

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

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

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

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

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

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

(Continued on page 2)

*(Instructions on page 2)



INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

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

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

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

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

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

Additional Operator Remarks

Location of Well

0. SHL: TR B / 20 FNL / 1900 FEL / TWSP: 26S / RANGE: 35E / SECTION: 2 / LAT: 32.079514 / LONG: -103.335918 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 0 FNL / 379 FEL / TWSP: 26S / RANGE: 35E / SECTION: 11 / LAT: 32.065048 / LONG: -103.330999 (TVD: 10710 feet, MD: 15700 feet)

PPP: NESE / 2662 FNL / 389 FEL / TWSP: 26S / RANGE: 35E / SECTION: 2 / LAT: 32.072256 / LONG: -103.331003 (TVD: 10710 feet, MD: 13100 feet)

PPP: NENE / 843 FNL / 382 FEL / TWSP: 26S / RANGE: 35E / SECTION: 2 / LAT: 32.077254 / LONG: -103.331005 (TVD: 10710 feet, MD: 11242 feet)

BHL: TR P / 150 FSL / 380 FEL / TWSP: 26S / RANGE: 35E / SECTION: 11 / LAT: 32.050933 / LONG: -103.330993 (TVD: 10710 feet, MD: 20818 feet)

BLM Point of Contact

Name: TENILLE ORTIZ

Title: Legal Instruments Examiner

Phone: (575) 234-2224

Email: tortiz@blm.gov

CONFIDENTIAL

Review and Appeal Rights

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

CONFIDENTIAL

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 98185	³ Pool Name WC-025 G-09 S253502B;LWR BONE SPRING
⁴ Property Code	⁵ Property Name TATANKA FED COM	⁶ Well Number 504H
⁷ OGRID No. 373910	⁸ Operator Name FRANKLIN MOUNTAIN ENERGY LLC	⁹ Elevation 3118.0'

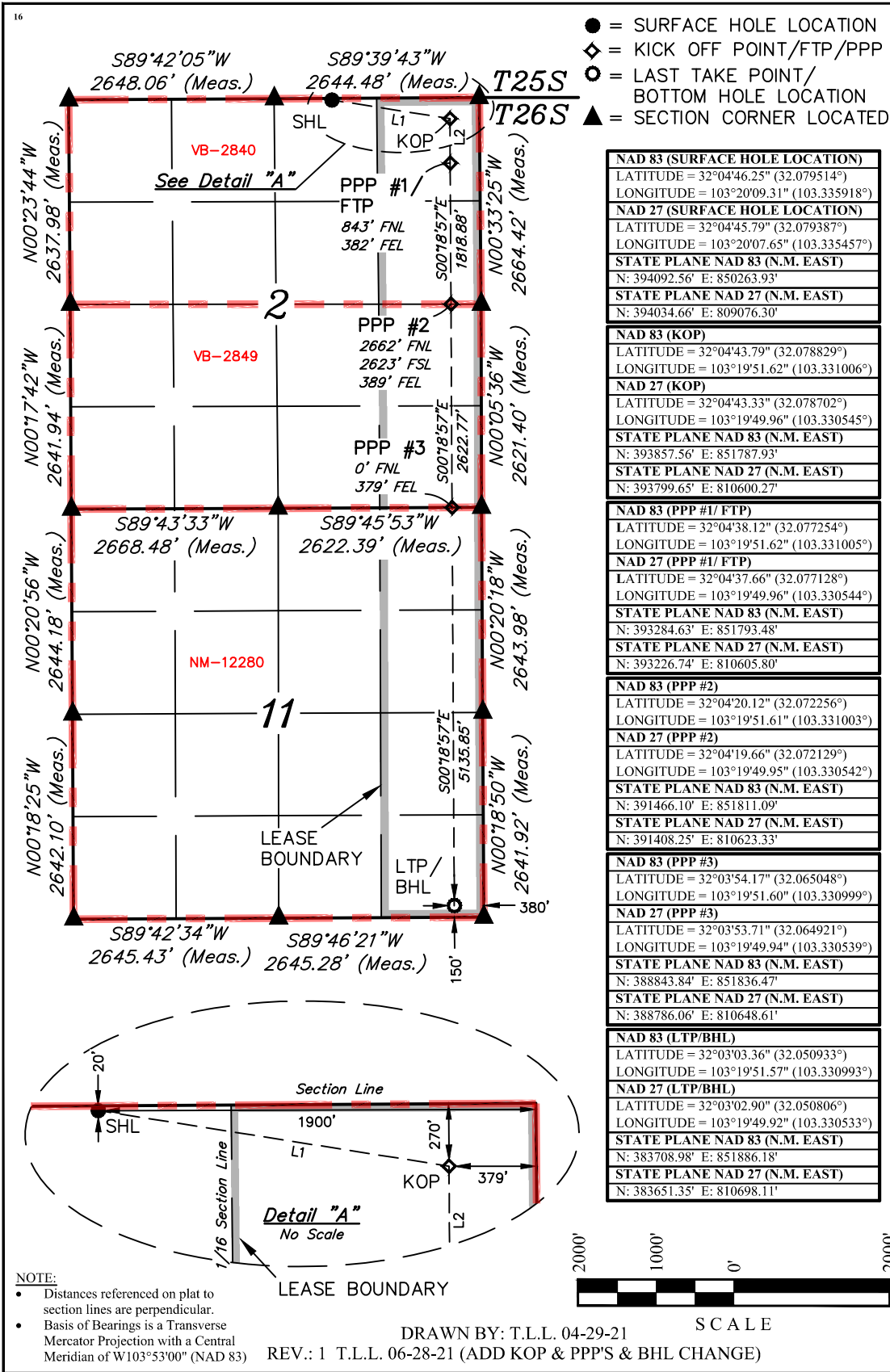
¹⁰ Surface Location

UL or lot no. B	Section 2	Township 26S	Range 35E	Lot Idn	Feet from the 20	North/South line NORTH	Feet from the 1900	East/West line EAST	County LEA
--------------------	--------------	-----------------	--------------	---------	---------------------	---------------------------	-----------------------	------------------------	---------------

¹¹ Bottom Hole Location If Different From Surface

UL or lot no. P	Section 11	Township 26S	Range 35E	Lot Idn	Feet from the 150	North/South line SOUTH	Feet from the 380	East/West line EAST	County LEA
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.



¹⁷ OPERATOR CERTIFICATION

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

Signature: *Shelly Albrecht* Date: 7/6/2021

Printed Name: Shelly Albrecht

salbrecht@fmellc.com

E-mail Address

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S80°59'42"E	1542.24'
L2	S00°18'58"E	573.04'

¹⁸ SURVEYOR CERTIFICATION

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

APRIL 19, 2021

Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
06-29-21
PROFESSIONAL SURVEYOR

Certificate Number:

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Franklin Mountain Energy, LLC **OGRID:** 373910 **Date:** 03/08/2022

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

If Other, please describe: _____

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

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

IV. Central Delivery Point Name: Paul Foster CTB: (f#) fAPP2125739207 [See 19.15.27.9(D)(1) NMAC]

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

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

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

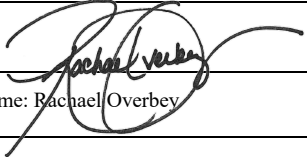
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

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

NATURAL GAS MANAGEMENT PLAN

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

Well Name	API 14 Digit	ULSTR	Surface Location FTG	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
PF Fed Com 101H	TBD	D-1-26S-35E	650 FNL 1268 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 102H	TBD	C-1-26S-35E	650 FNL 1343 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 501H	TBD	D-1-26S-35E	650 FNL 1293 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 502H	TBD	D-1-26S-35E	650 FNL 1318 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 801H	TBD	D-1-26S-35E	575 FNL 1281 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 802H	TBD	D-1-26S-35E	575 FNL 1306 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 803H	TBD	C-1-26S-35E	575 FNL 1331 FWL	800 +/-	700 +/-	600 +/-
PF Fed Com 103H	TBD	A-1-26S-35E	285 FNL 1125 FEL	800 +/-	700 +/-	600 +/-
PF Fed Com 104H	TBD	A-1-26S-35E	285 FNL 1050 FEL	800 +/-	700 +/-	600 +/-
PF Fed Com 503H	TBD 30-025-49854	A-1-26S-35E	285 FNL 1100 FEL	800 +/-	700 +/-	600 +/-
PF Fed Com 504H	TBD	A-1-26S-35E	285 FNL 1075 FEL	800 +/-	700 +/-	600 +/-
PF Fed Com 804H	TBD	A-1-26S-35E	210 FNL 1112 FEL	800 +/-	700 +/-	600 +/-
PF Fed Com 805H	TBD	A-1-26S-35E	210 FNL 1087 FEL	800 +/-	700 +/-	600 +/-
PF Fed Com 806H	TBD	A-1-26S-35E	210 FNL 1062 FEL	800 +/-	700 +/-	600 +/-

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

Well Name	API 14 Digit	Spud Date (Batch Drilling)	TD Reached Date	Completion Commencement Date	Initial Flowback Date	First Production Date
PF Fed Com 101H	TBD	TBD	TBD	TBD	TBD	TBD
PF Fed Com 102H	TBD	TBD	TBD	TBD	TBD	TBD
PF Fed Com 501H	TBD	TBD	TBD	TBD	TBD	TBD
PF Fed Com 502H	TBD	TBD	TBD	TBD	TBD	TBD
PF Fed Com 801H	TBD	10/20/2022	12/20/2022	1/5/2023	1/25/2023	1/27/2023
PF Fed Com 802H	TBD	10/20/2022	12/20/2022	1/5/2023	1/25/2023	1/27/2023
PF Fed Com 803H	TBD	10/20/2022	12/20/2022	1/5/2023	1/25/2023	1/27/2023
PF Fed Com 103H	TBD	TBD	TBD	TBD	TBD	TBD
PF Fed Com 104H	TBD	9/28/2022	10/20/2022	12/20/2022	1/1/2023	1/3/2023
PF Fed Com 503H	TBD 30-025-49854	TBD	TBD	TBD	TBD	TBD
PF Fed Com 504H	TBD	9/6/2022	9/27/2022	12/20/2022	1/1/2023	1/3/2023
PF Fed Com 804H	TBD	7/5/2022	9/5/2022	12/20/2022	1/1/2023	1/3/2023
PF Fed Com 805H	TBD	7/5/2022	9/5/2022	12/20/2022	1/1/2023	1/3/2023
PF Fed Com 806H	TBD	7/5/2022	9/5/2022	12/20/2022	1/1/2023	1/3/2023



Natural Gas Management Plan

Items VI-VIII

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

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

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

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



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

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

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



PF Fed Com 504H

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)	3,031'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,001'	1,060'			Carbonates
Salado	1,509'	1,552'			Salt, Carbonate & Clastics
Base Salt	-391'	3,452'			Shaley Carbonate & Shale
Lamar	-1,955'	5,016'			Carbonate & Clastics
Bell Canyon	-2,055'	5,116'			Sandstone - oil/gas/water
Cherry Canyon	-2,862'	5,923'			Sandstone - oil/gas/water
Brushy Canyon	-4,257'	7,318'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,445'	8,506'			Shale/Carbonates - oil/gas
Avalon	-5,490'	8,551'			Shale/Carbonates - oil/gas
Chert Zone	-5,643'	8,704'			Chert/Carbonate
First Bone Spring Sand	-6,739'	9,800'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,825'	9,886'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,195'	10,256'			Sandstone - oil/gas/water
HZ Target at Landing	-7,289'	10,350'			Overpressure shale/sand- Oil/Gas
Third Bone Spring Carbonates	-7,830'	10,891'			Shale/Carbonates - oil/gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,116'	Oil
Bone Spring Sand	9,800'	Oil
Bone Spring Carbonate	10,891'	Oil

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

4. **Casing Program:**

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

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5050	1.80	1.79	3.03	3.45
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	10733	1.24	1.42	1.97	1.35
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	20529 10350	1.32	1.51	1.27	1.06 1.79

7 5/8" casing will be set at 10,733' MD/10,350' TVD at 90° Inc. Stress calculations on 5 1/2" casing performed assuming 20,529' depth. Actual max vertical depth is 10,350'.



Cementing Program:

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft ³ /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft ³ /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1300	795	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	Tail, 14.8 ppg, Class C,	1.349	6.51	1000	100%
					0.125pps Poly-E-Flake					1% CaCl ₂ , 0.125pps Celo-Flake				
Int1	12.25	9.625	5050	1470	Lead, 12.8 ppg, Class C 5% Salt,	1.79	9.74	0	154	Tail, 14.8 ppg, Class C,	1.33	6.37	4750	100%
					0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal					0.1% HR 800 .125 pps Poly-E-Flake				
Int2	8.75	7.625	10733	305	Lite Fill, 9.5 ppg, Class C 3lb/sk	2.13	5.97	4050	94	NeoCem 14.8 ppg, Class C	1.33	6.29	9733	50%
					Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake					0.25 pps Cello-Flake, 2% CaCl ₂				
Prod	6.75	5.5	20529	805	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	9733						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' – 10,733'	Brine	8.8-10.2	28-34	N/c
10,733' – 20,529' Lateral	Oil Base	10.0-12.0	58-68	3 - 6

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

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

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

7. Auxiliary well control and monitoring equipment:

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

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

(C) H₂S 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 10,350' TVD (deepest point of the well) is 170F with an estimated maximum bottom-hole pressure (BHP) at the same point of 6,458 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 H₂S training.

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

C. Required Emergency Equipment

a. Well Control Equipment

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

ii. Choke manifold with a remotely operated hydraulic choke.

iii. Mud/gas separator

b. Protective equipment for essential personnel

i. Breathing Apparatus

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

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



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

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

11. Anticipated starting date and duration of operations:

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

**12. Disposal/environmental concerns:**

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

13. Wellhead:

A multi-bowl wellhead system will be utilized.

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

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

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

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

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

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

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

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

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

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

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

Released to Imaging: 3/14/2022 4:04:08 PM PST

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: PF Fed Com
Well: Paul Foster Fed Com 504H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.54°
Magnetic North: 5.86°

Magnetic Field
Strength: 47427.3nT
Dip Angle: 59.80°
Date: 7/16/2021
Model: IGRF2020

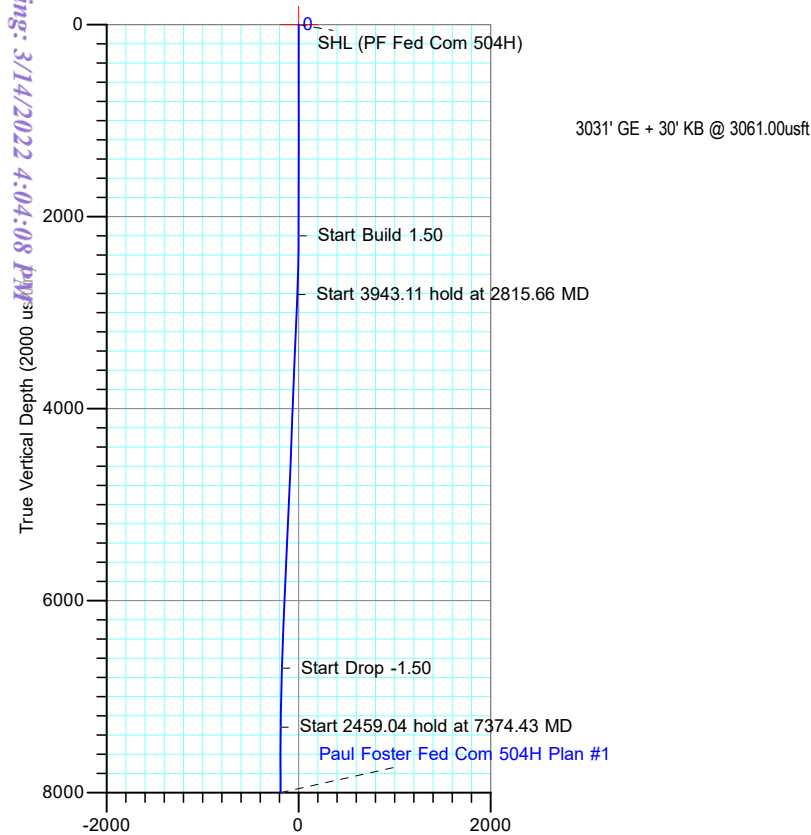
PROJECT DETAILS: Lea County, NM (NAD83)

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



Received by OCD: 3/8/2022 5:29:59 PM

Page 18 of 175

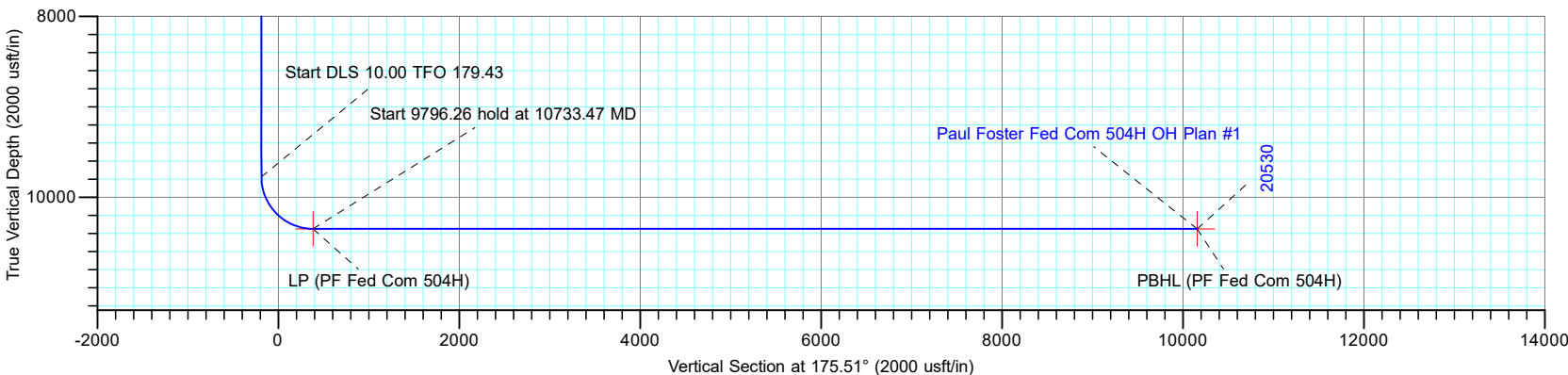
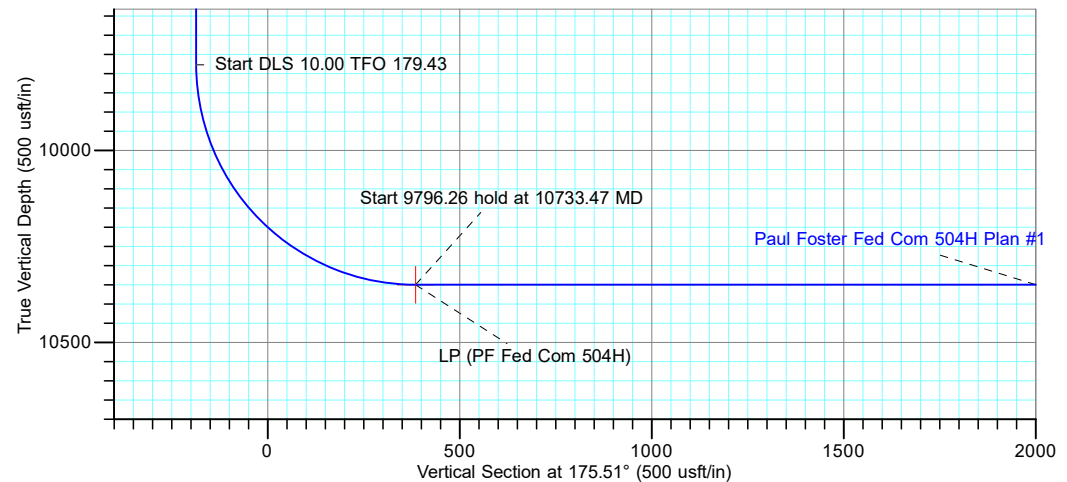


SECTION DETAILS

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	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2815.66	9.23	70.77	2813.00	16.30	46.75	1.50	70.77	-12.60	Start 3943.11 hold at 2815.66 MD
6758.77	9.23	70.77	6705.00	224.70	644.25	0.00	0.00	-173.60	Start Drop -1.50
7374.43	0.00	0.00	7318.00	241.00	691.00	1.50	180.00	-186.20	Start 2459.04 hold at 7374.43 MD
9833.47	0.00	0.00	9777.04	241.00	691.00	0.00	0.00	-186.20	Start DLS 10.00 TFO 179.43
10733.47	90.00	179.43	10350.00	-331.93	696.74	10.00	179.43	385.42	Start 9796.26 hold at 10733.47 MD
20529.73	90.00	179.43	10350.00	-10127.70	794.82	0.00	0.00	10158.84	TD at 20529.73

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (PF Fed Com 504H)	10350.00	-331.93	696.74	32.077860	-103.313952
PBHL (PF Fed Com 504H)	10350.00	-10127.70	794.82	32.050933	-103.313934
SHL (PF Fed Com 504H)	0.00	0.00	0.00	32.078790	-103.316191



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

Plan: Plan #1 (Paul Foster Fed Com 504H/OH)
PF Fed Com
Created By: Dustin Ault
Date: 0:16, July 17 2021
Approved: _____
Date: _____

Released to Imaging: 3/14/2022 4:04:08 PM

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: PF Fed Com
Well: Paul Foster Fed Com 504H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.54°
Magnetic North: 5.86°
Magnetic Field
Strength: 47427.3nT
Dip Angle: 59.80°
Date: 7/16/2021
Model: IGRF2020



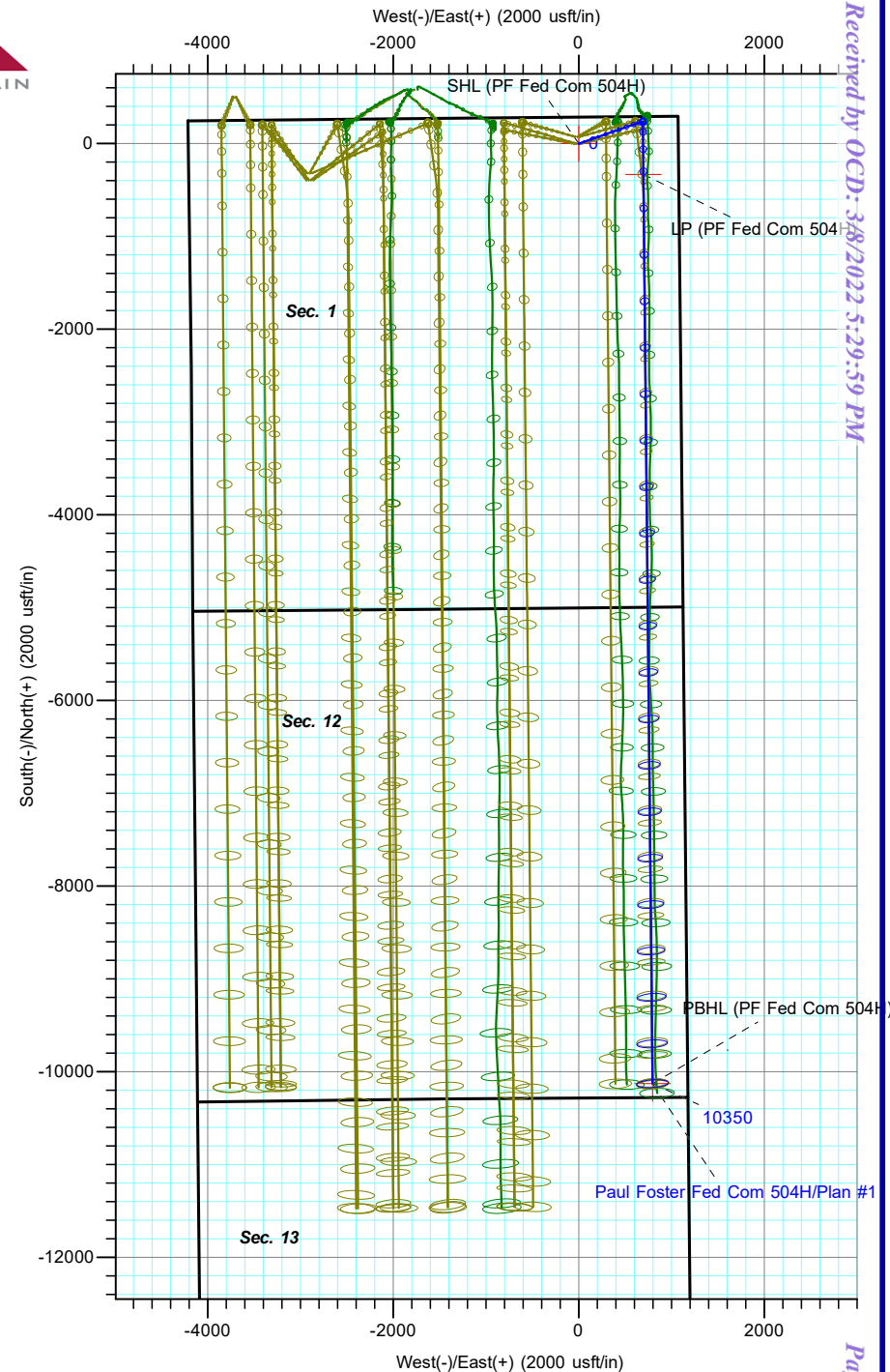
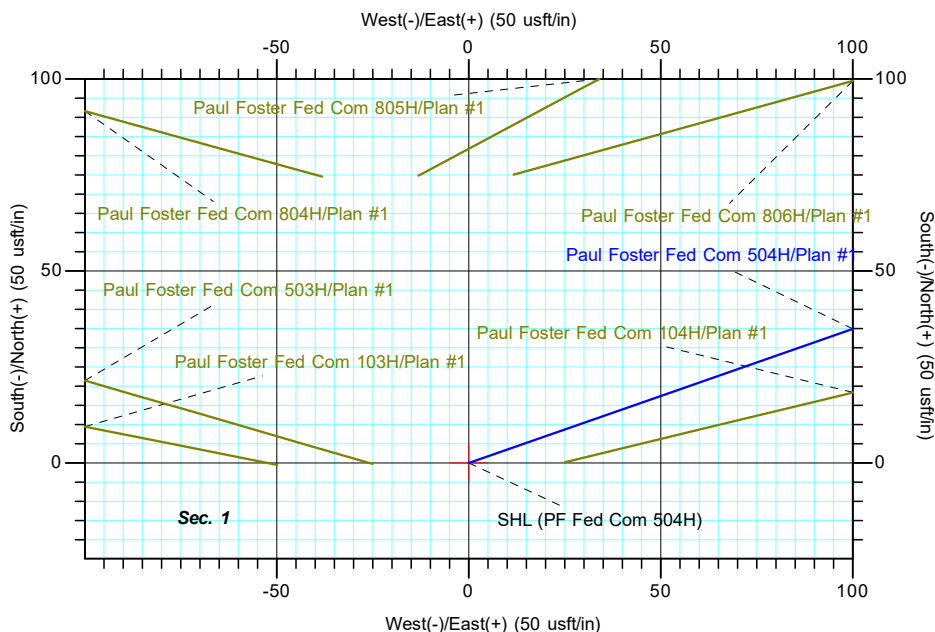
PROJECT DETAILS: Lea County, NM (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (PF Fed Com 504H)	10350.00	-331.93	696.74	393554.27	857073.57	32.077860	-103.313952
PBHL (PF Fed Com 504H)	10350.00	-10127.70	794.82	383758.50	857171.65	32.050933	-103.313934
SHL (PF Fed Com 504H)	0.00	0.00	0.00	393886.20	856376.83	32.078790	-103.316191

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	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2815.66	9.23	70.77	2813.00	16.30	46.75	1.50	70.77	-12.60	Start 3943.11 hold at 2815.66 MD
6758.77	9.23	70.77	6705.00	224.70	644.25	0.00	0.00	-173.60	Start Drop -1.50
7374.43	0.00	0.00	7318.00	241.00	691.00	1.50	180.00	-186.20	Start 2459.04 hold at 7374.43 MD
9833.47	0.00	0.00	9777.04	241.00	691.00	0.00	0.00	-186.20	Start DLS 10.00 TFO 179.43
10733.47	90.00	179.43	10350.00	-331.93	696.74	10.00	179.43	385.42	Start 9796.26 hold at 10733.47 MD
20529.73	90.00	179.43	10350.00	-10127.70	794.82	0.00	0.00	10158.84	TD at 20529.73



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

Plan: Plan #1 (Paul Foster Fed Com 504H/OH)
PF Fed Com
Created By: Dustin Ault
Date: 0:17, July 17 2021
Approved: _____
Date: _____

Received by OCD: 3/8/2022 5:29:59 PM

Page 19 of 175



Franklin Mountain Energy

Lea County, NM (NAD83)

PF Fed Com

Paul Foster Fed Com 504H

OH

Plan: Plan #1

Standard Planning Report

17 July, 2021





Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Company:	Franklin Mountain Energy	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site:	PF Fed Com	North Reference:	Grid
Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

Site	PF Fed Com				
Site Position:		Northing:	393,493.72 usft	Latitude:	32.077787
From:	Lat/Long	Easting:	853,440.15 usft	Longitude:	-103.325683
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.54

Well	Paul Foster Fed Com 504H					
Well Position	+N/-S	392.48 usft	Northing:	393,886.20 usft	Latitude:	32.078790
	+E/-W	2,936.68 usft	Easting:	856,376.83 usft	Longitude:	-103.316191
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,031.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/16/2021	6.41	59.80	47,427.29310907

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	175.51

Plan Survey Tool Program	Date	7/17/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,529.59 Plan #1 (OH)	OWSG (Rev2) MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,815.66	9.23	70.77	2,813.00	16.30	46.75	1.50	1.50	0.00	70.77	
6,758.77	9.23	70.77	6,705.00	224.70	644.25	0.00	0.00	0.00	0.00	
7,374.43	0.00	0.00	7,318.00	241.00	691.00	1.50	-1.50	0.00	180.00	
9,833.47	0.00	0.00	9,777.04	241.00	691.00	0.00	0.00	0.00	0.00	
10,733.47	90.00	179.43	10,350.00	-331.93	696.74	10.00	10.00	19.94	179.43	
20,529.73	90.00	179.43	10,350.00	-10,127.70	794.82	0.00	0.00	0.00	0.00	PBHL (PF Fed Com 5



