'			Shale/Carbonates - oil/gas
Avalon	-5,453'	8,582'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,842'	9,971'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,970'	10,099'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,364'	10,493'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,814'	10,943'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,464'	11,593'			Sandstone - oil/gas/water
HZ Target at SHL	-8,632'	11,761'			Overpressure shale/sand- Oil/Gas
Wolfcamp	-8,767'	11,896'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,802'	11,931'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,994'	12,123'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	4,973'	Oil
Bone Spring	9,971'	Oil
Wolfcamp	11,896'	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. Capitan Reef boundary is near surface hole locations, but exact location is unknown. While drilling, FME will be prepared to switch over to fresh water should we encounter the reef and have losses up to 50%.

4. Casing Program:

All casings 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 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5400	1.72	1.67	2.90	3.30
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	12163	1.09	1.26	1.79	1.22
Long string 5 1/2"	23	P-110	14520	14520	729	Anaconda 656	21938	1.32	1.41	1.21	1.09

Safety factors calculated assuming the well is vertical.





**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		Sacks	Type of cmt	Lead			Sacks	Type of cmt	Tail			Excess
		Size	Setting Depth			Yield ft3/sk	Water gal/sk	TOC ft			Yield ft3/sk	Water gal/sk	TOC	
Surf	17.5	13.375	1300	795	Extenda Cem, 13.5 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	HalCem TM, 14.8 ppg, Class C, 1% CaCl <sub>2</sub> , 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5400	1167	Neocem TM, 11.5 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	2.444	14.32	0	153	HalCem TM, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.334	6.42	5100	100%
Int2	8.75	7.625	12163	350	NeoCem, 11 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.798	17.15	4400	112	NeoCem 13.2 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl <sub>2</sub>	1.44	7.29	11163	50%
Prod	6.75	5.5	21938	793	NeoCem, 13.5 ppg, Gas Migration Control	1.357	6.65	11163						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 ½" 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' – 12,163'	Brine	8.8-10.2	28-34	N/c
12,163' – 21,938' Lateral	Oil Base	10.0-11.0	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 11,760' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,338 psig (based on 12 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/Escape 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 be 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 Cameron 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.

# Franklin Mountain Energy

Project: Lea County, NM (NAD83)  
 Site: Trinity Fed/Santa Fe Fed  
 Well: Trinity Federal 602H  
 Wellbore: OH  
 Design: Plan #2

3099.1' GE + 30' KB @ 3129.10usft



Azimuths to Grid North  
 True North: -0.54°  
 Magnetic North: 6.03°

Magnetic Field  
 Strength: 47586.4nT  
 Dip Angle: 59.88°  
 Date: 3/10/2020  
 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



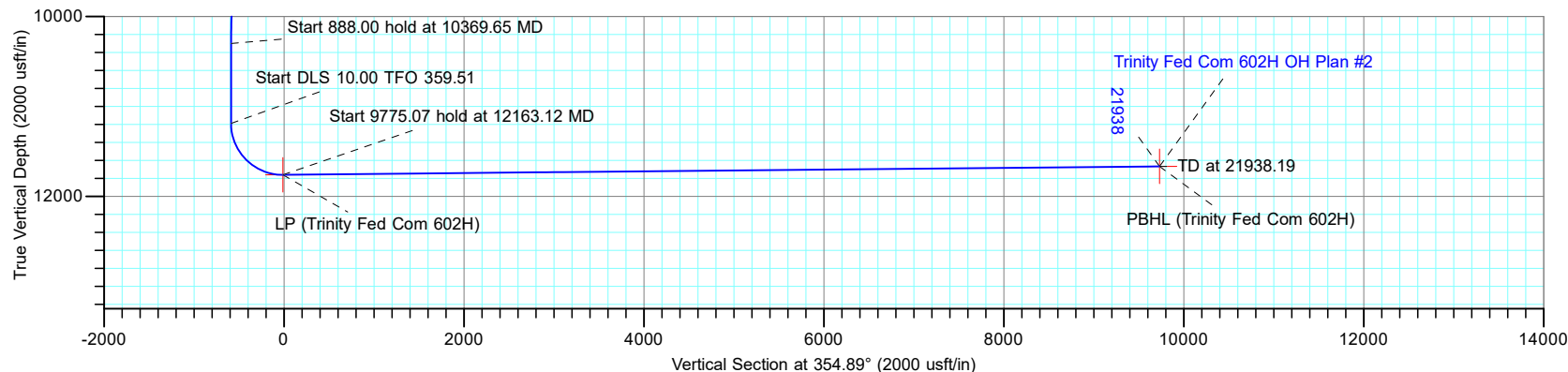
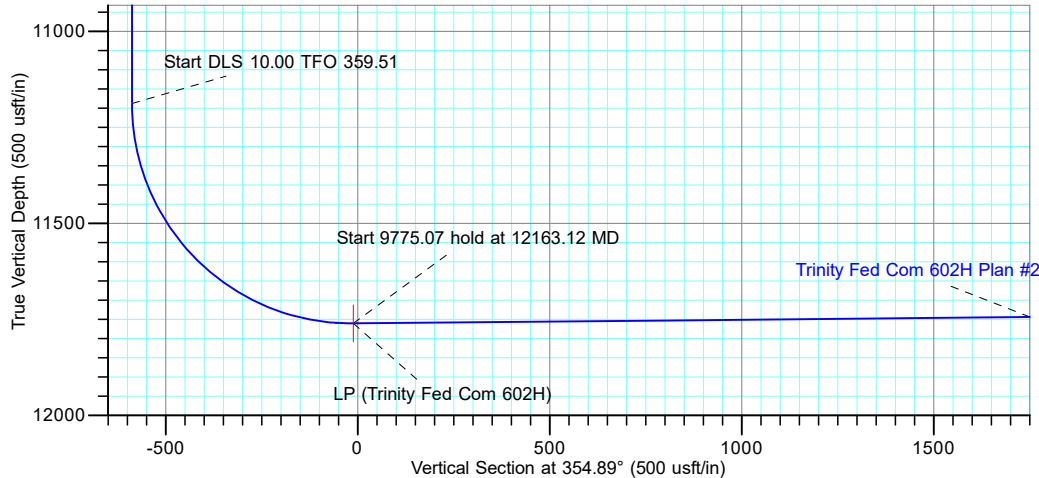
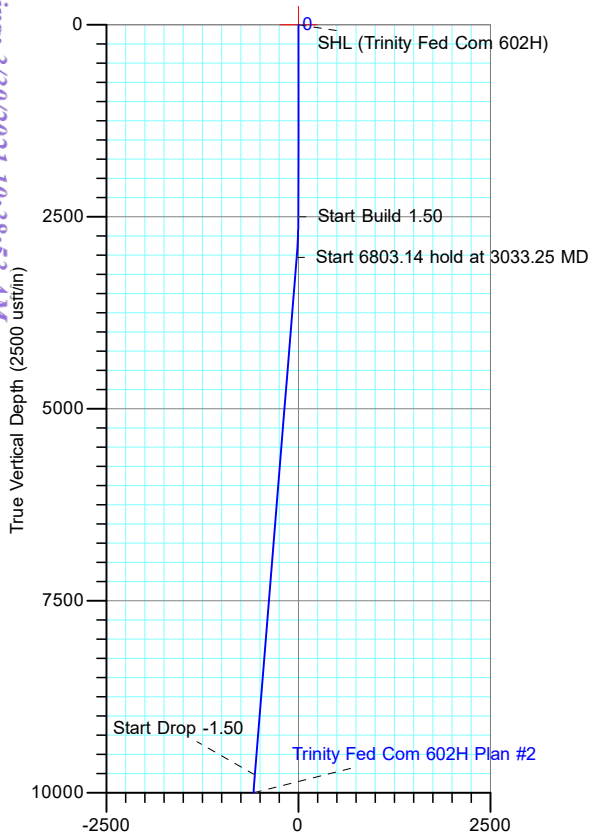
Received by OCD: 3/26/2021 4:47:10 PM

### 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	Start Build 1.50
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	Start 6803.14 hold at 3033.25 MD
3033.25	8.00	229.73	3031.52	-24.02	-28.35	1.50	229.73	-21.40	Start Drop -1.50
9836.39	8.00	229.73	9768.48	-635.98	-750.65	0.00	0.00	-566.55	Start 888.00 hold at 10369.65 MD
10369.65	0.00	0.00	10300.00	-660.00	-779.00	1.50	180.00	-587.95	Start DLS 10.00 TFO 359.51
11257.65	0.00	0.00	11188.00	-660.00	-779.00	0.00	0.00	-587.95	Start 9775.07 hold at 12163.12 MD
12163.12	90.55	359.51	11760.93	-81.59	-783.93	10.00	359.51	-11.40	TD at 21938.19
21938.19	90.55	359.51	11667.58	9692.68	-867.24	0.00	0.00	9731.40	

### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (Trinity Fed Com 602H)	11760.93	-81.59	-783.93	32.110368	-103.323971
PBHL (Trinity Fed Com 602H)	11667.58	9692.68	-867.24	32.137235	-103.323945
SHL (Trinity Fed Com 602H)	0.00	0.00	0.00	32.110573	-103.321437



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

Plan: Plan #2 (Trinity Fed Com 602H/OH)  
 Trinity Fed/Santa Fe Fed  
 Created By: Dustin Ault Date: 13:18, July 15 2020  
 Date: \_\_\_\_\_ Date: \_\_\_\_\_  
 Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Page 13 of 113

Released to Imaging: 3/30/2021 10:38:53 AM

# Franklin Mountain Energy

Project: Lea County, NM (NAD83)  
 Site: Trinity Fed/Santa Fe Fed  
 Well: Trinity Fed Com 602H  
 Wellbore: OH  
 Design: Plan #2



Azimuths to Grid North  
 True North: -0.54°  
 Magnetic North: 6.03°

Magnetic Field  
 Strength: 47586.4nT  
 Dip Angle: 59.88°  
 Date: 3/10/2020  
 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

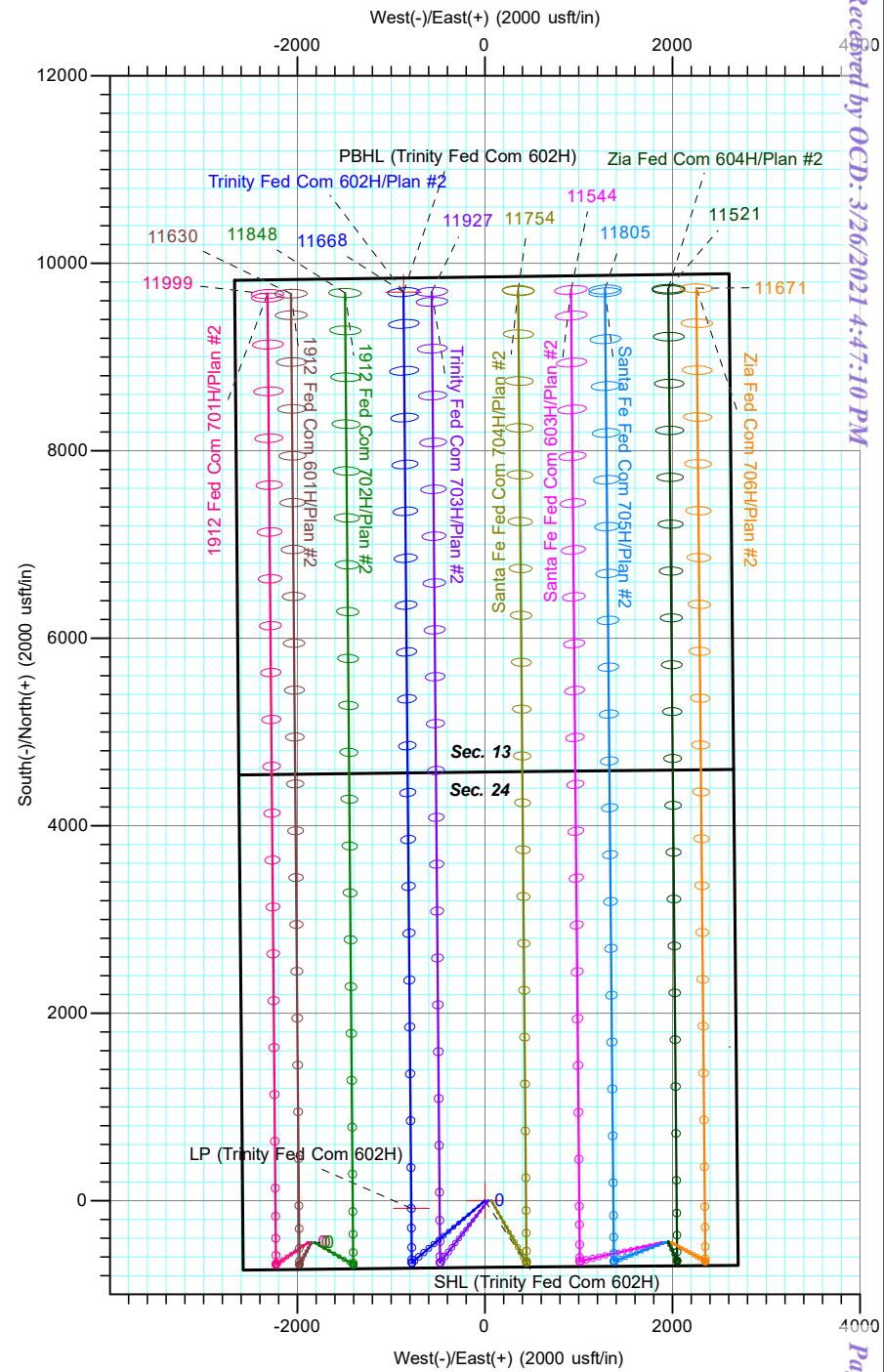
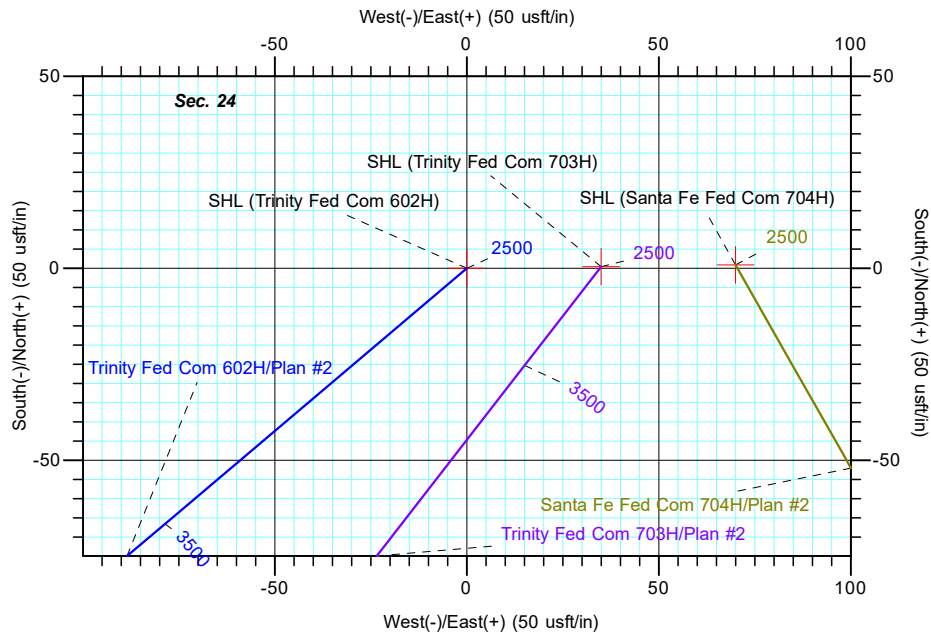


### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (Trinity Fed Com 602H)	11760.93	-81.59	-783.93	405351.76	853859.39	32.110368	-103.323971
PBHL (Trinity Fed Com 602H)	11667.58	9692.68	-867.24	415126.03	853776.08	32.137235	-103.323945
SHL (Trinity Fed Com 602H)	0.00	0.00	0.00	405433.35	854643.32	32.110573	-103.321437

### 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	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
3033.25	8.00	229.73	3031.52	-24.02	-28.35	1.50	229.73	-21.40	Start 6803.14 hold at 3033.25 MD
9836.39	8.00	229.73	9768.48	-635.98	-750.65	0.00	0.00	-566.55	Start Drop -1.50
10369.65	0.00	0.00	10300.00	-660.00	-779.00	1.50	180.00	-587.95	Start 888.00 hold at 10369.65 MD
11257.65	0.00	0.00	11188.00	-660.00	-779.00	0.00	0.00	-587.95	Start DLS 10.00 TFO 359.51
12163.12	90.55	359.51	11760.93	-81.59	-783.93	10.00	359.51	-11.40	Start 9775.07 hold at 12163.12 MD
21938.19	90.55	359.51	11667.58	9692.68	-867.24	0.00	0.00	9731.40	TD at 21938.19



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

Plan: Plan #2 (Trinity Fed Com 602H/OH)  
 Trinity Fed/Santa Fe Fed  
 Created By: Dustin Ault Date: 13:19, July 15 2020  
 Date: \_\_\_\_\_  
 Approved: \_\_\_\_\_ Date: \_\_\_\_\_



# Franklin Mountain Energy

Lea County, NM (NAD83)  
Trinity Fed/Santa Fe Fed  
Trinity Fed Com 602H

OH

Plan: Plan #2

## Standard Planning Report

15 July, 2020





**Total Directional Services**  
Planning Report



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

<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		

<b>Site</b>	Trinity Fed/Santa Fe Fed				
<b>Site Position:</b>	<b>Northing:</b>	405,220.81 usft	<b>Latitude:</b>	32.109994	
<b>From:</b> Map	<b>Easting:</b>	854,430.99 usft	<b>Longitude:</b>	-103.322130	
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.54 °

<b>Well</b>	Trinity Fed Com 602H					
<b>Well Position</b>	<b>+N/-S</b>	212.54 usft	<b>Northing:</b>	405,433.35 usft	<b>Latitude:</b>	32.110573
	<b>+E/-W</b>	212.33 usft	<b>Easting:</b>	854,643.32 usft	<b>Longitude:</b>	-103.321438
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	3,099.10 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	3/10/2020	6.57	59.88	47,586.39794920

<b>Design</b>	Plan #2			
<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	354.89

<b>Plan Survey Tool Program</b>	<b>Date</b>	7/15/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	21,938.19 Plan #2 (OH)	OWSG (Rev2) MWD	
			OWSG MWD - Standard	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.01	2,500.00	0.00	0.00	0.00	0.00	0.00	0.01	
3,033.25	8.00	229.73	3,031.52	-24.02	-28.35	1.50	1.50	0.00	229.73	
9,836.39	8.00	229.73	9,768.48	-635.98	-750.65	0.00	0.00	0.00	0.00	
10,369.65	0.00	0.00	10,300.00	-660.00	-779.00	1.50	-1.50	0.00	180.00	
11,257.65	0.00	0.00	11,188.00	-660.00	-779.00	0.00	0.00	0.00	0.00	
12,163.12	90.55	359.51	11,760.93	-81.59	-783.93	10.00	10.00	-0.05	359.51	
21,938.19	90.55	359.51	11,667.58	9,692.68	-867.24	0.00	0.00	0.00	0.00	PBHL (Trinity Fed Coi





**Total Directional Services**  
 Planning Report



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>SHL (Trinity Fed Com 602H)</b>									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	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
<b>Start Build 1.50</b>									
2,600.00	1.50	229.73	2,599.99	-0.85	-1.00	-0.75	1.50	1.50	0.00
2,700.00	3.00	229.73	2,699.91	-3.38	-3.99	-3.01	1.50	1.50	0.00
2,800.00	4.50	229.73	2,799.69	-7.61	-8.98	-6.78	1.50	1.50	0.00
2,900.00	6.00	229.73	2,899.27	-13.53	-15.97	-12.05	1.50	1.50	0.00
3,000.00	7.50	229.73	2,998.57	-21.12	-24.93	-18.82	1.50	1.50	0.00
3,033.25	8.00	229.73	3,031.52	-24.02	-28.35	-21.40	1.50	1.50	0.00
<b>Start 6803.14 hold at 3033.25 MD</b>									
3,100.00	8.00	229.73	3,097.62	-30.03	-35.44	-26.75	0.00	0.00	0.00
3,200.00	8.00	229.73	3,196.65	-39.02	-46.06	-34.76	0.00	0.00	0.00
3,300.00	8.00	229.73	3,295.67	-48.02	-56.67	-42.78	0.00	0.00	0.00
3,400.00	8.00	229.73	3,394.70	-57.01	-67.29	-50.79	0.00	0.00	0.00
3,500.00	8.00	229.73	3,493.73	-66.01	-77.91	-58.80	0.00	0.00	0.00
3,600.00	8.00	229.73	3,592.76	-75.00	-88.53	-66.81	0.00	0.00	0.00
3,700.00	8.00	229.73	3,691.78	-84.00	-99.14	-74.83	0.00	0.00	0.00
3,800.00	8.00	229.73	3,790.81	-92.99	-109.76	-82.84	0.00	0.00	0.00
3,900.00	8.00	229.73	3,889.84	-101.99	-120.38	-90.85	0.00	0.00	0.00
4,000.00	8.00	229.73	3,988.86	-110.98	-130.99	-98.87	0.00	0.00	0.00
4,100.00	8.00	229.73	4,087.89	-119.98	-141.61	-106.88	0.00	0.00	0.00
4,200.00	8.00	229.73	4,186.92	-128.97	-152.23	-114.89	0.00	0.00	0.00
4,300.00	8.00	229.73	4,285.95	-137.97	-162.84	-122.91	0.00	0.00	0.00
4,400.00	8.00	229.73	4,384.97	-146.96	-173.46	-130.92	0.00	0.00	0.00
4,500.00	8.00	229.73	4,484.00	-155.96	-184.08	-138.93	0.00	0.00	0.00
4,600.00	8.00	229.73	4,583.03	-164.95	-194.70	-146.95	0.00	0.00	0.00
4,700.00	8.00	229.73	4,682.05	-173.95	-205.31	-154.96	0.00	0.00	0.00
4,800.00	8.00	229.73	4,781.08	-182.94	-215.93	-162.97	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 Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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	8.00	229.73	4,880.11	-191.94	-226.55	-170.99	0.00	0.00	0.00
5,000.00	8.00	229.73	4,979.14	-200.93	-237.16	-179.00	0.00	0.00	0.00
5,100.00	8.00	229.73	5,078.16	-209.93	-247.78	-187.01	0.00	0.00	0.00
5,200.00	8.00	229.73	5,177.19	-218.93	-258.40	-195.03	0.00	0.00	0.00
5,300.00	8.00	229.73	5,276.22	-227.92	-269.02	-203.04	0.00	0.00	0.00
5,400.00	8.00	229.73	5,375.24	-236.92	-279.63	-211.05	0.00	0.00	0.00
5,500.00	8.00	229.73	5,474.27	-245.91	-290.25	-219.07	0.00	0.00	0.00
5,600.00	8.00	229.73	5,573.30	-254.91	-300.87	-227.08	0.00	0.00	0.00
5,700.00	8.00	229.73	5,672.32	-263.90	-311.48	-235.09	0.00	0.00	0.00
5,800.00	8.00	229.73	5,771.35	-272.90	-322.10	-243.11	0.00	0.00	0.00
5,900.00	8.00	229.73	5,870.38	-281.89	-332.72	-251.12	0.00	0.00	0.00
6,000.00	8.00	229.73	5,969.41	-290.89	-343.33	-259.13	0.00	0.00	0.00
6,100.00	8.00	229.73	6,068.43	-299.88	-353.95	-267.15	0.00	0.00	0.00
6,200.00	8.00	229.73	6,167.46	-308.88	-364.57	-275.16	0.00	0.00	0.00
6,300.00	8.00	229.73	6,266.49	-317.87	-375.19	-283.17	0.00	0.00	0.00
6,400.00	8.00	229.73	6,365.51	-326.87	-385.80	-291.19	0.00	0.00	0.00
6,500.00	8.00	229.73	6,464.54	-335.86	-396.42	-299.20	0.00	0.00	0.00
6,600.00	8.00	229.73	6,563.57	-344.86	-407.04	-307.21	0.00	0.00	0.00
6,700.00	8.00	229.73	6,662.60	-353.85	-417.65	-315.22	0.00	0.00	0.00
6,800.00	8.00	229.73	6,761.62	-362.85	-428.27	-323.24	0.00	0.00	0.00
6,900.00	8.00	229.73	6,860.65	-371.84	-438.89	-331.25	0.00	0.00	0.00
7,000.00	8.00	229.73	6,959.68	-380.84	-449.50	-339.26	0.00	0.00	0.00
7,100.00	8.00	229.73	7,058.70	-389.83	-460.12	-347.28	0.00	0.00	0.00
7,200.00	8.00	229.73	7,157.73	-398.83	-470.74	-355.29	0.00	0.00	0.00
7,300.00	8.00	229.73	7,256.76	-407.82	-481.36	-363.30	0.00	0.00	0.00
7,400.00	8.00	229.73	7,355.79	-416.82	-491.97	-371.32	0.00	0.00	0.00
7,500.00	8.00	229.73	7,454.81	-425.81	-502.59	-379.33	0.00	0.00	0.00
7,600.00	8.00	229.73	7,553.84	-434.81	-513.21	-387.34	0.00	0.00	0.00
7,700.00	8.00	229.73	7,652.87	-443.80	-523.82	-395.36	0.00	0.00	0.00
7,800.00	8.00	229.73	7,751.89	-452.80	-534.44	-403.37	0.00	0.00	0.00
7,900.00	8.00	229.73	7,850.92	-461.80	-545.06	-411.38	0.00	0.00	0.00
8,000.00	8.00	229.73	7,949.95	-470.79	-555.68	-419.40	0.00	0.00	0.00
8,100.00	8.00	229.73	8,048.97	-479.79	-566.29	-427.41	0.00	0.00	0.00
8,200.00	8.00	229.73	8,148.00	-488.78	-576.91	-435.42	0.00	0.00	0.00
8,300.00	8.00	229.73	8,247.03	-497.78	-587.53	-443.44	0.00	0.00	0.00
8,400.00	8.00	229.73	8,346.06	-506.77	-598.14	-451.45	0.00	0.00	0.00
8,500.00	8.00	229.73	8,445.08	-515.77	-608.76	-459.46	0.00	0.00	0.00
8,600.00	8.00	229.73	8,544.11	-524.76	-619.38	-467.48	0.00	0.00	0.00
8,700.00	8.00	229.73	8,643.14	-533.76	-629.99	-475.49	0.00	0.00	0.00
8,800.00	8.00	229.73	8,742.16	-542.75	-640.61	-483.50	0.00	0.00	0.00
8,900.00	8.00	229.73	8,841.19	-551.75	-651.23	-491.52	0.00	0.00	0.00
9,000.00	8.00	229.73	8,940.22	-560.74	-661.85	-499.53	0.00	0.00	0.00
9,100.00	8.00	229.73	9,039.25	-569.74	-672.46	-507.54	0.00	0.00	0.00
9,200.00	8.00	229.73	9,138.27	-578.73	-683.08	-515.56	0.00	0.00	0.00
9,300.00	8.00	229.73	9,237.30	-587.73	-693.70	-523.57	0.00	0.00	0.00
9,400.00	8.00	229.73	9,336.33	-596.72	-704.31	-531.58	0.00	0.00	0.00
9,500.00	8.00	229.73	9,435.35	-605.72	-714.93	-539.59	0.00	0.00	0.00
9,600.00	8.00	229.73	9,534.38	-614.71	-725.55	-547.61	0.00	0.00	0.00
9,700.00	8.00	229.73	9,633.41	-623.71	-736.16	-555.62	0.00	0.00	0.00
9,800.00	8.00	229.73	9,732.44	-632.70	-746.78	-563.63	0.00	0.00	0.00
9,836.39	8.00	229.73	9,768.48	-635.98	-750.65	-566.55	0.00	0.00	0.00
<b>Start Drop -1.50</b>									
9,900.00	7.04	229.73	9,831.53	-641.36	-757.00	-571.35	1.50	-1.50	0.00
10,000.00	5.54	229.73	9,930.93	-648.45	-765.36	-577.66	1.50	-1.50	0.00



**Total Directional Services**

Planning Report



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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)
10,100.00	4.04	229.73	10,030.57	-653.85	-771.74	-582.47	1.50	-1.50	0.00
10,200.00	2.54	229.73	10,130.41	-657.57	-776.13	-585.78	1.50	-1.50	0.00
10,300.00	1.04	229.73	10,230.35	-659.59	-778.52	-587.59	1.50	-1.50	0.00
10,369.65	0.00	0.00	10,300.00	-660.00	-779.00	-587.95	1.50	-1.50	0.00
<b>Start 888.00 hold at 10369.65 MD</b>									
10,400.00	0.00	0.00	10,330.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
10,500.00	0.00	0.00	10,430.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
10,600.00	0.00	0.00	10,530.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
10,700.00	0.00	0.00	10,630.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
10,800.00	0.00	0.00	10,730.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
10,900.00	0.00	0.00	10,830.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
11,000.00	0.00	0.00	10,930.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
11,100.00	0.00	0.00	11,030.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
11,200.00	0.00	0.00	11,130.35	-660.00	-779.00	-587.95	0.00	0.00	0.00
11,257.65	0.00	0.00	11,188.00	-660.00	-779.00	-587.95	0.00	0.00	0.00
<b>Start DLS 10.00 TFO 359.51</b>									
11,300.00	4.24	359.51	11,230.31	-658.44	-779.01	-586.39	10.00	10.00	0.00
11,350.00	9.24	359.51	11,279.95	-652.57	-779.06	-580.55	10.00	10.00	0.00
11,400.00	14.24	359.51	11,328.89	-642.41	-779.15	-570.42	10.00	10.00	0.00
11,450.00	19.24	359.51	11,376.76	-628.02	-779.27	-556.07	10.00	10.00	0.00
11,500.00	24.24	359.51	11,423.19	-609.51	-779.43	-537.62	10.00	10.00	0.00
11,550.00	29.24	359.51	11,467.83	-587.02	-779.62	-515.21	10.00	10.00	0.00
11,600.00	34.24	359.51	11,510.34	-560.73	-779.85	-489.00	10.00	10.00	0.00
11,650.00	39.24	359.51	11,550.40	-530.84	-780.10	-459.20	10.00	10.00	0.00
11,700.00	44.24	359.51	11,587.70	-497.56	-780.38	-426.04	10.00	10.00	0.00
11,750.00	49.24	359.51	11,621.96	-461.17	-780.69	-389.76	10.00	10.00	0.00
11,800.00	54.24	359.51	11,652.91	-421.92	-781.03	-350.64	10.00	10.00	0.00
11,850.00	59.24	359.51	11,680.33	-380.13	-781.39	-308.98	10.00	10.00	0.00
11,900.00	64.24	359.51	11,704.00	-336.11	-781.76	-265.10	10.00	10.00	0.00
11,950.00	69.24	359.51	11,723.74	-290.19	-782.15	-219.33	10.00	10.00	0.00
12,000.00	74.24	359.51	11,739.41	-242.72	-782.56	-172.02	10.00	10.00	0.00
12,050.00	79.24	359.51	11,750.88	-194.08	-782.97	-123.53	10.00	10.00	0.00
12,100.00	84.24	359.51	11,758.06	-144.61	-783.39	-74.22	10.00	10.00	0.00
12,150.00	89.24	359.51	11,760.91	-94.71	-783.82	-24.48	10.00	10.00	0.00
12,163.12	90.55	359.51	11,760.93	-81.59	-783.93	-11.40	10.00	10.00	0.00
<b>Start 9775.07 hold at 12163.12 MD - LP (Trinity Fed Com 602H)</b>									
12,200.00	90.55	359.51	11,760.58	-44.72	-784.24	25.35	0.00	0.00	0.00
12,300.00	90.55	359.51	11,759.62	55.28	-785.10	125.02	0.00	0.00	0.00
12,400.00	90.55	359.51	11,758.67	155.27	-785.95	224.69	0.00	0.00	0.00
12,500.00	90.55	359.51	11,757.71	255.26	-786.80	324.36	0.00	0.00	0.00
12,600.00	90.55	359.51	11,756.76	355.25	-787.65	424.03	0.00	0.00	0.00
12,700.00	90.55	359.51	11,755.80	455.24	-788.51	523.70	0.00	0.00	0.00
12,800.00	90.55	359.51	11,754.85	555.24	-789.36	623.37	0.00	0.00	0.00
12,900.00	90.55	359.51	11,753.89	655.23	-790.21	723.04	0.00	0.00	0.00
13,000.00	90.55	359.51	11,752.94	755.22	-791.06	822.71	0.00	0.00	0.00
13,100.00	90.55	359.51	11,751.98	855.21	-791.91	922.38	0.00	0.00	0.00
13,200.00	90.55	359.51	11,751.03	955.20	-792.77	1,022.05	0.00	0.00	0.00
13,300.00	90.55	359.51	11,750.07	1,055.19	-793.62	1,121.72	0.00	0.00	0.00
13,400.00	90.55	359.51	11,749.12	1,155.19	-794.47	1,221.39	0.00	0.00	0.00
13,500.00	90.55	359.51	11,748.16	1,255.18	-795.32	1,321.06	0.00	0.00	0.00
13,600.00	90.55	359.51	11,747.21	1,355.17	-796.18	1,420.73	0.00	0.00	0.00
13,700.00	90.55	359.51	11,746.25	1,455.16	-797.03	1,520.40	0.00	0.00	0.00
13,800.00	90.55	359.51	11,745.30	1,555.15	-797.88	1,620.07	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 Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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	90.55	359.51	11,744.34	1,655.15	-798.73	1,719.74	0.00	0.00	0.00	
14,000.00	90.55	359.51	11,743.39	1,755.14	-799.59	1,819.41	0.00	0.00	0.00	
14,100.00	90.55	359.51	11,742.43	1,855.13	-800.44	1,919.08	0.00	0.00	0.00	
14,200.00	90.55	359.51	11,741.48	1,955.12	-801.29	2,018.75	0.00	0.00	0.00	
14,300.00	90.55	359.51	11,740.52	2,055.11	-802.14	2,118.42	0.00	0.00	0.00	
14,400.00	90.55	359.51	11,739.57	2,155.10	-802.99	2,218.09	0.00	0.00	0.00	
14,500.00	90.55	359.51	11,738.61	2,255.10	-803.85	2,317.76	0.00	0.00	0.00	
14,600.00	90.55	359.51	11,737.66	2,355.09	-804.70	2,417.43	0.00	0.00	0.00	
14,700.00	90.55	359.51	11,736.70	2,455.08	-805.55	2,517.10	0.00	0.00	0.00	
14,800.00	90.55	359.51	11,735.75	2,555.07	-806.40	2,616.77	0.00	0.00	0.00	
14,900.00	90.55	359.51	11,734.79	2,655.06	-807.26	2,716.44	0.00	0.00	0.00	
15,000.00	90.55	359.51	11,733.84	2,755.06	-808.11	2,816.11	0.00	0.00	0.00	
15,100.00	90.55	359.51	11,732.88	2,855.05	-808.96	2,915.78	0.00	0.00	0.00	
15,200.00	90.55	359.51	11,731.93	2,955.04	-809.81	3,015.45	0.00	0.00	0.00	
15,300.00	90.55	359.51	11,730.97	3,055.03	-810.66	3,115.12	0.00	0.00	0.00	
15,400.00	90.55	359.51	11,730.02	3,155.02	-811.52	3,214.79	0.00	0.00	0.00	
15,500.00	90.55	359.51	11,729.06	3,255.01	-812.37	3,314.46	0.00	0.00	0.00	
15,600.00	90.55	359.51	11,728.11	3,355.01	-813.22	3,414.13	0.00	0.00	0.00	
15,700.00	90.55	359.51	11,727.15	3,455.00	-814.07	3,513.80	0.00	0.00	0.00	
15,800.00	90.55	359.51	11,726.20	3,554.99	-814.93	3,613.47	0.00	0.00	0.00	
15,900.00	90.55	359.51	11,725.24	3,654.98	-815.78	3,713.14	0.00	0.00	0.00	
16,000.00	90.55	359.51	11,724.29	3,754.97	-816.63	3,812.81	0.00	0.00	0.00	
16,100.00	90.55	359.51	11,723.33	3,854.97	-817.48	3,912.48	0.00	0.00	0.00	
16,200.00	90.55	359.51	11,722.38	3,954.96	-818.34	4,012.15	0.00	0.00	0.00	
16,300.00	90.55	359.51	11,721.42	4,054.95	-819.19	4,111.82	0.00	0.00	0.00	
16,400.00	90.55	359.51	11,720.47	4,154.94	-820.04	4,211.49	0.00	0.00	0.00	
16,500.00	90.55	359.51	11,719.51	4,254.93	-820.89	4,311.16	0.00	0.00	0.00	
16,600.00	90.55	359.51	11,718.56	4,354.92	-821.74	4,410.83	0.00	0.00	0.00	
16,700.00	90.55	359.51	11,717.60	4,454.92	-822.60	4,510.50	0.00	0.00	0.00	
16,800.00	90.55	359.51	11,716.65	4,554.91	-823.45	4,610.17	0.00	0.00	0.00	
16,900.00	90.55	359.51	11,715.69	4,654.90	-824.30	4,709.84	0.00	0.00	0.00	
17,000.00	90.55	359.51	11,714.74	4,754.89	-825.15	4,809.51	0.00	0.00	0.00	
17,100.00	90.55	359.51	11,713.78	4,854.88	-826.01	4,909.18	0.00	0.00	0.00	
17,200.00	90.55	359.51	11,712.83	4,954.87	-826.86	5,008.85	0.00	0.00	0.00	
17,300.00	90.55	359.51	11,711.87	5,054.87	-827.71	5,108.52	0.00	0.00	0.00	
17,400.00	90.55	359.51	11,710.92	5,154.86	-828.56	5,208.19	0.00	0.00	0.00	
17,500.00	90.55	359.51	11,709.96	5,254.85	-829.41	5,307.86	0.00	0.00	0.00	
17,600.00	90.55	359.51	11,709.01	5,354.84	-830.27	5,407.53	0.00	0.00	0.00	
17,700.00	90.55	359.51	11,708.05	5,454.83	-831.12	5,507.20	0.00	0.00	0.00	
17,800.00	90.55	359.51	11,707.10	5,554.83	-831.97	5,606.87	0.00	0.00	0.00	
17,900.00	90.55	359.51	11,706.14	5,654.82	-832.82	5,706.54	0.00	0.00	0.00	
18,000.00	90.55	359.51	11,705.19	5,754.81	-833.68	5,806.21	0.00	0.00	0.00	
18,100.00	90.55	359.51	11,704.23	5,854.80	-834.53	5,905.88	0.00	0.00	0.00	
18,200.00	90.55	359.51	11,703.28	5,954.79	-835.38	6,005.55	0.00	0.00	0.00	
18,300.00	90.55	359.51	11,702.32	6,054.78	-836.23	6,105.22	0.00	0.00	0.00	
18,400.00	90.55	359.51	11,701.37	6,154.78	-837.09	6,204.89	0.00	0.00	0.00	
18,500.00	90.55	359.51	11,700.41	6,254.77	-837.94	6,304.56	0.00	0.00	0.00	
18,600.00	90.55	359.51	11,699.46	6,354.76	-838.79	6,404.23	0.00	0.00	0.00	
18,700.00	90.55	359.51	11,698.50	6,454.75	-839.64	6,503.90	0.00	0.00	0.00	
18,800.00	90.55	359.51	11,697.55	6,554.74	-840.49	6,603.57	0.00	0.00	0.00	
18,900.00	90.55	359.51	11,696.59	6,654.74	-841.35	6,703.24	0.00	0.00	0.00	
19,000.00	90.55	359.51	11,695.64	6,754.73	-842.20	6,802.91	0.00	0.00	0.00	
19,100.00	90.55	359.51	11,694.68	6,854.72	-843.05	6,902.58	0.00	0.00	0.00	
19,200.00	90.55	359.51	11,693.73	6,954.71	-843.90	7,002.25	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 Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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)	
19,300.00	90.55	359.51	11,692.77	7,054.70	-844.76	7,101.92	0.00	0.00	0.00	
19,400.00	90.55	359.51	11,691.82	7,154.69	-845.61	7,201.59	0.00	0.00	0.00	
19,500.00	90.55	359.51	11,690.86	7,254.69	-846.46	7,301.26	0.00	0.00	0.00	
19,600.00	90.55	359.51	11,689.91	7,354.68	-847.31	7,400.93	0.00	0.00	0.00	
19,700.00	90.55	359.51	11,688.95	7,454.67	-848.16	7,500.60	0.00	0.00	0.00	
19,800.00	90.55	359.51	11,688.00	7,554.66	-849.02	7,600.27	0.00	0.00	0.00	
19,900.00	90.55	359.51	11,687.04	7,654.65	-849.87	7,699.94	0.00	0.00	0.00	
20,000.00	90.55	359.51	11,686.09	7,754.65	-850.72	7,799.61	0.00	0.00	0.00	
20,100.00	90.55	359.51	11,685.13	7,854.64	-851.57	7,899.27	0.00	0.00	0.00	
20,200.00	90.55	359.51	11,684.18	7,954.63	-852.43	7,998.94	0.00	0.00	0.00	
20,300.00	90.55	359.51	11,683.22	8,054.62	-853.28	8,098.61	0.00	0.00	0.00	
20,400.00	90.55	359.51	11,682.27	8,154.61	-854.13	8,198.28	0.00	0.00	0.00	
20,500.00	90.55	359.51	11,681.31	8,254.60	-854.98	8,297.95	0.00	0.00	0.00	
20,600.00	90.55	359.51	11,680.36	8,354.60	-855.84	8,397.62	0.00	0.00	0.00	
20,700.00	90.55	359.51	11,679.40	8,454.59	-856.69	8,497.29	0.00	0.00	0.00	
20,800.00	90.55	359.51	11,678.45	8,554.58	-857.54	8,596.96	0.00	0.00	0.00	
20,900.00	90.55	359.51	11,677.49	8,654.57	-858.39	8,696.63	0.00	0.00	0.00	
21,000.00	90.55	359.51	11,676.54	8,754.56	-859.24	8,796.30	0.00	0.00	0.00	
21,100.00	90.55	359.51	11,675.58	8,854.56	-860.10	8,895.97	0.00	0.00	0.00	
21,200.00	90.55	359.51	11,674.63	8,954.55	-860.95	8,995.64	0.00	0.00	0.00	
21,300.00	90.55	359.51	11,673.67	9,054.54	-861.80	9,095.31	0.00	0.00	0.00	
21,400.00	90.55	359.51	11,672.72	9,154.53	-862.65	9,194.98	0.00	0.00	0.00	
21,500.00	90.55	359.51	11,671.76	9,254.52	-863.51	9,294.65	0.00	0.00	0.00	
21,600.00	90.55	359.51	11,670.81	9,354.51	-864.36	9,394.32	0.00	0.00	0.00	
21,700.00	90.55	359.51	11,669.86	9,454.51	-865.21	9,493.99	0.00	0.00	0.00	
21,800.00	90.55	359.51	11,668.90	9,554.50	-866.06	9,593.66	0.00	0.00	0.00	
21,900.00	90.55	359.51	11,667.95	9,654.49	-866.91	9,693.33	0.00	0.00	0.00	
21,938.19	90.55	359.51	11,667.58	9,692.68	-867.24	9,731.40	0.00	0.00	0.00	
TD at 21938.19 - PBHL (Trinity Fed Com 602H)										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL (Trinity Fed Com 602H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	405,433.35	854,643.32	32.110573	-103.321438	
PBHL (Trinity Fed Com 602H) - plan hits target center - Point	0.00	0.00	11,667.58	9,692.68	-867.24	415,126.03	853,776.08	32.137236	-103.323945	
LP (Trinity Fed Com 602H) - plan hits target center - Point	0.00	0.00	11,760.93	-81.59	-783.93	405,351.76	853,859.39	32.110369	-103.323972	



**Total Directional Services**  
 Planning Report



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site:</b>	Trinity Fed/Santa Fe Fed	<b>North Reference:</b>	Grid
<b>Well:</b>	Trinity Fed Com 602H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
2,500.00	2,500.00	0.00	0.00	Start Build 1.50	
3,033.25	3,031.52	-24.02	-28.35	Start 6803.14 hold at 3033.25 MD	
9,836.39	9,768.48	-635.98	-750.65	Start Drop -1.50	
10,369.65	10,300.00	-660.00	-779.00	Start 888.00 hold at 10369.65 MD	
11,257.65	11,188.00	-660.00	-779.00	Start DLS 10.00 TFO 359.51	
12,163.12	11,760.93	-81.59	-783.93	Start 9775.07 hold at 12163.12 MD	
21,938.19	11,667.58	9,692.68	-867.24	TD at 21938.19	



# Franklin Mountain Energy

Lea County, NM (NAD83)  
Trinity Fed/Santa Fe Fed  
Trinity Fed Com 602H

OH  
Plan #2

## Anticollision Report

15 July, 2020





**Total Directional Services**  
Anticollision Report



<b>Company:</b>	Franklin Mountain Energy	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #2		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum ellipse separation of 1,000.00 usft	<b>Error Surface:</b>	Combined Separation
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	7/15/2020		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	21,938.19	Plan #2 (OH)	OWSG (Rev2) MWD	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
<b>Offset Well - Wellbore - Design</b>						
1912 Fed Com						
1912 Fed Com 601H - OH - Plan #2	11,257.65	11,211.47	1,198.84	1,142.06	21.115	CC
1912 Fed Com 601H - OH - Plan #2	21,938.19	21,929.37	1,200.43	958.85	4.969	ES, SF
1912 Fed Com 701H - OH - Plan #2	11,257.65	11,224.07	1,448.80	1,391.94	25.477	CC
1912 Fed Com 701H - OH - Plan #2	21,938.19	22,238.31	1,487.15	1,251.58	6.313	ES, SF
1912 Fed Com 702H - OH - Plan #2	11,257.65	11,225.75	624.00	567.12	10.970	CC
1912 Fed Com 702H - OH - Plan #2	21,938.19	22,099.37	649.43	418.00	2.806	ES, SF
Santa Fe Fed/Zia Fed						
Santa Fe Fed Com 603H - OH - Plan #2	9,604.54	9,766.27	1,770.41	1,720.69	35.607	CC
Santa Fe Fed Com 603H - OH - Plan #2	21,938.19	21,864.73	1,790.12	1,549.32	7.434	ES, SF
Santa Fe Fed Com 705H - OH - Plan #2	2,500.00	2,480.40	1,973.19	1,960.90	160.490	CC
Santa Fe Fed Com 705H - OH - Plan #2	21,938.19	22,123.44	2,153.22	1,911.49	8.907	ES, SF
Zia Fed Com 604H - OH - Plan #2	2,500.00	2,479.70	2,007.23	1,994.94	163.282	CC, ES
Zia Fed Com 604H - OH - Plan #2	21,938.19	21,798.00	2,828.53	2,587.16	11.718	SF
Zia Fed Com 706H - OH - Plan #2	2,500.00	2,479.40	2,041.32	2,029.02	166.065	CC, ES
Zia Fed Com 706H - OH - Plan #2	21,938.19	21,959.71	3,124.68	2,882.85	12.921	SF
Trinity Fed/Santa Fe Fed						
Santa Fe Fed Com 704H - OH - Plan #2	2,500.00	2,496.20	70.00	57.66	5.675	CC, ES
Santa Fe Fed Com 704H - OH - Plan #2	21,938.19	22,059.41	1,225.99	987.73	5.146	SF
Trinity Fed Com 703H - OH - Plan #2	2,500.00	2,498.50	35.00	22.66	2.836	CC, ES
Trinity Fed Com 703H - OH - Plan #2	21,931.44	22,201.32	397.98	215.29	2.178	SF