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Company:	Franklin Mountain Energy	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site:	PF Fed Com	North Reference:	Grid
Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (PF Fed Com 504H)									
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
Start Build 1.50									
2,300.00	1.50	70.77	2,299.99	0.43	1.24	-0.33	1.50	1.50	0.00
2,400.00	3.00	70.77	2,399.91	1.72	4.94	-1.33	1.50	1.50	0.00
2,500.00	4.50	70.77	2,499.69	3.88	11.12	-3.00	1.50	1.50	0.00
2,600.00	6.00	70.77	2,599.27	6.89	19.76	-5.32	1.50	1.50	0.00
2,700.00	7.50	70.77	2,698.57	10.76	30.86	-8.31	1.50	1.50	0.00
2,800.00	9.00	70.77	2,797.54	15.49	44.40	-11.97	1.50	1.50	0.00
2,815.66	9.23	70.77	2,813.00	16.30	46.75	-12.60	1.50	1.50	0.00
Start 3943.11 hold at 2815.66 MD									
2,900.00	9.23	70.77	2,896.24	20.76	59.53	-16.04	0.00	0.00	0.00
3,000.00	9.23	70.77	2,994.95	26.05	74.68	-20.12	0.00	0.00	0.00
3,100.00	9.23	70.77	3,093.65	31.33	89.83	-24.21	0.00	0.00	0.00
3,200.00	9.23	70.77	3,192.36	36.62	104.99	-28.29	0.00	0.00	0.00
3,300.00	9.23	70.77	3,291.06	41.90	120.14	-32.37	0.00	0.00	0.00
3,400.00	9.23	70.77	3,389.76	47.19	135.29	-36.46	0.00	0.00	0.00
3,500.00	9.23	70.77	3,488.47	52.47	150.45	-40.54	0.00	0.00	0.00
3,600.00	9.23	70.77	3,587.17	57.76	165.60	-44.62	0.00	0.00	0.00
3,700.00	9.23	70.77	3,685.88	63.04	180.75	-48.71	0.00	0.00	0.00
3,800.00	9.23	70.77	3,784.58	68.33	195.91	-52.79	0.00	0.00	0.00
3,900.00	9.23	70.77	3,883.28	73.61	211.06	-56.87	0.00	0.00	0.00
4,000.00	9.23	70.77	3,981.99	78.90	226.21	-60.96	0.00	0.00	0.00
4,100.00	9.23	70.77	4,080.69	84.18	241.37	-65.04	0.00	0.00	0.00
4,200.00	9.23	70.77	4,179.39	89.47	256.52	-69.12	0.00	0.00	0.00
4,300.00	9.23	70.77	4,278.10	94.75	271.67	-73.20	0.00	0.00	0.00
4,400.00	9.23	70.77	4,376.80	100.04	286.82	-77.29	0.00	0.00	0.00
4,500.00	9.23	70.77	4,475.51	105.32	301.98	-81.37	0.00	0.00	0.00
4,600.00	9.23	70.77	4,574.21	110.61	317.13	-85.45	0.00	0.00	0.00
4,700.00	9.23	70.77	4,672.91	115.89	332.28	-89.54	0.00	0.00	0.00
4,800.00	9.23	70.77	4,771.62	121.18	347.44	-93.62	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Company:	Franklin Mountain Energy	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site:	PF Fed Com	North Reference:	Grid
Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	9.23	70.77	4,870.32	126.46	362.59	-97.70	0.00	0.00	0.00
5,000.00	9.23	70.77	4,969.03	131.75	377.74	-101.79	0.00	0.00	0.00
5,100.00	9.23	70.77	5,067.73	137.03	392.90	-105.87	0.00	0.00	0.00
5,200.00	9.23	70.77	5,166.43	142.32	408.05	-109.95	0.00	0.00	0.00
5,300.00	9.23	70.77	5,265.14	147.60	423.20	-114.04	0.00	0.00	0.00
5,400.00	9.23	70.77	5,363.84	152.89	438.36	-118.12	0.00	0.00	0.00
5,500.00	9.23	70.77	5,462.54	158.17	453.51	-122.20	0.00	0.00	0.00
5,600.00	9.23	70.77	5,561.25	163.46	468.66	-126.29	0.00	0.00	0.00
5,700.00	9.23	70.77	5,659.95	168.74	483.82	-130.37	0.00	0.00	0.00
5,800.00	9.23	70.77	5,758.66	174.03	498.97	-134.45	0.00	0.00	0.00
5,900.00	9.23	70.77	5,857.36	179.31	514.12	-138.54	0.00	0.00	0.00
6,000.00	9.23	70.77	5,956.06	184.60	529.28	-142.62	0.00	0.00	0.00
6,100.00	9.23	70.77	6,054.77	189.88	544.43	-146.70	0.00	0.00	0.00
6,200.00	9.23	70.77	6,153.47	195.17	559.58	-150.79	0.00	0.00	0.00
6,300.00	9.23	70.77	6,252.18	200.45	574.73	-154.87	0.00	0.00	0.00
6,400.00	9.23	70.77	6,350.88	205.74	589.89	-158.95	0.00	0.00	0.00
6,500.00	9.23	70.77	6,449.58	211.02	605.04	-163.03	0.00	0.00	0.00
6,600.00	9.23	70.77	6,548.29	216.30	620.19	-167.12	0.00	0.00	0.00
6,700.00	9.23	70.77	6,646.99	221.59	635.35	-171.20	0.00	0.00	0.00
6,758.77	9.23	70.77	6,705.00	224.70	644.25	-173.60	0.00	0.00	0.00
Start Drop -1.50									
6,800.00	8.62	70.77	6,745.73	226.80	650.29	-175.23	1.50	-1.50	0.00
6,900.00	7.12	70.77	6,844.79	231.31	663.22	-178.71	1.50	-1.50	0.00
7,000.00	5.62	70.77	6,944.17	234.96	673.69	-181.53	1.50	-1.50	0.00
7,100.00	4.12	70.77	7,043.80	237.75	681.70	-183.69	1.50	-1.50	0.00
7,200.00	2.62	70.77	7,143.63	239.69	687.24	-185.18	1.50	-1.50	0.00
7,300.00	1.12	70.77	7,243.57	240.76	690.32	-186.01	1.50	-1.50	0.00
7,374.43	0.00	0.00	7,318.00	241.00	691.00	-186.20	1.50	-1.50	0.00
Start 2459.04 hold at 7374.43 MD									
7,400.00	0.00	0.00	7,343.57	241.00	691.00	-186.20	0.00	0.00	0.00
7,500.00	0.00	0.00	7,443.57	241.00	691.00	-186.20	0.00	0.00	0.00
7,600.00	0.00	0.00	7,543.57	241.00	691.00	-186.20	0.00	0.00	0.00
7,700.00	0.00	0.00	7,643.57	241.00	691.00	-186.20	0.00	0.00	0.00
7,800.00	0.00	0.00	7,743.57	241.00	691.00	-186.20	0.00	0.00	0.00
7,900.00	0.00	0.00	7,843.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,000.00	0.00	0.00	7,943.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,100.00	0.00	0.00	8,043.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,200.00	0.00	0.00	8,143.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,300.00	0.00	0.00	8,243.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,400.00	0.00	0.00	8,343.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,500.00	0.00	0.00	8,443.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,600.00	0.00	0.00	8,543.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,700.00	0.00	0.00	8,643.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,800.00	0.00	0.00	8,743.57	241.00	691.00	-186.20	0.00	0.00	0.00
8,900.00	0.00	0.00	8,843.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,000.00	0.00	0.00	8,943.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,100.00	0.00	0.00	9,043.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,200.00	0.00	0.00	9,143.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,300.00	0.00	0.00	9,243.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,400.00	0.00	0.00	9,343.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,500.00	0.00	0.00	9,443.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,600.00	0.00	0.00	9,543.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,700.00	0.00	0.00	9,643.57	241.00	691.00	-186.20	0.00	0.00	0.00
9,800.00	0.00	0.00	9,743.57	241.00	691.00	-186.20	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Company:	Franklin Mountain Energy	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site:	PF Fed Com	North Reference:	Grid
Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,833.47	0.00	0.00	9,777.04	241.00	691.00	-186.20	0.00	0.00	0.00	
Start DLS 10.00 TFO 179.43										
9,850.00	1.65	179.43	9,793.56	240.76	691.00	-185.96	10.00	10.00	0.00	
9,900.00	6.65	179.43	9,843.42	237.14	691.04	-182.35	10.00	10.00	0.00	
9,950.00	11.65	179.43	9,892.77	229.19	691.12	-174.42	10.00	10.00	0.00	
10,000.00	16.65	179.43	9,941.23	216.97	691.24	-162.22	10.00	10.00	0.00	
10,050.00	21.65	179.43	9,988.45	200.57	691.40	-145.86	10.00	10.00	0.00	
10,100.00	26.65	179.43	10,034.06	180.12	691.61	-125.46	10.00	10.00	0.00	
10,150.00	31.65	179.43	10,077.71	155.77	691.85	-101.17	10.00	10.00	0.00	
10,200.00	36.65	179.43	10,119.07	127.71	692.13	-73.17	10.00	10.00	0.00	
10,250.00	41.65	179.43	10,157.84	96.16	692.45	-41.68	10.00	10.00	0.00	
10,300.00	46.65	179.43	10,193.70	61.34	692.80	-6.95	10.00	10.00	0.00	
10,350.00	51.65	179.43	10,226.39	23.53	693.18	30.77	10.00	10.00	0.00	
10,400.00	56.65	179.43	10,255.66	-16.98	693.58	71.20	10.00	10.00	0.00	
10,450.00	61.65	179.43	10,281.29	-59.89	694.01	114.01	10.00	10.00	0.00	
10,500.00	66.65	179.43	10,303.08	-104.88	694.46	158.89	10.00	10.00	0.00	
10,550.00	71.65	179.43	10,320.87	-151.58	694.93	205.49	10.00	10.00	0.00	
10,600.00	76.65	179.43	10,334.52	-199.67	695.41	253.46	10.00	10.00	0.00	
10,650.00	81.65	179.43	10,343.93	-248.76	695.90	302.44	10.00	10.00	0.00	
10,700.00	86.65	179.43	10,349.02	-298.48	696.40	352.05	10.00	10.00	0.00	
10,733.47	90.00	179.43	10,350.00	-331.93	696.74	385.43	10.00	10.00	0.00	
Start 9796.26 hold at 10733.47 MD - LP (PF Fed Com 504H)										
10,800.00	90.00	179.43	10,350.00	-398.45	697.40	451.80	0.00	0.00	0.00	
10,900.00	90.00	179.43	10,350.00	-498.45	698.40	551.56	0.00	0.00	0.00	
11,000.00	90.00	179.43	10,350.00	-598.44	699.41	651.33	0.00	0.00	0.00	
11,100.00	90.00	179.43	10,350.00	-698.44	700.41	751.10	0.00	0.00	0.00	
11,200.00	90.00	179.43	10,350.00	-798.43	701.41	850.86	0.00	0.00	0.00	
11,300.00	90.00	179.43	10,350.00	-898.43	702.41	950.63	0.00	0.00	0.00	
11,400.00	90.00	179.43	10,350.00	-998.42	703.41	1,050.40	0.00	0.00	0.00	
11,500.00	90.00	179.43	10,350.00	-1,098.42	704.41	1,150.16	0.00	0.00	0.00	
11,600.00	90.00	179.43	10,350.00	-1,198.41	705.41	1,249.93	0.00	0.00	0.00	
11,700.00	90.00	179.43	10,350.00	-1,298.41	706.41	1,349.70	0.00	0.00	0.00	
11,800.00	90.00	179.43	10,350.00	-1,398.40	707.42	1,449.46	0.00	0.00	0.00	
11,900.00	90.00	179.43	10,350.00	-1,498.40	708.42	1,549.23	0.00	0.00	0.00	
12,000.00	90.00	179.43	10,350.00	-1,598.39	709.42	1,649.00	0.00	0.00	0.00	
12,100.00	90.00	179.43	10,350.00	-1,698.39	710.42	1,748.76	0.00	0.00	0.00	
12,200.00	90.00	179.43	10,350.00	-1,798.38	711.42	1,848.53	0.00	0.00	0.00	
12,300.00	90.00	179.43	10,350.00	-1,898.38	712.42	1,948.30	0.00	0.00	0.00	
12,400.00	90.00	179.43	10,350.00	-1,998.37	713.42	2,048.06	0.00	0.00	0.00	
12,500.00	90.00	179.43	10,350.00	-2,098.37	714.42	2,147.83	0.00	0.00	0.00	
12,600.00	90.00	179.43	10,350.00	-2,198.36	715.43	2,247.60	0.00	0.00	0.00	
12,700.00	90.00	179.43	10,350.00	-2,298.36	716.43	2,347.37	0.00	0.00	0.00	
12,800.00	90.00	179.43	10,350.00	-2,398.35	717.43	2,447.13	0.00	0.00	0.00	
12,900.00	90.00	179.43	10,350.00	-2,498.35	718.43	2,546.90	0.00	0.00	0.00	
13,000.00	90.00	179.43	10,350.00	-2,598.34	719.43	2,646.67	0.00	0.00	0.00	
13,100.00	90.00	179.43	10,350.00	-2,698.34	720.43	2,746.43	0.00	0.00	0.00	
13,200.00	90.00	179.43	10,350.00	-2,798.33	721.43	2,846.20	0.00	0.00	0.00	
13,300.00	90.00	179.43	10,350.00	-2,898.33	722.43	2,945.97	0.00	0.00	0.00	
13,400.00	90.00	179.43	10,350.00	-2,998.32	723.44	3,045.73	0.00	0.00	0.00	
13,500.00	90.00	179.43	10,350.00	-3,098.32	724.44	3,145.50	0.00	0.00	0.00	
13,600.00	90.00	179.43	10,350.00	-3,198.31	725.44	3,245.27	0.00	0.00	0.00	
13,700.00	90.00	179.43	10,350.00	-3,298.31	726.44	3,345.03	0.00	0.00	0.00	
13,800.00	90.00	179.43	10,350.00	-3,398.30	727.44	3,444.80	0.00	0.00	0.00	
13,900.00	90.00	179.43	10,350.00	-3,498.30	728.44	3,544.57	0.00	0.00	0.00	



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Company:	Franklin Mountain Energy	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site:	PF Fed Com	North Reference:	Grid
Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,000.00	90.00	179.43	10,350.00	-3,598.29	729.44	3,644.33	0.00	0.00	0.00	
14,100.00	90.00	179.43	10,350.00	-3,698.29	730.45	3,744.10	0.00	0.00	0.00	
14,200.00	90.00	179.43	10,350.00	-3,798.28	731.45	3,843.87	0.00	0.00	0.00	
14,300.00	90.00	179.43	10,350.00	-3,898.28	732.45	3,943.63	0.00	0.00	0.00	
14,400.00	90.00	179.43	10,350.00	-3,998.27	733.45	4,043.40	0.00	0.00	0.00	
14,500.00	90.00	179.43	10,350.00	-4,098.27	734.45	4,143.17	0.00	0.00	0.00	
14,600.00	90.00	179.43	10,350.00	-4,198.26	735.45	4,242.93	0.00	0.00	0.00	
14,700.00	90.00	179.43	10,350.00	-4,298.26	736.45	4,342.70	0.00	0.00	0.00	
14,800.00	90.00	179.43	10,350.00	-4,398.25	737.45	4,442.47	0.00	0.00	0.00	
14,900.00	90.00	179.43	10,350.00	-4,498.25	738.46	4,542.23	0.00	0.00	0.00	
15,000.00	90.00	179.43	10,350.00	-4,598.24	739.46	4,642.00	0.00	0.00	0.00	
15,100.00	90.00	179.43	10,350.00	-4,698.24	740.46	4,741.77	0.00	0.00	0.00	
15,200.00	90.00	179.43	10,350.00	-4,798.23	741.46	4,841.54	0.00	0.00	0.00	
15,300.00	90.00	179.43	10,350.00	-4,898.23	742.46	4,941.30	0.00	0.00	0.00	
15,400.00	90.00	179.43	10,350.00	-4,998.22	743.46	5,041.07	0.00	0.00	0.00	
15,500.00	90.00	179.43	10,350.00	-5,098.22	744.46	5,140.84	0.00	0.00	0.00	
15,600.00	90.00	179.43	10,350.00	-5,198.21	745.46	5,240.60	0.00	0.00	0.00	
15,700.00	90.00	179.43	10,350.00	-5,298.21	746.47	5,340.37	0.00	0.00	0.00	
15,800.00	90.00	179.43	10,350.00	-5,398.20	747.47	5,440.14	0.00	0.00	0.00	
15,900.00	90.00	179.43	10,350.00	-5,498.20	748.47	5,539.90	0.00	0.00	0.00	
16,000.00	90.00	179.43	10,350.00	-5,598.19	749.47	5,639.67	0.00	0.00	0.00	
16,100.00	90.00	179.43	10,350.00	-5,698.19	750.47	5,739.44	0.00	0.00	0.00	
16,200.00	90.00	179.43	10,350.00	-5,798.18	751.47	5,839.20	0.00	0.00	0.00	
16,300.00	90.00	179.43	10,350.00	-5,898.18	752.47	5,938.97	0.00	0.00	0.00	
16,400.00	90.00	179.43	10,350.00	-5,998.17	753.47	6,038.74	0.00	0.00	0.00	
16,500.00	90.00	179.43	10,350.00	-6,098.17	754.48	6,138.50	0.00	0.00	0.00	
16,600.00	90.00	179.43	10,350.00	-6,198.16	755.48	6,238.27	0.00	0.00	0.00	
16,700.00	90.00	179.43	10,350.00	-6,298.16	756.48	6,338.04	0.00	0.00	0.00	
16,800.00	90.00	179.43	10,350.00	-6,398.15	757.48	6,437.80	0.00	0.00	0.00	
16,900.00	90.00	179.43	10,350.00	-6,498.15	758.48	6,537.57	0.00	0.00	0.00	
17,000.00	90.00	179.43	10,350.00	-6,598.14	759.48	6,637.34	0.00	0.00	0.00	
17,100.00	90.00	179.43	10,350.00	-6,698.14	760.48	6,737.10	0.00	0.00	0.00	
17,200.00	90.00	179.43	10,350.00	-6,798.13	761.48	6,836.87	0.00	0.00	0.00	
17,300.00	90.00	179.43	10,350.00	-6,898.13	762.49	6,936.64	0.00	0.00	0.00	
17,400.00	90.00	179.43	10,350.00	-6,998.12	763.49	7,036.40	0.00	0.00	0.00	
17,500.00	90.00	179.43	10,350.00	-7,098.12	764.49	7,136.17	0.00	0.00	0.00	
17,600.00	90.00	179.43	10,350.00	-7,198.11	765.49	7,235.94	0.00	0.00	0.00	
17,700.00	90.00	179.43	10,350.00	-7,298.11	766.49	7,335.71	0.00	0.00	0.00	
17,800.00	90.00	179.43	10,350.00	-7,398.10	767.49	7,435.47	0.00	0.00	0.00	
17,900.00	90.00	179.43	10,350.00	-7,498.10	768.49	7,535.24	0.00	0.00	0.00	
18,000.00	90.00	179.43	10,350.00	-7,598.09	769.49	7,635.01	0.00	0.00	0.00	
18,100.00	90.00	179.43	10,350.00	-7,698.09	770.50	7,734.77	0.00	0.00	0.00	
18,200.00	90.00	179.43	10,350.00	-7,798.08	771.50	7,834.54	0.00	0.00	0.00	
18,300.00	90.00	179.43	10,350.00	-7,898.08	772.50	7,934.31	0.00	0.00	0.00	
18,400.00	90.00	179.43	10,350.00	-7,998.07	773.50	8,034.07	0.00	0.00	0.00	
18,500.00	90.00	179.43	10,350.00	-8,098.07	774.50	8,133.84	0.00	0.00	0.00	
18,600.00	90.00	179.43	10,350.00	-8,198.06	775.50	8,233.61	0.00	0.00	0.00	
18,700.00	90.00	179.43	10,350.00	-8,298.06	776.50	8,333.37	0.00	0.00	0.00	
18,800.00	90.00	179.43	10,350.00	-8,398.05	777.51	8,433.14	0.00	0.00	0.00	
18,900.00	90.00	179.43	10,350.00	-8,498.05	778.51	8,532.91	0.00	0.00	0.00	
19,000.00	90.00	179.43	10,350.00	-8,598.04	779.51	8,632.67	0.00	0.00	0.00	
19,100.00	90.00	179.43	10,350.00	-8,698.04	780.51	8,732.44	0.00	0.00	0.00	
19,200.00	90.00	179.43	10,350.00	-8,798.03	781.51	8,832.21	0.00	0.00	0.00	
19,300.00	90.00	179.43	10,350.00	-8,898.03	782.51	8,931.97	0.00	0.00	0.00	



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Company:	Franklin Mountain Energy	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site:	PF Fed Com	North Reference:	Grid
Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
19,400.00	90.00	179.43	10,350.00	-8,998.02	783.51	9,031.74	0.00	0.00	0.00	
19,500.00	90.00	179.43	10,350.00	-9,098.02	784.51	9,131.51	0.00	0.00	0.00	
19,600.00	90.00	179.43	10,350.00	-9,198.01	785.52	9,231.27	0.00	0.00	0.00	
19,700.00	90.00	179.43	10,350.00	-9,298.01	786.52	9,331.04	0.00	0.00	0.00	
19,800.00	90.00	179.43	10,350.00	-9,398.00	787.52	9,430.81	0.00	0.00	0.00	
19,900.00	90.00	179.43	10,350.00	-9,498.00	788.52	9,530.57	0.00	0.00	0.00	
20,000.00	90.00	179.43	10,350.00	-9,597.99	789.52	9,630.34	0.00	0.00	0.00	
20,100.00	90.00	179.43	10,350.00	-9,697.99	790.52	9,730.11	0.00	0.00	0.00	
20,200.00	90.00	179.43	10,350.00	-9,797.98	791.52	9,829.88	0.00	0.00	0.00	
20,300.00	90.00	179.43	10,350.00	-9,897.98	792.52	9,929.64	0.00	0.00	0.00	
20,400.00	90.00	179.43	10,350.00	-9,997.97	793.53	10,029.41	0.00	0.00	0.00	
20,500.00	90.00	179.43	10,350.00	-10,097.97	794.53	10,129.18	0.00	0.00	0.00	
20,529.73	90.00	179.43	10,350.00	-10,127.70	794.82	10,158.84	0.00	0.00	0.00	
TD at 20529.73 - PBHL (PF Fed Com 504H)										

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 (PF Fed Com 504H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	393,886.20	856,376.83	32.078790	-103.316191	
LP (PF Fed Com 504H) - plan hits target center - Point	0.00	0.00	10,350.00	-331.93	696.74	393,554.27	857,073.57	32.077860	-103.313952	
PBHL (PF Fed Com 504) - plan hits target center - Point	0.00	0.00	10,350.00	-10,127.70	794.82	383,758.50	857,171.65	32.050933	-103.313934	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,200.00	2,200.00	0.00	0.00	Start Build 1.50	
2,815.66	2,813.00	16.30	46.75	Start 3943.11 hold at 2815.66 MD	
6,758.77	6,705.00	224.70	644.25	Start Drop -1.50	
7,374.43	7,318.00	241.00	691.00	Start 2459.04 hold at 7374.43 MD	
9,833.47	9,777.04	241.00	691.00	Start DLS 10.00 TFO 179.43	
10,733.47	10,350.00	-331.93	696.74	Start 9796.26 hold at 10733.47 MD	
20,529.73	10,350.00	-10,127.70	794.82	TD at 20529.73	



Franklin Mountain Energy

Lea County, NM (NAD83)
PF Fed Com
Paul Foster Fed Com 504H

OH
Plan #1

Anticollision Report

17 July, 2021





Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	7/17/2021
From (usft)	To (usft)	Survey (Wellbore)
0.00	20,529.59	Plan #1 (OH)
		Tool Name
		OWSG (Rev2) MWD
		Description
		OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Bus Driver/Kaston Fed Com						
Bus Driver Fed Com 602H - OH - OH	0.00	26.16	1,898.19			
Bus Driver Fed Com 602H - OH - OH	1,408.24	1,435.69	1,899.93	1,893.22	282.930	ES
Bus Driver Fed Com 602H - OH - OH	15,600.00	16,643.00	3,189.14	3,068.68	26.474	SF
Bus Driver Fed Com 602H - OH - Plan #6	0.00	26.16	1,898.19			
Bus Driver Fed Com 602H - OH - Plan #6	1,408.24	1,435.69	1,899.93	1,893.22	282.930	ES
Bus Driver Fed Com 602H - OH - Plan #6	20,529.73	21,830.76	3,293.35	3,077.52	15.259	SF
Bus Driver Fed Com 702H - OH - OH	0.00	16.00	1,931.34			
Bus Driver Fed Com 702H - OH - OH	10,600.00	10,377.86	3,217.81	3,168.48	65.225	SF
Bus Driver Fed Com 702H - OH - Plan #5	0.00	16.00	1,931.34			
Bus Driver Fed Com 702H - OH - Plan #5	20,529.73	22,205.82	3,677.55	3,453.74	16.432	SF
Kaston Fed Com 603H - OH - OH	6,426.80	6,724.31	1,602.73	1,571.53	51.368	CC
Kaston Fed Com 603H - OH - OH	10,017.63	10,059.00	1,613.16	1,565.24	33.666	ES
Kaston Fed Com 603H - OH - OH	20,529.73	22,042.62	2,393.41	2,199.84	12.365	SF
Kaston Fed Com 703H - OH - OH	0.00	25.05	1,865.01			
Kaston Fed Com 703H - OH - OH	10,450.00	10,354.62	2,235.92	2,187.18	45.878	SF
Kaston Fed Com 703H - OH - Plan #9	0.00	25.05	1,865.01			
Kaston Fed Com 703H - OH - Plan #9	20,529.73	22,192.00	2,778.76	2,567.44	13.149	SF
Judge Baylor Fed Com						
Judge Baylor Fed Com 601H - OH - Plan #5	2,200.00	2,239.00	3,761.60	3,750.68	344.381	CC, ES
Judge Baylor Fed Com 601H - OH - Plan #5	20,529.73	22,079.96	4,855.62	4,618.05	20.439	SF
Judge Baylor Fed Com 701H - OH - Plan #5	2,200.00	2,239.00	3,726.97	3,716.05	341.210	CC, ES
Judge Baylor Fed Com 701H - OH - Plan #5	20,529.73	22,367.65	4,681.87	4,449.84	20.178	SF
LHS Wildcat Fed Com						
LHS Wildcat Fed Com 604H - OH - OH	5,970.53	5,944.75	171.99	143.55	6.048	CC
LHS Wildcat Fed Com 604H - OH - OH	6,000.00	5,973.59	172.12	143.54	6.023	ES
LHS Wildcat Fed Com 604H - OH - OH	10,050.00	10,012.73	284.21	236.79	5.993	SF
LHS Wildcat Fed Com 705H - OH - OH	7,302.17	7,257.44	63.72	28.83	1.826	CC, ES
LHS Wildcat Fed Com 705H - OH - OH	9,850.00	9,807.81	83.64	36.98	1.793	SF

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

7/17/2021 12:15:10AM

Page 2

COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
PF Fed Com						
Paul Foster Fed Com 103H - OH - Plan #1	2,000.00	2,000.00	49.87	40.06	5.084	CC, ES
Paul Foster Fed Com 103H - OH - Plan #1	2,100.00	2,098.72	51.14	40.83	4.962	SF
Paul Foster Fed Com 104H - OH - Plan #1	2,100.00	2,100.00	25.09	14.77	2.432	CC, ES
Paul Foster Fed Com 104H - OH - Plan #1	4,500.00	4,494.97	39.06	15.83	1.682	SF
Paul Foster Fed Com 503H - OH - Plan #1	2,100.00	2,100.00	25.09	14.77	2.432	CC, ES, SF
Paul Foster Fed Com 804H - OH - Plan #1	2,000.00	2,000.00	83.80	73.99	8.542	CC, ES
Paul Foster Fed Com 804H - OH - Plan #1	2,200.00	2,196.90	87.36	76.57	8.091	SF
Paul Foster Fed Com 805H - OH - Plan #1	2,200.00	2,200.00	75.96	65.14	7.018	CC
Paul Foster Fed Com 805H - OH - Plan #1	2,300.00	2,299.38	76.16	64.84	6.727	ES
Paul Foster Fed Com 805H - OH - Plan #1	3,000.00	2,997.03	84.72	69.88	5.707	SF
Paul Foster Fed Com 806H - OH - Plan #1	4,794.87	4,788.91	47.91	23.10	1.931	CC
Paul Foster Fed Com 806H - OH - Plan #1	5,000.00	4,993.94	48.34	22.48	1.870	ES
Paul Foster Fed Com 806H - OH - Plan #1	9,900.00	9,882.89	79.45	29.86	1.602	SF
PF Fed Com 101H - OH - Plan #1	1,907.27	1,929.27	2,962.79	2,953.40	315.345	CC
PF Fed Com 101H - OH - Plan #1	2,000.00	2,016.00	2,962.81	2,952.96	300.794	ES
PF Fed Com 101H - OH - Plan #1	20,529.73	18,634.72	4,394.47	4,172.36	19.785	SF
PF Fed Com 102H - OH - Plan #1	6,439.97	6,919.36	2,793.57	2,759.04	80.918	CC, ES
PF Fed Com 102H - OH - Plan #1	20,529.73	18,766.36	3,295.89	3,086.87	15.768	SF
PF Fed Com 501H - OH - Plan #1	2,007.27	2,029.27	2,938.20	2,928.30	296.718	CC
PF Fed Com 501H - OH - Plan #1	2,100.00	2,116.42	2,938.22	2,927.86	283.666	ES
PF Fed Com 501H - OH - Plan #1	20,529.73	20,792.10	4,013.37	3,773.41	16.725	SF
PF Fed Com 502H - OH - Plan #1	10,868.46	11,073.75	2,806.89	2,753.34	52.417	CC
PF Fed Com 502H - OH - Plan #1	20,529.73	20,734.30	2,809.36	2,569.17	11.697	ES, SF
PF Fed Com 801H - OH - Plan #1	1,907.26	1,929.26	2,942.16	2,932.77	313.150	CC
PF Fed Com 801H - OH - Plan #1	2,000.00	2,000.00	2,942.25	2,932.44	299.942	ES
PF Fed Com 801H - OH - Plan #1	20,529.73	22,715.49	4,644.95	4,424.24	21.046	SF
PF Fed Com 802H - OH - Plan #1	2,487.77	2,724.48	2,914.91	2,902.06	226.964	CC
PF Fed Com 802H - OH - Plan #1	2,500.00	2,736.66	2,914.92	2,902.02	225.892	ES
PF Fed Com 802H - OH - Plan #1	20,529.73	22,616.97	3,801.52	3,587.91	17.797	SF
PF Fed Com 803H - OH - Plan #1	6,609.12	7,100.00	2,307.54	2,271.28	63.648	CC
PF Fed Com 803H - OH - Plan #1	10,000.00	10,135.18	2,316.36	2,265.08	45.163	ES
PF Fed Com 803H - OH - Plan #1	20,529.73	22,819.94	3,086.81	2,891.83	15.832	SF

Offset Design Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1352-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance		Minimum Separation		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor		
0.00	0.00	26.16	26.16	0.00	0.03	-72.21	579.89	-1,807.44	1,898.19				
100.00	100.00	125.35	125.35	0.13	0.19	-72.21	580.11	-1,807.42	1,898.24	1,898.01	0.23	8,243.976	
200.00	200.00	221.47	221.47	0.48	0.53	-72.20	580.23	-1,807.47	1,898.32	1,897.60	0.72	2,650.273	
300.00	300.00	299.82	299.81	0.84	0.81	-72.19	580.95	-1,807.94	1,899.17	1,898.01	1.17	1,627.399	
400.00	400.00	378.41	378.38	1.20	1.09	-72.16	582.30	-1,809.16	1,901.17	1,899.55	1.62	1,172.863	
500.00	500.00	477.76	477.69	1.56	1.44	-72.14	583.83	-1,811.57	1,903.95	1,901.83	2.12	896.338	
600.00	600.00	589.79	589.69	1.92	1.84	-72.16	583.79	-1,814.16	1,906.13	1,903.47	2.66	717.611	
700.00	700.00	686.47	686.31	2.28	2.18	-72.24	581.77	-1,816.61	1,907.92	1,904.77	3.15	605.944	
800.00	800.00	871.75	871.22	2.63	2.83	-72.57	570.90	-1,818.31	1,906.35	1,902.49	3.86	493.907	
900.00	900.00	959.19	958.40	2.99	3.14	-72.77	564.18	-1,819.23	1,904.98	1,900.64	4.33	439.597	
1,000.00	1,000.00	1,048.80	1,047.84	3.35	3.46	-72.93	558.72	-1,819.51	1,903.48	1,898.67	4.81	395.452	
1,100.00	1,100.00	1,155.57	1,154.44	3.71	3.84	-73.11	552.73	-1,820.05	1,902.33	1,896.99	5.34	356.322	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH		Offset Site Error:	0.00 usft
Survey Program:													112-OWSG (Rev2) MWD, 1352-OWSG (Rev2) MWD		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)					
1,200.00	1,200.00	1,245.09	1,243.85	4.07	4.16	-73.23	548.46	-1,820.02	1,900.94	1,895.12	5.82	326.642				
1,300.00	1,300.00	1,337.54	1,336.25	4.43	4.49	-73.33	545.13	-1,820.27	1,900.17	1,893.86	6.31	301.255				
1,400.00	1,400.00	1,425.00	1,423.68	4.79	4.68	-73.39	543.25	-1,820.62	1,899.94	1,893.25	6.69	283.902				
1,408.24	1,408.24	1,435.69	1,434.38	4.82	4.68	-73.39	543.06	-1,820.67	1,899.93	1,893.22	6.72	282.930	ES			
1,500.00	1,500.00	1,506.63	1,505.31	5.14	4.70	-73.42	542.34	-1,821.30	1,900.45	1,893.49	6.97	272.802				
1,600.00	1,600.00	1,600.44	1,599.11	5.50	4.74	-73.41	542.86	-1,822.47	1,901.80	1,894.54	7.26	261.912				
1,700.00	1,700.00	1,697.89	1,696.53	5.86	4.80	-73.37	544.66	-1,823.47	1,903.31	1,895.73	7.58	251.221				
1,800.00	1,800.00	1,798.51	1,797.12	6.22	4.89	-73.31	546.94	-1,824.43	1,904.87	1,896.96	7.91	240.768				
1,900.00	1,900.00	1,901.81	1,900.40	6.58	5.01	-73.25	549.27	-1,825.32	1,906.35	1,898.08	8.27	230.586				
2,000.00	2,000.00	2,014.68	2,013.23	6.94	5.17	-73.18	551.85	-1,825.73	1,907.35	1,898.71	8.65	220.550				
2,100.00	2,100.00	2,121.82	2,120.34	7.29	5.34	-73.10	554.55	-1,825.45	1,907.84	1,898.80	9.04	211.090				
2,200.00	2,200.00	2,225.16	2,223.63	7.65	5.52	-73.01	557.45	-1,824.81	1,908.06	1,898.62	9.44	202.206				
2,300.00	2,299.99	2,325.06	2,323.49	8.01	5.72	-143.71	560.44	-1,824.03	1,909.24	1,899.41	9.84	194.107				
2,400.00	2,399.91	2,424.92	2,423.29	8.35	5.93	-143.65	563.68	-1,823.22	1,912.59	1,902.35	10.24	186.765				
2,500.00	2,499.69	2,547.19	2,545.51	8.70	6.20	-143.64	566.98	-1,821.88	1,917.64	1,906.95	10.68	179.512				
2,600.00	2,599.27	2,651.00	2,649.29	9.06	6.45	-143.69	568.62	-1,819.96	1,923.71	1,912.60	11.11	173.166				
2,700.00	2,698.57	2,735.15	2,733.42	9.42	6.65	-143.76	569.25	-1,818.91	1,932.25	1,920.74	11.51	167.835				
2,800.00	2,797.54	2,827.30	2,825.57	9.78	6.87	-143.90	568.89	-1,818.81	1,943.67	1,931.74	11.93	162.919				
2,815.66	2,813.00	2,842.60	2,840.87	9.84	6.91	-143.92	568.83	-1,818.82	1,945.67	1,933.67	12.00	162.169				
2,900.00	2,896.24	2,938.79	2,937.06	10.15	7.16	-144.19	568.82	-1,818.44	1,956.35	1,943.97	12.38	157.967				
3,000.00	2,994.95	3,064.81	3,063.06	10.53	7.50	-144.49	569.76	-1,816.19	1,967.93	1,955.06	12.87	152.882				
3,100.00	3,093.65	3,159.44	3,157.65	10.91	7.76	-144.71	570.30	-1,813.81	1,978.83	1,965.51	13.32	148.599				
3,200.00	3,192.36	3,239.90	3,238.11	11.29	7.99	-144.95	569.49	-1,812.96	1,990.69	1,976.95	13.74	144.880				
3,300.00	3,291.06	3,335.45	3,333.57	11.68	8.25	-145.31	565.54	-1,813.09	2,002.95	1,988.76	14.19	141.145				
3,400.00	3,389.76	3,406.00	3,403.95	12.07	8.46	-145.63	560.79	-1,813.99	2,015.85	2,001.25	14.60	138.068				
3,500.00	3,488.47	3,475.42	3,473.11	12.47	8.66	-145.98	555.20	-1,816.11	2,030.23	2,015.22	15.01	135.269				
3,600.00	3,587.17	3,540.28	3,537.64	12.87	8.85	-146.32	549.63	-1,819.49	2,046.54	2,031.13	15.41	132.834				
3,700.00	3,685.88	3,612.85	3,609.81	13.27	9.07	-146.70	543.66	-1,824.25	2,064.35	2,048.53	15.82	130.495				
3,800.00	3,784.58	3,699.84	3,696.38	13.67	9.34	-147.11	537.67	-1,830.31	2,083.03	2,066.76	16.26	128.072				
3,900.00	3,883.28	3,784.00	3,780.22	14.08	9.60	-147.47	533.47	-1,836.35	2,102.41	2,085.70	16.70	125.858				
4,000.00	3,981.99	3,870.54	3,866.39	14.49	9.87	-147.83	529.18	-1,843.02	2,122.42	2,105.27	17.15	123.743				
4,100.00	4,080.69	3,988.45	3,983.48	14.90	10.26	-148.42	519.28	-1,852.59	2,142.26	2,124.58	17.68	121.164				
4,200.00	4,179.39	4,091.85	4,085.94	15.31	10.60	-149.00	508.09	-1,860.82	2,161.65	2,143.47	18.18	118.911				
4,300.00	4,278.10	4,191.79	4,185.19	15.72	10.94	-149.49	498.92	-1,868.04	2,180.82	2,162.14	18.67	116.805				
4,400.00	4,376.80	4,308.44	4,301.22	16.13	11.34	-150.01	490.08	-1,876.21	2,200.29	2,181.08	19.21	114.562				
4,500.00	4,475.51	4,455.46	4,447.82	16.55	11.83	-150.58	481.19	-1,882.73	2,217.46	2,197.65	19.82	111.901				
4,600.00	4,574.21	4,564.08	4,556.21	16.97	12.20	-150.98	474.97	-1,886.07	2,233.57	2,213.24	20.33	109.846				
4,700.00	4,672.91	4,649.31	4,641.14	17.38	12.49	-151.32	468.52	-1,889.08	2,249.94	2,229.14	20.80	108.188				
4,800.00	4,771.62	4,733.92	4,725.42	17.80	12.78	-151.67	461.89	-1,892.60	2,266.97	2,245.71	21.26	106.637				
4,900.00	4,870.32	4,828.53	4,819.66	18.22	13.11	-152.05	454.82	-1,896.79	2,284.42	2,262.67	21.75	105.045				
5,000.00	4,969.03	4,920.94	4,911.72	18.64	13.44	-152.42	447.79	-1,901.04	2,302.12	2,279.89	22.23	103.556				
5,100.00	5,067.73	5,006.92	4,997.29	19.07	13.74	-152.77	440.76	-1,905.39	2,320.29	2,297.60	22.70	102.225				
5,200.00	5,166.43	5,096.50	5,086.46	19.49	14.06	-153.12	433.64	-1,910.24	2,338.94	2,315.77	23.18	100.924				
5,300.00	5,265.14	5,193.15	5,182.62	19.91	14.41	-153.51	425.66	-1,915.68	2,357.87	2,334.20	23.67	99.600				
5,400.00	5,363.84	5,319.77	5,308.29	20.33	14.88	-154.08	411.73	-1,922.28	2,376.20	2,351.94	24.26	97.943				
5,500.00	5,462.54	5,421.40	5,409.05	20.76	15.26	-154.57	399.33	-1,927.07	2,394.10	2,369.32	24.78	96.611				
5,600.00	5,561.25	5,533.82	5,520.57	21.18	15.68	-155.08	386.02	-1,931.84	2,411.73	2,386.40	25.33	95.205				
5,700.00	5,659.95	5,618.74	5,604.88	21.61	15.99	-155.46	376.31	-1,935.06	2,429.14	2,403.33	25.81	94.134				
5,800.00	5,758.66	5,688.31	5,673.93	22.04	16.26	-155.76	368.55	-1,938.51	2,447.76	2,421.53	26.23	93.313				
5,900.00	5,857.36	5,781.92	5,766.85	22.46	16.61	-156.15	358.48	-1,943.70	2,467.12	2,440.39	26.73	92.301				
6,000.00	5,956.06	5,906.31	5,890.51	22.89	17.07	-156.63	346.45	-1,949.67	2,485.93	2,458.61	27.32	90.999				
6,100.00	6,054.77	6,010.32	5,994.01	23.32	17.46	-157.01	337.05	-1,953.92	2,504.20	2,476.35	27.85	89.932				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH		Offset Site Error:	0.00 usft
Survey Program:		112-OWSG (Rev2) MWD, 1352-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				
6,200.00	6,153.47	6,113.96	6,097.17	23.75	17.84	-157.37	327.95	-1,957.96	2,522.40	2,494.03	28.37	88.906				
6,300.00	6,252.18	6,194.43	6,177.29	24.18	18.14	-157.65	321.09	-1,961.08	2,540.71	2,511.88	28.83	88.130				
6,400.00	6,350.88	6,266.62	6,249.09	24.60	18.42	-157.90	314.56	-1,964.64	2,560.07	2,530.81	29.26	87.494				
6,500.00	6,449.58	6,346.24	6,328.20	25.03	18.72	-158.19	306.86	-1,969.27	2,580.33	2,550.62	29.71	86.842				
6,600.00	6,548.29	6,448.05	6,429.34	25.46	19.11	-158.55	296.94	-1,975.35	2,600.86	2,570.63	30.24	86.013				
6,700.00	6,646.99	6,550.34	6,530.95	25.89	19.50	-158.92	286.73	-1,981.25	2,621.29	2,590.52	30.77	85.202				
6,758.77	6,705.00	6,611.02	6,591.24	26.15	19.73	-159.13	280.71	-1,984.64	2,633.23	2,602.15	31.08	84.731				
6,800.00	6,745.73	6,658.06	6,637.99	26.32	19.91	-159.33	276.20	-1,987.17	2,641.34	2,610.03	31.31	84.362				
6,900.00	6,844.79	6,765.79	6,745.17	26.74	20.32	-159.75	266.72	-1,992.53	2,658.97	2,627.12	31.85	83.484				
7,000.00	6,944.17	6,859.67	6,838.64	27.13	20.67	-160.07	259.11	-1,997.09	2,674.15	2,641.80	32.34	82.683				
7,100.00	7,043.80	6,942.58	6,921.21	27.51	20.98	-160.32	253.14	-2,001.42	2,687.30	2,654.50	32.79	81.946				
7,200.00	7,143.63	7,032.35	7,010.67	27.88	21.32	-160.53	247.92	-2,006.71	2,698.67	2,665.41	33.26	81.136				
7,300.00	7,243.57	7,143.15	7,121.16	28.22	21.72	-160.71	242.40	-2,013.04	2,707.45	2,673.66	33.79	80.120				
7,374.43	7,318.00	7,225.35	7,203.14	28.46	22.02	-90.05	238.42	-2,017.43	2,712.12	2,677.93	34.18	79.342				
7,400.00	7,343.57	7,253.29	7,231.02	28.55	22.12	-90.08	237.16	-2,018.87	2,713.44	2,679.12	34.31	79.074				
7,500.00	7,443.57	7,347.08	7,324.59	28.87	22.46	-90.16	233.23	-2,023.71	2,718.62	2,683.84	34.78	78.160				
7,600.00	7,543.57	7,477.55	7,454.81	29.19	22.94	-90.27	228.15	-2,030.13	2,723.60	2,688.23	35.37	77.010				
7,700.00	7,643.57	7,649.93	7,627.04	29.52	23.54	-90.36	224.08	-2,035.53	2,726.92	2,690.86	36.06	75.613				
7,800.00	7,743.57	7,793.97	7,771.08	29.84	24.00	-90.34	224.68	-2,036.30	2,727.35	2,690.70	36.65	74.419				
7,900.00	7,843.57	7,904.90	7,882.00	30.17	24.35	-90.34	225.04	-2,036.10	2,727.17	2,690.03	37.14	73.424				
8,000.00	7,943.57	8,024.25	8,001.35	30.49	24.73	-90.34	224.84	-2,035.17	2,726.39	2,688.73	37.66	72.393				
8,100.00	8,043.57	8,140.45	8,117.53	30.82	25.10	-90.35	224.28	-2,033.44	2,724.91	2,686.74	38.17	71.383				
8,200.00	8,143.57	8,218.00	8,195.07	31.15	25.35	-90.36	223.82	-2,032.06	2,723.23	2,684.63	38.59	70.562				
8,300.00	8,243.57	8,312.00	8,289.07	31.48	25.67	-90.37	223.26	-2,031.25	2,722.38	2,683.32	39.06	69.701				
8,318.93	8,262.50	8,312.00	8,289.07	31.54	25.67	-90.37	223.26	-2,031.25	2,722.31	2,683.21	39.10	69.624				
8,400.00	8,343.57	8,359.80	8,336.86	31.80	25.83	-90.38	223.04	-2,031.57	2,722.83	2,683.43	39.40	69.104				
8,500.00	8,443.57	8,439.75	8,416.80	32.13	26.10	-90.38	222.97	-2,033.10	2,724.68	2,684.85	39.83	68.410				
8,600.00	8,543.57	8,572.75	8,549.79	32.46	26.54	-90.37	223.18	-2,034.83	2,725.97	2,685.57	40.40	67.476				
8,700.00	8,643.57	8,677.45	8,654.48	32.80	26.89	-90.37	223.59	-2,035.46	2,726.56	2,685.67	40.89	66.680				
8,800.00	8,743.57	8,780.17	8,757.21	33.13	27.23	-90.36	223.99	-2,036.00	2,727.08	2,685.71	41.38	65.911				
8,900.00	8,843.57	8,870.07	8,847.10	33.46	27.53	-90.35	224.30	-2,036.58	2,727.73	2,685.90	41.83	65.212				
9,000.00	8,943.57	8,958.78	8,935.81	33.79	27.83	-90.34	224.60	-2,037.51	2,728.78	2,686.50	42.28	64.541				
9,100.00	9,043.57	9,052.79	9,029.80	34.12	28.14	-90.33	225.10	-2,038.82	2,730.16	2,687.41	42.75	63.870				
9,200.00	9,143.57	9,153.39	9,130.39	34.46	28.48	-90.31	226.02	-2,040.31	2,731.64	2,688.41	43.23	63.191				
9,300.00	9,243.57	9,252.50	9,229.48	34.79	28.81	-90.29	227.21	-2,041.77	2,733.10	2,689.40	43.71	62.534				
9,400.00	9,343.57	9,349.00	9,325.96	35.13	29.13	-90.26	228.50	-2,043.29	2,734.67	2,690.49	44.18	61.903				
9,500.00	9,443.57	9,443.00	9,419.94	35.46	29.44	-90.23	229.82	-2,044.95	2,736.43	2,691.79	44.64	61.297				
9,600.00	9,543.57	9,538.00	9,514.91	35.80	29.76	-90.20	231.23	-2,046.84	2,738.42	2,693.31	45.11	60.705				
9,700.00	9,643.57	9,640.63	9,617.51	36.13	30.10	-90.17	232.66	-2,048.90	2,740.42	2,694.82	45.60	60.096				
9,800.00	9,743.57	9,727.00	9,703.85	36.47	30.39	-90.15	233.68	-2,050.60	2,742.41	2,696.37	46.05	59.558				
9,833.47	9,777.04	9,762.82	9,739.67	36.58	30.52	-90.14	234.10	-2,051.38	2,743.14	2,696.92	46.21	59.356				
9,850.00	9,793.56	9,776.20	9,753.04	36.64	30.56	90.40	234.26	-2,051.70	2,743.53	2,697.25	46.28	59.276				
9,900.00	9,843.42	9,877.17	9,853.98	36.79	30.90	90.49	234.96	-2,053.21	2,744.30	2,697.64	46.66	58.821				
9,950.00	9,892.77	10,030.43	10,007.19	36.93	31.40	91.03	233.95	-2,050.48	2,743.01	2,695.88	47.13	58.202				
10,000.00	9,941.23	10,077.45	10,054.19	37.06	31.56	91.40	233.63	-2,048.99	2,741.64	2,694.30	47.34	57.911				
10,050.00	9,988.45	10,124.41	10,101.12	37.19	31.71	91.84	233.44	-2,047.51	2,740.47	2,692.92	47.55	57.633				
10,100.00	10,034.06	10,171.46	10,148.15	37.30	31.86	92.33	233.35	-2,046.02	2,739.55	2,691.80	47.75	57.368				
10,150.00	10,077.71	10,214.21	10,190.88	37.41	32.00	92.82	233.34	-2,044.65	2,738.98	2,691.03	47.94	57.129				
10,180.32	10,103.09	10,237.04	10,213.70	37.46	32.07	93.09	233.33	-2,043.94	2,738.87	2,690.82	48.05	57.001				
10,200.00	10,119.07	10,251.43	10,228.08	37.50	32.12	93.26	233.32	-2,043.50	2,738.92	2,690.80	48.12	56.922				
10,250.00	10,157.84	10,286.36	10,262.99	37.58	32.23	93.67	233.28	-2,042.48	2,739.49	2,691.21	48.28	56.739				
10,300.00	10,193.70	10,313.34	10,289.96	37.65	32.32	93.93	233.24	-2,041.74	2,740.82	2,692.40	48.43	56.597				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH		Offset Site Error:	0.00 usft
Survey Program:		112-OWSG (Rev2) MWD, 1352-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				
10,350.00	10,226.39	10,336.66	10,313.28	37.71	32.40	94.07	233.21	-2,041.19	2,743.06	2,694.50	48.56	56.488				
10,400.00	10,255.66	10,357.53	10,334.15	37.76	32.47	94.10	233.19	-2,040.76	2,746.26	2,697.57	48.68	56.409				
10,450.00	10,281.29	10,388.00	10,364.61	37.81	32.56	94.23	233.18	-2,040.25	2,750.51	2,701.68	48.83	56.326				
10,500.00	10,303.08	10,393.50	10,370.11	37.85	32.58	93.81	233.17	-2,040.17	2,755.75	2,706.83	48.92	56.335				
10,550.00	10,320.87	10,414.62	10,391.23	37.90	32.65	93.59	233.15	-2,039.85	2,762.06	2,713.02	49.04	56.323				
10,600.00	10,334.52	10,430.96	10,407.57	37.96	32.71	93.18	233.11	-2,039.58	2,769.42	2,720.27	49.15	56.347				
10,650.00	10,343.93	10,442.35	10,418.95	38.03	32.74	92.56	233.08	-2,039.39	2,777.83	2,728.59	49.25	56.408				
10,700.00	10,349.02	10,448.65	10,425.25	38.12	32.76	91.73	233.06	-2,039.28	2,787.29	2,737.96	49.33	56.506				
10,733.47	10,350.00	10,449.98	10,426.58	38.19	32.77	91.05	233.05	-2,039.26	2,794.17	2,744.80	49.37	56.593				
10,800.00	10,350.00	10,450.29	10,426.89	38.36	32.77	91.06	233.05	-2,039.25	2,809.03	2,759.56	49.46	56.788				
10,900.00	10,350.00	10,450.77	10,427.37	38.68	32.77	91.07	233.05	-2,039.24	2,834.15	2,784.52	49.63	57.111				
11,000.00	10,350.00	10,451.25	10,427.85	39.08	32.77	91.08	233.05	-2,039.24	2,862.55	2,812.74	49.81	57.470				
11,100.00	10,350.00	10,451.74	10,428.34	39.56	32.77	91.09	233.05	-2,039.23	2,894.12	2,844.11	50.02	57.864				
11,200.00	10,350.00	10,452.23	10,428.83	40.10	32.78	91.10	233.05	-2,039.22	2,928.77	2,878.54	50.24	58.296				
11,300.00	10,350.00	10,452.74	10,429.34	40.70	32.78	91.11	233.04	-2,039.21	2,966.39	2,915.92	50.48	58.765				
11,400.00	10,350.00	10,453.25	10,429.85	41.37	32.78	91.12	233.04	-2,039.20	3,006.87	2,956.14	50.73	59.272				
11,500.00	10,350.00	10,453.76	10,430.36	42.08	32.78	91.13	233.04	-2,039.19	3,050.09	2,999.10	50.99	59.815				
11,600.00	10,350.00	10,454.29	10,430.89	42.85	32.78	91.14	233.04	-2,039.18	3,095.93	3,044.67	51.26	60.397				
11,700.00	10,350.00	13,032.30	11,836.96	43.67	47.47	118.04	-1,210.35	-2,037.13	3,109.30	3,049.94	59.35	52.385				
11,800.00	10,350.00	13,163.11	11,843.02	44.53	48.86	118.12	-1,341.02	-2,037.40	3,112.56	3,051.77	60.79	51.205				
11,900.00	10,350.00	13,284.28	11,847.64	45.44	50.19	118.19	-1,462.10	-2,036.97	3,114.92	3,052.71	62.21	50.072				
12,000.00	10,350.00	13,386.18	11,850.64	46.39	51.34	118.23	-1,563.95	-2,036.56	3,116.84	3,053.30	63.54	49.055				
12,100.00	10,350.00	13,613.00	11,858.06	47.37	54.00	118.37	-1,790.57	-2,031.83	3,118.25	3,052.34	65.91	47.314				
12,200.00	10,350.00	13,707.00	11,857.60	48.39	55.14	118.38	-1,884.52	-2,029.01	3,116.26	3,048.97	67.28	46.315				
12,300.00	10,350.00	13,760.20	11,856.84	49.45	55.79	118.37	-1,937.71	-2,028.27	3,115.18	3,046.83	68.35	45.576				
12,327.62	10,350.00	13,775.93	11,856.85	49.75	55.99	118.37	-1,953.44	-2,028.07	3,115.13	3,046.47	68.66	45.371				
12,400.00	10,350.00	13,884.56	11,858.86	50.54	57.34	118.42	-2,062.02	-2,025.74	3,115.20	3,045.16	70.04	44.477				
12,500.00	10,350.00	13,983.26	11,861.28	51.66	58.59	118.48	-2,160.61	-2,022.01	3,113.93	3,042.40	71.53	43.533				
12,600.00	10,350.00	14,070.05	11,862.57	52.80	59.71	118.51	-2,247.36	-2,019.54	3,113.01	3,040.06	72.95	42.672				
12,696.31	10,350.00	14,144.75	11,863.13	53.93	60.68	118.53	-2,322.04	-2,018.17	3,112.65	3,038.39	74.27	41.911				
12,700.00	10,350.00	14,147.53	11,863.12	53.97	60.72	118.53	-2,324.83	-2,018.14	3,112.65	3,038.34	74.32	41.883				
12,800.00	10,350.00	14,218.60	11,862.49	55.17	61.65	118.51	-2,395.89	-2,018.14	3,113.12	3,037.47	75.65	41.151				
12,900.00	10,350.00	14,301.07	11,862.79	56.39	62.74	118.51	-2,478.36	-2,018.55	3,114.56	3,037.46	77.10	40.394				
13,000.00	10,350.00	14,435.40	11,867.72	57.63	64.54	118.60	-2,612.56	-2,015.75	3,115.31	3,036.27	79.05	39.412				
13,100.00	10,350.00	14,534.49	11,871.35	58.89	65.89	118.67	-2,711.55	-2,013.22	3,115.70	3,035.03	80.67	38.622				
13,200.00	10,350.00	14,639.84	11,874.49	60.17	67.34	118.73	-2,816.82	-2,010.94	3,116.12	3,033.73	82.38	37.825				
13,300.00	10,350.00	14,752.28	11,877.93	61.47	68.90	118.80	-2,929.18	-2,008.04	3,116.21	3,032.03	84.18	37.019				
13,302.40	10,350.00	14,754.99	11,878.01	61.50	68.94	118.81	-2,931.89	-2,007.97	3,116.21	3,031.98	84.22	37.000				
13,400.00	10,350.00	14,823.38	11,879.54	62.78	69.89	118.84	-3,000.24	-2,006.75	3,116.58	3,030.99	85.59	36.412				
13,500.00	10,350.00	14,943.73	11,880.70	64.11	71.58	118.85	-3,120.59	-2,005.83	3,117.29	3,029.76	87.53	35.614				
13,600.00	10,350.00	15,003.87	11,881.60	65.45	72.43	118.86	-3,180.71	-2,005.33	3,118.13	3,029.27	88.86	35.089				
13,700.00	10,350.00	15,087.89	11,884.10	66.81	73.63	118.90	-3,264.69	-2,004.92	3,119.99	3,029.55	90.44	34.498				
13,800.00	10,350.00	15,215.84	11,887.03	68.18	75.46	118.94	-3,392.61	-2,004.41	3,121.66	3,029.16	92.49	33.751				
13,900.00	10,350.00	15,265.94	11,887.70	69.56	76.18	118.95	-3,442.70	-2,004.51	3,123.44	3,029.69	93.74	33.319				
14,000.00	10,350.00	15,317.00	11,889.15	70.96	76.92	118.96	-3,493.74	-2,005.33	3,126.98	3,031.99	94.99	32.919				
14,100.00	10,350.00	15,393.30	11,892.42	72.36	78.03	118.99	-3,569.95	-2,006.94	3,131.74	3,035.23	96.51	32.451				
14,200.00	10,350.00	15,473.25	11,896.53	73.78	79.19	119.03	-3,649.78	-2,008.67	3,137.00	3,038.94	98.07	31.989				
14,300.00	10,350.00	15,642.55	11,904.92	75.20	81.67	119.13	-3,818.83	-2,011.37	3,141.80	3,041.16	100.64	31.218				
14,400.00	10,350.00	15,755.99	11,910.74	76.63	83.35	119.21	-3,932.13	-2,011.02	3,144.89	3,042.32	102.58	30.659				
14,500.00	10,350.00	15,852.01	11,914.54	78.08	84.77	119.26	-4,028.07	-2,011.23	3,147.90	3,043.55	104.35	30.167				
14,600.00	10,350.00	15,952.19	11,919.08	79.53	86.27	119.33	-4,128.15	-2,011.29	3,151.04	3,044.88	106.17	29.680				
14,700.00	10,350.00	16,036.38	11,923.48	80.99	87.52	119.39	-4,212.22	-2,011.11	3,154.31	3,046.50	107.80	29.260				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1352-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				
14,800.00	10,350.00	16,133.49	11,929.67	82.45	88.98	119.48	-4,309.13	-2,010.89	3,158.11	3,048.53	109.58	28.821				
14,900.00	10,350.00	16,240.37	11,936.97	83.92	90.59	119.59	-4,415.76	-2,010.03	3,161.65	3,050.19	111.45	28.367				
15,000.00	10,350.00	16,356.57	11,943.00	85.40	92.35	119.68	-4,531.80	-2,009.80	3,164.92	3,051.46	113.46	27.894				
15,100.00	10,350.00	16,590.87	11,955.00	86.89	95.91	119.93	-4,765.52	-2,000.34	3,163.57	3,046.91	116.66	27.119				
15,192.18	10,350.00	16,643.00	11,955.45	88.26	96.71	119.95	-4,817.64	-1,999.11	3,162.93	3,044.97	117.96	26.813				
15,200.00	10,350.00	16,643.00	11,955.45	88.38	96.71	119.95	-4,817.64	-1,999.11	3,162.94	3,044.92	118.03	26.799				
15,300.00	10,350.00	16,643.00	11,955.45	89.87	96.71	119.95	-4,817.64	-1,999.11	3,164.78	3,046.00	118.77	26.645				
15,400.00	10,350.00	16,643.00	11,955.45	91.38	96.71	119.95	-4,817.64	-1,999.11	3,169.77	3,050.34	119.43	26.541				
15,500.00	10,350.00	16,643.00	11,955.45	92.88	96.71	119.95	-4,817.64	-1,999.11	3,177.90	3,057.90	119.99	26.484				
15,600.00	10,350.00	16,643.00	11,955.45	94.39	96.71	119.95	-4,817.64	-1,999.11	3,189.14	3,068.68	120.46	26.474 SF				
15,700.00	10,350.00	16,643.00	11,955.45	95.91	96.71	119.95	-4,817.64	-1,999.11	3,203.47	3,082.63	120.84	26.510				
15,800.00	10,350.00	16,643.00	11,955.45	97.43	96.71	119.95	-4,817.64	-1,999.11	3,220.85	3,099.73	121.12	26.593				
15,900.00	10,350.00	16,643.00	11,955.45	98.96	96.71	119.95	-4,817.64	-1,999.11	3,241.21	3,119.90	121.31	26.719				
16,000.00	10,350.00	16,643.00	11,955.45	100.49	96.71	119.95	-4,817.64	-1,999.11	3,264.52	3,143.11	121.41	26.889				
16,100.00	10,350.00	16,643.00	11,955.45	102.02	96.71	119.95	-4,817.64	-1,999.11	3,290.70	3,169.27	121.43	27.100				
16,200.00	10,350.00	16,643.00	11,955.45	103.55	96.71	119.95	-4,817.64	-1,999.11	3,319.68	3,198.32	121.36	27.354				
16,300.00	10,350.00	16,643.00	11,955.45	105.09	96.71	119.95	-4,817.64	-1,999.11	3,351.40	3,230.19	121.21	27.649				
16,400.00	10,350.00	16,643.00	11,955.45	106.64	96.71	119.95	-4,817.64	-1,999.11	3,385.78	3,264.78	121.00	27.981				
16,500.00	10,350.00	16,643.00	11,955.45	108.18	96.71	119.95	-4,817.64	-1,999.11	3,422.73	3,302.01	120.73	28.351				
16,600.00	10,350.00	16,643.00	11,955.45	109.73	96.71	119.95	-4,817.64	-1,999.11	3,462.18	3,341.80	120.39	28.759				
16,700.00	10,350.00	16,643.00	11,955.45	111.29	96.71	119.95	-4,817.64	-1,999.11	3,504.04	3,384.06	119.99	29.203				
16,800.00	10,350.00	16,643.00	11,955.45	112.84	96.71	119.95	-4,817.64	-1,999.11	3,548.23	3,428.69	119.54	29.682				
16,900.00	10,350.00	16,643.00	11,955.45	114.40	96.71	119.95	-4,817.64	-1,999.11	3,594.65	3,475.60	119.05	30.194				
17,000.00	10,350.00	16,643.00	11,955.45	115.96	96.71	119.95	-4,817.64	-1,999.11	3,643.23	3,524.71	118.53	30.738				
17,100.00	10,350.00	16,643.00	11,955.45	117.52	96.71	119.95	-4,817.64	-1,999.11	3,693.88	3,575.92	117.96	31.314				
17,200.00	10,350.00	16,643.00	11,955.45	119.09	96.71	119.95	-4,817.64	-1,999.11	3,746.51	3,629.15	117.37	31.921				
17,300.00	10,350.00	16,643.00	11,955.45	120.66	96.71	119.95	-4,817.64	-1,999.11	3,801.05	3,684.30	116.75	32.558				
17,400.00	10,350.00	16,643.00	11,955.45	122.23	96.71	119.95	-4,817.64	-1,999.11	3,857.40	3,741.30	116.10	33.224				
17,500.00	10,350.00	16,643.00	11,955.45	123.80	96.71	119.95	-4,817.64	-1,999.11	3,915.50	3,800.06	115.45	33.916				
17,600.00	10,350.00	16,643.00	11,955.45	125.37	96.71	119.95	-4,817.64	-1,999.11	3,975.27	3,860.49	114.78	34.634				
17,700.00	10,350.00	16,643.00	11,955.45	126.95	96.71	119.95	-4,817.64	-1,999.11	4,036.63	3,922.53	114.10	35.379				
17,800.00	10,350.00	16,643.00	11,955.45	128.52	96.71	119.95	-4,817.64	-1,999.11	4,099.51	3,986.11	113.41	36.149				
17,900.00	10,350.00	16,643.00	11,955.45	130.10	96.71	119.95	-4,817.64	-1,999.11	4,163.85	4,051.14	112.71	36.943				
18,000.00	10,350.00	16,643.00	11,955.45	131.69	96.71	119.95	-4,817.64	-1,999.11	4,229.56	4,117.55	112.01	37.759				
18,100.00	10,350.00	16,643.00	11,955.45	133.27	96.71	119.95	-4,817.64	-1,999.11	4,296.61	4,185.29	111.32	38.597				
18,200.00	10,350.00	16,643.00	11,955.45	134.85	96.71	119.95	-4,817.64	-1,999.11	4,364.91	4,254.28	110.63	39.457				
18,300.00	10,350.00	16,643.00	11,955.45	136.44	96.71	119.95	-4,817.64	-1,999.11	4,434.42	4,324.48	109.93	40.337				
18,400.00	10,350.00	16,643.00	11,955.45	138.03	96.71	119.95	-4,817.64	-1,999.11	4,505.07	4,395.82	109.25	41.236				
18,500.00	10,350.00	16,643.00	11,955.45	139.62	96.71	119.95	-4,817.64	-1,999.11	4,576.82	4,468.24	108.57	42.154				
18,600.00	10,350.00	16,643.00	11,955.45	141.21	96.71	119.95	-4,817.64	-1,999.11	4,649.61	4,541.71	107.90	43.092				
18,700.00	10,350.00	16,643.00	11,955.45	142.80	96.71	119.95	-4,817.64	-1,999.11	4,723.40	4,616.16	107.24	44.046				
18,800.00	10,350.00	16,643.00	11,955.45	144.39	96.71	119.95	-4,817.64	-1,999.11	4,798.13	4,691.55	106.58	45.017				
18,900.00	10,350.00	16,643.00	11,955.45	145.99	96.71	119.95	-4,817.64	-1,999.11	4,873.78	4,767.83	105.94	46.004				
19,000.00	10,350.00	16,643.00	11,955.45	147.58	96.71	119.95	-4,817.64	-1,999.11	4,950.28	4,844.97	105.31	47.006				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - Plan #6													Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1425-OWSG (Rev2) MWD, 12083-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	26.16	26.16	0.00	0.03	-72.21	579.89	-1,807.44	1,898.19					
100.00	100.00	125.35	125.35	0.13	0.19	-72.21	580.11	-1,807.42	1,898.24	1,898.01	0.23	8,243.976		
200.00	200.00	221.47	221.47	0.48	0.53	-72.20	580.23	-1,807.47	1,898.32	1,897.60	0.72	2,650.273		
300.00	300.00	299.82	299.81	0.84	0.81	-72.19	580.95	-1,807.94	1,899.17	1,898.01	1.17	1,627.399		
400.00	400.00	378.41	378.38	1.20	1.09	-72.16	582.30	-1,809.16	1,901.17	1,899.55	1.62	1,172.863		
500.00	500.00	477.76	477.69	1.56	1.44	-72.14	583.83	-1,811.57	1,903.95	1,901.83	2.12	896.338		
600.00	600.00	589.79	589.69	1.92	1.84	-72.16	583.79	-1,814.16	1,906.13	1,903.47	2.66	717.611		
700.00	700.00	686.47	686.31	2.28	2.18	-72.24	581.77	-1,816.61	1,907.92	1,904.77	3.15	605.944		
800.00	800.00	871.75	871.22	2.63	2.83	-72.57	570.90	-1,818.31	1,906.35	1,902.49	3.86	493.907		
900.00	900.00	959.19	958.40	2.99	3.14	-72.77	564.18	-1,819.23	1,904.98	1,900.64	4.33	439.597		
1,000.00	1,000.00	1,048.80	1,047.84	3.35	3.46	-72.93	558.72	-1,819.51	1,903.48	1,898.67	4.81	395.452		
1,100.00	1,100.00	1,155.57	1,154.44	3.71	3.84	-73.11	552.73	-1,820.05	1,902.33	1,896.99	5.34	356.322		
1,200.00	1,200.00	1,245.09	1,243.85	4.07	4.16	-73.23	548.46	-1,820.02	1,900.94	1,895.12	5.82	326.642		
1,300.00	1,300.00	1,337.54	1,336.25	4.43	4.49	-73.33	545.13	-1,820.27	1,900.17	1,893.86	6.31	301.255		
1,400.00	1,400.00	1,425.00	1,423.68	4.79	4.68	-73.39	543.25	-1,820.62	1,899.94	1,893.25	6.69	283.902		
1,408.24	1,408.24	1,435.69	1,434.38	4.82	4.68	-73.39	543.06	-1,820.67	1,899.93	1,893.22	6.72	282.930 ES		
1,500.00	1,500.00	1,506.63	1,505.31	5.14	4.70	-73.42	542.34	-1,821.30	1,900.45	1,893.49	6.97	272.802		
1,600.00	1,600.00	1,600.44	1,599.11	5.50	4.74	-73.41	542.86	-1,822.47	1,901.80	1,894.54	7.26	261.912		
1,700.00	1,700.00	1,697.89	1,696.53	5.86	4.80	-73.37	544.66	-1,823.47	1,903.31	1,895.73	7.58	251.221		
1,800.00	1,800.00	1,798.51	1,797.12	6.22	4.89	-73.31	546.94	-1,824.43	1,904.87	1,896.96	7.91	240.768		
1,900.00	1,900.00	1,901.81	1,900.40	6.58	5.01	-73.25	549.27	-1,825.32	1,906.35	1,898.08	8.27	230.586		
2,000.00	2,000.00	2,014.68	2,013.23	6.94	5.17	-73.18	551.85	-1,825.73	1,907.35	1,898.71	8.65	220.550		
2,100.00	2,100.00	2,121.82	2,120.34	7.29	5.34	-73.10	554.55	-1,825.45	1,907.84	1,898.80	9.04	211.090		
2,200.00	2,200.00	2,225.16	2,223.63	7.65	5.52	-73.01	557.45	-1,824.81	1,908.06	1,898.62	9.44	202.206		
2,300.00	2,299.99	2,325.06	2,323.49	8.01	5.72	-143.71	560.44	-1,824.03	1,909.24	1,899.41	9.84	194.107		
2,400.00	2,399.91	2,424.92	2,423.29	8.35	5.93	-143.65	563.68	-1,823.22	1,912.59	1,902.35	10.24	186.765		
2,500.00	2,499.69	2,547.19	2,545.51	8.70	6.20	-143.64	566.98	-1,821.88	1,917.64	1,906.95	10.68	179.512		
2,600.00	2,599.27	2,651.00	2,649.29	9.06	6.45	-143.69	568.62	-1,819.96	1,923.71	1,912.60	11.11	173.166		
2,700.00	2,698.57	2,735.15	2,733.42	9.42	6.65	-143.76	569.25	-1,818.91	1,932.25	1,920.74	11.51	167.835		
2,800.00	2,797.54	2,827.30	2,825.57	9.78	6.87	-143.90	568.89	-1,818.81	1,943.67	1,931.74	11.93	162.919		
2,815.66	2,813.00	2,842.60	2,840.87	9.84	6.91	-143.92	568.83	-1,818.82	1,945.67	1,933.67	12.00	162.169		
2,900.00	2,896.24	2,938.79	2,937.06	10.15	7.16	-144.19	568.82	-1,818.44	1,956.35	1,943.97	12.38	157.967		