<b>Offset Design</b>													<b>Offset Site Error:</b>	0.00 usft
1912 Fed Com - 1912 Fed Com 601H - OH - Plan #2													<b>Offset Well Error:</b>	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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	12.20	12.20	0.00	0.02	-103.55	-445.66	-1,849.66	1,902.59					
100.00	100.00	112.20	112.20	0.13	0.17	-103.55	-445.66	-1,849.66	1,902.59	1,902.38	0.21	9,032.378		
200.00	200.00	212.20	212.20	0.48	0.53	-103.55	-445.66	-1,849.66	1,902.59	1,901.88	0.72	2,657.316		
300.00	300.00	312.20	312.20	0.84	0.89	-103.55	-445.66	-1,849.66	1,902.59	1,901.37	1.22	1,556.108		
400.00	400.00	412.20	412.20	1.20	1.24	-103.55	-445.66	-1,849.66	1,902.59	1,900.86	1.73	1,100.081		
500.00	500.00	512.20	512.20	1.56	1.60	-103.55	-445.66	-1,849.66	1,902.59	1,900.36	2.24	850.741		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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				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		
600.00	600.00	612.20	612.20	1.92	1.96	-103.55	-445.66	-1,849.66	1,902.59	1,899.85	2.74	693.539		
700.00	700.00	712.20	712.20	2.28	2.32	-103.55	-445.66	-1,849.66	1,902.59	1,899.34	3.25	585.370		
800.00	800.00	812.20	812.20	2.63	2.68	-103.55	-445.66	-1,849.66	1,902.59	1,898.83	3.76	506.389		
900.00	900.00	912.20	912.20	2.99	3.04	-103.55	-445.66	-1,849.66	1,902.59	1,898.33	4.26	446.187		
1,000.00	1,000.00	1,012.20	1,012.20	3.35	3.40	-103.55	-445.66	-1,849.66	1,902.59	1,897.82	4.77	398.778		
1,100.00	1,100.00	1,112.20	1,112.20	3.71	3.75	-103.55	-445.66	-1,849.66	1,902.59	1,897.31	5.28	360.476		
1,200.00	1,200.00	1,212.20	1,212.20	4.07	4.11	-103.55	-445.66	-1,849.66	1,902.59	1,896.81	5.78	328.886		
1,300.00	1,300.00	1,312.20	1,312.20	4.43	4.47	-103.55	-445.66	-1,849.66	1,902.59	1,896.30	6.29	302.388		
1,400.00	1,400.00	1,412.20	1,412.20	4.79	4.83	-103.55	-445.66	-1,849.66	1,902.59	1,895.79	6.80	279.840		
1,500.00	1,500.00	1,512.20	1,512.20	5.14	5.19	-103.55	-445.66	-1,849.66	1,902.59	1,895.29	7.31	260.422		
1,600.00	1,600.00	1,612.20	1,612.20	5.50	5.55	-103.55	-445.66	-1,849.66	1,902.59	1,894.78	7.81	243.524		
1,700.00	1,700.00	1,712.20	1,712.20	5.86	5.90	-103.55	-445.66	-1,849.66	1,902.59	1,894.27	8.32	228.685		
1,800.00	1,800.00	1,812.20	1,812.20	6.22	6.26	-103.55	-445.66	-1,849.66	1,902.59	1,893.77	8.83	215.551		
1,900.00	1,900.00	1,912.20	1,912.20	6.58	6.62	-103.55	-445.66	-1,849.66	1,902.59	1,893.26	9.33	203.843		
2,000.00	2,000.00	2,012.20	2,012.20	6.94	6.98	-103.55	-445.66	-1,849.66	1,902.59	1,892.75	9.84	193.342		
2,100.00	2,100.00	2,112.20	2,112.20	7.29	7.34	-103.55	-445.66	-1,849.66	1,902.59	1,892.24	10.35	183.869		
2,200.00	2,200.00	2,212.20	2,212.20	7.65	7.70	-103.55	-445.66	-1,849.66	1,902.59	1,891.74	10.85	175.282		
2,300.00	2,300.00	2,312.20	2,312.20	8.01	8.06	-103.55	-445.66	-1,849.66	1,902.59	1,891.23	11.36	167.461		
2,400.00	2,400.00	2,412.20	2,412.20	8.37	8.41	-103.55	-445.66	-1,849.66	1,902.59	1,890.72	11.87	160.308		
2,500.00	2,500.00	2,512.20	2,512.20	8.73	8.77	-103.55	-445.66	-1,849.66	1,902.59	1,890.22	12.38	153.741		
2,600.00	2,599.99	2,612.19	2,612.19	9.07	9.13	26.75	-445.66	-1,849.66	1,901.42	1,888.55	12.87	147.723		
2,700.00	2,699.91	2,712.11	2,712.11	9.40	9.49	26.83	-445.66	-1,849.66	1,897.92	1,884.56	13.36	142.080		
2,800.00	2,799.69	2,811.89	2,811.89	9.74	9.85	26.96	-445.66	-1,849.66	1,892.08	1,878.24	13.85	136.656		
2,900.00	2,899.27	2,911.47	2,911.47	10.07	10.20	27.14	-445.66	-1,849.66	1,883.93	1,869.59	14.33	131.434		
3,000.00	2,998.57	3,010.77	3,010.77	10.42	10.56	27.38	-445.66	-1,849.66	1,873.46	1,858.64	14.82	126.396		
3,033.25	3,031.52	3,043.72	3,043.72	10.53	10.68	27.47	-445.66	-1,849.66	1,869.47	1,854.49	14.99	124.756		
3,100.00	3,097.62	3,109.82	3,109.82	10.76	10.91	27.60	-445.66	-1,849.66	1,861.22	1,845.91	15.31	121.558		
3,200.00	3,196.65	3,208.85	3,208.85	11.12	11.27	27.80	-445.66	-1,849.66	1,848.87	1,833.07	15.80	117.003		
3,300.00	3,295.67	3,307.87	3,307.87	11.48	11.62	28.00	-445.66	-1,849.66	1,836.55	1,820.26	16.29	112.710		
3,400.00	3,394.70	3,406.90	3,406.90	11.84	11.98	28.20	-445.66	-1,849.66	1,824.25	1,807.46	16.79	108.658		
3,500.00	3,493.73	3,500.00	3,500.00	12.20	12.31	28.40	-445.66	-1,849.66	1,811.98	1,794.71	17.27	104.918		
3,600.00	3,592.76	3,580.37	3,580.36	12.57	12.59	28.55	-446.40	-1,850.06	1,800.43	1,782.72	17.71	101.655		
3,700.00	3,691.78	3,656.54	3,656.49	12.95	12.84	28.65	-448.48	-1,851.19	1,790.19	1,772.06	18.14	98.713		
3,800.00	3,790.81	3,732.98	3,732.84	13.32	13.09	28.72	-451.90	-1,853.06	1,781.24	1,762.68	18.56	95.984		
3,900.00	3,889.84	3,809.64	3,809.30	13.70	13.34	28.75	-456.68	-1,855.66	1,773.59	1,754.61	18.98	93.443		
4,000.00	3,988.86	3,902.23	3,901.55	14.09	13.64	28.76	-463.70	-1,859.49	1,766.92	1,747.47	19.45	90.864		
4,100.00	4,087.89	4,002.02	4,000.95	14.47	13.98	28.76	-471.35	-1,863.65	1,760.31	1,740.38	19.93	88.312		
4,200.00	4,186.92	4,101.80	4,100.35	14.86	14.31	28.76	-478.99	-1,867.81	1,753.71	1,733.29	20.42	85.871		
4,300.00	4,285.95	4,201.58	4,199.75	15.25	14.65	28.76	-486.63	-1,871.98	1,747.11	1,726.19	20.91	83.535		
4,400.00	4,384.97	4,301.36	4,299.15	15.64	14.98	28.76	-494.28	-1,876.14	1,740.50	1,719.09	21.41	81.297		
4,500.00	4,484.00	4,401.14	4,398.56	16.03	15.33	28.76	-501.92	-1,880.30	1,733.90	1,711.99	21.91	79.153		
4,600.00	4,583.03	4,500.92	4,497.96	16.42	15.67	28.76	-509.56	-1,884.47	1,727.29	1,704.89	22.40	77.098		
4,700.00	4,682.05	4,600.71	4,597.36	16.82	16.01	28.77	-517.21	-1,888.63	1,720.69	1,697.78	22.90	75.125		
4,800.00	4,781.08	4,700.49	4,696.76	17.21	16.36	28.77	-524.85	-1,892.79	1,714.08	1,690.68	23.41	73.232		
4,900.00	4,880.11	4,800.27	4,796.16	17.61	16.71	28.77	-532.49	-1,896.96	1,707.48	1,683.57	23.91	71.413		
5,000.00	4,979.14	4,900.05	4,895.56	18.01	17.06	28.77	-540.14	-1,901.12	1,700.87	1,676.46	24.41	69.665		
5,100.00	5,078.16	4,999.83	4,994.96	18.41	17.41	28.77	-547.78	-1,905.28	1,694.27	1,669.35	24.92	67.984		
5,200.00	5,177.19	5,099.61	5,094.37	18.81	17.76	28.77	-555.42	-1,909.45	1,687.67	1,662.24	25.43	66.367		
5,300.00	5,276.22	5,199.40	5,193.77	19.21	18.12	28.77	-563.07	-1,913.61	1,681.06	1,655.12	25.94	64.809		
5,400.00	5,375.24	5,299.18	5,293.17	19.62	18.47	28.77	-570.71	-1,917.77	1,674.46	1,648.01	26.45	63.309		
5,500.00	5,474.27	5,398.96	5,392.57	20.02	18.83	28.78	-578.35	-1,921.93	1,667.85	1,640.89	26.96	61.863		
5,600.00	5,573.30	5,498.74	5,491.97	20.43	19.19	28.78	-586.00	-1,926.10	1,661.25	1,633.78	27.47	60.469		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
5,700.00	5,672.32	5,598.52	5,591.37	20.83	19.55	28.78	-593.64	-1,930.26	1,654.64	1,626.66	27.99	59.123		
5,800.00	5,771.35	5,698.30	5,690.77	21.24	19.91	28.78	-601.28	-1,934.42	1,648.04	1,619.54	28.50	57.824		
5,900.00	5,870.38	5,798.09	5,790.17	21.64	20.27	28.78	-608.92	-1,938.59	1,641.43	1,612.42	29.02	56.570		
6,000.00	5,969.41	5,897.87	5,889.58	22.05	20.63	28.78	-616.57	-1,942.75	1,634.83	1,605.30	29.53	55.357		
6,100.00	6,068.43	5,997.65	5,988.98	22.46	20.99	28.78	-624.21	-1,946.91	1,628.23	1,598.18	30.05	54.185		
6,200.00	6,167.46	6,097.43	6,088.38	22.87	21.36	28.78	-631.85	-1,951.08	1,621.62	1,591.05	30.57	53.051		
6,300.00	6,266.49	6,197.21	6,187.78	23.28	21.72	28.79	-639.50	-1,955.24	1,615.02	1,583.93	31.09	51.954		
6,400.00	6,365.51	6,296.99	6,287.18	23.69	22.09	28.79	-647.14	-1,959.40	1,608.41	1,576.81	31.60	50.891		
6,500.00	6,464.54	6,396.78	6,386.58	24.10	22.45	28.79	-654.78	-1,963.57	1,601.81	1,569.68	32.12	49.862		
6,600.00	6,563.57	6,496.56	6,485.98	24.51	22.82	28.79	-662.43	-1,967.73	1,595.20	1,562.56	32.65	48.865		
6,700.00	6,662.60	6,606.86	6,595.88	24.92	23.22	28.80	-670.70	-1,972.24	1,588.50	1,555.31	33.19	47.857		
6,800.00	6,761.62	6,742.84	6,731.62	25.33	23.71	28.91	-677.78	-1,976.09	1,580.10	1,546.30	33.79	46.756		
6,900.00	6,860.65	6,877.98	6,866.71	25.75	24.19	29.15	-680.60	-1,977.63	1,569.42	1,535.04	34.38	45.653		
7,000.00	6,959.68	6,983.15	6,971.88	26.16	24.55	29.41	-680.66	-1,977.66	1,557.29	1,522.39	34.90	44.621		
7,100.00	7,058.70	7,082.17	7,070.90	26.57	24.89	29.66	-680.66	-1,977.66	1,545.15	1,509.74	35.41	43.630		
7,200.00	7,157.73	7,181.20	7,169.93	26.99	25.23	29.92	-680.66	-1,977.66	1,533.05	1,497.12	35.93	42.668		
7,300.00	7,256.76	7,280.23	7,268.96	27.40	25.57	30.18	-680.66	-1,977.66	1,520.98	1,484.53	36.45	41.733		
7,400.00	7,355.79	7,379.25	7,367.99	27.81	25.92	30.45	-680.66	-1,977.66	1,508.93	1,471.97	36.96	40.824		
7,500.00	7,454.81	7,478.28	7,467.01	28.23	26.26	30.72	-680.66	-1,977.66	1,496.92	1,459.44	37.48	39.940		
7,600.00	7,553.84	7,577.31	7,566.04	28.64	26.60	30.99	-680.66	-1,977.66	1,484.95	1,446.95	38.00	39.080		
7,700.00	7,652.87	7,676.34	7,665.07	29.06	26.94	31.27	-680.66	-1,977.66	1,473.00	1,434.49	38.52	38.243		
7,800.00	7,751.89	7,775.36	7,764.09	29.47	27.29	31.55	-680.66	-1,977.66	1,461.10	1,422.06	39.04	37.429		
7,900.00	7,850.92	7,874.39	7,863.12	29.89	27.63	31.84	-680.66	-1,977.66	1,449.22	1,409.67	39.56	36.637		
8,000.00	7,949.95	7,973.42	7,962.15	30.30	27.97	32.13	-680.66	-1,977.66	1,437.39	1,397.31	40.08	35.865		
8,100.00	8,048.97	8,072.44	8,061.17	30.72	28.32	32.43	-680.66	-1,977.66	1,425.59	1,384.99	40.60	35.113		
8,200.00	8,148.00	8,171.47	8,160.20	31.14	28.66	32.73	-680.66	-1,977.66	1,413.83	1,372.71	41.12	34.380		
8,300.00	8,247.03	8,270.50	8,259.23	31.55	29.01	33.03	-680.66	-1,977.66	1,402.11	1,360.47	41.65	33.667		
8,400.00	8,346.06	8,369.52	8,358.26	31.97	29.35	33.35	-680.66	-1,977.66	1,390.43	1,348.26	42.17	32.971		
8,500.00	8,445.08	8,468.55	8,457.28	32.38	29.70	33.66	-680.66	-1,977.66	1,378.80	1,336.10	42.70	32.293		
8,600.00	8,544.11	8,567.58	8,556.31	32.80	30.04	33.98	-680.66	-1,977.66	1,367.20	1,323.98	43.22	31.631		
8,700.00	8,643.14	8,666.61	8,655.34	33.22	30.39	34.31	-680.66	-1,977.66	1,355.65	1,311.90	43.75	30.986		
8,800.00	8,742.16	8,765.63	8,754.36	33.64	30.73	34.65	-680.66	-1,977.66	1,344.14	1,299.86	44.28	30.357		
8,900.00	8,841.19	8,864.66	8,853.39	34.05	31.08	34.98	-680.66	-1,977.66	1,332.68	1,287.87	44.81	29.743		
9,000.00	8,940.22	8,963.69	8,952.42	34.47	31.43	35.33	-680.66	-1,977.66	1,321.27	1,275.93	45.34	29.143		
9,100.00	9,039.25	9,062.71	9,051.45	34.89	31.77	35.68	-680.66	-1,977.66	1,309.90	1,264.03	45.87	28.558		
9,200.00	9,138.27	9,161.74	9,150.47	35.31	32.12	36.04	-680.66	-1,977.66	1,298.59	1,252.19	46.40	27.987		
9,300.00	9,237.30	9,260.77	9,249.50	35.73	32.47	36.40	-680.66	-1,977.66	1,287.32	1,240.39	46.93	27.430		
9,400.00	9,336.33	9,359.80	9,348.53	36.14	32.81	36.77	-680.66	-1,977.66	1,276.11	1,228.65	47.46	26.885		
9,500.00	9,435.35	9,458.82	9,447.55	36.56	33.16	37.15	-680.66	-1,977.66	1,264.95	1,216.95	48.00	26.354		
9,600.00	9,534.38	9,557.85	9,546.58	36.98	33.51	37.53	-680.66	-1,977.66	1,253.85	1,205.31	48.53	25.834		
9,700.00	9,633.41	9,656.88	9,645.61	37.40	33.86	37.92	-680.66	-1,977.66	1,242.80	1,193.73	49.07	25.327		
9,800.00	9,732.44	9,755.90	9,744.64	37.82	34.20	38.31	-680.66	-1,977.66	1,231.81	1,182.20	49.61	24.831		
9,836.39	9,768.48	9,791.94	9,780.68	37.97	34.33	38.46	-680.66	-1,977.66	1,227.83	1,178.02	49.80	24.653		
9,900.00	9,831.53	9,855.00	9,843.73	38.23	34.55	38.64	-680.66	-1,977.66	1,221.29	1,171.15	50.14	24.356		
10,000.00	9,930.93	9,954.40	9,943.13	38.63	34.90	38.88	-680.66	-1,977.66	1,212.72	1,162.05	50.67	23.932		
10,100.00	10,030.57	10,054.04	10,042.77	39.01	35.25	39.07	-680.66	-1,977.66	1,206.22	1,155.02	51.19	23.562		
10,200.00	10,130.41	10,153.88	10,142.61	39.38	35.60	39.20	-680.66	-1,977.66	1,201.76	1,150.05	51.70	23.243		
10,300.00	10,230.35	10,253.82	10,242.55	39.72	35.95	39.27	-680.66	-1,977.66	1,199.33	1,147.13	52.20	22.974		
10,369.65	10,300.00	10,323.47	10,312.20	39.95	36.20	-90.99	-680.66	-1,977.66	1,198.84	1,146.30	52.54	22.817		
10,400.00	10,330.35	10,353.82	10,342.55	40.04	36.31	-90.99	-680.66	-1,977.66	1,198.84	1,146.15	52.68	22.755		
10,500.00	10,430.35	10,453.82	10,442.55	40.35	36.66	-90.99	-680.66	-1,977.66	1,198.84	1,145.68	53.16	22.551		
10,600.00	10,530.35	10,553.82	10,542.55	40.66	37.01	-90.99	-680.66	-1,977.66	1,198.84	1,145.20	53.64	22.352		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 1912 Fed Com - 1912 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 (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		
10,700.00	10,630.35	10,653.82	10,642.55	40.97	37.36	-90.99	-680.66	-1,977.66	1,198.84	1,144.73	54.11	22.155		
10,800.00	10,730.35	10,753.82	10,742.55	41.28	37.71	-90.99	-680.66	-1,977.66	1,198.84	1,144.25	54.59	21.961		
10,900.00	10,830.35	10,853.82	10,842.55	41.59	38.07	-90.99	-680.66	-1,977.66	1,198.84	1,143.77	55.07	21.771		
11,000.00	10,930.35	10,953.82	10,942.55	41.91	38.42	-90.99	-680.66	-1,977.66	1,198.84	1,143.29	55.54	21.584		
11,100.00	11,030.35	11,053.82	11,042.55	42.22	38.77	-90.99	-680.66	-1,977.66	1,198.84	1,142.82	56.02	21.399		
11,200.00	11,130.35	11,153.82	11,142.55	42.53	39.13	-90.99	-680.66	-1,977.66	1,198.84	1,142.34	56.50	21.218		
11,257.65	11,188.00	11,211.47	11,200.20	42.72	39.33	-90.99	-680.66	-1,977.66	1,198.84	1,142.06	56.78	21.115	CC	
11,300.00	11,230.31	11,254.00	11,242.73	42.84	39.48	-90.57	-680.56	-1,977.66	1,198.85	1,141.88	56.97	21.042		
11,350.00	11,279.95	11,305.10	11,293.71	42.98	39.65	-90.70	-677.33	-1,977.69	1,198.88	1,141.69	57.19	20.962		
11,400.00	11,328.89	11,356.45	11,344.45	43.11	39.82	-90.82	-669.52	-1,977.76	1,198.92	1,141.52	57.40	20.889		
11,450.00	11,376.76	11,408.04	11,394.51	43.21	39.99	-90.94	-657.13	-1,977.86	1,198.96	1,141.37	57.58	20.821		
11,500.00	11,423.19	11,459.87	11,443.48	43.31	40.14	-91.05	-640.21	-1,978.01	1,199.00	1,141.24	57.76	20.760		
11,550.00	11,467.83	11,511.91	11,490.91	43.38	40.29	-91.15	-618.83	-1,978.19	1,199.04	1,141.13	57.91	20.704		
11,600.00	11,510.34	11,564.16	11,536.37	43.44	40.42	-91.25	-593.13	-1,978.41	1,199.09	1,141.03	58.06	20.654		
11,650.00	11,550.40	11,616.59	11,579.46	43.48	40.55	-91.33	-563.28	-1,978.67	1,199.13	1,140.94	58.19	20.607		
11,700.00	11,587.70	11,669.19	11,619.77	43.50	40.66	-91.41	-529.51	-1,978.96	1,199.17	1,140.86	58.31	20.565		
11,750.00	11,621.96	11,721.94	11,656.90	43.51	40.78	-91.47	-492.08	-1,979.29	1,199.21	1,140.78	58.42	20.526		
11,800.00	11,652.91	11,774.81	11,690.51	43.50	40.89	-91.52	-451.29	-1,979.64	1,199.24	1,140.71	58.53	20.488		
11,850.00	11,680.33	11,827.78	11,720.27	43.48	41.01	-91.56	-407.50	-1,980.02	1,199.26	1,140.63	58.64	20.453		
11,900.00	11,704.00	11,880.82	11,745.89	43.45	41.12	-91.58	-361.08	-1,980.42	1,199.28	1,140.54	58.74	20.417		
11,950.00	11,723.74	11,933.90	11,767.13	43.40	41.25	-91.60	-312.46	-1,980.84	1,199.30	1,140.45	58.84	20.381		
12,000.00	11,739.41	11,987.00	11,783.78	43.35	41.37	-91.60	-262.06	-1,981.27	1,199.30	1,140.35	58.95	20.345		
12,050.00	11,750.88	12,040.08	11,795.69	43.29	41.50	-91.59	-210.35	-1,981.72	1,199.30	1,140.24	59.06	20.308		
12,100.00	11,758.06	12,093.12	11,802.77	43.23	41.63	-91.56	-157.80	-1,982.17	1,199.29	1,140.12	59.17	20.270		
12,150.00	11,760.91	12,146.10	11,804.95	43.16	41.76	-91.52	-104.89	-1,982.62	1,199.27	1,139.99	59.28	20.229		
12,163.12	11,760.93	12,159.59	11,804.77	43.14	41.80	-91.51	-91.40	-1,982.74	1,199.27	1,139.95	59.31	20.219		
12,200.00	11,760.58	12,196.47	11,804.15	43.10	41.90	-91.50	-54.53	-1,983.06	1,199.27	1,139.86	59.41	20.188		
12,300.00	11,759.62	12,296.47	11,802.49	42.98	42.22	-91.47	45.45	-1,983.92	1,199.26	1,139.54	59.72	20.082		
12,400.00	11,758.67	12,396.47	11,800.82	42.89	42.61	-91.43	145.43	-1,984.78	1,199.25	1,139.13	60.12	19.947		
12,500.00	11,757.71	12,496.46	11,799.16	42.82	43.05	-91.40	245.41	-1,985.65	1,199.24	1,138.63	60.61	19.786		
12,600.00	11,756.76	12,596.46	11,797.49	43.17	43.56	-91.36	345.39	-1,986.51	1,199.23	1,138.05	61.19	19.600		
12,700.00	11,755.80	12,696.46	11,795.83	43.61	44.11	-91.33	445.37	-1,987.37	1,199.23	1,137.38	61.84	19.392		
12,800.00	11,754.85	12,796.46	11,794.16	44.09	44.73	-91.30	545.35	-1,988.23	1,199.22	1,136.64	62.58	19.163		
12,900.00	11,753.89	12,896.45	11,792.50	44.63	45.39	-91.26	645.33	-1,989.09	1,199.22	1,135.82	63.40	18.916		
13,000.00	11,752.94	12,996.45	11,790.83	45.21	46.10	-91.23	745.31	-1,989.96	1,199.21	1,134.92	64.29	18.654		
13,100.00	11,751.98	13,096.45	11,789.17	45.84	46.86	-91.19	845.29	-1,990.82	1,199.20	1,133.96	65.25	18.379		
13,200.00	11,751.03	13,196.45	11,787.50	46.52	47.67	-91.16	945.27	-1,991.68	1,199.20	1,132.92	66.28	18.093		
13,300.00	11,750.07	13,296.44	11,785.84	47.24	48.52	-91.13	1,045.25	-1,992.54	1,199.20	1,131.82	67.38	17.799		
13,400.00	11,749.12	13,396.44	11,784.17	48.00	49.41	-91.09	1,145.23	-1,993.40	1,199.19	1,130.66	68.53	17.498		
13,500.00	11,748.16	13,496.44	11,782.51	48.81	50.34	-91.06	1,245.21	-1,994.27	1,199.19	1,129.44	69.75	17.193		
13,600.00	11,747.21	13,596.44	11,780.84	49.65	51.30	-91.02	1,345.19	-1,995.13	1,199.19	1,128.16	71.02	16.885		
13,700.00	11,746.25	13,696.43	11,779.18	50.54	52.30	-90.99	1,445.17	-1,995.99	1,199.18	1,126.83	72.35	16.575		
13,800.00	11,745.30	13,796.43	11,777.51	51.46	53.33	-90.96	1,545.15	-1,996.85	1,199.18	1,125.46	73.72	16.266		
13,900.00	11,744.34	13,896.43	11,775.85	52.41	54.39	-90.92	1,645.13	-1,997.72	1,199.18	1,124.03	75.15	15.957		
14,000.00	11,743.39	13,996.43	11,774.18	53.40	55.48	-90.89	1,745.11	-1,998.58	1,199.18	1,122.56	76.62	15.652		
14,100.00	11,742.43	14,096.42	11,772.52	54.42	56.60	-90.85	1,845.09	-1,999.44	1,199.18	1,121.05	78.13	15.349		
14,200.00	11,741.48	14,196.42	11,770.85	55.47	57.74	-90.82	1,945.07	-2,000.30	1,199.18	1,119.50	79.68	15.050		
14,252.97	11,740.97	14,249.39	11,769.97	56.04	58.36	-90.80	1,998.03	-2,000.76	1,199.18	1,118.66	80.52	14.893		
14,300.00	11,740.52	14,296.42	11,769.19	56.54	58.91	-90.79	2,045.05	-2,001.16	1,199.18	1,117.91	81.27	14.756		
14,400.00	11,739.57	14,396.42	11,767.53	57.65	60.10	-90.75	2,145.03	-2,002.03	1,199.18	1,116.29	82.89	14.467		
14,500.00	11,738.61	14,496.41	11,765.86	58.77	61.31	-90.72	2,245.01	-2,002.89	1,199.18	1,114.63	84.55	14.183		
14,600.00	11,737.66	14,596.41	11,764.20	59.93	62.54	-90.68	2,344.99	-2,003.75	1,199.18	1,112.94	86.24	13.906		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
14,700.00	11,736.70	14,696.41	11,762.53	61.10	63.79	-90.65	2,444.97	-2,004.61	1,199.18	1,111.23	87.96	13.634		
14,800.00	11,735.75	14,796.41	11,760.87	62.30	65.06	-90.62	2,544.95	-2,005.47	1,199.18	1,109.48	89.70	13.368		
14,900.00	11,734.79	14,896.40	11,759.20	63.51	66.35	-90.58	2,644.93	-2,006.34	1,199.19	1,107.71	91.48	13.109		
15,000.00	11,733.84	14,996.40	11,757.54	64.75	67.65	-90.55	2,744.91	-2,007.20	1,199.19	1,105.92	93.27	12.857		
15,100.00	11,732.88	15,096.40	11,755.87	66.00	68.96	-90.52	2,844.89	-2,008.06	1,199.19	1,104.10	95.09	12.611		
15,200.00	11,731.93	15,196.39	11,754.21	67.27	70.29	-90.48	2,944.87	-2,008.92	1,199.20	1,102.26	96.94	12.371		
15,300.00	11,730.97	15,296.39	11,752.54	68.55	71.64	-90.45	3,044.85	-2,009.78	1,199.20	1,100.40	98.80	12.137		
15,400.00	11,730.02	15,396.39	11,750.88	69.86	72.99	-90.41	3,144.83	-2,010.65	1,199.20	1,098.52	100.69	11.910		
15,500.00	11,729.06	15,496.39	11,749.21	71.17	74.36	-90.38	3,244.81	-2,011.51	1,199.21	1,096.62	102.59	11.689		
15,600.00	11,728.11	15,596.38	11,747.55	72.50	75.74	-90.35	3,344.79	-2,012.37	1,199.21	1,094.71	104.51	11.475		
15,700.00	11,727.15	15,696.38	11,745.88	73.84	77.13	-90.31	3,444.77	-2,013.23	1,199.22	1,092.77	106.45	11.266		
15,800.00	11,726.20	15,796.38	11,744.22	75.19	78.53	-90.28	3,544.75	-2,014.10	1,199.23	1,090.83	108.40	11.063		
15,900.00	11,725.24	15,896.38	11,742.55	76.56	79.94	-90.24	3,644.73	-2,014.96	1,199.23	1,088.87	110.37	10.866		
16,000.00	11,724.29	15,996.37	11,740.89	77.94	81.36	-90.21	3,744.71	-2,015.82	1,199.24	1,086.89	112.35	10.674		
16,100.00	11,723.33	16,096.37	11,739.22	79.32	82.79	-90.18	3,844.69	-2,016.68	1,199.25	1,084.90	114.34	10.488		
16,200.00	11,722.38	16,196.37	11,737.56	80.72	84.22	-90.14	3,944.67	-2,017.54	1,199.26	1,082.90	116.35	10.307		
16,300.00	11,721.42	16,296.37	11,735.89	82.12	85.67	-90.11	4,044.65	-2,018.41	1,199.26	1,080.89	118.37	10.131		
16,400.00	11,720.47	16,396.36	11,734.23	83.54	87.12	-90.07	4,144.63	-2,019.27	1,199.27	1,078.87	120.40	9.960		
16,500.00	11,719.51	16,496.36	11,732.56	84.96	88.58	-90.04	4,244.61	-2,020.13	1,199.28	1,076.84	122.45	9.794		
16,600.00	11,718.56	16,596.36	11,730.90	86.39	90.04	-90.01	4,344.59	-2,020.99	1,199.29	1,074.79	124.50	9.633		
16,700.00	11,717.60	16,696.36	11,729.23	87.83	91.51	-89.97	4,444.57	-2,021.85	1,199.30	1,072.74	126.56	9.476		
16,800.00	11,716.65	16,796.35	11,727.57	89.28	92.99	-89.94	4,544.55	-2,022.72	1,199.31	1,070.68	128.63	9.323		
16,900.00	11,715.69	16,896.35	11,725.90	90.73	94.47	-89.90	4,644.53	-2,023.58	1,199.32	1,068.61	130.72	9.175		
17,000.00	11,714.74	16,996.35	11,724.24	92.19	95.96	-89.87	4,744.51	-2,024.44	1,199.34	1,066.53	132.80	9.031		
17,100.00	11,713.78	17,096.35	11,722.57	93.66	97.46	-89.84	4,844.48	-2,025.30	1,199.35	1,064.45	134.90	8.890		
17,200.00	11,712.83	17,196.34	11,720.91	95.13	98.95	-89.80	4,944.46	-2,026.16	1,199.36	1,062.35	137.01	8.754		
17,300.00	11,711.87	17,296.34	11,719.24	96.61	100.46	-89.77	5,044.44	-2,027.03	1,199.37	1,060.25	139.12	8.621		
17,400.00	11,710.92	17,396.34	11,717.58	98.09	101.97	-89.74	5,144.42	-2,027.89	1,199.38	1,058.15	141.24	8.492		
17,500.00	11,709.96	17,496.34	11,715.92	99.58	103.48	-89.70	5,244.40	-2,028.75	1,199.40	1,056.03	143.37	8.366		
17,600.00	11,709.01	17,596.33	11,714.25	101.07	105.00	-89.67	5,344.38	-2,029.61	1,199.41	1,053.91	145.50	8.243		
17,700.00	11,708.05	17,696.33	11,712.59	102.57	106.52	-89.63	5,444.36	-2,030.48	1,199.43	1,051.79	147.64	8.124		
17,800.00	11,707.10	17,796.33	11,710.92	104.08	108.04	-89.60	5,544.34	-2,031.34	1,199.44	1,049.66	149.78	8.008		
17,900.00	11,706.14	17,896.33	11,709.26	105.58	109.57	-89.57	5,644.32	-2,032.20	1,199.46	1,047.52	151.93	7.895		
18,000.00	11,705.19	17,996.32	11,707.59	107.09	111.10	-89.53	5,744.30	-2,033.06	1,199.47	1,045.38	154.09	7.784		
18,100.00	11,704.23	18,096.32	11,705.93	108.61	112.64	-89.50	5,844.28	-2,033.92	1,199.49	1,043.24	156.25	7.677		
18,200.00	11,703.28	18,196.32	11,704.26	110.13	114.17	-89.46	5,944.26	-2,034.79	1,199.50	1,041.09	158.42	7.572		
18,300.00	11,702.32	18,296.32	11,702.60	111.65	115.72	-89.43	6,044.24	-2,035.65	1,199.52	1,038.94	160.59	7.470		
18,400.00	11,701.37	18,396.31	11,700.93	113.18	117.26	-89.40	6,144.22	-2,036.51	1,199.54	1,036.78	162.76	7.370		
18,500.00	11,700.41	18,496.31	11,699.27	114.71	118.81	-89.36	6,244.20	-2,037.37	1,199.56	1,034.62	164.94	7.273		
18,600.00	11,699.46	18,596.31	11,697.60	116.24	120.36	-89.33	6,344.18	-2,038.23	1,199.57	1,032.45	167.12	7.178		
18,700.00	11,698.50	18,696.31	11,695.94	117.78	121.91	-89.29	6,444.16	-2,039.10	1,199.59	1,030.28	169.31	7.085		
18,800.00	11,697.55	18,796.30	11,694.27	119.32	123.47	-89.26	6,544.14	-2,039.96	1,199.61	1,028.11	171.50	6.995		
18,900.00	11,696.59	18,896.30	11,692.61	120.86	125.02	-89.23	6,644.12	-2,040.82	1,199.63	1,025.93	173.70	6.906		
19,000.00	11,695.64	18,996.30	11,690.94	122.41	126.58	-89.19	6,744.10	-2,041.68	1,199.65	1,023.75	175.90	6.820		
19,100.00	11,694.68	19,096.30	11,689.28	123.96	128.15	-89.16	6,844.08	-2,042.55	1,199.67	1,021.57	178.10	6.736		
19,200.00	11,693.73	19,196.29	11,687.61	125.51	129.71	-89.13	6,944.06	-2,043.41	1,199.69	1,019.39	180.30	6.654		
19,300.00	11,692.77	19,296.29	11,685.95	127.06	131.28	-89.09	7,044.04	-2,044.27	1,199.71	1,017.20	182.51	6.573		
19,400.00	11,691.82	19,396.29	11,684.28	128.62	132.85	-89.06	7,144.02	-2,045.13	1,199.73	1,015.01	184.72	6.495		
19,500.00	11,690.86	19,496.29	11,682.62	130.18	134.42	-89.02	7,244.00	-2,045.99	1,199.76	1,012.82	186.94	6.418		
19,600.00	11,689.91	19,596.28	11,680.95	131.74	135.99	-88.99	7,343.98	-2,046.86	1,199.78	1,010.62	189.15	6.343		
19,700.00	11,688.95	19,696.28	11,679.29	133.30	137.57	-88.96	7,443.96	-2,047.72	1,199.80	1,008.43	191.37	6.269		
19,800.00	11,688.00	19,796.28	11,677.62	134.87	139.14	-88.92	7,543.94	-2,048.58	1,199.82	1,006.23	193.60	6.198		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,900.00	11,687.04	19,896.28	11,675.96	136.43	140.72	-88.89	7,643.92	-2,049.44	1,199.85	1,004.03	195.82	6.127		
20,000.00	11,686.09	19,996.27	11,674.29	138.00	142.30	-88.85	7,743.90	-2,050.30	1,199.87	1,001.82	198.05	6.058		
20,100.00	11,685.13	20,096.27	11,672.63	139.57	143.88	-88.82	7,843.88	-2,051.17	1,199.90	999.62	200.28	5.991		
20,200.00	11,684.18	20,196.27	11,670.96	141.14	145.47	-88.79	7,943.86	-2,052.03	1,199.92	997.41	202.51	5.925		
20,300.00	11,683.22	20,296.27	11,669.30	142.72	147.05	-88.75	8,043.84	-2,052.89	1,199.95	995.20	204.75	5.861		
20,400.00	11,682.27	20,396.26	11,667.63	144.29	148.64	-88.72	8,143.82	-2,053.75	1,199.97	992.99	206.98	5.797		
20,500.00	11,681.31	20,496.26	11,665.97	145.87	150.22	-88.68	8,243.80	-2,054.61	1,200.00	990.78	209.22	5.736		
20,600.00	11,680.36	20,596.26	11,664.31	147.45	151.81	-88.65	8,343.78	-2,055.48	1,200.02	988.56	211.46	5.675		
20,700.00	11,679.40	20,696.26	11,662.64	149.03	153.40	-88.62	8,443.76	-2,056.34	1,200.05	986.35	213.70	5.615		
20,800.00	11,678.45	20,796.25	11,660.98	150.62	154.99	-88.58	8,543.74	-2,057.20	1,200.08	984.13	215.95	5.557		
20,900.00	11,677.49	20,896.25	11,659.31	152.20	156.59	-88.55	8,643.72	-2,058.06	1,200.11	981.91	218.19	5.500		
21,000.00	11,676.54	20,996.25	11,657.65	153.78	158.18	-88.52	8,743.70	-2,058.93	1,200.13	979.69	220.44	5.444		
21,100.00	11,675.58	21,096.25	11,655.98	155.37	159.78	-88.48	8,843.68	-2,059.79	1,200.16	977.47	222.69	5.389		
21,200.00	11,674.63	21,196.24	11,654.32	156.96	161.37	-88.45	8,943.66	-2,060.65	1,200.19	975.25	224.94	5.336		
21,300.00	11,673.67	21,296.24	11,652.65	158.55	162.97	-88.41	9,043.64	-2,061.51	1,200.22	973.03	227.19	5.283		
21,400.00	11,672.72	21,396.24	11,650.99	160.14	164.57	-88.38	9,143.62	-2,062.37	1,200.25	970.80	229.45	5.231		
21,500.00	11,671.76	21,496.24	11,649.32	161.73	166.17	-88.35	9,243.60	-2,063.24	1,200.28	968.58	231.70	5.180		
21,600.00	11,670.81	21,596.23	11,647.66	163.32	167.77	-88.31	9,343.58	-2,064.10	1,200.31	966.35	233.96	5.130		
21,700.00	11,669.86	21,696.23	11,645.99	164.92	169.37	-88.28	9,443.56	-2,064.96	1,200.34	964.13	236.22	5.082		
21,800.00	11,668.90	21,796.23	11,644.33	166.51	170.97	-88.24	9,543.54	-2,065.82	1,200.37	961.90	238.48	5.034		
21,900.00	11,667.95	21,896.23	11,642.66	168.11	172.57	-88.21	9,643.52	-2,066.68	1,200.41	959.67	240.74	4.986		
21,900.33	11,667.94	21,896.56	11,642.66	168.11	172.58	-88.21	9,643.85	-2,066.69	1,200.41	959.66	240.74	4.986		
21,938.19	11,667.58	21,929.37	11,642.11	168.72	173.11	-88.20	9,676.66	-2,066.97	1,200.43	958.85	241.57	4.969 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	15.00	15.00	0.00	0.02	-103.31	-446.03	-1,884.65	1,936.71					
100.00	100.00	115.00	115.00	0.13	0.18	-103.31	-446.03	-1,884.65	1,936.71	1,936.49	0.22	8,852.102		
200.00	200.00	215.00	215.00	0.48	0.54	-103.31	-446.03	-1,884.65	1,936.71	1,935.99	0.72	2,677.191		
300.00	300.00	315.00	315.00	0.84	0.90	-103.31	-446.03	-1,884.65	1,936.71	1,935.48	1.23	1,574.620		
400.00	400.00	415.00	415.00	1.20	1.25	-103.31	-446.03	-1,884.65	1,936.71	1,934.97	1.74	1,115.142		
500.00	500.00	515.00	515.00	1.56	1.61	-103.31	-446.03	-1,884.65	1,936.71	1,934.47	2.24	863.216		
600.00	600.00	615.00	615.00	1.92	1.97	-103.31	-446.03	-1,884.65	1,936.71	1,933.96	2.75	704.132		
700.00	700.00	715.00	715.00	2.28	2.33	-103.31	-446.03	-1,884.65	1,936.71	1,933.45	3.26	594.555		
800.00	800.00	815.00	815.00	2.63	2.69	-103.31	-446.03	-1,884.65	1,936.71	1,932.95	3.76	514.489		
900.00	900.00	915.00	915.00	2.99	3.05	-103.31	-446.03	-1,884.65	1,936.71	1,932.44	4.27	453.428		
1,000.00	1,000.00	1,015.00	1,015.00	3.35	3.41	-103.31	-446.03	-1,884.65	1,936.71	1,931.93	4.78	405.322		
1,100.00	1,100.00	1,115.00	1,115.00	3.71	3.76	-103.31	-446.03	-1,884.65	1,936.71	1,931.43	5.29	366.444		
1,200.00	1,200.00	1,215.00	1,215.00	4.07	4.12	-103.31	-446.03	-1,884.65	1,936.71	1,930.92	5.79	334.372		
1,300.00	1,300.00	1,315.00	1,315.00	4.43	4.48	-103.31	-446.03	-1,884.65	1,936.71	1,930.41	6.30	307.462		
1,400.00	1,400.00	1,415.00	1,415.00	4.79	4.84	-103.31	-446.03	-1,884.65	1,936.71	1,929.90	6.81	284.560		
1,500.00	1,500.00	1,515.00	1,515.00	5.14	5.20	-103.31	-446.03	-1,884.65	1,936.71	1,929.40	7.31	264.834		
1,600.00	1,600.00	1,615.00	1,615.00	5.50	5.56	-103.31	-446.03	-1,884.65	1,936.71	1,928.89	7.82	247.665		
1,700.00	1,700.00	1,715.00	1,715.00	5.86	5.91	-103.31	-446.03	-1,884.65	1,936.71	1,928.38	8.33	232.587		
1,800.00	1,800.00	1,815.00	1,815.00	6.22	6.27	-103.31	-446.03	-1,884.65	1,936.71	1,927.88	8.83	219.239		
1,900.00	1,900.00	1,915.00	1,915.00	6.58	6.63	-103.31	-446.03	-1,884.65	1,936.71	1,927.37	9.34	207.340		
2,000.00	2,000.00	2,015.00	2,015.00	6.94	6.99	-103.31	-446.03	-1,884.65	1,936.71	1,926.86	9.85	196.667		
2,100.00	2,100.00	2,115.00	2,115.00	7.29	7.35	-103.31	-446.03	-1,884.65	1,936.71	1,926.36	10.35	187.038		
2,200.00	2,200.00	2,215.00	2,215.00	7.65	7.71	-103.31	-446.03	-1,884.65	1,936.71	1,925.85	10.86	178.308		
2,300.00	2,300.00	2,315.00	2,315.00	8.01	8.07	-103.31	-446.03	-1,884.65	1,936.71	1,925.34	11.37	170.357		
2,400.00	2,400.00	2,415.00	2,415.00	8.37	8.42	-103.31	-446.03	-1,884.65	1,936.71	1,924.84	11.88	163.085		
2,500.00	2,500.00	2,515.00	2,515.00	8.73	8.78	-103.31	-446.03	-1,884.65	1,936.71	1,924.33	12.38	156.408		
2,600.00	2,599.99	2,614.99	2,614.99	9.07	9.14	26.98	-446.03	-1,884.65	1,935.54	1,922.67	12.88	150.291		
2,700.00	2,699.91	2,714.91	2,714.91	9.40	9.50	27.06	-446.03	-1,884.65	1,932.05	1,918.68	13.37	144.558		
2,800.00	2,799.69	2,814.69	2,814.69	9.74	9.86	27.19	-446.03	-1,884.65	1,926.22	1,912.37	13.85	139.051		
2,900.00	2,899.27	2,914.27	2,914.27	10.07	10.21	27.37	-446.03	-1,884.65	1,918.08	1,903.74	14.34	133.751		
3,000.00	2,998.57	3,013.57	3,013.57	10.42	10.57	27.60	-446.03	-1,884.65	1,907.64	1,892.81	14.83	128.640		
3,033.25	3,031.52	3,046.52	3,046.52	10.53	10.69	27.69	-446.03	-1,884.65	1,903.66	1,888.67	14.99	126.977		
3,100.00	3,097.62	3,112.62	3,112.62	10.76	10.92	27.82	-446.03	-1,884.65	1,895.42	1,880.11	15.32	123.734		
3,200.00	3,196.65	3,200.00	3,200.00	11.12	11.24	28.00	-446.03	-1,884.65	1,883.14	1,867.36	15.78	119.340		
3,300.00	3,295.67	3,276.12	3,276.12	11.48	11.50	28.14	-446.46	-1,885.28	1,871.83	1,855.62	16.21	115.507		
3,400.00	3,394.70	3,344.55	3,344.51	11.84	11.73	28.26	-447.58	-1,886.91	1,862.20	1,845.59	16.61	112.132		
3,500.00	3,493.73	3,400.00	3,399.91	12.20	11.91	28.34	-448.99	-1,888.97	1,854.31	1,837.34	16.97	109.262		
3,600.00	3,592.76	3,482.10	3,481.84	12.57	12.19	28.45	-451.91	-1,893.24	1,847.95	1,830.54	17.41	106.172		
3,700.00	3,691.78	3,551.14	3,550.64	12.95	12.42	28.52	-455.15	-1,897.96	1,843.33	1,825.52	17.80	103.540		
3,800.00	3,790.81	3,629.25	3,628.36	13.32	12.68	28.59	-459.59	-1,904.44	1,840.31	1,822.08	18.23	100.970		
3,900.00	3,889.84	3,729.18	3,727.74	13.70	13.03	28.67	-465.49	-1,913.06	1,837.71	1,819.00	18.72	98.190		
4,000.00	3,988.86	3,829.11	3,827.13	14.09	13.37	28.76	-471.40	-1,921.68	1,835.12	1,815.92	19.21	95.540		
4,100.00	4,087.89	3,929.05	3,926.51	14.47	13.72	28.84	-477.30	-1,930.30	1,832.54	1,812.83	19.70	93.011		
4,200.00	4,186.92	4,028.98	4,025.90	14.86	14.07	28.92	-483.21	-1,938.92	1,829.95	1,809.75	20.20	90.596		
4,300.00	4,285.95	4,128.91	4,125.28	15.25	14.42	29.00	-489.12	-1,947.54	1,827.37	1,806.67	20.70	88.289		
4,400.00	4,384.97	4,228.84	4,224.66	15.64	14.77	29.09	-495.02	-1,956.16	1,824.80	1,803.60	21.20	86.082		
4,500.00	4,484.00	4,328.77	4,324.05	16.03	15.13	29.17	-500.93	-1,964.78	1,822.22	1,800.52	21.70	83.971		
4,600.00	4,583.03	4,428.70	4,423.43	16.42	15.49	29.25	-506.83	-1,973.40	1,819.65	1,797.45	22.20	81.949		
4,700.00	4,682.05	4,528.64	4,522.82	16.82	15.85	29.34	-512.74	-1,982.02	1,817.09	1,794.38	22.71	80.012		
4,800.00	4,781.08	4,628.57	4,622.20	17.21	16.21	29.42	-518.65	-1,990.64	1,814.53	1,791.31	23.22	78.154		
4,900.00	4,880.11	4,728.50	4,721.58	17.61	16.57	29.51	-524.55	-1,999.26	1,811.97	1,788.25	23.73	76.371		
5,000.00	4,979.14	4,828.43	4,820.97	18.01	16.94	29.59	-530.46	-2,007.88	1,809.42	1,785.18	24.24	74.659		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	5,078.16	4,928.36	4,920.35	18.41	17.30	29.68	-536.36	-2,016.50	1,806.87	1,782.12	24.75	73.014		
5,200.00	5,177.19	5,028.30	5,019.73	18.81	17.67	29.76	-542.27	-2,025.12	1,804.33	1,779.07	25.26	71.432		
5,300.00	5,276.22	5,128.23	5,119.12	19.21	18.04	29.85	-548.18	-2,033.74	1,801.79	1,776.01	25.77	69.910		
5,400.00	5,375.24	5,228.16	5,218.50	19.62	18.41	29.93	-554.08	-2,042.36	1,799.25	1,772.96	26.29	68.445		
5,500.00	5,474.27	5,328.09	5,317.89	20.02	18.78	30.02	-559.99	-2,050.98	1,796.72	1,769.91	26.80	67.034		
5,600.00	5,573.30	5,428.02	5,417.27	20.43	19.15	30.10	-565.89	-2,059.60	1,794.19	1,766.87	27.32	65.674		
5,700.00	5,672.32	5,527.95	5,516.65	20.83	19.53	30.19	-571.80	-2,068.22	1,791.66	1,763.83	27.84	64.363		
5,800.00	5,771.35	5,627.89	5,616.04	21.24	19.90	30.28	-577.71	-2,076.84	1,789.14	1,760.79	28.36	63.097		
5,900.00	5,870.38	5,727.82	5,715.42	21.64	20.28	30.36	-583.61	-2,085.46	1,786.62	1,757.75	28.87	61.875		
6,000.00	5,969.41	5,827.75	5,814.81	22.05	20.65	30.45	-589.52	-2,094.08	1,784.11	1,754.72	29.39	60.695		
6,100.00	6,068.43	5,927.68	5,914.19	22.46	21.03	30.54	-595.42	-2,102.70	1,781.60	1,751.69	29.92	59.555		
6,200.00	6,167.46	6,027.61	6,013.57	22.87	21.40	30.62	-601.33	-2,111.32	1,779.10	1,748.66	30.44	58.452		
6,300.00	6,266.49	6,127.54	6,112.96	23.28	21.78	30.71	-607.24	-2,119.94	1,776.60	1,745.64	30.96	57.385		
6,400.00	6,365.51	6,227.48	6,212.34	23.69	22.16	30.80	-613.14	-2,128.56	1,774.10	1,742.62	31.48	56.353		
6,500.00	6,464.54	6,327.41	6,311.72	24.10	22.54	30.89	-619.05	-2,137.18	1,771.61	1,739.61	32.01	55.353		
6,600.00	6,563.57	6,427.34	6,411.11	24.51	22.92	30.98	-624.95	-2,145.80	1,769.12	1,736.59	32.53	54.384		
6,700.00	6,662.60	6,527.27	6,510.49	24.92	23.30	31.07	-630.86	-2,154.42	1,766.64	1,733.59	33.06	53.445		
6,800.00	6,761.62	6,627.20	6,609.88	25.33	23.68	31.15	-636.77	-2,163.04	1,764.16	1,730.58	33.58	52.535		
6,900.00	6,860.65	6,727.13	6,709.26	25.75	24.06	31.24	-642.67	-2,171.66	1,761.69	1,727.58	34.11	51.652		
7,000.00	6,959.68	6,827.07	6,808.64	26.16	24.45	31.33	-648.58	-2,180.28	1,759.22	1,724.58	34.63	50.795		
7,100.00	7,058.70	6,927.00	6,908.03	26.57	24.83	31.42	-654.48	-2,188.90	1,756.75	1,721.59	35.16	49.963		
7,200.00	7,157.73	7,026.93	7,007.41	26.99	25.21	31.51	-660.39	-2,197.52	1,754.29	1,718.60	35.69	49.155		
7,300.00	7,256.76	7,126.86	7,106.80	27.40	25.59	31.60	-666.30	-2,206.14	1,751.83	1,715.61	36.22	48.370		
7,400.00	7,355.79	7,226.44	7,241.72	27.81	26.11	31.74	-673.76	-2,217.03	1,748.86	1,712.01	36.85	47.462		
7,500.00	7,454.81	7,431.67	7,410.64	28.23	26.73	32.00	-679.49	-2,225.40	1,742.39	1,704.85	37.54	46.418		
7,600.00	7,553.84	7,589.90	7,568.84	28.64	27.28	32.35	-681.03	-2,227.65	1,732.03	1,693.88	38.16	45.392		
7,700.00	7,652.87	7,688.93	7,667.87	29.06	27.62	32.60	-681.03	-2,227.65	1,720.26	1,681.59	38.67	44.480		
7,800.00	7,751.89	7,787.96	7,766.89	29.47	27.95	32.85	-681.03	-2,227.65	1,708.52	1,669.33	39.19	43.593		
7,900.00	7,850.92	7,886.99	7,865.92	29.89	28.29	33.10	-681.03	-2,227.65	1,696.81	1,657.10	39.71	42.728		
8,000.00	7,949.95	7,986.01	7,964.95	30.30	28.62	33.36	-681.03	-2,227.65	1,685.14	1,644.91	40.23	41.886		
8,100.00	8,048.97	8,085.04	8,063.97	30.72	28.96	33.62	-681.03	-2,227.65	1,673.50	1,632.75	40.75	41.065		
8,200.00	8,148.00	8,184.07	8,163.00	31.14	29.30	33.89	-681.03	-2,227.65	1,661.90	1,620.62	41.27	40.266		
8,300.00	8,247.03	8,283.09	8,262.03	31.55	29.63	34.16	-681.03	-2,227.65	1,650.33	1,608.53	41.80	39.486		
8,400.00	8,346.06	8,382.12	8,361.06	31.97	29.97	34.43	-681.03	-2,227.65	1,638.80	1,596.48	42.32	38.725		
8,500.00	8,445.08	8,481.15	8,460.08	32.38	30.31	34.71	-681.03	-2,227.65	1,627.30	1,584.46	42.84	37.984		
8,600.00	8,544.11	8,580.18	8,559.11	32.80	30.65	34.99	-681.03	-2,227.65	1,615.85	1,572.48	43.37	37.260		
8,700.00	8,643.14	8,679.20	8,658.14	33.22	30.99	35.27	-681.03	-2,227.65	1,604.43	1,560.54	43.89	36.554		
8,800.00	8,742.16	8,778.23	8,757.16	33.64	31.33	35.56	-681.03	-2,227.65	1,593.05	1,548.63	44.42	35.865		
8,900.00	8,841.19	8,877.26	8,856.19	34.05	31.67	35.85	-681.03	-2,227.65	1,581.71	1,536.77	44.95	35.192		
9,000.00	8,940.22	8,976.28	8,955.22	34.47	32.01	36.15	-681.03	-2,227.65	1,570.42	1,524.94	45.47	34.535		
9,100.00	9,039.25	9,075.31	9,054.25	34.89	32.35	36.45	-681.03	-2,227.65	1,559.16	1,513.16	46.00	33.894		
9,200.00	9,138.27	9,174.34	9,153.27	35.31	32.69	36.75	-681.03	-2,227.65	1,547.95	1,501.42	46.53	33.267		
9,300.00	9,237.30	9,273.37	9,252.30	35.73	33.03	37.06	-681.03	-2,227.65	1,536.79	1,489.73	47.06	32.655		
9,400.00	9,336.33	9,372.39	9,351.33	36.14	33.37	37.37	-681.03	-2,227.65	1,525.67	1,478.08	47.59	32.057		
9,500.00	9,435.35	9,471.42	9,450.35	36.56	33.71	37.69	-681.03	-2,227.65	1,514.59	1,466.47	48.12	31.473		
9,600.00	9,534.38	9,570.45	9,549.38	36.98	34.05	38.02	-681.03	-2,227.65	1,503.57	1,454.91	48.66	30.902		
9,700.00	9,633.41	9,669.47	9,648.41	37.40	34.39	38.34	-681.03	-2,227.65	1,492.59	1,443.40	49.19	30.343		
9,800.00	9,732.44	9,768.50	9,747.44	37.82	34.74	38.68	-681.03	-2,227.65	1,481.66	1,431.93	49.72	29.797		
9,836.39	9,768.48	9,804.54	9,783.48	37.97	34.86	38.80	-681.03	-2,227.65	1,477.69	1,427.77	49.92	29.602		
9,900.00	9,831.53	9,867.60	9,846.53	38.23	35.08	38.94	-681.03	-2,227.65	1,471.19	1,420.93	50.26	29.273		
10,000.00	9,930.93	9,966.99	9,945.93	38.63	35.42	39.13	-681.03	-2,227.65	1,462.65	1,411.86	50.78	28.801		
10,100.00	10,030.57	10,066.64	10,045.57	39.01	35.77	39.27	-681.03	-2,227.65	1,456.16	1,404.86	51.30	28.384		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													1912 Fed Com - 1912 Fed Com 701H - 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			
10,200.00	10,130.41	10,166.47	10,145.41	39.38	36.11	39.37	-681.03	-2,227.65	1,451.71	1,399.90	51.81	28.020			
10,300.00	10,230.35	10,266.42	10,245.35	39.72	36.46	39.43	-681.03	-2,227.65	1,449.29	1,396.99	52.31	27.707			
10,369.65	10,300.00	10,336.07	10,315.00	39.95	36.70	-90.83	-681.03	-2,227.65	1,448.80	1,396.16	52.64	27.520			
10,400.00	10,330.35	10,366.42	10,345.35	40.04	36.81	-90.83	-681.03	-2,227.65	1,448.80	1,396.01	52.79	27.446			
10,500.00	10,430.35	10,466.42	10,445.35	40.35	37.16	-90.83	-681.03	-2,227.65	1,448.80	1,395.54	53.26	27.202			
10,600.00	10,530.35	10,566.42	10,545.35	40.66	37.50	-90.83	-681.03	-2,227.65	1,448.80	1,395.07	53.74	26.962			
10,700.00	10,630.35	10,666.42	10,645.35	40.97	37.85	-90.83	-681.03	-2,227.65	1,448.80	1,394.59	54.21	26.726			
10,800.00	10,730.35	10,766.42	10,745.35	41.28	38.20	-90.83	-681.03	-2,227.65	1,448.80	1,394.12	54.69	26.494			
10,900.00	10,830.35	10,866.42	10,845.35	41.59	38.55	-90.83	-681.03	-2,227.65	1,448.80	1,393.64	55.16	26.265			
11,000.00	10,930.35	10,966.42	10,945.35	41.91	38.89	-90.83	-681.03	-2,227.65	1,448.80	1,393.17	55.64	26.040			
11,100.00	11,030.35	11,066.42	11,045.35	42.22	39.24	-90.83	-681.03	-2,227.65	1,448.80	1,392.69	56.11	25.819			
11,200.00	11,130.35	11,166.42	11,145.35	42.53	39.59	-90.83	-681.03	-2,227.65	1,448.80	1,392.21	56.59	25.601			
11,257.65	11,188.00	11,224.07	11,203.00	42.72	39.79	-90.83	-681.03	-2,227.65	1,448.80	1,391.94	56.87	25.477 CC			
11,300.00	11,230.31	11,266.38	11,245.31	42.84	39.94	-90.40	-681.03	-2,227.65	1,448.81	1,391.75	57.06	25.390			
11,350.00	11,279.95	11,316.02	11,294.95	42.98	40.11	-90.63	-681.03	-2,227.65	1,448.87	1,391.59	57.28	25.296			
11,400.00	11,328.89	11,364.96	11,343.89	43.11	40.28	-91.01	-681.03	-2,227.65	1,449.01	1,391.54	57.47	25.212			
11,450.00	11,376.76	11,412.82	11,391.76	43.21	40.45	-91.52	-681.03	-2,227.65	1,449.35	1,391.70	57.65	25.141			
11,500.00	11,423.19	11,459.25	11,438.19	43.31	40.61	-92.13	-681.03	-2,227.65	1,449.98	1,392.18	57.80	25.084			
11,550.00	11,467.83	11,503.89	11,482.83	43.38	40.77	-92.82	-681.03	-2,227.65	1,451.08	1,393.13	57.94	25.044			
11,600.00	11,510.34	11,546.41	11,525.34	43.44	40.92	-93.53	-681.03	-2,227.65	1,452.79	1,394.73	58.06	25.021			
11,650.00	11,550.40	11,596.02	11,574.92	43.48	41.09	-94.41	-679.64	-2,227.66	1,455.22	1,397.05	58.17	25.015			
11,700.00	11,587.70	11,651.66	11,630.15	43.50	41.28	-95.37	-673.07	-2,227.72	1,458.20	1,399.92	58.28	25.021			
11,750.00	11,621.96	11,711.90	11,688.92	43.51	41.47	-96.35	-659.97	-2,227.83	1,461.65	1,403.29	58.37	25.043			
11,800.00	11,652.91	11,777.67	11,751.12	43.50	41.66	-97.36	-638.71	-2,228.01	1,465.50	1,407.06	58.43	25.080			
11,850.00	11,680.33	11,850.06	11,816.27	43.48	41.85	-98.39	-607.24	-2,228.29	1,469.60	1,411.13	58.47	25.134			
11,900.00	11,704.00	11,930.23	11,883.13	43.45	42.02	-99.45	-563.14	-2,228.67	1,473.78	1,415.31	58.47	25.205			
11,950.00	11,723.74	12,019.22	11,949.34	43.40	42.18	-100.49	-503.81	-2,229.18	1,477.79	1,419.35	58.44	25.287			
12,000.00	11,739.41	12,117.62	12,010.87	43.35	42.30	-101.46	-427.18	-2,229.84	1,481.36	1,422.96	58.40	25.368			
12,050.00	11,750.88	12,225.07	12,062.02	43.29	42.38	-102.25	-332.88	-2,230.65	1,484.16	1,425.79	58.37	25.427			
12,100.00	11,758.06	12,339.73	12,096.19	43.23	42.61	-102.76	-223.62	-2,231.59	1,485.91	1,427.49	58.43	25.433			
12,150.00	11,760.91	12,458.19	12,107.95	43.16	42.91	-102.91	-105.97	-2,232.61	1,486.40	1,427.79	58.61	25.361			
12,162.93	11,760.93	12,473.09	12,107.82	43.14	42.95	-102.90	-91.07	-2,232.74	1,486.36	1,427.72	58.64	25.347			
12,163.12	11,760.93	12,473.28	12,107.82	43.14	42.95	-102.90	-90.88	-2,232.74	1,486.36	1,427.72	58.64	25.347			
12,200.00	11,760.58	12,510.15	12,107.46	43.10	43.06	-102.90	-54.01	-2,233.06	1,486.37	1,427.65	58.72	25.313			
12,300.00	11,759.62	12,610.15	12,106.50	42.98	43.38	-102.90	45.98	-2,233.92	1,486.37	1,427.38	59.00	25.195			
12,400.00	11,758.67	12,710.15	12,105.54	42.89	43.76	-102.90	145.97	-2,234.78	1,486.38	1,427.02	59.36	25.041			
12,500.00	11,757.71	12,810.15	12,104.57	42.82	44.19	-102.90	245.97	-2,235.64	1,486.39	1,426.58	59.81	24.854			
12,600.00	11,756.76	12,910.15	12,103.61	43.17	44.68	-102.90	345.96	-2,236.50	1,486.40	1,426.06	60.34	24.636			
12,700.00	11,755.80	13,010.15	12,102.65	43.61	45.22	-102.90	445.95	-2,237.37	1,486.41	1,425.46	60.95	24.389			
12,800.00	11,754.85	13,110.15	12,101.68	44.09	45.82	-102.90	545.94	-2,238.23	1,486.41	1,424.77	61.64	24.115			
12,900.00	11,753.89	13,210.15	12,100.72	44.63	46.46	-102.90	645.93	-2,239.09	1,486.42	1,424.01	62.41	23.819			
13,000.00	11,752.94	13,310.15	12,099.76	45.21	47.15	-102.90	745.92	-2,239.95	1,486.43	1,423.18	63.25	23.502			
13,100.00	11,751.98	13,410.15	12,098.80	45.84	47.89	-102.90	845.92	-2,240.81	1,486.44	1,422.28	64.16	23.169			
13,200.00	11,751.03	13,510.15	12,097.83	46.52	48.68	-102.90	945.91	-2,241.68	1,486.44	1,421.31	65.13	22.821			
13,300.00	11,750.07	13,610.15	12,096.87	47.24	49.50	-102.90	1,045.90	-2,242.54	1,486.45	1,420.27	66.18	22.462			
13,400.00	11,749.12	13,710.15	12,095.91	48.00	50.37	-102.90	1,145.89	-2,243.40	1,486.46	1,419.18	67.28	22.093			
13,500.00	11,748.16	13,810.15	12,094.94	48.81	51.27	-102.90	1,245.88	-2,244.26	1,486.47	1,418.02	68.45	21.717			
13,600.00	11,747.21	13,910.15	12,093.98	49.65	52.21	-102.90	1,345.87	-2,245.12	1,486.47	1,416.81	69.67	21.337			
13,700.00	11,746.25	14,010.15	12,093.02	50.54	53.19	-102.90	1,445.87	-2,245.99	1,486.48	1,415.54	70.94	20.955			
13,800.00	11,745.30	14,110.15	12,092.05	51.46	54.20	-102.90	1,545.86	-2,246.85	1,486.49	1,414.23	72.26	20.572			
13,900.00	11,744.34	14,210.16	12,091.09	52.41	55.24	-102.90	1,645.85	-2,247.71	1,486.50	1,412.87	73.63	20.189			
14,000.00	11,743.39	14,310.16	12,090.13	53.40	56.30	-102.90	1,745.84	-2,248.57	1,486.50	1,411.46	75.04	19.809			

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													1912 Fed Com - 1912 Fed Com 701H - 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			
14,100.00	11,742.43	14,410.16	12,089.16	54.42	57.40	-102.90	1,845.83	-2,249.43	1,486.51	1,410.02	76.50	19.432			
14,200.00	11,741.48	14,510.16	12,088.20	55.47	58.52	-102.89	1,945.82	-2,250.29	1,486.52	1,408.53	77.99	19.060			
14,300.00	11,740.52	14,610.16	12,087.24	56.54	59.67	-102.89	2,045.82	-2,251.16	1,486.53	1,407.00	79.52	18.693			
14,400.00	11,739.57	14,710.16	12,086.28	57.65	60.84	-102.89	2,145.81	-2,252.02	1,486.54	1,405.44	81.09	18.331			
14,500.00	11,738.61	14,810.16	12,085.31	58.77	62.03	-102.89	2,245.80	-2,252.88	1,486.54	1,403.85	82.70	17.976			
14,600.00	11,737.66	14,910.16	12,084.35	59.93	63.24	-102.89	2,345.79	-2,253.74	1,486.55	1,402.22	84.33	17.628			
14,700.00	11,736.70	15,010.16	12,083.39	61.10	64.47	-102.89	2,445.78	-2,254.60	1,486.56	1,400.57	85.99	17.287			
14,800.00	11,735.75	15,110.16	12,082.42	62.30	65.72	-102.89	2,545.77	-2,255.47	1,486.57	1,398.88	87.68	16.954			
14,900.00	11,734.79	15,210.16	12,081.46	63.51	66.99	-102.89	2,645.77	-2,256.33	1,486.57	1,397.17	89.40	16.628			
15,000.00	11,733.84	15,310.16	12,080.50	64.75	68.27	-102.89	2,745.76	-2,257.19	1,486.58	1,395.44	91.14	16.310			
15,100.00	11,732.88	15,410.16	12,079.53	66.00	69.57	-102.89	2,845.75	-2,258.05	1,486.59	1,393.68	92.91	16.000			
15,200.00	11,731.93	15,510.16	12,078.57	67.27	70.89	-102.89	2,945.74	-2,258.91	1,486.60	1,391.90	94.70	15.698			
15,300.00	11,730.97	15,610.16	12,077.61	68.55	72.21	-102.89	3,045.73	-2,259.78	1,486.60	1,390.09	96.51	15.404			
15,400.00	11,730.02	15,710.16	12,076.64	69.86	73.55	-102.89	3,145.72	-2,260.64	1,486.61	1,388.27	98.34	15.117			
15,500.00	11,729.06	15,810.16	12,075.68	71.17	74.91	-102.89	3,245.72	-2,261.50	1,486.62	1,386.43	100.18	14.839			
15,600.00	11,728.11	15,910.16	12,074.72	72.50	76.27	-102.89	3,345.71	-2,262.36	1,486.63	1,384.58	102.05	14.568			
15,700.00	11,727.15	16,010.16	12,073.75	73.84	77.65	-102.89	3,445.70	-2,263.22	1,486.63	1,382.70	103.93	14.304			
15,800.00	11,726.20	16,110.16	12,072.79	75.19	79.03	-102.89	3,545.69	-2,264.09	1,486.64	1,380.81	105.83	14.048			
15,900.00	11,725.24	16,210.16	12,071.83	76.56	80.43	-102.89	3,645.68	-2,264.95	1,486.65	1,378.91	107.74	13.798			
16,000.00	11,724.29	16,310.16	12,070.87	77.94	81.84	-102.89	3,745.67	-2,265.81	1,486.66	1,376.99	109.67	13.556			
16,100.00	11,723.33	16,410.16	12,069.90	79.32	83.25	-102.89	3,845.67	-2,266.67	1,486.67	1,375.06	111.61	13.320			
16,200.00	11,722.38	16,510.16	12,068.94	80.72	84.68	-102.89	3,945.66	-2,267.53	1,486.67	1,373.11	113.56	13.091			
16,300.00	11,721.42	16,610.16	12,067.98	82.12	86.11	-102.89	4,045.65	-2,268.40	1,486.68	1,371.15	115.53	12.869			
16,400.00	11,720.47	16,710.16	12,067.01	83.54	87.55	-102.89	4,145.64	-2,269.26	1,486.69	1,369.19	117.50	12.652			
16,500.00	11,719.51	16,810.16	12,066.05	84.96	88.99	-102.89	4,245.63	-2,270.12	1,486.70	1,367.21	119.49	12.442			
16,600.00	11,718.56	16,910.16	12,065.09	86.39	90.45	-102.89	4,345.62	-2,270.98	1,486.70	1,365.22	121.49	12.237			
16,700.00	11,717.60	17,010.16	12,064.12	87.83	91.91	-102.89	4,445.62	-2,271.84	1,486.71	1,363.21	123.50	12.038			
16,800.00	11,716.65	17,110.16	12,063.16	89.28	93.37	-102.88	4,545.61	-2,272.71	1,486.72	1,361.21	125.51	11.845			
16,900.00	11,715.69	17,210.16	12,062.20	90.73	94.85	-102.88	4,645.60	-2,273.57	1,486.73	1,359.19	127.54	11.657			
17,000.00	11,714.74	17,310.16	12,061.23	92.19	96.33	-102.88	4,745.59	-2,274.43	1,486.73	1,357.16	129.57	11.474			
17,100.00	11,713.78	17,410.16	12,060.27	93.66	97.81	-102.88	4,845.58	-2,275.29	1,486.74	1,355.13	131.62	11.296			
17,200.00	11,712.83	17,510.16	12,059.31	95.13	99.30	-102.88	4,945.57	-2,276.15	1,486.75	1,353.08	133.67	11.123			
17,300.00	11,711.87	17,610.16	12,058.34	96.61	100.80	-102.88	5,045.57	-2,277.02	1,486.76	1,351.03	135.72	10.954			
17,400.00	11,710.92	17,710.16	12,057.38	98.09	102.29	-102.88	5,145.56	-2,277.88	1,486.76	1,348.98	137.79	10.790			
17,500.00	11,709.96	17,810.16	12,056.42	99.58	103.80	-102.88	5,245.55	-2,278.74	1,486.77	1,346.91	139.86	10.631			
17,600.00	11,709.01	17,910.16	12,055.46	101.07	105.31	-102.88	5,345.54	-2,279.60	1,486.78	1,344.84	141.94	10.475			
17,700.00	11,708.05	18,010.16	12,054.49	102.57	106.82	-102.88	5,445.53	-2,280.46	1,486.79	1,342.77	144.02	10.324			
17,800.00	11,707.10	18,110.16	12,053.53	104.08	108.34	-102.88	5,545.52	-2,281.33	1,486.80	1,340.69	146.11	10.176			
17,900.00	11,706.14	18,210.16	12,052.57	105.58	109.86	-102.88	5,645.52	-2,282.19	1,486.80	1,338.60	148.20	10.032			
18,000.00	11,705.19	18,310.16	12,051.60	107.09	111.38	-102.88	5,745.51	-2,283.05	1,486.81	1,336.51	150.31	9.892			
18,100.00	11,704.23	18,410.16	12,050.64	108.61	112.91	-102.88	5,845.50	-2,283.91	1,486.82	1,334.41	152.41	9.755			
18,200.00	11,703.28	18,510.16	12,049.68	110.13	114.44	-102.88	5,945.49	-2,284.77	1,486.83	1,332.30	154.52	9.622			
18,300.00	11,702.32	18,610.16	12,048.71	111.65	115.98	-102.88	6,045.48	-2,285.64	1,486.83	1,330.20	156.64	9.492			
18,400.00	11,701.37	18,710.16	12,047.75	113.18	117.51	-102.88	6,145.47	-2,286.50	1,486.84	1,328.09	158.76	9.366			
18,500.00	11,700.41	18,810.16	12,046.79	114.71	119.05	-102.88	6,245.47	-2,287.36	1,486.85	1,325.97	160.88	9.242			
18,600.00	11,699.46	18,910.16	12,045.82	116.24	120.60	-102.88	6,345.46	-2,288.22	1,486.86	1,323.85	163.01	9.121			
18,700.00	11,698.50	19,010.16	12,044.86	117.78	122.14	-102.88	6,445.45	-2,289.08	1,486.86	1,321.72	165.14	9.004			
18,800.00	11,697.55	19,110.16	12,043.90	119.32	123.69	-102.88	6,545.44	-2,289.95	1,486.87	1,319.60	167.28	8.889			
18,900.00	11,696.59	19,210.16	12,042.93	120.86	125.25	-102.88	6,645.43	-2,290.81	1,486.88	1,317.46	169.42	8.776			
19,000.00	11,695.64	19,310.16	12,041.97	122.41	126.80	-102.88	6,745.42	-2,291.67	1,486.89	1,315.33	171.56	8.667			
19,100.00	11,694.68	19,410.16	12,041.01	123.96	128.36	-102.88	6,845.42	-2,292.53	1,486.90	1,313.19	173.71	8.560			
19,200.00	11,693.73	19,510.16	12,040.05	125.51	129.92	-102.88	6,945.41	-2,293.39	1,486.90	1,311.05	175.86	8.455			

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,300.00	11,692.77	19,610.16	12,039.08	127.06	131.48	-102.88	7,045.40	-2,294.26	1,486.91	1,308.90	178.01	8.353		
19,400.00	11,691.82	19,710.16	12,038.12	128.62	133.04	-102.87	7,145.39	-2,295.12	1,486.92	1,306.75	180.17	8.253		
19,500.00	11,690.86	19,810.16	12,037.16	130.18	134.61	-102.87	7,245.38	-2,295.98	1,486.93	1,304.60	182.32	8.155		
19,600.00	11,689.91	19,910.16	12,036.19	131.74	136.18	-102.87	7,345.37	-2,296.84	1,486.93	1,302.45	184.49	8.060		
19,700.00	11,688.95	20,010.16	12,035.23	133.30	137.75	-102.87	7,445.37	-2,297.70	1,486.94	1,300.29	186.65	7.966		
19,800.00	11,688.00	20,110.16	12,034.27	134.87	139.32	-102.87	7,545.36	-2,298.57	1,486.95	1,298.13	188.82	7.875		
19,900.00	11,687.04	20,210.16	12,033.30	136.43	140.89	-102.87	7,645.35	-2,299.43	1,486.96	1,295.97	190.99	7.786		
20,000.00	11,686.09	20,310.16	12,032.34	138.00	142.47	-102.87	7,745.34	-2,300.29	1,486.96	1,293.81	193.16	7.698		
20,100.00	11,685.13	20,410.16	12,031.38	139.57	144.04	-102.87	7,845.33	-2,301.15	1,486.97	1,291.64	195.33	7.612		
20,200.00	11,684.18	20,510.16	12,030.41	141.14	145.62	-102.87	7,945.32	-2,302.01	1,486.98	1,289.47	197.51	7.529		
20,300.00	11,683.22	20,610.16	12,029.45	142.72	147.20	-102.87	8,045.32	-2,302.88	1,486.99	1,287.30	199.69	7.447		
20,400.00	11,682.27	20,710.16	12,028.49	144.29	148.78	-102.87	8,145.31	-2,303.74	1,486.99	1,285.13	201.87	7.366		
20,500.00	11,681.31	20,810.16	12,027.53	145.87	150.37	-102.87	8,245.30	-2,304.60	1,487.00	1,282.95	204.05	7.287		
20,600.00	11,680.36	20,910.16	12,026.56	147.45	151.95	-102.87	8,345.29	-2,305.46	1,487.01	1,280.77	206.24	7.210		
20,700.00	11,679.40	21,010.16	12,025.60	149.03	153.54	-102.87	8,445.28	-2,306.32	1,487.02	1,278.59	208.42	7.135		
20,800.00	11,678.45	21,110.16	12,024.64	150.62	155.13	-102.87	8,545.27	-2,307.19	1,487.03	1,276.41	210.61	7.060		
20,900.00	11,677.49	21,210.16	12,023.67	152.20	156.71	-102.87	8,645.27	-2,308.05	1,487.03	1,274.23	212.80	6.988		
21,000.00	11,676.54	21,310.16	12,022.71	153.78	158.30	-102.87	8,745.26	-2,308.91	1,487.04	1,272.05	214.99	6.917		
21,100.00	11,675.58	21,410.16	12,021.75	155.37	159.90	-102.87	8,845.25	-2,309.77	1,487.05	1,269.86	217.19	6.847		
21,200.00	11,674.63	21,510.16	12,020.78	156.96	161.49	-102.87	8,945.24	-2,310.63	1,487.06	1,267.67	219.38	6.778		
21,300.00	11,673.67	21,610.16	12,019.82	158.55	163.08	-102.87	9,045.23	-2,311.50	1,487.06	1,265.48	221.58	6.711		
21,400.00	11,672.72	21,710.16	12,018.86	160.14	164.68	-102.87	9,145.22	-2,312.36	1,487.07	1,263.29	223.78	6.645		
21,500.00	11,671.76	21,810.16	12,017.89	161.73	166.27	-102.87	9,245.21	-2,313.22	1,487.08	1,261.10	225.98	6.581		
21,600.00	11,670.81	21,910.16	12,016.93	163.32	167.87	-102.87	9,345.21	-2,314.08	1,487.09	1,258.91	228.18	6.517		
21,700.00	11,669.86	22,010.16	12,015.97	164.92	169.47	-102.87	9,445.20	-2,314.94	1,487.09	1,256.71	230.38	6.455		
21,800.00	11,668.90	22,110.16	12,015.00	166.51	171.07	-102.87	9,545.19	-2,315.81	1,487.10	1,254.52	232.59	6.394		
21,900.00	11,667.95	22,210.16	12,014.04	168.11	172.67	-102.86	9,645.18	-2,316.67	1,487.11	1,252.32	234.79	6.334		
21,900.12	11,667.94	22,210.28	12,014.04	168.11	172.67	-102.86	9,645.30	-2,316.67	1,487.11	1,252.32	234.79	6.334		
21,938.19	11,667.58	22,238.31	12,013.77	168.72	173.12	-102.86	9,673.33	-2,316.91	1,487.15	1,251.58	235.57	6.313 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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				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	9.90	9.90	0.00	0.01	-103.79	-445.30	-1,814.67	1,868.51					
100.00	100.00	109.90	109.90	0.13	0.16	-103.79	-445.30	-1,814.67	1,868.51	1,868.30	0.20	9,155.864		
200.00	200.00	209.90	209.90	0.48	0.52	-103.79	-445.30	-1,814.67	1,868.51	1,867.80	0.71	2,631.968		
300.00	300.00	309.90	309.90	0.84	0.88	-103.79	-445.30	-1,814.67	1,868.51	1,867.29	1.22	1,535.719		
400.00	400.00	409.90	409.90	1.20	1.24	-103.79	-445.30	-1,814.67	1,868.51	1,866.78	1.72	1,084.087		
500.00	500.00	509.90	509.90	1.56	1.59	-103.79	-445.30	-1,814.67	1,868.51	1,866.28	2.23	837.711		
600.00	600.00	609.90	609.90	1.92	1.95	-103.79	-445.30	-1,814.67	1,868.51	1,865.77	2.74	682.580		
700.00	700.00	709.90	709.90	2.28	2.31	-103.79	-445.30	-1,814.67	1,868.51	1,865.26	3.24	575.925		
800.00	800.00	809.90	809.90	2.63	2.67	-103.79	-445.30	-1,814.67	1,868.51	1,864.76	3.75	498.096		
900.00	900.00	909.90	909.90	2.99	3.03	-103.79	-445.30	-1,814.67	1,868.51	1,864.25	4.26	438.797		
1,000.00	1,000.00	1,009.90	1,009.90	3.35	3.39	-103.79	-445.30	-1,814.67	1,868.51	1,863.74	4.77	392.116		
1,100.00	1,100.00	1,109.90	1,109.90	3.71	3.75	-103.79	-445.30	-1,814.67	1,868.51	1,863.24	5.27	354.411		
1,200.00	1,200.00	1,209.90	1,209.90	4.07	4.10	-103.79	-445.30	-1,814.67	1,868.51	1,862.73	5.78	323.322		
1,300.00	1,300.00	1,309.90	1,309.90	4.43	4.46	-103.79	-445.30	-1,814.67	1,868.51	1,862.22	6.29	297.247		
1,400.00	1,400.00	1,409.90	1,409.90	4.79	4.82	-103.79	-445.30	-1,814.67	1,868.51	1,861.71	6.79	275.064		
1,500.00	1,500.00	1,509.90	1,509.90	5.14	5.18	-103.79	-445.30	-1,814.67	1,868.51	1,861.21	7.30	255.962		
1,600.00	1,600.00	1,609.90	1,609.90	5.50	5.54	-103.79	-445.30	-1,814.67	1,868.51	1,860.70	7.81	239.341		
1,700.00	1,700.00	1,709.90	1,709.90	5.86	5.90	-103.79	-445.30	-1,814.67	1,868.51	1,860.19	8.31	224.746		
1,800.00	1,800.00	1,809.90	1,809.90	6.22	6.25	-103.79	-445.30	-1,814.67	1,868.51	1,859.69	8.82	211.830		
1,900.00	1,900.00	1,909.90	1,909.90	6.58	6.61	-103.79	-445.30	-1,814.67	1,868.51	1,859.18	9.33	200.317		
2,000.00	2,000.00	2,009.90	2,009.90	6.94	6.97	-103.79	-445.30	-1,814.67	1,868.51	1,858.67	9.83	189.991		
2,100.00	2,100.00	2,109.90	2,109.90	7.29	7.33	-103.79	-445.30	-1,814.67	1,868.51	1,858.17	10.34	180.678		
2,200.00	2,200.00	2,209.90	2,209.90	7.65	7.69	-103.79	-445.30	-1,814.67	1,868.51	1,857.66	10.85	172.235		
2,300.00	2,300.00	2,309.90	2,309.90	8.01	8.05	-103.79	-445.30	-1,814.67	1,868.51	1,857.15	11.36	164.545		
2,400.00	2,400.00	2,409.90	2,409.90	8.37	8.41	-103.79	-445.30	-1,814.67	1,868.51	1,856.64	11.86	157.513		
2,500.00	2,500.00	2,509.90	2,509.90	8.73	8.76	-103.79	-445.30	-1,814.67	1,868.51	1,856.14	12.37	151.058		
2,600.00	2,599.99	2,609.89	2,609.89	9.07	9.12	26.51	-445.30	-1,814.67	1,867.34	1,854.47	12.87	145.140		
2,700.00	2,699.91	2,709.81	2,709.81	9.40	9.48	26.59	-445.30	-1,814.67	1,863.82	1,850.47	13.35	139.589		
2,800.00	2,799.69	2,809.59	2,809.59	9.74	9.84	26.72	-445.30	-1,814.67	1,857.98	1,844.14	13.84	134.250		
2,900.00	2,899.27	2,909.17	2,909.17	10.07	10.20	26.90	-445.30	-1,814.67	1,849.80	1,835.47	14.33	129.107		
3,000.00	2,998.57	3,008.47	3,008.47	10.42	10.55	27.14	-445.30	-1,814.67	1,839.32	1,824.50	14.82	124.142		
3,033.25	3,031.52	3,041.42	3,041.42	10.53	10.67	27.23	-445.30	-1,814.67	1,835.32	1,820.34	14.98	122.525		
3,100.00	3,097.62	3,107.52	3,107.52	10.76	10.91	27.36	-445.30	-1,814.67	1,827.05	1,811.74	15.31	119.372		
3,200.00	3,196.65	3,210.06	3,210.06	11.12	11.27	27.57	-445.31	-1,814.66	1,814.67	1,798.87	15.80	114.825		
3,300.00	3,295.67	3,361.89	3,361.84	11.48	11.79	27.81	-447.00	-1,811.69	1,800.68	1,784.27	16.40	109.786		
3,400.00	3,394.70	3,512.63	3,512.28	11.84	12.29	27.93	-451.64	-1,803.56	1,783.81	1,766.83	16.98	105.061		
3,500.00	3,493.73	3,661.83	3,660.70	12.20	12.80	27.91	-459.12	-1,790.45	1,764.09	1,746.54	17.54	100.555		
3,600.00	3,592.76	3,761.19	3,759.33	12.57	13.15	27.85	-465.11	-1,779.93	1,742.87	1,724.84	18.02	96.701		
3,700.00	3,691.78	3,858.90	3,856.31	12.95	13.49	27.79	-471.01	-1,769.59	1,721.65	1,703.15	18.50	93.043		
3,800.00	3,790.81	3,956.61	3,953.29	13.32	13.83	27.74	-476.91	-1,759.24	1,700.43	1,681.45	18.99	89.557		
3,900.00	3,889.84	4,054.32	4,050.27	13.70	14.18	27.67	-482.81	-1,748.90	1,679.22	1,659.75	19.47	86.232		
4,000.00	3,988.86	4,152.03	4,147.25	14.09	14.53	27.61	-488.71	-1,738.56	1,658.01	1,638.04	19.96	83.058		
4,100.00	4,087.89	4,249.73	4,244.23	14.47	14.88	27.55	-494.61	-1,728.21	1,636.80	1,616.34	20.45	80.027		
4,200.00	4,186.92	4,347.44	4,341.21	14.86	15.23	27.48	-500.51	-1,717.87	1,615.59	1,594.64	20.95	77.130		
4,300.00	4,285.95	4,445.15	4,438.19	15.25	15.59	27.41	-506.41	-1,707.52	1,594.38	1,572.94	21.44	74.359		
4,400.00	4,384.97	4,542.86	4,535.17	15.64	15.95	27.35	-512.31	-1,697.18	1,573.18	1,551.24	21.94	71.707		
4,500.00	4,484.00	4,640.57	4,632.15	16.03	16.31	27.27	-518.21	-1,686.84	1,551.97	1,529.54	22.44	69.167		
4,600.00	4,583.03	4,738.27	4,729.13	16.42	16.67	27.20	-524.11	-1,676.49	1,530.77	1,507.83	22.94	66.732		
4,700.00	4,682.05	4,835.98	4,826.10	16.82	17.03	27.13	-530.01	-1,666.15	1,509.58	1,486.13	23.44	64.398		
4,800.00	4,781.08	4,933.69	4,923.08	17.21	17.40	27.05	-535.91	-1,655.80	1,488.38	1,464.44	23.95	62.157		
4,900.00	4,880.11	5,031.40	5,020.06	17.61	17.77	26.97	-541.81	-1,645.46	1,467.19	1,442.74	24.45	60.006		
5,000.00	4,979.14	5,129.11	5,117.04	18.01	18.14	26.89	-547.71	-1,635.12	1,446.00	1,421.04	24.96	57.939		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	5,078.16	5,226.81	5,214.02	18.41	18.51	26.80	-553.61	-1,624.77	1,424.81	1,399.35	25.47	55.952		
5,200.00	5,177.19	5,324.52	5,311.00	18.81	18.88	26.72	-559.51	-1,614.43	1,403.63	1,377.66	25.97	54.040		
5,300.00	5,276.22	5,422.23	5,407.98	19.21	19.25	26.63	-565.41	-1,604.09	1,382.45	1,355.97	26.48	52.199		
5,400.00	5,375.24	5,519.94	5,504.96	19.62	19.62	26.53	-571.32	-1,593.74	1,361.27	1,334.28	27.00	50.426		
5,500.00	5,474.27	5,617.65	5,601.94	20.02	20.00	26.44	-577.22	-1,583.40	1,340.10	1,312.59	27.51	48.718		
5,600.00	5,573.30	5,715.35	5,698.92	20.43	20.37	26.34	-583.12	-1,573.05	1,318.93	1,290.91	28.02	47.070		
5,700.00	5,672.32	5,813.06	5,795.90	20.83	20.75	26.24	-589.02	-1,562.71	1,297.76	1,269.23	28.53	45.480		
5,800.00	5,771.35	5,910.77	5,892.88	21.24	21.12	26.13	-594.92	-1,552.37	1,276.60	1,247.55	29.05	43.946		
5,900.00	5,870.38	6,008.48	5,989.86	21.64	21.50	26.03	-600.82	-1,542.02	1,255.44	1,225.88	29.56	42.464		
6,000.00	5,969.41	6,106.19	6,086.84	22.05	21.88	25.91	-606.72	-1,531.68	1,234.29	1,204.21	30.08	41.032		
6,100.00	6,068.43	6,203.89	6,183.82	22.46	22.26	25.80	-612.62	-1,521.33	1,213.14	1,182.54	30.60	39.648		
6,200.00	6,167.46	6,301.60	6,280.80	22.87	22.64	25.68	-618.52	-1,510.99	1,192.00	1,160.88	31.12	38.309		
6,300.00	6,266.49	6,399.31	6,377.78	23.28	23.02	25.55	-624.42	-1,500.65	1,170.86	1,139.23	31.63	37.013		
6,400.00	6,365.51	6,497.02	6,474.76	23.69	23.40	25.42	-630.32	-1,490.30	1,149.73	1,117.57	32.15	35.758		
6,500.00	6,464.54	6,594.73	6,571.74	24.10	23.79	25.29	-636.22	-1,479.96	1,128.60	1,095.93	32.67	34.543		
6,600.00	6,563.57	6,692.44	6,668.72	24.51	24.17	25.15	-642.12	-1,469.61	1,107.48	1,074.29	33.19	33.366		
6,700.00	6,662.60	6,790.14	6,765.70	24.92	24.55	25.01	-648.02	-1,459.27	1,086.36	1,052.65	33.71	32.225		
6,800.00	6,761.62	6,887.85	6,862.68	25.33	24.93	24.86	-653.92	-1,448.93	1,065.26	1,031.02	34.23	31.118		
6,900.00	6,860.65	6,985.56	6,959.66	25.75	25.32	24.70	-659.82	-1,438.58	1,044.15	1,009.40	34.75	30.044		
7,000.00	6,959.68	7,083.27	7,056.64	26.16	25.70	24.54	-665.72	-1,428.24	1,023.06	987.79	35.28	29.001		
7,100.00	7,058.70	7,167.10	7,139.93	26.57	26.03	24.42	-671.41	-1,420.02	1,002.60	966.80	35.80	28.007		
7,200.00	7,157.73	7,250.23	7,222.71	26.99	26.35	24.39	-674.17	-1,413.42	983.62	947.30	36.31	27.086		
7,300.00	7,256.76	7,333.83	7,306.11	27.40	26.66	24.42	-677.05	-1,408.37	966.13	929.30	36.82	26.238		
7,400.00	7,355.79	7,417.82	7,390.00	27.81	26.96	24.54	-679.03	-1,404.90	950.15	912.83	37.32	25.459		
7,500.00	7,454.81	7,500.00	7,472.15	28.23	27.25	24.74	-680.08	-1,403.05	935.70	897.89	37.81	24.748		
7,600.00	7,553.84	7,591.59	7,563.74	28.64	27.56	25.06	-680.30	-1,402.67	922.72	884.42	38.30	24.090		
7,700.00	7,652.87	7,690.62	7,662.77	29.06	27.89	25.43	-680.30	-1,402.67	910.11	871.30	38.81	23.452		
7,800.00	7,751.89	7,789.64	7,761.79	29.47	28.22	25.81	-680.30	-1,402.67	897.54	858.23	39.31	22.830		
7,900.00	7,850.92	7,888.67	7,860.82	29.89	28.56	26.20	-680.30	-1,402.67	885.01	845.19	39.82	22.225		
8,000.00	7,949.95	7,987.70	7,959.85	30.30	28.89	26.60	-680.30	-1,402.67	872.52	832.19	40.33	21.635		
8,100.00	8,048.97	8,086.72	8,058.87	30.72	29.23	27.02	-680.30	-1,402.67	860.08	819.24	40.84	21.060		
8,200.00	8,148.00	8,185.75	8,157.90	31.14	29.56	27.44	-680.30	-1,402.67	847.68	806.33	41.35	20.500		
8,300.00	8,247.03	8,284.78	8,256.93	31.55	29.90	27.88	-680.30	-1,402.67	835.33	793.47	41.86	19.954		
8,400.00	8,346.06	8,383.80	8,355.96	31.97	30.23	28.33	-680.30	-1,402.67	823.03	780.65	42.38	19.422		
8,500.00	8,445.08	8,482.83	8,454.98	32.38	30.57	28.80	-680.30	-1,402.67	810.78	767.89	42.89	18.903		
8,600.00	8,544.11	8,581.86	8,554.01	32.80	30.91	29.28	-680.30	-1,402.67	798.59	755.18	43.41	18.397		
8,700.00	8,643.14	8,680.89	8,653.04	33.22	31.24	29.77	-680.30	-1,402.67	786.45	742.52	43.93	17.904		
8,800.00	8,742.16	8,779.91	8,752.06	33.64	31.58	30.28	-680.30	-1,402.67	774.37	729.93	44.44	17.423		
8,900.00	8,841.19	8,878.94	8,851.09	34.05	31.92	30.81	-680.30	-1,402.67	762.36	717.39	44.96	16.955		
9,000.00	8,940.22	8,977.97	8,950.12	34.47	32.26	31.35	-680.30	-1,402.67	750.41	704.92	45.49	16.497		
9,100.00	9,039.25	9,076.99	9,049.15	34.89	32.59	31.91	-680.30	-1,402.67	738.53	692.52	46.01	16.051		
9,200.00	9,138.27	9,176.02	9,148.17	35.31	32.93	32.49	-680.30	-1,402.67	726.72	680.19	46.54	15.616		
9,300.00	9,237.30	9,275.05	9,247.20	35.73	33.27	33.09	-680.30	-1,402.67	714.99	667.93	47.06	15.192		
9,400.00	9,336.33	9,374.08	9,346.23	36.14	33.61	33.71	-680.30	-1,402.67	703.34	655.75	47.59	14.779		
9,500.00	9,435.35	9,473.10	9,445.25	36.56	33.95	34.34	-680.30	-1,402.67	691.77	643.65	48.12	14.375		
9,600.00	9,534.38	9,572.13	9,544.28	36.98	34.29	35.00	-680.30	-1,402.67	680.29	631.64	48.65	13.982		
9,700.00	9,633.41	9,671.16	9,643.31	37.40	34.63	35.68	-680.30	-1,402.67	668.90	619.71	49.19	13.599		
9,800.00	9,732.44	9,770.18	9,742.34	37.82	34.97	36.39	-680.30	-1,402.67	657.61	607.89	49.73	13.225		
9,836.39	9,768.48	9,806.22	9,778.38	37.97	35.10	36.65	-680.30	-1,402.67	653.53	603.61	49.92	13.091		
9,900.00	9,831.53	9,869.28	9,841.43	38.23	35.32	37.03	-680.30	-1,402.67	646.84	596.58	50.26	12.869		
10,000.00	9,930.93	9,968.68	9,940.83	38.63	35.66	37.54	-680.30	-1,402.67	638.10	587.31	50.79	12.563		
10,100.00	10,030.57	10,068.32	10,040.47	39.01	36.00	37.94	-680.30	-1,402.67	631.48	580.17	51.31	12.307		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													1912 Fed Com - 1912 Fed Com 702H - 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			
10,200.00	10,130.41	10,168.16	10,140.31	39.38	36.35	38.22	-680.30	-1,402.67	626.96	575.13	51.82	12.098			
10,300.00	10,230.35	10,268.10	10,240.25	39.72	36.69	38.38	-680.30	-1,402.67	624.50	572.17	52.32	11.935			
10,369.65	10,300.00	10,337.75	10,309.90	39.95	36.93	-91.86	-680.30	-1,402.67	624.00	571.34	52.66	11.850			
10,400.00	10,330.35	10,368.10	10,340.25	40.04	37.04	-91.86	-680.30	-1,402.67	624.00	571.20	52.80	11.817			
10,500.00	10,430.35	10,468.10	10,440.25	40.35	37.38	-91.86	-680.30	-1,402.67	624.00	570.72	53.28	11.712			
10,600.00	10,530.35	10,568.10	10,540.25	40.66	37.73	-91.86	-680.30	-1,402.67	624.00	570.25	53.75	11.609			
10,700.00	10,630.35	10,668.10	10,640.25	40.97	38.08	-91.86	-680.30	-1,402.67	624.00	569.77	54.23	11.507			
10,800.00	10,730.35	10,768.10	10,740.25	41.28	38.42	-91.86	-680.30	-1,402.67	624.00	569.30	54.70	11.407			
10,900.00	10,830.35	10,868.10	10,840.25	41.59	38.77	-91.86	-680.30	-1,402.67	624.00	568.82	55.18	11.309			
11,000.00	10,930.35	10,968.10	10,940.25	41.91	39.12	-91.86	-680.30	-1,402.67	624.00	568.35	55.65	11.212			
11,100.00	11,030.35	11,068.10	11,040.25	42.22	39.47	-91.86	-680.30	-1,402.67	624.00	567.87	56.13	11.117			
11,200.00	11,130.35	11,168.10	11,140.25	42.53	39.81	-91.86	-680.30	-1,402.67	624.00	567.39	56.61	11.023			
11,257.65	11,188.00	11,225.75	11,197.90	42.72	40.01	-91.86	-680.30	-1,402.67	624.00	567.12	56.88	10.970	CC		
11,300.00	11,230.31	11,268.06	11,240.21	42.84	40.16	-91.52	-680.30	-1,402.67	624.04	566.96	57.08	10.933			
11,350.00	11,279.95	11,317.70	11,289.85	42.98	40.33	-92.03	-680.30	-1,402.67	624.22	566.93	57.29	10.896			
11,400.00	11,328.89	11,366.64	11,338.79	43.11	40.50	-92.90	-680.30	-1,402.67	624.67	567.19	57.48	10.868			
11,450.00	11,376.76	11,415.19	11,387.34	43.21	40.67	-94.08	-680.24	-1,402.67	625.58	567.94	57.64	10.853			
11,500.00	11,423.19	11,467.69	11,439.72	43.31	40.85	-95.45	-677.07	-1,402.70	626.95	569.16	57.80	10.848			
11,550.00	11,467.83	11,521.91	11,493.29	43.38	41.03	-96.79	-668.79	-1,402.77	628.68	570.75	57.93	10.852			
11,600.00	11,510.34	11,577.99	11,547.61	43.44	41.20	-98.11	-654.93	-1,402.89	630.72	572.67	58.04	10.867			
11,650.00	11,550.40	11,636.03	11,602.12	43.48	41.36	-99.38	-635.07	-1,403.06	633.00	574.88	58.12	10.891			
11,700.00	11,587.70	11,696.13	11,656.14	43.50	41.52	-100.60	-608.82	-1,403.28	635.46	577.30	58.16	10.927			
11,750.00	11,621.96	11,758.33	11,708.85	43.51	41.66	-101.75	-575.84	-1,403.56	638.00	579.85	58.15	10.972			
11,800.00	11,652.91	11,822.64	11,759.25	43.50	41.78	-102.80	-535.94	-1,403.90	640.52	582.43	58.10	11.025			
11,850.00	11,680.33	11,889.02	11,806.24	43.48	41.88	-103.76	-489.11	-1,404.30	642.93	584.92	58.01	11.083			
11,900.00	11,704.00	11,957.33	11,848.62	43.45	41.96	-104.58	-435.59	-1,404.76	645.11	587.20	57.91	11.140			
11,950.00	11,723.74	12,027.37	11,885.13	43.40	42.01	-105.26	-375.88	-1,405.27	646.97	589.16	57.81	11.191			
12,000.00	11,739.41	12,098.82	11,914.60	43.35	42.04	-105.77	-310.85	-1,405.82	648.40	590.65	57.75	11.228			
12,050.00	11,750.88	12,171.31	11,936.00	43.29	42.08	-106.10	-241.64	-1,406.41	649.34	591.60	57.75	11.245			
12,100.00	11,758.06	12,244.38	11,948.56	43.23	42.28	-106.24	-169.70	-1,407.03	649.74	591.91	57.83	11.236			
12,150.00	11,760.91	12,315.92	11,951.90	43.16	42.47	-106.18	-98.29	-1,407.64	649.58	591.58	58.00	11.200			
12,163.12	11,760.93	12,329.04	11,951.77	43.14	42.51	-106.18	-85.17	-1,407.75	649.54	591.51	58.03	11.193			
12,200.00	11,760.58	12,365.92	11,951.42	43.10	42.61	-106.18	-48.30	-1,408.06	649.54	591.42	58.12	11.177			
12,300.00	11,759.62	12,465.92	11,950.45	42.98	42.95	-106.17	51.70	-1,408.92	649.54	591.13	58.40	11.122			
12,400.00	11,758.67	12,565.92	11,949.49	42.89	43.33	-106.17	151.69	-1,409.77	649.54	590.76	58.78	11.051			
12,500.00	11,757.71	12,665.92	11,948.53	42.82	43.77	-106.17	251.68	-1,410.62	649.53	590.30	59.23	10.966			
12,600.00	11,756.76	12,765.92	11,947.57	43.17	44.27	-106.17	351.67	-1,411.47	649.53	589.76	59.77	10.867			
12,700.00	11,755.80	12,865.92	11,946.60	43.61	44.82	-106.17	451.66	-1,412.33	649.53	589.14	60.39	10.756			
12,800.00	11,754.85	12,965.92	11,945.64	44.09	45.42	-106.17	551.65	-1,413.18	649.53	588.45	61.08	10.634			
12,900.00	11,753.89	13,065.92	11,944.68	44.63	46.07	-106.17	651.65	-1,414.03	649.53	587.68	61.85	10.502			
13,000.00	11,752.94	13,165.92	11,943.71	45.21	46.77	-106.17	751.64	-1,414.89	649.53	586.84	62.69	10.361			
13,100.00	11,751.98	13,265.92	11,942.75	45.84	47.51	-106.17	851.63	-1,415.74	649.53	585.93	63.60	10.213			
13,200.00	11,751.03	13,365.92	11,941.79	46.52	48.30	-106.17	951.62	-1,416.59	649.52	584.95	64.58	10.058			
13,300.00	11,750.07	13,465.92	11,940.83	47.24	49.13	-106.17	1,051.61	-1,417.45	649.52	583.91	65.61	9.899			
13,400.00	11,749.12	13,565.92	11,939.86	48.00	50.00	-106.17	1,151.60	-1,418.30	649.52	582.81	66.71	9.736			
13,500.00	11,748.16	13,665.92	11,938.90	48.81	50.91	-106.17	1,251.60	-1,419.15	649.52	581.65	67.87	9.570			
13,600.00	11,747.21	13,765.92	11,937.94	49.65	51.86	-106.17	1,351.59	-1,420.01	649.52	580.44	69.08	9.403			
13,700.00	11,746.25	13,865.92	11,936.98	50.54	52.84	-106.17	1,451.58	-1,420.86	649.52	579.18	70.34	9.234			
13,800.00	11,745.30	13,965.92	11,936.01	51.46	53.86	-106.16	1,551.57	-1,421.71	649.52	577.87	71.65	9.065			
13,900.00	11,744.34	14,065.92	11,935.05	52.41	54.90	-106.16	1,651.56	-1,422.57	649.52	576.51	73.01	8.897			
14,000.00	11,743.39	14,165.92	11,934.09	53.40	55.97	-106.16	1,751.56	-1,423.42	649.51	575.11	74.40	8.730			
14,100.00	11,742.43	14,265.92	11,933.12	54.42	57.07	-106.16	1,851.55	-1,424.27	649.51	573.67	75.85	8.564			