3,000.00	2,994.95	3,064.81	3,063.06	10.53	7.50	-144.49	569.76	-1,816.19	1,967.93	1,955.06	12.87	152.882		
3,100.00	3,093.65	3,159.44	3,157.65	10.91	7.76	-144.71	570.30	-1,813.81	1,978.83	1,965.51	13.32	148.599		
3,200.00	3,192.36	3,239.90	3,238.11	11.29	7.99	-144.95	569.49	-1,812.96	1,990.69	1,976.95	13.74	144.880		
3,300.00	3,291.06	3,335.45	3,333.57	11.68	8.25	-145.31	565.54	-1,813.09	2,002.95	1,988.76	14.19	141.145		
3,400.00	3,389.76	3,406.00	3,403.95	12.07	8.46	-145.63	560.79	-1,813.99	2,015.85	2,001.25	14.60	138.068		
3,500.00	3,488.47	3,475.42	3,473.11	12.47	8.66	-145.98	555.20	-1,816.11	2,030.23	2,015.22	15.01	135.269		
3,600.00	3,587.17	3,540.28	3,537.64	12.87	8.85	-146.32	549.63	-1,819.49	2,046.54	2,031.13	15.41	132.834		
3,700.00	3,685.88	3,612.85	3,609.81	13.27	9.07	-146.70	543.66	-1,824.25	2,064.35	2,048.53	15.82	130.495		
3,800.00	3,784.58	3,699.84	3,696.38	13.67	9.34	-147.11	537.67	-1,830.31	2,083.03	2,066.76	16.26	128.072		
3,900.00	3,883.28	3,784.00	3,780.22	14.08	9.60	-147.47	533.47	-1,836.35	2,102.41	2,085.70	16.70	125.858		
4,000.00	3,981.99	3,870.54	3,866.39	14.49	9.87	-147.83	529.18	-1,843.02	2,122.42	2,105.27	17.15	123.743		
4,100.00	4,080.69	3,988.45	3,983.48	14.90	10.26	-148.42	519.28	-1,852.59	2,142.26	2,124.58	17.68	121.164		
4,200.00	4,179.39	4,091.85	4,085.94	15.31	10.60	-149.00	508.09	-1,860.82	2,161.65	2,143.47	18.18	118.911		
4,300.00	4,278.10	4,191.79	4,185.19	15.72	10.94	-149.49	498.92	-1,868.04	2,180.82	2,162.14	18.67	116.805		
4,400.00	4,376.80	4,308.44	4,301.22	16.13	11.34	-150.01	490.08	-1,876.21	2,200.29	2,181.08	19.21	114.562		
4,500.00	4,475.51	4,455.46	4,447.82	16.55	11.83	-150.58	481.19	-1,882.73	2,217.46	2,197.65	19.82	111.901		
4,600.00	4,574.21	4,564.08	4,556.21	16.97	12.20	-150.98	474.97	-1,886.07	2,233.57	2,213.24	20.33	109.846		
4,700.00	4,672.91	4,649.31	4,641.14	17.38	12.49	-151.32	468.52	-1,889.08	2,249.94	2,229.14	20.80	108.188		
4,800.00	4,771.62	4,733.92	4,725.42	17.80	12.78	-151.67	461.89	-1,892.60	2,266.97	2,245.71	21.26	106.637		
4,900.00	4,870.32	4,828.53	4,819.66	18.22	13.11	-152.05	454.82	-1,896.79	2,284.42	2,262.67	21.75	105.045		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - Plan #6		Offset Site Error:	0.00 usft
Survey Program:													112-OWSG (Rev2) MWD, 1425-OWSG (Rev2) MWD, 12083-OWSG (Rev2) MWD		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
5,000.00	4,969.03	4,920.94	4,911.72	18.64	13.44	-152.42	447.79	-1,901.04	2,302.12	2,279.89	22.23	103.556				
5,100.00	5,067.73	5,006.92	4,997.29	19.07	13.74	-152.77	440.76	-1,905.39	2,320.29	2,297.60	22.70	102.225				
5,200.00	5,166.43	5,096.50	5,086.46	19.49	14.06	-153.12	433.64	-1,910.24	2,338.94	2,315.77	23.18	100.924				
5,300.00	5,265.14	5,193.15	5,182.62	19.91	14.41	-153.51	425.66	-1,915.68	2,357.87	2,334.20	23.67	99.600				
5,400.00	5,363.84	5,319.77	5,308.29	20.33	14.88	-154.08	411.73	-1,922.28	2,376.20	2,351.94	24.26	97.943				
5,500.00	5,462.54	5,421.40	5,409.05	20.76	15.26	-154.57	399.33	-1,927.07	2,394.10	2,369.32	24.78	96.611				
5,600.00	5,561.25	5,533.82	5,520.57	21.18	15.68	-155.08	386.02	-1,931.84	2,411.73	2,386.40	25.33	95.205				
5,700.00	5,659.95	5,618.74	5,604.88	21.61	15.99	-155.46	376.31	-1,935.06	2,429.14	2,403.33	25.81	94.134				
5,800.00	5,758.66	5,688.31	5,673.93	22.04	16.26	-155.76	368.55	-1,938.51	2,447.76	2,421.53	26.23	93.313				
5,900.00	5,857.36	5,781.92	5,766.85	22.46	16.61	-156.15	358.48	-1,943.70	2,467.12	2,440.39	26.73	92.301				
6,000.00	5,956.06	5,906.31	5,890.51	22.89	17.07	-156.63	346.45	-1,949.67	2,485.93	2,458.61	27.32	90.999				
6,100.00	6,054.77	6,010.32	5,994.01	23.32	17.46	-157.01	337.05	-1,953.92	2,504.20	2,476.35	27.85	89.932				
6,200.00	6,153.47	6,113.96	6,097.17	23.75	17.84	-157.37	327.95	-1,957.96	2,522.40	2,494.03	28.37	88.906				
6,300.00	6,252.18	6,194.43	6,177.29	24.18	18.14	-157.65	321.09	-1,961.08	2,540.71	2,511.88	28.83	88.130				
6,400.00	6,350.88	6,266.62	6,249.09	24.60	18.42	-157.90	314.56	-1,964.64	2,560.07	2,530.81	29.26	87.494				
6,500.00	6,449.58	6,346.24	6,328.20	25.03	18.72	-158.19	306.86	-1,969.27	2,580.33	2,550.62	29.71	86.842				
6,600.00	6,548.29	6,448.05	6,429.34	25.46	19.11	-158.55	296.94	-1,975.35	2,600.86	2,570.63	30.24	86.013				
6,700.00	6,646.99	6,550.34	6,530.95	25.89	19.50	-158.92	286.73	-1,981.25	2,621.29	2,590.52	30.77	85.202				
6,758.77	6,705.00	6,611.02	6,591.24	26.15	19.73	-159.13	280.71	-1,984.64	2,633.23	2,602.15	31.08	84.731				
6,800.00	6,745.73	6,658.06	6,637.99	26.32	19.91	-159.33	276.20	-1,987.17	2,641.34	2,610.03	31.31	84.362				
6,900.00	6,844.79	6,765.79	6,745.17	26.74	20.32	-159.75	266.72	-1,992.53	2,658.97	2,627.12	31.85	83.484				
7,000.00	6,944.17	6,859.67	6,838.64	27.13	20.67	-160.07	259.11	-1,997.09	2,674.15	2,641.80	32.34	82.683				
7,100.00	7,043.80	6,942.58	6,921.21	27.51	20.98	-160.32	253.14	-2,001.42	2,687.30	2,654.50	32.79	81.946				
7,200.00	7,143.63	7,032.35	7,010.67	27.88	21.32	-160.53	247.92	-2,006.71	2,698.67	2,665.41	33.26	81.136				
7,300.00	7,243.57	7,143.15	7,121.16	28.22	21.72	-160.71	242.40	-2,013.04	2,707.45	2,673.66	33.79	80.120				
7,374.43	7,318.00	7,225.35	7,203.14	28.46	22.02	-90.05	238.42	-2,017.43	2,712.12	2,677.93	34.18	79.342				
7,400.00	7,343.57	7,253.29	7,231.02	28.55	22.12	-90.08	237.16	-2,018.87	2,713.44	2,679.12	34.31	79.074				
7,500.00	7,443.57	7,347.08	7,324.59	28.87	22.46	-90.16	233.23	-2,023.71	2,718.62	2,683.84	34.78	78.160				
7,600.00	7,543.57	7,477.55	7,454.81	29.19	22.94	-90.27	228.15	-2,030.13	2,723.60	2,688.23	35.37	77.010				
7,700.00	7,643.57	7,649.93	7,627.04	29.52	23.54	-90.36	224.08	-2,035.53	2,726.92	2,690.86	36.06	75.613				
7,800.00	7,743.57	7,793.97	7,771.08	29.84	24.00	-90.34	224.68	-2,036.30	2,727.35	2,690.70	36.65	74.419				
7,900.00	7,843.57	7,904.90	7,882.00	30.17	24.35	-90.34	225.04	-2,036.10	2,727.17	2,690.03	37.14	73.424				
8,000.00	7,943.57	8,024.25	8,001.35	30.49	24.73	-90.34	224.84	-2,035.17	2,726.39	2,688.73	37.66	72.393				
8,100.00	8,043.57	8,140.45	8,117.53	30.82	25.10	-90.35	224.28	-2,033.44	2,724.91	2,686.74	38.17	71.383				
8,200.00	8,143.57	8,218.00	8,195.07	31.15	25.35	-90.36	223.82	-2,032.06	2,723.23	2,684.63	38.59	70.562				
8,300.00	8,243.57	8,312.00	8,289.07	31.48	25.67	-90.37	223.26	-2,031.25	2,722.38	2,683.32	39.06	69.701				
8,318.93	8,262.50	8,312.00	8,289.07	31.54	25.67	-90.37	223.26	-2,031.25	2,722.31	2,683.21	39.10	69.624				
8,400.00	8,343.57	8,359.80	8,336.86	31.80	25.83	-90.38	223.04	-2,031.57	2,722.83	2,683.43	39.40	69.104				
8,500.00	8,443.57	8,439.75	8,416.80	32.13	26.10	-90.38	222.97	-2,033.10	2,724.68	2,684.85	39.83	68.410				
8,600.00	8,543.57	8,572.75	8,549.79	32.46	26.54	-90.37	223.18	-2,034.83	2,725.97	2,685.57	40.40	67.476				
8,700.00	8,643.57	8,677.45	8,654.48	32.80	26.89	-90.37	223.59	-2,035.46	2,726.56	2,685.67	40.89	66.680				
8,800.00	8,743.57	8,780.17	8,757.21	33.13	27.23	-90.36	223.99	-2,036.00	2,727.08	2,685.71	41.38	65.911				
8,900.00	8,843.57	8,870.07	8,847.10	33.46	27.53	-90.35	224.30	-2,036.58	2,727.73	2,685.90	41.83	65.212				
9,000.00	8,943.57	8,958.78	8,935.81	33.79	27.83	-90.34	224.60	-2,037.51	2,728.78	2,686.50	42.28	64.541				
9,100.00	9,043.57	9,052.79	9,029.80	34.12	28.14	-90.33	225.10	-2,038.82	2,730.16	2,687.41	42.75	63.870				
9,200.00	9,143.57	9,153.39	9,130.39	34.46	28.48	-90.31	226.02	-2,040.31	2,731.64	2,688.41	43.23	63.191				
9,300.00	9,243.57	9,252.50	9,229.48	34.79	28.81	-90.29	227.21	-2,041.77	2,733.10	2,689.40	43.71	62.534				
9,400.00	9,343.57	9,349.00	9,325.96	35.13	29.13	-90.26	228.50	-2,043.29	2,734.67	2,690.49	44.18	61.903				
9,500.00	9,443.57	9,443.00	9,419.94	35.46	29.44	-90.23	229.82	-2,044.95	2,736.43	2,691.79	44.64	61.297				
9,600.00	9,543.57	9,538.00	9,514.91	35.80	29.76	-90.20	231.23	-2,046.84	2,738.42	2,693.31	45.11	60.705				
9,700.00	9,643.57	9,640.63	9,617.51	36.13	30.10	-90.17	232.66	-2,048.90	2,740.42	2,694.82	45.60	60.096				
9,800.00	9,743.57	9,727.00	9,703.85	36.47	30.39	-90.15	233.68	-2,050.60	2,742.41	2,696.37	46.05	59.558				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - Plan #6		Offset Site Error:	0.00 usft
Survey Program:													112-OWSG (Rev2) MWD, 1425-OWSG (Rev2) MWD, 12083-OWSG (Rev2) MWD		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,833.47	9,777.04	9,762.82	9,739.67	36.58	30.52	-90.14	234.10	-2,051.38	2,743.14	2,696.92	46.21	59.356				
9,850.00	9,793.56	9,776.20	9,753.04	36.64	30.56	90.40	234.26	-2,051.70	2,743.53	2,697.25	46.28	59.276				
9,900.00	9,843.42	9,877.17	9,853.98	36.79	30.90	90.49	234.96	-2,053.21	2,744.30	2,697.64	46.66	58.821				
9,950.00	9,892.77	10,030.43	10,007.19	36.93	31.40	91.03	233.95	-2,050.48	2,743.01	2,695.88	47.13	58.202				
10,000.00	9,941.23	10,077.45	10,054.19	37.06	31.56	91.40	233.63	-2,048.99	2,741.64	2,694.30	47.34	57.911				
10,050.00	9,988.45	10,124.41	10,101.12	37.19	31.71	91.84	233.44	-2,047.51	2,740.47	2,692.92	47.55	57.633				
10,100.00	10,034.06	10,171.46	10,148.15	37.30	31.86	92.33	233.35	-2,046.02	2,739.55	2,691.80	47.75	57.368				
10,150.00	10,077.71	10,214.21	10,190.88	37.41	32.00	92.82	233.34	-2,044.65	2,738.98	2,691.03	47.94	57.129				
10,180.32	10,103.09	10,237.04	10,213.70	37.46	32.07	93.09	233.33	-2,043.94	2,738.87	2,690.82	48.05	57.001				
10,200.00	10,119.07	10,251.43	10,228.08	37.50	32.12	93.26	233.32	-2,043.50	2,738.92	2,690.80	48.12	56.922				
10,250.00	10,157.84	10,286.36	10,262.99	37.58	32.23	93.67	233.28	-2,042.48	2,739.49	2,691.21	48.28	56.739				
10,300.00	10,193.70	10,313.34	10,289.96	37.65	32.32	93.93	233.24	-2,041.74	2,740.82	2,692.40	48.43	56.597				
10,350.00	10,226.39	10,336.66	10,313.28	37.71	32.40	94.07	233.21	-2,041.19	2,743.06	2,694.50	48.56	56.488				
10,400.00	10,255.66	10,357.53	10,334.15	37.76	32.47	94.10	233.19	-2,040.76	2,746.26	2,697.57	48.68	56.409				
10,450.00	10,281.29	10,388.00	10,364.61	37.81	32.56	94.23	233.18	-2,040.25	2,750.51	2,701.68	48.83	56.326				
10,500.00	10,303.08	10,393.50	10,370.11	37.85	32.58	93.81	233.17	-2,040.17	2,755.75	2,706.83	48.92	56.335				
10,550.00	10,320.87	10,414.62	10,391.23	37.90	32.65	93.59	233.15	-2,039.85	2,762.06	2,713.02	49.04	56.323				
10,600.00	10,334.52	10,430.96	10,407.57	37.96	32.71	93.18	233.11	-2,039.58	2,769.42	2,720.27	49.15	56.347				
10,650.00	10,343.93	10,442.35	10,418.95	38.03	32.74	92.56	233.08	-2,039.39	2,777.83	2,728.59	49.25	56.408				
10,700.00	10,349.02	10,448.65	10,425.25	38.12	32.76	91.73	233.06	-2,039.28	2,787.29	2,737.96	49.33	56.506				
10,733.47	10,350.00	10,449.98	10,426.58	38.19	32.77	91.05	233.05	-2,039.26	2,794.17	2,744.80	49.37	56.593				
10,800.00	10,350.00	10,450.29	10,426.89	38.36	32.77	91.06	233.05	-2,039.25	2,809.03	2,759.56	49.46	56.788				
10,900.00	10,350.00	10,450.77	10,427.37	38.68	32.77	91.07	233.05	-2,039.24	2,834.15	2,784.52	49.63	57.111				
11,000.00	10,350.00	10,451.25	10,427.85	39.08	32.77	91.08	233.05	-2,039.24	2,862.55	2,812.74	49.81	57.470				
11,100.00	10,350.00	10,451.74	10,428.34	39.56	32.77	91.09	233.05	-2,039.23	2,894.12	2,844.11	50.02	57.864				
11,200.00	10,350.00	10,452.23	10,428.83	40.10	32.78	91.10	233.05	-2,039.22	2,928.77	2,878.54	50.24	58.296				
11,300.00	10,350.00	10,452.74	10,429.34	40.70	32.78	91.11	233.04	-2,039.21	2,966.39	2,915.92	50.48	58.765				
11,400.00	10,350.00	10,453.25	10,429.85	41.37	32.78	91.12	233.04	-2,039.20	3,006.87	2,956.14	50.73	59.272				
11,500.00	10,350.00	10,453.76	10,430.36	42.08	32.78	91.13	233.04	-2,039.19	3,050.09	2,999.10	50.99	59.815				
11,600.00	10,350.00	10,454.29	10,430.89	42.85	32.78	91.14	233.04	-2,039.18	3,095.93	3,044.67	51.26	60.397				
11,700.00	10,350.00	13,115.82	11,846.18	43.67	48.33	118.26	-1,294.34	-2,027.68	3,104.07	3,044.19	59.88	51.840				
11,800.00	10,350.00	13,215.80	11,848.10	44.53	49.40	118.29	-1,394.30	-2,026.80	3,105.08	3,043.97	61.11	50.809				
11,900.00	10,350.00	13,315.78	11,850.01	45.44	50.51	118.32	-1,494.26	-2,025.92	3,106.10	3,043.71	62.39	49.783				
12,000.00	10,350.00	13,415.76	11,851.92	46.39	51.65	118.35	-1,594.22	-2,025.04	3,107.11	3,043.40	63.72	48.765				
12,100.00	10,350.00	13,515.75	11,853.83	47.37	52.81	118.38	-1,694.18	-2,024.16	3,108.13	3,043.05	65.08	47.758				
12,200.00	10,350.00	13,615.73	11,855.74	48.39	54.00	118.41	-1,794.14	-2,023.28	3,109.14	3,042.66	66.48	46.766				
12,300.00	10,350.00	13,715.71	11,857.65	49.45	55.22	118.44	-1,894.10	-2,022.40	3,110.16	3,042.24	67.92	45.791				
12,400.00	10,350.00	13,815.69	11,859.57	50.54	56.45	118.47	-1,994.06	-2,021.52	3,111.18	3,041.79	69.39	44.833				
12,500.00	10,350.00	13,915.67	11,861.48	51.66	57.71	118.50	-2,094.02	-2,020.64	3,112.20	3,041.30	70.90	43.897				
12,600.00	10,350.00	14,015.65	11,863.39	52.80	58.98	118.53	-2,193.98	-2,019.77	3,113.22	3,040.79	72.43	42.981				
12,700.00	10,350.00	14,115.64	11,865.30	53.97	60.28	118.56	-2,293.94	-2,018.89	3,114.24	3,040.25	73.99	42.089				
12,800.00	10,350.00	14,215.62	11,867.21	55.17	61.59	118.59	-2,393.90	-2,018.01	3,115.26	3,039.69	75.58	41.220				
12,900.00	10,350.00	14,315.60	11,869.13	56.39	62.92	118.62	-2,493.86	-2,017.13	3,116.29	3,039.10	77.18	40.375				
13,000.00	10,350.00	14,415.58	11,871.04	57.63	64.26	118.65	-2,593.82	-2,016.25	3,117.31	3,038.49	78.82	39.552				
13,100.00	10,350.00	14,515.56	11,872.95	58.89	65.61	118.68	-2,693.78	-2,015.37	3,118.33	3,037.86	80.47	38.752				
13,200.00	10,350.00	14,615.54	11,874.86	60.17	66.98	118.71	-2,793.74	-2,014.49	3,119.36	3,037.22	82.14	37.976				
13,300.00	10,350.00	14,715.53	11,876.77	61.47	68.37	118.74	-2,893.70	-2,013.61	3,120.38	3,036.55	83.83	37.223				
13,400.00	10,350.00	14,815.51	11,878.68	62.78	69.76	118.77	-2,993.66	-2,012.73	3,121.41	3,035.88	85.53	36.493				
13,500.00	10,350.00	14,915.49	11,880.60	64.11	71.16	118.80	-3,093.62	-2,011.85	3,122.44	3,035.18	87.26	35.785				
13,600.00	10,350.00	15,015.47	11,882.51	65.45	72.58	118.83	-3,193.58	-2,010.97	3,123.47	3,034.47	88.99	35.098				
13,700.00	10,350.00	15,115.45	11,884.42	66.81	74.00	118.86	-3,293.53	-2,010.10	3,124.50	3,033.75	90.74	34.432				
13,800.00	10,350.00	15,215.43	11,886.33	68.18	75.44	118.89	-3,393.49	-2,009.22	3,125.53	3,033.02	92.51	33.786				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - Plan #6		Offset Site Error:	0.00 usft
Survey Program:													112-OWSG (Rev2) MWD, 1425-OWSG (Rev2) MWD, 12083-OWSG (Rev2) MWD		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
13,900.00	10,350.00	15,300.00	11,887.97	69.56	76.66	118.91	-3,478.04	-2,008.47	3,126.60	3,032.48	94.12	33.218				
14,000.00	10,350.00	15,383.32	11,890.87	70.96	77.87	118.96	-3,561.31	-2,007.74	3,128.40	3,032.68	95.72	32.682				
14,100.00	10,350.00	15,483.24	11,894.90	72.36	79.32	119.02	-3,661.14	-2,006.86	3,130.46	3,032.96	97.50	32.107				
14,200.00	10,350.00	15,583.16	11,898.92	73.78	80.79	119.09	-3,760.98	-2,005.99	3,132.52	3,033.24	99.29	31.550				
14,300.00	10,350.00	15,683.08	11,902.94	75.20	82.26	119.15	-3,860.81	-2,005.11	3,134.59	3,033.51	101.08	31.011				
14,400.00	10,350.00	15,783.00	11,906.97	76.63	83.74	119.21	-3,960.64	-2,004.23	3,136.66	3,033.78	102.88	30.488				
14,500.00	10,350.00	15,882.92	11,910.99	78.08	85.23	119.27	-4,060.48	-2,003.35	3,138.74	3,034.04	104.69	29.981				
14,600.00	10,350.00	15,982.84	11,915.01	79.53	86.72	119.34	-4,160.31	-2,002.48	3,140.82	3,034.31	106.51	29.489				
14,700.00	10,350.00	16,082.76	11,919.04	80.99	88.22	119.40	-4,260.15	-2,001.60	3,142.90	3,034.57	108.33	29.012				
14,800.00	10,350.00	16,182.67	11,923.06	82.45	89.72	119.46	-4,359.98	-2,000.72	3,144.99	3,034.82	110.16	28.549				
14,900.00	10,350.00	16,282.59	11,927.09	83.92	91.23	119.53	-4,459.81	-1,999.84	3,147.08	3,035.08	112.00	28.099				
15,000.00	10,350.00	16,382.51	11,931.11	85.40	92.74	119.59	-4,559.65	-1,998.97	3,149.17	3,035.33	113.84	27.663				
15,100.00	10,350.00	16,482.43	11,935.13	86.89	94.26	119.65	-4,659.48	-1,998.09	3,151.27	3,035.59	115.68	27.241				
15,200.00	10,350.00	16,582.35	11,939.16	88.38	95.78	119.71	-4,759.32	-1,997.21	3,153.37	3,035.84	117.53	26.830				
15,300.00	10,350.00	16,682.27	11,943.18	89.87	97.30	119.78	-4,859.15	-1,996.34	3,155.48	3,036.09	119.38	26.431				
15,400.00	10,350.00	16,782.19	11,947.21	91.38	98.83	119.84	-4,958.98	-1,995.46	3,157.58	3,036.34	121.24	26.044				
15,500.00	10,350.00	16,882.11	11,951.23	92.88	100.37	119.90	-5,058.82	-1,994.58	3,159.70	3,036.59	123.10	25.667				
15,600.00	10,350.00	16,982.02	11,955.25	94.39	101.90	119.96	-5,158.65	-1,993.70	3,161.81	3,036.85	124.97	25.301				
15,700.00	10,350.00	17,081.94	11,959.28	95.91	103.44	120.02	-5,258.49	-1,992.83	3,163.93	3,037.10	126.84	24.945				
15,800.00	10,350.00	17,181.86	11,963.30	97.43	104.99	120.09	-5,358.32	-1,991.95	3,166.06	3,037.35	128.71	24.599				
15,900.00	10,350.00	17,281.78	11,967.32	98.96	106.54	120.15	-5,458.15	-1,991.07	3,168.19	3,037.61	130.58	24.263				
16,000.00	10,350.00	17,381.70	11,971.35	100.49	108.09	120.21	-5,557.99	-1,990.19	3,170.32	3,037.86	132.45	23.935				
16,100.00	10,350.00	17,481.62	11,975.37	102.02	109.64	120.27	-5,657.82	-1,989.32	3,172.45	3,038.12	134.33	23.617				
16,200.00	10,350.00	17,581.54	11,979.40	103.55	111.20	120.33	-5,757.66	-1,988.44	3,174.59	3,038.38	136.21	23.307				
16,300.00	10,350.00	17,681.46	11,983.42	105.09	112.75	120.39	-5,857.49	-1,987.56	3,176.73	3,038.64	138.09	23.004				
16,400.00	10,350.00	17,781.37	11,987.44	106.64	114.31	120.46	-5,957.32	-1,986.68	3,178.88	3,038.90	139.98	22.710				
16,500.00	10,350.00	17,881.29	11,991.47	108.18	115.88	120.52	-6,057.16	-1,985.81	3,181.03	3,039.17	141.86	22.424				
16,600.00	10,350.00	17,981.21	11,995.49	109.73	117.44	120.58	-6,156.99	-1,984.93	3,183.18	3,039.44	143.74	22.145				
16,700.00	10,350.00	18,081.13	11,999.52	111.29	119.01	120.64	-6,256.82	-1,984.05	3,185.34	3,039.71	145.63	21.873				
16,800.00	10,350.00	18,181.05	12,003.54	112.84	120.58	120.70	-6,356.66	-1,983.18	3,187.50	3,039.98	147.52	21.607				
16,900.00	10,350.00	18,280.97	12,007.56	114.40	122.16	120.76	-6,456.49	-1,982.30	3,189.67	3,040.26	149.41	21.349				
17,000.00	10,350.00	18,380.89	12,011.59	115.96	123.73	120.82	-6,556.33	-1,981.42	3,191.83	3,040.54	151.30	21.096				
17,100.00	10,350.00	18,480.81	12,015.61	117.52	125.31	120.88	-6,656.16	-1,980.54	3,194.01	3,040.82	153.19	20.850				
17,200.00	10,350.00	18,580.73	12,019.63	119.09	126.88	120.94	-6,755.99	-1,979.67	3,196.18	3,041.10	155.08	20.610				
17,300.00	10,350.00	18,680.64	12,023.66	120.66	128.46	121.01	-6,855.83	-1,978.79	3,198.36	3,041.39	156.97	20.375				
17,400.00	10,350.00	18,780.56	12,027.68	122.23	130.05	121.07	-6,955.66	-1,977.91	3,200.54	3,041.68	158.86	20.147				
17,500.00	10,350.00	18,880.48	12,031.71	123.80	131.63	121.13	-7,055.50	-1,977.03	3,202.73	3,041.98	160.75	19.923				
17,600.00	10,350.00	18,980.40	12,035.73	125.37	133.21	121.19	-7,155.33	-1,976.16	3,204.92	3,042.27	162.64	19.705				
17,700.00	10,350.00	19,080.32	12,039.75	126.95	134.84	121.24	-7,232.32	-1,975.48	3,207.51	3,043.25	164.26	19.527				
17,800.00	10,350.00	19,180.24	12,044.83	128.52	136.03	121.32	-7,332.03	-1,974.60	3,210.42	3,044.29	166.12	19.326				
17,900.00	10,350.00	19,280.16	12,050.21	130.10	137.61	121.41	-7,431.73	-1,973.73	3,213.33	3,045.35	167.98	19.129				
18,000.00	10,350.00	19,380.08	12,055.60	131.69	139.20	121.49	-7,531.44	-1,972.85	3,216.26	3,046.41	169.85	18.936				
18,100.00	10,350.00	19,480.00	12,060.99	133.27	140.80	121.57	-7,631.14	-1,971.98	3,219.18	3,047.48	171.71	18.748				
18,200.00	10,350.00	19,580.00	12,066.38	134.85	142.39	121.65	-7,730.85	-1,971.10	3,222.12	3,048.55	173.57	18.564				
18,300.00	10,350.00	19,680.00	12,071.77	136.44	143.98	121.73	-7,830.55	-1,970.22	3,225.06	3,049.63	175.43	18.384				
18,400.00	10,350.00	19,780.00	12,077.16	138.03	145.58	121.81	-7,930.26	-1,969.35	3,228.01	3,050.72	177.29	18.208				
18,500.00	10,350.00	19,880.00	12,082.55	139.62	147.18	121.89	-8,029.96	-1,968.47	3,230.97	3,051.82	179.15	18.035				
18,600.00	10,350.00	19,980.00	12,087.94	141.21	148.77	121.97	-8,129.66	-1,967.59	3,233.93	3,052.92	181.00	17.867				
18,700.00	10,350.00	20,080.00	12,093.33	142.80	150.37	122.05	-8,229.37	-1,966.72	3,236.89	3,054.04	182.86	17.702				
18,800.00	10,350.00	20,180.00	12,098.72	144.39	151.97	122.13	-8,329.07	-1,965.84	3,239.87	3,055.15	184.71	17.540				
18,900.00	10,350.00	20,280.00	12,104.10	145.99	153.57	122.21	-8,428.78	-1,964.97	3,242.85	3,056.28	186.57	17.382				
19,000.00	10,350.00	20,380.00	12,109.49	147.58	155.17	122.29	-8,528.48	-1,964.09	3,245.83	3,057.42	188.42	17.227				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - Plan #6												Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1425-OWSG (Rev2) MWD, 12083-OWSG (Rev2) MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,100.00	10,350.00	20,455.44	12,114.88	149.18	156.78	122.37	-8,628.19	-1,963.21	3,248.83	3,058.56	190.26	17.075	
19,200.00	10,350.00	20,555.30	12,120.27	150.78	158.38	122.44	-8,727.89	-1,962.34	3,251.82	3,059.72	192.11	16.927	
19,300.00	10,350.00	20,655.15	12,125.66	152.38	159.99	122.52	-8,827.60	-1,961.46	3,254.83	3,060.88	193.95	16.781	
19,400.00	10,350.00	20,755.01	12,131.05	153.98	161.59	122.60	-8,927.30	-1,960.59	3,257.84	3,062.04	195.80	16.639	
19,500.00	10,350.00	20,854.86	12,136.44	155.58	163.20	122.68	-9,027.01	-1,959.71	3,260.86	3,063.22	197.64	16.499	
19,600.00	10,350.00	20,954.72	12,141.83	157.18	164.80	122.76	-9,126.71	-1,958.83	3,263.88	3,064.40	199.48	16.362	
19,700.00	10,350.00	21,054.57	12,147.22	158.79	166.41	122.84	-9,226.42	-1,957.96	3,266.91	3,065.59	201.32	16.228	
19,800.00	10,350.00	21,154.42	12,152.61	160.39	168.02	122.92	-9,326.12	-1,957.08	3,269.95	3,066.79	203.16	16.096	
19,900.00	10,350.00	21,254.28	12,158.00	162.00	169.63	122.99	-9,425.83	-1,956.20	3,272.99	3,068.00	204.99	15.966	
20,000.00	10,350.00	21,354.13	12,163.38	163.61	171.24	123.07	-9,525.53	-1,955.33	3,276.03	3,069.21	206.83	15.840	
20,100.00	10,350.00	21,453.99	12,168.77	165.21	172.85	123.15	-9,625.24	-1,954.45	3,279.09	3,070.43	208.66	15.715	
20,200.00	10,350.00	21,553.84	12,174.16	166.82	174.46	123.23	-9,724.94	-1,953.58	3,282.15	3,071.66	210.49	15.593	
20,300.00	10,350.00	21,653.69	12,179.55	168.43	176.08	123.31	-9,824.65	-1,952.70	3,285.21	3,072.90	212.32	15.473	
20,400.00	10,350.00	21,748.36	12,184.66	170.04	177.60	123.38	-9,919.17	-1,951.87	3,288.29	3,074.21	214.08	15.360	
20,500.00	10,350.00	21,800.00	12,187.91	171.65	178.44	123.43	-9,970.71	-1,951.42	3,292.05	3,076.76	215.30	15.291	
20,529.73	10,350.00	21,830.76	12,190.29	172.13	178.94	123.46	-10,001.38	-1,951.15	3,293.35	3,077.52	215.83	15.259 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-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	16.00	16.00	0.00	0.00	-72.54	579.56	-1,842.30	1,931.34					
100.00	100.00	100.00	99.98	0.13	0.16	-72.52	580.42	-1,843.14	1,932.55	1,932.36	0.19	N/A		
200.00	200.00	202.44	202.40	0.48	0.49	-72.50	581.57	-1,844.52	1,934.18	1,933.49	0.69	2,794.838		
300.00	300.00	300.00	299.95	0.84	0.84	-72.50	582.11	-1,845.84	1,935.64	1,934.45	1.19	1,626.192		
400.00	400.00	383.16	383.09	1.20	1.14	-72.52	581.89	-1,847.47	1,937.43	1,935.78	1.65	1,171.618		
500.00	500.00	473.45	473.35	1.56	1.46	-72.54	581.87	-1,849.78	1,939.86	1,937.73	2.14	908.222		
600.00	600.00	551.00	550.84	1.92	1.74	-72.57	581.55	-1,852.72	1,943.32	1,940.73	2.59	750.931		
700.00	700.00	646.96	646.72	2.28	2.09	-72.62	581.23	-1,856.72	1,947.21	1,944.12	3.08	631.259		
800.00	800.00	783.01	782.67	2.63	2.58	-72.68	580.67	-1,861.69	1,950.64	1,946.96	3.68	529.918		
900.00	900.00	885.03	884.65	2.99	2.95	-72.72	579.85	-1,864.49	1,953.02	1,948.83	4.19	465.781		
1,000.00	1,000.00	995.77	995.35	3.35	3.35	-72.78	578.51	-1,866.99	1,954.82	1,950.09	4.73	413.608		
1,100.00	1,100.00	1,092.89	1,092.45	3.71	3.70	-72.84	577.08	-1,869.03	1,956.39	1,951.16	5.23	374.421		
1,200.00	1,200.00	1,194.81	1,194.32	4.07	4.06	-72.91	575.43	-1,871.53	1,958.27	1,952.53	5.74	341.348		
1,300.00	1,300.00	1,301.03	1,300.52	4.43	4.44	-72.95	574.52	-1,873.45	1,959.74	1,953.48	6.26	313.076		
1,400.00	1,400.00	1,406.75	1,406.22	4.79	4.65	-72.98	574.01	-1,874.95	1,960.95	1,954.30	6.66	294.506		
1,500.00	1,500.00	1,513.03	1,512.50	5.14	4.71	-72.99	574.02	-1,875.92	1,961.82	1,954.86	6.96	281.901		
1,600.00	1,600.00	1,616.86	1,616.33	5.50	4.76	-73.00	573.89	-1,876.62	1,962.44	1,955.17	7.26	270.127		
1,700.00	1,700.00	1,721.86	1,721.33	5.86	4.85	-73.00	573.79	-1,877.07	1,962.81	1,955.22	7.59	258.442		
1,800.00	1,800.00	1,822.24	1,821.71	6.22	4.96	-73.00	573.80	-1,877.32	1,963.06	1,955.12	7.94	247.203		
1,900.00	1,900.00	1,921.84	1,921.31	6.58	5.09	-73.00	573.92	-1,877.57	1,963.34	1,955.03	8.30	236.461		
2,000.00	2,000.00	2,023.61	2,023.07	6.94	5.24	-73.00	573.98	-1,877.76	1,963.53	1,954.85	8.68	226.190		
2,100.00	2,100.00	2,122.98	2,122.44	7.29	5.40	-72.99	574.34	-1,877.86	1,963.73	1,954.66	9.07	216.575		
2,200.00	2,200.00	2,224.45	2,223.92	7.65	5.59	-72.98	574.87	-1,877.89	1,963.91	1,954.45	9.47	207.486		
2,300.00	2,299.99	2,326.17	2,325.63	8.01	5.79	-143.75	575.46	-1,877.79	1,965.05	1,955.18	9.87	199.132		
2,400.00	2,399.91	2,427.18	2,426.63	8.35	6.00	-143.76	576.33	-1,877.54	1,968.23	1,957.95	10.27	191.570		
2,500.00	2,499.69	2,528.74	2,528.19	8.70	6.23	-143.80	577.26	-1,877.20	1,973.46	1,962.77	10.69	184.617		
2,600.00	2,599.27	2,614.27	2,613.72	9.06	6.43	-143.85	577.83	-1,877.14	1,981.00	1,969.91	11.09	178.620		
2,700.00	2,698.57	2,690.91	2,690.35	9.42	6.62	-143.93	577.28	-1,878.22	1,991.66	1,980.18	11.48	173.433		
2,800.00	2,797.54	2,771.96	2,771.35	9.78	6.82	-144.06	576.00	-1,880.57	2,005.61	1,993.73	11.89	168.720		
2,815.66	2,813.00	2,787.61	2,786.99	9.84	6.86	-144.09	575.75	-1,881.07	2,008.04	1,996.09	11.96	167.948		
2,900.00	2,896.24	2,878.93	2,878.26	10.15	7.11	-144.40	574.51	-1,883.81	2,021.18	2,008.84	12.34	163.816		
3,000.00	2,994.95	2,975.61	2,974.90	10.53	7.37	-144.71	573.07	-1,886.19	2,036.27	2,023.50	12.78	159.357		
3,100.00	3,093.65	3,047.52	3,046.74	10.91	7.57	-144.97	571.21	-1,888.81	2,052.29	2,039.11	13.18	155.723		
3,200.00	3,192.36	3,122.00	3,121.03	11.29	7.78	-145.28	568.24	-1,893.18	2,070.00	2,056.41	13.59	152.358		
3,300.00	3,291.06	3,167.33	3,166.15	11.68	7.92	-145.48	565.88	-1,896.83	2,089.41	2,075.48	13.94	149.929		
3,400.00	3,389.76	3,217.00	3,215.48	12.07	8.07	-145.72	562.82	-1,901.75	2,110.87	2,096.58	14.29	147.739		
3,500.00	3,488.47	3,288.61	3,286.39	12.47	8.30	-146.10	557.59	-1,910.27	2,134.00	2,119.31	14.69	145.287		
3,600.00	3,587.17	3,364.65	3,361.45	12.87	8.55	-146.52	551.21	-1,920.62	2,158.57	2,143.47	15.10	142.952		
3,700.00	3,685.88	3,467.05	3,462.46	13.27	8.89	-147.09	542.40	-1,934.94	2,183.67	2,168.09	15.58	140.150		
3,800.00	3,784.58	3,562.52	3,556.81	13.67	9.22	-147.58	535.11	-1,947.57	2,208.40	2,192.35	16.05	137.606		
3,900.00	3,883.28	3,625.93	3,619.42	14.08	9.44	-147.90	530.19	-1,956.35	2,233.93	2,217.50	16.43	135.940		
4,000.00	3,981.99	3,689.00	3,681.42	14.49	9.67	-148.23	524.85	-1,966.59	2,261.47	2,244.66	16.81	134.499		
4,100.00	4,080.69	3,729.12	3,720.71	14.90	9.82	-148.45	521.31	-1,973.89	2,290.81	2,273.68	17.12	133.776		
4,200.00	4,179.39	3,783.00	3,773.32	15.31	10.02	-148.74	516.56	-1,984.47	2,321.97	2,304.50	17.47	132.921		
4,300.00	4,278.10	3,853.08	3,841.59	15.72	10.30	-149.12	510.58	-1,999.13	2,354.53	2,336.67	17.86	131.807		
4,400.00	4,376.80	3,930.17	3,916.59	16.13	10.61	-149.51	504.41	-2,015.86	2,388.05	2,369.77	18.28	130.630		
4,500.00	4,475.51	4,023.68	4,007.52	16.55	11.00	-149.97	497.24	-2,036.45	2,422.05	2,403.30	18.76	129.137		
4,600.00	4,574.21	4,205.79	4,185.03	16.97	11.76	-150.87	481.37	-2,073.87	2,455.02	2,435.49	19.54	125.667		
4,700.00	4,672.91	4,507.55	4,483.01	17.38	12.95	-152.15	456.69	-2,113.25	2,478.63	2,457.97	20.66	119.968		
4,800.00	4,771.62	4,599.18	4,574.06	17.80	13.29	-152.46	451.59	-2,122.09	2,501.58	2,480.44	21.14	118.339		
4,900.00	4,870.32	4,742.42	4,716.58	18.22	13.82	-152.90	445.15	-2,134.91	2,524.19	2,502.43	21.76	115.992		
5,000.00	4,969.03	4,821.00	4,794.82	18.64	14.11	-153.13	441.71	-2,141.37	2,546.04	2,523.83	22.20	114.665		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-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	5,067.73	4,901.50	4,874.91	19.07	14.41	-153.37	437.79	-2,148.42	2,568.43	2,545.78	22.65	113.384		
5,200.00	5,166.43	5,014.00	4,986.84	19.49	14.83	-153.71	432.20	-2,158.26	2,590.84	2,567.65	23.19	111.704		
5,300.00	5,265.14	5,085.41	5,057.83	19.91	15.10	-153.93	428.07	-2,164.77	2,613.61	2,589.99	23.62	110.668		
5,400.00	5,363.84	5,140.95	5,112.94	20.33	15.31	-154.12	424.16	-2,170.53	2,637.58	2,613.59	23.99	109.943		
5,500.00	5,462.54	5,199.00	5,170.33	20.76	15.55	-154.33	419.26	-2,177.74	2,663.31	2,638.95	24.37	109.299		
5,600.00	5,561.25	5,241.62	5,212.33	21.18	15.73	-154.50	415.25	-2,183.79	2,690.70	2,666.01	24.69	108.982		
5,700.00	5,659.95	5,294.00	5,263.79	21.61	15.95	-154.71	410.01	-2,191.99	2,719.71	2,694.67	25.04	108.624		
5,800.00	5,758.66	5,373.73	5,341.96	22.04	16.30	-155.04	401.65	-2,205.32	2,749.80	2,724.32	25.48	107.906		
5,900.00	5,857.36	5,463.77	5,430.15	22.46	16.70	-155.41	391.99	-2,220.67	2,780.32	2,754.35	25.97	107.070		
6,000.00	5,956.06	5,569.33	5,533.55	22.89	17.16	-155.84	380.51	-2,238.53	2,810.83	2,784.32	26.51	106.031		
6,100.00	6,054.77	5,654.50	5,616.98	23.32	17.54	-156.17	371.17	-2,252.83	2,841.32	2,814.34	26.98	105.324		
6,200.00	6,153.47	5,745.99	5,706.57	23.75	17.96	-156.53	361.03	-2,268.42	2,872.14	2,844.67	27.47	104.562		
6,300.00	6,252.18	5,896.14	5,853.87	24.18	18.62	-157.09	344.94	-2,292.67	2,902.30	2,874.13	28.18	102.995		
6,400.00	6,350.88	6,035.67	5,991.24	24.60	19.23	-157.58	330.83	-2,312.57	2,930.70	2,901.86	28.84	101.604		
6,500.00	6,449.58	6,144.59	6,098.56	25.03	19.70	-157.96	319.07	-2,327.06	2,958.27	2,928.88	29.40	100.625		
6,600.00	6,548.29	6,255.29	6,207.67	25.46	20.17	-158.34	306.88	-2,341.19	2,985.43	2,955.47	29.96	99.645		
6,700.00	6,646.99	6,346.86	6,297.94	25.89	20.56	-158.66	296.73	-2,352.74	3,012.53	2,982.08	30.45	98.919		
6,758.77	6,705.00	6,400.82	6,351.12	26.15	20.80	-158.84	290.71	-2,359.59	3,028.55	2,997.81	30.75	98.504		
6,800.00	6,745.73	6,444.93	6,394.61	26.32	20.98	-159.05	285.82	-2,365.19	3,039.61	3,008.64	30.97	98.143		
6,900.00	6,844.79	6,558.06	6,506.36	26.74	21.46	-159.51	274.83	-2,378.89	3,064.23	3,032.69	31.54	97.164		
7,000.00	6,944.17	6,643.50	6,590.91	27.13	21.82	-159.82	268.27	-2,389.27	3,086.59	3,054.59	32.00	96.458		
7,100.00	7,043.80	6,733.90	6,680.39	27.51	22.19	-160.09	262.19	-2,400.63	3,106.99	3,074.51	32.48	95.673		
7,200.00	7,143.63	6,868.56	6,813.77	27.88	22.75	-160.40	253.41	-2,416.91	3,124.57	3,091.47	33.10	94.389		
7,300.00	7,243.57	7,012.92	6,957.02	28.22	23.33	-160.67	244.35	-2,432.31	3,138.28	3,104.53	33.76	92.970		
7,374.43	7,318.00	7,104.54	7,048.08	28.46	23.69	-90.03	239.14	-2,441.06	3,146.06	3,111.88	34.18	92.039		
7,400.00	7,343.57	7,125.04	7,068.45	28.55	23.77	-90.05	238.10	-2,443.01	3,148.49	3,114.20	34.29	91.817		
7,500.00	7,443.57	7,210.46	7,153.38	28.87	24.10	-90.12	234.34	-2,451.42	3,158.35	3,123.61	34.74	90.927		
7,600.00	7,543.57	7,324.85	7,267.10	29.19	24.55	-90.21	229.44	-2,462.79	3,168.33	3,133.05	35.28	89.817		
7,700.00	7,643.57	7,486.14	7,427.66	29.52	25.16	-90.33	223.00	-2,476.56	3,176.87	3,140.91	35.96	88.339		
7,800.00	7,743.57	7,610.52	7,551.68	29.84	25.62	-90.38	220.07	-2,485.59	3,184.16	3,147.64	36.52	87.179		
7,900.00	7,843.57	7,774.78	7,715.63	30.17	26.20	-90.41	218.29	-2,495.39	3,190.21	3,153.02	37.20	85.768		
8,000.00	7,943.57	7,941.37	7,882.09	30.49	26.77	-90.44	216.28	-2,501.52	3,193.83	3,155.97	37.86	84.359		
8,100.00	8,043.57	8,084.02	8,024.71	30.82	27.23	-90.44	216.40	-2,504.21	3,195.63	3,157.19	38.44	83.123		
8,200.00	8,143.57	8,188.96	8,129.63	31.15	27.55	-90.42	217.79	-2,505.62	3,196.96	3,158.03	38.93	82.121		
8,300.00	8,243.57	8,302.31	8,242.97	31.48	27.91	-90.40	218.93	-2,506.87	3,198.06	3,158.62	39.44	81.096		
8,400.00	8,343.57	8,426.17	8,366.83	31.80	28.29	-90.38	219.60	-2,507.46	3,198.53	3,158.57	39.96	80.038		
8,500.00	8,443.57	8,542.05	8,482.71	32.13	28.63	-90.38	220.01	-2,507.24	3,198.33	3,157.87	40.46	79.045		
8,600.00	8,543.57	8,650.61	8,591.27	32.46	28.94	-90.37	220.33	-2,506.67	3,197.81	3,156.87	40.94	78.106		
8,700.00	8,643.57	8,774.31	8,714.96	32.80	29.29	-90.37	220.19	-2,505.47	3,196.85	3,155.40	41.45	77.118		
8,800.00	8,743.57	8,888.65	8,829.28	33.13	29.62	-90.38	219.86	-2,503.58	3,195.20	3,153.25	41.95	76.173		
8,900.00	8,843.57	8,993.28	8,933.89	33.46	29.92	-90.37	220.33	-2,501.54	3,193.24	3,150.82	42.42	75.278		
9,000.00	8,943.57	9,091.20	9,031.79	33.79	30.20	-90.36	221.23	-2,499.63	3,191.29	3,148.41	42.88	74.426		
9,100.00	9,043.57	9,194.01	9,134.57	34.12	30.49	-90.33	222.53	-2,497.62	3,189.33	3,145.98	43.35	73.573		
9,200.00	9,143.57	9,302.44	9,242.97	34.46	30.80	-90.30	224.09	-2,495.31	3,187.19	3,143.36	43.83	72.715		
9,300.00	9,243.57	9,404.79	9,345.28	34.79	31.10	-90.28	225.37	-2,492.88	3,184.81	3,140.51	44.30	71.889		
9,400.00	9,343.57	9,502.44	9,442.89	35.13	31.38	-90.26	226.81	-2,490.63	3,182.49	3,137.73	44.76	71.095		
9,500.00	9,443.57	9,568.67	9,509.10	35.46	31.58	-90.24	227.77	-2,489.30	3,180.56	3,135.40	45.17	70.420		
9,600.00	9,543.57	9,631.00	9,571.42	35.80	31.77	-90.22	228.65	-2,489.16	3,180.18	3,134.62	45.56	69.807		
9,601.35	9,544.92	9,631.00	9,571.42	35.80	31.77	-90.22	228.65	-2,489.16	3,180.18	3,134.62	45.56	69.801		
9,700.00	9,643.57	9,692.78	9,633.19	36.13	31.97	-90.21	229.57	-2,489.76	3,180.99	3,135.04	45.95	69.231		
9,800.00	9,743.57	9,802.83	9,743.22	36.47	32.32	-90.17	231.30	-2,491.03	3,182.15	3,135.70	46.45	68.503		
9,833.47	9,777.04	9,852.89	9,793.27	36.58	32.48	-90.16	232.01	-2,491.34	3,182.37	3,135.71	46.65	68.215		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD															Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,850.00	9,793.56	9,880.11	9,820.50	36.64	32.57	90.42	232.36	-2,491.38	3,182.39	3,135.64	46.75	68.067				
9,900.00	9,843.42	9,939.35	9,879.73	36.79	32.75	90.52	233.07	-2,491.21	3,182.27	3,135.27	47.00	67.705				
9,931.27	9,874.36	9,966.11	9,906.49	36.88	32.83	90.60	233.42	-2,491.15	3,182.24	3,135.10	47.13	67.519				
9,950.00	9,892.77	9,982.01	9,922.39	36.93	32.88	90.65	233.64	-2,491.12	3,182.25	3,135.04	47.21	67.408				
10,000.00	9,941.23	10,026.82	9,967.19	37.06	33.02	90.85	234.30	-2,491.12	3,182.41	3,134.99	47.42	67.115				
10,050.00	9,988.45	10,075.22	10,015.59	37.19	33.17	91.11	234.96	-2,491.11	3,182.70	3,135.07	47.63	66.821				
10,100.00	10,034.06	10,120.16	10,060.52	37.30	33.32	91.40	235.45	-2,491.09	3,183.18	3,135.35	47.83	66.548				
10,150.00	10,077.71	10,160.99	10,101.35	37.41	33.45	91.68	235.45	-2,491.11	3,183.97	3,135.94	48.02	66.300				
10,200.00	10,119.07	10,197.00	10,137.36	37.50	33.56	91.92	235.02	-2,491.17	3,185.12	3,136.92	48.20	66.081				
10,250.00	10,157.84	10,228.74	10,169.09	37.58	33.67	92.11	234.44	-2,491.29	3,186.78	3,138.41	48.37	65.888				
10,300.00	10,193.70	10,255.85	10,196.19	37.65	33.76	92.21	233.92	-2,491.48	3,189.05	3,140.53	48.52	65.727				
10,350.00	10,226.39	10,292.00	10,232.34	37.71	33.88	92.41	233.18	-2,491.87	3,192.00	3,143.31	48.69	65.552				
10,400.00	10,255.66	10,305.02	10,245.35	37.76	33.92	92.23	232.90	-2,492.04	3,195.62	3,146.81	48.81	65.469				
10,450.00	10,281.29	10,328.25	10,268.58	37.81	34.00	92.15	232.38	-2,492.36	3,199.99	3,151.03	48.95	65.367				
10,500.00	10,303.08	10,348.24	10,288.56	37.85	34.07	91.95	231.92	-2,492.66	3,205.13	3,156.04	49.09	65.292				
10,550.00	10,320.87	10,364.83	10,305.14	37.90	34.13	91.63	231.52	-2,492.92	3,211.06	3,161.85	49.22	65.245				
10,600.00	10,334.52	10,377.86	10,318.17	37.96	34.17	91.17	231.20	-2,493.13	3,217.81	3,168.48	49.33	65.225 SF				
10,650.00	10,343.93	10,387.69	10,327.99	38.03	34.20	90.58	230.95	-2,493.30	3,225.36	3,175.91	49.44	65.233				
10,700.00	10,349.02	10,395.37	10,335.67	38.12	34.23	89.87	230.75	-2,493.43	3,233.68	3,184.13	49.55	65.264				
10,733.47	10,350.00	10,397.58	10,337.87	38.19	34.24	89.31	230.70	-2,493.47	3,239.67	3,190.06	49.61	65.304				
10,800.00	10,350.00	10,399.61	10,339.90	38.36	34.24	89.34	230.65	-2,493.50	3,252.53	3,202.80	49.73	65.402				
10,900.00	10,350.00	10,402.65	10,342.95	38.68	34.25	89.40	230.57	-2,493.55	3,274.32	3,224.38	49.94	65.561				
11,000.00	10,350.00	10,405.69	10,345.99	39.08	34.26	89.45	230.49	-2,493.60	3,298.99	3,248.81	50.18	65.739				
11,100.00	10,350.00	10,408.73	10,349.02	39.56	34.27	89.51	230.42	-2,493.65	3,326.49	3,276.04	50.45	65.938				
11,200.00	10,350.00	10,411.76	10,352.06	40.10	34.28	89.56	230.34	-2,493.70	3,356.73	3,306.00	50.74	66.159				
11,300.00	10,350.00	10,414.79	10,355.08	40.70	34.30	89.61	230.26	-2,493.74	3,389.66	3,338.61	51.05	66.405				
11,400.00	10,350.00	10,417.82	10,358.11	41.37	34.31	89.67	230.19	-2,493.79	3,425.19	3,373.82	51.37	66.677				
11,500.00	10,350.00	10,420.84	10,361.13	42.08	34.32	89.72	230.11	-2,493.84	3,463.24	3,411.53	51.71	66.976				
11,600.00	10,350.00	10,423.85	10,364.14	42.85	34.33	89.78	230.03	-2,493.88	3,503.73	3,451.67	52.06	67.305				
11,700.00	10,350.00	10,426.87	10,367.15	43.67	34.34	89.83	229.96	-2,493.93	3,546.57	3,494.16	52.42	67.663				
11,800.00	10,350.00	10,429.87	10,370.16	44.53	34.35	89.89	229.88	-2,493.97	3,591.69	3,538.91	52.78	68.052				
11,900.00	10,350.00	10,432.88	10,373.16	45.44	34.36	89.94	229.81	-2,494.02	3,638.99	3,585.85	53.15	68.471				
12,000.00	10,350.00	10,435.88	10,376.16	46.39	34.37	89.99	229.73	-2,494.06	3,688.40	3,634.89	53.52	68.923				
12,100.00	10,350.00	10,438.87	10,379.15	47.37	34.38	90.05	229.66	-2,494.10	3,739.83	3,685.95	53.88	69.405				
12,200.00	10,350.00	10,441.86	10,382.14	48.39	34.39	90.10	229.58	-2,494.15	3,793.19	3,738.95	54.25	69.923				
12,300.00	10,350.00	10,444.85	10,385.13	49.45	34.40	90.16	229.51	-2,494.19	3,848.42	3,793.81	54.61	70.472				
12,400.00	10,350.00	10,447.83	10,388.11	50.54	34.41	90.21	229.43	-2,494.23	3,905.42	3,850.45	54.97	71.051				
12,500.00	10,350.00	10,450.81	10,391.09	51.66	34.42	90.26	229.36	-2,494.27	3,964.12	3,908.80	55.32	71.659				
12,600.00	10,350.00	10,453.79	10,394.06	52.80	34.43	90.32	229.28	-2,494.31	4,024.45	3,968.78	55.67	72.296				
12,700.00	10,350.00	10,456.76	10,397.03	53.97	34.44	90.37	229.21	-2,494.35	4,086.33	4,030.33	56.01	72.963				
12,800.00	10,350.00	10,459.72	10,400.00	55.17	34.45	90.42	229.13	-2,494.39	4,149.70	4,093.36	56.34	73.657				
12,900.00	10,350.00	10,462.69	10,402.96	56.39	34.46	90.48	229.06	-2,494.43	4,214.49	4,157.82	56.66	74.378				
13,000.00	10,350.00	10,465.64	10,405.91	57.63	34.47	90.53	228.99	-2,494.46	4,280.63	4,223.65	56.98	75.127				
13,100.00	10,350.00	10,468.60	10,408.87	58.89	34.48	90.58	228.91	-2,494.50	4,348.06	4,290.78	57.29	75.901				
13,200.00	10,350.00	10,471.55	10,411.82	60.17	34.49	90.64	228.84	-2,494.54	4,416.73	4,359.14	57.59	76.699				
13,300.00	10,350.00	10,474.49	10,414.76	61.47	34.50	90.69	228.77	-2,494.58	4,486.57	4,428.70	57.87	77.523				
13,400.00	10,350.00	10,477.44	10,417.70	62.78	34.51	90.74	228.69	-2,494.61	4,557.54	4,499.38	58.15	78.369				
13,500.00	10,350.00	10,480.37	10,420.64	64.11	34.52	90.79	228.62	-2,494.65	4,629.58	4,571.15	58.43	79.237				
13,600.00	10,350.00	10,483.31	10,423.57	65.45	34.53	90.85	228.55	-2,494.68	4,702.63	4,643.94	58.69	80.125				
13,700.00	10,350.00	10,486.24	10,426.50	66.81	34.54	90.90	228.48	-2,494.72	4,776.67	4,717.72	58.95	81.033				
13,800.00	10,350.00	10,488.36	10,428.62	68.18	34.55	90.94	228.42	-2,494.74	4,851.63	4,792.44	59.19	81.962				
13,900.00	10,350.00	10,491.03	10,431.29	69.56	34.55	90.99	228.36	-2,494.77	4,927.48	4,868.05	59.43	82.907				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #5		Offset Site Error:	0.00 usft
Survey Program:													16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 2745-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	16.00	16.00	0.00	0.00	-72.54	579.56	-1,842.30	1,931.34							
100.00	100.00	100.00	99.98	0.13	0.16	-72.52	580.42	-1,843.14	1,932.55	1,932.36	0.19	N/A				
200.00	200.00	202.44	202.40	0.48	0.49	-72.50	581.57	-1,844.52	1,934.18	1,933.49	0.69	2,794.838				
300.00	300.00	300.00	299.95	0.84	0.84	-72.50	582.11	-1,845.84	1,935.64	1,934.45	1.19	1,626.192				
400.00	400.00	383.16	383.09	1.20	1.14	-72.52	581.89	-1,847.47	1,937.43	1,935.78	1.65	1,171.618				
500.00	500.00	473.45	473.35	1.56	1.46	-72.54	581.87	-1,849.78	1,939.86	1,937.73	2.14	908.222				
600.00	600.00	551.00	550.84	1.92	1.74	-72.57	581.55	-1,852.72	1,943.32	1,940.73	2.59	750.931				
700.00	700.00	646.96	646.72	2.28	2.09	-72.62	581.23	-1,856.72	1,947.21	1,944.12	3.08	631.259				
800.00	800.00	783.01	782.67	2.63	2.58	-72.68	580.67	-1,861.69	1,950.64	1,946.96	3.68	529.918				
900.00	900.00	885.03	884.65	2.99	2.95	-72.72	579.85	-1,864.49	1,953.02	1,948.83	4.19	465.781				
1,000.00	1,000.00	995.77	995.35	3.35	3.35	-72.78	578.51	-1,866.99	1,954.82	1,950.09	4.73	413.608				
1,100.00	1,100.00	1,092.89	1,092.45	3.71	3.70	-72.84	577.08	-1,869.03	1,956.39	1,951.16	5.23	374.421				
1,200.00	1,200.00	1,194.81	1,194.32	4.07	4.06	-72.91	575.43	-1,871.53	1,958.27	1,952.53	5.74	341.348				
1,300.00	1,300.00	1,301.03	1,300.52	4.43	4.44	-72.95	574.52	-1,873.45	1,959.74	1,953.48	6.26	313.076				
1,400.00	1,400.00	1,406.75	1,406.22	4.79	4.65	-72.98	574.01	-1,874.95	1,960.95	1,954.30	6.66	294.506				
1,500.00	1,500.00	1,513.03	1,512.50	5.14	4.71	-72.99	574.02	-1,875.92	1,961.82	1,954.86	6.96	281.901				
1,600.00	1,600.00	1,616.86	1,616.33	5.50	4.76	-73.00	573.89	-1,876.62	1,962.44	1,955.17	7.26	270.127				
1,700.00	1,700.00	1,721.86	1,721.33	5.86	4.85	-73.00	573.79	-1,877.07	1,962.81	1,955.22	7.59	258.442				
1,800.00	1,800.00	1,822.24	1,821.71	6.22	4.96	-73.00	573.80	-1,877.32	1,963.06	1,955.12	7.94	247.203				
1,900.00	1,900.00	1,921.84	1,921.31	6.58	5.09	-73.00	573.92	-1,877.57	1,963.34	1,955.03	8.30	236.461				
2,000.00	2,000.00	2,023.61	2,023.07	6.94	5.24	-73.00	573.98	-1,877.76	1,963.53	1,954.85	8.68	226.190				
2,100.00	2,100.00	2,122.98	2,122.44	7.29	5.40	-72.99	574.34	-1,877.86	1,963.73	1,954.66	9.07	216.575				
2,200.00	2,200.00	2,224.45	2,223.92	7.65	5.59	-72.98	574.87	-1,877.89	1,963.91	1,954.45	9.47	207.486				
2,300.00	2,299.99	2,326.17	2,325.63	8.01	5.79	-143.75	575.46	-1,877.79	1,965.05	1,955.18	9.87	199.132				
2,400.00	2,399.91	2,427.18	2,426.63	8.35	6.00	-143.76	576.33	-1,877.54	1,968.23	1,957.95	10.27	191.570				
2,500.00	2,499.69	2,528.74	2,528.19	8.70	6.23	-143.80	577.26	-1,877.20	1,973.46	1,962.77	10.69	184.617				
2,600.00	2,599.27	2,614.27	2,613.72	9.06	6.43	-143.85	577.83	-1,877.14	1,981.00	1,969.91	11.09	178.620				
2,700.00	2,698.57	2,690.91	2,690.35	9.42	6.62	-143.93	577.28	-1,878.22	1,991.66	1,980.18	11.48	173.433				
2,800.00	2,797.54	2,771.48	2,770.87	9.78	6.82	-144.06	575.99	-1,880.57	2,005.62	1,993.73	11.89	168.735				
2,815.66	2,813.00	2,786.84	2,786.22	9.84	6.86	-144.09	575.71	-1,881.07	2,008.05	1,996.09	11.95	167.973				
2,900.00	2,896.24	2,855.03	2,854.36	10.15	7.04	-144.33	574.37	-1,883.49	2,021.51	2,009.21	12.30	164.374				
3,000.00	2,994.95	2,926.57	2,925.78	10.53	7.24	-144.61	572.35	-1,887.06	2,038.63	2,025.94	12.69	160.620				
3,100.00	3,093.65	3,000.00	2,998.99	10.91	7.44	-144.91	569.55	-1,891.91	2,057.11	2,044.01	13.09	157.135				
3,200.00	3,192.36	3,067.79	3,066.48	11.29	7.64	-145.22	566.33	-1,897.46	2,076.93	2,063.45	13.48	154.053				
3,300.00	3,291.06	3,137.39	3,135.63	11.68	7.85	-145.55	562.38	-1,904.23	2,098.11	2,084.24	13.88	151.202				
3,400.00	3,389.76	3,200.00	3,197.71	12.07	8.04	-145.87	558.28	-1,911.24	2,120.68	2,106.42	14.25	148.774				
3,500.00	3,488.47	3,275.36	3,272.25	12.47	8.28	-146.27	552.65	-1,920.83	2,144.59	2,129.93	14.66	146.262				
3,600.00	3,587.17	3,370.38	3,366.10	12.87	8.60	-146.78	545.11	-1,933.65	2,169.25	2,154.13	15.12	143.446				
3,700.00	3,685.88	3,465.41	3,459.95	13.27	8.92	-147.28	537.57	-1,946.47	2,194.07	2,178.49	15.59	140.771				
3,800.00	3,784.58	3,560.43	3,553.80	13.67	9.25	-147.77	530.03	-1,959.29	2,219.06	2,203.00	16.05	138.225				
3,900.00	3,883.28	3,655.45	3,647.66	14.08	9.59	-148.25	522.49	-1,972.11	2,244.19	2,227.67	16.53	135.804				
4,000.00	3,981.99	3,750.48	3,741.51	14.49	9.93	-148.72	514.95	-1,984.92	2,269.48	2,252.48	17.00	133.502				
4,100.00	4,080.69	3,845.50	3,835.36	14.90	10.28	-149.18	507.41	-1,997.74	2,294.91	2,277.43	17.48	131.311				
4,200.00	4,179.39	3,940.53	3,929.22	15.31	10.63	-149.63	499.87	-2,010.56	2,320.48	2,302.53	17.96	129.227				
4,300.00	4,278.10	4,035.55	4,023.07	15.72	10.99	-150.07	492.33	-2,023.38	2,346.19	2,327.75	18.44	127.243				
4,400.00	4,376.80	4,130.57	4,116.92	16.13	11.36	-150.50	484.79	-2,036.20	2,372.02	2,353.10	18.92	125.353				
4,500.00	4,475.51	4,225.60	4,210.78	16.55	11.72	-150.92	477.26	-2,049.02	2,397.98	2,378.58	19.41	123.553				
4,600.00	4,574.21	4,320.62	4,304.63	16.97	12.09	-151.33	469.72	-2,061.84	2,424.07	2,404.17	19.90	121.837				
4,700.00	4,672.91	4,415.65	4,398.48	17.38	12.46	-151.73	462.18	-2,074.66	2,450.27	2,429.89	20.39	120.199				
4,800.00	4,771.62	4,510.67	4,492.34	17.80	12.84	-152.13	454.64	-2,087.47	2,476.59	2,455.71	20.88	118.637				
4,900.00	4,870.32	4,605.70	4,586.19	18.22	13.22	-152.52	447.10	-2,100.29	2,503.02	2,481.65	21.37	117.145				
5,000.00	4,969.03	4,700.72	4,680.04	18.64	13.60	-152.90	439.56	-2,113.11	2,529.55	2,507.69	21.86	115.719				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #5		Offset Site Error:	0.00 usft
Survey Program:													16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 2745-OWSG (Rev2) MWD		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,900.00	9,843.42	9,924.78	9,869.92	36.79	32.85	90.11	211.49	-2,500.90	3,192.04	3,145.00	47.04	67.863				
9,950.00	9,892.77	9,974.13	9,919.27	36.93	33.00	90.25	211.49	-2,500.90	3,192.07	3,144.81	47.26	67.542				
10,000.00	9,941.23	10,022.59	9,967.73	37.06	33.16	90.46	211.49	-2,500.90	3,192.14	3,144.67	47.48	67.233				
10,050.00	9,988.45	10,069.81	10,014.95	37.19	33.31	90.72	211.49	-2,500.90	3,192.32	3,144.63	47.69	66.938				
10,100.00	10,034.06	10,115.42	10,060.56	37.30	33.45	91.02	211.49	-2,500.90	3,192.66	3,144.77	47.90	66.659				
10,150.00	10,077.71	10,159.07	10,104.21	37.41	33.59	91.34	211.49	-2,500.90	3,193.24	3,145.15	48.09	66.398				
10,200.00	10,119.07	10,200.43	10,145.57	37.50	33.72	91.67	211.49	-2,500.90	3,194.13	3,145.85	48.28	66.156				
10,250.00	10,157.84	10,239.20	10,184.34	37.58	33.85	91.97	211.49	-2,500.90	3,195.43	3,146.97	48.46	65.935				
10,300.00	10,193.70	10,275.06	10,220.20	37.65	33.96	92.24	211.49	-2,500.90	3,197.23	3,148.59	48.64	65.738				
10,350.00	10,226.39	10,307.75	10,252.89	37.71	34.07	92.45	211.49	-2,500.90	3,199.60	3,150.80	48.80	65.565				
10,400.00	10,255.66	10,337.02	10,282.16	37.76	34.16	92.57	211.49	-2,500.90	3,202.64	3,153.69	48.96	65.418				
10,450.00	10,281.29	10,362.65	10,307.79	37.81	34.24	92.58	211.49	-2,500.90	3,206.42	3,157.31	49.10	65.298				
10,500.00	10,303.08	10,384.44	10,329.58	37.85	34.31	92.48	211.49	-2,500.90	3,210.99	3,161.74	49.24	65.207				
10,550.00	10,320.87	10,402.23	10,347.37	37.90	34.37	92.23	211.49	-2,500.90	3,216.39	3,167.02	49.37	65.145				
10,600.00	10,334.52	10,415.88	10,361.02	37.96	34.41	91.84	211.49	-2,500.90	3,222.65	3,173.16	49.49	65.114				
10,650.00	10,343.93	10,425.29	10,370.43	38.03	34.44	91.28	211.49	-2,500.90	3,229.76	3,180.16	49.60	65.114				
10,700.00	10,349.02	10,430.38	10,375.52	38.12	34.46	90.57	211.49	-2,500.90	3,237.72	3,188.02	49.70	65.146				
10,733.47	10,350.00	10,431.36	10,376.50	38.19	34.46	90.00	211.49	-2,500.90	3,243.48	3,193.72	49.76	65.185				
10,800.00	10,350.00	10,431.36	10,376.50	38.36	34.46	90.00	211.49	-2,500.90	3,255.94	3,206.07	49.88	65.279				
10,900.00	10,350.00	10,431.36	10,376.50	38.68	34.46	90.00	211.49	-2,500.90	3,277.13	3,227.04	50.08	65.433				
11,000.00	10,350.00	10,431.36	10,376.50	39.08	34.46	90.00	211.49	-2,500.90	3,301.20	3,250.88	50.32	65.606				
11,100.00	10,350.00	10,431.36	10,376.50	39.56	34.46	90.00	211.49	-2,500.90	3,328.11	3,277.53	50.58	65.800				
11,200.00	10,350.00	10,431.36	10,376.50	40.10	34.46	90.00	211.49	-2,500.90	3,357.78	3,306.92	50.86	66.017				
11,300.00	10,350.00	10,431.36	10,376.50	40.70	34.46	90.00	211.49	-2,500.90	3,390.15	3,338.98	51.17	66.259				
11,400.00	10,350.00	10,431.36	10,376.50	41.37	34.46	90.00	211.49	-2,500.90	3,425.13	3,373.64	51.49	66.527				
11,500.00	10,350.00	10,431.36	10,376.50	42.08	34.46	90.00	211.49	-2,500.90	3,462.64	3,410.82	51.82	66.822				
11,600.00	10,350.00	10,431.36	10,376.50	42.85	34.46	90.00	211.49	-2,500.90	3,502.61	3,450.44	52.16	67.147				
11,700.00	10,350.00	10,431.36	10,376.50	43.67	34.46	90.00	211.49	-2,500.90	3,544.95	3,492.43	52.52	67.501				
11,800.00	10,350.00	10,431.36	10,376.50	44.53	34.46	90.00	211.49	-2,500.90	3,589.57	3,536.70	52.88	67.886				
11,900.00	10,350.00	13,576.84	12,067.02	45.44	51.79	117.89	-1,504.28	-2,485.81	3,614.00	3,551.55	62.45	57.872				
12,000.00	10,350.00	13,676.83	12,068.33	46.39	52.88	117.91	-1,604.26	-2,484.93	3,614.72	3,550.96	63.76	56.694				
12,100.00	10,350.00	13,776.82	12,069.64	47.37	53.99	117.93	-1,704.24	-2,484.05	3,615.44	3,550.33	65.11	55.527				
12,200.00	10,350.00	13,876.82	12,070.96	48.39	55.14	117.94	-1,804.22	-2,483.17	3,616.17	3,549.66	66.50	54.376				
12,300.00	10,350.00	13,976.81	12,072.27	49.45	56.31	117.96	-1,904.20	-2,482.29	3,616.89	3,548.96	67.93	53.242				
12,400.00	10,350.00	14,076.80	12,073.58	50.54	57.50	117.98	-2,004.18	-2,481.42	3,617.61	3,548.22	69.39	52.131				
12,500.00	10,350.00	14,176.79	12,074.90	51.66	58.72	118.00	-2,104.16	-2,480.54	3,618.34	3,547.45	70.89	51.042				
12,600.00	10,350.00	14,276.78	12,076.21	52.80	59.96	118.01	-2,204.14	-2,479.66	3,619.06	3,546.65	72.42	49.976				
12,700.00	10,350.00	14,376.77	12,077.52	53.97	61.21	118.03	-2,304.11	-2,478.78	3,619.79	3,545.82	73.97	48.936				
12,800.00	10,350.00	14,476.76	12,078.83	55.17	62.49	118.05	-2,404.09	-2,477.90	3,620.51	3,544.96	75.55	47.921				
12,900.00	10,350.00	14,576.75	12,080.15	56.39	63.78	118.07	-2,504.07	-2,477.02	3,621.24	3,544.08	77.16	46.933				
13,000.00	10,350.00	14,676.75	12,081.46	57.63	65.09	118.08	-2,604.05	-2,476.14	3,621.96	3,543.17	78.79	45.972				
13,100.00	10,350.00	14,776.74	12,082.77	58.89	66.41	118.10	-2,704.03	-2,475.26	3,622.69	3,542.25	80.44	45.036				
13,200.00	10,350.00	14,876.73	12,084.09	60.17	67.75	118.12	-2,804.01	-2,474.38	3,623.41	3,541.30	82.11	44.128				
13,300.00	10,350.00	14,976.72	12,085.40	61.47	69.10	118.13	-2,903.99	-2,473.50	3,624.14	3,540.34	83.80	43.246				
13,400.00	10,350.00	15,076.71	12,086.71	62.78	70.46	118.15	-3,003.97	-2,472.62	3,624.87	3,539.35	85.51	42.389				
13,500.00	10,350.00	15,176.70	12,088.03	64.11	71.84	118.17	-3,103.94	-2,471.74	3,625.60	3,538.35	87.24	41.558				
13,600.00	10,350.00	15,276.69	12,089.34	65.45	73.23	118.19	-3,203.92	-2,470.87	3,626.32	3,537.34	88.98	40.753				
13,700.00	10,350.00	15,376.69	12,090.65	66.81	74.62	118.20	-3,303.90	-2,469.99	3,627.05	3,536.31	90.74	39.972				
13,800.00	10,350.00	15,476.68	12,091.97	68.18	76.03	118.22	-3,403.88	-2,469.11	3,627.78	3,535.27	92.51	39.214				
13,900.00	10,350.00	15,576.67	12,093.28	69.56	77.45	118.24	-3,503.86	-2,468.23	3,628.51	3,534.21	94.30	38.480				
14,000.00	10,350.00	15,676.66	12,094.59	70.96	78.88	118.26	-3,603.84	-2,467.35	3,629.24	3,533.14	96.09	37.768				
14,100.00	10,350.00	15,776.65	12,095.90	72.36	80.31	118.27	-3,703.82	-2,466.47	3,629.97	3,532.06	97.90	37.077				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #5		Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 2745-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	10,350.00	15,876.64	12,097.22	73.78	81.76	118.29	-3,803.80	-2,465.59	3,630.70	3,530.97	99.72	36.408				
14,300.00	10,350.00	15,976.63	12,098.53	75.20	83.21	118.31	-3,903.78	-2,464.71	3,631.43	3,529.87	101.55	35.759				
14,400.00	10,350.00	16,076.62	12,099.84	76.63	84.67	118.33	-4,003.75	-2,463.83	3,632.16	3,528.76	103.39	35.129				
14,500.00	10,350.00	16,176.62	12,101.16	78.08	86.13	118.34	-4,103.73	-2,462.95	3,632.89	3,527.64	105.24	34.519				
14,600.00	10,350.00	16,276.61	12,102.47	79.53	87.61	118.36	-4,203.71	-2,462.07	3,633.62	3,526.52	107.10	33.927				
14,700.00	10,350.00	16,376.60	12,103.78	80.99	89.08	118.38	-4,303.69	-2,461.19	3,634.35	3,525.38	108.97	33.353				
14,800.00	10,350.00	16,476.59	12,105.10	82.45	90.57	118.39	-4,403.67	-2,460.32	3,635.08	3,524.24	110.84	32.796				
14,900.00	10,350.00	16,576.58	12,106.41	83.92	92.06	118.41	-4,503.65	-2,459.44	3,635.81	3,523.09	112.72	32.256				
15,000.00	10,350.00	16,676.57	12,107.72	85.40	93.56	118.43	-4,603.63	-2,458.56	3,636.54	3,521.94	114.61	31.731				
15,100.00	10,350.00	16,776.56	12,109.04	86.89	95.06	118.45	-4,703.61	-2,457.68	3,637.28	3,520.78	116.50	31.221				
15,200.00	10,350.00	16,876.55	12,110.35	88.38	96.56	118.46	-4,803.58	-2,456.80	3,638.01	3,519.61	118.40	30.726				
15,300.00	10,350.00	16,976.55	12,111.66	89.87	98.07	118.48	-4,903.56	-2,455.92	3,638.74	3,518.44	120.31	30.245				
15,400.00	10,350.00	17,076.54	12,112.98	91.38	99.59	118.50	-5,003.54	-2,455.04	3,639.48	3,517.26	122.22	29.778				
15,500.00	10,350.00	17,176.53	12,114.29	92.88	101.11	118.52	-5,103.52	-2,454.16	3,640.21	3,516.07	124.14	29.324				
15,600.00	10,350.00	17,276.52	12,115.60	94.39	102.63	118.53	-5,203.50	-2,453.28	3,640.95	3,514.88	126.06	28.882				
15,700.00	10,350.00	17,376.51	12,116.91	95.91	104.16	118.55	-5,303.48	-2,452.40	3,641.68	3,513.69	127.99	28.453				
15,800.00	10,350.00	17,476.50	12,118.23	97.43	105.69	118.57	-5,403.46	-2,451.52	3,642.41	3,512.49	129.92	28.035				
15,900.00	10,350.00	17,576.49	12,119.54	98.96	107.22	118.58	-5,503.44	-2,450.64	3,643.15	3,511.29	131.86	27.629				
16,000.00	10,350.00	17,676.49	12,120.85	100.49	108.76	118.60	-5,603.42	-2,449.77	3,643.89	3,510.09	133.80	27.234				
16,100.00	10,350.00	17,776.48	12,122.17	102.02	110.30	118.62	-5,703.39	-2,448.89	3,644.62	3,508.88	135.75	26.849				
16,200.00	10,350.00	17,876.47	12,123.48	103.55	111.85	118.64	-5,803.37	-2,448.01	3,645.36	3,507.66	137.70	26.474				
16,300.00	10,350.00	17,976.46	12,124.79	105.09	113.39	118.65	-5,903.35	-2,447.13	3,646.09	3,506.45	139.65	26.109				
16,400.00	10,350.00	18,076.45	12,126.11	106.64	114.94	118.67	-6,003.33	-2,446.25	3,646.83	3,505.23	141.60	25.754				
16,500.00	10,350.00	18,176.44	12,127.42	108.18	116.50	118.69	-6,103.31	-2,445.37	3,647.57	3,504.01	143.56	25.408				
16,600.00	10,350.00	18,276.43	12,128.73	109.73	118.05	118.70	-6,203.29	-2,444.49	3,648.31	3,502.79	145.52	25.071				
16,700.00	10,350.00	18,376.42	12,130.05	111.29	119.61	118.72	-6,303.27	-2,443.61	3,649.04	3,501.56	147.48	24.743				
16,800.00	10,350.00	18,476.42	12,131.36	112.84	121.17	118.74	-6,403.25	-2,442.73	3,649.78	3,500.34	149.45	24.422				
16,900.00	10,350.00	18,576.41	12,132.67	114.40	122.73	118.76	-6,503.22	-2,441.85	3,650.52	3,499.11	151.41	24.110				
17,000.00	10,350.00	18,676.40	12,133.98	115.96	124.30	118.77	-6,603.20	-2,440.97	3,651.26	3,497.88	153.38	23.805				
17,100.00	10,350.00	18,776.39	12,135.30	117.52	125.87	118.79	-6,703.18	-2,440.09	3,652.00	3,496.64	155.36	23.507				
17,200.00	10,350.00	18,876.38	12,136.61	119.09	127.44	118.81	-6,803.16	-2,439.22	3,652.74	3,495.41	157.33	23.217				
17,300.00	10,350.00	18,976.37	12,137.92	120.66	129.01	118.82	-6,903.14	-2,438.34	3,653.48	3,494.17	159.31	22.933				
17,400.00	10,350.00	19,076.36	12,139.24	122.23	130.58	118.84	-7,003.12	-2,437.46	3,654.22	3,492.93	161.29	22.657				
17,500.00	10,350.00	19,176.35	12,140.55	123.80	132.16	118.86	-7,103.10	-2,436.58	3,654.96	3,491.69	163.27	22.386				
17,600.00	10,350.00	19,276.35	12,141.86	125.37	133.74	118.88	-7,203.08	-2,435.70	3,655.70	3,490.45	165.25	22.122				
17,700.00	10,350.00	19,376.34	12,143.18	126.95	135.31	118.89	-7,303.06	-2,434.82	3,656.44	3,489.20	167.24	21.864				
17,800.00	10,350.00	19,476.33	12,144.49	128.52	136.90	118.91	-7,403.03	-2,433.94	3,657.18	3,487.96	169.23	21.611				