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													1912 Fed Com - 1912 Fed Com 702H - 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			
14,200.00	11,741.48	14,365.92	11,932.16	55.47	58.20	-106.16	1,951.54	-1,425.12	649.51	572.19	77.32	8.400			
14,300.00	11,740.52	14,465.92	11,931.20	56.54	59.35	-106.16	2,051.53	-1,425.98	649.51	570.67	78.84	8.238			
14,400.00	11,739.57	14,565.92	11,930.24	57.65	60.53	-106.16	2,151.52	-1,426.83	649.51	569.12	80.39	8.080			
14,500.00	11,738.61	14,665.92	11,929.27	58.77	61.72	-106.16	2,251.51	-1,427.68	649.51	567.54	81.97	7.924			
14,600.00	11,737.66	14,765.92	11,928.31	59.93	62.94	-106.16	2,351.51	-1,428.54	649.51	565.92	83.58	7.771			
14,700.00	11,736.70	14,865.92	11,927.35	61.10	64.18	-106.16	2,451.50	-1,429.39	649.50	564.28	85.22	7.621			
14,800.00	11,735.75	14,965.92	11,926.39	62.30	65.43	-106.16	2,551.49	-1,430.24	649.50	562.61	86.89	7.475			
14,900.00	11,734.79	15,065.92	11,925.42	63.51	66.70	-106.16	2,651.48	-1,431.10	649.50	560.92	88.58	7.332			
15,000.00	11,733.84	15,165.92	11,924.46	64.75	67.99	-106.16	2,751.47	-1,431.95	649.50	559.20	90.30	7.192			
15,100.00	11,732.88	15,265.92	11,923.50	66.00	69.29	-106.16	2,851.46	-1,432.80	649.50	557.46	92.04	7.056			
15,200.00	11,731.93	15,365.92	11,922.53	67.27	70.61	-106.15	2,951.46	-1,433.66	649.50	555.69	93.81	6.924			
15,300.00	11,730.97	15,465.92	11,921.57	68.55	71.94	-106.15	3,051.45	-1,434.51	649.50	553.91	95.59	6.795			
15,400.00	11,730.02	15,565.92	11,920.61	69.86	73.29	-106.15	3,151.44	-1,435.36	649.50	552.11	97.39	6.669			
15,500.00	11,729.06	15,665.92	11,919.65	71.17	74.64	-106.15	3,251.43	-1,436.22	649.49	550.29	99.21	6.547			
15,600.00	11,728.11	15,765.92	11,918.68	72.50	76.01	-106.15	3,351.42	-1,437.07	649.49	548.45	101.04	6.428			
15,700.00	11,727.15	15,865.92	11,917.72	73.84	77.39	-106.15	3,451.41	-1,437.92	649.49	546.60	102.89	6.312			
15,800.00	11,726.20	15,965.92	11,916.76	75.19	78.78	-106.15	3,551.41	-1,438.77	649.49	544.73	104.76	6.200			
15,900.00	11,725.24	16,065.92	11,915.80	76.56	80.18	-106.15	3,651.40	-1,439.63	649.49	542.85	106.64	6.090			
16,000.00	11,724.29	16,165.92	11,914.83	77.94	81.59	-106.15	3,751.39	-1,440.48	649.49	540.95	108.53	5.984			
16,100.00	11,723.33	16,265.92	11,913.87	79.32	83.01	-106.15	3,851.38	-1,441.33	649.49	539.04	110.44	5.881			
16,200.00	11,722.38	16,365.92	11,912.91	80.72	84.44	-106.15	3,951.37	-1,442.19	649.48	537.12	112.36	5.780			
16,300.00	11,721.42	16,465.92	11,911.94	82.12	85.87	-106.15	4,051.37	-1,443.04	649.48	535.19	114.29	5.683			
16,400.00	11,720.47	16,565.92	11,910.98	83.54	87.31	-106.15	4,151.36	-1,443.89	649.48	533.25	116.23	5.588			
16,500.00	11,719.51	16,665.92	11,910.02	84.96	88.76	-106.15	4,251.35	-1,444.75	649.48	531.29	118.19	5.495			
16,600.00	11,718.56	16,765.92	11,909.06	86.39	90.22	-106.15	4,351.34	-1,445.60	649.48	529.33	120.15	5.406			
16,700.00	11,717.60	16,865.92	11,908.09	87.83	91.68	-106.14	4,451.33	-1,446.45	649.48	527.36	122.12	5.318			
16,800.00	11,716.65	16,965.92	11,907.13	89.28	93.15	-106.14	4,551.32	-1,447.31	649.48	525.38	124.10	5.234			
16,900.00	11,715.69	17,065.92	11,906.17	90.73	94.63	-106.14	4,651.32	-1,448.16	649.48	523.39	126.08	5.151			
17,000.00	11,714.74	17,165.92	11,905.21	92.19	96.11	-106.14	4,751.31	-1,449.01	649.47	521.39	128.08	5.071			
17,100.00	11,713.78	17,265.92	11,904.24	93.66	97.60	-106.14	4,851.30	-1,449.86	649.47	519.39	130.08	4.993			
17,200.00	11,712.83	17,365.92	11,903.28	95.13	99.09	-106.14	4,951.29	-1,450.72	649.47	517.38	132.09	4.917			
17,300.00	11,711.87	17,465.92	11,902.32	96.61	100.59	-106.14	5,051.28	-1,451.57	649.47	515.36	134.11	4.843			
17,400.00	11,710.92	17,565.92	11,901.35	98.09	102.09	-106.14	5,151.27	-1,452.42	649.47	513.33	136.13	4.771			
17,500.00	11,709.96	17,665.92	11,900.39	99.58	103.59	-106.14	5,251.27	-1,453.28	649.47	511.30	138.16	4.701			
17,600.00	11,709.01	17,765.92	11,899.43	101.07	105.10	-106.14	5,351.26	-1,454.13	649.47	509.27	140.20	4.632			
17,700.00	11,708.05	17,865.92	11,898.47	102.57	106.62	-106.14	5,451.25	-1,454.98	649.46	507.22	142.24	4.566			
17,800.00	11,707.10	17,965.92	11,897.50	104.08	108.14	-106.14	5,551.24	-1,455.84	649.46	505.18	144.29	4.501			
17,900.00	11,706.14	18,065.92	11,896.54	105.58	109.66	-106.14	5,651.23	-1,456.69	649.46	503.12	146.34	4.438			
18,000.00	11,705.19	18,165.92	11,895.58	107.09	111.19	-106.14	5,751.22	-1,457.54	649.46	501.07	148.39	4.377			
18,100.00	11,704.23	18,265.92	11,894.62	108.61	112.72	-106.14	5,851.22	-1,458.40	649.46	499.01	150.45	4.317			
18,200.00	11,703.28	18,365.92	11,893.65	110.13	114.25	-106.13	5,951.21	-1,459.25	649.46	496.94	152.52	4.258			
18,300.00	11,702.32	18,465.92	11,892.69	111.65	115.79	-106.13	6,051.20	-1,460.10	649.46	494.87	154.59	4.201			
18,400.00	11,701.37	18,565.92	11,891.73	113.18	117.33	-106.13	6,151.19	-1,460.96	649.46	492.79	156.66	4.146			
18,500.00	11,700.41	18,665.92	11,890.76	114.71	118.87	-106.13	6,251.18	-1,461.81	649.45	490.72	158.74	4.091			
18,600.00	11,699.46	18,765.92	11,889.80	116.24	120.41	-106.13	6,351.17	-1,462.66	649.45	488.63	160.82	4.038			
18,700.00	11,698.50	18,865.92	11,888.84	117.78	121.96	-106.13	6,451.17	-1,463.51	649.45	486.55	162.90	3.987			
18,800.00	11,697.55	18,965.92	11,887.88	119.32	123.51	-106.13	6,551.16	-1,464.37	649.45	484.46	164.99	3.936			
18,900.00	11,696.59	19,065.92	11,886.91	120.86	125.07	-106.13	6,651.15	-1,465.22	649.45	482.37	167.08	3.887			
19,000.00	11,695.64	19,165.92	11,885.95	122.41	126.62	-106.13	6,751.14	-1,466.07	649.45	480.28	169.17	3.839			
19,100.00	11,694.68	19,265.92	11,884.99	123.96	128.18	-106.13	6,851.13	-1,466.93	649.45	478.18	171.27	3.792			
19,200.00	11,693.73	19,365.92	11,884.03	125.51	129.74	-106.13	6,951.13	-1,467.78	649.44	476.08	173.37	3.746			
19,300.00	11,692.77	19,465.92	11,883.06	127.06	131.30	-106.13	7,051.12	-1,468.63	649.44	473.98	175.47	3.701			