17,900.00	10,350.00	19,576.32	12,145.80	130.10	138.48	118.93	-7,503.01	-2,433.06	3,657.92	3,486.71	171.21	21.365				
18,000.00	10,350.00	19,676.31	12,147.12	131.69	140.06	118.94	-7,602.99	-2,432.18	3,658.67	3,485.46	173.20	21.123				
18,100.00	10,350.00	19,776.30	12,148.43	133.27	141.65	118.96	-7,702.97	-2,431.30	3,659.41	3,484.21	175.20	20.888				
18,200.00	10,350.00	19,876.29	12,149.74	134.85	143.23	118.98	-7,802.95	-2,430.42	3,660.15	3,482.96	177.19	20.657				
18,300.00	10,350.00	19,976.29	12,151.05	136.44	144.82	119.00	-7,902.93	-2,429.54	3,660.89	3,481.71	179.18	20.431				
18,400.00	10,350.00	20,076.28	12,152.37	138.03	146.41	119.01	-8,002.91	-2,428.67	3,661.64	3,480.47	181.17	20.211				
18,500.00	10,350.00	20,176.27	12,153.68	139.62	148.00	119.03	-8,102.89	-2,427.79	3,662.38	3,479.22	183.17	19.995				
18,600.00	10,350.00	20,276.26	12,154.99	141.21	149.60	119.05	-8,202.86	-2,426.91	3,663.13	3,477.96	185.16	19.783				
18,700.00	10,350.00	20,376.25	12,156.31	142.80	151.19	119.06	-8,302.84	-2,426.03	3,663.87	3,476.71	187.16	19.576				
18,800.00	10,350.00	20,476.24	12,157.62	144.39	152.79	119.08	-8,402.82	-2,425.15	3,664.62	3,475.46	189.15	19.374				
18,900.00	10,350.00	20,576.23	12,158.93	145.99	154.38	119.10	-8,502.80	-2,424.27	3,665.36	3,474.21	191.15	19.175				
19,000.00	10,350.00	20,676.22	12,160.25	147.58	155.98	119.12	-8,602.78	-2,423.39	3,666.11	3,472.95	193.15	18.980				
19,100.00	10,350.00	20,776.22	12,161.56	149.18	157.58	119.13	-8,702.76	-2,422.51	3,666.85	3,471.70	195.15	18.790				
19,200.00	10,350.00	20,876.21	12,162.87	150.78	159.18	119.15	-8,802.74	-2,421.63	3,667.60	3,470.44	197.15	18.603				
19,300.00	10,350.00	20,976.20	12,164.19	152.38	160.78	119.17	-8,902.72	-2,420.75	3,668.34	3,469.19	199.16	18.420				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #5												Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 2745-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	10,350.00	21,076.19	12,165.50	153.98	162.38	119.18	-9,002.69	-2,419.87	3,669.09	3,467.93	201.16	18.240	
19,500.00	10,350.00	21,176.18	12,166.81	155.58	163.98	119.20	-9,102.67	-2,418.99	3,669.84	3,466.68	203.16	18.064	
19,600.00	10,350.00	21,276.17	12,168.12	157.18	165.59	119.22	-9,202.65	-2,418.12	3,670.58	3,465.42	205.17	17.891	
19,700.00	10,350.00	21,376.16	12,169.44	158.79	167.19	119.23	-9,302.63	-2,417.24	3,671.33	3,464.16	207.17	17.721	
19,800.00	10,350.00	21,476.15	12,170.75	160.39	168.80	119.25	-9,402.61	-2,416.36	3,672.08	3,462.90	209.18	17.555	
19,900.00	10,350.00	21,576.15	12,172.06	162.00	170.40	119.27	-9,502.59	-2,415.48	3,672.83	3,461.65	211.18	17.392	
20,000.00	10,350.00	21,676.14	12,173.38	163.61	172.01	119.28	-9,602.57	-2,414.60	3,673.58	3,460.39	213.18	17.232	
20,100.00	10,350.00	21,776.13	12,174.69	165.21	173.62	119.30	-9,702.55	-2,413.72	3,674.33	3,459.14	215.19	17.075	
20,200.00	10,350.00	21,876.12	12,176.00	166.82	175.23	119.32	-9,802.53	-2,412.84	3,675.07	3,457.88	217.19	16.921	
20,300.00	10,350.00	21,976.11	12,177.32	168.43	176.84	119.34	-9,902.50	-2,411.96	3,675.82	3,456.62	219.20	16.769	
20,400.00	10,350.00	22,076.10	12,178.63	170.04	178.45	119.35	-10,002.48	-2,411.08	3,676.57	3,455.37	221.21	16.621	
20,500.00	10,350.00	22,176.09	12,179.94	171.65	180.06	119.37	-10,102.46	-2,410.20	3,677.32	3,454.11	223.21	16.474	
20,529.73	10,350.00	22,205.82	12,180.33	172.13	180.54	119.37	-10,132.19	-2,409.94	3,677.55	3,453.74	223.81	16.432 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													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	23.09	23.09	0.00	0.03	-71.52	580.61	-1,737.45	1,831.90							
100.00	100.00	116.51	116.49	0.13	0.17	-71.47	582.37	-1,737.41	1,832.45	1,832.25	0.20	9,119.111				
200.00	200.00	206.79	206.72	0.48	0.49	-71.38	585.43	-1,737.35	1,833.44	1,832.75	0.68	2,680.108				
300.00	300.00	294.51	294.37	0.84	0.80	-71.27	588.92	-1,737.37	1,834.76	1,833.59	1.16	1,578.054				
400.00	400.00	390.87	390.62	1.20	1.15	-71.14	593.52	-1,737.75	1,836.66	1,835.00	1.66	1,103.877				
500.00	500.00	483.33	482.93	1.56	1.49	-71.00	598.58	-1,738.11	1,838.81	1,836.65	2.16	852.696				
600.00	600.00	559.97	559.42	1.92	1.77	-70.86	603.42	-1,738.88	1,841.82	1,839.21	2.61	705.599				
700.00	700.00	741.55	740.85	2.28	2.43	-70.68	609.77	-1,739.64	1,843.47	1,840.14	3.32	554.497				
800.00	800.00	856.27	855.55	2.63	2.82	-70.65	610.44	-1,738.01	1,842.33	1,838.47	3.86	477.415				
900.00	900.00	956.26	955.53	2.99	3.17	-70.62	610.85	-1,736.24	1,840.79	1,836.44	4.36	422.567				
1,000.00	1,000.00	1,067.22	1,066.46	3.35	3.55	-70.60	610.75	-1,734.03	1,838.88	1,834.00	4.88	376.816				
1,100.00	1,100.00	1,173.73	1,172.94	3.71	3.92	-70.57	610.77	-1,731.37	1,836.52	1,831.13	5.40	340.384				
1,200.00	1,200.00	1,273.33	1,272.49	4.07	4.27	-70.52	611.32	-1,728.26	1,833.77	1,827.87	5.90	310.976				
1,300.00	1,300.00	1,352.77	1,351.91	4.43	4.55	-70.49	611.82	-1,726.42	1,831.80	1,825.46	6.35	288.516				
1,400.00	1,400.00	1,439.79	1,438.92	4.79	4.68	-70.47	612.11	-1,725.55	1,830.94	1,824.25	6.69	273.643				
1,500.00	1,500.00	1,540.63	1,539.76	5.14	4.71	-70.45	612.30	-1,724.73	1,830.24	1,823.27	6.97	262.518				
1,600.00	1,600.00	1,640.54	1,639.66	5.50	4.76	-70.44	612.48	-1,723.88	1,829.50	1,822.23	7.28	251.418				
1,700.00	1,700.00	1,738.97	1,738.09	5.86	4.84	-70.44	612.29	-1,723.24	1,828.82	1,821.22	7.60	240.582				
1,800.00	1,800.00	1,835.86	1,834.98	6.22	4.94	-70.44	612.01	-1,722.76	1,828.26	1,820.32	7.94	230.154				
1,900.00	1,900.00	1,929.87	1,928.99	6.58	5.06	-70.44	611.85	-1,722.51	1,827.95	1,819.65	8.30	220.268				
2,000.00	2,000.00	2,028.36	2,027.48	6.94	5.20	-70.44	611.90	-1,722.42	1,827.88	1,819.21	8.67	210.819				
2,100.00	2,100.00	2,153.43	2,152.55	7.29	5.41	-70.44	611.70	-1,721.70	1,827.33	1,818.24	9.08	201.196				
2,200.00	2,200.00	2,326.80	2,325.80	7.65	5.75	-70.42	610.35	-1,716.03	1,824.05	1,814.48	9.56	190.759				
2,300.00	2,299.99	2,561.40	2,559.18	8.01	6.30	-141.42	599.88	-1,695.22	1,814.24	1,804.13	10.11	179.452				
2,400.00	2,399.91	2,664.56	2,661.45	8.35	6.57	-141.66	593.49	-1,683.30	1,804.33	1,793.79	10.53	171.290				
2,500.00	2,499.69	2,789.18	2,784.91	8.70	6.92	-141.97	585.99	-1,668.10	1,795.99	1,785.00	10.99	163.423				
2,600.00	2,599.27	2,943.06	2,936.81	9.06	7.39	-142.42	575.46	-1,645.92	1,787.32	1,775.83	11.48	155.650				
2,700.00	2,698.57	3,056.90	3,048.71	9.42	7.77	-142.88	565.53	-1,627.52	1,778.40	1,766.45	11.95	148.871				
2,800.00	2,797.54	3,147.03	3,137.30	9.78	8.08	-143.30	557.25	-1,613.20	1,771.80	1,759.41	12.39	142.952				
2,815.66	2,813.00	3,160.85	3,150.90	9.84	8.13	-143.37	556.03	-1,611.03	1,771.02	1,758.56	12.46	142.085				
2,900.00	2,896.24	3,231.33	3,220.29	10.15	8.38	-143.66	550.13	-1,600.18	1,767.31	1,754.46	12.84	137.607				
3,000.00	2,994.95	3,327.80	3,315.39	10.53	8.72	-144.05	542.72	-1,585.78	1,763.65	1,750.34	13.31	132.499				
3,100.00	3,093.65	3,503.52	3,487.85	10.91	9.39	-144.83	526.19	-1,556.55	1,758.03	1,744.16	13.87	126.760				
3,200.00	3,192.36	3,613.64	3,595.26	11.29	9.84	-145.35	514.03	-1,535.53	1,749.55	1,735.18	14.37	121.784				
3,300.00	3,291.06	3,700.49	3,680.03	11.68	10.20	-145.75	505.01	-1,518.94	1,741.39	1,726.54	14.85	117.304				
3,400.00	3,389.76	3,779.63	3,757.45	12.07	10.53	-146.10	497.54	-1,504.35	1,734.26	1,718.94	15.32	113.213				
3,500.00	3,488.47	3,864.39	3,840.60	12.47	10.88	-146.46	490.19	-1,489.65	1,728.45	1,712.65	15.80	109.395				
3,600.00	3,587.17	3,981.83	3,955.70	12.87	11.38	-147.00	479.00	-1,469.15	1,722.45	1,706.13	16.32	105.522				
3,700.00	3,685.88	4,084.30	4,055.88	13.27	11.82	-147.52	467.73	-1,450.78	1,715.71	1,698.88	16.83	101.920				
3,800.00	3,784.58	4,186.35	4,155.66	13.67	12.27	-148.04	456.54	-1,432.56	1,709.19	1,691.85	17.35	98.525				
3,900.00	3,883.28	4,288.86	4,255.86	14.08	12.72	-148.54	445.89	-1,413.73	1,702.44	1,684.57	17.87	95.294				
4,000.00	3,981.99	4,392.53	4,357.23	14.49	13.19	-149.00	436.50	-1,394.16	1,695.61	1,677.23	18.39	92.228				
4,100.00	4,080.69	4,489.54	4,452.14	14.90	13.62	-149.35	430.15	-1,375.18	1,688.75	1,669.86	18.90	89.368				
4,200.00	4,179.39	4,564.06	4,525.19	15.31	13.95	-149.58	426.36	-1,360.91	1,682.71	1,663.33	19.38	86.820				
4,300.00	4,278.10	4,631.21	4,591.21	15.72	14.24	-149.83	422.33	-1,349.32	1,678.41	1,658.56	19.85	84.534				
4,400.00	4,376.80	4,688.00	4,647.19	16.13	14.48	-150.08	417.97	-1,340.86	1,676.28	1,655.97	20.31	82.546				
4,465.52	4,441.47	4,743.17	4,701.68	16.41	14.71	-150.34	413.31	-1,333.59	1,675.89	1,655.26	20.63	81.235				
4,500.00	4,475.51	4,768.11	4,726.35	16.55	14.81	-150.45	411.22	-1,330.52	1,675.99	1,655.20	20.79	80.605				
4,600.00	4,574.21	4,868.37	4,825.57	16.97	15.21	-150.92	403.34	-1,318.49	1,676.75	1,655.44	21.31	78.674				
4,700.00	4,672.91	4,986.29	4,942.21	17.38	15.70	-151.40	395.56	-1,303.04	1,676.74	1,654.87	21.86	76.693				
4,747.97	4,720.26	5,027.89	4,983.36	17.58	15.87	-151.56	393.22	-1,297.41	1,676.64	1,654.54	22.10	75.861				
4,800.00	4,771.62	5,074.53	5,029.53	17.80	16.06	-151.73	390.82	-1,291.23	1,676.75	1,654.39	22.36	74.981				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.00	4,870.32	5,287.40	5,239.18	18.22	16.98	-152.69	373.67	-1,259.27	1,675.93	1,652.88	23.06	72.692		
5,000.00	4,969.03	5,409.75	5,358.28	18.64	17.57	-153.35	359.79	-1,234.90	1,668.60	1,644.98	23.62	70.644		
5,100.00	5,067.73	5,509.45	5,455.27	19.07	18.05	-153.88	348.83	-1,214.60	1,661.10	1,636.94	24.16	68.753		
5,200.00	5,166.43	5,607.13	5,550.34	19.49	18.53	-154.38	338.71	-1,194.59	1,653.71	1,629.02	24.70	66.954		
5,300.00	5,265.14	5,708.28	5,648.84	19.91	19.02	-154.88	328.86	-1,173.78	1,646.45	1,621.21	25.24	65.225		
5,400.00	5,363.84	5,796.46	5,734.77	20.33	19.45	-155.30	320.83	-1,155.71	1,639.48	1,613.71	25.77	63.617		
5,500.00	5,462.54	5,875.87	5,812.35	20.76	19.83	-155.67	314.23	-1,140.08	1,633.53	1,607.24	26.29	62.141		
5,600.00	5,561.25	5,970.51	5,905.01	21.18	20.28	-156.10	306.58	-1,122.41	1,628.69	1,601.87	26.82	60.724		
5,700.00	5,659.95	6,074.90	6,007.19	21.61	20.77	-156.56	298.72	-1,102.52	1,623.65	1,596.28	27.37	59.327		
5,800.00	5,758.66	6,178.30	6,108.36	22.04	21.26	-157.00	291.20	-1,082.55	1,618.45	1,590.54	27.91	57.981		
5,900.00	5,857.36	6,250.51	6,179.08	22.46	21.60	-157.32	285.89	-1,068.96	1,613.89	1,585.47	28.42	56.790		
6,000.00	5,956.06	6,327.66	6,254.89	22.89	21.95	-157.67	279.94	-1,055.94	1,611.26	1,582.34	28.93	55.703		
6,100.00	6,054.77	6,426.35	6,351.97	23.32	22.40	-158.12	272.33	-1,039.89	1,609.39	1,579.92	29.47	54.616		
6,200.00	6,153.47	6,533.54	6,457.31	23.75	22.88	-158.62	263.85	-1,022.00	1,607.18	1,577.16	30.02	53.529		
6,300.00	6,252.18	6,637.95	6,559.87	24.18	23.36	-159.10	255.72	-1,004.20	1,604.73	1,574.15	30.58	52.478		
6,400.00	6,350.88	6,708.56	6,629.27	24.60	23.68	-159.44	250.15	-992.40	1,602.83	1,571.75	31.08	51.579		
6,426.80	6,377.33	6,724.31	6,644.77	24.72	23.75	-159.51	248.86	-990.02	1,602.73	1,571.53	31.20	51.368	CC	
6,500.00	6,449.58	6,760.00	6,679.99	25.03	23.91	-159.68	245.88	-985.02	1,603.46	1,571.94	31.52	50.869		
6,600.00	6,548.29	6,854.00	6,772.99	25.46	24.31	-160.12	238.71	-973.41	1,606.04	1,573.99	32.05	50.109		
6,700.00	6,646.99	6,903.51	6,822.13	25.89	24.50	-160.33	235.37	-968.31	1,610.59	1,578.13	32.46	49.618		
6,758.77	6,705.00	6,948.00	6,866.37	26.15	24.67	-160.52	232.43	-964.70	1,614.61	1,581.88	32.73	49.325		
6,800.00	6,745.73	6,965.20	6,883.49	26.32	24.74	-160.61	231.31	-963.50	1,617.63	1,584.75	32.88	49.196		
6,900.00	6,844.79	7,047.06	6,965.03	26.74	25.03	-160.95	226.15	-958.36	1,624.29	1,590.94	33.35	48.704		
7,000.00	6,944.17	7,150.59	7,068.27	27.13	25.40	-161.27	221.61	-952.22	1,628.89	1,595.01	33.88	48.083		
7,100.00	7,043.80	7,247.30	7,164.78	27.51	25.73	-161.46	219.25	-946.49	1,631.03	1,596.66	34.37	47.452		
7,200.00	7,143.63	7,342.95	7,260.25	27.88	26.06	-161.60	217.07	-941.08	1,630.97	1,596.11	34.86	46.789		
7,300.00	7,243.57	7,441.99	7,359.11	28.22	26.40	-161.70	214.77	-935.56	1,628.52	1,593.17	35.35	46.068		
7,374.43	7,318.00	7,514.00	7,431.00	28.46	26.65	-90.97	213.40	-931.72	1,625.26	1,589.55	35.71	45.517		
7,400.00	7,343.57	7,529.36	7,446.35	28.55	26.70	-90.98	213.16	-930.96	1,623.99	1,588.19	35.80	45.367		
7,500.00	7,443.57	7,608.00	7,524.93	28.87	26.96	-91.01	212.54	-928.17	1,620.35	1,584.14	36.20	44.756		
7,600.00	7,543.57	7,676.67	7,593.59	29.19	27.16	-90.99	212.95	-926.87	1,618.28	1,581.72	36.56	44.263		
7,700.00	7,643.57	7,773.21	7,690.10	29.52	27.44	-90.93	214.80	-925.73	1,617.07	1,580.06	37.01	43.695		
7,800.00	7,743.57	7,877.91	7,794.78	29.84	27.75	-90.86	216.71	-924.33	1,615.70	1,578.21	37.49	43.101		
7,900.00	7,843.57	7,979.46	7,896.30	30.17	28.05	-90.83	217.76	-922.73	1,614.11	1,576.15	37.96	42.522		
8,000.00	7,943.57	8,095.21	8,012.03	30.49	28.41	-90.80	218.43	-920.26	1,611.97	1,573.48	38.49	41.880		
8,100.00	8,043.57	8,192.47	8,109.25	30.82	28.72	-90.80	218.44	-917.64	1,609.27	1,570.31	38.96	41.307		
8,200.00	8,143.57	8,268.00	8,184.77	31.15	28.96	-90.81	218.29	-916.40	1,607.63	1,568.29	39.35	40.858		
8,300.00	8,243.57	8,353.06	8,269.83	31.48	29.22	-90.82	217.92	-916.06	1,607.22	1,567.46	39.76	40.420		
8,348.35	8,291.92	8,406.65	8,323.41	31.63	29.38	-90.84	217.45	-916.01	1,607.19	1,567.18	40.01	40.166		
8,400.00	8,343.57	8,457.00	8,373.76	31.80	29.53	-90.86	216.84	-915.73	1,606.91	1,566.66	40.26	39.918		
8,436.55	8,380.12	8,490.03	8,406.79	31.92	29.62	-90.87	216.47	-915.59	1,606.77	1,566.36	40.41	39.759		
8,500.00	8,443.57	8,535.91	8,452.67	32.13	29.75	-90.88	216.24	-915.83	1,607.11	1,566.48	40.64	39.547		
8,600.00	8,543.57	8,651.44	8,568.18	32.46	30.08	-90.93	215.02	-916.78	1,607.99	1,566.83	41.17	39.060		
8,700.00	8,643.57	8,730.38	8,647.10	32.80	30.31	-90.99	213.33	-917.44	1,608.84	1,567.29	41.55	38.717		
8,800.00	8,743.57	8,831.83	8,748.51	33.13	30.60	-91.07	210.87	-918.87	1,610.30	1,568.27	42.03	38.310		
8,900.00	8,843.57	8,931.32	8,847.92	33.46	30.90	-91.21	207.00	-920.15	1,611.66	1,569.15	42.51	37.912		
9,000.00	8,943.57	9,035.85	8,952.29	33.79	31.21	-91.40	201.57	-921.27	1,612.85	1,569.83	43.02	37.494		
9,100.00	9,043.57	9,130.69	9,046.99	34.12	31.50	-91.59	196.33	-922.37	1,614.15	1,570.67	43.48	37.123		
9,200.00	9,143.57	9,235.58	9,151.70	34.46	31.83	-91.80	190.40	-923.55	1,615.45	1,571.46	43.99	36.722		
9,300.00	9,243.57	9,341.91	9,257.86	34.79	32.16	-92.01	184.39	-924.33	1,616.37	1,571.86	44.51	36.315		
9,400.00	9,343.57	9,447.17	9,362.96	35.13	32.49	-92.21	178.61	-924.77	1,616.99	1,571.97	45.02	35.914		
9,500.00	9,443.57	9,554.95	9,470.58	35.46	32.84	-92.42	172.78	-924.77	1,617.21	1,571.66	45.55	35.503		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,600.00	9,543.57	9,658.06	9,573.51	35.80	33.18	-92.63	166.67	-924.32	1,617.04	1,570.97	46.06	35.106		
9,700.00	9,643.57	9,761.58	9,676.88	36.13	33.51	-92.82	161.32	-923.76	1,616.74	1,570.17	46.57	34.715		
9,800.00	9,743.57	9,874.15	9,789.43	36.47	33.87	-92.87	160.16	-922.83	1,615.97	1,568.87	47.10	34.307		
9,833.47	9,777.04	9,912.64	9,827.92	36.58	33.99	-92.85	160.59	-922.33	1,615.52	1,568.23	47.28	34.168		
9,850.00	9,793.56	9,931.64	9,846.91	36.64	34.05	87.77	160.83	-922.04	1,615.24	1,567.88	47.37	34.101		
9,900.00	9,843.42	9,965.00	9,880.27	36.79	34.16	87.94	161.33	-921.46	1,614.32	1,566.79	47.53	33.966		
9,950.00	9,892.77	10,011.83	9,927.08	36.93	34.30	88.30	162.49	-920.95	1,613.47	1,565.74	47.73	33.807		
10,000.00	9,941.23	10,059.00	9,974.21	37.06	34.44	88.83	164.44	-921.14	1,613.25	1,565.34	47.92	33.669		
10,017.63	9,958.05	10,059.00	9,974.21	37.11	34.44	88.84	164.44	-921.14	1,613.16	1,565.24	47.92	33.666 ES		
10,050.00	9,988.45	10,081.67	9,996.84	37.19	34.50	89.14	165.55	-921.41	1,613.30	1,565.30	48.00	33.609		
10,100.00	10,034.06	10,124.47	10,039.60	37.30	34.62	89.78	167.55	-921.96	1,613.76	1,565.60	48.16	33.509		
10,150.00	10,077.71	10,165.80	10,080.88	37.41	34.73	90.46	169.34	-922.53	1,614.61	1,566.31	48.30	33.426		
10,200.00	10,119.07	10,206.00	10,121.05	37.50	34.85	91.17	170.85	-923.10	1,616.00	1,567.55	48.44	33.358		
10,250.00	10,157.84	10,243.88	10,158.91	37.58	34.95	91.84	172.02	-923.65	1,618.08	1,569.50	48.57	33.311		
10,300.00	10,193.70	10,274.37	10,189.38	37.65	35.04	92.31	172.89	-924.12	1,621.05	1,572.38	48.67	33.304		
10,350.00	10,226.39	10,301.26	10,216.26	37.71	35.11	92.64	173.74	-924.61	1,625.16	1,576.40	48.76	33.330		
10,400.00	10,255.66	10,324.95	10,239.93	37.76	35.18	92.79	174.56	-925.10	1,630.52	1,581.69	48.84	33.388		
10,450.00	10,281.29	10,346.50	10,261.45	37.81	35.24	92.78	175.36	-925.59	1,637.26	1,588.35	48.91	33.477		
10,500.00	10,303.08	10,369.15	10,284.08	37.85	35.30	92.69	176.33	-926.08	1,645.39	1,596.40	48.99	33.587		
10,550.00	10,320.87	10,386.51	10,301.41	37.90	35.35	92.30	177.19	-926.40	1,654.97	1,605.92	49.05	33.738		
10,600.00	10,334.52	10,398.68	10,313.57	37.96	35.39	91.58	177.84	-926.61	1,666.05	1,616.95	49.10	33.930		
10,650.00	10,343.93	10,405.83	10,320.70	38.03	35.41	90.54	178.25	-926.72	1,678.61	1,629.47	49.14	34.161		
10,700.00	10,349.02	10,408.14	10,323.01	38.12	35.41	89.16	178.39	-926.76	1,692.57	1,643.41	49.16	34.431		
10,733.47	10,350.00	10,407.09	10,321.96	38.19	35.41	88.07	178.32	-926.74	1,702.65	1,653.48	49.16	34.631		
10,800.00	10,350.00	10,403.09	10,317.97	38.36	35.40	87.93	178.09	-926.68	1,724.38	1,675.20	49.18	35.063		
10,900.00	10,350.00	10,397.39	10,312.28	38.68	35.38	87.73	177.77	-926.59	1,761.25	1,712.02	49.23	35.779		
11,000.00	10,350.00	10,392.04	10,306.94	39.08	35.37	87.54	177.48	-926.50	1,802.90	1,753.61	49.30	36.573		
11,100.00	10,350.00	10,387.01	10,301.91	39.56	35.35	87.36	177.21	-926.41	1,849.02	1,799.63	49.39	37.439		
11,200.00	10,350.00	10,382.27	10,297.18	40.10	35.34	87.19	176.97	-926.33	1,899.27	1,849.77	49.50	38.373		
11,300.00	10,350.00	10,377.79	10,292.71	40.70	35.33	87.04	176.74	-926.24	1,953.34	1,903.72	49.61	39.370		
11,400.00	10,350.00	10,373.56	10,288.48	41.37	35.32	86.89	176.54	-926.16	2,010.92	1,961.17	49.74	40.426		
11,500.00	10,350.00	10,369.55	10,284.48	42.08	35.31	86.74	176.35	-926.08	2,071.72	2,021.84	49.88	41.537		
11,600.00	10,350.00	10,365.75	10,280.68	42.85	35.29	86.61	176.17	-926.01	2,135.46	2,085.45	50.01	42.698		
11,700.00	10,350.00	13,276.74	11,808.02	43.67	51.34	131.02	-1,425.04	-938.15	2,184.01	2,126.13	57.88	37.734		
11,800.00	10,350.00	13,351.89	11,806.82	44.53	52.17	131.06	-1,500.04	-933.73	2,179.33	2,120.57	58.77	37.085		
11,900.00	10,350.00	13,433.78	11,804.25	45.44	53.09	131.03	-1,581.86	-931.72	2,176.11	2,116.34	59.78	36.405		
12,000.00	10,350.00	13,530.89	11,800.35	46.39	54.20	130.96	-1,678.88	-929.93	2,172.85	2,111.86	60.99	35.626		
12,100.00	10,350.00	13,604.21	11,797.55	47.37	55.04	130.91	-1,752.14	-929.29	2,170.46	2,108.49	61.98	35.021		
12,200.00	10,350.00	13,680.00	11,795.40	48.39	55.92	130.84	-1,827.90	-929.59	2,169.58	2,106.57	63.01	34.433		
12,300.00	10,350.00	13,775.00	11,792.71	49.45	57.05	130.76	-1,922.86	-930.40	2,169.12	2,104.83	64.29	33.739		
12,335.36	10,350.00	13,802.34	11,791.92	49.83	57.38	130.74	-1,950.19	-930.61	2,168.97	2,104.29	64.68	33.534		
12,400.00	10,350.00	13,837.84	11,791.38	50.54	57.80	130.71	-1,985.68	-931.04	2,169.40	2,104.19	65.21	33.268		
12,500.00	10,350.00	13,925.05	11,791.57	51.66	58.86	130.68	-2,072.88	-932.46	2,171.47	2,105.05	66.42	32.693		
12,600.00	10,350.00	14,072.31	11,789.43	52.80	60.67	130.57	-2,220.09	-934.59	2,172.42	2,104.01	68.41	31.754		
12,607.52	10,350.00	14,071.07	11,789.53	52.89	60.66	130.57	-2,218.86	-934.55	2,172.44	2,104.03	68.41	31.754		
12,700.00	10,350.00	14,140.05	11,788.35	53.97	61.53	130.52	-2,287.82	-935.51	2,173.09	2,103.64	69.45	31.289		
12,800.00	10,350.00	14,263.75	11,788.11	55.17	63.10	130.49	-2,411.52	-935.89	2,174.01	2,102.82	71.19	30.540		
12,900.00	10,350.00	14,386.73	11,788.02	56.39	64.71	130.50	-2,534.48	-934.07	2,173.58	2,100.66	72.92	29.807		
13,000.00	10,350.00	14,503.27	11,788.61	57.63	66.27	130.55	-2,650.96	-930.45	2,172.31	2,097.74	74.57	29.130		
13,100.00	10,350.00	14,589.15	11,790.82	58.89	67.43	130.66	-2,736.69	-925.96	2,170.80	2,094.98	75.82	28.631		
13,200.00	10,350.00	14,692.56	11,793.02	60.17	68.85	130.75	-2,839.99	-921.97	2,170.03	2,092.72	77.31	28.069		
13,300.00	10,350.00	14,821.31	11,790.54	61.47	70.61	130.72	-2,968.69	-919.73	2,168.22	2,088.99	79.23	27.365		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
13,400.00	10,350.00	14,958.17	11,783.71	62.78	72.51	130.60	-3,105.35	-917.46	2,164.31	2,082.97	81.33	26.610				
13,500.00	10,350.00	15,050.10	11,777.87	64.11	73.80	130.48	-3,197.10	-916.74	2,160.34	2,077.46	82.88	26.067				
13,600.00	10,350.00	15,101.00	11,775.07	65.45	74.51	130.42	-3,247.92	-916.11	2,157.12	2,073.28	83.84	25.729				
13,700.00	10,350.00	15,195.00	11,772.69	66.81	75.83	130.37	-3,341.88	-915.39	2,155.66	2,070.28	85.38	25.248				
13,727.14	10,350.00	15,195.00	11,772.69	67.18	75.83	130.37	-3,341.88	-915.39	2,155.49	2,070.05	85.44	25.228				
13,800.00	10,350.00	15,229.33	11,772.87	68.18	76.32	130.37	-3,376.20	-915.48	2,156.27	2,070.22	86.06	25.057				
13,900.00	10,350.00	15,290.22	11,774.01	69.56	77.18	130.37	-3,437.08	-916.05	2,158.97	2,071.89	87.08	24.793				
14,000.00	10,350.00	15,384.00	11,776.42	70.96	78.51	130.38	-3,530.82	-917.41	2,162.51	2,073.92	88.59	24.410				
14,100.00	10,350.00	15,479.00	11,779.44	72.36	79.86	130.40	-3,625.76	-918.95	2,166.57	2,076.44	90.12	24.041				
14,200.00	10,350.00	15,559.51	11,782.95	73.78	81.01	130.43	-3,706.18	-920.25	2,171.34	2,079.91	91.42	23.751				
14,300.00	10,350.00	15,649.81	11,787.97	75.20	82.32	130.50	-3,796.34	-921.26	2,176.56	2,083.70	92.85	23.441				
14,400.00	10,350.00	15,875.47	11,798.86	76.63	85.63	130.74	-4,021.66	-917.69	2,179.43	2,083.23	96.19	22.657				
14,500.00	10,350.00	15,983.34	11,799.33	78.08	87.22	130.78	-4,129.49	-915.11	2,178.64	2,080.71	97.93	22.247				
14,549.53	10,350.00	16,018.15	11,799.39	78.79	87.74	130.78	-4,164.31	-914.56	2,178.47	2,079.93	98.54	22.108				
14,600.00	10,350.00	16,047.00	11,799.55	79.53	88.16	130.78	-4,193.15	-914.23	2,178.66	2,079.61	99.06	21.994				
14,700.00	10,350.00	16,123.51	11,800.26	80.99	89.29	130.79	-4,269.65	-914.18	2,180.03	2,079.66	100.37	21.720				
14,800.00	10,350.00	16,195.04	11,801.54	82.45	90.35	130.79	-4,341.17	-914.95	2,182.76	2,081.15	101.60	21.483				
14,900.00	10,350.00	16,279.69	11,804.83	83.92	91.61	130.82	-4,425.75	-915.64	2,186.65	2,083.64	103.00	21.229				
15,000.00	10,350.00	16,382.57	11,809.05	85.40	93.14	130.88	-4,528.54	-916.43	2,190.67	2,085.99	104.68	20.927				
15,100.00	10,350.00	16,477.42	11,813.19	86.89	94.56	130.94	-4,623.30	-916.86	2,194.63	2,088.40	106.24	20.658				
15,200.00	10,350.00	16,604.97	11,821.65	88.38	96.49	131.12	-4,750.54	-914.81	2,198.63	2,090.43	108.19	20.322				
15,300.00	10,350.00	16,741.16	11,830.43	89.87	98.57	131.36	-4,886.34	-909.37	2,200.60	2,090.39	110.21	19.968				
15,400.00	10,350.00	16,864.88	11,840.48	91.38	100.48	131.68	-5,009.34	-900.61	2,201.44	2,089.51	111.93	19.669				
15,500.00	10,350.00	16,961.85	11,847.19	92.88	101.98	131.92	-5,105.83	-893.78	2,201.55	2,088.22	113.33	19.426				
15,600.00	10,350.00	17,073.08	11,853.45	94.39	103.70	132.13	-5,216.71	-887.57	2,201.94	2,086.97	114.97	19.153				
15,617.32	10,350.00	17,095.38	11,854.32	94.66	104.05	132.16	-5,238.97	-886.50	2,201.91	2,086.60	115.30	19.097				
15,700.00	10,350.00	17,135.94	11,855.96	95.91	104.67	132.21	-5,279.47	-885.06	2,202.51	2,086.49	116.01	18.985				
15,800.00	10,350.00	17,198.94	11,858.83	97.43	105.64	132.27	-5,342.39	-884.15	2,205.13	2,088.07	117.06	18.838				
15,900.00	10,350.00	17,329.90	11,864.77	98.96	107.66	132.40	-5,473.19	-881.75	2,207.53	2,088.42	119.10	18.534				
16,000.00	10,350.00	17,409.98	11,869.09	100.49	108.90	132.51	-5,553.12	-879.12	2,209.56	2,089.21	120.36	18.359				
16,100.00	10,350.00	17,473.09	11,872.71	102.02	109.88	132.59	-5,616.11	-878.37	2,213.26	2,091.89	121.36	18.236				
16,200.00	10,350.00	17,600.07	11,879.85	103.55	111.84	132.74	-5,742.86	-876.06	2,216.30	2,092.96	123.34	17.970				
16,300.00	10,350.00	17,674.60	11,883.95	105.09	113.00	132.81	-5,817.28	-875.60	2,220.27	2,095.74	124.53	17.829				
16,400.00	10,350.00	17,774.94	11,887.44	106.64	114.54	132.84	-5,917.54	-876.89	2,224.31	2,098.09	126.21	17.624				
16,500.00	10,350.00	17,846.00	11,890.91	108.18	115.64	132.87	-5,988.51	-878.13	2,229.54	2,102.16	127.38	17.503				
16,600.00	10,350.00	17,941.14	11,897.98	109.73	117.12	132.98	-6,083.38	-878.49	2,235.61	2,106.75	128.86	17.349				
16,700.00	10,350.00	18,055.36	11,907.71	111.29	118.90	133.17	-6,197.17	-877.12	2,241.31	2,110.72	130.58	17.164				
16,800.00	10,350.00	18,193.63	11,918.22	112.84	121.07	133.40	-6,335.00	-873.76	2,245.40	2,112.75	132.64	16.928				
16,900.00	10,350.00	18,392.62	11,929.50	114.40	124.21	133.76	-6,533.36	-863.22	2,245.66	2,110.25	135.41	16.584				
17,000.00	10,350.00	18,482.43	11,932.54	115.96	125.63	133.88	-6,623.00	-858.60	2,245.00	2,108.21	136.79	16.412				
17,048.94	10,350.00	18,522.74	11,933.47	116.72	126.27	133.91	-6,663.27	-857.17	2,244.89	2,107.44	137.45	16.332				
17,100.00	10,350.00	18,560.48	11,934.31	117.52	126.86	133.94	-6,700.98	-856.14	2,245.05	2,106.96	138.08	16.259				
17,200.00	10,350.00	18,635.67	11,936.22	119.09	128.05	133.99	-6,776.13	-854.76	2,246.21	2,106.87	139.34	16.121				
17,300.00	10,350.00	18,698.00	11,938.79	120.66	129.03	134.04	-6,838.40	-853.48	2,248.48	2,108.14	140.34	16.022				
17,400.00	10,350.00	18,767.37	11,942.54	122.23	130.12	134.12	-6,907.66	-852.67	2,252.25	2,110.84	141.41	15.927				
17,500.00	10,350.00	18,835.14	11,946.67	123.80	131.19	134.17	-6,975.30	-853.25	2,257.79	2,115.32	142.46	15.848				
17,600.00	10,350.00	18,917.78	11,951.77	125.37	132.48	134.21	-7,057.76	-855.16	2,264.44	2,120.65	143.79	15.748				
17,700.00	10,350.00	19,006.27	11,957.10	126.95	133.86	134.25	-7,146.06	-857.72	2,271.45	2,126.22	145.23	15.641				
17,800.00	10,350.00	19,077.00	11,963.14	128.52	134.97	134.32	-7,216.51	-859.13	2,279.54	2,133.28	146.26	15.586				
17,900.00	10,350.00	19,304.07	11,981.42	130.10	138.56	134.60	-7,442.77	-859.41	2,286.68	2,136.84	149.84	15.260				
18,000.00	10,350.00	19,382.92	11,986.20	131.69	139.81	134.70	-7,521.47	-857.84	2,290.25	2,139.21	151.03	15.164				
18,100.00	10,350.00	19,458.26	11,990.67	133.27	141.00	134.77	-7,596.67	-857.54	2,294.85	2,142.67	152.19	15.079				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													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	
18,200.00	10,350.00	19,550.00	11,995.66	134.85	142.45	134.84	-7,688.27	-858.11	2,299.86	2,146.21	153.64	14.969		
18,300.00	10,350.00	19,645.00	12,000.18	136.44	143.95	134.86	-7,783.14	-860.14	2,305.44	2,150.22	155.22	14.853		
18,400.00	10,350.00	19,742.79	12,004.68	138.03	145.49	134.88	-7,880.78	-863.05	2,311.50	2,154.63	156.87	14.735		
18,500.00	10,350.00	19,835.00	12,010.04	139.62	146.95	134.93	-7,972.82	-864.59	2,317.49	2,159.14	158.35	14.636		
18,600.00	10,350.00	20,047.13	12,019.69	141.21	150.32	135.03	-8,184.68	-866.12	2,322.75	2,160.97	161.78	14.357		
18,700.00	10,350.00	20,151.73	12,021.42	142.80	151.98	135.07	-8,289.25	-864.53	2,323.54	2,160.05	163.49	14.212		
18,800.00	10,350.00	20,213.00	12,023.05	144.39	152.96	135.10	-8,350.50	-863.79	2,325.35	2,160.82	164.53	14.133		
18,900.00	10,350.00	20,269.80	12,025.41	145.99	153.87	135.13	-8,407.24	-863.66	2,328.92	2,163.48	165.44	14.077		
19,000.00	10,350.00	20,360.13	12,030.58	147.58	155.30	135.19	-8,497.42	-864.56	2,334.33	2,167.46	166.87	13.989		
19,100.00	10,350.00	20,551.80	12,033.98	149.18	158.35	135.17	-8,689.01	-867.42	2,337.30	2,167.15	170.16	13.736		
19,200.00	10,350.00	20,641.97	12,034.23	150.78	159.79	135.16	-8,779.18	-867.33	2,338.18	2,166.45	171.73	13.616		
19,300.00	10,350.00	20,717.55	12,035.72	152.38	160.99	135.17	-8,854.75	-867.48	2,340.38	2,167.35	173.03	13.526		
19,400.00	10,350.00	20,781.00	12,037.87	153.98	162.01	135.20	-8,918.16	-866.99	2,343.22	2,169.17	174.05	13.463		