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,400.00	11,691.82	19,565.92	11,882.10	128.62	132.87	-106.13	7,151.11	-1,469.49	649.44	471.87	177.57	3.657		
19,500.00	11,690.86	19,665.92	11,881.14	130.18	134.44	-106.13	7,251.10	-1,470.34	649.44	469.77	179.68	3.615		
19,600.00	11,689.91	19,765.92	11,880.17	131.74	136.01	-106.13	7,351.09	-1,471.19	649.44	467.66	181.78	3.573		
19,700.00	11,688.95	19,865.92	11,879.21	133.30	137.58	-106.12	7,451.08	-1,472.05	649.44	465.54	183.89	3.532		
19,800.00	11,688.00	19,965.92	11,878.25	134.87	139.15	-106.12	7,551.08	-1,472.90	649.44	463.43	186.01	3.491		
19,900.00	11,687.04	20,065.92	11,877.29	136.43	140.72	-106.12	7,651.07	-1,473.75	649.44	461.32	188.12	3.452		
20,000.00	11,686.09	20,165.92	11,876.32	138.00	142.30	-106.12	7,751.06	-1,474.61	649.43	459.20	190.23	3.414		
20,100.00	11,685.13	20,265.92	11,875.36	139.57	143.88	-106.12	7,851.05	-1,475.46	649.43	457.08	192.35	3.376		
20,200.00	11,684.18	20,365.92	11,874.40	141.14	145.46	-106.12	7,951.04	-1,476.31	649.43	454.96	194.47	3.339		
20,300.00	11,683.22	20,465.92	11,873.44	142.72	147.04	-106.12	8,051.03	-1,477.16	649.43	452.84	196.59	3.303		
20,400.00	11,682.27	20,565.92	11,872.47	144.29	148.62	-106.12	8,151.03	-1,478.02	649.43	450.72	198.71	3.268		
20,500.00	11,681.31	20,665.92	11,871.51	145.87	150.21	-106.12	8,251.02	-1,478.87	649.43	448.59	200.84	3.234		
20,600.00	11,680.36	20,765.92	11,870.55	147.45	151.79	-106.12	8,351.01	-1,479.72	649.43	446.47	202.96	3.200		
20,700.00	11,679.40	20,865.92	11,869.58	149.03	153.38	-106.12	8,451.00	-1,480.58	649.42	444.34	205.09	3.167		
20,800.00	11,678.45	20,965.92	11,868.62	150.62	154.97	-106.12	8,550.99	-1,481.43	649.42	442.21	207.21	3.134		
20,900.00	11,677.49	21,065.92	11,867.66	152.20	156.56	-106.12	8,650.98	-1,482.28	649.42	440.08	209.34	3.102		
21,000.00	11,676.54	21,165.92	11,866.70	153.78	158.15	-106.12	8,750.98	-1,483.14	649.42	437.95	211.47	3.071		
21,100.00	11,675.58	21,265.92	11,865.73	155.37	159.74	-106.12	8,850.97	-1,483.99	649.42	435.82	213.60	3.040		
21,200.00	11,674.63	21,365.92	11,864.77	156.96	161.34	-106.11	8,950.96	-1,484.84	649.42	433.69	215.73	3.010		
21,300.00	11,673.67	21,465.92	11,863.81	158.55	162.93	-106.11	9,050.95	-1,485.70	649.42	431.55	217.86	2.981		
21,400.00	11,672.72	21,565.92	11,862.85	160.14	164.53	-106.11	9,150.94	-1,486.55	649.42	429.42	220.00	2.952		
21,500.00	11,671.76	21,665.92	11,861.88	161.73	166.12	-106.11	9,250.93	-1,487.40	649.41	427.28	222.13	2.924		
21,600.00	11,670.81	21,765.92	11,860.92	163.32	167.72	-106.11	9,350.93	-1,488.26	649.41	425.15	224.26	2.896		
21,700.00	11,669.86	21,865.92	11,859.96	164.92	169.32	-106.11	9,450.92	-1,489.11	649.41	423.01	226.40	2.868		
21,800.00	11,668.90	21,965.92	11,859.00	166.51	170.92	-106.11	9,550.91	-1,489.96	649.41	420.88	228.53	2.842		
21,900.00	11,667.95	22,065.92	11,858.03	168.11	172.52	-106.11	9,650.90	-1,490.81	649.41	418.74	230.67	2.815		
21,932.87	11,667.63	22,098.79	11,857.72	168.63	173.05	-106.11	9,683.77	-1,491.10	649.41	418.04	231.37	2.807		
21,938.19	11,667.58	22,099.37	11,857.71	168.72	173.06	-106.11	9,684.35	-1,491.10	649.43	418.00	231.43	2.806 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	103.27	-445.02	1,887.43	1,939.28					
100.00	100.00	80.70	80.70	0.13	0.10	103.27	-445.02	1,887.43	1,939.18	1,939.02	0.16	N/A		
200.00	200.00	180.70	180.70	0.48	0.41	103.27	-445.02	1,887.43	1,939.18	1,938.55	0.64	3,042.578		
300.00	300.00	280.70	280.70	0.84	0.77	103.27	-445.02	1,887.43	1,939.18	1,938.04	1.14	1,695.875		
400.00	400.00	380.70	380.70	1.20	1.13	103.27	-445.02	1,887.43	1,939.18	1,937.53	1.65	1,175.188		
500.00	500.00	480.70	480.70	1.56	1.49	103.27	-445.02	1,887.43	1,939.18	1,937.03	2.16	899.065		
600.00	600.00	580.70	580.70	1.92	1.85	103.27	-445.02	1,887.43	1,939.18	1,936.52	2.66	727.993		
700.00	700.00	680.70	680.70	2.28	2.21	103.27	-445.02	1,887.43	1,939.18	1,936.01	3.17	611.610		
800.00	800.00	780.70	780.70	2.63	2.57	103.27	-445.02	1,887.43	1,939.18	1,935.51	3.68	527.307		
900.00	900.00	880.70	880.70	2.99	2.92	103.27	-445.02	1,887.43	1,939.18	1,935.00	4.18	463.427		
1,000.00	1,000.00	980.70	980.70	3.35	3.28	103.27	-445.02	1,887.43	1,939.18	1,934.49	4.69	413.352		
1,100.00	1,100.00	1,080.70	1,080.70	3.71	3.64	103.27	-445.02	1,887.43	1,939.18	1,933.99	5.20	373.042		
1,200.00	1,200.00	1,180.70	1,180.70	4.07	4.00	103.27	-445.02	1,887.43	1,939.18	1,933.48	5.71	339.896		
1,300.00	1,300.00	1,280.70	1,280.70	4.43	4.36	103.27	-445.02	1,887.43	1,939.18	1,932.97	6.21	312.159		
1,400.00	1,400.00	1,380.70	1,380.70	4.79	4.72	103.27	-445.02	1,887.43	1,939.18	1,932.46	6.72	288.607		
1,500.00	1,500.00	1,480.70	1,480.70	5.14	5.07	103.27	-445.02	1,887.43	1,939.18	1,931.96	7.23	268.360		
1,600.00	1,600.00	1,580.70	1,580.70	5.50	5.43	103.27	-445.02	1,887.43	1,939.18	1,931.45	7.73	250.767		
1,700.00	1,700.00	1,680.70	1,680.70	5.86	5.79	103.27	-445.02	1,887.43	1,939.18	1,930.94	8.24	235.339		
1,800.00	1,800.00	1,780.70	1,780.70	6.22	6.15	103.27	-445.02	1,887.43	1,939.18	1,930.44	8.75	221.700		
1,900.00	1,900.00	1,880.70	1,880.70	6.58	6.51	103.27	-445.02	1,887.43	1,939.18	1,929.93	9.25	209.555		
2,000.00	2,000.00	1,980.70	1,980.70	6.94	6.87	103.27	-445.02	1,887.43	1,939.18	1,929.42	9.76	198.671		
2,100.00	2,100.00	2,080.70	2,080.70	7.29	7.23	103.27	-445.02	1,887.43	1,939.18	1,928.92	10.27	188.862		
2,200.00	2,200.00	2,180.70	2,180.70	7.65	7.58	103.27	-445.02	1,887.43	1,939.18	1,928.41	10.77	179.976		
2,300.00	2,300.00	2,280.70	2,280.70	8.01	7.94	103.27	-445.02	1,887.43	1,939.18	1,927.90	11.28	171.889		
2,400.00	2,400.00	2,380.70	2,380.70	8.37	8.30	103.27	-445.02	1,887.43	1,939.18	1,927.40	11.79	164.497		
2,500.00	2,500.00	2,480.70	2,480.70	8.73	8.66	103.27	-445.02	1,887.43	1,939.18	1,926.89	12.30	157.714		
2,600.00	2,599.99	2,580.69	2,580.69	9.07	9.02	-126.48	-445.02	1,887.43	1,939.96	1,927.17	12.79	151.658		
2,700.00	2,699.91	2,680.61	2,680.61	9.40	9.38	-126.55	-445.02	1,887.43	1,942.30	1,929.02	13.28	146.278		
2,800.00	2,799.69	2,780.39	2,780.39	9.74	9.73	-126.65	-445.02	1,887.43	1,946.20	1,932.44	13.77	141.380		
2,900.00	2,899.27	2,879.97	2,879.97	10.07	10.09	-126.80	-445.02	1,887.43	1,951.69	1,937.44	14.25	136.915		
3,000.00	2,998.57	2,979.27	2,979.27	10.42	10.45	-126.99	-445.02	1,887.43	1,958.78	1,944.03	14.75	132.840		
3,033.25	3,031.52	3,012.22	3,012.22	10.53	10.56	-127.06	-445.02	1,887.43	1,961.50	1,946.59	14.91	131.564		
3,100.00	3,097.62	3,078.32	3,078.32	10.76	10.80	-127.28	-445.02	1,887.43	1,967.14	1,951.90	15.24	129.093		
3,200.00	3,196.65	3,177.35	3,177.35	11.12	11.16	-127.60	-445.02	1,887.43	1,975.65	1,959.92	15.73	125.570		
3,300.00	3,295.67	3,344.86	3,344.82	11.48	11.74	-128.10	-445.63	1,884.75	1,982.91	1,966.52	16.39	121.014		
3,400.00	3,394.70	3,534.04	3,533.61	11.84	12.38	-128.56	-448.27	1,873.20	1,985.86	1,968.80	17.06	116.413		
3,500.00	3,493.73	3,723.91	3,722.27	12.20	13.04	-128.90	-453.01	1,852.46	1,984.32	1,966.61	17.71	112.040		
3,600.00	3,592.76	3,828.19	3,825.54	12.57	13.41	-129.06	-456.25	1,838.32	1,980.31	1,962.10	18.21	108.729		
3,700.00	3,691.78	3,927.98	3,924.35	12.95	13.76	-129.21	-459.34	1,824.78	1,976.31	1,957.60	18.71	105.618		
3,800.00	3,790.81	4,027.76	4,023.16	13.32	14.12	-129.36	-462.43	1,811.24	1,972.32	1,953.11	19.21	102.653		
3,900.00	3,889.84	4,127.54	4,121.97	13.70	14.49	-129.52	-465.53	1,797.70	1,968.35	1,948.63	19.72	99.826		
4,000.00	3,988.86	4,227.33	4,220.79	14.09	14.86	-129.67	-468.62	1,784.16	1,964.39	1,944.17	20.22	97.129		
4,100.00	4,087.89	4,327.11	4,319.60	14.47	15.23	-129.82	-471.72	1,770.62	1,960.45	1,939.71	20.73	94.554		
4,200.00	4,186.92	4,426.89	4,418.41	14.86	15.60	-129.98	-474.81	1,757.08	1,956.52	1,935.27	21.25	92.093		
4,300.00	4,285.95	4,526.67	4,517.22	15.25	15.97	-130.13	-477.91	1,743.54	1,952.60	1,930.85	21.76	89.741		
4,400.00	4,384.97	4,626.46	4,616.03	15.64	16.35	-130.29	-481.00	1,730.00	1,948.70	1,926.43	22.27	87.491		
4,500.00	4,484.00	4,726.24	4,714.84	16.03	16.73	-130.45	-484.10	1,716.46	1,944.82	1,922.03	22.79	85.337		
4,600.00	4,583.03	4,826.02	4,813.65	16.42	17.11	-130.60	-487.19	1,702.92	1,940.94	1,917.64	23.31	83.274		
4,700.00	4,682.05	4,925.80	4,912.47	16.82	17.49	-130.76	-490.29	1,689.38	1,937.09	1,913.26	23.83	81.297		
4,800.00	4,781.08	5,025.59	5,011.28	17.21	17.88	-130.92	-493.38	1,675.84	1,933.24	1,908.90	24.35	79.400		
4,900.00	4,880.11	5,125.37	5,110.09	17.61	18.27	-131.08	-496.48	1,662.31	1,929.42	1,904.55	24.87	77.580		
5,000.00	4,979.14	5,225.15	5,208.90	18.01	18.65	-131.24	-499.57	1,648.77	1,925.60	1,900.21	25.39	75.832		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	5,078.16	5,324.94	5,307.71	18.41	19.04	-131.40	-502.67	1,635.23	1,921.81	1,895.89	25.92	74.153		
5,200.00	5,177.19	5,424.72	5,406.52	18.81	19.43	-131.56	-505.76	1,621.69	1,918.02	1,891.58	26.44	72.538		
5,300.00	5,276.22	5,524.50	5,505.33	19.21	19.83	-131.72	-508.86	1,608.15	1,914.26	1,887.29	26.97	70.984		
5,400.00	5,375.24	5,624.28	5,604.15	19.62	20.22	-131.88	-511.95	1,594.61	1,910.50	1,883.01	27.49	69.489		
5,500.00	5,474.27	5,724.07	5,702.96	20.02	20.62	-132.05	-515.05	1,581.07	1,906.77	1,878.75	28.02	68.048		
5,600.00	5,573.30	5,823.85	5,801.77	20.43	21.01	-132.21	-518.14	1,567.53	1,903.05	1,874.50	28.55	66.660		
5,700.00	5,672.32	5,923.63	5,900.58	20.83	21.41	-132.37	-521.24	1,553.99	1,899.34	1,870.26	29.08	65.322		
5,800.00	5,771.35	6,023.41	5,999.39	21.24	21.81	-132.54	-524.33	1,540.45	1,895.65	1,866.04	29.61	64.030		
5,900.00	5,870.38	6,123.20	6,098.20	21.64	22.20	-132.70	-527.42	1,526.91	1,891.98	1,861.84	30.13	62.784		
6,000.00	5,969.41	6,222.98	6,197.01	22.05	22.60	-132.87	-530.52	1,513.37	1,888.32	1,857.65	30.66	61.580		
6,100.00	6,068.43	6,322.76	6,295.83	22.46	23.00	-133.04	-533.61	1,499.83	1,884.67	1,853.48	31.19	60.417		
6,200.00	6,167.46	6,422.55	6,394.64	22.87	23.41	-133.20	-536.71	1,486.29	1,881.05	1,849.32	31.72	59.293		
6,300.00	6,266.49	6,522.33	6,493.45	23.28	23.81	-133.37	-539.80	1,472.75	1,877.44	1,845.18	32.26	58.205		
6,400.00	6,365.51	6,622.11	6,592.26	23.69	24.21	-133.54	-542.90	1,459.21	1,873.84	1,841.06	32.79	57.153		
6,500.00	6,464.54	6,721.89	6,691.07	24.10	24.61	-133.71	-545.99	1,445.67	1,870.26	1,836.95	33.32	56.134		
6,600.00	6,563.57	6,821.68	6,789.88	24.51	25.02	-133.88	-549.09	1,432.13	1,866.70	1,832.85	33.85	55.148		
6,700.00	6,662.60	6,921.46	6,888.69	24.92	25.42	-134.05	-552.18	1,418.59	1,863.16	1,828.78	34.38	54.192		
6,800.00	6,761.62	7,021.24	6,987.51	25.33	25.83	-134.22	-555.28	1,405.05	1,859.63	1,824.72	34.91	53.266		
6,900.00	6,860.65	7,121.03	7,086.32	25.75	26.23	-134.39	-558.37	1,391.51	1,856.12	1,820.67	35.44	52.367		
7,000.00	6,959.68	7,220.81	7,185.13	26.16	26.64	-134.56	-561.47	1,377.97	1,852.62	1,816.65	35.98	51.496		
7,100.00	7,058.70	7,320.59	7,283.94	26.57	27.05	-134.74	-564.56	1,364.44	1,849.14	1,812.64	36.51	50.650		
7,200.00	7,157.73	7,420.37	7,382.75	26.99	27.45	-134.91	-567.66	1,350.90	1,845.68	1,808.64	37.04	49.829		
7,300.00	7,256.76	7,520.16	7,481.56	27.40	27.86	-135.08	-570.75	1,337.36	1,842.24	1,804.67	37.57	49.032		
7,400.00	7,355.79	7,619.94	7,580.37	27.81	28.27	-135.26	-573.85	1,323.82	1,838.81	1,800.71	38.10	48.257		
7,500.00	7,454.81	7,719.72	7,679.19	28.23	28.68	-135.44	-576.94	1,310.28	1,835.40	1,796.77	38.64	47.504		
7,600.00	7,553.84	7,819.50	7,778.00	28.64	29.09	-135.61	-580.04	1,296.74	1,832.01	1,792.84	39.17	46.772		
7,700.00	7,652.87	7,919.29	7,876.81	29.06	29.50	-135.79	-583.13	1,283.20	1,828.64	1,788.93	39.70	46.060		
7,800.00	7,751.89	8,019.07	7,975.62	29.47	29.91	-135.97	-586.22	1,269.66	1,825.28	1,785.04	40.23	45.367		
7,900.00	7,850.92	8,118.85	8,074.43	29.89	30.32	-136.14	-589.32	1,256.12	1,821.94	1,781.17	40.77	44.693		
8,000.00	7,949.95	8,218.64	8,173.24	30.30	30.73	-136.32	-592.41	1,242.58	1,818.62	1,777.32	41.30	44.037		
8,100.00	8,048.97	8,318.42	8,272.05	30.72	31.14	-136.50	-595.51	1,229.04	1,815.31	1,773.48	41.83	43.398		
8,200.00	8,148.00	8,418.20	8,370.87	31.14	31.55	-136.68	-598.60	1,215.50	1,812.03	1,769.66	42.36	42.776		
8,300.00	8,247.03	8,517.98	8,469.68	31.55	31.96	-136.86	-601.70	1,201.96	1,808.76	1,765.86	42.89	42.169		
8,400.00	8,346.06	8,617.77	8,568.49	31.97	32.37	-137.05	-604.79	1,188.42	1,805.51	1,762.08	43.42	41.578		
8,500.00	8,445.08	8,717.55	8,667.30	32.38	32.78	-137.23	-607.89	1,174.88	1,802.27	1,758.32	43.96	41.002		
8,600.00	8,544.11	8,817.33	8,766.11	32.80	33.19	-137.41	-610.98	1,161.34	1,799.06	1,754.57	44.49	40.440		
8,700.00	8,643.14	8,917.11	8,864.92	33.22	33.61	-137.59	-614.08	1,147.80	1,795.87	1,750.85	45.02	39.892		
8,800.00	8,742.16	9,016.90	8,963.73	33.64	34.02	-137.78	-617.17	1,134.26	1,792.69	1,747.14	45.55	39.357		
8,900.00	8,841.19	9,116.68	9,062.55	34.05	34.43	-137.96	-620.27	1,120.72	1,789.53	1,743.45	46.08	38.835		
9,000.00	8,940.22	9,216.46	9,161.36	34.47	34.85	-138.15	-623.36	1,107.18	1,786.39	1,739.78	46.61	38.325		
9,100.00	9,039.25	9,316.25	9,260.17	34.89	35.26	-138.33	-626.46	1,093.64	1,783.27	1,736.13	47.14	37.828		
9,200.00	9,138.27	9,416.03	9,358.98	35.31	35.67	-138.52	-629.55	1,080.10	1,780.17	1,732.50	47.67	37.342		
9,300.00	9,237.30	9,515.81	9,457.79	35.73	36.09	-138.71	-632.65	1,066.56	1,777.09	1,728.88	48.20	36.867		
9,400.00	9,336.33	9,615.59	9,556.60	36.14	36.50	-138.90	-635.74	1,053.03	1,774.02	1,725.29	48.73	36.403		
9,500.00	9,435.35	9,700.00	9,640.24	36.56	36.85	-139.06	-638.82	1,041.92	1,771.39	1,722.16	49.24	35.976		
9,600.00	9,534.38	9,783.15	9,702.95	36.98	37.10	-139.19	-639.93	1,034.69	1,770.42	1,720.72	49.70	35.622		
9,604.54	9,538.87	9,766.27	9,706.05	37.00	37.11	-139.19	-640.01	1,034.36	1,770.41	1,720.69	49.72	35.607 CC		
9,700.00	9,633.41	9,831.92	9,771.37	37.40	37.37	-139.34	-641.47	1,027.97	1,771.22	1,721.06	50.16	35.313		
9,800.00	9,732.44	9,900.00	9,839.22	37.82	37.63	-139.50	-642.72	1,022.50	1,773.80	1,723.20	50.60	35.055		
9,836.39	9,768.48	9,925.58	9,864.73	37.97	37.72	-139.56	-643.12	1,020.75	1,775.18	1,724.42	50.76	34.972		
9,900.00	9,831.53	9,969.20	9,908.27	38.23	37.88	-139.68	-643.71	1,018.15	1,777.75	1,726.72	51.03	34.836		
10,000.00	9,930.93	10,037.78	9,976.78	38.63	38.13	-139.86	-644.42	1,015.05	1,781.61	1,730.17	51.44	34.632		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
10,100.00	10,030.57	10,100.00	10,038.97	39.01	38.35	-139.99	-644.83	1,013.27	1,785.25	1,733.43	51.81	34.455		
10,200.00	10,130.41	10,181.03	10,120.00	39.38	38.61	-140.11	-645.02	1,012.43	1,788.62	1,736.39	52.23	34.242		
10,300.00	10,230.35	10,272.09	10,211.05	39.72	38.91	-140.19	-645.02	1,012.43	1,791.00	1,738.32	52.68	33.996		
10,369.65	10,300.00	10,341.73	10,280.70	39.95	39.13	89.52	-645.02	1,012.43	1,791.49	1,738.48	53.01	33.793		
10,400.00	10,330.35	10,372.09	10,311.05	40.04	39.23	89.52	-645.02	1,012.43	1,791.49	1,738.34	53.15	33.703		
10,500.00	10,430.35	10,472.09	10,411.05	40.35	39.56	89.52	-645.02	1,012.43	1,791.49	1,737.87	53.62	33.410		
10,600.00	10,530.35	10,572.09	10,511.05	40.66	39.88	89.52	-645.02	1,012.43	1,791.49	1,737.40	54.09	33.121		
10,700.00	10,630.35	10,672.09	10,611.05	40.97	40.21	89.52	-645.02	1,012.43	1,791.49	1,736.94	54.56	32.837		
10,800.00	10,730.35	10,772.09	10,711.05	41.28	40.53	89.52	-645.02	1,012.43	1,791.49	1,736.47	55.03	32.558		
10,900.00	10,830.35	10,872.09	10,811.05	41.59	40.86	89.52	-645.02	1,012.43	1,791.49	1,736.00	55.49	32.282		
11,000.00	10,930.35	10,972.09	10,911.05	41.91	41.18	89.52	-645.02	1,012.43	1,791.49	1,735.53	55.96	32.011		
11,100.00	11,030.35	11,072.09	11,011.05	42.22	41.51	89.52	-645.02	1,012.43	1,791.49	1,735.06	56.43	31.744		
11,200.00	11,130.35	11,172.09	11,111.05	42.53	41.84	89.52	-645.02	1,012.43	1,791.49	1,734.59	56.91	31.482		
11,249.97	11,180.32	11,222.09	11,161.02	42.69	42.00	89.48	-643.76	1,012.42	1,791.49	1,734.35	57.14	31.354		
11,257.65	11,188.00	11,229.74	11,168.66	42.72	42.03	89.46	-643.20	1,012.41	1,791.49	1,734.32	57.17	31.335		
11,300.00	11,230.31	11,271.79	11,210.41	42.84	42.16	89.84	-638.31	1,012.37	1,791.50	1,734.14	57.36	31.234		
11,350.00	11,279.95	11,321.13	11,258.79	42.98	42.31	89.72	-628.70	1,012.28	1,791.51	1,733.94	57.56	31.123		
11,400.00	11,328.89	11,370.14	11,305.85	43.11	42.44	89.60	-615.06	1,012.16	1,791.52	1,733.77	57.75	31.023		
11,450.00	11,376.76	11,418.84	11,351.29	43.21	42.57	89.48	-597.58	1,012.00	1,791.54	1,733.62	57.92	30.932		
11,500.00	11,423.19	11,467.25	11,394.82	43.31	42.69	89.36	-576.44	1,011.81	1,791.57	1,733.49	58.07	30.849		
11,550.00	11,467.83	11,515.37	11,436.18	43.38	42.79	89.25	-551.86	1,011.59	1,791.60	1,733.38	58.22	30.775		
11,600.00	11,510.34	11,563.24	11,475.12	43.44	42.89	89.15	-524.05	1,011.33	1,791.63	1,733.28	58.35	30.707		
11,650.00	11,550.40	11,610.86	11,511.43	43.48	42.97	89.05	-493.26	1,011.05	1,791.66	1,733.19	58.46	30.646		
11,700.00	11,587.70	11,658.25	11,544.90	43.50	43.04	88.96	-459.73	1,010.75	1,791.69	1,733.12	58.57	30.590		
11,750.00	11,621.96	11,705.44	11,575.36	43.51	43.09	88.88	-423.71	1,010.42	1,791.72	1,733.05	58.67	30.538		
11,800.00	11,652.91	11,752.45	11,602.66	43.50	43.14	88.80	-385.46	1,010.08	1,791.74	1,732.98	58.77	30.489		
11,850.00	11,680.33	11,800.00	11,626.99	43.48	43.19	88.73	-344.62	1,009.71	1,791.77	1,732.91	58.86	30.441		
11,900.00	11,704.00	11,845.99	11,647.21	43.45	43.22	88.68	-303.33	1,009.33	1,791.78	1,732.83	58.95	30.395		
11,950.00	11,723.74	11,892.57	11,664.26	43.40	43.26	88.63	-260.00	1,008.94	1,791.80	1,732.76	59.04	30.348		
12,000.00	11,739.41	11,939.05	11,677.71	43.35	43.30	88.59	-215.52	1,008.54	1,791.80	1,732.67	59.13	30.301		
12,050.00	11,750.88	11,985.45	11,687.50	43.29	43.34	88.56	-170.18	1,008.12	1,791.80	1,732.57	59.23	30.253		
12,100.00	11,758.06	12,031.80	11,693.58	43.23	43.40	88.55	-124.24	1,007.71	1,791.79	1,732.46	59.32	30.203		
12,150.00	11,760.91	12,078.12	11,695.93	43.16	43.46	88.54	-78.00	1,007.29	1,791.77	1,732.34	59.43	30.151		
12,163.12	11,760.93	12,090.27	11,695.92	43.14	43.48	88.54	-65.85	1,007.18	1,791.76	1,732.31	59.45	30.137		
12,200.00	11,760.58	12,126.85	11,695.30	43.10	43.55	88.53	-29.28	1,006.85	1,791.75	1,732.20	59.55	30.090		
12,300.00	11,759.62	12,226.84	11,693.55	42.98	43.79	88.50	70.70	1,005.94	1,791.71	1,731.86	59.85	29.935		
12,400.00	11,758.67	12,326.84	11,691.80	42.89	44.12	88.48	170.67	1,005.03	1,791.68	1,731.43	60.25	29.737		
12,500.00	11,757.71	12,426.84	11,690.05	42.82	44.52	88.45	270.65	1,004.13	1,791.65	1,730.91	60.73	29.500		
12,600.00	11,756.76	12,526.83	11,688.30	43.17	44.99	88.43	370.63	1,003.22	1,791.62	1,730.31	61.30	29.225		
12,700.00	11,755.80	12,626.83	11,686.55	43.61	45.52	88.40	470.61	1,002.32	1,791.58	1,729.63	61.95	28.918		
12,800.00	11,754.85	12,726.83	11,684.80	44.09	46.12	88.38	570.58	1,001.41	1,791.55	1,728.87	62.69	28.580		
12,900.00	11,753.89	12,826.82	11,683.06	44.63	46.76	88.35	670.56	1,000.50	1,791.52	1,728.03	63.49	28.216		
13,000.00	11,752.94	12,926.82	11,681.31	45.21	47.46	88.33	770.54	999.60	1,791.49	1,727.11	64.37	27.829		
13,100.00	11,751.98	13,026.82	11,679.56	45.84	48.21	88.30	870.52	998.69	1,791.46	1,726.13	65.33	27.423		
13,200.00	11,751.03	13,126.81	11,677.81	46.52	49.00	88.28	970.49	997.78	1,791.43	1,725.08	66.35	27.000		
13,300.00	11,750.07	13,226.81	11,676.06	47.24	49.83	88.25	1,070.47	996.88	1,791.40	1,723.96	67.44	26.564		
13,400.00	11,749.12	13,326.81	11,674.31	48.00	50.70	88.22	1,170.45	995.97	1,791.37	1,722.78	68.58	26.119		
13,500.00	11,748.16	13,426.81	11,672.56	48.81	51.61	88.20	1,270.43	995.06	1,791.34	1,721.55	69.79	25.667		
13,600.00	11,747.21	13,526.80	11,670.81	49.65	52.56	88.17	1,370.40	994.16	1,791.31	1,720.25	71.06	25.210		
13,700.00	11,746.25	13,626.80	11,669.06	50.54	53.54	88.15	1,470.38	993.25	1,791.28	1,718.91	72.37	24.751		
13,800.00	11,745.30	13,726.80	11,667.32	51.46	54.56	88.12	1,570.36	992.34	1,791.25	1,717.51	73.74	24.291		
13,900.00	11,744.34	13,826.79	11,665.57	52.41	55.60	88.10	1,670.33	991.44	1,791.22	1,716.07	75.16	23.834		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	11,743.39	13,926.79	11,663.82	53.40	56.67	88.07	1,770.31	990.53	1,791.20	1,714.58	76.61	23.379		
14,100.00	11,742.43	14,026.79	11,662.07	54.42	57.77	88.05	1,870.29	989.63	1,791.17	1,713.05	78.12	22.930		
14,200.00	11,741.48	14,126.78	11,660.32	55.47	58.90	88.02	1,970.27	988.72	1,791.14	1,711.48	79.66	22.486		
14,300.00	11,740.52	14,226.78	11,658.57	56.54	60.05	88.00	2,070.24	987.81	1,791.11	1,709.88	81.24	22.048		
14,400.00	11,739.57	14,326.78	11,656.82	57.65	61.22	87.97	2,170.22	986.91	1,791.09	1,708.24	82.85	21.618		
14,500.00	11,738.61	14,426.77	11,655.07	58.77	62.42	87.94	2,270.20	986.00	1,791.06	1,706.57	84.50	21.197		
14,600.00	11,737.66	14,526.77	11,653.32	59.93	63.63	87.92	2,370.18	985.09	1,791.04	1,704.86	86.18	20.783		
14,700.00	11,736.70	14,626.77	11,651.58	61.10	64.87	87.89	2,470.15	984.19	1,791.01	1,703.13	87.89	20.379		
14,800.00	11,735.75	14,726.76	11,649.83	62.30	66.12	87.87	2,570.13	983.28	1,790.99	1,701.36	89.62	19.984		
14,900.00	11,734.79	14,826.76	11,648.08	63.51	67.39	87.84	2,670.11	982.37	1,790.96	1,699.58	91.39	19.598		
15,000.00	11,733.84	14,926.76	11,646.33	64.75	68.67	87.82	2,770.09	981.47	1,790.94	1,697.76	93.17	19.221		
15,100.00	11,732.88	15,026.75	11,644.58	66.00	69.97	87.79	2,870.06	980.56	1,790.91	1,695.93	94.99	18.854		
15,200.00	11,731.93	15,126.75	11,642.83	67.27	71.29	87.77	2,970.04	979.66	1,790.89	1,694.07	96.82	18.497		
15,300.00	11,730.97	15,226.75	11,641.08	68.55	72.62	87.74	3,070.02	978.75	1,790.87	1,692.19	98.68	18.149		
15,400.00	11,730.02	15,326.75	11,639.33	69.86	73.96	87.72	3,170.00	977.84	1,790.85	1,690.29	100.55	17.810		
15,500.00	11,729.06	15,426.74	11,637.59	71.17	75.31	87.69	3,269.97	976.94	1,790.82	1,688.38	102.44	17.481		
15,600.00	11,728.11	15,526.74	11,635.84	72.50	76.68	87.66	3,369.95	976.03	1,790.80	1,686.45	104.36	17.161		
15,700.00	11,727.15	15,626.74	11,634.09	73.84	78.05	87.64	3,469.93	975.12	1,790.78	1,684.50	106.28	16.849		
15,800.00	11,726.20	15,726.73	11,632.34	75.19	79.44	87.61	3,569.91	974.22	1,790.76	1,682.53	108.23	16.546		
15,900.00	11,725.24	15,826.73	11,630.59	76.56	80.84	87.59	3,669.88	973.31	1,790.74	1,680.55	110.19	16.252		
16,000.00	11,724.29	15,926.73	11,628.84	77.94	82.24	87.56	3,769.86	972.40	1,790.72	1,678.56	112.16	15.966		
16,100.00	11,723.33	16,026.72	11,627.09	79.32	83.66	87.54	3,869.84	971.50	1,790.70	1,676.55	114.14	15.688		
16,200.00	11,722.38	16,126.72	11,625.34	80.72	85.08	87.51	3,969.82	970.59	1,790.68	1,674.53	116.14	15.418		
16,300.00	11,721.42	16,226.72	11,623.59	82.12	86.52	87.49	4,069.79	969.68	1,790.66	1,672.50	118.15	15.156		
16,400.00	11,720.47	16,326.71	11,621.85	83.54	87.95	87.46	4,169.77	968.78	1,790.64	1,670.46	120.17	14.900		
16,500.00	11,719.51	16,426.71	11,620.10	84.96	89.40	87.44	4,269.75	967.87	1,790.62	1,668.41	122.21	14.652		
16,600.00	11,718.56	16,526.71	11,618.35	86.39	90.86	87.41	4,369.73	966.97	1,790.60	1,666.35	124.25	14.411		
16,700.00	11,717.60	16,626.70	11,616.60	87.83	92.32	87.38	4,469.70	966.06	1,790.58	1,664.28	126.30	14.177		
16,800.00	11,716.65	16,726.70	11,614.85	89.28	93.78	87.36	4,569.68	965.15	1,790.56	1,662.20	128.36	13.949		
16,900.00	11,715.69	16,826.70	11,613.10	90.73	95.25	87.33	4,669.66	964.25	1,790.55	1,660.11	130.44	13.727		
17,000.00	11,714.74	16,926.69	11,611.35	92.19	96.73	87.31	4,769.64	963.34	1,790.53	1,658.01	132.52	13.512		
17,100.00	11,713.78	17,026.69	11,609.60	93.66	98.22	87.28	4,869.61	962.43	1,790.51	1,655.91	134.60	13.302		
17,200.00	11,712.83	17,126.69	11,607.86	95.13	99.71	87.26	4,969.59	961.53	1,790.50	1,653.80	136.70	13.098		
17,300.00	11,711.87	17,226.69	11,606.11	96.61	101.20	87.23	5,069.57	960.62	1,790.48	1,651.68	138.80	12.899		
17,400.00	11,710.92	17,326.68	11,604.36	98.09	102.70	87.21	5,169.55	959.71	1,790.46	1,649.55	140.91	12.706		
17,500.00	11,709.96	17,426.68	11,602.61	99.58	104.20	87.18	5,269.52	958.81	1,790.45	1,647.42	143.03	12.518		
17,600.00	11,709.01	17,526.68	11,600.86	101.07	105.71	87.16	5,369.50	957.90	1,790.43	1,645.28	145.15	12.335		
17,700.00	11,708.05	17,626.67	11,599.11	102.57	107.22	87.13	5,469.48	956.99	1,790.42	1,643.14	147.28	12.156		
17,800.00	11,707.10	17,726.67	11,597.36	104.08	108.74	87.10	5,569.45	956.09	1,790.41	1,640.99	149.42	11.983		
17,900.00	11,706.14	17,826.67	11,595.61	105.58	110.26	87.08	5,669.43	955.18	1,790.39	1,638.83	151.56	11.813		
18,000.00	11,705.19	17,926.66	11,593.86	107.09	111.78	87.05	5,769.41	954.28	1,790.38	1,636.67	153.70	11.648		
18,100.00	11,704.23	18,026.66	11,592.12	108.61	113.31	87.03	5,869.39	953.37	1,790.36	1,634.51	155.86	11.487		
18,200.00	11,703.28	18,126.66	11,590.37	110.13	114.84	87.00	5,969.36	952.46	1,790.35	1,632.34	158.01	11.331		
18,300.00	11,702.32	18,226.65	11,588.62	111.65	116.38	86.98	6,069.34	951.56	1,790.34	1,630.17	160.17	11.178		
18,400.00	11,701.37	18,326.65	11,586.87	113.18	117.91	86.95	6,169.32	950.65	1,790.33	1,627.99	162.34	11.029		
18,500.00	11,700.41	18,426.65	11,585.12	114.71	119.46	86.93	6,269.30	949.74	1,790.32	1,625.81	164.51	10.883		
18,600.00	11,699.46	18,526.64	11,583.37	116.24	121.00	86.90	6,369.27	948.84	1,790.30	1,623.63	166.68	10.741		
18,700.00	11,698.50	18,626.64	11,581.62	117.78	122.54	86.88	6,469.25	947.93	1,790.29	1,621.44	168.86	10.602		
18,800.00	11,697.55	18,726.64	11,579.87	119.32	124.09	86.85	6,569.23	947.02	1,790.28	1,619.25	171.04	10.467		
18,900.00	11,696.59	18,826.63	11,578.12	120.86	125.65	86.82	6,669.21	946.12	1,790.27	1,617.05	173.22	10.335		
19,000.00	11,695.64	18,926.63	11,576.38	122.41	127.20	86.80	6,769.18	945.21	1,790.26	1,614.85	175.41	10.206		
19,100.00	11,694.68	19,026.63	11,574.63	123.96	128.76	86.77	6,869.16	944.30	1,790.25	1,612.65	177.60	10.080		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	11,693.73	19,126.62	11,572.88	125.51	130.31	86.75	6,969.14	943.40	1,790.24	1,610.45	179.80	9.957		
19,300.00	11,692.77	19,226.62	11,571.13	127.06	131.88	86.72	7,069.12	942.49	1,790.23	1,608.24	181.99	9.837		
19,400.00	11,691.82	19,326.62	11,569.38	128.62	133.44	86.70	7,169.09	941.59	1,790.22	1,606.03	184.20	9.719		
19,500.00	11,690.86	19,426.62	11,567.63	130.18	135.00	86.67	7,269.07	940.68	1,790.22	1,603.82	186.40	9.604		
19,600.00	11,689.91	19,526.61	11,565.88	131.74	136.57	86.65	7,369.05	939.77	1,790.21	1,601.60	188.61	9.492		
19,700.00	11,688.95	19,626.61	11,564.13	133.30	138.14	86.62	7,469.03	938.87	1,790.20	1,599.39	190.82	9.382		
19,800.00	11,688.00	19,726.61	11,562.39	134.87	139.71	86.60	7,569.00	937.96	1,790.19	1,597.17	193.03	9.274		
19,900.00	11,687.04	19,826.60	11,560.64	136.43	141.29	86.57	7,668.98	937.05	1,790.19	1,594.94	195.24	9.169		
20,000.00	11,686.09	19,926.60	11,558.89	138.00	142.86	86.54	7,768.96	936.15	1,790.18	1,592.72	197.46	9.066		
20,100.00	11,685.13	20,026.60	11,557.14	139.57	144.44	86.52	7,868.94	935.24	1,790.17	1,590.50	199.68	8.965		
20,200.00	11,684.18	20,126.59	11,555.39	141.14	146.01	86.49	7,968.91	934.33	1,790.17	1,588.27	201.90	8.867		
20,300.00	11,683.22	20,226.59	11,553.64	142.72	147.59	86.47	8,068.89	933.43	1,790.16	1,586.04	204.12	8.770		
20,400.00	11,682.27	20,326.59	11,551.89	144.29	149.18	86.44	8,168.87	932.52	1,790.16	1,583.81	206.35	8.675		
20,500.00	11,681.31	20,426.58	11,550.14	145.87	150.76	86.42	8,268.85	931.61	1,790.15	1,581.58	208.58	8.583		
20,600.00	11,680.36	20,526.58	11,548.39	147.45	152.34	86.39	8,368.82	930.71	1,790.15	1,579.34	210.81	8.492		
20,700.00	11,679.40	20,626.58	11,546.65	149.03	153.93	86.37	8,468.80	929.80	1,790.15	1,577.11	213.04	8.403		
20,800.00	11,678.45	20,726.57	11,544.90	150.62	155.52	86.34	8,568.78	928.90	1,790.14	1,574.87	215.27	8.316		
20,900.00	11,677.49	20,826.57	11,543.15	152.20	157.10	86.32	8,668.76	927.99	1,790.14	1,572.63	217.51	8.230		
21,000.00	11,676.54	20,926.57	11,541.40	153.78	158.69	86.29	8,768.73	927.08	1,790.14	1,570.39	219.74	8.146		
21,100.00	11,675.58	21,026.56	11,539.65	155.37	160.29	86.26	8,868.71	926.18	1,790.13	1,568.15	221.98	8.064		
21,200.00	11,674.63	21,126.56	11,537.90	156.96	161.88	86.24	8,968.69	925.27	1,790.13	1,565.91	224.22	7.984		
21,300.00	11,673.67	21,226.56	11,536.15	158.55	163.47	86.21	9,068.66	924.36	1,790.13	1,563.66	226.47	7.905		
21,400.00	11,672.72	21,326.56	11,534.40	160.14	165.07	86.19	9,168.64	923.46	1,790.13	1,561.42	228.71	7.827		
21,500.00	11,671.76	21,426.55	11,532.66	161.73	166.66	86.16	9,268.62	922.55	1,790.13	1,559.17	230.95	7.751		
21,600.00	11,670.81	21,526.55	11,530.91	163.32	168.26	86.14	9,368.60	921.64	1,790.12	1,556.93	233.20	7.676		
21,700.00	11,669.86	21,626.55	11,529.16	164.92	169.86	86.11	9,468.57	920.74	1,790.12	1,554.68	235.45	7.603		
21,784.73	11,669.05	21,711.27	11,527.68	166.27	171.21	86.09	9,553.28	919.97	1,790.12	1,552.77	237.35	7.542		
21,800.00	11,668.90	21,726.54	11,527.41	166.51	171.45	86.09	9,568.55	919.83	1,790.12	1,552.43	237.69	7.531		
21,900.00	11,667.95	21,826.54	11,525.66	168.11	173.05	86.06	9,668.53	918.93	1,790.12	1,550.18	239.94	7.461		
21,938.19	11,667.58	21,864.73	11,524.99	168.72	173.67	86.05	9,706.71	918.58	1,790.12	1,549.32	240.80	7.434 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	103.03	-444.73	1,922.42	1,973.29					
100.00	100.00	80.40	80.40	0.13	0.10	103.03	-444.73	1,922.42	1,973.19	1,973.03	0.16	N/A		
200.00	200.00	180.40	180.40	0.48	0.41	103.03	-444.73	1,922.42	1,973.19	1,972.55	0.64	3,099.335		
300.00	300.00	280.40	280.40	0.84	0.77	103.03	-444.73	1,922.42	1,973.19	1,972.05	1.14	1,726.713		
400.00	400.00	380.40	380.40	1.20	1.13	103.03	-444.73	1,922.42	1,973.19	1,971.54	1.65	1,196.332		
500.00	500.00	480.40	480.40	1.56	1.49	103.03	-444.73	1,922.42	1,973.19	1,971.04	2.16	915.147		
600.00	600.00	580.40	580.40	1.92	1.85	103.03	-444.73	1,922.42	1,973.19	1,970.53	2.66	740.967		
700.00	700.00	680.40	680.40	2.28	2.21	103.03	-444.73	1,922.42	1,973.19	1,970.02	3.17	622.483		
800.00	800.00	780.40	780.40	2.63	2.56	103.03	-444.73	1,922.42	1,973.19	1,969.51	3.68	536.663		
900.00	900.00	880.40	880.40	2.99	2.92	103.03	-444.73	1,922.42	1,973.19	1,969.01	4.18	471.639		
1,000.00	1,000.00	980.40	980.40	3.35	3.28	103.03	-444.73	1,922.42	1,973.19	1,968.50	4.69	420.668		
1,100.00	1,100.00	1,080.40	1,080.40	3.71	3.64	103.03	-444.73	1,922.42	1,973.19	1,967.99	5.20	379.639		
1,200.00	1,200.00	1,180.40	1,180.40	4.07	4.00	103.03	-444.73	1,922.42	1,973.19	1,967.49	5.70	345.902		
1,300.00	1,300.00	1,280.40	1,280.40	4.43	4.36	103.03	-444.73	1,922.42	1,973.19	1,966.98	6.21	317.672		
1,400.00	1,400.00	1,380.40	1,380.40	4.79	4.72	103.03	-444.73	1,922.42	1,973.19	1,966.47	6.72	293.702		
1,500.00	1,500.00	1,480.40	1,480.40	5.14	5.07	103.03	-444.73	1,922.42	1,973.19	1,965.97	7.23	273.095		
1,600.00	1,600.00	1,580.40	1,580.40	5.50	5.43	103.03	-444.73	1,922.42	1,973.19	1,965.46	7.73	255.190		
1,700.00	1,700.00	1,680.40	1,680.40	5.86	5.79	103.03	-444.73	1,922.42	1,973.19	1,964.95	8.24	239.489		
1,800.00	1,800.00	1,780.40	1,780.40	6.22	6.15	103.03	-444.73	1,922.42	1,973.19	1,964.45	8.75	225.607		
1,900.00	1,900.00	1,880.40	1,880.40	6.58	6.51	103.03	-444.73	1,922.42	1,973.19	1,963.94	9.25	213.247		
2,000.00	2,000.00	1,980.40	1,980.40	6.94	6.87	103.03	-444.73	1,922.42	1,973.19	1,963.43	9.76	202.171		
2,100.00	2,100.00	2,080.40	2,080.40	7.29	7.22	103.03	-444.73	1,922.42	1,973.19	1,962.92	10.27	192.188		
2,200.00	2,200.00	2,180.40	2,180.40	7.65	7.58	103.03	-444.73	1,922.42	1,973.19	1,962.42	10.77	183.145		
2,300.00	2,300.00	2,280.40	2,280.40	8.01	7.94	103.03	-444.73	1,922.42	1,973.19	1,961.91	11.28	174.915		
2,400.00	2,400.00	2,380.40	2,380.40	8.37	8.30	103.03	-444.73	1,922.42	1,973.19	1,961.40	11.79	167.392		
2,500.00	2,500.00	2,480.40	2,480.40	8.73	8.66	103.03	-444.73	1,922.42	1,973.19	1,960.90	12.29	160.490 CC		
2,600.00	2,599.99	2,580.39	2,580.39	9.07	9.02	-126.72	-444.73	1,922.42	1,973.97	1,961.18	12.79	154.326		
2,700.00	2,699.91	2,680.31	2,680.31	9.40	9.38	-126.79	-444.73	1,922.42	1,976.32	1,963.05	13.28	148.849		
2,800.00	2,799.69	2,780.09	2,780.09	9.74	9.73	-126.89	-444.73	1,922.42	1,980.25	1,966.49	13.76	143.862		
2,900.00	2,899.27	2,879.67	2,879.67	10.07	10.09	-127.03	-444.73	1,922.42	1,985.77	1,971.51	14.25	139.314		
3,000.00	2,998.57	2,978.97	2,978.97	10.42	10.45	-127.22	-444.73	1,922.42	1,992.89	1,978.15	14.74	135.161		
3,033.25	3,031.52	3,011.92	3,011.92	10.53	10.56	-127.29	-444.73	1,922.42	1,995.62	1,980.72	14.91	133.860		
3,100.00	3,097.62	3,078.02	3,078.02	10.76	10.80	-127.50	-444.73	1,922.42	2,001.30	1,986.06	15.24	131.342		
3,200.00	3,196.65	3,177.05	3,177.05	11.12	11.16	-127.81	-444.73	1,922.42	2,009.85	1,994.12	15.73	127.750		
3,300.00	3,295.67	3,276.07	3,276.07	11.48	11.51	-128.12	-444.73	1,922.42	2,018.46	2,002.23	16.23	124.362		
3,400.00	3,394.70	3,375.10	3,375.10	11.84	11.87	-128.43	-444.73	1,922.42	2,027.14	2,010.40	16.73	121.162		
3,500.00	3,493.73	3,474.13	3,474.13	12.20	12.22	-128.73	-444.73	1,922.42	2,035.86	2,018.63	17.23	118.136		
3,600.00	3,592.76	3,635.68	3,635.65	12.57	12.78	-129.19	-445.56	1,920.16	2,043.53	2,025.65	17.88	114.296		
3,700.00	3,691.78	3,820.76	3,820.39	12.95	13.40	-129.59	-449.36	1,909.78	2,047.25	2,028.70	18.55	110.366		
3,800.00	3,790.81	3,988.31	3,986.98	13.32	13.98	-129.85	-455.43	1,893.21	2,046.90	2,027.73	19.17	106.778		
3,900.00	3,889.84	4,088.19	4,086.12	13.70	14.33	-129.98	-459.62	1,881.77	2,045.26	2,025.59	19.67	103.987		
4,000.00	3,988.86	4,188.07	4,185.25	14.09	14.68	-130.10	-463.81	1,870.33	2,043.64	2,023.47	20.17	101.321		
4,100.00	4,087.89	4,287.95	4,284.39	14.47	15.03	-130.23	-468.00	1,858.89	2,042.02	2,021.34	20.67	98.772		
4,200.00	4,186.92	4,387.83	4,383.53	14.86	15.39	-130.36	-472.19	1,847.46	2,040.41	2,019.23	21.18	96.334		
4,300.00	4,285.95	4,487.71	4,482.66	15.25	15.74	-130.49	-476.38	1,836.02	2,038.82	2,017.13	21.69	94.001		
4,400.00	4,384.97	4,587.59	4,581.80	15.64	16.10	-130.62	-480.57	1,824.58	2,037.23	2,015.03	22.20	91.767		
4,500.00	4,484.00	4,687.47	4,680.93	16.03	16.47	-130.75	-484.76	1,813.14	2,035.66	2,012.94	22.71	89.626		
4,600.00	4,583.03	4,787.35	4,780.07	16.42	16.83	-130.88	-488.95	1,801.71	2,034.09	2,010.86	23.23	87.574		
4,700.00	4,682.05	4,887.23	4,879.20	16.82	17.20	-131.01	-493.14	1,790.27	2,032.54	2,008.79	23.74	85.606		
4,800.00	4,781.08	4,987.12	4,978.34	17.21	17.57	-131.14	-497.33	1,778.83	2,030.99	2,006.73	24.26	83.716		
4,900.00	4,880.11	5,087.00	5,077.47	17.61	17.94	-131.27	-501.52	1,767.39	2,029.46	2,004.68	24.78	81.902		
5,000.00	4,979.14	5,186.88	5,176.61	18.01	18.31	-131.40	-505.71	1,755.96	2,027.94	2,002.64	25.30	80.158		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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				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	5,078.16	5,286.76	5,275.75	18.41	18.69	-131.53	-509.90	1,744.52	2,026.43	2,000.61	25.82	78.481		
5,200.00	5,177.19	5,386.64	5,374.88	18.81	19.06	-131.66	-514.09	1,733.08	2,024.92	1,998.58	26.34	76.868		
5,300.00	5,276.22	5,486.52	5,474.02	19.21	19.44	-131.80	-518.27	1,721.64	2,023.43	1,996.57	26.87	75.315		
5,400.00	5,375.24	5,586.40	5,573.15	19.62	19.82	-131.93	-522.46	1,710.20	2,021.95	1,994.56	27.39	73.820		
5,500.00	5,474.27	5,686.28	5,672.29	20.02	20.20	-132.06	-526.65	1,698.77	2,020.49	1,992.57	27.92	72.379		
5,600.00	5,573.30	5,786.16	5,771.42	20.43	20.58	-132.19	-530.84	1,687.33	2,019.03	1,990.59	28.44	70.989		
5,700.00	5,672.32	5,886.04	5,870.56	20.83	20.96	-132.32	-535.03	1,675.89	2,017.58	1,988.61	28.97	69.649		
5,800.00	5,771.35	5,985.93	5,969.69	21.24	21.34	-132.46	-539.22	1,664.45	2,016.14	1,986.65	29.50	68.355		
5,900.00	5,870.38	6,085.81	6,068.83	21.64	21.72	-132.59	-543.41	1,653.02	2,014.72	1,984.69	30.02	67.106		
6,000.00	5,969.41	6,185.69	6,167.96	22.05	22.11	-132.72	-547.60	1,641.58	2,013.30	1,982.75	30.55	65.899		
6,100.00	6,068.43	6,285.57	6,267.10	22.46	22.49	-132.85	-551.79	1,630.14	2,011.90	1,980.81	31.08	64.732		
6,200.00	6,167.46	6,385.45	6,366.24	22.87	22.88	-132.99	-555.98	1,618.70	2,010.50	1,978.89	31.61	63.604		
6,300.00	6,266.49	6,485.33	6,465.37	23.28	23.27	-133.12	-560.17	1,607.27	2,009.12	1,976.98	32.14	62.512		
6,400.00	6,365.51	6,585.21	6,564.51	23.69	23.65	-133.25	-564.36	1,595.83	2,007.75	1,975.08	32.67	61.455		
6,500.00	6,464.54	6,685.09	6,663.64	24.10	24.04	-133.39	-568.55	1,584.39	2,006.39	1,973.18	33.20	60.432		
6,600.00	6,563.57	6,784.97	6,762.78	24.51	24.43	-133.52	-572.74	1,572.95	2,005.04	1,971.30	33.73	59.440		
6,700.00	6,662.60	6,884.86	6,861.91	24.92	24.82	-133.65	-576.93	1,561.51	2,003.70	1,969.43	34.26	58.479		
6,800.00	6,761.62	6,984.74	6,961.05	25.33	25.21	-133.79	-581.12	1,550.08	2,002.37	1,967.57	34.79	57.548		
6,900.00	6,860.65	7,084.62	7,060.18	25.75	25.60	-133.92	-585.31	1,538.64	2,001.05	1,965.72	35.33	56.644		
7,000.00	6,959.68	7,184.50	7,159.32	26.16	25.99	-134.06	-589.50	1,527.20	1,999.74	1,963.88	35.86	55.767		
7,100.00	7,058.70	7,284.38	7,258.46	26.57	26.39	-134.19	-593.69	1,515.76	1,998.45	1,962.06	36.39	54.915		
7,200.00	7,157.73	7,384.26	7,357.59	26.99	26.78	-134.33	-597.88	1,504.33	1,997.16	1,960.24	36.92	54.089		
7,300.00	7,256.76	7,484.14	7,456.73	27.40	27.17	-134.46	-602.07	1,492.89	1,995.89	1,958.43	37.46	53.285		
7,400.00	7,355.79	7,584.02	7,555.86	27.81	27.56	-134.60	-606.26	1,481.45	1,994.63	1,956.64	37.99	52.505		
7,500.00	7,454.81	7,683.90	7,655.00	28.23	27.96	-134.73	-610.45	1,470.01	1,993.38	1,954.86	38.52	51.746		
7,600.00	7,553.84	7,783.78	7,754.13	28.64	28.35	-134.87	-614.64	1,458.58	1,992.14	1,953.08	39.06	51.008		
7,700.00	7,652.87	7,883.67	7,853.27	29.06	28.75	-135.00	-618.83	1,447.14	1,990.91	1,951.32	39.59	50.290		
7,800.00	7,751.89	7,983.55	7,952.40	29.47	29.14	-135.14	-623.02	1,435.70	1,989.69	1,949.57	40.12	49.591		
7,900.00	7,850.92	8,083.43	8,051.54	29.89	29.54	-135.27	-627.21	1,424.26	1,988.49	1,947.83	40.66	48.911		
8,000.00	7,949.95	8,183.31	8,150.67	30.30	29.93	-135.41	-631.39	1,412.83	1,987.29	1,946.10	41.19	48.248		
8,100.00	8,048.97	8,278.13	8,244.79	30.72	30.31	-135.54	-635.57	1,401.39	1,986.13	1,944.42	41.71	47.614		
8,156.78	8,105.20	8,316.62	8,283.02	30.96	30.46	-135.60	-636.88	1,397.85	1,985.87	1,943.89	41.98	47.305		
8,200.00	8,148.00	8,345.90	8,312.15	31.14	30.57	-135.64	-637.94	1,394.96	1,986.02	1,943.84	42.18	47.082		
8,300.00	8,247.03	8,400.00	8,366.00	31.55	30.78	-135.73	-639.70	1,390.16	1,987.61	1,945.00	42.61	46.648		
8,400.00	8,346.06	8,481.20	8,446.96	31.97	31.09	-135.89	-641.84	1,384.30	1,990.69	1,947.60	43.09	46.200		
8,500.00	8,445.08	8,548.63	8,514.28	32.38	31.33	-136.03	-643.18	1,380.66	1,995.47	1,951.95	43.52	45.847		
8,600.00	8,544.11	8,600.00	8,565.60	32.80	31.52	-136.15	-643.92	1,378.64	2,001.99	1,958.09	43.90	45.602		
8,700.00	8,643.14	8,682.88	8,648.45	33.22	31.81	-136.35	-644.61	1,376.75	2,009.96	1,965.59	44.36	45.306		
8,800.00	8,742.16	8,756.99	8,722.56	33.64	32.06	-136.55	-644.73	1,376.42	2,019.61	1,974.82	44.79	45.091		
8,900.00	8,841.19	8,856.02	8,821.59	34.05	32.39	-136.82	-644.73	1,376.42	2,029.78	1,984.48	45.30	44.812		
9,000.00	8,940.22	8,955.04	8,920.62	34.47	32.72	-137.09	-644.73	1,376.42	2,040.00	1,994.19	45.80	44.539		
9,100.00	9,039.25	9,054.07	9,019.65	34.89	33.05	-137.35	-644.73	1,376.42	2,050.25	2,003.95	46.31	44.273		
9,200.00	9,138.27	9,153.10	9,118.67	35.31	33.39	-137.61	-644.73	1,376.42	2,060.56	2,013.74	46.82	44.014		
9,300.00	9,237.30	9,252.12	9,217.70	35.73	33.72	-137.87	-644.73	1,376.42	2,070.90	2,023.58	47.32	43.761		
9,400.00	9,336.33	9,351.15	9,316.73	36.14	34.05	-138.13	-644.73	1,376.42	2,081.29	2,033.46	47.83	43.514		
9,500.00	9,435.35	9,450.18	9,415.75	36.56	34.39	-138.38	-644.73	1,376.42	2,091.71	2,043.38	48.34	43.273		
9,600.00	9,534.38	9,549.21	9,514.78	36.98	34.72	-138.63	-644.73	1,376.42	2,102.18	2,053.34	48.84	43.038		
9,700.00	9,633.41	9,648.23	9,613.81	37.40	35.06	-138.88	-644.73	1,376.42	2,112.69	2,063.34	49.35	42.808		
9,800.00	9,732.44	9,747.26	9,712.84	37.82	35.39	-139.13	-644.73	1,376.42	2,123.24	2,073.38	49.86	42.584		
9,836.39	9,768.48	9,783.30	9,748.88	37.97	35.51	-139.21	-644.73	1,376.42	2,127.08	2,077.04	50.05	42.503		
9,900.00	9,831.53	9,846.36	9,811.93	38.23	35.73	-139.42	-644.73	1,376.42	2,133.42	2,083.05	50.37	42.357		
10,000.00	9,930.93	9,945.75	9,911.33	38.63	36.06	-139.69	-644.73	1,376.42	2,141.79	2,090.92	50.87	42.102		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	10,030.57	10,045.40	10,010.97	39.01	36.40	-139.90	-644.73	1,376.42	2,148.18	2,096.81	51.37	41.817		
10,200.00	10,130.41	10,145.23	10,110.81	39.38	36.74	-140.04	-644.73	1,376.42	2,152.58	2,100.72	51.87	41.503		
10,300.00	10,230.35	10,245.18	10,210.75	39.72	37.08	-140.12	-644.73	1,376.42	2,154.99	2,102.63	52.36	41.160		
10,369.65	10,300.00	10,314.82	10,280.40	39.95	37.32	89.59	-644.73	1,376.42	2,155.47	2,102.78	52.69	40.909		
10,400.00	10,330.35	10,345.18	10,310.75	40.04	37.42	89.59	-644.73	1,376.42	2,155.47	2,102.64	52.83	40.798		
10,500.00	10,430.35	10,445.18	10,410.75	40.35	37.76	89.59	-644.73	1,376.42	2,155.47	2,102.17	53.30	40.437		
10,600.00	10,530.35	10,545.18	10,510.75	40.66	38.10	89.59	-644.73	1,376.42	2,155.47	2,101.70	53.78	40.082		
10,700.00	10,630.35	10,645.18	10,610.75	40.97	38.45	89.59	-644.73	1,376.42	2,155.47	2,101.22	54.25	39.733		
10,800.00	10,730.35	10,745.18	10,710.75	41.28	38.79	89.59	-644.73	1,376.42	2,155.47	2,100.75	54.72	39.389		
10,900.00	10,830.35	10,845.18	10,810.75	41.59	39.13	89.59	-644.73	1,376.42	2,155.47	2,100.28	55.20	39.050		
11,000.00	10,930.35	10,945.18	10,910.75	41.91	39.47	89.59	-644.73	1,376.42	2,155.47	2,099.80	55.67	38.717		
11,100.00	11,030.35	11,045.18	11,010.75	42.22	39.81	89.59	-644.73	1,376.42	2,155.47	2,099.33	56.15	38.390		
11,200.00	11,130.35	11,145.18	11,110.75	42.53	40.16	89.59	-644.73	1,376.42	2,155.47	2,098.85	56.62	38.067		
11,257.65	11,188.00	11,202.82	11,168.40	42.72	40.36	89.59	-644.73	1,376.42	2,155.47	2,098.58	56.90	37.883		
11,300.00	11,230.31	11,245.14	11,210.71	42.84	40.50	90.12	-644.73	1,376.42	2,155.48	2,098.38	57.10	37.751		
11,350.00	11,279.95	11,294.78	11,260.35	42.98	40.67	90.28	-644.73	1,376.42	2,155.50	2,098.17	57.33	37.600		
11,400.00	11,328.89	11,343.72	11,309.29	43.11	40.84	90.53	-644.73	1,376.42	2,155.57	2,098.02	57.55	37.455		
11,450.00	11,376.76	11,391.58	11,357.16	43.21	41.00	90.88	-644.73	1,376.42	2,155.76	2,097.99	57.76	37.320		
11,500.00	11,423.19	11,438.39	11,403.97	43.31	41.16	91.30	-644.72	1,376.42	2,156.14	2,098.17	57.97	37.194		
11,550.00	11,467.83	11,490.02	11,455.51	43.38	41.34	91.80	-642.04	1,376.40	2,156.73	2,098.55	58.18	37.069		
11,600.00	11,510.34	11,543.88	11,508.79	43.44	41.51	92.29	-634.31	1,376.32	2,157.50	2,099.12	58.39	36.953		
11,650.00	11,550.40	11,600.23	11,563.50	43.48	41.69	92.78	-620.91	1,376.20	2,158.43	2,099.85	58.58	36.847		
11,700.00	11,587.70	11,659.32	11,619.17	43.50	41.86	93.27	-601.16	1,376.02	2,159.50	2,100.74	58.76	36.752		
11,750.00	11,621.96	11,721.41	11,675.14	43.51	42.02	93.74	-574.35	1,375.77	2,160.66	2,101.74	58.92	36.668		
11,800.00	11,652.91	11,786.71	11,730.51	43.50	42.16	94.21	-539.80	1,375.46	2,161.89	2,102.82	59.08	36.594		
11,850.00	11,680.33	11,855.39	11,784.10	43.48	42.29	94.65	-496.93	1,375.07	2,163.13	2,103.92	59.22	36.530		
11,900.00	11,704.00	11,927.49	11,834.42	43.45	42.40	95.05	-445.36	1,374.59	2,164.32	2,104.98	59.34	36.472		
11,950.00	11,723.74	12,002.92	11,879.70	43.40	42.49	95.42	-385.10	1,374.04	2,165.41	2,105.95	59.46	36.417		
12,000.00	11,739.41	12,081.41	11,917.99	43.35	42.56	95.72	-316.66	1,373.41	2,166.32	2,106.74	59.58	36.358		
12,050.00	11,750.88	12,162.45	11,947.34	43.29	42.63	95.95	-241.20	1,372.72	2,167.01	2,107.29	59.71	36.291		
12,100.00	11,758.06	12,245.32	11,966.04	43.23	42.74	96.09	-160.54	1,371.98	2,167.42	2,107.56	59.86	36.211		
12,150.00	11,760.91	12,329.11	11,972.93	43.16	42.91	96.13	-77.11	1,371.22	2,167.52	2,107.50	60.02	36.113		
12,163.12	11,760.93	12,351.13	11,972.71	43.14	42.97	96.13	-55.09	1,371.02	2,167.49	2,107.43	60.07	36.085		
12,200.00	11,760.58	12,385.69	11,972.08	43.10	43.06	96.12	-20.54	1,370.70	2,167.43	2,107.27	60.16	36.027		
12,300.00	11,759.62	12,485.69	11,970.17	42.98	43.39	96.10	79.44	1,369.78	2,167.27	2,106.78	60.49	35.828		
12,400.00	11,758.67	12,585.69	11,968.25	42.89	43.78	96.07	179.41	1,368.87	2,167.10	2,106.20	60.91	35.581		
12,500.00	11,757.71	12,685.68	11,966.33	42.82	44.23	96.05	279.38	1,367.95	2,166.94	2,105.53	61.41	35.289		
12,600.00	11,756.76	12,785.68	11,964.42	43.17	44.74	96.02	379.36	1,367.03	2,166.77	2,104.78	61.99	34.954		
12,700.00	11,755.80	12,885.67	11,962.50	43.61	45.30	96.00	479.33	1,366.12	2,166.61	2,103.96	62.65	34.581		
12,800.00	11,754.85	12,985.67	11,960.59	44.09	45.91	95.97	579.30	1,365.20	2,166.44	2,103.05	63.40	34.174		
12,900.00	11,753.89	13,085.66	11,958.67	44.63	46.57	95.95	679.27	1,364.28	2,166.28	2,102.07	64.21	33.736		
13,000.00	11,752.94	13,185.66	11,956.76	45.21	47.27	95.92	779.25	1,363.37	2,166.12	2,101.01	65.10	33.271		
13,100.00	11,751.98	13,285.65	11,954.84	45.84	48.03	95.90	879.22	1,362.45	2,165.95	2,099.89	66.07	32.785		
13,200.00	11,751.03	13,385.65	11,952.92	46.52	48.82	95.87	979.19	1,361.54	2,165.79	2,098.70	67.09	32.280		
13,300.00	11,750.07	13,485.64	11,951.01	47.24	49.66	95.85	1,079.16	1,360.62	2,165.63	2,097.45	68.18	31.762		
13,400.00	11,749.12	13,585.64	11,949.09	48.00	50.54	95.82	1,179.14	1,359.70	2,165.47	2,096.13	69.34	31.232		
13,500.00	11,748.16	13,685.63	11,947.18	48.81	51.46	95.80	1,279.11	1,358.79	2,165.31	2,094.76	70.54	30.694		
13,600.00	11,747.21	13,785.63	11,945.26	49.65	52.41	95.77	1,379.08	1,357.87	2,165.15	2,093.34	71.81	30.151		
13,700.00	11,746.25	13,885.63	11,943.35	50.54	53.39	95.75	1,479.06	1,356.95	2,164.99	2,091.86	73.13	29.606		
13,800.00	11,745.30	13,985.62	11,941.43	51.46	54.41	95.72	1,579.03	1,356.04	2,164.83	2,090.33	74.49	29.060		
13,900.00	11,744.34	14,085.62	11,939.52	52.41	55.46	95.70	1,679.00	1,355.12	2,164.67	2,088.76	75.91	28.517		
14,000.00	11,743.39	14,185.61	11,937.60	53.40	56.53	95.67	1,778.97	1,354.21	2,164.51	2,087.14	77.37	27.978		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	11,742.43	14,285.61	11,935.68	54.42	57.64	95.64	1,878.95	1,353.29	2,164.35	2,085.49	78.86	27.444		
14,200.00	11,741.48	14,385.60	11,933.77	55.47	58.77	95.62	1,978.92	1,352.37	2,164.19	2,083.79	80.40	26.917		
14,300.00	11,740.52	14,485.60	11,931.85	56.54	59.92	95.59	2,078.89	1,351.46	2,164.03	2,082.06	81.98	26.397		
14,400.00	11,739.57	14,585.59	11,929.94	57.65	61.10	95.57	2,178.87	1,350.54	2,163.88	2,080.29	83.59	25.887		
14,500.00	11,738.61	14,685.59	11,928.02	58.77	62.29	95.54	2,278.84	1,349.62	2,163.72	2,078.49	85.23	25.386		
14,600.00	11,737.66	14,785.58	11,926.11	59.93	63.51	95.52	2,378.81	1,348.71	2,163.56	2,076.65	86.91	24.894		
14,700.00	11,736.70	14,885.58	11,924.19	61.10	64.75	95.49	2,478.78	1,347.79	2,163.41	2,074.79	88.61	24.414		
14,800.00	11,735.75	14,985.57	11,922.27	62.30	66.00	95.47	2,578.76	1,346.88	2,163.25	2,072.90	90.35	23.944		
14,900.00	11,734.79	15,085.57	11,920.36	63.51	67.27	95.44	2,678.73	1,345.96	2,163.10	2,070.99	92.11	23.485		
15,000.00	11,733.84	15,185.57	11,918.44	64.75	68.56	95.42	2,778.70	1,345.04	2,162.94	2,069.05	93.89	23.037		
15,100.00	11,732.88	15,285.56	11,916.53	66.00	69.87	95.39	2,878.68	1,344.13	2,162.79	2,067.09	95.70	22.600		
15,200.00	11,731.93	15,385.56	11,914.61	67.27	71.18	95.37	2,978.65	1,343.21	2,162.63	2,065.10	97.53	22.174		
15,300.00	11,730.97	15,485.55	11,912.70	68.55	72.52	95.34	3,078.62	1,342.29	2,162.48	2,063.10	99.38	21.760		
15,400.00	11,730.02	15,585.55	11,910.78	69.86	73.86	95.32	3,178.59	1,341.38	2,162.33	2,061.08	101.25	21.356		
15,500.00	11,729.06	15,685.54	11,908.86	71.17	75.22	95.29	3,278.57	1,340.46	2,162.17	2,059.03	103.14	20.964		
15,600.00	11,728.11	15,785.54	11,906.95	72.50	76.58	95.27	3,378.54	1,339.54	2,162.02	2,056.98	105.05	20.582		
15,700.00	11,727.15	15,885.53	11,905.03	73.84	77.96	95.24	3,478.51	1,338.63	2,161.87	2,054.90	106.97	20.210		
15,800.00	11,726.20	15,985.53	11,903.12	75.19	79.35	95.22	3,578.49	1,337.71	2,161.72	2,052.81	108.91	19.849		
15,900.00	11,725.24	16,085.52	11,901.20	76.56	80.75	95.19	3,678.46	1,336.80	2,161.57	2,050.70	110.86	19.497		
16,000.00	11,724.29	16,185.52	11,899.29	77.94	82.16	95.17	3,778.43	1,335.88	2,161.42	2,048.58	112.83	19.156		
16,100.00	11,723.33	16,285.51	11,897.37	79.32	83.58	95.14	3,878.40	1,334.96	2,161.27	2,046.45	114.82	18.824		
16,200.00	11,722.38	16,385.51	11,895.46	80.72	85.00	95.12	3,978.38	1,334.05	2,161.12	2,044.30	116.81	18.501		
16,300.00	11,721.42	16,485.50	11,893.54	82.12	86.44	95.09	4,078.35	1,333.13	2,160.97	2,042.15	118.82	18.187		
16,400.00	11,720.47	16,585.50	11,891.62	83.54	87.88	95.07	4,178.32	1,332.21	2,160.82	2,039.98	120.84	17.882		
16,500.00	11,719.51	16,685.50	11,889.71	84.96	89.33	95.04	4,278.29	1,331.30	2,160.67	2,037.80	122.87	17.585		
16,600.00	11,718.56	16,785.49	11,887.79	86.39	90.78	95.02	4,378.27	1,330.38	2,160.52	2,035.61	124.91	17.296		
16,700.00	11,717.60	16,885.49	11,885.88	87.83	92.25	94.99	4,478.24	1,329.47	2,160.37	2,033.41	126.96	17.016		
16,800.00	11,716.65	16,985.48	11,883.96	89.28	93.72	94.96	4,578.21	1,328.55	2,160.23	2,031.20	129.02	16.743		
16,900.00	11,715.69	17,085.48	11,882.05	90.73	95.19	94.94	4,678.19	1,327.63	2,160.08	2,028.98	131.09	16.477		
17,000.00	11,714.74	17,185.47	11,880.13	92.19	96.67	94.91	4,778.16	1,326.72	2,159.93	2,026.76	133.17	16.219		
17,100.00	11,713.78	17,285.47	11,878.21	93.66	98.16	94.89	4,878.13	1,325.80	2,159.79	2,024.53	135.26	15.968		
17,200.00	11,712.83	17,385.46	11,876.30	95.13	99.65	94.86	4,978.10	1,324.88	2,159.64	2,022.29	137.36	15.723		
17,300.00	11,711.87	17,485.46	11,874.38	96.61	101.14	94.84	5,078.08	1,323.97	2,159.50	2,020.04	139.46	15.485		
17,400.00	11,710.92	17,585.45	11,872.47	98.09	102.64	94.81	5,178.05	1,323.05	2,159.35	2,017.78	141.57	15.253		
17,500.00	11,709.96	17,685.45	11,870.55	99.58	104.15	94.79	5,278.02	1,322.14	2,159.21	2,015.52	143.68	15.027		
17,600.00	11,709.01	17,785.44	11,868.64	101.07	105.66	94.76	5,378.00	1,321.22	2,159.06	2,013.25	145.81	14.808		
17,700.00	11,708.05	17,885.44	11,866.72	102.57	107.17	94.74	5,477.97	1,320.30	2,158.92	2,010.98	147.94	14.593		
17,800.00	11,707.10	17,985.44	11,864.80	104.08	108.69	94.71	5,577.94	1,319.39	2,158.78	2,008.70	150.07	14.385		
17,900.00	11,706.14	18,085.43	11,862.89	105.58	110.21	94.69	5,677.91	1,318.47	2,158.63	2,006.42	152.22	14.181		
18,000.00	11,705.19	18,185.43	11,860.97	107.09	111.74	94.66	5,777.89	1,317.55	2,158.49	2,004.13	154.36	13.983		
18,100.00	11,704.23	18,285.42	11,859.06	108.61	113.27	94.64	5,877.86	1,316.64	2,158.35	2,001.83	156.52	13.790		
18,200.00	11,703.28	18,385.42	11,857.14	110.13	114.80	94.61	5,977.83	1,315.72	2,158.21	1,999.53	158.67	13.602		
18,300.00	11,702.32	18,485.41	11,855.23	111.65	116.34	94.59	6,077.81	1,314.80	2,158.07	1,997.23	160.84	13.418		
18,400.00	11,701.37	18,585.41	11,853.31	113.18	117.87	94.56	6,177.78	1,313.89	2,157.93	1,994.92	163.00	13.239		
18,500.00	11,700.41	18,685.40	11,851.40	114.71	119.42	94.54	6,277.75	1,312.97	2,157.79	1,992.61	165.18	13.064		
18,600.00	11,699.46	18,785.40	11,849.48	116.24	120.96	94.51	6,377.72	1,312.06	2,157.65	1,990.29	167.35	12.893		
18,700.00	11,698.50	18,885.39	11,847.56	117.78	122.51	94.48	6,477.70	1,311.14	2,157.51	1,987.97	169.53	12.726		
18,800.00	11,697.55	18,985.39	11,845.65	119.32	124.06	94.46	6,577.67	1,310.22	2,157.37	1,985.65	171.72	12.563		
18,900.00	11,696.59	19,085.38	11,843.73	120.86	125.61	94.43	6,677.64	1,309.31	2,157.23	1,983.32	173.91	12.404		
19,000.00	11,695.64	19,185.38	11,841.82	122.41	127.17	94.41	6,777.62	1,308.39	2,157.09	1,980.99	176.10	12.249		
19,100.00	11,694.68	19,285.38	11,839.90	123.96	128.72	94.38	6,877.59	1,307.47	2,156.95	1,978.66	178.30	12.098		
19,200.00	11,693.73	19,385.37	11,837.99	125.51	130.28	94.36	6,977.56	1,306.56	2,156.82	1,976.32	180.50	11.949		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,300.00	11,692.77	19,485.37	11,836.07	127.06	131.85	94.33	7,077.53	1,305.64	2,156.68	1,973.98	182.70	11.805		
19,400.00	11,691.82	19,585.36	11,834.15	128.62	133.41	94.31	7,177.51	1,304.73	2,156.54	1,971.64	184.91	11.663		
19,500.00	11,690.86	19,685.36	11,832.24	130.18	134.98	94.28	7,277.48	1,303.81	2,156.41	1,969.29	187.12	11.524		
19,600.00	11,689.91	19,785.35	11,830.32	131.74	136.55	94.26	7,377.45	1,302.89	2,156.27	1,966.94	189.33	11.389		
19,700.00	11,688.95	19,885.35	11,828.41	133.30	138.12	94.23	7,477.42	1,301.98	2,156.14	1,964.59	191.54	11.257		
19,800.00	11,688.00	19,985.34	11,826.49	134.87	139.69	94.21	7,577.40	1,301.06	2,156.00	1,962.24	193.76	11.127		
19,900.00	11,687.04	20,085.34	11,824.58	136.43	141.26	94.18	7,677.37	1,300.14	2,155.87	1,959.88	195.98	11.000		
20,000.00	11,686.09	20,185.33	11,822.66	138.00	142.84	94.16	7,777.34	1,299.23	2,155.73	1,957.53	198.21	10.876		
20,100.00	11,685.13	20,285.33	11,820.75	139.57	144.42	94.13	7,877.32	1,298.31	2,155.60	1,955.17	200.43	10.755		
20,200.00	11,684.18	20,385.32	11,818.83	141.14	146.00	94.10	7,977.29	1,297.40	2,155.47	1,952.80	202.66	10.636		
20,300.00	11,683.22	20,485.32	11,816.91	142.72	147.58	94.08	8,077.26	1,296.48	2,155.33	1,950.44	204.89	10.519		
20,400.00	11,682.27	20,585.31	11,815.00	144.29	149.16	94.05	8,177.23	1,295.56	2,155.20	1,948.07	207.13	10.405		
20,500.00	11,681.31	20,685.31	11,813.08	145.87	150.74	94.03	8,277.21	1,294.65	2,155.07	1,945.71	209.36	10.293		
20,600.00	11,680.36	20,785.31	11,811.17	147.45	152.33	94.00	8,377.18	1,293.73	2,154.94	1,943.34	211.60	10.184		
20,700.00	11,679.40	20,885.30	11,809.25	149.03	153.91	93.98	8,477.15	1,292.81	2,154.81	1,940.97	213.84	10.077		
20,800.00	11,678.45	20,985.30	11,807.34	150.62	155.50	93.95	8,577.13	1,291.90	2,154.68	1,938.59	216.09	9.971		
20,900.00	11,677.49	21,085.29	11,805.42	152.20	157.09	93.93	8,677.10	1,290.98	2,154.55	1,936.22	218.33	9.868		
21,000.00	11,676.54	21,185.29	11,803.50	153.78	158.68	93.90	8,777.07	1,290.06	2,154.42	1,933.84	220.58	9.767		
21,100.00	11,675.58	21,285.28	11,801.59	155.37	160.27	93.88	8,877.04	1,289.15	2,154.29	1,931.46	222.82	9.668		
21,200.00	11,674.63	21,385.28	11,799.67	156.96	161.87	93.85	8,977.02	1,288.23	2,154.16	1,929.09	225.07	9.571		
21,300.00	11,673.67	21,485.27	11,797.76	158.55	163.46	93.83	9,076.99	1,287.32	2,154.03	1,926.71	227.33	9.476		
21,400.00	11,672.72	21,585.27	11,795.84	160.14	165.06	93.80	9,176.96	1,286.40	2,153.90	1,924.32	229.58	9.382		
21,500.00	11,671.76	21,685.26	11,793.93	161.73	166.65	93.77	9,276.94	1,285.48	2,153.78	1,921.94	231.83	9.290		
21,600.00	11,670.81	21,785.26	11,792.01	163.32	168.25	93.75	9,376.91	1,284.57	2,153.65	1,919.56	234.09	9.200		
21,700.00	11,669.86	21,885.25	11,790.09	164.92	169.85	93.72	9,476.88	1,283.65	2,153.52	1,917.17	236.35	9.112		
21,800.00	11,668.90	21,985.25	11,788.18	166.51	171.45	93.70	9,576.85	1,282.73	2,153.40	1,914.79	238.61	9.025		
21,900.00	11,667.95	22,085.25	11,786.26	168.11	173.05	93.67	9,676.83	1,281.82	2,153.27	1,912.40	240.87	8.940		
21,938.19	11,667.58	22,123.44	11,785.53	168.72	173.66	93.66	9,715.01	1,281.47	2,153.22	1,911.49	241.73	8.907 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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	102.79	-444.44	1,957.41	2,007.33					
100.00	100.00	79.70	79.70	0.13	0.10	102.79	-444.44	1,957.41	2,007.23	2,007.07	0.16	N/A		
200.00	200.00	179.70	179.70	0.48	0.41	102.79	-444.44	1,957.41	2,007.23	2,006.60	0.64	3,160.885		
300.00	300.00	279.70	279.70	0.84	0.77	102.79	-444.44	1,957.41	2,007.23	2,006.09	1.14	1,759.110		
400.00	400.00	379.70	379.70	1.20	1.13	102.79	-444.44	1,957.41	2,007.23	2,005.58	1.65	1,218.241		
500.00	500.00	479.70	479.70	1.56	1.49	102.79	-444.44	1,957.41	2,007.23	2,005.08	2.15	931.683		
600.00	600.00	579.70	579.70	1.92	1.85	102.79	-444.44	1,957.41	2,007.23	2,004.57	2.66	754.243		
700.00	700.00	679.70	679.70	2.28	2.20	102.79	-444.44	1,957.41	2,007.23	2,004.06	3.17	633.570		
800.00	800.00	779.70	779.70	2.63	2.56	102.79	-444.44	1,957.41	2,007.23	2,003.56	3.68	546.182		
900.00	900.00	879.70	879.70	2.99	2.92	102.79	-444.44	1,957.41	2,007.23	2,003.05	4.18	479.977		
1,000.00	1,000.00	979.70	979.70	3.35	3.28	102.79	-444.44	1,957.41	2,007.23	2,002.54	4.69	428.085		
1,100.00	1,100.00	1,079.70	1,079.70	3.71	3.64	102.79	-444.44	1,957.41	2,007.23	2,002.04	5.20	386.319		
1,200.00	1,200.00	1,179.70	1,179.70	4.07	4.00	102.79	-444.44	1,957.41	2,007.23	2,001.53	5.70	351.978		
1,300.00	1,300.00	1,279.70	1,279.70	4.43	4.35	102.79	-444.44	1,957.41	2,007.23	2,001.02	6.21	323.244		
1,400.00	1,400.00	1,379.70	1,379.70	4.79	4.71	102.79	-444.44	1,957.41	2,007.23	2,000.52	6.72	298.847		
1,500.00	1,500.00	1,479.70	1,479.70	5.14	5.07	102.79	-444.44	1,957.41	2,007.23	2,000.01	7.22	277.874		
1,600.00	1,600.00	1,579.70	1,579.70	5.50	5.43	102.79	-444.44	1,957.41	2,007.23	1,999.50	7.73	259.652		
1,700.00	1,700.00	1,679.70	1,679.70	5.86	5.79	102.79	-444.44	1,957.41	2,007.23	1,998.99	8.24	243.672		
1,800.00	1,800.00	1,779.70	1,779.70	6.22	6.15	102.79	-444.44	1,957.41	2,007.23	1,998.49	8.74	229.546		
1,900.00	1,900.00	1,879.70	1,879.70	6.58	6.51	102.79	-444.44	1,957.41	2,007.23	1,997.98	9.25	216.967		
2,000.00	2,000.00	1,979.70	1,979.70	6.94	6.86	102.79	-444.44	1,957.41	2,007.23	1,997.47	9.76	205.696		
2,100.00	2,100.00	2,079.70	2,079.70	7.29	7.22	102.79	-444.44	1,957.41	2,007.23	1,996.97	10.27	195.537		
2,200.00	2,200.00	2,179.70	2,179.70	7.65	7.58	102.79	-444.44	1,957.41	2,007.23	1,996.46	10.77	186.335		
2,300.00	2,300.00	2,279.70	2,279.70	8.01	7.94	102.79	-444.44	1,957.41	2,007.23	1,995.95	11.28	177.960		
2,400.00	2,400.00	2,379.70	2,379.70	8.37	8.30	102.79	-444.44	1,957.41	2,007.23	1,995.45	11.79	170.306		
2,500.00	2,500.00	2,479.70	2,479.70	8.73	8.66	102.79	-444.44	1,957.41	2,007.23	1,994.94	12.29	163.282 CC, ES		
2,600.00	2,599.99	2,579.69	2,579.69	9.07	9.01	-126.96	-444.44	1,957.41	2,008.02	1,995.23	12.79	157.009		
2,700.00	2,699.91	2,679.61	2,679.61	9.40	9.37	-127.02	-444.44	1,957.41	2,010.38	1,997.11	13.28	151.435		
2,800.00	2,799.69	2,779.39	2,779.39	9.74	9.73	-127.12	-444.44	1,957.41	2,014.33	2,000.57	13.76	146.356		
2,900.00	2,899.27	2,878.97	2,878.97	10.07	10.09	-127.26	-444.44	1,957.41	2,019.88	2,005.62	14.25	141.724		
3,000.00	2,998.57	2,978.27	2,978.27	10.42	10.44	-127.44	-444.44	1,957.41	2,027.04	2,012.29	14.74	137.494		
3,033.25	3,031.52	3,011.22	3,011.22	10.53	10.56	-127.50	-444.44	1,957.41	2,029.78	2,014.87	14.91	136.168		
3,100.00	3,097.62	3,077.32	3,077.32	10.76	10.80	-127.71	-444.44	1,957.41	2,035.48	2,020.25	15.24	133.601		
3,200.00	3,196.65	3,176.35	3,176.35	11.12	11.15	-128.02	-444.44	1,957.41	2,044.08	2,028.35	15.73	129.941		
3,300.00	3,295.67	3,275.37	3,275.37	11.48	11.51	-128.32	-444.44	1,957.41	2,052.73	2,036.50	16.23	126.488		
3,400.00	3,394.70	3,374.40	3,374.40	11.84	11.86	-128.62	-444.44	1,957.41	2,061.44	2,044.71	16.73	123.226		
3,500.00	3,493.73	3,473.43	3,473.43	12.20	12.22	-128.92	-444.44	1,957.41	2,070.20	2,052.97	17.23	120.143		
3,600.00	3,592.76	3,572.46	3,572.46	12.57	12.57	-129.22	-444.44	1,957.41	2,079.02	2,061.29	17.74	117.224		
3,700.00	3,691.78	3,671.48	3,671.48	12.95	12.93	-129.51	-444.44	1,957.41	2,087.90	2,069.66	18.24	114.460		
3,800.00	3,790.81	3,770.51	3,770.51	13.32	13.28	-129.80	-444.44	1,957.41	2,096.83	2,078.08	18.75	111.838		
3,900.00	3,889.84	3,869.54	3,869.54	13.70	13.64	-130.09	-444.44	1,957.41	2,105.82	2,086.56	19.26	109.349		
4,000.00	3,988.86	3,968.56	3,968.56	14.09	13.99	-130.38	-444.44	1,957.41	2,114.86	2,095.09	19.77	106.985		
4,100.00	4,087.89	4,067.59	4,067.59	14.47	14.35	-130.66	-444.44	1,957.41	2,123.95	2,103.67	20.28	104.736		
4,200.00	4,186.92	4,166.62	4,166.62	14.86	14.70	-130.95	-444.44	1,957.41	2,133.09	2,112.30	20.79	102.595		
4,300.00	4,285.95	4,265.65	4,265.65	15.25	15.06	-131.22	-444.44	1,957.41	2,142.29	2,120.99	21.30	100.556		
4,400.00	4,384.97	4,364.67	4,364.67	15.64	15.41	-131.50	-444.44	1,957.41	2,151.54	2,129.72	21.82	98.611		
4,500.00	4,484.00	4,463.70	4,463.70	16.03	15.77	-131.78	-444.44	1,957.41	2,160.83	2,138.50	22.33	96.754		
4,600.00	4,583.03	4,548.03	4,548.03	16.42	16.06	-132.00	-444.71	1,957.54	2,170.39	2,147.59	22.80	95.181		
4,700.00	4,682.05	4,623.91	4,623.89	16.82	16.32	-132.17	-446.26	1,958.26	2,180.98	2,157.73	23.24	93.839		
4,800.00	4,781.08	4,700.00	4,699.91	17.21	16.56	-132.31	-449.18	1,959.64	2,192.64	2,168.97	23.67	92.620		
4,900.00	4,880.11	4,775.65	4,775.41	17.61	16.81	-132.41	-453.44	1,961.64	2,205.37	2,181.27	24.10	91.498		
5,000.00	4,979.14	4,851.39	4,850.90	18.01	17.06	-132.47	-459.06	1,964.28	2,219.15	2,194.62	24.53	90.461		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,078.16	4,935.31	4,934.38	18.41	17.33	-132.51	-466.72	1,967.88	2,233.91	2,208.92	24.98	89.414		
5,200.00	5,177.19	5,034.17	5,032.71	18.81	17.66	-132.55	-476.07	1,972.28	2,248.88	2,223.40	25.48	88.251		
5,300.00	5,276.22	5,133.04	5,131.03	19.21	17.99	-132.58	-485.42	1,976.67	2,263.85	2,237.87	25.98	87.126		
5,400.00	5,375.24	5,231.90	5,229.35	19.62	18.32	-132.62	-494.77	1,981.07	2,278.82	2,252.33	26.49	86.036		
5,500.00	5,474.27	5,330.76	5,327.67	20.02	18.66	-132.65	-504.13	1,985.46	2,293.79	2,266.80	26.99	84.981		
5,600.00	5,573.30	5,429.63	5,425.99	20.43	18.99	-132.68	-513.48	1,989.86	2,308.77	2,281.27	27.50	83.959		
5,700.00	5,672.32	5,528.49	5,524.32	20.83	19.33	-132.72	-522.83	1,994.25	2,323.74	2,295.73	28.01	82.969		
5,800.00	5,771.35	5,627.35	5,622.64	21.24	19.67	-132.75	-532.18	1,998.65	2,338.72	2,310.20	28.52	82.009		
5,900.00	5,870.38	5,726.22	5,720.96	21.64	20.01	-132.78	-541.54	2,003.04	2,353.69	2,324.66	29.03	81.078		
6,000.00	5,969.41	5,825.08	5,819.28	22.05	20.36	-132.81	-550.89	2,007.44	2,368.67	2,339.13	29.54	80.175		
6,100.00	6,068.43	5,923.94	5,917.60	22.46	20.70	-132.85	-560.24	2,011.84	2,383.65	2,353.59	30.06	79.300		
6,200.00	6,167.46	6,022.81	6,015.93	22.87	21.05	-132.88	-569.59	2,016.23	2,398.63	2,368.05	30.57	78.451		
6,300.00	6,266.49	6,121.67	6,114.25	23.28	21.40	-132.91	-578.94	2,020.63	2,413.60	2,382.51	31.09	77.626		
6,400.00	6,365.51	6,220.53	6,212.57	23.69	21.75	-132.94	-588.30	2,025.02	2,428.58	2,396.97	31.61	76.826		
6,500.00	6,464.54	6,319.40	6,310.89	24.10	22.10	-132.97	-597.65	2,029.42	2,443.56	2,411.43	32.13	76.048		
6,600.00	6,563.57	6,418.26	6,409.21	24.51	22.46	-133.00	-607.00	2,033.81	2,458.54	2,425.89	32.65	75.293		
6,700.00	6,662.60	6,517.13	6,507.54	24.92	22.81	-133.03	-616.35	2,038.21	2,473.53	2,440.35	33.18	74.559		
6,800.00	6,761.62	6,616.08	6,606.94	25.33	23.17	-133.06	-625.71	2,042.65	2,488.51	2,454.80	33.70	73.838		
6,900.00	6,860.65	6,767.04	6,756.36	25.75	23.71	-133.16	-637.23	2,048.02	2,502.44	2,468.05	34.39	72.774		
7,000.00	6,959.68	6,917.33	6,906.49	26.16	24.23	-133.38	-643.34	2,050.89	2,514.35	2,479.30	35.05	71.728		
7,100.00	7,058.70	7,049.25	7,038.40	26.57	24.69	-133.66	-644.44	2,051.41	2,524.40	2,488.75	35.66	70.794		
7,200.00	7,157.73	7,148.28	7,137.43	26.99	25.04	-133.89	-644.44	2,051.41	2,534.08	2,497.90	36.18	70.047		
7,300.00	7,256.76	7,247.31	7,236.46	27.40	25.38	-134.11	-644.44	2,051.41	2,543.79	2,507.10	36.70	69.322		
7,400.00	7,355.79	7,346.33	7,335.49	27.81	25.73	-134.33	-644.44	2,051.41	2,553.55	2,516.33	37.21	68.619		
7,500.00	7,454.81	7,445.36	7,434.51	28.23	26.08	-134.55	-644.44	2,051.41	2,563.34	2,525.61	37.73	67.935		
7,600.00	7,553.84	7,544.39	7,533.54	28.64	26.43	-134.77	-644.44	2,051.41	2,573.17	2,534.92	38.25	67.271		
7,700.00	7,652.87	7,643.42	7,632.57	29.06	26.77	-134.99	-644.44	2,051.41	2,583.04	2,544.27	38.77	66.626		
7,800.00	7,751.89	7,742.44	7,731.59	29.47	27.12	-135.21	-644.44	2,051.41	2,592.94	2,553.65	39.29	65.999		
7,900.00	7,850.92	7,841.47	7,830.62	29.89	27.47	-135.42	-644.44	2,051.41	2,602.88	2,563.08	39.81	65.388		
8,000.00	7,949.95	7,940.50	7,929.65	30.30	27.82	-135.64	-644.44	2,051.41	2,612.86	2,572.54	40.33	64.795		
8,100.00	8,048.97	8,039.52	8,028.67	30.72	28.17	-135.85	-644.44	2,051.41	2,622.88	2,582.03	40.84	64.217		
8,200.00	8,148.00	8,138.55	8,127.70	31.14	28.51	-136.06	-644.44	2,051.41	2,632.92	2,591.56	41.36	63.655		
8,300.00	8,247.03	8,237.58	8,226.73	31.55	28.86	-136.27	-644.44	2,051.41	2,643.01	2,601.13	41.88	63.107		
8,400.00	8,346.06	8,336.61	8,325.76	31.97	29.21	-136.47	-644.44	2,051.41	2,653.13	2,610.73	42.40	62.574		
8,500.00	8,445.08	8,435.63	8,424.78	32.38	29.56	-136.68	-644.44	2,051.41	2,663.28	2,620.36	42.92	62.054		
8,600.00	8,544.11	8,534.66	8,523.81	32.80	29.91	-136.88	-644.44	2,051.41	2,673.47	2,630.03	43.44	61.547		
8,700.00	8,643.14	8,633.69	8,622.84	33.22	30.26	-137.08	-644.44	2,051.41	2,683.69	2,639.73	43.96	61.054		
8,800.00	8,742.16	8,732.71	8,721.86	33.64	30.61	-137.29	-644.44	2,051.41	2,693.94	2,649.47	44.47	60.572		
8,900.00	8,841.19	8,831.74	8,820.89	34.05	30.96	-137.48	-644.44	2,051.41	2,704.23	2,659.23	44.99	60.103		
9,000.00	8,940.22	8,930.77	8,919.92	34.47	31.31	-137.68	-644.44	2,051.41	2,714.55	2,669.03	45.51	59.644		
9,100.00	9,039.25	9,029.80	9,018.95	34.89	31.66	-137.88	-644.44	2,051.41	2,724.90	2,678.87	46.03	59.197		
9,200.00	9,138.27	9,128.82	9,117.97	35.31	32.01	-138.07	-644.44	2,051.41	2,735.28	2,688.73	46.55	58.761		
9,300.00	9,237.30	9,227.85	9,217.00	35.73	32.36	-138.27	-644.44	2,051.41	2,745.69	2,698.62	47.07	58.335		
9,400.00	9,336.33	9,326.88	9,316.03	36.14	32.71	-138.46	-644.44	2,051.41	2,756.14	2,708.55	47.59	57.919		
9,500.00	9,435.35	9,425.90	9,415.05	36.56	33.06	-138.65	-644.44	2,051.41	2,766.61	2,718.51	48.10	57.512		
9,600.00	9,534.38	9,524.93	9,514.08	36.98	33.41	-138.84	-644.44	2,051.41	2,777.12	2,728.49	48.62	57.115		
9,700.00	9,633.41	9,623.96	9,613.11	37.40	33.76	-139.02	-644.44	2,051.41	2,787.65	2,738.51	49.14	56.727		
9,800.00	9,732.44	9,722.98	9,712.14	37.82	34.11	-139.21	-644.44	2,051.41	2,798.22	2,748.56	49.66	56.348		
9,836.39	9,768.48	9,759.03	9,748.18	37.97	34.24	-139.28	-644.44	2,051.41	2,802.07	2,752.22	49.85	56.212		
9,900.00	9,831.53	9,822.08	9,811.23	38.23	34.46	-139.45	-644.44	2,051.41	2,808.41	2,758.23	50.18	55.970		
10,000.00	9,930.93	9,921.48	9,910.63	38.63	34.81	-139.68	-644.44	2,051.41	2,816.78	2,766.09	50.69	55.569		
10,100.00	10,030.57	10,021.12	10,010.27	39.01	35.16	-139.85	-644.44	2,051.41	2,823.17	2,771.97	51.20	55.143		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
10,200.00	10,130.41	10,120.96	10,110.11	39.38	35.52	-139.97	-644.44	2,051.41	2,827.57	2,775.87	51.70	54.693		
10,300.00	10,230.35	10,220.90	10,210.05	39.72	35.87	-140.03	-644.44	2,051.41	2,829.97	2,777.77	52.20	54.219		
10,369.65	10,300.00	10,290.55	10,279.70	39.95	36.12	89.69	-644.44	2,051.41	2,830.45	2,777.92	52.53	53.880		
10,400.00	10,330.35	10,320.90	10,310.05	40.04	36.23	89.69	-644.44	2,051.41	2,830.45	2,777.78	52.68	53.732		
10,500.00	10,430.35	10,420.90	10,410.05	40.35	36.58	89.69	-644.44	2,051.41	2,830.45	2,777.30	53.15	53.250		
10,600.00	10,530.35	10,520.90	10,510.05	40.66	36.94	89.69	-644.44	2,051.41	2,830.45	2,776.82	53.63	52.777		
10,700.00	10,630.35	10,620.90	10,610.05	40.97	37.29	89.69	-644.44	2,051.41	2,830.45	2,776.35	54.11	52.311		
10,800.00	10,730.35	10,720.90	10,710.05	41.28	37.65	89.69	-644.44	2,051.41	2,830.45	2,775.87	54.59	51.853		
10,900.00	10,830.35	10,820.90	10,810.05	41.59	38.00	89.69	-644.44	2,051.41	2,830.45	2,775.39	55.06	51.403		
11,000.00	10,930.35	10,920.90	10,910.05	41.91	38.36	89.69	-644.44	2,051.41	2,830.45	2,774.91	55.54	50.960		
11,100.00	11,030.35	11,020.90	11,010.05	42.22	38.71	89.69	-644.44	2,051.41	2,830.45	2,774.43	56.02	50.523		
11,200.00	11,130.35	11,121.12	11,110.26	42.53	39.07	89.68	-644.31	2,051.41	2,830.45	2,773.95	56.50	50.094		
11,257.65	11,188.00	11,179.44	11,168.42	42.72	39.27	89.60	-640.10	2,051.37	2,830.44	2,773.67	56.77	49.854		
11,300.00	11,230.31	11,221.71	11,210.13	42.84	39.41	89.98	-633.36	2,051.31	2,830.43	2,773.47	56.96	49.689		
11,315.53	11,245.78	11,237.12	11,225.20	42.89	39.46	89.94	-630.14	2,051.28	2,830.43	2,773.40	57.03	49.632		
11,350.00	11,279.95	11,271.13	11,258.12	42.98	39.57	89.86	-621.61	2,051.20	2,830.44	2,773.26	57.17	49.508		
11,400.00	11,328.89	11,320.03	11,304.43	43.11	39.72	89.74	-605.96	2,051.06	2,830.45	2,773.09	57.36	49.343		
11,450.00	11,376.76	11,368.45	11,348.81	43.21	39.86	89.62	-586.63	2,050.89	2,830.47	2,772.93	57.54	49.193		
11,500.00	11,423.19	11,416.42	11,391.01	43.31	39.99	89.50	-563.86	2,050.68	2,830.50	2,772.80	57.70	49.058		
11,550.00	11,467.83	11,463.94	11,430.80	43.38	40.11	89.39	-537.89	2,050.44	2,830.54	2,772.70	57.84	48.935		
11,600.00	11,510.34	11,511.07	11,467.99	43.44	40.23	89.29	-508.97	2,050.18	2,830.59	2,772.61	57.98	48.824		
11,650.00	11,550.40	11,557.81	11,502.41	43.48	40.34	89.19	-477.36	2,049.89	2,830.64	2,772.54	58.10	48.723		
11,700.00	11,587.70	11,604.21	11,533.92	43.50	40.45	89.09	-443.32	2,049.58	2,830.69	2,772.48	58.21	48.630		
11,750.00	11,621.96	11,650.00	11,562.21	43.51	40.55	89.00	-407.34	2,049.26	2,830.74	2,772.43	58.31	48.545		
11,800.00	11,652.91	11,696.09	11,587.69	43.50	40.66	88.92	-368.95	2,048.91	2,830.79	2,772.38	58.41	48.463		
11,850.00	11,680.33	11,741.62	11,609.76	43.48	40.77	88.85	-329.14	2,048.55	2,830.84	2,772.33	58.51	48.385		
11,900.00	11,704.00	11,786.93	11,628.51	43.45	40.88	88.78	-287.91	2,048.17	2,830.88	2,772.28	58.60	48.308		
11,950.00	11,723.74	11,832.03	11,643.89	43.40	40.99	88.73	-245.52	2,047.79	2,830.92	2,772.23	58.69	48.232		
12,000.00	11,739.41	11,876.97	11,655.85	43.35	41.10	88.68	-202.22	2,047.40	2,830.95	2,772.16	58.79	48.155		
12,050.00	11,750.88	11,921.77	11,664.35	43.29	41.22	88.64	-158.25	2,047.00	2,830.97	2,772.09	58.88	48.077		
12,100.00	11,758.06	11,966.45	11,669.39	43.23	41.33	88.61	-113.86	2,046.60	2,830.98	2,772.00	58.98	47.997		
12,150.00	11,760.91	12,011.06	11,670.95	43.16	41.45	88.59	-69.30	2,046.19	2,830.98	2,771.90	59.08	47.915		
12,163.12	11,760.93	12,023.23	11,670.79	43.14	41.48	88.59	-57.13	2,046.08	2,830.98	2,771.86	59.11	47.891		
12,200.00	11,760.58	12,060.11	11,670.15	43.10	41.60	88.58	-20.25	2,045.75	2,830.96	2,771.75	59.21	47.812		
12,300.00	11,759.62	12,160.11	11,668.41	42.98	41.93	88.56	79.72	2,044.84	2,830.93	2,771.40	59.53	47.554		
12,400.00	11,758.67	12,260.10	11,666.67	42.89	42.33	88.55	179.70	2,043.93	2,830.89	2,770.95	59.94	47.229		
12,500.00	11,757.71	12,360.10	11,664.93	42.82	42.78	88.53	279.68	2,043.02	2,830.86	2,770.42	60.44	46.841		
12,600.00	11,756.76	12,460.10	11,663.19	43.17	43.30	88.52	379.66	2,042.12	2,830.82	2,769.81	61.02	46.394		
12,700.00	11,755.80	12,560.09	11,661.45	43.61	43.87	88.50	479.63	2,041.21	2,830.79	2,769.11	61.68	45.894		
12,800.00	11,754.85	12,660.09	11,659.71	44.09	44.49	88.49	579.61	2,040.30	2,830.75	2,768.33	62.43	45.346		
12,900.00	11,753.89	12,760.09	11,657.97	44.63	45.17	88.47	679.59	2,039.39	2,830.72	2,767.47	63.25	44.756		
13,000.00	11,752.94	12,860.08	11,656.23	45.21	45.89	88.45	779.57	2,038.49	2,830.69	2,766.54	64.14	44.130		
13,100.00	11,751.98	12,960.08	11,654.49	45.84	46.67	88.44	879.54	2,037.58	2,830.65	2,765.54	65.11	43.474		
13,200.00	11,751.03	13,060.08	11,652.75	46.52	47.48	88.42	979.52	2,036.67	2,830.62	2,764.47	66.15	42.793		
13,300.00	11,750.07	13,160.08	11,651.01	47.24	48.35	88.41	1,079.50	2,035.77	2,830.59	2,763.34	67.25	42.091		
13,400.00	11,749.12	13,260.07	11,649.27	48.00	49.25	88.39	1,179.48	2,034.86	2,830.55	2,762.14	68.41	41.375		
13,500.00	11,748.16	13,360.07	11,647.53	48.81	50.18	88.37	1,279.45	2,033.95	2,830.52	2,760.89	69.63	40.649		
13,600.00	11,747.21	13,460.07	11,645.78	49.65	51.16	88.36	1,379.43	2,033.04	2,830.49	2,759.58	70.91	39.916		
13,700.00	11,746.25	13,560.06	11,644.04	50.54	52.17	88.34	1,479.41	2,032.14	2,830.45	2,758.21	72.24	39.180		
13,800.00	11,745.30	13,660.06	11,642.30	51.46	53.21	88.33	1,579.39	2,031.23	2,830.42	2,756.80	73.62	38.445		
13,900.00	11,744.34	13,760.06	11,640.56	52.41	54.28	88.31	1,679.37	2,030.32	2,830.39	2,755.34	75.05	37.713		
14,000.00	11,743.39	13,860.05	11,638.82	53.40	55.38	88.29	1,779.34	2,029.41	2,830.36	2,753.84	76.52	36.987		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
14,100.00	11,742.43	13,960.05	11,637.08	54.42	56.51	88.28	1,879.32	2,028.51	2,830.33	2,752.29	78.04	36.269			
14,200.00	11,741.48	14,060.05	11,635.34	55.47	57.66	88.26	1,979.30	2,027.60	2,830.30	2,750.70	79.59	35.561			
14,300.00	11,740.52	14,160.04	11,633.60	56.54	58.83	88.25	2,079.28	2,026.69	2,830.26	2,749.08	81.18	34.863			
14,400.00	11,739.57	14,260.04	11,631.86	57.65	60.03	88.23	2,179.25	2,025.79	2,830.23	2,747.42	82.81	34.178			
14,500.00	11,738.61	14,360.04	11,630.12	58.77	61.25	88.21	2,279.23	2,024.88	2,830.20	2,745.73	84.47	33.506			
14,600.00	11,737.66	14,460.04	11,628.38	59.93	62.49	88.20	2,379.21	2,023.97	2,830.17	2,744.01	86.16	32.848			
14,700.00	11,736.70	14,560.03	11,626.64	61.10	63.75	88.18	2,479.19	2,023.06	2,830.14	2,742.26	87.88	32.205			
14,800.00	11,735.75	14,660.03	11,624.90	62.30	65.03	88.17	2,579.16	2,022.16	2,830.11	2,740.48	89.63	31.576			
14,900.00	11,734.79	14,760.03	11,623.16	63.51	66.32	88.15	2,679.14	2,021.25	2,830.08	2,738.68	91.40	30.963			
15,000.00	11,733.84	14,860.02	11,621.42	64.75	67.63	88.13	2,779.12	2,020.34	2,830.05	2,736.85	93.20	30.365			
15,100.00	11,732.88	14,960.02	11,619.68	66.00	68.95	88.12	2,879.10	2,019.43	2,830.02	2,735.00	95.02	29.783			
15,200.00	11,731.93	15,060.02	11,617.94	67.27	70.28	88.10	2,979.07	2,018.53	2,829.99	2,733.13	96.87	29.216			
15,300.00	11,730.97	15,160.01	11,616.20	68.55	71.63	88.09	3,079.05	2,017.62	2,829.96	2,731.23	98.73	28.664			
15,400.00	11,730.02	15,260.01	11,614.46	69.86	73.00	88.07	3,179.03	2,016.71	2,829.94	2,729.32	100.61	28.127			
15,500.00	11,729.06	15,360.01	11,612.71	71.17	74.37	88.06	3,279.01	2,015.81	2,829.91	2,727.39	102.52	27.604			
15,600.00	11,728.11	15,460.00	11,610.97	72.50	75.76	88.04	3,378.98	2,014.90	2,829.88	2,725.44	104.44	27.097			
15,700.00	11,727.15	15,560.00	11,609.23	73.84	77.15	88.02	3,478.96	2,013.99	2,829.85	2,723.48	106.37	26.603			
15,800.00	11,726.20	15,660.00	11,607.49	75.19	78.56	88.01	3,578.94	2,013.08	2,829.82	2,721.50	108.32	26.124			
15,900.00	11,725.24	15,759.99	11,605.75	76.56	79.97	87.99	3,678.92	2,012.18	2,829.79	2,719.50	110.29	25.657			
16,000.00	11,724.29	15,859.99	11,604.01	77.94	81.39	87.98	3,778.90	2,011.27	2,829.77	2,717.50	112.27	25.205			
16,100.00	11,723.33	15,959.99	11,602.27	79.32	82.83	87.96	3,878.87	2,010.36	2,829.74	2,715.47	114.27	24.764			
16,200.00	11,722.38	16,059.99	11,600.53	80.72	84.27	87.94	3,978.85	2,009.45	2,829.71	2,713.44	116.27	24.337			
16,300.00	11,721.42	16,159.98	11,598.79	82.12	85.71	87.93	4,078.83	2,008.55	2,829.69	2,711.39	118.29	23.921			
16,400.00	11,720.47	16,259.98	11,597.05	83.54	87.17	87.91	4,178.81	2,007.64	2,829.66	2,709.34	120.32	23.517			
16,500.00	11,719.51	16,359.98	11,595.31	84.96	88.63	87.90	4,278.78	2,006.73	2,829.63	2,707.27	122.36	23.125			
16,600.00	11,718.56	16,459.97	11,593.57	86.39	90.10	87.88	4,378.76	2,005.83	2,829.61	2,705.19	124.41	22.744			
16,700.00	11,717.60	16,559.97	11,591.83	87.83	91.58	87.86	4,478.74	2,004.92	2,829.58	2,703.11	126.47	22.373			
16,800.00	11,716.65	16,659.97	11,590.09	89.28	93.06	87.85	4,578.72	2,004.01	2,829.56	2,701.01	128.54	22.012			
16,900.00	11,715.69	16,759.96	11,588.35	90.73	94.54	87.83	4,678.69	2,003.10	2,829.53	2,698.91	130.62	21.662			
17,000.00	11,714.74	16,859.96	11,586.61	92.19	96.03	87.82	4,778.67	2,002.20	2,829.50	2,696.79	132.71	21.321			
17,100.00	11,713.78	16,959.96	11,584.87	93.66	97.53	87.80	4,878.65	2,001.29	2,829.48	2,694.67	134.81	20.989			
17,200.00	11,712.83	17,059.95	11,583.13	95.13	99.03	87.78	4,978.63	2,000.38	2,829.46	2,692.55	136.91	20.667			
17,300.00	11,711.87	17,159.95	11,581.38	96.61	100.54	87.77	5,078.60	1,999.47	2,829.43	2,690.41	139.02	20.353			
17,400.00	11,710.92	17,259.95	11,579.64	98.09	102.05	87.75	5,178.58	1,998.57	2,829.41	2,688.27	141.14	20.047			
17,500.00	11,709.96	17,359.95	11,577.90	99.58	103.57	87.74	5,278.56	1,997.66	2,829.38	2,686.12	143.26	19.750			
17,600.00	11,709.01	17,459.94	11,576.16	101.07	105.09	87.72	5,378.54	1,996.75	2,829.36	2,683.97	145.39	19.460			
17,700.00	11,708.05	17,559.94	11,574.42	102.57	106.61	87.70	5,478.52	1,995.85	2,829.33	2,681.81	147.53	19.178			
17,800.00	11,707.10	17,659.94	11,572.68	104.08	108.14	87.69	5,578.49	1,994.94	2,829.31	2,679.64	149.67	18.904			
17,900.00	11,706.14	17,759.93	11,570.94	105.58	109.67	87.67	5,678.47	1,994.03	2,829.29	2,677.47	151.82	18.636			
18,000.00	11,705.19	17,859.93	11,569.20	107.09	111.20	87.66	5,778.45	1,993.12	2,829.26	2,675.29	153.97	18.375			
18,100.00	11,704.23	17,959.93	11,567.46	108.61	112.74	87.64	5,878.43	1,992.22	2,829.24	2,673.11	156.13	18.121			
18,200.00	11,703.28	18,059.92	11,565.72	110.13	114.28	87.62	5,978.40	1,991.31	2,829.22	2,670.93	158.29	17.874			
18,300.00	11,702.32	18,159.92	11,563.98	111.65	115.82	87.61	6,078.38	1,990.40	2,829.20	2,668.74	160.46	17.632			
18,400.00	11,701.37	18,259.92	11,562.24	113.18	117.37	87.59	6,178.36	1,989.49	2,829.17	2,666.54	162.63	17.396			
18,500.00	11,700.41	18,359.91	11,560.50	114.71	118.92	87.58	6,278.34	1,988.59	2,829.15	2,664.34	164.81	17.166			
18,600.00	11,699.46	18,459.91	11,558.76	116.24	120.47	87.56	6,378.31	1,987.68	2,829.13	2,662.14	166.99	16.942			
18,700.00	11,698.50	18,559.91	11,557.02	117.78	122.03	87.54	6,478.29	1,986.77	2,829.11	2,659.94	169.17	16.723			
18,800.00	11,697.55	18,659.91	11,555.28	119.32	123.59	87.53	6,578.27	1,985.86	2,829.09	2,657.73	171.36	16.509			
18,900.00	11,696.59	18,759.90	11,553.54	120.86	125.14	87.51	6,678.25	1,984.96	2,829.07	2,655.51	173.55	16.301			
19,000.00	11,695.64	18,859.90	11,551.80	122.41	126.71	87.50	6,778.22	1,984.05	2,829.05	2,653.30	175.75	16.097			
19,100.00	11,694.68	18,959.90	11,550.05	123.96	128.27	87.48	6,878.20	1,983.14	2,829.03	2,651.08	177.95	15.898			
19,200.00	11,693.73	19,059.89	11,548.31	125.51	129.84	87.47	6,978.18	1,982.24	2,829.00	2,648.85	180.15	15.704			

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,300.00	11,692.77	19,159.89	11,546.57	127.06	131.41	87.45	7,078.16	1,981.33	2,828.98	2,646.63	182.36	15.513		
19,400.00	11,691.82	19,259.89	11,544.83	128.62	132.98	87.43	7,178.14	1,980.42	2,828.96	2,644.40	184.56	15.328		
19,500.00	11,690.86	19,359.88	11,543.09	130.18	134.55	87.42	7,278.11	1,979.51	2,828.94	2,642.17	186.78	15.146		
19,600.00	11,689.91	19,459.88	11,541.35	131.74	136.12	87.40	7,378.09	1,978.61	2,828.92	2,639.93	188.99	14.969		
19,700.00	11,688.95	19,559.88	11,539.61	133.30	137.70	87.39	7,478.07	1,977.70	2,828.91	2,637.70	191.21	14.795		
19,800.00	11,688.00	19,659.87	11,537.87	134.87	139.28	87.37	7,578.05	1,976.79	2,828.89	2,635.46	193.43	14.625		
19,900.00	11,687.04	19,759.87	11,536.13	136.43	140.86	87.35	7,678.02	1,975.88	2,828.87	2,633.22	195.65	14.459		
20,000.00	11,686.09	19,859.87	11,534.39	138.00	142.44	87.34	7,778.00	1,974.98	2,828.85	2,630.97	197.87	14.296		
20,100.00	11,685.13	19,959.86	11,532.65	139.57	144.02	87.32	7,877.98	1,974.07	2,828.83	2,628.73	200.10	14.137		
20,200.00	11,684.18	20,059.86	11,530.91	141.14	145.61	87.31	7,977.96	1,973.16	2,828.81	2,626.48	202.33	13.981		
20,300.00	11,683.22	20,159.86	11,529.17	142.72	147.19	87.29	8,077.93	1,972.26	2,828.79	2,624.23	204.56	13.829		
20,400.00	11,682.27	20,259.86	11,527.43	144.29	148.78	87.27	8,177.91	1,971.35	2,828.78	2,621.98	206.80	13.679		
20,500.00	11,681.31	20,359.85	11,525.69	145.87	150.37	87.26	8,277.89	1,970.44	2,828.76	2,619.73	209.03	13.533		
20,600.00	11,680.36	20,459.85	11,523.95	147.45	151.96	87.24	8,377.87	1,969.53	2,828.74	2,617.47	211.27	13.389		
20,700.00	11,679.40	20,559.85	11,522.21	149.03	153.55	87.23	8,477.84	1,968.63	2,828.72	2,615.22	213.51	13.249		
20,800.00	11,678.45	20,659.84	11,520.47	150.62	155.14	87.21	8,577.82	1,967.72	2,828.71	2,612.96	215.75	13.111		
20,900.00	11,677.49	20,759.84	11,518.73	152.20	156.74	87.19	8,677.80	1,966.81	2,828.69	2,610.70	217.99	12.976		
21,000.00	11,676.54	20,859.84	11,516.98	153.78	158.33	87.18	8,777.78	1,965.90	2,828.67	2,608.44	220.24	12.844		
21,100.00	11,675.58	20,959.83	11,515.24	155.37	159.93	87.16	8,877.75	1,965.00	2,828.66	2,606.17	222.48	12.714		
21,200.00	11,674.63	21,059.83	11,513.50	156.96	161.53	87.15	8,977.73	1,964.09	2,828.64	2,603.91	224.73	12.587		
21,300.00	11,673.67	21,159.83	11,511.76	158.55	163.13	87.13	9,077.71	1,963.18	2,828.63	2,601.64	226.98	12.462		
21,400.00	11,672.72	21,259.82	11,510.02	160.14	164.72	87.11	9,177.69	1,962.28	2,828.61	2,599.38	229.23	12.339		
21,500.00	11,671.76	21,359.82	11,508.28	161.73	166.33	87.10	9,277.67	1,961.37	2,828.59	2,597.11	231.49	12.219		
21,600.00	11,670.81	21,459.82	11,506.54	163.32	167.93	87.08	9,377.64	1,960.46	2,828.58	2,594.84	233.74	12.101		
21,700.00	11,669.86	21,559.82	11,504.80	164.92	169.53	87.07	9,477.62	1,959.55	2,828.56	2,592.57	236.00	11.986		
21,800.00	11,668.90	21,659.81	11,503.06	166.51	171.13	87.05	9,577.60	1,958.65	2,828.55	2,590.30	238.25	11.872		
21,900.00	11,667.95	21,759.81	11,501.32	168.11	172.74	87.03	9,677.58	1,957.74	2,828.54	2,588.02	240.51	11.760		
21,938.19	11,667.58	21,798.00	11,500.65	168.72	173.35	87.03	9,715.76	1,957.39	2,828.53	2,587.16	241.37	11.718 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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				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	102.57	-444.15	1,992.41	2,041.42					
100.00	100.00	79.40	79.40	0.13	0.10	102.57	-444.15	1,992.41	2,041.32	2,041.15	0.16	N/A		
200.00	200.00	179.40	179.40	0.48	0.41	102.57	-444.15	1,992.41	2,041.32	2,040.68	0.63	3,218.083		
300.00	300.00	279.40	279.40	0.84	0.77	102.57	-444.15	1,992.41	2,041.32	2,040.17	1.14	1,790.117		
400.00	400.00	379.40	379.40	1.20	1.13	102.57	-444.15	1,992.41	2,041.32	2,039.67	1.65	1,239.480		
500.00	500.00	479.40	479.40	1.56	1.49	102.57	-444.15	1,992.41	2,041.32	2,039.16	2.15	947.830		
600.00	600.00	579.40	579.40	1.92	1.84	102.57	-444.15	1,992.41	2,041.32	2,038.65	2.66	767.265		
700.00	700.00	679.40	679.40	2.28	2.20	102.57	-444.15	1,992.41	2,041.32	2,038.15	3.17	644.481		
800.00	800.00	779.40	779.40	2.63	2.56	102.57	-444.15	1,992.41	2,041.32	2,037.64	3.67	555.569		
900.00	900.00	879.40	879.40	2.99	2.92	102.57	-444.15	1,992.41	2,041.32	2,037.13	4.18	488.214		
1,000.00	1,000.00	979.40	979.40	3.35	3.28	102.57	-444.15	1,992.41	2,041.32	2,036.63	4.69	435.424		
1,100.00	1,100.00	1,079.40	1,079.40	3.71	3.64	102.57	-444.15	1,992.41	2,041.32	2,036.12	5.20	392.936		
1,200.00	1,200.00	1,179.40	1,179.40	4.07	3.99	102.57	-444.15	1,992.41	2,041.32	2,035.61	5.70	358.002		
1,300.00	1,300.00	1,279.40	1,279.40	4.43	4.35	102.57	-444.15	1,992.41	2,041.32	2,035.11	6.21	328.772		
1,400.00	1,400.00	1,379.40	1,379.40	4.79	4.71	102.57	-444.15	1,992.41	2,041.32	2,034.60	6.72	303.955		
1,500.00	1,500.00	1,479.40	1,479.40	5.14	5.07	102.57	-444.15	1,992.41	2,041.32	2,034.09	7.22	282.622		
1,600.00	1,600.00	1,579.40	1,579.40	5.50	5.43	102.57	-444.15	1,992.41	2,041.32	2,033.59	7.73	264.086		
1,700.00	1,700.00	1,679.40	1,679.40	5.86	5.79	102.57	-444.15	1,992.41	2,041.32	2,033.08	8.24	247.833		
1,800.00	1,800.00	1,779.40	1,779.40	6.22	6.15	102.57	-444.15	1,992.41	2,041.32	2,032.57	8.74	233.464		
1,900.00	1,900.00	1,879.40	1,879.40	6.58	6.50	102.57	-444.15	1,992.41	2,041.32	2,032.06	9.25	220.669		
2,000.00	2,000.00	1,979.40	1,979.40	6.94	6.86	102.57	-444.15	1,992.41	2,041.32	2,031.56	9.76	209.205		
2,100.00	2,100.00	2,079.40	2,079.40	7.29	7.22	102.57	-444.15	1,992.41	2,041.32	2,031.05	10.26	198.872		
2,200.00	2,200.00	2,179.40	2,179.40	7.65	7.58	102.57	-444.15	1,992.41	2,041.32	2,030.54	10.77	189.512		
2,300.00	2,300.00	2,279.40	2,279.40	8.01	7.94	102.57	-444.15	1,992.41	2,041.32	2,030.04	11.28	180.994		
2,400.00	2,400.00	2,379.40	2,379.40	8.37	8.30	102.57	-444.15	1,992.41	2,041.32	2,029.53	11.79	173.208		
2,500.00	2,500.00	2,479.40	2,479.40	8.73	8.65	102.57	-444.15	1,992.41	2,041.32	2,029.02	12.29	166.065 CC, ES		
2,600.00	2,599.99	2,579.39	2,579.39	9.07	9.01	-127.18	-444.15	1,992.41	2,042.11	2,029.32	12.79	159.684		
2,700.00	2,699.91	2,679.31	2,679.31	9.40	9.37	-127.24	-444.15	1,992.41	2,044.48	2,031.21	13.27	154.012		
2,800.00	2,799.69	2,779.09	2,779.09	9.74	9.73	-127.34	-444.15	1,992.41	2,048.45	2,034.69	13.76	148.844		
2,900.00	2,899.27	2,878.67	2,878.67	10.07	10.09	-127.47	-444.15	1,992.41	2,054.02	2,039.77	14.25	144.128		
3,000.00	2,998.57	2,977.97	2,977.97	10.42	10.44	-127.65	-444.15	1,992.41	2,061.22	2,046.48	14.74	139.820		
3,033.25	3,031.52	3,010.92	3,010.92	10.53	10.56	-127.71	-444.15	1,992.41	2,063.98	2,049.07	14.91	138.469		
3,100.00	3,097.62	3,077.02	3,077.02	10.76	10.80	-127.91	-444.15	1,992.41	2,069.70	2,054.47	15.23	135.855		
3,200.00	3,196.65	3,176.05	3,176.05	11.12	11.15	-128.21	-444.15	1,992.41	2,078.34	2,062.61	15.73	132.127		
3,300.00	3,295.67	3,249.42	3,249.42	11.48	11.41	-128.43	-444.31	1,992.69	2,087.49	2,071.33	16.16	129.209		
3,400.00	3,394.70	3,300.00	3,299.99	11.84	11.58	-128.58	-444.79	1,993.55	2,098.32	2,081.80	16.52	127.025		
3,500.00	3,493.73	3,379.36	3,379.29	12.20	11.85	-128.79	-446.20	1,996.09	2,110.64	2,093.69	16.95	124.520		
3,600.00	3,592.76	3,444.03	3,443.87	12.57	12.06	-128.95	-447.94	1,999.22	2,124.67	2,107.33	17.34	122.518		
3,700.00	3,691.78	3,508.46	3,508.12	12.95	12.28	-129.10	-450.21	2,003.28	2,140.30	2,122.57	17.73	120.714		
3,800.00	3,790.81	3,593.69	3,593.03	13.32	12.57	-129.28	-453.78	2,009.70	2,157.23	2,139.06	18.18	118.664		
3,900.00	3,889.84	3,691.91	3,690.89	13.70	12.90	-129.49	-457.94	2,017.17	2,174.31	2,155.64	18.67	116.466		
4,000.00	3,988.86	3,790.14	3,788.74	14.09	13.24	-129.69	-462.11	2,024.64	2,191.41	2,172.25	19.16	114.367		
4,100.00	4,087.89	3,888.36	3,886.59	14.47	13.58	-129.89	-466.27	2,032.11	2,208.54	2,188.88	19.66	112.361		
4,200.00	4,186.92	3,986.58	3,984.44	14.86	13.92	-130.09	-470.43	2,039.58	2,225.69	2,205.54	20.15	110.444		
4,300.00	4,285.95	4,084.81	4,082.29	15.25	14.27	-130.29	-474.59	2,047.06	2,242.87	2,222.22	20.65	108.610		
4,400.00	4,384.97	4,183.03	4,180.14	15.64	14.61	-130.48	-478.76	2,054.53	2,260.08	2,238.93	21.15	106.855		
4,500.00	4,484.00	4,281.26	4,277.99	16.03	14.96	-130.67	-482.92	2,062.00	2,277.31	2,255.66	21.65	105.174		
4,600.00	4,583.03	4,379.48	4,375.85	16.42	15.31	-130.86	-487.08	2,069.47	2,294.56	2,272.41	22.16	103.563		
4,700.00	4,682.05	4,477.71	4,473.70	16.82	15.66	-131.04	-491.24	2,076.94	2,311.84	2,289.18	22.66	102.018		
4,800.00	4,781.08	4,575.93	4,571.55	17.21	16.01	-131.22	-495.40	2,084.41	2,329.14	2,305.97	23.17	100.535		
4,900.00	4,880.11	4,674.16	4,669.40	17.61	16.36	-131.40	-499.57	2,091.88	2,346.46	2,322.79	23.67	99.112		
5,000.00	4,979.14	4,772.38	4,767.25	18.01	16.71	-131.58	-503.73	2,099.35	2,363.81	2,339.63	24.18	97.745		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
5,100.00	5,078.16	4,870.61	4,865.10	18.41	17.07	-131.75	-507.89	2,106.83	2,381.18	2,356.48	24.69	96.431			
5,200.00	5,177.19	4,968.83	4,962.96	18.81	17.42	-131.92	-512.05	2,114.30	2,398.56	2,373.36	25.20	95.167			
5,300.00	5,276.22	5,067.05	5,060.81	19.21	17.78	-132.09	-516.22	2,121.77	2,415.97	2,390.26	25.72	93.951			
5,400.00	5,375.24	5,165.28	5,158.66	19.62	18.14	-132.26	-520.38	2,129.24	2,433.40	2,407.17	26.23	92.780			
5,500.00	5,474.27	5,263.50	5,256.51	20.02	18.49	-132.42	-524.54	2,136.71	2,450.85	2,424.11	26.74	91.651			
5,600.00	5,573.30	5,361.73	5,354.36	20.43	18.85	-132.58	-528.70	2,144.18	2,468.31	2,441.06	27.25	90.564			
5,700.00	5,672.32	5,459.95	5,452.21	20.83	19.21	-132.74	-532.87	2,151.65	2,485.80	2,458.03	27.77	89.515			
5,800.00	5,771.35	5,558.18	5,550.06	21.24	19.57	-132.90	-537.03	2,159.13	2,503.30	2,475.02	28.29	88.502			
5,900.00	5,870.38	5,656.40	5,647.92	21.64	19.93	-133.05	-541.19	2,166.60	2,520.82	2,492.02	28.80	87.525			
6,000.00	5,969.41	5,754.63	5,745.77	22.05	20.29	-133.21	-545.35	2,174.07	2,538.36	2,509.05	29.32	86.580			
6,100.00	6,068.43	5,852.85	5,843.62	22.46	20.66	-133.36	-549.51	2,181.54	2,555.92	2,526.09	29.84	85.668			
6,200.00	6,167.46	5,951.08	5,941.47	22.87	21.02	-133.51	-553.68	2,189.01	2,573.50	2,543.14	30.35	84.785			
6,300.00	6,266.49	6,049.30	6,039.32	23.28	21.38	-133.65	-557.84	2,196.48	2,591.09	2,560.22	30.87	83.931			
6,400.00	6,365.51	6,147.53	6,137.17	23.69	21.75	-133.80	-562.00	2,203.95	2,608.69	2,577.30	31.39	83.105			
6,500.00	6,464.54	6,245.75	6,235.03	24.10	22.11	-133.94	-566.16	2,211.43	2,626.32	2,594.41	31.91	82.305			
6,600.00	6,563.57	6,343.97	6,332.88	24.51	22.48	-134.08	-570.33	2,218.90	2,643.96	2,611.53	32.43	81.530			
6,700.00	6,662.60	6,442.20	6,430.73	24.92	22.84	-134.22	-574.49	2,226.37	2,661.61	2,628.66	32.95	80.778			
6,800.00	6,761.62	6,540.42	6,528.58	25.33	23.21	-134.36	-578.65	2,233.84	2,679.28	2,645.81	33.47	80.050			
6,900.00	6,860.65	6,638.65	6,626.43	25.75	23.57	-134.49	-582.81	2,241.31	2,696.96	2,662.97	33.99	79.344			
7,000.00	6,959.68	6,736.87	6,724.28	26.16	23.94	-134.63	-586.98	2,248.78	2,714.66	2,680.15	34.51	78.658			
7,100.00	7,058.70	6,835.10	6,822.13	26.57	24.31	-134.76	-591.14	2,256.25	2,732.37	2,697.34	35.03	77.992			
7,200.00	7,157.73	6,933.32	6,919.99	26.99	24.67	-134.89	-595.30	2,263.72	2,750.10	2,714.54	35.56	77.346			
7,300.00	7,256.76	7,031.55	7,017.84	27.40	25.04	-135.02	-599.46	2,271.20	2,767.84	2,731.76	36.08	76.718			
7,400.00	7,355.79	7,129.77	7,115.69	27.81	25.41	-135.14	-603.62	2,278.67	2,785.59	2,748.99	36.60	76.108			
7,500.00	7,454.81	7,228.00	7,213.54	28.23	25.78	-135.27	-607.79	2,286.14	2,803.36	2,766.24	37.12	75.515			
7,600.00	7,553.84	7,326.22	7,311.39	28.64	26.15	-135.39	-611.95	2,293.61	2,821.14	2,783.49	37.65	74.938			
7,700.00	7,652.87	7,424.45	7,409.24	29.06	26.51	-135.51	-616.11	2,301.08	2,838.93	2,800.76	38.17	74.376			
7,800.00	7,751.89	7,522.67	7,507.10	29.47	26.88	-135.64	-620.27	2,308.55	2,856.73	2,818.04	38.69	73.830			
7,900.00	7,850.92	7,620.89	7,604.95	29.89	27.25	-135.75	-624.44	2,316.02	2,874.55	2,835.33	39.22	73.298			
8,000.00	7,949.95	7,719.12	7,702.80	30.30	27.62	-135.87	-628.60	2,323.50	2,892.38	2,852.64	39.74	72.780			
8,100.00	8,048.97	7,817.34	7,800.65	30.72	27.99	-135.99	-632.76	2,330.97	2,910.22	2,869.95	40.27	72.275			
8,200.00	8,148.00	7,915.57	7,898.50	31.14	28.36	-136.10	-636.92	2,338.44	2,928.07	2,887.28	40.79	71.784			
8,300.00	8,247.03	8,013.79	8,000.00	31.55	28.73	-136.21	-641.08	2,345.91	2,945.91	2,904.61	41.32	71.306			
8,400.00	8,346.06	8,112.01	8,098.00	31.97	29.10	-136.32	-645.24	2,353.38	2,963.75	2,921.94	41.85	70.841			
8,500.00	8,445.08	8,210.23	8,196.00	32.38	29.47	-136.43	-649.40	2,360.85	2,981.59	2,939.27	42.38	70.386			
8,600.00	8,544.11	8,308.45	8,294.00	32.80	29.84	-136.54	-653.56	2,368.32	2,999.43	2,956.60	42.91	69.941			
8,700.00	8,643.14	8,406.67	8,398.00	33.21	30.21	-136.65	-657.72	2,375.79	3,017.27	2,973.73	43.44	69.506			
8,800.00	8,742.16	8,504.89	8,492.00	33.62	30.58	-136.76	-661.88	2,383.26	3,035.11	2,991.06	43.97	69.081			
8,900.00	8,841.19	8,603.11	8,586.00	34.03	30.95	-136.87	-666.04	2,390.73	3,052.95	3,008.35	44.50	68.666			
9,000.00	8,940.22	8,701.33	8,680.00	34.44	31.32	-136.98	-670.20	2,398.20	3,070.79	3,025.64	45.03	68.261			
9,100.00	9,039.25	8,800.00	8,774.00	34.85	31.69	-137.09	-674.36	2,405.67	3,088.63	3,042.93	45.56	67.866			
9,200.00	9,138.27	8,898.67	8,868.00	35.26	32.06	-137.20	-678.52	2,413.14	3,106.47	3,060.22	46.09	67.481			
9,300.00	9,237.30	8,997.34	8,962.00	35.67	32.43	-137.31	-682.68	2,420.61	3,124.31	3,077.51	46.62	67.106			
9,400.00	9,336.33	9,096.01	9,056.00	36.08	32.80	-137.42	-686.84	2,428.08	3,142.15	3,094.80	47.15	66.741			
9,500.00	9,435.35	9,194.68	9,154.00	36.49	33.17	-137.53	-691.00	2,435.55	3,160.00	3,112.09	47.68	66.386			
9,600.00	9,534.38	9,293.35	9,253.00	36.90	33.54	-137.64	-695.16	2,443.02	3,177.84	3,129.38	48.21	66.041			
9,700.00	9,633.41	9,392.02	9,352.00	37.31	33.91	-137.75	-699.32	2,450.49	3,195.68	3,146.67	48.74	65.706			
9,800.00	9,732.44	9,490.69	9,450.00	37.72	34.28	-137.86	-703.48	2,457.96	3,213.52	3,163.96	49.27	65.381			
9,836.39	9,768.48	9,536.63	9,496.00	37.97	34.76	-138.00	-707.64	2,465.43	3,231.36	3,181.25	49.80	65.066			
9,900.00	9,831.53	9,635.30	9,594.00	38.38	35.13	-138.11	-711.80	2,472.90	3,249.20	3,198.54	50.33	64.761			
10,000.00	9,930.56	9,734.00	9,692.00	38.79	35.50	-138.22	-715.96	2,480.37	3,267.04	3,215.83	50.86	64.466			
10,100.00	10,030.57	9,832.67	9,790.00	39.20	35.87	-138.33	-720.12	2,487.84	3,284.88	3,233.12	51.39	64.181			