19,500.00	10,350.00	20,875.00	12,041.98	155.58	163.51	135.25	-9,012.06	-867.71	2,347.56	2,171.99	175.57	13.371		
19,600.00	10,350.00	20,971.38	12,043.44	157.18	165.03	135.17	-9,108.28	-872.54	2,352.85	2,175.48	177.37	13.265		
19,700.00	10,350.00	21,038.29	12,043.78	158.79	166.09	135.10	-9,175.07	-876.51	2,358.09	2,179.47	178.62	13.202		
19,800.00	10,350.00	21,110.09	12,046.53	160.39	167.22	135.08	-9,246.74	-879.70	2,364.63	2,184.80	179.83	13.149		
19,900.00	10,350.00	21,184.74	12,049.73	162.00	168.41	135.05	-9,321.21	-883.82	2,372.27	2,191.17	181.10	13.099		
20,000.00	10,350.00	21,268.44	12,055.69	163.61	169.73	135.07	-9,404.62	-887.30	2,380.92	2,198.49	182.43	13.051		
20,100.00	10,350.00	21,418.10	12,065.63	165.21	172.12	135.14	-9,553.87	-891.90	2,388.41	2,203.38	185.02	12.909		
20,200.00	10,350.00	21,526.50	12,076.41	166.82	173.86	135.34	-9,661.71	-889.93	2,394.91	2,208.41	186.50	12.842		
20,300.00	10,350.00	21,796.56	12,096.60	168.43	178.24	135.86	-9,930.58	-876.63	2,397.06	2,207.14	189.92	12.621		
20,400.00	10,350.00	21,912.16	12,099.48	170.04	180.12	135.99	-10,045.99	-870.74	2,395.98	2,204.43	191.56	12.508		
20,500.00	10,350.00	22,010.00	12,100.28	171.65	181.71	136.06	-10,143.72	-866.15	2,394.03	2,200.97	193.06	12.400		
20,529.73	10,350.00	22,042.62	12,100.25	172.13	182.23	136.08	-10,176.31	-864.91	2,393.41	2,199.84	193.57	12.365 SF		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1431-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	25.05	25.05	0.00	0.03	-71.87	580.21	-1,772.46	1,865.01					
100.00	100.00	119.80	119.80	0.13	0.17	-71.87	580.26	-1,772.67	1,865.23	1,865.02	0.22	8,667.795		
200.00	200.00	196.98	196.97	0.48	0.45	-71.88	580.21	-1,773.38	1,866.11	1,865.45	0.66	2,826.107		
300.00	300.00	288.80	288.77	0.84	0.78	-71.93	579.43	-1,775.54	1,868.08	1,866.93	1.15	1,629.114		
400.00	400.00	372.38	372.31	1.20	1.08	-71.97	578.74	-1,777.95	1,870.56	1,868.94	1.61	1,158.745		
500.00	500.00	464.91	464.78	1.56	1.41	-72.02	578.15	-1,781.14	1,873.64	1,871.54	2.10	890.746		
600.00	600.00	564.60	564.39	1.92	1.78	-72.08	577.15	-1,784.89	1,876.91	1,874.30	2.61	719.024		
700.00	700.00	658.00	657.72	2.28	2.12	-72.14	576.22	-1,788.61	1,880.39	1,877.29	3.10	606.134		
800.00	800.00	816.00	815.57	2.63	2.68	-72.22	574.85	-1,792.87	1,882.80	1,879.05	3.75	502.325		
900.00	900.00	855.03	854.56	2.99	2.82	-72.25	574.47	-1,794.52	1,885.60	1,881.50	4.10	459.486		
1,000.00	1,000.00	949.20	948.64	3.35	3.16	-72.31	573.64	-1,798.76	1,889.62	1,885.02	4.60	411.022		
1,100.00	1,100.00	1,066.89	1,066.17	3.71	3.60	-72.44	571.07	-1,804.20	1,893.38	1,888.23	5.15	367.541		
1,200.00	1,200.00	1,153.19	1,152.34	4.07	3.91	-72.55	568.56	-1,808.19	1,896.92	1,891.29	5.63	337.135		
1,300.00	1,300.00	1,256.67	1,255.69	4.43	4.29	-72.65	566.50	-1,813.02	1,900.79	1,894.64	6.15	309.299		
1,400.00	1,400.00	1,320.00	1,318.93	4.79	4.52	-72.71	565.12	-1,816.04	1,904.97	1,898.41	6.56	290.353		
1,500.00	1,500.00	1,405.77	1,404.48	5.14	4.70	-72.84	562.47	-1,821.54	1,910.31	1,903.37	6.94	275.446		
1,600.00	1,600.00	1,499.00	1,497.21	5.50	4.89	-73.03	558.35	-1,830.26	1,917.89	1,910.57	7.32	261.942		
1,700.00	1,700.00	1,553.03	1,550.83	5.86	4.93	-73.17	555.48	-1,836.21	1,926.41	1,918.81	7.60	253.398		
1,800.00	1,800.00	1,752.24	1,748.84	6.22	5.13	-73.66	543.75	-1,854.35	1,933.98	1,925.98	8.00	241.713		
1,900.00	1,900.00	2,085.91	2,081.68	6.58	5.55	-74.13	525.76	-1,849.58	1,929.10	1,920.57	8.53	226.045		
2,000.00	2,000.00	2,198.44	2,193.81	6.94	5.71	-74.18	521.67	-1,840.99	1,920.78	1,911.86	8.92	215.298		
2,100.00	2,100.00	2,321.34	2,316.15	7.29	5.92	-74.26	516.09	-1,830.73	1,911.51	1,902.18	9.33	204.828		
2,200.00	2,200.00	2,413.24	2,407.57	7.65	6.10	-74.34	510.97	-1,822.84	1,901.75	1,892.01	9.73	195.406		
2,300.00	2,299.99	2,510.44	2,504.29	8.01	6.30	-145.30	505.56	-1,814.84	1,893.38	1,883.24	10.14	186.703		
2,400.00	2,399.91	2,612.61	2,605.90	8.35	6.54	-145.56	498.75	-1,806.72	1,887.16	1,876.60	10.56	178.681		
2,500.00	2,499.69	2,706.00	2,698.72	8.70	6.77	-145.85	491.35	-1,799.52	1,883.03	1,872.04	10.98	171.431		
2,582.66	2,582.02	2,772.34	2,764.69	9.00	6.94	-146.08	486.17	-1,794.78	1,881.79	1,870.46	11.33	166.150		
2,600.00	2,599.27	2,785.11	2,777.40	9.06	6.98	-146.12	485.27	-1,793.94	1,881.84	1,870.44	11.40	165.127		
2,700.00	2,698.57	2,868.34	2,860.30	9.42	7.20	-146.39	479.97	-1,788.83	1,884.07	1,872.25	11.82	159.446		
2,800.00	2,797.54	3,106.17	3,096.50	9.78	7.87	-147.20	465.69	-1,765.87	1,885.21	1,872.78	12.43	151.640		
2,815.66	2,813.00	3,117.55	3,107.75	9.84	7.91	-147.24	464.88	-1,764.39	1,885.05	1,872.55	12.50	150.815		
2,865.72	2,862.41	3,153.88	3,143.70	10.02	8.02	-147.38	462.23	-1,759.85	1,884.86	1,872.15	12.71	148.267		
2,900.00	2,896.24	3,178.00	3,167.58	10.15	8.09	-147.48	460.42	-1,757.00	1,884.95	1,872.09	12.86	146.594		
3,000.00	2,994.95	3,255.78	3,244.64	10.53	8.34	-147.81	453.96	-1,748.61	1,886.08	1,872.78	13.30	141.823		
3,100.00	3,093.65	3,366.42	3,354.18	10.91	8.71	-148.35	443.00	-1,737.60	1,887.79	1,874.00	13.79	136.879		
3,200.00	3,192.36	3,451.81	3,438.69	11.29	9.00	-148.77	434.31	-1,729.05	1,889.49	1,875.24	14.26	132.548		
3,300.00	3,291.06	3,523.22	3,509.49	11.68	9.24	-149.10	427.65	-1,722.50	1,892.34	1,877.65	14.70	128.744		
3,400.00	3,389.76	3,594.72	3,580.49	12.07	9.49	-149.43	421.33	-1,716.98	1,896.80	1,881.66	15.14	125.275		
3,500.00	3,488.47	3,649.00	3,634.46	12.47	9.67	-149.68	416.76	-1,713.40	1,902.86	1,887.31	15.55	122.364		
3,600.00	3,587.17	3,744.00	3,729.07	12.87	9.99	-150.10	409.41	-1,708.91	1,910.70	1,894.66	16.03	119.172		
3,700.00	3,685.88	3,850.73	3,835.51	13.27	10.35	-150.51	403.29	-1,704.15	1,919.32	1,902.78	16.54	116.073		
3,800.00	3,784.58	4,011.54	3,995.49	13.67	10.91	-151.15	392.30	-1,692.42	1,924.78	1,907.63	17.14	112.289		
3,900.00	3,883.28	4,097.97	4,081.29	14.08	11.22	-151.55	384.35	-1,685.58	1,929.57	1,911.95	17.62	109.500		
4,000.00	3,981.99	4,224.68	4,207.21	14.49	11.67	-152.05	375.23	-1,674.93	1,934.33	1,916.16	18.17	106.449		
4,100.00	4,080.69	4,324.00	4,305.97	14.90	12.02	-152.35	371.13	-1,665.31	1,938.37	1,919.70	18.67	103.843		
4,200.00	4,179.39	4,448.95	4,430.18	15.31	12.46	-152.69	367.00	-1,652.32	1,941.91	1,922.70	19.20	101.123		
4,300.00	4,278.10	4,550.68	4,531.12	15.72	12.83	-153.02	361.71	-1,640.81	1,944.27	1,924.56	19.71	98.644		
4,400.00	4,376.80	4,627.44	4,607.26	16.13	13.11	-153.32	355.95	-1,632.99	1,947.50	1,927.32	20.18	96.510		
4,500.00	4,475.51	4,699.61	4,678.91	16.55	13.38	-153.61	350.22	-1,626.64	1,952.13	1,931.50	20.64	94.583		
4,600.00	4,574.21	4,778.00	4,756.90	16.97	13.67	-153.91	344.94	-1,620.77	1,958.25	1,937.15	21.11	92.774		
4,700.00	4,672.91	4,861.71	4,840.27	17.38	13.97	-154.21	339.89	-1,615.19	1,965.37	1,943.79	21.58	91.056		
4,800.00	4,771.62	4,946.72	4,924.94	17.80	14.28	-154.52	334.40	-1,609.98	1,973.08	1,951.01	22.06	89.426		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1431-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,600.00	9,543.57	9,555.88	9,526.84	35.80	29.98	-90.78	210.85	-1,518.30	2,209.93	2,164.71	45.22	48.873		
9,700.00	9,643.57	9,651.79	9,622.72	36.13	30.30	-90.83	209.15	-1,520.23	2,211.96	2,166.28	45.69	48.417		
9,800.00	9,743.57	9,772.78	9,743.68	36.47	30.68	-90.82	209.51	-1,522.44	2,213.82	2,167.59	46.23	47.888		
9,833.47	9,777.04	9,806.39	9,777.29	36.58	30.79	-90.81	209.85	-1,522.84	2,214.21	2,167.82	46.39	47.732		
9,850.00	9,793.56	9,822.41	9,793.31	36.64	30.84	89.76	210.02	-1,523.03	2,214.41	2,167.95	46.46	47.660		
9,900.00	9,843.42	9,871.00	9,841.89	36.79	30.99	89.80	210.54	-1,523.64	2,215.02	2,168.34	46.68	47.449		
9,950.00	9,892.77	9,933.00	9,903.89	36.93	31.19	90.02	211.09	-1,524.26	2,215.50	2,168.57	46.94	47.201		
10,000.00	9,941.23	9,987.82	9,958.70	37.06	31.37	90.34	211.37	-1,524.53	2,215.79	2,168.62	47.17	46.977		
10,050.00	9,988.45	10,034.34	10,005.23	37.19	31.52	90.70	211.48	-1,524.72	2,216.18	2,168.81	47.37	46.787		
10,100.00	10,034.06	10,078.28	10,049.16	37.30	31.66	91.10	211.47	-1,524.93	2,216.79	2,169.23	47.56	46.615		
10,150.00	10,077.71	10,119.28	10,090.17	37.41	31.80	91.52	211.24	-1,525.17	2,217.76	2,170.03	47.73	46.462		
10,200.00	10,119.07	10,159.33	10,130.21	37.50	31.93	91.95	210.79	-1,525.45	2,219.20	2,171.29	47.90	46.326		
10,250.00	10,157.84	10,202.33	10,173.20	37.58	32.08	92.44	210.13	-1,525.74	2,221.15	2,173.06	48.09	46.192		
10,300.00	10,193.70	10,242.43	10,213.29	37.65	32.21	92.89	209.39	-1,525.95	2,223.69	2,175.44	48.26	46.082		
10,350.00	10,226.39	10,285.49	10,256.34	37.71	32.36	93.39	208.59	-1,526.05	2,226.93	2,178.50	48.43	45.978		
10,400.00	10,255.66	10,324.78	10,295.63	37.76	32.50	93.80	208.04	-1,525.95	2,230.95	2,182.35	48.60	45.904		
10,450.00	10,281.29	10,354.62	10,325.47	37.81	32.60	93.95	207.73	-1,525.76	2,235.92	2,187.18	48.74	45.878 SF		
10,500.00	10,303.08	10,376.15	10,347.00	37.85	32.68	93.84	207.56	-1,525.61	2,242.02	2,193.17	48.85	45.900		
10,550.00	10,320.87	10,393.63	10,364.48	37.90	32.74	93.52	207.46	-1,525.49	2,249.33	2,200.39	48.94	45.958		
10,600.00	10,334.52	10,406.97	10,377.82	37.96	32.78	92.98	207.41	-1,525.40	2,257.87	2,208.85	49.03	46.054		
10,650.00	10,343.93	10,416.13	10,386.98	38.03	32.81	92.22	207.38	-1,525.33	2,267.65	2,218.55	49.10	46.186		
10,700.00	10,349.02	10,421.10	10,391.95	38.12	32.83	91.22	207.37	-1,525.30	2,278.62	2,229.47	49.16	46.356		
10,733.47	10,350.00	10,422.09	10,392.94	38.19	32.83	90.42	207.37	-1,525.29	2,286.60	2,237.41	49.19	46.489		
10,800.00	10,350.00	10,422.21	10,393.05	38.36	32.84	90.43	207.37	-1,525.29	2,303.84	2,254.59	49.25	46.782		
10,900.00	10,350.00	10,422.38	10,393.23	38.68	32.84	90.43	207.37	-1,525.29	2,333.08	2,283.73	49.36	47.270		
11,000.00	10,350.00	10,422.55	10,393.40	39.08	32.84	90.44	207.37	-1,525.29	2,366.20	2,316.71	49.49	47.814		
11,100.00	10,350.00	10,422.72	10,393.57	39.56	32.84	90.44	207.37	-1,525.29	2,403.02	2,353.38	49.64	48.412		
11,200.00	10,350.00	10,422.88	10,393.73	40.10	32.84	90.45	207.37	-1,525.29	2,443.38	2,393.58	49.80	49.064		
11,300.00	10,350.00	10,423.04	10,393.89	40.70	32.84	90.45	207.37	-1,525.29	2,487.11	2,437.14	49.97	49.768		
11,400.00	10,350.00	10,423.20	10,394.05	41.37	32.84	90.45	207.37	-1,525.29	2,534.03	2,483.88	50.16	50.521		
11,500.00	10,350.00	10,423.36	10,394.20	42.08	32.84	90.46	207.37	-1,525.28	2,583.98	2,533.63	50.35	51.324		
11,600.00	10,350.00	10,423.51	10,394.36	42.85	32.84	90.46	207.37	-1,525.28	2,636.77	2,586.23	50.54	52.172		
11,700.00	10,350.00	10,423.66	10,394.51	43.67	32.84	90.47	207.37	-1,525.28	2,692.24	2,641.50	50.73	53.065		
11,800.00	10,350.00	10,423.80	10,394.65	44.53	32.84	90.47	207.37	-1,525.28	2,750.23	2,699.30	50.93	54.003		
11,900.00	10,350.00	10,423.95	10,394.80	45.44	32.84	90.47	207.37	-1,525.28	2,810.58	2,759.46	51.12	54.980		
12,000.00	10,350.00	10,424.09	10,394.94	46.39	32.84	90.48	207.37	-1,525.28	2,873.15	2,821.84	51.31	55.995		
12,100.00	10,350.00	10,424.23	10,395.08	47.37	32.84	90.48	207.37	-1,525.28	2,937.79	2,886.29	51.50	57.047		
12,200.00	10,350.00	10,424.37	10,395.21	48.39	32.84	90.48	207.37	-1,525.28	3,004.36	2,952.68	51.68	58.134		
12,300.00	10,350.00	10,424.50	10,395.35	49.45	32.84	90.49	207.37	-1,525.28	3,072.75	3,020.90	51.86	59.254		
12,400.00	10,350.00	10,424.63	10,395.48	50.54	32.84	90.49	207.37	-1,525.28	3,142.84	3,090.81	52.03	60.405		
12,500.00	10,350.00	10,424.76	10,395.61	51.66	32.84	90.49	207.37	-1,525.27	3,214.50	3,162.30	52.20	61.584		
12,600.00	10,350.00	10,424.89	10,395.74	52.80	32.84	90.50	207.37	-1,525.27	3,287.65	3,235.29	52.36	62.790		
12,700.00	10,350.00	10,425.02	10,395.87	53.97	32.84	90.50	207.37	-1,525.27	3,362.18	3,309.66	52.52	64.022		
12,800.00	10,350.00	10,425.14	10,395.99	55.17	32.85	90.50	207.37	-1,525.27	3,438.00	3,385.33	52.67	65.278		
12,900.00	10,350.00	10,425.26	10,396.11	56.39	32.85	90.51	207.36	-1,525.27	3,515.03	3,462.22	52.81	66.556		
13,000.00	10,350.00	10,425.38	10,396.23	57.63	32.85	90.51	207.36	-1,525.27	3,593.20	3,540.24	52.95	67.854		
13,100.00	10,350.00	10,436.00	10,406.85	58.89	32.88	90.78	207.36	-1,525.20	3,672.44	3,619.32	53.12	69.140		
13,200.00	10,350.00	10,436.00	10,406.85	60.17	32.88	90.78	207.36	-1,525.20	3,752.66	3,699.41	53.25	70.477		
13,300.00	10,350.00	10,436.00	10,406.85	61.47	32.88	90.78	207.36	-1,525.20	3,833.80	3,780.43	53.37	71.832		
13,400.00	10,350.00	10,436.00	10,406.85	62.78	32.88	90.78	207.36	-1,525.20	3,915.82	3,862.33	53.49	73.203		
13,500.00	10,350.00	10,436.00	10,406.85	64.11	32.88	90.78	207.36	-1,525.20	3,998.66	3,945.05	53.61	74.589		
13,600.00	10,350.00	10,436.00	10,406.85	65.45	32.88	90.78	207.36	-1,525.20	4,082.26	4,028.54	53.72	75.989		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1431-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,700.00	10,350.00	10,436.00	10,406.85	66.81	32.88	90.78	207.36	-1,525.20	4,166.59	4,112.76	53.83	77.401	
13,800.00	10,350.00	10,436.00	10,406.85	68.18	32.88	90.78	207.36	-1,525.20	4,251.60	4,197.66	53.94	78.826	
13,900.00	10,350.00	10,436.00	10,406.85	69.56	32.88	90.78	207.36	-1,525.20	4,337.24	4,283.20	54.04	80.261	
14,000.00	10,350.00	10,436.00	10,406.85	70.96	32.88	90.78	207.36	-1,525.20	4,423.49	4,369.35	54.14	81.707	
14,100.00	10,350.00	10,436.00	10,406.85	72.36	32.88	90.78	207.36	-1,525.20	4,510.31	4,456.07	54.24	83.161	
14,200.00	10,350.00	10,436.00	10,406.85	73.78	32.88	90.78	207.36	-1,525.20	4,597.66	4,543.33	54.33	84.625	
14,300.00	10,350.00	10,436.00	10,406.85	75.20	32.88	90.78	207.36	-1,525.20	4,685.52	4,631.10	54.42	86.096	
14,400.00	10,350.00	10,436.00	10,406.85	76.63	32.88	90.78	207.36	-1,525.20	4,773.86	4,719.34	54.51	87.575	
14,500.00	10,350.00	10,436.00	10,406.85	78.08	32.88	90.78	207.36	-1,525.20	4,862.64	4,808.05	54.60	89.062	
14,600.00	10,350.00	10,436.00	10,406.85	79.53	32.88	90.78	207.36	-1,525.20	4,951.86	4,897.18	54.68	90.554	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - Plan #9		Offset Site Error:	0.00 usft
Survey Program:													112-OWSG (Rev2) MWD, 1409-OWSG (Rev2) MWD, 11286-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	25.05	25.05	0.00	0.03	-71.87	580.21	-1,772.46	1,865.01							
100.00	100.00	119.80	119.80	0.13	0.17	-71.87	580.26	-1,772.67	1,865.23	1,865.02	0.22	8,667.795				
200.00	200.00	196.98	196.97	0.48	0.45	-71.88	580.21	-1,773.38	1,866.11	1,865.45	0.66	2,826.107				
300.00	300.00	288.80	288.77	0.84	0.78	-71.93	579.43	-1,775.54	1,868.08	1,866.93	1.15	1,629.114				
400.00	400.00	372.38	372.31	1.20	1.08	-71.97	578.74	-1,777.95	1,870.56	1,868.94	1.61	1,158.745				
500.00	500.00	464.91	464.78	1.56	1.41	-72.02	578.15	-1,781.14	1,873.64	1,871.54	2.10	890.746				
600.00	600.00	564.60	564.39	1.92	1.78	-72.08	577.15	-1,784.89	1,876.91	1,874.30	2.61	719.024				
700.00	700.00	658.00	657.72	2.28	2.12	-72.14	576.22	-1,788.61	1,880.39	1,877.29	3.10	606.134				
800.00	800.00	816.00	815.57	2.63	2.68	-72.22	574.85	-1,792.87	1,882.80	1,879.05	3.75	502.325				
900.00	900.00	855.03	854.56	2.99	2.82	-72.25	574.47	-1,794.52	1,885.60	1,881.50	4.10	459.486				
1,000.00	1,000.00	949.20	948.64	3.35	3.16	-72.31	573.64	-1,798.76	1,889.62	1,885.02	4.60	411.022				
1,100.00	1,100.00	1,066.89	1,066.17	3.71	3.60	-72.44	571.07	-1,804.20	1,893.38	1,888.23	5.15	367.541				
1,200.00	1,200.00	1,153.19	1,152.34	4.07	3.91	-72.55	568.56	-1,808.19	1,896.92	1,891.29	5.63	337.135				
1,300.00	1,300.00	1,256.67	1,255.69	4.43	4.29	-72.65	566.50	-1,813.02	1,900.79	1,894.64	6.15	309.299				
1,400.00	1,400.00	1,339.93	1,338.82	4.79	4.56	-72.74	564.61	-1,817.10	1,904.81	1,898.23	6.59	289.112				
1,500.00	1,500.00	1,409.00	1,407.71	5.14	4.70	-72.84	562.52	-1,821.74	1,910.31	1,903.37	6.94	275.400				
1,600.00	1,600.00	1,471.40	1,469.81	5.50	4.73	-72.96	560.04	-1,827.27	1,917.58	1,910.37	7.21	265.829				
1,700.00	1,700.00	1,553.04	1,550.86	5.86	4.79	-73.16	555.83	-1,836.09	1,926.41	1,918.89	7.51	256.384				
1,800.00	1,800.00	1,752.26	1,748.88	6.22	5.02	-73.65	544.10	-1,854.23	1,933.97	1,926.04	7.93	243.844				
1,900.00	1,900.00	2,085.89	2,081.68	6.58	5.48	-74.12	526.11	-1,849.47	1,929.09	1,920.60	8.49	227.219				
2,000.00	2,000.00	2,198.42	2,193.81	6.94	5.66	-74.17	522.02	-1,840.88	1,920.77	1,911.88	8.89	216.163				
2,100.00	2,100.00	2,321.33	2,316.16	7.29	5.88	-74.25	516.44	-1,830.62	1,911.50	1,902.20	9.30	205.429				
2,200.00	2,200.00	2,413.23	2,407.58	7.65	6.06	-74.33	511.32	-1,822.73	1,901.73	1,892.02	9.71	195.837				
2,300.00	2,299.99	2,510.43	2,504.30	8.01	6.28	-145.29	505.91	-1,814.73	1,893.37	1,883.24	10.13	186.991				
2,400.00	2,399.91	2,612.60	2,605.91	8.35	6.52	-145.55	499.10	-1,806.61	1,887.14	1,876.59	10.55	178.851				
2,500.00	2,499.69	2,706.00	2,698.74	8.70	6.76	-145.84	491.70	-1,799.40	1,883.01	1,872.03	10.98	171.514				
2,582.72	2,582.08	2,772.39	2,764.76	9.00	6.94	-146.07	486.52	-1,794.66	1,881.77	1,870.44	11.32	166.177				
2,600.00	2,599.27	2,785.11	2,777.42	9.06	6.97	-146.11	485.62	-1,793.82	1,881.82	1,870.43	11.39	165.150				
2,700.00	2,698.57	2,868.33	2,860.31	9.42	7.20	-146.38	480.32	-1,788.72	1,884.04	1,872.23	11.82	159.417				
2,800.00	2,797.54	3,106.16	3,096.51	9.78	7.89	-147.19	466.04	-1,765.76	1,885.19	1,872.74	12.44	151.497				
2,815.66	2,813.00	3,117.54	3,107.76	9.84	7.93	-147.23	465.23	-1,764.28	1,885.02	1,872.51	12.51	150.669				
2,865.98	2,862.66	3,154.06	3,143.90	10.02	8.04	-147.37	462.57	-1,759.72	1,884.84	1,872.11	12.73	148.099				
2,900.00	2,896.24	3,178.00	3,167.60	10.15	8.12	-147.47	460.77	-1,756.89	1,884.92	1,872.05	12.87	146.434				
3,000.00	2,994.95	3,255.78	3,244.66	10.53	8.37	-147.80	454.31	-1,748.49	1,886.05	1,872.74	13.32	141.647				
3,100.00	3,093.65	3,366.42	3,354.20	10.91	8.74	-148.34	443.35	-1,737.49	1,887.76	1,873.95	13.81	136.681				
3,200.00	3,192.36	3,451.81	3,438.72	11.29	9.03	-148.76	434.66	-1,728.94	1,889.46	1,875.18	14.28	132.340				
3,300.00	3,291.06	3,523.22	3,509.51	11.68	9.28	-149.09	428.00	-1,722.39	1,892.31	1,877.58	14.72	128.532				
3,400.00	3,389.76	3,594.72	3,580.52	12.07	9.53	-149.42	421.68	-1,716.86	1,896.76	1,881.60	15.17	125.060				
3,500.00	3,488.47	3,649.00	3,634.48	12.47	9.72	-149.67	417.11	-1,713.28	1,902.82	1,887.24	15.58	122.149				
3,600.00	3,587.17	3,744.00	3,729.09	12.87	10.04	-150.09	409.76	-1,708.80	1,910.65	1,894.59	16.06	118.952				
3,700.00	3,685.88	3,850.71	3,835.51	13.27	10.40	-150.50	403.64	-1,704.04	1,919.27	1,902.70	16.57	115.848				
3,800.00	3,784.58	4,011.54	3,995.52	13.67	10.96	-151.14	392.65	-1,692.31	1,924.73	1,907.55	17.18	112.056				
3,900.00	3,883.28	4,097.97	4,081.32	14.08	11.28	-151.54	384.70	-1,685.47	1,929.51	1,911.86	17.66	109.268				
4,000.00	3,981.99	4,224.67	4,207.21	14.49	11.73	-152.04	375.58	-1,674.82	1,934.28	1,916.07	18.21	106.218				
4,100.00	4,080.69	4,323.97	4,305.97	14.90	12.08	-152.34	371.48	-1,665.20	1,938.31	1,919.60	18.71	103.614				
4,200.00	4,179.39	4,448.93	4,430.17	15.31	12.52	-152.68	367.35	-1,652.21	1,941.85	1,922.60	19.25	100.896				
4,300.00	4,278.10	4,550.67	4,531.13	15.72	12.90	-153.01	362.06	-1,640.70	1,944.21	1,924.45	19.75	98.421				
4,400.00	4,376.80	4,627.44	4,607.27	16.13	13.18	-153.31	356.30	-1,632.88	1,947.44	1,927.22	20.22	96.292				
4,500.00	4,475.51	4,699.61	4,678.93	16.55	13.45	-153.60	350.57	-1,626.52	1,952.07	1,931.38	20.69	94.370				
4,600.00	4,574.21	4,778.00	4,756.92	16.97	13.74	-153.90	345.29	-1,620.65	1,958.19	1,937.03	21.15	92.565				
4,700.00	4,672.91	4,861.70	4,840.29	17.38	14.05	-154.20	340.24	-1,615.08	1,965.30	1,943.67	21.63	90.850				
4,800.00	4,771.62	4,946.71	4,924.96	17.80	14.36	-154.51	334.75	-1,609.87	1,973.00	1,950.89	22.11	89.225				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - Plan #9		Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1409-OWSG (Rev2) MWD, 11286-OWSG (Rev2) MWD													Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,600.00	9,543.57	9,555.87	9,526.85	35.80	30.10	-90.77	211.20	-1,518.19	2,209.81	2,164.51	45.30	48.785				
9,700.00	9,643.57	9,651.78	9,622.72	36.13	30.42	-90.82	209.50	-1,520.11	2,211.84	2,166.08	45.77	48.330				
9,800.00	9,743.57	9,772.74	9,743.67	36.47	30.81	-90.81	209.86	-1,522.33	2,213.70	2,167.39	46.31	47.802				
9,833.47	9,777.04	9,806.37	9,777.29	36.58	30.91	-90.80	210.20	-1,522.72	2,214.09	2,167.62	46.47	47.647				
9,850.00	9,793.56	9,822.39	9,793.31	36.64	30.96	89.77	210.37	-1,522.92	2,214.29	2,167.75	46.54	47.575				
9,900.00	9,843.42	9,871.00	9,841.91	36.79	31.12	89.81	210.89	-1,523.53	2,214.90	2,168.14	46.76	47.365				
9,950.00	9,892.77	9,932.97	9,903.88	36.93	31.31	90.03	211.44	-1,524.15	2,215.39	2,168.37	47.02	47.117				
10,000.00	9,941.23	9,987.79	9,958.70	37.06	31.49	90.35	211.72	-1,524.41	2,215.68	2,168.43	47.25	46.894				
10,050.00	9,988.45	10,034.32	10,005.23	37.19	31.64	90.71	211.83	-1,524.61	2,216.06	2,168.62	47.45	46.705				
10,100.00	10,034.06	10,078.26	10,049.16	37.30	31.78	91.11	211.82	-1,524.81	2,216.68	2,169.04	47.64	46.532				
10,150.00	10,077.71	10,119.27	10,090.17	37.41	31.92	91.53	211.59	-1,525.05	2,217.65	2,169.84	47.81	46.380				
10,200.00	10,119.07	10,159.32	10,130.21	37.50	32.05	91.95	211.14	-1,525.34	2,219.10	2,171.11	47.99	46.244				
10,250.00	10,157.84	10,202.31	10,173.21	37.58	32.20	92.44	210.48	-1,525.63	2,221.05	2,172.88	48.17	46.111				
10,300.00	10,193.70	10,242.41	10,213.30	37.65	32.34	92.89	209.74	-1,525.83	2,223.60	2,175.26	48.34	46.002				
10,350.00	10,226.39	10,285.46	10,256.34	37.71	32.49	93.39	208.94	-1,525.93	2,226.85	2,178.33	48.52	45.899				
10,400.00	10,255.66	10,324.76	10,295.63	37.76	32.62	93.80	208.39	-1,525.84	2,230.87	2,182.19	48.68	45.824				
10,450.00	10,281.29	10,354.60	10,325.47	37.81	32.73	93.96	208.08	-1,525.65	2,235.85	2,187.03	48.82	45.799				
10,500.00	10,303.08	10,376.13	10,347.00	37.85	32.80	93.84	207.91	-1,525.50	2,241.96	2,193.03	48.93	45.821				
10,550.00	10,320.87	10,393.61	10,364.48	37.90	32.86	93.52	207.81	-1,525.38	2,249.27	2,200.25	49.03	45.879				
10,600.00	10,334.52	10,406.95	10,377.82	37.96	32.91	92.98	207.76	-1,525.28	2,257.82	2,208.72	49.11	45.975				
10,650.00	10,343.93	10,416.11	10,386.98	38.03	32.94	92.22	207.73	-1,525.22	2,267.61	2,218.43	49.18	46.108				
10,700.00	10,349.02	10,421.08	10,391.95	38.12	32.96	91.22	207.72	-1,525.19	2,278.59	2,229.35	49.24	46.277				
10,733.47	10,350.00	10,422.07	10,392.94	38.19	32.96	90.42	207.72	-1,525.18	2,286.57	2,237.30	49.27	46.411				
10,800.00	10,350.00	10,422.19	10,393.06	38.36	32.96	90.43	207.72	-1,525.18	2,303.82	2,254.49	49.33	46.704				
10,900.00	10,350.00	10,422.36	10,393.23	38.68	32.96	90.43	207.72	-1,525.18	2,333.08	2,283.64	49.44	47.191				
11,000.00	10,350.00	10,422.53	10,393.40	39.08	32.96	90.44	207.72	-1,525.18	2,366.21	2,316.64	49.57	47.735				
11,100.00	10,350.00	10,422.70	10,393.57	39.56	32.96	90.44	207.72	-1,525.18	2,403.05	2,353.33	49.72	48.333				
11,200.00	10,350.00	10,422.86	10,393.73	40.10	32.96	90.45	207.72	-1,525.17	2,443.42	2,393.54	49.88	48.985				
11,300.00	10,350.00	10,423.02	10,393.89	40.70	32.96	90.45	207.72	-1,525.17	2,487.16	2,437.11	50.06	49.688				
11,400.00	10,350.00	10,423.18	10,394.05	41.37	32.96	90.45	207.72	-1,525.17	2,534.10	2,483.86	50.24	50.441				
11,500.00	10,350.00	10,423.34	10,394.21	42.08	32.96	90.46	207.72	-1,525.17	2,584.06	2,533.63	50.43	51.243				
11,600.00	10,350.00	10,423.49	10,394.36	42.85	32.96	90.46	207.72	-1,525.17	2,636.86	2,586.24	50.62	52.091				
11,700.00	10,350.00	10,423.64	10,394.51	43.67	32.96	90.47	207.72	-1,525.17	2,692.34	2,641.53	50.81	52.984				
11,800.00	10,350.00	10,423.79	10,394.66	44.53	32.97	90.47	207.72	-1,525.17	2,750.34	2,699.33	51.01	53.921				
11,900.00	10,350.00	13,562.27	12,050.00	45.44	51.44	127.17	-1,517.74	-1,499.00	2,770.14	2,709.91	60.24	45.988				
12,000.00	10,350.00	13,662.27	12,050.00	46.39	52.56	127.16	-1,617.73	-1,498.13	2,770.24	2,708.78	61.47	45.068				
12,100.00	10,350.00	13,762.27	12,050.00	47.37	53.71	127.16	-1,717.73	-1,497.25	2,770.34	2,707.61	62.74	44.158				
12,200.00	10,350.00	13,862.27	12,050.00	48.39	54.89	127.16	-1,817.73	-1,496.37	2,770.44	2,706.40	64.04	43.260				
12,300.00	10,350.00	13,962.27	12,050.00	49.45	56.09	127.16	-1,917.72	-1,495.50	2,770.54	2,705.17	65.38	42.378				
12,400.00	10,350.00	14,062.27	12,050.00	50.54	57.31	127.16	-2,017.72	-1,494.62	2,770.64	2,703.90	66.74	41.511				
12,500.00	10,350.00	14,162.27	12,050.00	51.66	58.56	127.16	-2,117.71	-1,493.75	2,770.74	2,702.60	68.14	40.662				
12,600.00	10,350.00	14,262.27	12,050.00	52.80	59.82	127.15	-2,217.71	-1,492.87	2,770.84	2,701.28	69.56	39.831				
12,700.00	10,350.00	14,362.27	12,050.00	53.97	61.10	127.15	-2,317.71	-1,491.99	2,770.94	2,699.93	71.02	39.019				
12,800.00	10,350.00	14,462.27	12,050.00	55.17	62.40	127.15	-2,417.70	-1,491.12	2,771.04	2,698.55	72.49	38.227				
12,900.00	10,350.00	14,562.27	12,050.00	56.39	63.72	127.15	-2,517.70	-1,490.24	2,771.14	2,697.15	73.99	37.454				
13,000.00	10,350.00	14,662.27	12,050.00	57.63	65.05	127.15	-2,617.69	-1,489.37	2,771.24	2,695.73	75.51	36.702				
13,100.00	10,350.00	14,762.27	12,050.00	58.89	66.40	127.15	-2,717.69	-1,488.49	2,771.34	2,694.29	77.05	35.970				
13,200.00	10,350.00	14,862.27	12,050.00	60.17	67.75	127.15	-2,817.69	-1,487.61	2,771.44	2,692.84	78.60	35.259				
13,300.00	10,350.00	14,962.27	12,050.00	61.47	69.13	127.14	-2,917.68	-1,486.74	2,771.54	2,691.36	80.18	34.567				
13,400.00	10,350.00	15,062.27	12,050.00	62.78	70.51	127.14	-3,017.68	-1,485.86	2,771.64	2,689.87	81.77	33.895				
13,500.00	10,350.00	15,162.27	12,050.00	64.11	71.90	127.14	-3,117.68	-1,484.99	2,771.74	2,688.36	83.38	33.242				
13,600.00	10,350.00	15,262.27	12,050.00	65.45	73.31	127.14	-3,217.67	-1,484.11	2,771.84	2,686.84	85.00	32.609				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - Plan #9		Offset Site Error:		0.00 usft
Survey Program:													112-OWSG (Rev2) MWD, 1409-OWSG (Rev2) MWD, 11286-OWSG (Rev2) MWD		Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
18,900.00	10,350.00	20,562.27	12,050.00	145.99	154.90	127.06	-8,517.46	-1,437.68	2,777.13	2,596.56	180.57	15.380					
19,000.00	10,350.00	20,662.27	12,050.00	147.58	156.50	127.05	-8,617.46	-1,436.80	2,777.23	2,594.78	182.45	15.221					
19,100.00	10,350.00	20,762.27	12,050.00	149.18	158.10	127.05	-8,717.46	-1,435.92	2,777.33	2,592.99	184.34	15.067					
19,200.00	10,350.00	20,862.27	12,050.00	150.78	159.71	127.05	-8,817.45	-1,435.05	2,777.43	2,591.21	186.22	14.915					
19,300.00	10,350.00	20,962.27	12,050.00	152.38	161.31	127.05	-8,917.45	-1,434.17	2,777.53	2,589.43	188.10	14.766					
19,400.00	10,350.00	21,062.27	12,050.00	153.98	162.92	127.05	-9,017.44	-1,433.30	2,777.63	2,587.65	189.98	14.620					
19,500.00	10,350.00	21,162.27	12,050.00	155.58	164.52	127.05	-9,117.44	-1,432.42	2,777.73	2,585.86	191.87	14.477					
19,600.00	10,350.00	21,262.27	12,050.00	157.18	166.13	127.05	-9,217.44	-1,431.54	2,777.83	2,584.08	193.75	14.337					
19,700.00	10,350.00	21,362.27	12,050.00	158.79	167.74	127.04	-9,317.43	-1,430.67	2,777.93	2,582.29	195.64	14.199					
19,800.00	10,350.00	21,462.27	12,050.00	160.39	169.34	127.04	-9,417.43	-1,429.79	2,778.03	2,580.50	197.53	14.064					
19,900.00	10,350.00	21,562.27	12,050.00	162.00	170.95	127.04	-9,517.42	-1,428.92	2,778.13	2,578.71	199.42	13.931					
20,000.00	10,350.00	21,662.27	12,050.00	163.61	172.56	127.04	-9,617.42	-1,428.04	2,778.23	2,576.92	201.30	13.801					
20,100.00	10,350.00	21,762.27	12,050.00	165.21	174.17	127.04	-9,717.42	-1,427.16	2,778.33	2,575.13	203.20	13.673					
20,200.00	10,350.00	21,862.27	12,050.00	166.82	175.79	127.04	-9,817.41	-1,426.29	2,778.43	2,573.34	205.09	13.548					
20,300.00	10,350.00	21,962.27	12,050.00	168.43	177.40	127.03	-9,917.41	-1,425.41	2,778.53	2,571.55	206.98	13.424					
20,400.00	10,350.00	22,062.27	12,050.00	170.04	179.01	127.03	-10,017.41	-1,424.54	2,778.63	2,569.76	208.87	13.303					
20,500.00	10,350.00	22,162.27	12,050.00	171.65	180.63	127.03	-10,117.40	-1,423.66	2,778.73	2,567.97	210.76	13.184					
20,529.73	10,350.00	22,192.00	12,050.00	172.13	181.11	127.03	-10,147.13	-1,423.40	2,778.76	2,567.44	211.32	13.149 SF					