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.00	10,130.41	10,127.31	10,109.81	39.38	36.00	-139.95	-644.15	2,351.41	3,127.56	3,075.81	51.76	60.430		
10,300.00	10,230.35	10,227.26	10,209.75	39.72	36.35	-140.01	-644.15	2,351.41	3,129.96	3,077.72	52.25	59.906		
10,369.65	10,300.00	10,296.90	10,279.40	39.95	36.59	89.71	-644.15	2,351.41	3,130.45	3,077.87	52.58	59.534		
10,400.00	10,330.35	10,327.25	10,309.75	40.04	36.70	89.71	-644.15	2,351.41	3,130.45	3,077.72	52.73	59.372		
10,500.00	10,430.35	10,427.25	10,409.75	40.35	37.04	89.71	-644.15	2,351.41	3,130.45	3,077.25	53.20	58.845		
10,600.00	10,530.35	10,527.25	10,509.75	40.66	37.39	89.71	-644.15	2,351.41	3,130.45	3,076.78	53.67	58.327		
10,700.00	10,630.35	10,627.25	10,609.75	40.97	37.74	89.71	-644.15	2,351.41	3,130.45	3,076.31	54.14	57.816		
10,800.00	10,730.35	10,727.25	10,709.75	41.28	38.08	89.71	-644.15	2,351.41	3,130.45	3,075.83	54.62	57.314		
10,900.00	10,830.35	10,827.25	10,809.75	41.59	38.43	89.71	-644.15	2,351.41	3,130.45	3,075.36	55.09	56.820		
11,000.00	10,930.35	10,927.25	10,909.75	41.91	38.78	89.71	-644.15	2,351.41	3,130.45	3,074.88	55.57	56.334		
11,100.00	11,030.35	11,027.25	11,009.75	42.22	39.12	89.71	-644.15	2,351.41	3,130.45	3,074.41	56.05	55.856		
11,200.00	11,130.35	11,127.25	11,109.75	42.53	39.47	89.71	-644.15	2,351.41	3,130.45	3,073.93	56.52	55.385		
11,257.65	11,188.00	11,184.90	11,167.40	42.72	39.67	89.71	-644.15	2,351.41	3,130.45	3,073.65	56.80	55.117		
11,300.00	11,230.31	11,227.22	11,209.71	42.84	39.82	90.23	-644.15	2,351.41	3,130.46	3,073.46	57.00	54.924		
11,350.00	11,279.95	11,277.26	11,259.76	42.98	39.99	90.33	-644.03	2,351.41	3,130.48	3,073.26	57.22	54.706		
11,400.00	11,328.89	11,328.88	11,311.25	43.11	40.17	90.46	-640.65	2,351.38	3,130.53	3,073.09	57.44	54.499		
11,450.00	11,376.76	11,381.18	11,362.90	43.21	40.34	90.58	-632.51	2,351.30	3,130.59	3,072.94	57.65	54.306		
11,500.00	11,423.19	11,434.16	11,414.24	43.31	40.51	90.70	-619.51	2,351.19	3,130.65	3,072.82	57.84	54.129		
11,550.00	11,467.83	11,487.83	11,464.79	43.38	40.66	90.82	-601.56	2,351.02	3,130.73	3,072.72	58.01	53.966		
11,600.00	11,510.34	11,542.16	11,514.03	43.44	40.81	90.92	-578.65	2,350.82	3,130.81	3,072.63	58.17	53.817		
11,650.00	11,550.40	11,597.15	11,561.43	43.48	40.94	91.03	-550.82	2,350.56	3,130.89	3,072.56	58.32	53.682		
11,700.00	11,587.70	11,652.75	11,606.43	43.50	41.06	91.12	-518.20	2,350.27	3,130.97	3,072.51	58.46	53.557		
11,750.00	11,621.96	11,708.94	11,648.47	43.51	41.16	91.21	-480.96	2,349.93	3,131.04	3,072.45	58.59	53.443		
11,800.00	11,652.91	11,765.65	11,687.01	43.50	41.24	91.28	-439.38	2,349.55	3,131.11	3,072.40	58.71	53.335		
11,850.00	11,680.33	11,822.84	11,721.51	43.48	41.31	91.35	-393.80	2,349.14	3,131.16	3,072.34	58.82	53.232		
11,900.00	11,704.00	11,880.42	11,751.48	43.45	41.36	91.40	-344.67	2,348.69	3,131.20	3,072.27	58.93	53.132		
11,950.00	11,723.74	11,938.31	11,776.50	43.40	41.40	91.44	-292.49	2,348.22	3,131.23	3,072.19	59.04	53.033		
12,000.00	11,739.41	11,996.44	11,796.20	43.35	41.54	91.47	-237.83	2,347.72	3,131.24	3,072.08	59.16	52.932		
12,050.00	11,750.88	12,054.70	11,810.28	43.29	41.70	91.49	-181.33	2,347.21	3,131.23	3,071.96	59.27	52.830		
12,100.00	11,758.06	12,112.99	11,816.55	43.23	41.85	91.49	-123.65	2,346.68	3,131.20	3,071.81	59.39	52.724		
12,150.00	11,760.91	12,171.23	11,820.93	43.16	42.02	91.47	-65.49	2,346.16	3,131.15	3,071.64	59.51	52.615		
12,163.12	11,760.93	12,184.94	11,820.71	43.14	42.06	91.47	-51.78	2,346.03	3,131.14	3,071.59	59.54	52.587		
12,200.00	11,760.58	12,221.82	11,820.06	43.10	42.17	91.47	-14.91	2,345.70	3,131.11	3,071.47	59.64	52.500		
12,300.00	11,759.62	12,321.82	11,818.32	42.98	42.52	91.45	85.07	2,344.79	3,131.03	3,071.07	59.96	52.219		
12,400.00	11,758.67	12,421.82	11,816.58	42.89	42.93	91.44	185.05	2,343.88	3,130.96	3,070.59	60.37	51.864		
12,500.00	11,757.71	12,521.81	11,814.84	42.82	43.39	91.42	285.03	2,342.97	3,130.88	3,070.02	60.86	51.440		
12,600.00	11,756.76	12,621.81	11,813.10	43.17	43.90	91.41	385.00	2,342.07	3,130.81	3,069.36	61.44	50.953		
12,700.00	11,755.80	12,721.81	11,811.36	43.61	44.47	91.39	484.98	2,341.16	3,130.73	3,068.62	62.11	50.408		
12,800.00	11,754.85	12,821.80	11,809.62	44.09	45.09	91.38	584.96	2,340.25	3,130.66	3,067.81	62.85	49.811		
12,900.00	11,753.89	12,921.80	11,807.88	44.63	45.76	91.37	684.94	2,339.34	3,130.58	3,066.91	63.67	49.169		
13,000.00	11,752.94	13,021.80	11,806.13	45.21	46.48	91.35	784.91	2,338.44	3,130.51	3,066.95	64.56	48.487		
13,100.00	11,751.98	13,121.79	11,804.39	45.84	47.25	91.34	884.89	2,337.53	3,130.44	3,066.91	65.53	47.772		
13,200.00	11,751.03	13,221.79	11,802.65	46.52	48.06	91.32	984.87	2,336.62	3,130.36	3,066.80	66.56	47.029		
13,300.00	11,750.07	13,321.79	11,800.91	47.24	48.91	91.31	1,084.85	2,335.71	3,130.29	3,066.63	67.66	46.265		
13,400.00	11,749.12	13,421.79	11,799.17	48.00	49.81	91.29	1,184.83	2,334.81	3,130.22	3,066.40	68.82	45.485		
13,500.00	11,748.16	13,521.78	11,797.43	48.81	50.73	91.28	1,284.80	2,333.90	3,130.14	3,066.11	70.04	44.693		
13,600.00	11,747.21	13,621.78	11,795.69	49.65	51.70	91.27	1,384.78	2,332.99	3,130.07	3,065.76	71.31	43.893		
13,700.00	11,746.25	13,721.78	11,793.95	50.54	52.70	91.25	1,484.76	2,332.08	3,130.00	3,065.36	72.64	43.091		
13,800.00	11,745.30	13,821.77	11,792.20	51.46	53.73	91.24	1,584.74	2,331.18	3,129.92	3,065.91	74.01	42.288		
13,900.00	11,744.34	13,921.77	11,790.46	52.41	54.79	91.22	1,684.71	2,330.27	3,129.85	3,065.41	75.44	41.489		
14,000.00	11,743.39	14,021.77	11,788.72	53.40	55.88	91.21	1,784.69	2,329.36	3,129.78	3,065.87	76.91	40.696		
14,100.00	11,742.43	14,121.76	11,786.98	54.42	57.00	91.19	1,884.67	2,328.45	3,129.71	3,065.29	78.42	39.911		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
14,200.00	11,741.48	14,221.76	11,785.24	55.47	58.14	91.18	1,984.65	2,327.54	3,129.64	3,049.67	79.97	39.137		
14,300.00	11,740.52	14,321.76	11,783.50	56.54	59.31	91.16	2,084.62	2,326.64	3,129.56	3,048.01	81.55	38.374		
14,400.00	11,739.57	14,421.75	11,781.76	57.65	60.50	91.15	2,184.60	2,325.73	3,129.49	3,046.32	83.18	37.624		
14,500.00	11,738.61	14,521.75	11,780.02	58.77	61.71	91.14	2,284.58	2,324.82	3,129.42	3,044.59	84.83	36.889		
14,600.00	11,737.66	14,621.75	11,778.28	59.93	62.94	91.12	2,384.56	2,323.91	3,129.35	3,042.83	86.52	36.169		
14,700.00	11,736.70	14,721.75	11,776.53	61.10	64.19	91.11	2,484.53	2,323.01	3,129.28	3,041.04	88.24	35.464		
14,800.00	11,735.75	14,821.74	11,774.79	62.30	65.46	91.09	2,584.51	2,322.10	3,129.21	3,039.23	89.98	34.776		
14,900.00	11,734.79	14,921.74	11,773.05	63.51	66.74	91.08	2,684.49	2,321.19	3,129.14	3,037.39	91.75	34.104		
15,000.00	11,733.84	15,021.74	11,771.31	64.75	68.04	91.06	2,784.47	2,320.28	3,129.07	3,035.52	93.55	33.448		
15,100.00	11,732.88	15,121.73	11,769.57	66.00	69.36	91.05	2,884.44	2,319.38	3,129.00	3,033.63	95.37	32.809		
15,200.00	11,731.93	15,221.73	11,767.83	67.27	70.69	91.04	2,984.42	2,318.47	3,128.93	3,031.72	97.21	32.187		
15,300.00	11,730.97	15,321.73	11,766.09	68.55	72.03	91.02	3,084.40	2,317.56	3,128.86	3,029.79	99.07	31.582		
15,400.00	11,730.02	15,421.72	11,764.35	69.86	73.38	91.01	3,184.38	2,316.65	3,128.79	3,027.84	100.95	30.992		
15,500.00	11,729.06	15,521.72	11,762.60	71.17	74.75	90.99	3,284.36	2,315.75	3,128.72	3,025.87	102.85	30.419		
15,600.00	11,728.11	15,621.72	11,760.86	72.50	76.13	90.98	3,384.33	2,314.84	3,128.65	3,023.88	104.77	29.861		
15,700.00	11,727.15	15,721.71	11,759.12	73.84	77.52	90.96	3,484.31	2,313.93	3,128.58	3,021.88	106.71	29.319		
15,800.00	11,726.20	15,821.71	11,757.38	75.19	78.91	90.95	3,584.29	2,313.02	3,128.51	3,019.86	108.66	28.792		
15,900.00	11,725.24	15,921.71	11,755.64	76.56	80.32	90.93	3,684.27	2,312.12	3,128.45	3,017.82	110.62	28.280		
16,000.00	11,724.29	16,021.70	11,753.90	77.94	81.74	90.92	3,784.24	2,311.21	3,128.38	3,015.77	112.60	27.782		
16,100.00	11,723.33	16,121.70	11,752.16	79.32	83.17	90.91	3,884.22	2,310.30	3,128.31	3,013.71	114.60	27.298		
16,200.00	11,722.38	16,221.70	11,750.42	80.72	84.60	90.89	3,984.20	2,309.39	3,128.24	3,011.64	116.60	26.828		
16,300.00	11,721.42	16,321.70	11,748.67	82.12	86.04	90.88	4,084.18	2,308.48	3,128.17	3,009.55	118.62	26.371		
16,400.00	11,720.47	16,421.69	11,746.93	83.54	87.49	90.86	4,184.15	2,307.58	3,128.11	3,007.46	120.65	25.927		
16,500.00	11,719.51	16,521.69	11,745.19	84.96	88.95	90.85	4,284.13	2,306.67	3,128.04	3,005.35	122.69	25.496		
16,600.00	11,718.56	16,621.69	11,743.45	86.39	90.41	90.83	4,384.11	2,305.76	3,127.97	3,003.23	124.74	25.076		
16,700.00	11,717.60	16,721.68	11,741.71	87.83	91.88	90.82	4,484.09	2,304.85	3,127.91	3,001.11	126.80	24.668		
16,800.00	11,716.65	16,821.68	11,739.97	89.28	93.36	90.80	4,584.06	2,303.95	3,127.84	2,999.97	128.87	24.271		
16,900.00	11,715.69	16,921.68	11,738.23	90.73	94.84	90.79	4,684.04	2,303.04	3,127.77	2,998.82	130.95	23.885		
17,000.00	11,714.74	17,021.67	11,736.49	92.19	96.33	90.78	4,784.02	2,302.13	3,127.71	2,997.67	133.04	23.510		
17,100.00	11,713.78	17,121.67	11,734.74	93.66	97.82	90.76	4,884.00	2,301.22	3,127.64	2,996.52	135.13	23.145		
17,200.00	11,712.83	17,221.67	11,733.00	95.13	99.32	90.75	4,983.97	2,300.32	3,127.57	2,995.34	137.24	22.790		
17,300.00	11,711.87	17,321.66	11,731.26	96.61	100.82	90.73	5,083.95	2,299.41	3,127.51	2,994.16	139.35	22.444		
17,400.00	11,710.92	17,421.66	11,729.52	98.09	102.33	90.72	5,183.93	2,298.50	3,127.44	2,992.98	141.46	22.108		
17,500.00	11,709.96	17,521.66	11,727.78	99.58	103.84	90.70	5,283.91	2,297.59	3,127.38	2,991.79	143.59	21.780		
17,600.00	11,709.01	17,621.66	11,726.04	101.07	105.35	90.69	5,383.89	2,296.69	3,127.31	2,990.59	145.72	21.461		
17,700.00	11,708.05	17,721.65	11,724.30	102.57	106.87	90.68	5,483.86	2,295.78	3,127.25	2,989.39	147.86	21.151		
17,800.00	11,707.10	17,821.65	11,722.56	104.08	108.39	90.66	5,583.84	2,294.87	3,127.18	2,988.19	150.00	20.848		
17,900.00	11,706.14	17,921.65	11,720.82	105.58	109.92	90.65	5,683.82	2,293.96	3,127.12	2,986.97	152.15	20.553		
18,000.00	11,705.19	18,021.64	11,719.07	107.09	111.45	90.63	5,783.80	2,293.05	3,127.06	2,985.75	154.30	20.266		
18,100.00	11,704.23	18,121.64	11,717.33	108.61	112.99	90.62	5,883.77	2,292.15	3,126.99	2,984.53	156.46	19.986		
18,200.00	11,703.28	18,221.64	11,715.59	110.13	114.52	90.60	5,983.75	2,291.24	3,126.93	2,983.30	158.63	19.713		
18,300.00	11,702.32	18,321.63	11,713.85	111.65	116.06	90.59	6,083.73	2,290.33	3,126.86	2,982.07	160.79	19.446		
18,400.00	11,701.37	18,421.63	11,712.11	113.18	117.61	90.57	6,183.71	2,289.42	3,126.80	2,980.83	162.97	19.187		
18,500.00	11,700.41	18,521.63	11,710.37	114.71	119.15	90.56	6,283.68	2,288.52	3,126.74	2,979.59	165.15	18.933		
18,600.00	11,699.46	18,621.62	11,708.63	116.24	120.70	90.55	6,383.66	2,287.61	3,126.67	2,978.34	167.33	18.686		
18,700.00	11,698.50	18,721.62	11,706.89	117.78	122.25	90.53	6,483.64	2,286.70	3,126.61	2,977.10	169.52	18.444		
18,800.00	11,697.55	18,821.62	11,705.14	119.32	123.81	90.52	6,583.62	2,285.79	3,126.55	2,975.84	171.71	18.209		
18,900.00	11,696.59	18,921.61	11,703.40	120.86	125.37	90.50	6,683.59	2,284.89	3,126.49	2,974.59	173.90	17.979		
19,000.00	11,695.64	19,021.61	11,701.66	122.41	126.93	90.49	6,783.57	2,283.98	3,126.42	2,973.33	176.10	17.754		
19,100.00	11,694.68	19,121.61	11,699.92	123.96	128.49	90.47	6,883.55	2,283.07	3,126.36	2,972.06	178.30	17.534		
19,200.00	11,693.73	19,221.61	11,698.18	125.51	130.05	90.46	6,983.53	2,282.16	3,126.30	2,970.80	180.50	17.320		
19,300.00	11,692.77	19,321.60	11,696.44	127.06	131.62	90.45	7,083.50	2,281.26	3,126.24	2,969.53	182.71	17.110		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,400.00	11,691.82	19,421.60	11,694.70	128.62	133.18	90.43	7,183.48	2,280.35	3,126.18	2,941.25	184.92	16.905		
19,500.00	11,690.86	19,521.60	11,692.96	130.18	134.75	90.42	7,283.46	2,279.44	3,126.12	2,938.98	187.14	16.705		
19,600.00	11,689.91	19,621.59	11,691.21	131.74	136.33	90.40	7,383.44	2,278.53	3,126.05	2,936.70	189.36	16.509		
19,700.00	11,688.95	19,721.59	11,689.47	133.30	137.90	90.39	7,483.41	2,277.63	3,125.99	2,934.42	191.58	16.317		
19,800.00	11,688.00	19,821.59	11,687.73	134.87	139.48	90.37	7,583.39	2,276.72	3,125.93	2,932.13	193.80	16.130		
19,900.00	11,687.04	19,921.58	11,685.99	136.43	141.05	90.36	7,683.37	2,275.81	3,125.87	2,929.85	196.02	15.946		
20,000.00	11,686.09	20,021.58	11,684.25	138.00	142.63	90.34	7,783.35	2,274.90	3,125.81	2,927.56	198.25	15.767		
20,100.00	11,685.13	20,121.58	11,682.51	139.57	144.21	90.33	7,883.33	2,273.99	3,125.75	2,925.27	200.48	15.591		
20,200.00	11,684.18	20,221.57	11,680.77	141.14	145.80	90.32	7,983.30	2,273.09	3,125.69	2,922.98	202.71	15.419		
20,300.00	11,683.22	20,321.57	11,679.03	142.72	147.38	90.30	8,083.28	2,272.18	3,125.63	2,920.68	204.95	15.251		
20,400.00	11,682.27	20,421.57	11,677.28	144.29	148.96	90.29	8,183.26	2,271.27	3,125.57	2,918.39	207.19	15.086		
20,500.00	11,681.31	20,521.57	11,675.54	145.87	150.55	90.27	8,283.24	2,270.36	3,125.51	2,916.09	209.43	14.924		
20,600.00	11,680.36	20,621.56	11,673.80	147.45	152.14	90.26	8,383.21	2,269.46	3,125.45	2,913.79	211.67	14.766		
20,700.00	11,679.40	20,721.56	11,672.06	149.03	153.73	90.24	8,483.19	2,268.55	3,125.40	2,911.49	213.91	14.611		
20,800.00	11,678.45	20,821.56	11,670.32	150.62	155.32	90.23	8,583.17	2,267.64	3,125.34	2,909.18	216.16	14.459		
20,900.00	11,677.49	20,921.55	11,668.58	152.20	156.91	90.21	8,683.15	2,266.73	3,125.28	2,906.88	218.40	14.310		
21,000.00	11,676.54	21,021.55	11,666.84	153.78	158.50	90.20	8,783.12	2,265.83	3,125.22	2,904.57	220.65	14.164		
21,100.00	11,675.58	21,121.55	11,665.10	155.37	160.10	90.19	8,883.10	2,264.92	3,125.16	2,902.26	222.90	14.020		
21,200.00	11,674.63	21,221.54	11,663.36	156.96	161.69	90.17	8,983.08	2,264.01	3,125.10	2,899.95	225.15	13.880		
21,300.00	11,673.67	21,321.54	11,661.61	158.55	163.29	90.16	9,083.06	2,263.10	3,125.05	2,897.64	227.41	13.742		
21,400.00	11,672.72	21,421.54	11,659.87	160.14	164.89	90.14	9,183.03	2,262.20	3,124.99	2,895.32	229.66	13.607		
21,500.00	11,671.76	21,521.53	11,658.13	161.73	166.49	90.13	9,283.01	2,261.29	3,124.93	2,893.01	231.92	13.474		
21,600.00	11,670.81	21,621.53	11,656.39	163.32	168.09	90.11	9,382.99	2,260.38	3,124.87	2,890.69	234.18	13.344		
21,700.00	11,669.86	21,721.53	11,654.65	164.92	169.69	90.10	9,482.97	2,259.47	3,124.82	2,888.38	236.44	13.216		
21,800.00	11,668.90	21,821.52	11,652.91	166.51	171.29	90.08	9,582.94	2,258.56	3,124.76	2,886.06	238.70	13.091		
21,900.00	11,667.95	21,921.52	11,651.17	168.11	172.89	90.07	9,682.92	2,257.66	3,124.70	2,883.74	240.97	12.967		
21,938.19	11,667.58	21,959.71	11,650.50	168.72	173.50	90.06	9,721.11	2,257.31	3,124.68	2,882.85	241.83	12.921 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Santa Fe Fed Com 704H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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	89.30	0.85	69.99	70.10					
100.00	100.00	96.20	96.20	0.13	0.12	89.30	0.85	69.99	70.00	69.82	0.17	402.049		
200.00	200.00	196.20	196.20	0.48	0.47	89.30	0.85	69.99	70.00	69.32	0.67	103.723		
300.00	300.00	296.20	296.20	0.84	0.83	89.30	0.85	69.99	70.00	68.81	1.18	59.230		
400.00	400.00	396.20	396.20	1.20	1.19	89.30	0.85	69.99	70.00	68.31	1.69	41.449		
500.00	500.00	496.20	496.20	1.56	1.55	89.30	0.85	69.99	70.00	67.80	2.20	31.879		
600.00	600.00	596.20	596.20	1.92	1.90	89.30	0.85	69.99	70.00	67.29	2.70	25.899		
700.00	700.00	696.20	696.20	2.28	2.26	89.30	0.85	69.99	70.00	66.79	3.21	21.808		
800.00	800.00	796.20	796.20	2.63	2.62	89.30	0.85	69.99	70.00	66.28	3.72	18.834		
900.00	900.00	896.20	896.20	2.99	2.98	89.30	0.85	69.99	70.00	65.77	4.22	16.573		
1,000.00	1,000.00	996.20	996.20	3.35	3.34	89.30	0.85	69.99	70.00	65.26	4.73	14.797		
1,100.00	1,100.00	1,096.20	1,096.20	3.71	3.70	89.30	0.85	69.99	70.00	64.76	5.24	13.365		
1,200.00	1,200.00	1,196.20	1,196.20	4.07	4.06	89.30	0.85	69.99	70.00	64.25	5.74	12.185		
1,300.00	1,300.00	1,296.20	1,296.20	4.43	4.41	89.30	0.85	69.99	70.00	63.74	6.25	11.197		
1,400.00	1,400.00	1,396.20	1,396.20	4.79	4.77	89.30	0.85	69.99	70.00	63.24	6.76	10.357		
1,500.00	1,500.00	1,496.20	1,496.20	5.14	5.13	89.30	0.85	69.99	70.00	62.73	7.27	9.634		
1,600.00	1,600.00	1,596.20	1,596.20	5.50	5.49	89.30	0.85	69.99	70.00	62.22	7.77	9.006		
1,700.00	1,700.00	1,696.20	1,696.20	5.86	5.85	89.30	0.85	69.99	70.00	61.72	8.28	8.454		
1,800.00	1,800.00	1,796.20	1,796.20	6.22	6.21	89.30	0.85	69.99	70.00	61.21	8.79	7.967		
1,900.00	1,900.00	1,896.20	1,896.20	6.58	6.56	89.30	0.85	69.99	70.00	60.70	9.29	7.532		
2,000.00	2,000.00	1,996.20	1,996.20	6.94	6.92	89.30	0.85	69.99	70.00	60.20	9.80	7.142		
2,100.00	2,100.00	2,096.20	2,096.20	7.29	7.28	89.30	0.85	69.99	70.00	59.69	10.31	6.791		
2,200.00	2,200.00	2,196.20	2,196.20	7.65	7.64	89.30	0.85	69.99	70.00	59.18	10.81	6.473		
2,300.00	2,300.00	2,296.20	2,296.20	8.01	8.00	89.30	0.85	69.99	70.00	58.67	11.32	6.183		
2,400.00	2,400.00	2,396.20	2,396.20	8.37	8.36	89.30	0.85	69.99	70.00	58.17	11.83	5.918		
2,500.00	2,500.00	2,496.20	2,496.20	8.73	8.72	89.30	0.85	69.99	70.00	57.66	12.33	5.675 CC, ES		
2,600.00	2,599.99	2,595.33	2,595.32	9.07	9.05	-140.24	-0.18	70.58	71.58	58.77	12.82	5.585		
2,700.00	2,699.91	2,694.27	2,694.18	9.40	9.38	-139.59	-3.44	72.43	76.45	63.17	13.27	5.759		
2,800.00	2,799.69	2,792.88	2,792.60	9.74	9.70	-138.64	-8.91	75.53	84.59	70.86	13.73	6.160		
2,900.00	2,899.27	2,891.02	2,890.34	10.07	10.03	-137.55	-16.54	79.87	96.02	81.83	14.19	6.768		
3,000.00	2,998.57	2,988.86	2,987.53	10.42	10.36	-136.48	-26.26	85.39	110.68	96.03	14.65	7.557		
3,033.25	3,031.52	3,021.67	3,020.10	10.53	10.47	-136.26	-29.73	87.37	116.11	101.31	14.80	7.843		
3,100.00	3,097.62	3,087.48	3,085.42	10.76	10.70	-136.06	-36.71	91.33	127.22	112.10	15.12	8.413		
3,200.00	3,196.65	3,186.08	3,183.29	11.12	11.04	-135.83	-47.15	97.26	143.87	128.27	15.60	9.222		
3,300.00	3,295.67	3,284.68	3,281.15	11.48	11.38	-135.64	-57.60	103.20	160.52	144.43	16.09	9.979		
3,400.00	3,394.70	3,383.29	3,379.02	11.84	11.73	-135.49	-68.05	109.14	177.17	160.60	16.57	10.690		
3,500.00	3,493.73	3,481.89	3,476.89	12.20	12.09	-135.37	-78.49	115.07	193.82	176.76	17.07	11.356		
3,600.00	3,592.76	3,580.49	3,574.76	12.57	12.44	-135.26	-88.94	121.01	210.48	192.91	17.56	11.983		
3,700.00	3,691.78	3,679.10	3,672.63	12.95	12.80	-135.17	-99.39	126.94	227.13	209.06	18.06	12.573		
3,800.00	3,790.81	3,777.70	3,770.50	13.32	13.16	-135.09	-109.84	132.88	243.78	225.21	18.57	13.129		
3,900.00	3,889.84	3,876.30	3,868.36	13.70	13.53	-135.02	-120.28	138.82	260.44	241.36	19.08	13.653		
4,000.00	3,988.86	3,974.91	3,966.23	14.09	13.89	-134.96	-130.73	144.75	277.09	257.51	19.59	14.148		
4,100.00	4,087.89	4,073.51	4,064.10	14.47	14.26	-134.91	-141.18	150.69	293.75	273.65	20.10	14.616		
4,200.00	4,186.92	4,172.11	4,161.97	14.86	14.63	-134.86	-151.62	156.62	310.40	289.79	20.61	15.059		
4,300.00	4,285.95	4,270.71	4,259.84	15.25	15.00	-134.82	-162.07	162.56	327.06	305.93	21.13	15.479		
4,400.00	4,384.97	4,369.32	4,357.70	15.64	15.38	-134.78	-172.52	168.50	343.71	322.06	21.65	15.877		
4,500.00	4,484.00	4,467.92	4,455.57	16.03	15.75	-134.75	-182.97	174.43	360.37	338.20	22.17	16.255		
4,600.00	4,583.03	4,566.52	4,553.44	16.42	16.13	-134.72	-193.41	180.37	377.02	354.33	22.69	16.615		
4,700.00	4,682.05	4,665.13	4,651.31	16.82	16.51	-134.69	-203.86	186.30	393.68	370.46	23.22	16.957		
4,800.00	4,781.08	4,763.73	4,749.18	17.21	16.89	-134.66	-214.31	192.24	410.34	386.59	23.74	17.283		
4,900.00	4,880.11	4,862.33	4,847.04	17.61	17.27	-134.64	-224.76	198.17	426.99	402.72	24.27	17.593		
5,000.00	4,979.14	4,960.94	4,944.91	18.01	17.65	-134.61	-235.20	204.11	443.65	418.85	24.80	17.890		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Santa Fe Fed Com 704H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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	5,078.16	5,059.54	5,042.78	18.41	18.03	-134.59	-245.65	210.05	460.30	434.98	25.33	18.173		
5,200.00	5,177.19	5,158.14	5,140.65	18.81	18.41	-134.57	-256.10	215.98	476.96	451.10	25.86	18.444		
5,300.00	5,276.22	5,256.74	5,238.52	19.21	18.80	-134.56	-266.54	221.92	493.62	467.22	26.39	18.703		
5,400.00	5,375.24	5,355.35	5,336.39	19.62	19.18	-134.54	-276.99	227.85	510.27	483.35	26.93	18.951		
5,500.00	5,474.27	5,453.95	5,434.25	20.02	19.57	-134.52	-287.44	233.79	526.93	499.47	27.46	19.189		
5,600.00	5,573.30	5,552.55	5,532.12	20.43	19.95	-134.51	-297.89	239.73	543.58	515.59	28.00	19.417		
5,700.00	5,672.32	5,651.16	5,629.99	20.83	20.34	-134.49	-308.33	245.66	560.24	531.71	28.53	19.636		
5,800.00	5,771.35	5,749.76	5,727.86	21.24	20.73	-134.48	-318.78	251.60	576.90	547.83	29.07	19.846		
5,900.00	5,870.38	5,848.36	5,825.73	21.64	21.12	-134.47	-329.23	257.53	593.55	563.95	29.61	20.048		
6,000.00	5,969.41	5,946.97	5,923.59	22.05	21.51	-134.46	-339.67	263.47	610.21	580.06	30.15	20.242		
6,100.00	6,068.43	6,045.57	6,021.46	22.46	21.90	-134.44	-350.12	269.41	626.87	596.18	30.69	20.429		
6,200.00	6,167.46	6,144.17	6,119.33	22.87	22.29	-134.43	-360.57	275.34	643.52	612.30	31.23	20.609		
6,300.00	6,266.49	6,242.77	6,217.20	23.28	22.68	-134.42	-371.02	281.28	660.18	628.41	31.77	20.783		
6,400.00	6,365.51	6,341.38	6,315.07	23.69	23.07	-134.41	-381.46	287.21	676.84	644.53	32.31	20.950		
6,500.00	6,464.54	6,439.98	6,412.93	24.10	23.46	-134.41	-391.91	293.15	693.49	660.64	32.85	21.111		
6,600.00	6,563.57	6,538.58	6,510.80	24.51	23.85	-134.40	-402.36	299.09	710.15	676.76	33.39	21.267		
6,700.00	6,662.60	6,637.19	6,608.67	24.92	24.25	-134.39	-412.81	305.02	726.81	692.87	33.93	21.418		
6,800.00	6,761.62	6,735.79	6,706.54	25.33	24.64	-134.38	-423.25	310.96	743.46	708.98	34.48	21.563		
6,900.00	6,860.65	6,834.39	6,804.41	25.75	25.03	-134.37	-433.70	316.89	760.12	725.10	35.02	21.704		
7,000.00	6,959.68	6,933.00	6,902.28	26.16	25.43	-134.37	-444.15	322.83	776.78	741.21	35.57	21.840		
7,100.00	7,058.70	7,031.60	7,000.14	26.57	25.82	-134.36	-454.59	328.77	793.43	757.32	36.11	21.971		
7,200.00	7,157.73	7,130.20	7,098.01	26.99	26.21	-134.35	-465.04	334.70	810.09	773.43	36.66	22.099		
7,300.00	7,256.76	7,228.80	7,195.88	27.40	26.61	-134.34	-475.49	340.64	826.75	789.54	37.20	22.222		
7,400.00	7,355.79	7,327.41	7,293.75	27.81	27.00	-134.34	-485.94	346.57	843.40	805.65	37.75	22.342		
7,500.00	7,454.81	7,426.01	7,391.62	28.23	27.40	-134.33	-496.38	352.51	860.06	821.76	38.30	22.458		
7,600.00	7,553.84	7,524.61	7,489.48	28.64	27.79	-134.33	-506.83	358.44	876.72	837.87	38.84	22.570		
7,700.00	7,652.87	7,623.22	7,587.35	29.06	28.19	-134.32	-517.28	364.38	893.37	853.98	39.39	22.680		
7,800.00	7,751.89	7,721.82	7,685.22	29.47	28.59	-134.32	-527.72	370.32	910.03	870.09	39.94	22.786		
7,900.00	7,850.92	7,820.42	7,783.09	29.89	28.98	-134.31	-538.17	376.25	926.69	886.20	40.49	22.889		
8,000.00	7,949.95	7,919.03	7,880.96	30.30	29.38	-134.31	-548.62	382.19	943.34	902.31	41.04	22.989		
8,100.00	8,048.97	8,017.63	7,978.82	30.72	29.78	-134.30	-559.07	388.12	960.00	918.42	41.58	23.086		
8,200.00	8,148.00	8,116.23	8,076.69	31.14	30.17	-134.30	-569.51	394.06	976.66	934.52	42.13	23.180		
8,300.00	8,247.03	8,214.83	8,174.56	31.55	30.57	-134.29	-579.96	400.00	993.31	950.63	42.68	23.272		
8,400.00	8,346.06	8,313.44	8,272.43	31.97	30.97	-134.29	-590.41	405.93	1,009.97	966.74	43.23	23.362		
8,500.00	8,445.08	8,412.04	8,370.30	32.38	31.36	-134.28	-600.86	411.87	1,026.63	982.84	43.78	23.449		
8,600.00	8,544.11	8,510.64	8,468.16	32.80	31.76	-134.28	-611.30	417.80	1,043.28	998.95	44.33	23.534		
8,700.00	8,643.14	8,609.25	8,566.03	33.22	32.16	-134.28	-621.75	423.74	1,059.94	1,015.06	44.88	23.616		
8,800.00	8,742.16	8,707.85	8,663.90	33.64	32.56	-134.27	-632.20	429.68	1,076.60	1,031.16	45.43	23.697		
8,900.00	8,841.19	8,821.53	8,776.86	34.05	33.01	-134.32	-642.67	435.96	1,092.72	1,046.66	46.06	23.725		
9,000.00	8,940.22	8,939.69	8,894.62	34.47	33.46	-134.51	-651.72	440.77	1,107.15	1,060.47	46.68	23.716		
9,100.00	9,039.25	9,058.15	9,012.92	34.89	33.89	-134.86	-657.01	443.77	1,119.87	1,072.58	47.29	23.683		
9,200.00	9,138.27	9,176.69	9,131.42	35.31	34.29	-135.36	-659.11	444.97	1,130.91	1,083.05	47.86	23.630		
9,300.00	9,237.30	9,278.76	9,233.50	35.73	34.61	-135.86	-659.15	444.99	1,140.92	1,092.56	48.37	23.589		
9,400.00	9,336.33	9,377.79	9,332.53	36.14	34.93	-136.34	-659.15	444.99	1,151.00	1,102.14	48.86	23.556		
9,500.00	9,435.35	9,476.82	9,431.55	36.56	35.24	-136.81	-659.15	444.99	1,161.15	1,111.79	49.36	23.525		
9,600.00	9,534.38	9,575.84	9,530.58	36.98	35.56	-137.27	-659.15	444.99	1,171.38	1,121.53	49.85	23.496		
9,700.00	9,633.41	9,674.87	9,629.61	37.40	35.87	-137.73	-659.15	444.99	1,181.69	1,131.34	50.35	23.470		
9,800.00	9,732.44	9,773.90	9,728.64	37.82	36.19	-138.18	-659.15	444.99	1,192.07	1,141.22	50.85	23.445		
9,836.39	9,768.48	9,809.94	9,764.68	37.97	36.30	-138.34	-659.15	444.99	1,195.86	1,144.84	51.03	23.437		
9,900.00	9,831.53	9,873.00	9,827.73	38.23	36.50	-138.66	-659.15	444.99	1,202.12	1,150.78	51.34	23.415		
10,000.00	9,930.93	9,972.39	9,927.13	38.63	36.82	-139.09	-659.15	444.99	1,210.40	1,158.57	51.83	23.353		
10,100.00	10,030.57	10,072.04	10,026.77	39.01	37.14	-139.41	-659.15	444.99	1,216.74	1,164.43	52.32	23.258		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Santa Fe Fed Com 704H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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		
10,200.00	10,130.41	10,171.87	10,126.61	39.38	37.47	-139.63	-659.15	444.99	1,221.12	1,168.32	52.80	23.129		
10,300.00	10,230.35	10,271.82	10,226.55	39.72	37.79	-139.74	-659.15	444.99	1,223.51	1,170.23	53.27	22.967		
10,369.65	10,300.00	10,341.46	10,296.20	39.95	38.01	89.96	-659.15	444.99	1,223.99	1,170.39	53.60	22.838		
10,400.00	10,330.35	10,371.81	10,326.55	40.04	38.11	89.96	-659.15	444.99	1,223.99	1,170.26	53.73	22.779		
10,500.00	10,430.35	10,471.81	10,426.55	40.35	38.44	89.96	-659.15	444.99	1,223.99	1,169.80	54.19	22.587		
10,600.00	10,530.35	10,571.81	10,526.55	40.66	38.76	89.96	-659.15	444.99	1,223.99	1,169.34	54.65	22.397		
10,700.00	10,630.35	10,671.81	10,626.55	40.97	39.08	89.96	-659.15	444.99	1,223.99	1,168.88	55.11	22.211		
10,800.00	10,730.35	10,771.81	10,726.55	41.28	39.41	89.96	-659.15	444.99	1,223.99	1,168.42	55.57	22.027		
10,900.00	10,830.35	10,871.81	10,826.55	41.59	39.74	89.96	-659.15	444.99	1,223.99	1,167.96	56.03	21.846		
11,000.00	10,930.35	10,971.81	10,926.55	41.91	40.06	89.96	-659.15	444.99	1,223.99	1,167.50	56.49	21.668		
11,100.00	11,030.35	11,071.81	11,026.55	42.22	40.39	89.96	-659.15	444.99	1,223.99	1,167.04	56.95	21.492		
11,200.00	11,130.35	11,171.81	11,126.55	42.53	40.72	89.96	-659.15	444.99	1,223.99	1,166.58	57.41	21.319		
11,257.65	11,188.00	11,229.46	11,184.20	42.72	40.91	89.96	-659.15	444.99	1,223.99	1,166.31	57.68	21.220		
11,300.00	11,230.31	11,271.77	11,226.51	42.84	41.05	90.52	-659.15	444.99	1,224.00	1,166.13	57.88	21.149		
11,350.00	11,279.95	11,321.41	11,276.15	42.98	41.21	90.79	-659.15	444.99	1,224.07	1,165.97	58.10	21.069		
11,400.00	11,328.89	11,370.51	11,325.25	43.11	41.37	91.23	-659.14	444.99	1,224.25	1,165.94	58.31	20.995		
11,450.00	11,376.76	11,422.05	11,376.71	43.21	41.53	91.78	-656.53	444.97	1,224.58	1,166.06	58.52	20.927		
11,500.00	11,423.19	11,474.80	11,428.91	43.31	41.68	92.32	-649.09	444.90	1,225.01	1,166.31	58.70	20.868		
11,550.00	11,467.83	11,528.82	11,481.43	43.38	41.82	92.84	-636.52	444.79	1,225.54	1,166.67	58.87	20.819		
11,600.00	11,510.34	11,584.15	11,533.75	43.44	41.94	93.36	-618.59	444.64	1,226.15	1,167.15	59.01	20.780		
11,650.00	11,550.40	11,640.83	11,585.29	43.48	42.04	93.85	-595.07	444.44	1,226.83	1,167.71	59.12	20.750		
11,700.00	11,587.70	11,698.87	11,635.41	43.50	42.13	94.31	-565.84	444.19	1,227.55	1,168.33	59.22	20.729		
11,750.00	11,621.96	11,758.26	11,683.35	43.51	42.20	94.75	-530.84	443.88	1,228.29	1,169.00	59.29	20.717		
11,800.00	11,652.91	11,818.97	11,728.35	43.50	42.26	95.15	-490.13	443.53	1,229.02	1,169.68	59.34	20.711		
11,850.00	11,680.33	11,880.91	11,769.56	43.48	42.30	95.50	-443.94	443.13	1,229.71	1,170.33	59.37	20.711		
11,900.00	11,704.00	11,943.97	11,806.15	43.45	42.32	95.81	-392.61	442.69	1,230.33	1,170.93	59.40	20.714		
11,950.00	11,723.74	12,008.03	11,837.31	43.40	42.33	96.06	-336.69	442.21	1,230.85	1,171.44	59.41	20.717		
12,000.00	11,739.41	12,072.88	11,862.30	43.35	42.34	96.25	-276.89	441.70	1,231.26	1,171.83	59.43	20.718		
12,050.00	11,750.88	12,138.31	11,880.51	43.29	42.34	96.38	-214.07	441.15	1,231.54	1,172.08	59.45	20.714		
12,100.00	11,758.06	12,204.09	11,891.48	43.23	42.34	96.43	-149.25	440.59	1,231.66	1,172.17	59.49	20.704		
12,150.00	11,760.91	12,269.96	11,894.95	43.16	42.35	96.42	-83.51	440.03	1,231.64	1,172.10	59.54	20.686		
12,163.12	11,760.93	12,284.47	11,894.77	43.14	42.35	96.42	-69.00	439.90	1,231.61	1,172.06	59.55	20.680		
12,200.00	11,760.58	12,321.35	11,894.22	43.10	42.37	96.41	-32.13	439.59	1,231.59	1,171.98	59.61	20.662		
12,300.00	11,759.62	12,421.35	11,892.74	42.98	42.47	96.38	67.85	438.72	1,231.52	1,171.72	59.80	20.594		
12,400.00	11,758.67	12,521.35	11,891.26	42.89	42.65	96.36	167.84	437.86	1,231.45	1,171.37	60.08	20.495		
12,500.00	11,757.71	12,621.35	11,889.78	42.82	42.91	96.34	267.82	437.00	1,231.38	1,170.93	60.46	20.368		
12,600.00	11,756.76	12,721.35	11,888.29	43.17	43.24	96.31	367.81	436.14	1,231.32	1,170.40	60.91	20.214		
12,700.00	11,755.80	12,821.35	11,886.81	43.61	43.63	96.29	467.79	435.28	1,231.25	1,169.79	61.46	20.034		
12,800.00	11,754.85	12,921.34	11,885.33	44.09	44.09	96.26	567.77	434.41	1,231.18	1,169.10	62.08	19.832		
12,900.00	11,753.89	13,021.34	11,883.85	44.63	44.60	96.24	667.76	433.55	1,231.11	1,168.33	62.79	19.608		
13,000.00	11,752.94	13,121.34	11,882.37	45.21	45.17	96.21	767.74	432.69	1,231.05	1,167.48	63.57	19.366		
13,100.00	11,751.98	13,221.34	11,880.89	45.84	45.79	96.19	867.73	431.83	1,230.98	1,166.56	64.43	19.107		
13,200.00	11,751.03	13,321.34	11,879.41	46.52	46.47	96.17	967.71	430.97	1,230.92	1,165.56	65.35	18.835		
13,300.00	11,750.07	13,421.34	11,877.93	47.24	47.18	96.14	1,067.69	430.11	1,230.85	1,164.50	66.35	18.551		
13,400.00	11,749.12	13,521.34	11,876.44	48.00	47.95	96.12	1,167.68	429.24	1,230.78	1,163.37	67.41	18.258		
13,500.00	11,748.16	13,621.34	11,874.96	48.81	48.76	96.09	1,267.66	428.38	1,230.72	1,162.18	68.54	17.957		
13,600.00	11,747.21	13,721.33	11,873.48	49.65	49.61	96.07	1,367.64	427.52	1,230.65	1,160.93	69.72	17.651		
13,700.00	11,746.25	13,821.33	11,872.00	50.54	50.50	96.04	1,467.63	426.66	1,230.59	1,159.63	70.96	17.341		
13,800.00	11,745.30	13,921.33	11,870.52	51.46	51.42	96.02	1,567.61	425.80	1,230.52	1,158.27	72.26	17.030		
13,900.00	11,744.34	14,021.33	11,869.04	52.41	52.38	95.99	1,667.60	424.93	1,230.46	1,156.86	73.60	16.718		
14,000.00	11,743.39	14,121.33	11,867.56	53.40	53.38	95.97	1,767.58	424.07	1,230.39	1,155.40	75.00	16.406		
14,100.00	11,742.43	14,221.33	11,866.07	54.42	54.40	95.95	1,867.56	423.21	1,230.33	1,153.89	76.43	16.097		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Trinity Fed/Santa Fe Fed - Santa Fe 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		
14,200.00	11,741.48	14,321.33	11,864.59	55.47	55.46	95.92	1,967.55	422.35	1,230.27	1,152.35	77.92	15.790		
14,300.00	11,740.52	14,421.32	11,863.11	56.54	56.55	95.90	2,067.53	421.49	1,230.20	1,150.76	79.44	15.486		
14,400.00	11,739.57	14,521.32	11,861.63	57.65	57.66	95.87	2,167.52	420.63	1,230.14	1,149.14	81.00	15.187		
14,500.00	11,738.61	14,621.32	11,860.15	58.77	58.80	95.85	2,267.50	419.76	1,230.07	1,147.48	82.60	14.893		
14,600.00	11,737.66	14,721.32	11,858.67	59.93	59.96	95.82	2,367.48	418.90	1,230.01	1,145.79	84.23	14.604		
14,700.00	11,736.70	14,821.32	11,857.19	61.10	61.14	95.80	2,467.47	418.04	1,229.95	1,144.06	85.89	14.320		
14,800.00	11,735.75	14,921.32	11,855.71	62.30	62.34	95.78	2,567.45	417.18	1,229.89	1,142.30	87.58	14.043		
14,900.00	11,734.79	15,021.32	11,854.22	63.51	63.57	95.75	2,667.44	416.32	1,229.82	1,140.52	89.30	13.771		
15,000.00	11,733.84	15,121.31	11,852.74	64.75	64.81	95.73	2,767.42	415.45	1,229.76	1,138.71	91.05	13.506		
15,100.00	11,732.88	15,221.31	11,851.26	66.00	66.07	95.70	2,867.40	414.59	1,229.70	1,136.87	92.83	13.247		
15,200.00	11,731.93	15,321.31	11,849.78	67.27	67.35	95.68	2,967.39	413.73	1,229.64	1,135.01	94.63	12.995		
15,300.00	11,730.97	15,421.31	11,848.30	68.55	68.65	95.65	3,067.37	412.87	1,229.58	1,133.13	96.45	12.748		
15,400.00	11,730.02	15,521.31	11,846.82	69.86	69.95	95.63	3,167.36	412.01	1,229.51	1,131.22	98.29	12.509		
15,500.00	11,729.06	15,621.31	11,845.34	71.17	71.28	95.61	3,267.34	411.14	1,229.45	1,129.30	100.16	12.275		
15,600.00	11,728.11	15,721.31	11,843.86	72.50	72.61	95.58	3,367.32	410.28	1,229.39	1,127.35	102.04	12.048		
15,700.00	11,727.15	15,821.30	11,842.37	73.84	73.96	95.56	3,467.31	409.42	1,229.33	1,125.39	103.94	11.827		
15,800.00	11,726.20	15,921.30	11,840.89	75.19	75.32	95.53	3,567.29	408.56	1,229.27	1,123.41	105.86	11.613		
15,900.00	11,725.24	16,021.30	11,839.41	76.56	76.70	95.51	3,667.28	407.70	1,229.21	1,121.42	107.79	11.404		
16,000.00	11,724.29	16,121.30	11,837.93	77.94	78.08	95.48	3,767.26	406.84	1,229.15	1,119.41	109.74	11.201		
16,100.00	11,723.33	16,221.30	11,836.45	79.32	79.47	95.46	3,867.24	405.97	1,229.09	1,117.39	111.70	11.003		
16,200.00	11,722.38	16,321.30	11,834.97	80.72	80.88	95.43	3,967.23	405.11	1,229.03	1,115.35	113.68	10.811		
16,300.00	11,721.42	16,421.30	11,833.49	82.12	82.29	95.41	4,067.21	404.25	1,228.97	1,113.30	115.67	10.624		
16,400.00	11,720.47	16,521.30	11,832.00	83.54	83.71	95.39	4,167.19	403.39	1,228.91	1,111.24	117.68	10.443		
16,500.00	11,719.51	16,621.29	11,830.52	84.96	85.14	95.36	4,267.18	402.53	1,228.85	1,109.16	119.69	10.267		
16,600.00	11,718.56	16,721.29	11,829.04	86.39	86.58	95.34	4,367.16	401.66	1,228.80	1,107.08	121.72	10.095		
16,700.00	11,717.60	16,821.29	11,827.56	87.83	88.02	95.31	4,467.15	400.80	1,228.74	1,104.98	123.76	9.929		
16,800.00	11,716.65	16,921.29	11,826.08	89.28	89.48	95.29	4,567.13	399.94	1,228.68	1,102.87	125.81	9.767		
16,900.00	11,715.69	17,021.29	11,824.60	90.73	90.93	95.26	4,667.11	399.08	1,228.62	1,100.76	127.86	9.609		
17,000.00	11,714.74	17,121.29	11,823.12	92.19	92.40	95.24	4,767.10	398.22	1,228.56	1,098.63	129.93	9.456		
17,100.00	11,713.78	17,221.29	11,821.64	93.66	93.87	95.21	4,867.08	397.36	1,228.51	1,096.50	132.01	9.306		
17,200.00	11,712.83	17,321.28	11,820.15	95.13	95.35	95.19	4,967.07	396.49	1,228.45	1,094.36	134.09	9.161		
17,300.00	11,711.87	17,421.28	11,818.67	96.61	96.83	95.17	5,067.05	395.63	1,228.39	1,092.21	136.18	9.020		
17,400.00	11,710.92	17,521.28	11,817.19	98.09	98.32	95.14	5,167.03	394.77	1,228.33	1,090.05	138.28	8.883		
17,500.00	11,709.96	17,621.28	11,815.71	99.58	99.81	95.12	5,267.02	393.91	1,228.28	1,087.89	140.39	8.749		
17,600.00	11,709.01	17,721.28	11,814.23	101.07	101.31	95.09	5,367.00	393.05	1,228.22	1,085.72	142.50	8.619		
17,700.00	11,708.05	17,821.28	11,812.75	102.57	102.81	95.07	5,466.99	392.18	1,228.17	1,083.54	144.63	8.492		
17,800.00	11,707.10	17,921.28	11,811.27	104.08	104.32	95.04	5,566.97	391.32	1,228.11	1,081.36	146.75	8.368		
17,900.00	11,706.14	18,021.27	11,809.79	105.58	105.83	95.02	5,666.95	390.46	1,228.05	1,079.17	148.89	8.248		
18,000.00	11,705.19	18,121.27	11,808.30	107.09	107.35	95.00	5,766.94	389.60	1,228.00	1,076.97	151.03	8.131		
18,100.00	11,704.23	18,221.27	11,806.82	108.61	108.87	94.97	5,866.92	388.74	1,227.94	1,074.77	153.17	8.017		
18,200.00	11,703.28	18,321.27	11,805.34	110.13	110.39	94.95	5,966.91	387.88	1,227.89	1,072.56	155.33	7.905		
18,300.00	11,702.32	18,421.27	11,803.86	111.65	111.92	94.92	6,066.89	387.01	1,227.83	1,070.35	157.48	7.797		
18,400.00	11,701.37	18,521.27	11,802.38	113.18	113.45	94.90	6,166.87	386.15	1,227.78	1,068.14	159.64	7.691		
18,500.00	11,700.41	18,621.27	11,800.90	114.71	114.99	94.87	6,266.86	385.29	1,227.72	1,065.91	161.81	7.587		
18,600.00	11,699.46	18,721.26	11,799.42	116.24	116.52	94.85	6,366.84	384.43	1,227.67	1,063.69	163.98	7.487		
18,700.00	11,698.50	18,821.26	11,797.93	117.78	118.06	94.82	6,466.83	383.57	1,227.62	1,061.46	166.16	7.388		
18,800.00	11,697.55	18,921.26	11,796.45	119.32	119.61	94.80	6,566.81	382.70	1,227.56	1,059.23	168.34	7.292		
18,900.00	11,696.59	19,021.26	11,794.97	120.86	121.15	94.78	6,666.79	381.84	1,227.51	1,056.99	170.52	7.199		
19,000.00	11,695.64	19,121.26	11,793.49	122.41	122.70	94.75	6,766.78	380.98	1,227.46	1,054.75	172.71	7.107		
19,100.00	11,694.68	19,221.26	11,792.01	123.96	124.25	94.73	6,866.76	380.12	1,227.40	1,052.50	174.90	7.018		
19,200.00	11,693.73	19,321.26	11,790.53	125.51	125.81	94.70	6,966.74	379.26	1,227.35	1,050.26	177.09	6.931		
19,300.00	11,692.77	19,421.26	11,789.05	127.06	127.37	94.68	7,066.73	378.40	1,227.30	1,048.00	179.29	6.845		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<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		
19,400.00	11,691.82	19,521.25	11,787.57	128.62	128.92	94.65	7,166.71	377.53	1,227.24	1,045.75	181.49	6.762		
19,500.00	11,690.86	19,621.25	11,786.08	130.18	130.49	94.63	7,266.70	376.67	1,227.19	1,043.49	183.70	6.680		
19,600.00	11,689.91	19,721.25	11,784.60	131.74	132.05	94.60	7,366.68	375.81	1,227.14	1,041.23	185.91	6.601		
19,700.00	11,688.95	19,821.25	11,783.12	133.30	133.61	94.58	7,466.66	374.95	1,227.09	1,038.97	188.12	6.523		
19,800.00	11,688.00	19,921.25	11,781.64	134.87	135.18	94.56	7,566.65	374.09	1,227.04	1,036.70	190.34	6.447		
19,900.00	11,687.04	20,021.25	11,780.16	136.43	136.75	94.53	7,666.63	373.22	1,226.99	1,034.43	192.55	6.372		
20,000.00	11,686.09	20,121.25	11,778.68	138.00	138.32	94.51	7,766.62	372.36	1,226.93	1,032.16	194.77	6.299		
20,100.00	11,685.13	20,221.24	11,777.20	139.57	139.90	94.48	7,866.60	371.50	1,226.88	1,029.89	197.00	6.228		
20,200.00	11,684.18	20,321.24	11,775.71	141.14	141.47	94.46	7,966.58	370.64	1,226.83	1,027.61	199.22	6.158		
20,300.00	11,683.22	20,421.24	11,774.23	142.72	143.05	94.43	8,066.57	369.78	1,226.78	1,025.33	201.45	6.090		
20,400.00	11,682.27	20,521.24	11,772.75	144.29	144.63	94.41	8,166.55	368.92	1,226.73	1,023.05	203.68	6.023		
20,500.00	11,681.31	20,621.24	11,771.27	145.87	146.21	94.38	8,266.54	368.05	1,226.68	1,020.77	205.91	5.957		
20,600.00	11,680.36	20,721.24	11,769.79	147.45	147.79	94.36	8,366.52	367.19	1,226.63	1,018.48	208.15	5.893		
20,700.00	11,679.40	20,821.24	11,768.31	149.03	149.37	94.33	8,466.50	366.33	1,226.58	1,016.20	210.39	5.830		
20,800.00	11,678.45	20,921.23	11,766.83	150.62	150.96	94.31	8,566.49	365.47	1,226.53	1,013.91	212.63	5.768		
20,900.00	11,677.49	21,021.23	11,765.35	152.20	152.54	94.29	8,666.47	364.61	1,226.49	1,011.62	214.87	5.708		
21,000.00	11,676.54	21,121.23	11,763.86	153.78	154.13	94.26	8,766.46	363.74	1,226.44	1,009.32	217.11	5.649		
21,100.00	11,675.58	21,221.23	11,762.38	155.37	155.72	94.24	8,866.44	362.88	1,226.39	1,007.03	219.36	5.591		
21,200.00	11,674.63	21,321.23	11,760.90	156.96	157.31	94.21	8,966.42	362.02	1,226.34	1,004.73	221.61	5.534		
21,300.00	11,673.67	21,421.23	11,759.42	158.55	158.90	94.19	9,066.41	361.16	1,226.29	1,002.43	223.86	5.478		
21,400.00	11,672.72	21,521.23	11,757.94	160.14	160.49	94.16	9,166.39	360.30	1,226.24	1,000.13	226.11	5.423		
21,500.00	11,671.76	21,621.22	11,756.46	161.73	162.09	94.14	9,266.38	359.44	1,226.20	997.83	228.36	5.370		
21,600.00	11,670.81	21,721.22	11,754.98	163.32	163.68	94.11	9,366.36	358.57	1,226.15	995.53	230.62	5.317		
21,700.00	11,669.86	21,821.22	11,753.50	164.92	165.28	94.09	9,466.34	357.71	1,226.10	993.23	232.87	5.265		
21,800.00	11,668.90	21,921.22	11,752.01	166.51	166.88	94.07	9,566.33	356.85	1,226.05	990.92	235.13	5.214		
21,900.00	11,667.95	22,021.22	11,750.53	168.11	168.47	94.04	9,666.31	355.99	1,226.01	988.61	237.39	5.164		
21,938.19	11,667.58	22,059.41	11,749.97	168.72	169.08	94.03	9,704.50	355.66	1,225.99	987.73	238.26	5.146 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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Trinity Fed Com 703H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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	89.30	0.43	35.00	35.03					
100.00	100.00	98.50	98.50	0.13	0.12	89.30	0.43	35.00	35.00	34.83	0.18	198.756		
200.00	200.00	198.50	198.50	0.48	0.48	89.30	0.43	35.00	35.00	34.32	0.68	51.429		
300.00	300.00	298.50	298.50	0.84	0.84	89.30	0.43	35.00	35.00	33.82	1.19	29.475		
400.00	400.00	398.50	398.50	1.20	1.20	89.30	0.43	35.00	35.00	33.31	1.69	20.657		
500.00	500.00	498.50	498.50	1.56	1.55	89.30	0.43	35.00	35.00	32.80	2.20	15.900		
600.00	600.00	598.50	598.50	1.92	1.91	89.30	0.43	35.00	35.00	32.29	2.71	12.924		
700.00	700.00	698.50	698.50	2.28	2.27	89.30	0.43	35.00	35.00	31.79	3.22	10.886		
800.00	800.00	798.50	798.50	2.63	2.63	89.30	0.43	35.00	35.00	31.28	3.72	9.403		
900.00	900.00	898.50	898.50	2.99	2.99	89.30	0.43	35.00	35.00	30.77	4.23	8.276		
1,000.00	1,000.00	998.50	998.50	3.35	3.35	89.30	0.43	35.00	35.00	30.27	4.74	7.390		
1,100.00	1,100.00	1,098.50	1,098.50	3.71	3.70	89.30	0.43	35.00	35.00	29.76	5.24	6.676		
1,200.00	1,200.00	1,198.50	1,198.50	4.07	4.06	89.30	0.43	35.00	35.00	29.25	5.75	6.087		
1,300.00	1,300.00	1,298.50	1,298.50	4.43	4.42	89.30	0.43	35.00	35.00	28.75	6.26	5.594		
1,400.00	1,400.00	1,398.50	1,398.50	4.79	4.78	89.30	0.43	35.00	35.00	28.24	6.76	5.175		
1,500.00	1,500.00	1,498.50	1,498.50	5.14	5.14	89.30	0.43	35.00	35.00	27.73	7.27	4.814		
1,600.00	1,600.00	1,598.50	1,598.50	5.50	5.50	89.30	0.43	35.00	35.00	27.22	7.78	4.500		
1,700.00	1,700.00	1,698.50	1,698.50	5.86	5.86	89.30	0.43	35.00	35.00	26.72	8.28	4.225		
1,800.00	1,800.00	1,798.50	1,798.50	6.22	6.21	89.30	0.43	35.00	35.00	26.21	8.79	3.981		
1,900.00	1,900.00	1,898.50	1,898.50	6.58	6.57	89.30	0.43	35.00	35.00	25.70	9.30	3.764		
2,000.00	2,000.00	1,998.50	1,998.50	6.94	6.93	89.30	0.43	35.00	35.00	25.20	9.81	3.570		
2,100.00	2,100.00	2,098.50	2,098.50	7.29	7.29	89.30	0.43	35.00	35.00	24.69	10.31	3.394		
2,200.00	2,200.00	2,198.50	2,198.50	7.65	7.65	89.30	0.43	35.00	35.00	24.18	10.82	3.235		
2,300.00	2,300.00	2,298.50	2,298.50	8.01	8.01	89.30	0.43	35.00	35.00	23.68	11.33	3.090		
2,400.00	2,400.00	2,398.50	2,398.50	8.37	8.36	89.30	0.43	35.00	35.00	23.17	11.83	2.958		
2,500.00	2,500.00	2,498.50	2,498.50	8.73	8.72	89.30	0.43	35.00	35.00	22.66	12.34	2.836 CC, ES		
2,600.00	2,599.99	2,598.49	2,598.49	9.07	9.08	-141.75	0.43	35.00	36.02	23.18	12.84	2.806		
2,700.00	2,699.91	2,698.41	2,698.41	9.40	9.44	-145.28	0.43	35.00	39.18	25.86	13.32	2.941		
2,800.00	2,799.69	2,798.19	2,798.19	9.74	9.80	-150.01	0.43	35.00	44.71	30.90	13.81	3.238		
2,900.00	2,899.27	2,897.77	2,897.77	10.07	10.15	-154.92	0.43	35.00	52.84	38.54	14.30	3.696		
3,000.00	2,998.57	2,997.07	2,997.07	10.42	10.51	-159.35	0.43	35.00	63.69	48.90	14.79	4.307		
3,033.25	3,031.52	3,030.49	3,030.49	10.53	10.63	-160.62	0.33	34.93	67.81	52.86	14.95	4.536		
3,100.00	3,097.62	3,097.82	3,097.81	10.76	10.86	-162.55	-0.56	34.23	75.67	60.40	15.27	4.957		
3,200.00	3,196.65	3,199.19	3,199.10	11.12	11.19	-164.10	-3.67	31.82	85.61	69.89	15.73	5.443		
3,300.00	3,295.67	3,301.01	3,300.70	11.48	11.52	-164.58	-8.94	27.73	93.24	77.06	16.19	5.761		
3,400.00	3,394.70	3,403.15	3,402.40	11.84	11.86	-164.27	-16.36	21.97	98.51	81.87	16.64	5.920		
3,500.00	3,493.73	3,504.55	3,503.11	12.20	12.20	-163.33	-25.71	14.72	101.60	84.49	17.10	5.940		
3,600.00	3,592.76	3,604.50	3,602.31	12.57	12.55	-162.32	-35.34	7.25	104.25	86.67	17.59	5.928		
3,700.00	3,691.78	3,704.45	3,701.52	12.95	12.89	-161.36	-44.96	-0.21	106.94	88.87	18.08	5.916		
3,800.00	3,790.81	3,804.40	3,800.72	13.32	13.24	-160.45	-54.59	-7.68	109.66	91.09	18.57	5.906		
3,900.00	3,889.84	3,904.34	3,899.92	13.70	13.59	-159.58	-64.21	-15.15	112.40	93.34	19.06	5.897		
4,000.00	3,988.86	4,004.29	3,999.13	14.09	13.95	-158.75	-73.84	-22.61	115.17	95.61	19.56	5.888		
4,100.00	4,087.89	4,104.24	4,098.33	14.47	14.30	-157.97	-83.46	-30.08	117.96	97.90	20.06	5.880		
4,200.00	4,186.92	4,204.19	4,197.53	14.86	14.66	-157.22	-93.09	-37.55	120.77	100.21	20.56	5.873		
4,300.00	4,285.95	4,304.14	4,296.73	15.25	15.03	-156.50	-102.71	-45.01	123.61	102.54	21.07	5.866		
4,400.00	4,384.97	4,404.09	4,395.94	15.64	15.39	-155.81	-112.34	-52.48	126.46	104.88	21.58	5.860		
4,500.00	4,484.00	4,504.03	4,495.14	16.03	15.76	-155.16	-121.96	-59.95	129.32	107.23	22.09	5.855		
4,600.00	4,583.03	4,603.98	4,594.34	16.42	16.13	-154.54	-131.59	-67.41	132.21	109.61	22.60	5.849		
4,700.00	4,682.05	4,703.93	4,693.55	16.82	16.50	-153.94	-141.21	-74.88	135.11	111.99	23.12	5.844		
4,800.00	4,781.08	4,803.88	4,792.75	17.21	16.88	-153.36	-150.84	-82.35	138.02	114.38	23.64	5.840		
4,900.00	4,880.11	4,903.83	4,891.95	17.61	17.25	-152.81	-160.46	-89.81	140.95	116.79	24.15	5.835		
5,000.00	4,979.14	5,003.78	4,991.16	18.01	17.63	-152.29	-170.08	-97.28	143.88	119.21	24.68	5.831		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Trinity Fed Com 703H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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	5,078.16	5,103.72	5,090.36	18.41	18.01	-151.78	-179.71	-104.74	146.83	121.64	25.20	5.827		
5,200.00	5,177.19	5,203.67	5,189.56	18.81	18.39	-151.29	-189.33	-112.21	149.80	124.07	25.72	5.823		
5,300.00	5,276.22	5,303.62	5,288.77	19.21	18.77	-150.82	-198.96	-119.68	152.77	126.52	26.25	5.820		
5,400.00	5,375.24	5,403.57	5,387.97	19.62	19.15	-150.38	-208.58	-127.14	155.75	128.97	26.78	5.816		
5,500.00	5,474.27	5,503.52	5,487.17	20.02	19.53	-149.94	-218.21	-134.61	158.74	131.43	27.31	5.813		
5,600.00	5,573.30	5,603.46	5,586.38	20.43	19.92	-149.53	-227.83	-142.08	161.74	133.90	27.84	5.810		
5,700.00	5,672.32	5,703.41	5,685.58	20.83	20.30	-149.12	-237.46	-149.54	164.75	136.37	28.37	5.807		
5,800.00	5,771.35	5,803.36	5,784.78	21.24	20.69	-148.74	-247.08	-157.01	167.76	138.86	28.91	5.804		
5,900.00	5,870.38	5,903.31	5,883.98	21.64	21.08	-148.36	-256.71	-164.48	170.79	141.34	29.44	5.801		
6,000.00	5,969.41	6,003.26	5,983.19	22.05	21.46	-148.00	-266.33	-171.94	173.82	143.84	29.98	5.798		
6,100.00	6,068.43	6,103.21	6,082.39	22.46	21.85	-147.66	-275.96	-179.41	176.85	146.34	30.51	5.796		
6,200.00	6,167.46	6,203.15	6,181.59	22.87	22.24	-147.32	-285.58	-186.87	179.89	148.84	31.05	5.793		
6,300.00	6,266.49	6,303.10	6,280.80	23.28	22.63	-146.99	-295.21	-194.34	182.94	151.35	31.59	5.791		
6,400.00	6,365.51	6,403.05	6,380.00	23.69	23.02	-146.68	-304.83	-201.81	186.00	153.86	32.13	5.788		
6,500.00	6,464.54	6,503.00	6,479.20	24.10	23.42	-146.38	-314.45	-209.27	189.06	156.38	32.68	5.786		
6,600.00	6,563.57	6,602.95	6,578.41	24.51	23.81	-146.08	-324.08	-216.74	192.12	158.91	33.22	5.784		
6,700.00	6,662.60	6,702.89	6,677.61	24.92	24.20	-145.80	-333.70	-224.21	195.19	161.43	33.76	5.782		
6,800.00	6,761.62	6,802.84	6,776.81	25.33	24.59	-145.52	-343.33	-231.67	198.27	163.96	34.31	5.780		
6,900.00	6,860.65	6,902.79	6,876.02	25.75	24.99	-145.25	-352.95	-239.14	201.35	166.50	34.85	5.778		
7,000.00	6,959.68	7,002.74	6,975.22	26.16	25.38	-144.99	-362.58	-246.61	204.43	169.03	35.40	5.776		
7,100.00	7,058.70	7,102.69	7,074.42	26.57	25.78	-144.74	-372.20	-254.07	207.52	171.58	35.94	5.774		
7,200.00	7,157.73	7,202.64	7,173.63	26.99	26.17	-144.49	-381.83	-261.54	210.61	174.12	36.49	5.772		
7,300.00	7,256.76	7,302.58	7,272.83	27.40	26.57	-144.26	-391.45	-269.01	213.70	176.67	37.04	5.770		
7,400.00	7,355.79	7,402.53	7,372.03	27.81	26.96	-144.03	-401.08	-276.47	216.80	179.22	37.59	5.768		
7,500.00	7,454.81	7,502.48	7,471.24	28.23	27.36	-143.80	-410.70	-283.94	219.91	181.77	38.13	5.767		
7,600.00	7,553.84	7,602.43	7,570.44	28.64	27.76	-143.58	-420.33	-291.40	223.01	184.33	38.68	5.765		
7,700.00	7,652.87	7,702.38	7,669.64	29.06	28.16	-143.37	-429.95	-298.87	226.12	186.88	39.23	5.763		
7,800.00	7,751.89	7,802.33	7,768.84	29.47	28.55	-143.16	-439.58	-306.34	229.23	189.44	39.79	5.762		
7,900.00	7,850.92	7,902.27	7,868.05	29.89	28.95	-142.96	-449.20	-313.80	232.34	192.01	40.34	5.760		
8,000.00	7,949.95	8,002.22	7,967.25	30.30	29.35	-142.77	-458.82	-321.27	235.46	194.57	40.89	5.759		
8,100.00	8,048.97	8,102.17	8,066.45	30.72	29.75	-142.58	-468.45	-328.74	238.58	197.14	41.44	5.757		
8,200.00	8,148.00	8,202.12	8,165.66	31.14	30.15	-142.39	-478.07	-336.20	241.70	199.71	41.99	5.756		
8,300.00	8,247.03	8,302.07	8,264.86	31.55	30.55	-142.21	-487.70	-343.67	244.83	202.28	42.55	5.754		
8,400.00	8,346.06	8,402.01	8,364.06	31.97	30.95	-142.03	-497.32	-351.14	247.96	204.85	43.10	5.753		
8,500.00	8,445.08	8,501.96	8,463.27	32.38	31.35	-141.86	-506.95	-358.60	251.09	207.43	43.66	5.751		
8,600.00	8,544.11	8,601.91	8,562.47	32.80	31.75	-141.70	-516.57	-366.07	254.22	210.01	44.21	5.750		
8,700.00	8,643.14	8,701.86	8,661.67	33.22	32.15	-141.53	-526.20	-373.54	257.35	212.59	44.77	5.749		
8,800.00	8,742.16	8,801.81	8,760.88	33.64	32.55	-141.37	-535.82	-381.00	260.49	215.17	45.32	5.748		
8,900.00	8,841.19	8,901.76	8,860.08	34.05	32.95	-141.22	-545.45	-388.47	263.63	217.75	45.88	5.746		
9,000.00	8,940.22	9,001.70	8,959.28	34.47	33.35	-141.06	-555.07	-395.93	266.77	220.33	46.43	5.745		
9,100.00	9,039.25	9,101.65	9,058.49	34.89	33.75	-140.92	-564.70	-403.40	269.91	222.92	46.99	5.744		
9,200.00	9,138.27	9,201.60	9,157.69	35.31	34.15	-140.77	-574.32	-410.87	273.05	225.50	47.55	5.743		
9,300.00	9,237.30	9,301.55	9,256.89	35.73	34.56	-140.63	-583.95	-418.33	276.20	228.09	48.10	5.742		
9,400.00	9,336.33	9,401.50	9,356.10	36.14	34.96	-140.49	-593.57	-425.80	279.34	230.68	48.66	5.740		
9,500.00	9,435.35	9,501.44	9,455.30	36.56	35.36	-140.35	-603.19	-433.27	282.49	233.27	49.22	5.739		
9,600.00	9,534.38	9,601.39	9,554.50	36.98	35.76	-140.22	-612.82	-440.73	285.64	235.86	49.78	5.738		
9,700.00	9,633.41	9,701.34	9,653.70	37.40	36.17	-140.09	-622.44	-448.20	288.79	238.46	50.34	5.737		
9,800.00	9,732.44	9,801.29	9,752.91	37.82	36.57	-139.97	-632.07	-455.67	291.94	241.05	50.90	5.736		
9,836.39	9,768.48	9,837.67	9,789.01	37.97	36.71	-139.92	-635.57	-458.38	293.09	241.99	51.10	5.736		
9,900.00	9,831.53	9,900.00	9,850.92	38.23	36.96	-139.84	-641.35	-462.87	294.87	243.42	51.45	5.731		
10,000.00	9,930.93	9,994.49	9,944.96	38.63	37.33	-139.75	-648.62	-468.51	297.26	245.28	51.98	5.719		
10,100.00	10,030.57	10,089.90	10,040.11	39.01	37.69	-139.71	-654.10	-472.76	299.19	246.71	52.48	5.701		

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Trinity Fed Com 703H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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		
10,200.00	10,130.41	10,185.30	10,135.40	39.38	38.03	-139.71	-657.70	-475.55	300.65	247.69	52.96	5.677		
10,300.00	10,230.35	10,280.68	10,230.76	39.72	38.36	-139.76	-659.41	-476.88	301.65	248.24	53.41	5.648		
10,369.65	10,300.00	10,348.43	10,298.50	39.95	38.59	89.92	-659.57	-477.00	302.00	248.29	53.71	5.622		
10,400.00	10,330.35	10,378.78	10,328.85	40.04	38.68	89.92	-659.57	-477.00	302.00	248.15	53.85	5.608		
10,500.00	10,430.35	10,478.78	10,428.85	40.35	39.00	89.92	-659.57	-477.00	302.00	247.69	54.31	5.561		
10,600.00	10,530.35	10,578.78	10,528.85	40.66	39.32	89.92	-659.57	-477.00	302.00	247.24	54.76	5.515		
10,700.00	10,630.35	10,678.78	10,628.85	40.97	39.64	89.92	-659.57	-477.00	302.00	246.78	55.22	5.469		
10,800.00	10,730.35	10,778.78	10,728.85	41.28	39.96	89.92	-659.57	-477.00	302.00	246.32	55.68	5.424		
10,900.00	10,830.35	10,878.78	10,828.85	41.59	40.28	89.92	-659.57	-477.00	302.00	245.86	56.14	5.380		
11,000.00	10,930.35	10,978.78	10,928.85	41.91	40.60	89.92	-659.57	-477.00	302.00	245.40	56.60	5.336		
11,100.00	11,030.35	11,078.78	11,028.85	42.22	40.92	89.92	-659.57	-477.00	302.00	244.94	57.06	5.293		
11,200.00	11,130.35	11,178.78	11,128.85	42.53	41.25	89.92	-659.57	-477.00	302.00	244.48	57.52	5.251		
11,257.65	11,188.00	11,236.43	11,186.50	42.72	41.43	89.92	-659.57	-477.00	302.00	244.22	57.78	5.226		
11,300.00	11,230.31	11,278.74	11,228.81	42.84	41.57	90.70	-659.57	-477.00	302.02	244.02	57.99	5.208		
11,350.00	11,279.95	11,328.38	11,278.45	42.98	41.73	91.79	-659.57	-477.00	302.14	243.87	58.28	5.185		
11,400.00	11,328.89	11,377.32	11,327.39	43.11	41.89	93.62	-659.57	-477.00	302.64	244.04	58.59	5.165		
11,450.00	11,376.76	11,425.19	11,375.26	43.21	42.04	96.09	-659.57	-477.00	303.92	244.98	58.94	5.157		
11,500.00	11,423.19	11,471.62	11,421.69	43.31	42.20	99.03	-659.57	-477.00	306.55	247.24	59.30	5.169		
11,550.00	11,467.83	11,516.26	11,466.33	43.38	42.34	102.25	-659.57	-477.00	311.20	251.52	59.67	5.215		
11,600.00	11,510.34	11,566.60	11,516.63	43.44	42.50	106.03	-657.83	-477.01	318.11	258.05	60.06	5.297		
11,650.00	11,550.40	11,620.70	11,570.28	43.48	42.65	109.79	-651.08	-477.07	326.71	266.38	60.33	5.415		
11,700.00	11,587.70	11,678.16	11,626.30	43.50	42.80	113.41	-638.40	-477.18	336.71	276.31	60.40	5.575		
11,750.00	11,621.96	11,739.50	11,684.38	43.51	42.93	116.87	-618.76	-477.35	347.76	287.57	60.19	5.777		
11,800.00	11,652.91	11,805.27	11,743.93	43.50	43.05	120.14	-590.93	-477.59	359.45	299.80	59.64	6.027		
11,850.00	11,680.33	11,876.02	11,803.98	43.48	43.14	123.20	-553.60	-477.90	371.29	312.58	58.71	6.324		
11,900.00	11,704.00	11,952.24	11,862.98	43.45	43.21	125.98	-505.44	-478.31	382.77	325.35	57.42	6.666		
11,950.00	11,723.74	12,034.22	11,918.71	43.40	43.25	128.43	-445.41	-478.83	393.32	337.48	55.84	7.044		
12,000.00	11,739.41	12,121.93	11,968.19	43.35	43.25	130.48	-373.10	-479.44	402.38	348.22	54.16	7.429		
12,050.00	11,750.88	12,214.82	12,007.93	43.29	43.22	132.04	-289.25	-480.16	409.40	356.75	52.65	7.776		
12,100.00	11,758.06	12,311.75	12,034.40	43.23	43.18	133.03	-196.13	-480.95	413.91	362.28	51.62	8.018		
12,150.00	11,760.91	12,410.96	12,044.85	43.16	43.12	133.39	-97.60	-481.79	415.58	364.23	51.35	8.093		
12,163.12	11,760.93	12,433.04	12,044.87	43.14	43.11	133.39	-75.52	-481.98	415.55	364.15	51.40	8.085		
12,200.00	11,760.58	12,469.92	12,044.41	43.10	43.10	133.38	-38.65	-482.29	415.48	364.00	51.49	8.070		
12,300.00	11,759.62	12,569.92	12,043.19	42.98	43.13	133.35	61.34	-483.15	415.30	363.54	51.76	8.023		
12,400.00	11,758.67	12,669.92	12,041.97	42.89	43.26	133.32	161.33	-484.00	415.11	363.01	52.10	7.968		
12,500.00	11,757.71	12,769.92	12,040.74	42.82	43.49	133.30	261.32	-484.85	414.93	362.43	52.50	7.904		
12,600.00	11,756.76	12,869.92	12,039.52	43.17	43.81	133.27	361.30	-485.70	414.75	361.79	52.95	7.832		
12,700.00	11,755.80	12,969.92	12,038.30	43.61	44.21	133.24	461.29	-486.56	414.56	361.10	53.46	7.754		
12,800.00	11,754.85	13,069.92	12,037.07	44.09	44.67	133.22	561.28	-487.41	414.38	360.34	54.03	7.669		
12,900.00	11,753.89	13,169.92	12,035.85	44.63	45.18	133.19	661.27	-488.26	414.19	359.54	54.65	7.578		
13,000.00	11,752.94	13,269.91	12,034.63	45.21	45.75	133.16	761.26	-489.11	414.01	358.68	55.33	7.483		
13,100.00	11,751.98	13,369.91	12,033.40	45.84	46.36	133.13	861.25	-489.97	413.83	357.77	56.05	7.383		
13,200.00	11,751.03	13,469.91	12,032.18	46.52	47.03	133.11	961.24	-490.82	413.64	356.82	56.82	7.279		
13,300.00	11,750.07	13,569.91	12,030.96	47.24	47.74	133.08	1,061.22	-491.67	413.46	355.82	57.64	7.173		
13,400.00	11,749.12	13,669.91	12,029.73	48.00	48.50	133.05	1,161.21	-492.52	413.28	354.77	58.50	7.064		
13,500.00	11,748.16	13,769.91	12,028.51	48.81	49.30	133.03	1,261.20	-493.38	413.09	353.68	59.41	6.953		
13,600.00	11,747.21	13,869.91	12,027.29	49.65	50.14	133.00	1,361.19	-494.23	412.91	352.56	60.35	6.842		
13,700.00	11,746.25	13,969.91	12,026.06	50.54	51.02	132.97	1,461.18	-495.08	412.73	351.39	61.34	6.729		
13,800.00	11,745.30	14,069.91	12,024.84	51.46	51.93	132.94	1,561.17	-495.93	412.54	350.19	62.35	6.616		
13,900.00	11,744.34	14,169.91	12,023.62	52.41	52.88	132.92	1,661.15	-496.79	412.36	348.95	63.41	6.503		
14,000.00	11,743.39	14,269.91	12,022.39	53.40	53.87	132.89	1,761.14	-497.64	412.18	347.68	64.49	6.391		
14,100.00	11,742.43	14,369.91	12,021.17	54.42	54.88	132.86	1,861.13	-498.49	411.99	346.38	65.61	6.279		

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



Total Directional Services
Anticollision Report



Company: Franklin Mountain Energy
Project: Lea County, NM (NAD83)
Reference Site: Trinity Fed/Santa Fe Fed
Site Error: 0.00 usft
Reference Well: Trinity Fed Com 602H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2
Local Co-ordinate Reference: Well Trinity Fed Com 602H
TVD Reference: 3099.1' GE + 30' KB @ 3129.10usft
MD Reference: 3099.1' GE + 30' KB @ 3129.10usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.15 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Trinity Fed/Santa Fe Fed - Trinity Fed Com 703H - OH - Plan #2
Survey Program: 0-OWSG (Rev2) MWD
Reference Offset Semi Major Axis Distance
Measured Vertical Measured Vertical Reference Offset Highside Offset Wellbore Centre Between Between Minimum Separation
Depth Depth Depth Depth (usft) (usft) Toolface (usft) (+N/-S) (+E/-W) Centres Ellipses Separation Factor
Warning
14,200.00 11,741.48 14,469.91 12,019.95 55.47 55.93 132.84 1,961.12 -499.34 411.81 345.05 66.76 6.169
14,300.00 11,740.52 14,569.91 12,018.72 56.54 57.00 132.81 2,061.11 -500.20 411.63 343.70 67.93 6.060
14,400.00 11,739.57 14,669.91 12,017.50 57.65 58.10 132.78 2,161.10 -501.05 411.45 342.32 69.13 5.952
14,500.00 11,738.61 14,769.91 12,016.28 58.77 59.23 132.75 2,261.09 -501.90 411.26 340.91 70.35 5.846
14,600.00 11,737.66 14,869.91 12,015.05 59.93 60.38 132.73 2,361.07 -502.75 411.08 339.48 71.60 5.741
14,700.00 11,736.70 14,969.91 12,013.83 61.10 61.55 132.70 2,461.06 -503.61 410.90 338.03 72.87 5.639
14,800.00 11,735.75 15,069.91 12,012.61 62.30 62.75 132.67 2,561.05 -504.46 410.72 336.56 74.16 5.538
14,900.00 11,734.79 15,169.91 12,011.38 63.51 63.96 132.64 2,661.04 -505.31 410.53 335.07 75.47 5.440
15,000.00 11,733.84 15,269.91 12,010.16 64.75 65.19 132.62 2,761.03 -506.16 410.35 333.56 76.80 5.343
15,100.00 11,732.88 15,369.91 12,008.94 66.00 66.45 132.59 2,861.02 -507.02 410.17 332.03 78.14 5.249
15,200.00 11,731.93 15,469.91 12,007.71 67.27 67.71 132.56 2,961.01 -507.87 409.99 330.49 79.50 5.157
15,300.00 11,730.97 15,569.91 12,006.49 68.55 69.00 132.53 3,060.99 -508.72 409.81 328.93 80.87 5.067
15,400.00 11,730.02 15,669.91 12,005.27 69.86 70.30 132.51 3,160.98 -509.57 409.63 327.36 82.26 4.979
15,500.00 11,729.06 15,769.91 12,004.04 71.17 71.61 132.48 3,260.97 -510.43 409.44 325.78 83.67 4.894
15,600.00 11,728.11 15,869.91 12,002.82 72.50 72.94 132.45 3,360.96 -511.28 409.26 324.18 85.08 4.810
15,700.00 11,727.15 15,969.91 12,001.60 73.84 74.28 132.42 3,460.95 -512.13 409.08 322.57 86.51 4.729
15,800.00 11,726.20 16,069.91 12,000.37 75.19 75.63 132.39 3,560.94 -512.99 408.90 320.95 87.95 4.649
15,900.00 11,725.24 16,169.91 11,999.15 76.56 77.00 132.37 3,660.93 -513.84 408.72 319.33 89.39 4.572
16,000.00 11,724.29 16,269.91 11,997.93 77.94 78.37 132.34 3,760.91 -514.69 408.54 317.69 90.85 4.497
16,100.00 11,723.33 16,369.91 11,996.70 79.32 79.76 132.31 3,860.90 -515.54 408.36 316.04 92.32 4.423
16,200.00 11,722.38 16,469.91 11,995.48 80.72 81.16 132.28 3,960.89 -516.40 408.18 314.38 93.79 4.352
16,300.00 11,721.42 16,569.91 11,994.26 82.12 82.56 132.26 4,060.88 -517.25 408.00 312.72 95.28 4.282
16,400.00 11,720.47 16,669.91 11,993.03 83.54 83.98 132.23 4,160.87 -518.10 407.81 311.05 96.77 4.214
16,500.00 11,719.51 16,769.91 11,991.81 84.96 85.40 132.20 4,260.86 -518.95 407.63 309.37 98.26 4.148
16,600.00 11,718.56 16,869.91 11,990.59 86.39 86.83 132.17 4,360.85 -519.81 407.45 307.69 99.77 4.084
16,700.00 11,717.60 16,969.91 11,989.36 87.83 88.27 132.14 4,460.83 -520.66 407.27 306.00 101.28 4.021
16,800.00 11,716.65 17,069.91 11,988.14 89.28 89.71 132.12 4,560.82 -521.51 407.09 304.30 102.79 3.960
16,900.00 11,715.69 17,169.91 11,986.92 90.73 91.17 132.09 4,660.81 -522.36 406.91 302.60 104.31 3.901
17,000.00 11,714.74 17,269.91 11,985.69 92.19 92.62 132.06 4,760.80 -523.22 406.73 300.90 105.84 3.843
17,100.00 11,713.78 17,369.91 11,984.47 93.66 94.09 132.03 4,860.79 -524.07 406.55 299.19 107.37 3.787
17,200.00 11,712.83 17,469.91 11,983.25 95.13 95.56 132.00 4,960.78 -524.92 406.37 297.47 108.90 3.732
17,300.00 11,711.87 17,569.91 11,982.02 96.61 97.04 131.98 5,060.76 -525.77 406.19 295.75 110.44 3.678
17,400.00 11,710.92 17,669.91 11,980.80 98.09 98.52 131.95 5,160.75 -526.63 406.01 294.03 111.98 3.626
17,500.00 11,709.96 17,769.91 11,979.58 99.58 100.01 131.92 5,260.74 -527.48 405.83 292.31 113.52 3.575
17,600.00 11,709.01 17,869.91 11,978.35 101.07 101.50 131.89 5,360.73 -528.33 405.65 290.58 115.07 3.525
17,700.00 11,708.05 17,969.91 11,977.13 102.57 103.00 131.86 5,460.72 -529.18 405.48 288.85 116.62 3.477
17,800.00 11,707.10 18,069.91 11,975.90 104.08 104.51 131.83 5,560.71 -530.04 405.30 287.12 118.18 3.430
17,900.00 11,706.14 18,169.91 11,974.68 105.58 106.01 131.81 5,660.70 -530.89 405.12 285.38 119.73 3.384
18,000.00 11,705.19 18,269.91 11,973.46 107.09 107.52 131.78 5,760.68 -531.74 404.94 283.65 121.29 3.339
18,100.00 11,704.23 18,369.91 11,972.23 108.61 109.04 131.75 5,860.67 -532.59 404.76 281.91 122.85 3.295
18,200.00 11,703.28 18,469.91 11,971.01 110.13 110.56 131.72 5,960.66 -533.45 404.58 280.17 124.41 3.252
18,300.00 11,702.32 18,569.91 11,969.79 111.65 112.08 131.69 6,060.65 -534.30 404.40 278.43 125.97 3.210
18,400.00 11,701.37 18,669.91 11,968.56 113.18 113.61 131.66 6,160.64 -535.15 404.22 276.69 127.54 3.169
18,500.00 11,700.41 18,769.91 11,967.34 114.71 115.14 131.64 6,260.63 -536.00 404.04 274.94 129.10 3.130
18,600.00 11,699.46 18,869.91 11,966.12 116.24 116.67 131.61 6,360.62 -536.86 403.87 273.20 130.67 3.091
18,700.00 11,698.50 18,969.91 11,964.89 117.78 118.21 131.58 6,460.60 -537.71 403.69 271.45 132.23 3.053
18,800.00 11,697.55 19,069.91 11,963.67 119.32 119.75 131.55 6,560.59 -538.56 403.51 269.71 133.80 3.016
18,900.00 11,696.59 19,169.91 11,962.45 120.86 121.29 131.52 6,660.58 -539.41 403.33 267.96 135.37 2.979
19,000.00 11,695.64 19,269.91 11,961.22 122.41 122.84 131.49 6,760.57 -540.27 403.15 266.21 136.94 2.944
19,100.00 11,694.68 19,369.91 11,960.00 123.96 124.38 131.47 6,860.56 -541.12 402.97 264.47 138.51 2.909
19,200.00 11,693.73 19,469.91 11,958.78 125.51 125.93 131.44 6,960.55 -541.97 402.80 262.72 140.08 2.876
19,300.00 11,692.77 19,569.91 11,957.55 127.06 127.49 131.41 7,060.54 -542.82 402.62 260.97 141.65 2.842

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 Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Trinity Fed/Santa Fe Fed - Trinity Fed Com 703H - OH - Plan #2													Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														
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		
19,400.00	11,691.82	19,669.89	11,956.33	128.62	129.04	131.38	7,160.52	-543.68	402.44	259.23	143.22	2.810		
19,500.00	11,690.86	19,769.89	11,955.11	130.18	130.60	131.35	7,260.51	-544.53	402.26	257.48	144.78	2.778		
19,600.00	11,689.91	19,869.89	11,953.88	131.74	132.16	131.32	7,360.50	-545.38	402.09	255.73	146.35	2.747		
19,700.00	11,688.95	19,969.89	11,952.66	133.30	133.72	131.29	7,460.49	-546.23	401.91	253.99	147.92	2.717		
19,800.00	11,688.00	20,069.89	11,951.44	134.87	135.29	131.26	7,560.48	-547.09	401.73	252.24	149.49	2.687		
19,900.00	11,687.04	20,169.89	11,950.21	136.43	136.86	131.24	7,660.47	-547.94	401.55	250.50	151.06	2.658		
20,000.00	11,686.09	20,269.89	11,948.99	138.00	138.42	131.21	7,760.45	-548.79	401.38	248.75	152.62	2.630		
20,100.00	11,685.13	20,369.89	11,947.77	139.57	139.99	131.18	7,860.44	-549.64	401.20	247.01	154.19	2.602		
20,200.00	11,684.18	20,469.89	11,946.54	141.14	141.57	131.15	7,960.43	-550.50	401.02	245.27	155.76	2.575		
20,300.00	11,683.22	20,569.89	11,945.32	142.72	143.14	131.12	8,060.42	-551.35	400.85	243.53	157.32	2.548		
20,400.00	11,682.27	20,669.89	11,944.10	144.29	144.72	131.09	8,160.41	-552.20	400.67	241.78	158.88	2.522		
20,500.00	11,681.31	20,769.89	11,942.87	145.87	146.29	131.06	8,260.40	-553.05	400.49	240.05	160.45	2.496		
20,600.00	11,680.36	20,869.89	11,941.65	147.45	147.87	131.03	8,360.39	-553.91	400.32	238.31	162.01	2.471		
20,700.00	11,679.40	20,969.89	11,940.43	149.03	149.45	131.00	8,460.37	-554.76	400.14	236.57	163.57	2.446		
20,800.00	11,678.45	21,069.89	11,939.20	150.62	151.04	130.98	8,560.36	-555.61	399.96	234.83	165.13	2.422		
20,900.00	11,677.49	21,169.89	11,937.98	152.20	152.62	130.95	8,660.35	-556.46	399.79	233.10	166.69	2.398		
21,000.00	11,676.54	21,269.89	11,936.76	153.78	154.21	130.92	8,760.34	-557.32	399.61	231.36	168.25	2.375		
21,100.00	11,675.58	21,369.89	11,935.53	155.37	155.79	130.89	8,860.33	-558.17	399.44	229.63	169.80	2.352		
21,200.00	11,674.63	21,469.89	11,934.31	156.96	157.38	130.86	8,960.32	-559.02	399.26	227.90	171.36	2.330		
21,300.00	11,673.67	21,569.89	11,933.09	158.55	158.97	130.83	9,060.31	-559.87	399.08	226.17	172.91	2.308		
21,400.00	11,672.72	21,669.89	11,931.86	160.14	160.56	130.80	9,160.29	-560.73	398.91	224.44	174.46	2.286		
21,500.00	11,671.76	21,769.89	11,930.64	161.73	162.15	130.77	9,260.28	-561.58	398.73	222.72	176.01	2.265		
21,600.00	11,670.81	21,869.89	11,929.42	163.32	163.74	130.74	9,360.27	-562.43	398.56	220.99	177.56	2.245		
21,700.00	11,669.86	21,969.89	11,928.19	164.92	165.34	130.71	9,460.26	-563.28	398.38	219.27	179.11	2.224		
21,800.00	11,668.90	22,069.89	11,926.97	166.51	166.93	130.68	9,560.25	-564.14	398.21	217.55	180.66	2.204		
21,900.00	11,667.95	22,169.89	11,925.75	168.11	168.53	130.66	9,660.24	-564.99	398.03	215.83	182.20	2.185		
21,931.44	11,667.64	22,201.32	11,925.36	168.61	169.03	130.65	9,691.67	-565.26	397.98	215.29	182.69	2.178 SF		
21,938.19	11,667.58	22,206.36	11,925.30	168.72	169.11	130.64	9,696.71	-565.30	397.97	215.30	182.67	2.179		

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



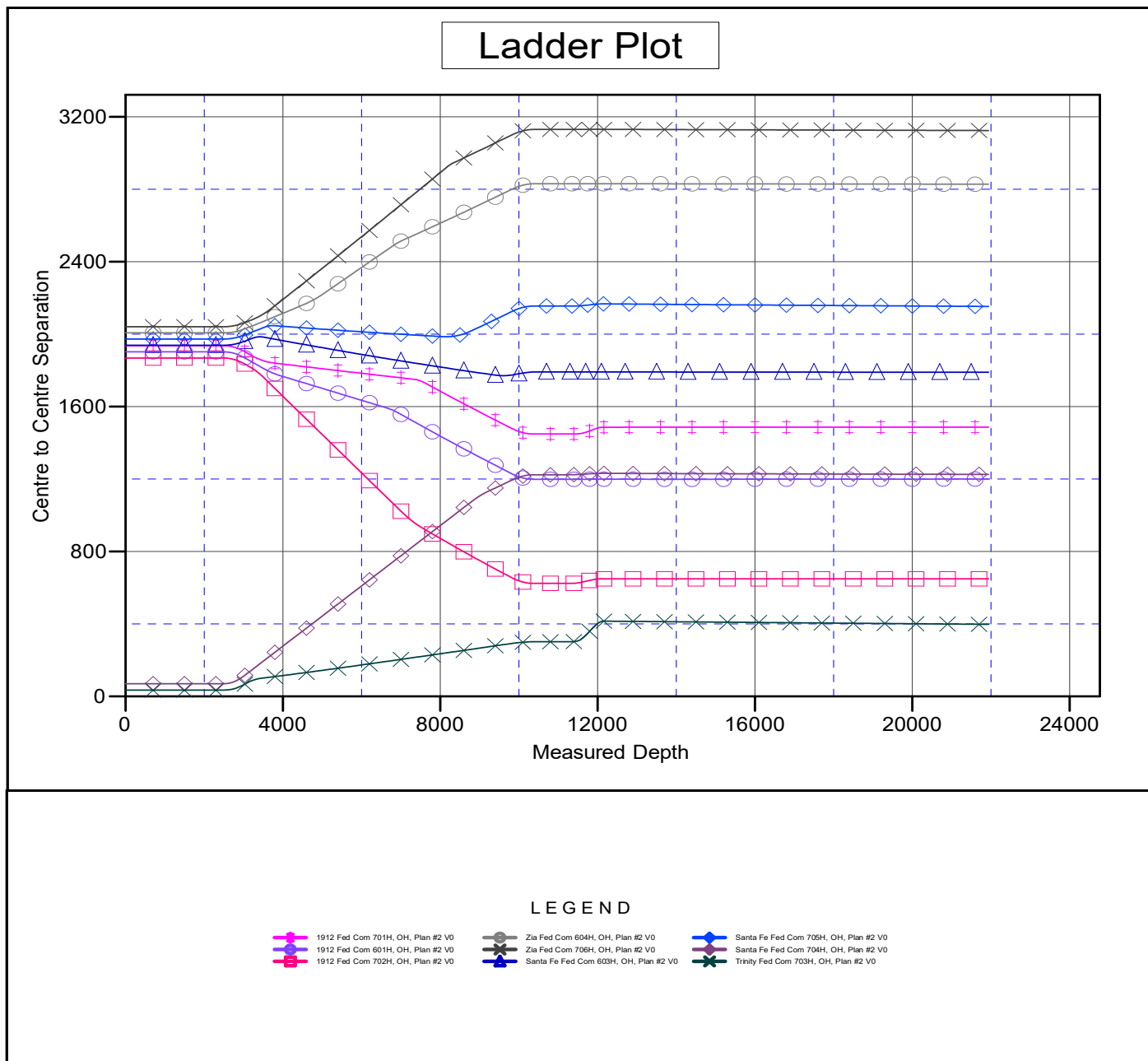
### Total Directional Services Anticollision Report



<b>Company:</b>	Franklin Mountain Energy	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to 3099.1' GE + 30' KB @ 3129.10usft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -104.333334

Coordinates are relative to: Trinity Fed Com 602H  
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone  
 Grid Convergence at Surface is: 0.54°



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



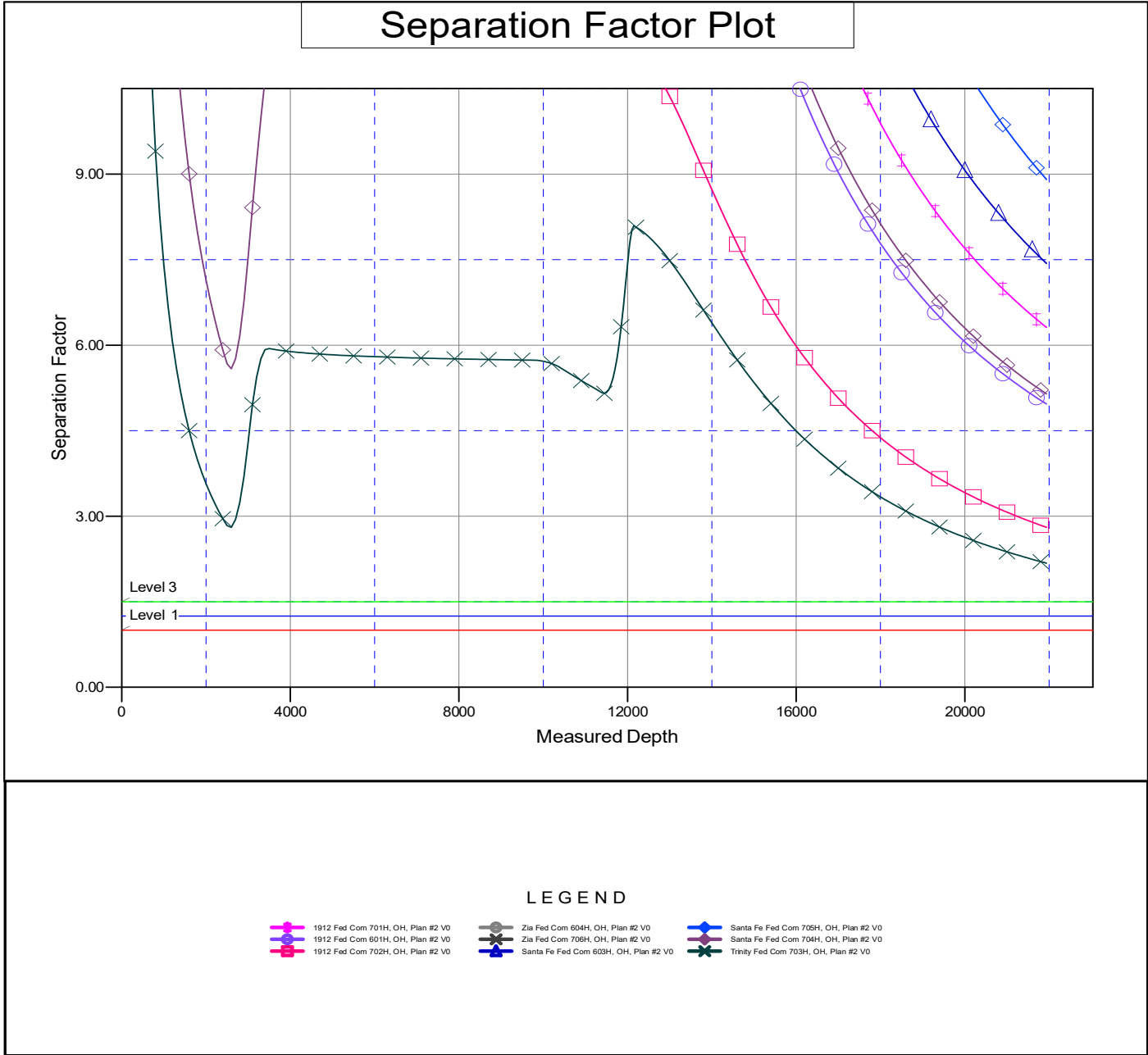
# Total Directional Services Anticollision Report



<b>Company:</b>	Franklin Mountain Energy	<b>Local Co-ordinate Reference:</b>	Well Trinity Fed Com 602H
<b>Project:</b>	Lea County, NM (NAD83)	<b>TVD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Reference Site:</b>	Trinity Fed/Santa Fe Fed	<b>MD Reference:</b>	3099.1' GE + 30' KB @ 3129.10usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Trinity Fed Com 602H	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to 3099.1' GE + 30' KB @ 3129.10usft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -104.333334

Coordinates are relative to: Trinity Fed Com 602H  
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone  
 Grid Convergence at Surface is: 0.54°



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: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC 1912 FEDERAL 601H 285'/S & 730'/W 150'/N & 600'/W Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC 1912 FEDERAL 701H 285'/S & 695'/W 150'/N & 350'/W Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC 1912 FEDERAL 702H 285'/S & 765'/W 150'/N & 1176'/W Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC SANTA FE FED COM 704H 710'/S & 2626'/W 150'/N & 2252'/E Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC SANTA FE FED COM 603H 250'/S & 812'/E 150'/N & 1689'/E Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC SANTA FE FED COM 705H 250'/S & 777'/E 150'/N & 1326'/E Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC TRINITY FEDERAL 602H 710'/S & 2584'/W 150'/N & 1800'/W Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico



OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE: LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC TRINITY FEDERAL 703H 710'/S & 2619'/W 150'/N & 2102'/W Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE: LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC ZIA FED COM 604H 250'/S & 742'/E 150'/N & 650'/E Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico
OPERATOR'S NAME: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE: LOCATION: COUNTY:	FRANKLIN MOUNTAIN ENERGY LLC ZIA FED COM 706H 250'/S & 707'/E 150'/N & 350'/E Section 24, T.25 S., R.35 E., NMP Lea County, New Mexico

**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**
  - Lesser Prairie-Chicken Timing Stipulations
  - Ground-level Abandoned Well Marker
- 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 and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **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)

### **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, 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 feet from the source of the noise.

**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.

### **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.

## **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 thirty (30) 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**

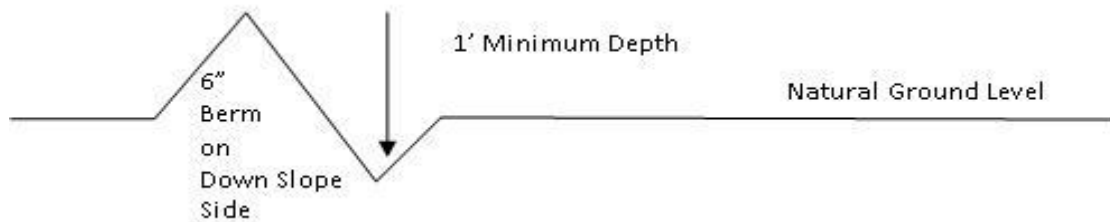
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outloping 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

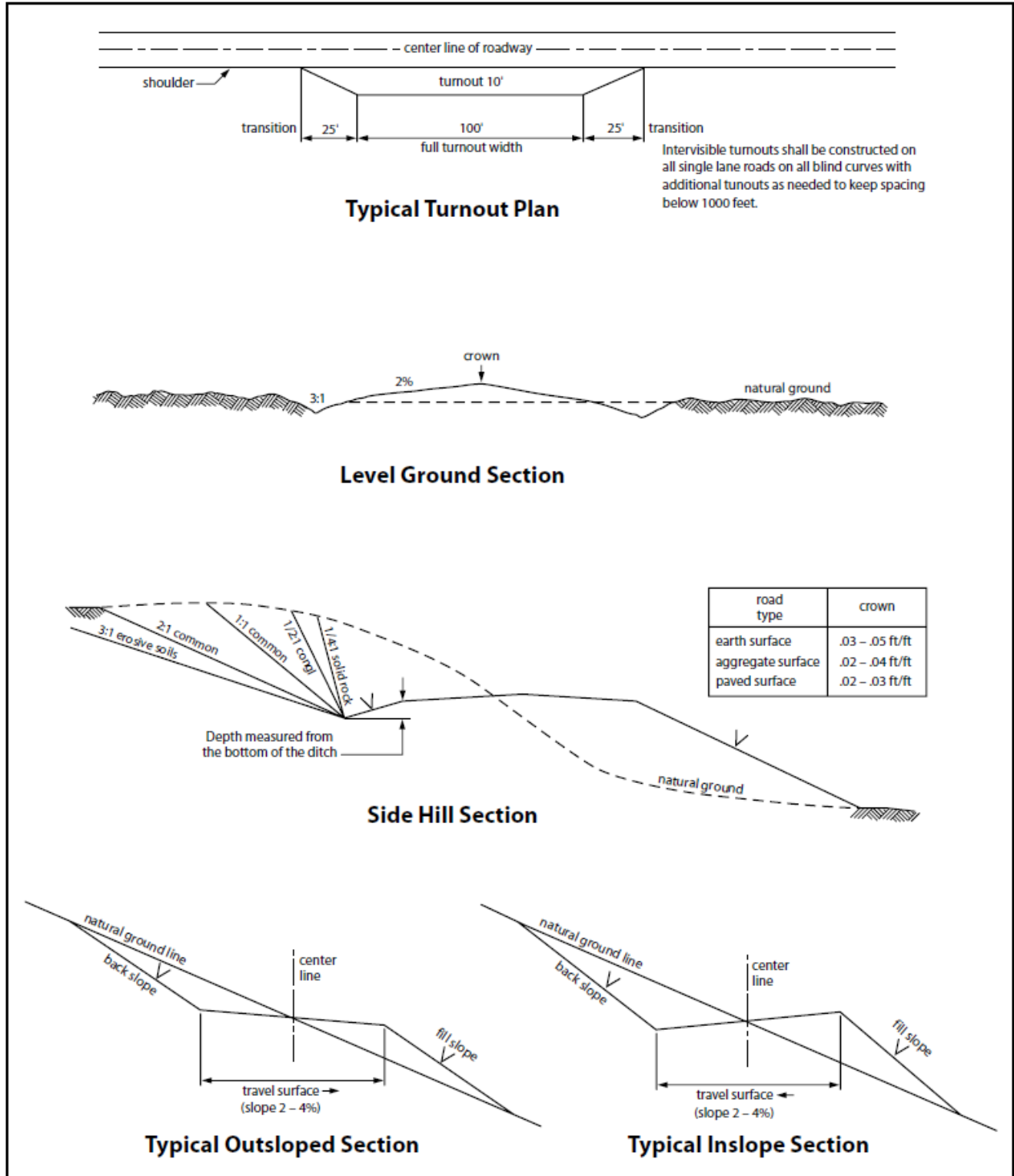


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## 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. 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
- 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. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. 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 proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. 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.

18. 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.

19. Special Stipulations:

**Wildlife:**

*Lesser Prairie-Chicken*

Oil and gas activities 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. 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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

**Hydrology:**

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.

**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 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 notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

*Livestock Watering Requirement*

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.

**C. STIPULATIONS FOR OVERHEAD ELECTRIC 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. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. 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 proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

**Wildlife:**

*Lesser Prairie-Chicken*

Oil and gas activities 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. 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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

**Hydrology:**

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 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 notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

### *Livestock Watering Requirement*

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.

## **D. STIPULATIONS FOR OIL AND GAS RELATED SITES**

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

The holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.

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 and for all response costs, penalties, damages, claims, and other costs arising from the provisions of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Chap. 82, Section 6901 et. seq., from the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Chap. 109, Section 9601 et. seq., and from other applicable environmental statutes.
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 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this 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). 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 site or related pipeline(s), any oil or other pollutant should be discharged from site facilities, the pipeline(s) or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup 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 the holder of any liability or responsibility.

5. Sites shall be maintained in an orderly, sanitary condition at all times. Waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, brines, chemicals, oil drums, ashes, and equipment.

6. The operator will notify the Bureau of Land Management (BLM) authorized officer and nearest Fish and Wildlife Service (FWS) Law Enforcement office within 24 hours, if the operator discovers a dead or injured federally protected species (i.e., migratory bird species, bald or golden eagle, or species listed by the FWS as threatened or endangered) in or adjacent to a pit, trench, tank, exhaust stack, or fence. (If the operator is unable to contact the FWS Law Enforcement office, the operator must contact the nearest FWS Ecological Services office.)

7. 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 a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is **Shale Green**, Munsell Soil Color Chart Number 5Y 4/2.

8. Any cultural and/or 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.

9. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. There are several options available for purchasing mineral material: contact the BLM office (575-234-5972).

10. 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.

11. Once the site is no longer in service or use, the site must undergo final abandonment. At final abandonment, the site 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 the abandonment of the site. All pads and 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. 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).

12. The holder shall stockpile an adequate amount of topsoil where blading occurs. The topsoil to be stripped is approximately   6   inches in depth. The topsoil will be segregated from other spoil piles. The topsoil will be used for final reclamation.

13. 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                      (X) seed mixture 3

- (X) seed mixture 2                      ( ) seed mixture 4  
( ) seed mixture 2/LPC                ( ) Aplomado Falcon Mixture

14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.

15. Open-topped Tanks - 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

16. 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 enclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

17. Open-Vent Exhaust Stack Enclosures – 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 enclosure 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.

18. 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.

19. Special Stipulations:

**Wildlife:**

*Lesser Prairie-Chicken*

Oil and gas activities 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. 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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

**Hydrology:**

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 top soil 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 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.

**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 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 notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

#### *Livestock Watering Requirement*

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.

## **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:

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

\*Pounds of pure live seed:

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

### Seed Mixture 3, for Shallow 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:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass ( <i>Setaria macrostachya</i> )	1.0
Green Sprangletop ( <i>Leptochloa dubia</i> )	2.0
Sideoats Grama ( <i>Bouteloua curtipendula</i> )	5.0

\*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>NMNM138898</b>
<b>LOCATION:</b>	Section 24, T.25 S., R.35 E., NMPM
<b>COUNTY:</b>	Lea County, New Mexico

<b>WELL NAME &amp; NO.:</b>	Trinity Federal 602H
<b>SURFACE HOLE FOOTAGE:</b>	710'/S & 2584'/W
<b>BOTTOM HOLE FOOTAGE:</b>	150'/N & 1800'/W

<b>WELL NAME &amp; NO.:</b>	Trinity Federal 703H
<b>SURFACE HOLE FOOTAGE:</b>	710'/S & 2619'/W
<b>BOTTOM HOLE FOOTAGE:</b>	150'/N & 2102'/W

COA

H2S	<input type="checkbox"/> Yes	<input checked="" 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 checked="" type="checkbox"/> Multibowl	<input type="checkbox"/> Both
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"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

**A. HYDROGEN SULFIDE**

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

**B. CASING**

1. The **13-3/8** inch surface casing shall be set at approximately **1225 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 shall be set at approximately **5400 feet** is:
    - Cement to surface. If cement does not circulate see B.1.a, c-d above.
  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.

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

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. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. 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**.
  - 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. 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.
- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

## 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.





### 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. H<sub>2</sub>S 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 H<sub>2</sub>S 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 H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S 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 H<sub>2</sub>S 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 H<sub>2</sub>S 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 H<sub>2</sub>S contingency plan. This will be reevaluated during wellbore construction if H<sub>2</sub>S is observed and after the well is on production.



**Emergency Contact List:**

Vladimir Roudakov, Drilling Engineer Cell 720 933 9784  
 Rachael Overbey, Project and Regulatory Director Cell 303 570 4057  
 Franklin Mountain Energy Afterhours Emergency Call Tree: 720-640-7517

**EMERGENCY NUMBERS:**

Agency	Telephone Number
BLM – Carlsbad Mainline	575-234-5972
BLM – Spill Emergency	575-234-6235
BLM – Engineering Emergency	575-361-2822
NMOCD District 1 – Hobbs Mainline	575-393-6161
NMOCD Emergency Line	575-370-3186
Wild Well Control	281-784-4700
<b>H2S Emergency response:</b>	
Air Ambulance New Mexico – Lea Co Regional	575-391-2934
Lea County Sheriff's Department	575-396-3611
Fire Department:	
Carlsbad	575-885-3125
Artesia	575-746-5050
Lea County Regional Medical Center	575-492-5000
Jal Community Hospital	505-395-2511
Lea County Emergency Management	575-396-8602
Poison Control Center	800-222-1222



# Trinity Federal 602H

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)	3,099'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,378'	751'			Carbonates
Salado	1,775'	1,354'			Salt, Carbonate & Clastics
Base Salt	-1,026'	4,155'			Shaley Carbonate & Shale
Lamar	-1,792'	4,921'			Carbonate & Clastics
Bell Canyon	-1,844'	4,973'			Sandstone - oil/gas/water
Cherry Canyon	-2,877'	6,006'			Sandstone - oil/gas/water
Brushy Canyon	-4,179'	7,308'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,430'	8,559'			Shale/Carbonates - oil/gas
Avalon	-5,453'	8,582'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,842'	9,971'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,970'	10,099'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,364'	10,493'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,814'	10,943'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,464'	11,593'			Sandstone - oil/gas/water
HZ Target at SHL	-8,632'	11,761'			Overpressure shale/sand- Oil/Gas
Wolfcamp	-8,767'	11,896'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,802'	11,931'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,994'	12,123'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	4,973'	Oil
Bone Spring	9,971'	Oil
Wolfcamp	11,896'	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. Capitan Reef boundary is near surface hole locations, but exact location is unknown. While drilling, FME will be prepared to switch over to fresh water should we encounter the reef and have losses up to 50%.

4. Casing Program:

All casings 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 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5400	1.72	1.67	2.90	3.30
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	12163	1.09	1.26	1.79	1.22
Long string 5 1/2"	23	P-110	14520	14520	729	Anaconda 656	21938	1.32	1.41	1.21	1.09

Safety factors calculated assuming the well is vertical.



### 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		Sacks	Type of cmt	Lead			Sacks	Type of cmt	Tail			Excess
		Size	Setting Depth			Yield ft <sup>3</sup> /sk	Water gal/sk	TOC ft			Yield ft <sup>3</sup> /sk	Water gal/sk	TOC	
Surf	17.5	13.375	1300	795	Extenda Cem, 13.5 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	HalCem TM, 14.8 ppg, Class C, 1% CaCl <sub>2</sub> , 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5400	1167	Neocem TM, 11.5 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	2.444	14.32	0	153	HalCem TM, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.334	6.42	5100	100%
Int2	8.75	7.625	12163	350	NeoCem, 11 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.798	17.15	4400	112	NeoCem 13.2 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl <sub>2</sub>	1.44	7.29	11163	50%
Prod	6.75	5.5	21938	793	NeoCem, 13.5 ppg, Gas Migration Control	1.357	6.65	11163						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 ½" 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' – 12,163'	Brine	8.8-10.2	28-34	N/c
12,163' – 21,938' Lateral	Oil Base	10.0-11.0	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 11,760' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,338 psig (based on 12 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/Escape 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 be 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 Cameron 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.



**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 22166

**CONDITIONS OF APPROVAL**

Operator: FRANKLIN MOUNTAIN ENERGY LLC      44 Cook Street Suite 1000      Denver, CO80206	OGRID: 373910	Action Number: 22166	Action Type: FORM 3160-3
--	------------------	-------------------------	-----------------------------

OCD Reviewer	Condition
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
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