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	39.00	39.00	0.00	0.05	-82.36	500.03	-3,728.22	3,761.60					
100.00	100.00	139.00	139.00	0.13	0.27	-82.36	500.03	-3,728.22	3,761.60	3,761.31	0.29	N/A		
200.00	200.00	239.00	239.00	0.48	0.62	-82.36	500.03	-3,728.22	3,761.60	3,760.81	0.79	4,764.778		
300.00	300.00	339.00	339.00	0.84	0.98	-82.36	500.03	-3,728.22	3,761.60	3,760.31	1.29	2,906.994		
400.00	400.00	439.00	439.00	1.20	1.34	-82.36	500.03	-3,728.22	3,761.60	3,759.80	1.80	2,089.925		
500.00	500.00	539.00	539.00	1.56	1.70	-82.36	500.03	-3,728.22	3,761.60	3,759.30	2.31	1,631.060		
600.00	600.00	639.00	639.00	1.92	2.06	-82.36	500.03	-3,728.22	3,761.60	3,758.79	2.81	1,337.313		
700.00	700.00	739.00	739.00	2.28	2.42	-82.36	500.03	-3,728.22	3,761.60	3,758.28	3.32	1,133.185		
800.00	800.00	839.00	839.00	2.63	2.77	-82.36	500.03	-3,728.22	3,761.60	3,757.78	3.83	983.103		
900.00	900.00	939.00	939.00	2.99	3.13	-82.36	500.03	-3,728.22	3,761.60	3,757.27	4.33	868.116		
1,000.00	1,000.00	1,039.00	1,039.00	3.35	3.49	-82.36	500.03	-3,728.22	3,761.60	3,756.76	4.84	777.207		
1,100.00	1,100.00	1,139.00	1,139.00	3.71	3.85	-82.36	500.03	-3,728.22	3,761.60	3,756.26	5.35	703.529		
1,200.00	1,200.00	1,239.00	1,239.00	4.07	4.21	-82.36	500.03	-3,728.22	3,761.60	3,755.75	5.85	642.610		
1,300.00	1,300.00	1,339.00	1,339.00	4.43	4.57	-82.36	500.03	-3,728.22	3,761.60	3,755.24	6.36	591.398		
1,400.00	1,400.00	1,439.00	1,439.00	4.79	4.93	-82.36	500.03	-3,728.22	3,761.60	3,754.73	6.87	547.746		
1,500.00	1,500.00	1,539.00	1,539.00	5.14	5.28	-82.36	500.03	-3,728.22	3,761.60	3,754.23	7.37	510.094		
1,600.00	1,600.00	1,639.00	1,639.00	5.50	5.64	-82.36	500.03	-3,728.22	3,761.60	3,753.72	7.88	477.286		
1,700.00	1,700.00	1,739.00	1,739.00	5.86	6.00	-82.36	500.03	-3,728.22	3,761.60	3,753.21	8.39	448.442		
1,800.00	1,800.00	1,839.00	1,839.00	6.22	6.36	-82.36	500.03	-3,728.22	3,761.60	3,752.71	8.90	422.886		
1,900.00	1,900.00	1,939.00	1,939.00	6.58	6.72	-82.36	500.03	-3,728.22	3,761.60	3,752.20	9.40	400.085		
2,000.00	2,000.00	2,039.00	2,039.00	6.94	7.08	-82.36	500.03	-3,728.22	3,761.60	3,751.69	9.91	379.617		
2,100.00	2,100.00	2,139.00	2,139.00	7.29	7.43	-82.36	500.03	-3,728.22	3,761.60	3,751.19	10.42	361.142		
2,200.00	2,200.00	2,239.00	2,239.00	7.65	7.79	-82.36	500.03	-3,728.22	3,761.60	3,750.68	10.92	344.381	CC, ES	
2,300.00	2,299.99	2,338.99	2,338.99	8.01	8.15	-153.13	500.03	-3,728.22	3,762.77	3,751.34	11.43	329.334		
2,400.00	2,399.91	2,438.91	2,438.91	8.35	8.51	-153.14	500.03	-3,728.22	3,766.27	3,754.35	11.92	315.854		
2,500.00	2,499.69	2,538.69	2,538.69	8.70	8.87	-153.14	500.03	-3,728.22	3,772.11	3,759.69	12.42	303.641		
2,600.00	2,599.27	2,638.27	2,638.27	9.06	9.22	-153.15	500.03	-3,728.22	3,780.28	3,767.36	12.92	292.552		
2,700.00	2,698.57	2,737.57	2,737.57	9.42	9.58	-153.16	500.03	-3,728.22	3,790.78	3,777.36	13.42	282.466		
2,800.00	2,797.54	2,836.54	2,836.54	9.78	9.94	-153.17	500.03	-3,728.22	3,803.61	3,789.69	13.92	273.273		
2,815.66	2,813.00	2,852.00	2,852.00	9.84	9.99	-153.17	500.03	-3,728.22	3,805.83	3,791.84	14.00	271.897		
2,900.00	2,896.24	2,935.24	2,935.24	10.15	10.29	-153.26	500.03	-3,728.22	3,817.95	3,803.53	14.42	264.818		
3,000.00	2,994.95	3,033.95	3,033.95	10.53	10.64	-153.37	500.03	-3,728.22	3,832.32	3,817.41	14.92	256.917		
3,100.00	3,093.65	3,132.65	3,132.65	10.91	11.00	-153.48	500.03	-3,728.22	3,846.71	3,831.30	15.42	249.505		
3,200.00	3,192.36	3,231.36	3,231.36	11.29	11.35	-153.58	500.03	-3,728.22	3,861.12	3,845.20	15.92	242.540		
3,300.00	3,291.06	3,330.06	3,330.06	11.68	11.70	-153.69	500.03	-3,728.22	3,875.53	3,859.11	16.42	235.984		
3,400.00	3,389.76	3,428.76	3,428.76	12.07	12.06	-153.79	500.03	-3,728.22	3,889.96	3,873.03	16.93	229.804		
3,500.00	3,488.47	3,527.47	3,527.47	12.47	12.41	-153.90	500.03	-3,728.22	3,904.40	3,886.97	17.43	223.971		
3,600.00	3,587.17	3,626.17	3,626.17	12.87	12.77	-154.00	500.03	-3,728.22	3,918.86	3,900.92	17.94	218.456		
3,700.00	3,685.88	3,720.00	3,720.00	13.27	13.10	-154.10	500.03	-3,728.22	3,933.32	3,914.89	18.43	213.383		
3,800.00	3,784.58	3,800.00	3,799.99	13.67	13.37	-154.19	499.26	-3,728.54	3,948.10	3,929.22	18.88	209.103		
3,900.00	3,883.28	3,877.12	3,877.08	14.08	13.62	-154.30	497.04	-3,729.44	3,963.44	3,944.13	19.31	205.226		
4,000.00	3,981.99	3,953.12	3,952.98	14.49	13.87	-154.43	493.45	-3,730.91	3,979.36	3,959.62	19.74	201.571		
4,100.00	4,080.69	4,028.62	4,028.28	14.90	14.12	-154.58	488.50	-3,732.93	3,995.86	3,975.69	20.17	198.110		
4,200.00	4,179.39	4,118.78	4,118.11	15.31	14.41	-154.78	481.30	-3,735.87	4,012.83	3,992.19	20.64	194.460		
4,300.00	4,278.10	4,216.19	4,215.15	15.72	14.74	-155.00	473.45	-3,739.08	4,029.88	4,008.76	21.12	190.793		
4,400.00	4,376.80	4,313.59	4,312.18	16.13	15.06	-155.21	465.60	-3,742.29	4,046.99	4,025.38	21.61	187.276		
4,500.00	4,475.51	4,411.00	4,409.21	16.55	15.39	-155.42	457.75	-3,745.50	4,064.15	4,042.05	22.10	183.901		
4,600.00	4,574.21	4,508.40	4,506.25	16.97	15.71	-155.62	449.89	-3,748.70	4,081.37	4,058.78	22.59	180.660		
4,700.00	4,672.91	4,605.80	4,603.28	17.38	16.05	-155.83	442.04	-3,751.91	4,098.64	4,075.55	23.08	177.547		
4,800.00	4,771.62	4,703.21	4,700.32	17.80	16.38	-156.03	434.19	-3,755.12	4,115.96	4,092.38	23.58	174.556		
4,900.00	4,870.32	4,800.61	4,797.35	18.22	16.71	-156.24	426.34	-3,758.33	4,133.33	4,109.26	24.08	171.679		
5,000.00	4,969.03	4,898.02	4,894.38	18.64	17.05	-156.44	418.49	-3,761.54	4,150.75	4,126.18	24.57	168.912		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	4,995.42	4,991.42	19.07	17.39	-156.64	410.64	-3,764.74	4,168.23	4,143.16	25.07	166.248		
5,200.00	5,166.43	5,092.82	5,088.45	19.49	17.73	-156.83	402.79	-3,767.95	4,185.75	4,160.18	25.57	163.683		
5,300.00	5,265.14	5,190.23	5,185.49	19.91	18.07	-157.03	394.94	-3,771.16	4,203.32	4,177.25	26.07	161.212		
5,400.00	5,363.84	5,287.63	5,282.52	20.33	18.41	-157.22	387.08	-3,774.37	4,220.94	4,194.37	26.58	158.830		
5,500.00	5,462.54	5,385.03	5,379.55	20.76	18.76	-157.42	379.23	-3,777.57	4,238.61	4,211.53	27.08	156.533		
5,600.00	5,561.25	5,482.44	5,476.59	21.18	19.10	-157.61	371.38	-3,780.78	4,256.33	4,228.74	27.58	154.316		
5,700.00	5,659.95	5,579.84	5,573.62	21.61	19.45	-157.80	363.53	-3,783.99	4,274.09	4,246.00	28.09	152.176		
5,800.00	5,758.66	5,677.25	5,670.66	22.04	19.79	-157.99	355.68	-3,787.20	4,291.89	4,263.30	28.59	150.109		
5,900.00	5,857.36	5,774.65	5,767.69	22.46	20.14	-158.17	347.83	-3,790.41	4,309.75	4,280.65	29.10	148.112		
6,000.00	5,956.06	5,872.05	5,864.72	22.89	20.49	-158.36	339.98	-3,793.61	4,327.64	4,298.04	29.60	146.182		
6,100.00	6,054.77	5,969.46	5,961.76	23.32	20.84	-158.54	332.12	-3,796.82	4,345.59	4,315.47	30.11	144.315		
6,200.00	6,153.47	6,066.86	6,058.79	23.75	21.19	-158.72	324.27	-3,800.03	4,363.57	4,332.95	30.62	142.508		
6,300.00	6,252.18	6,164.27	6,155.83	24.18	21.55	-158.90	316.42	-3,803.24	4,381.60	4,350.47	31.13	140.760		
6,400.00	6,350.88	6,261.67	6,252.86	24.60	21.90	-159.08	308.57	-3,806.45	4,399.67	4,368.03	31.64	139.066		
6,500.00	6,449.58	6,359.07	6,349.89	25.03	22.25	-159.26	300.72	-3,809.65	4,417.78	4,385.64	32.15	137.426		
6,600.00	6,548.29	6,456.48	6,446.93	25.46	22.61	-159.44	292.87	-3,812.86	4,435.94	4,403.28	32.66	135.836		
6,700.00	6,646.99	6,553.88	6,543.96	25.89	22.96	-159.61	285.02	-3,816.07	4,454.13	4,420.97	33.17	134.294		
6,758.77	6,705.00	6,611.13	6,600.99	26.15	23.17	-159.71	280.40	-3,817.96	4,464.85	4,431.38	33.47	133.410		
6,800.00	6,745.73	6,651.33	6,641.04	26.32	23.32	-159.82	277.16	-3,819.28	4,472.16	4,438.49	33.68	132.794		
6,900.00	6,844.79	6,749.22	6,738.56	26.74	23.68	-160.07	269.27	-3,822.50	4,488.23	4,454.04	34.19	131.283		
7,000.00	6,944.17	6,847.59	6,836.55	27.13	24.04	-160.29	261.34	-3,825.74	4,501.89	4,467.20	34.70	129.753		
7,100.00	7,043.80	6,946.36	6,934.95	27.51	24.40	-160.48	253.38	-3,829.00	4,513.14	4,477.94	35.20	128.203		
7,200.00	7,143.63	7,045.46	7,033.68	27.88	24.76	-160.65	245.39	-3,832.26	4,521.96	4,486.25	35.71	126.636		
7,300.00	7,243.57	7,144.84	7,132.68	28.22	25.13	-160.80	237.38	-3,835.53	4,528.33	4,492.12	36.21	125.053		
7,374.43	7,318.00	7,218.94	7,206.50	28.46	25.40	-90.12	231.41	-3,837.97	4,531.48	4,494.90	36.58	123.870		
7,400.00	7,343.57	7,244.41	7,231.87	28.55	25.50	-90.15	229.36	-3,838.81	4,532.33	4,495.62	36.71	123.464		
7,500.00	7,443.57	7,344.03	7,331.11	28.87	25.87	-90.25	221.33	-3,842.09	4,535.66	4,498.46	37.21	121.904		
7,600.00	7,543.57	7,443.66	7,430.36	29.19	26.23	-90.35	213.30	-3,845.37	4,539.01	4,501.31	37.70	120.382		
7,700.00	7,643.57	7,543.72	7,530.01	29.52	26.57	-90.49	205.44	-3,848.61	4,541.65	4,503.23	38.21	118.813		
7,800.00	7,743.57	7,643.83	7,630.27	29.84	26.89	-90.53	197.89	-3,851.26	4,542.45	4,503.33	38.71	117.244		
7,900.00	7,843.57	7,743.93	7,730.37	30.17	27.24	-90.53	190.89	-3,851.26	4,542.45	4,502.84	39.21	115.675		
8,000.00	7,943.57	7,844.03	7,830.47	30.49	27.59	-90.53	183.89	-3,851.26	4,542.45	4,502.36	39.71	114.106		
8,100.00	8,043.57	7,944.13	7,930.57	30.82	27.92	-90.53	176.89	-3,851.26	4,542.45	4,501.87	40.21	112.537		
8,200.00	8,143.57	8,044.23	8,030.67	31.15	28.25	-90.53	169.89	-3,851.26	4,542.45	4,501.39	40.71	110.968		
8,300.00	8,243.57	8,144.33	8,130.77	31.48	28.58	-90.53	162.89	-3,851.26	4,542.45	4,500.90	41.21	109.399		
8,400.00	8,343.57	8,244.43	8,230.87	31.80	28.91	-90.53	155.89	-3,851.26	4,542.45	4,500.41	41.71	107.830		
8,500.00	8,443.57	8,344.53	8,330.97	32.13	29.24	-90.53	148.89	-3,851.26	4,542.45	4,499.93	42.21	106.261		
8,600.00	8,543.57	8,444.63	8,431.07	32.46	29.57	-90.53	141.89	-3,851.26	4,542.45	4,499.44	42.71	104.692		
8,700.00	8,643.57	8,544.73	8,531.17	32.80	29.90	-90.53	134.89	-3,851.26	4,542.45	4,498.95	43.21	103.123		
8,800.00	8,743.57	8,644.83	8,631.27	33.13	30.23	-90.53	127.89	-3,851.26	4,542.45	4,498.46	43.71	101.554		
8,900.00	8,843.57	8,744.93	8,731.47	33.46	30.56	-90.53	120.89	-3,851.26	4,542.45	4,497.97	44.21	100.985		
9,000.00	8,943.57	8,845.03	8,831.57	33.79	30.89	-90.53	113.89	-3,851.26	4,542.45	4,497.48	44.71	99.416		
9,100.00	9,043.57	8,945.13	8,931.67	34.12	31.22	-90.53	106.89	-3,851.26	4,542.45	4,496.99	45.21	97.847		
9,200.00	9,143.57	9,045.23	9,031.77	34.46	31.55	-90.53	99.89	-3,851.26	4,542.45	4,496.50	45.71	96.278		
9,300.00	9,243.57	9,145.33	9,131.87	34.79	31.88	-90.53	92.89	-3,851.26	4,542.45	4,496.01	46.21	94.709		
9,400.00	9,343.57	9,245.43	9,231.97	35.13	32.21	-90.53	85.89	-3,851.26	4,542.45	4,495.52	46.71	93.140		
9,500.00	9,443.57	9,345.53	9,332.07	35.46	32.54	-90.53	78.89	-3,851.26	4,542.45	4,495.03	47.21	91.571		
9,600.00	9,543.57	9,445.63	9,432.17	35.80	32.87	-90.53	71.89	-3,851.26	4,542.45	4,494.54	47.71	90.002		
9,700.00	9,643.57	9,545.73	9,532.27	36.13	33.20	-90.53	64.89	-3,851.26	4,542.45	4,494.05	48.21	88.433		
9,800.00	9,743.57	9,645.83	9,632.37	36.47	33.53	-90.53	57.89	-3,851.26	4,542.45	4,493.55	48.71	86.864		
9,833.47	9,777.04	9,679.30	9,665.84	36.58	34.50	-90.53	198.89	-3,851.26	4,542.45	4,493.39	49.07	92.578		
9,850.00	9,793.56	9,695.82	9,682.36	36.64	34.56	90.05	198.89	-3,851.26	4,542.45	4,493.31	49.15	92.428		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,843.42	9,896.19	9,882.42	36.79	34.73	90.09	198.89	-3,851.26	4,542.46	4,493.08	49.38	91.990		
9,950.00	9,892.77	9,945.53	9,931.77	36.93	34.91	90.19	198.89	-3,851.26	4,542.48	4,492.87	49.61	91.568		
10,000.00	9,941.23	9,994.00	9,980.23	37.06	35.07	90.33	198.89	-3,851.26	4,542.54	4,492.71	49.83	91.163		
10,050.00	9,988.45	10,041.22	10,027.45	37.19	35.24	90.51	198.89	-3,851.26	4,542.66	4,492.62	50.04	90.779		
10,100.00	10,034.06	10,086.83	10,073.06	37.30	35.40	90.72	198.89	-3,851.26	4,542.91	4,492.66	50.24	90.416		
10,150.00	10,077.71	10,130.48	10,116.71	37.41	35.55	90.95	198.89	-3,851.26	4,543.32	4,492.88	50.44	90.075		
10,200.00	10,119.07	10,171.84	10,158.07	37.50	35.69	91.18	198.89	-3,851.26	4,543.95	4,493.33	50.62	89.759		
10,250.00	10,157.84	10,210.60	10,196.84	37.58	35.83	91.40	198.89	-3,851.26	4,544.87	4,494.07	50.80	89.468		
10,300.00	10,193.70	10,246.47	10,232.70	37.65	35.95	91.58	198.89	-3,851.26	4,546.14	4,495.18	50.96	89.203		
10,350.00	10,226.39	10,279.16	10,265.39	37.71	36.07	91.73	198.89	-3,851.26	4,547.82	4,496.70	51.12	88.964		
10,400.00	10,255.66	10,308.43	10,294.66	37.76	36.17	91.81	198.89	-3,851.26	4,549.97	4,498.70	51.27	88.753		
10,450.00	10,281.29	10,334.06	10,320.29	37.81	36.26	91.82	198.89	-3,851.26	4,552.63	4,501.23	51.40	88.569		
10,500.00	10,303.08	10,355.85	10,342.08	37.85	36.34	91.75	198.89	-3,851.26	4,555.86	4,504.33	51.53	88.413		
10,550.00	10,320.87	10,373.64	10,359.87	37.90	36.40	91.57	198.89	-3,851.26	4,559.68	4,508.03	51.65	88.287		
10,600.00	10,334.52	10,387.29	10,373.52	37.96	36.44	91.29	198.89	-3,851.26	4,564.11	4,512.35	51.75	88.190		
10,650.00	10,343.93	10,396.70	10,382.93	38.03	36.48	90.90	198.89	-3,851.26	4,569.14	4,517.29	51.85	88.122		
10,700.00	10,349.02	10,401.79	10,388.02	38.12	36.50	90.40	198.89	-3,851.26	4,574.78	4,522.84	51.94	88.085		
10,733.47	10,350.00	10,402.77	10,389.00	38.19	36.50	90.00	198.89	-3,851.26	4,578.87	4,526.88	51.99	88.078		
10,800.00	10,350.00	10,402.77	10,389.00	38.36	36.50	90.00	198.89	-3,851.26	4,587.72	4,535.63	52.09	88.070		
10,900.00	10,350.00	10,402.77	10,389.00	38.68	36.50	90.00	198.89	-3,851.26	4,602.79	4,550.51	52.28	88.040		
11,000.00	10,350.00	10,402.77	10,389.00	39.08	36.50	90.00	198.89	-3,851.26	4,619.99	4,567.48	52.50	87.992		
11,100.00	10,350.00	10,402.77	10,389.00	39.56	36.50	90.00	198.89	-3,851.26	4,639.27	4,586.51	52.76	87.928		
11,200.00	10,350.00	10,402.77	10,389.00	40.10	36.50	90.00	198.89	-3,851.26	4,660.63	4,607.58	53.05	87.852		
11,300.00	10,350.00	10,402.77	10,389.00	40.70	36.50	90.00	198.89	-3,851.26	4,684.02	4,630.65	53.37	87.767		
11,400.00	10,350.00	10,402.77	10,389.00	41.37	36.50	90.00	198.89	-3,851.26	4,709.41	4,655.70	53.71	87.677		
11,500.00	10,350.00	10,402.77	10,389.00	42.08	36.50	90.00	198.89	-3,851.26	4,736.79	4,682.70	54.08	87.584		
11,600.00	10,350.00	10,402.77	10,389.00	42.85	36.50	90.00	198.89	-3,851.26	4,766.10	4,711.63	54.47	87.493		
11,700.00	10,350.00	10,402.77	10,389.00	43.67	36.50	90.00	198.89	-3,851.26	4,797.32	4,742.44	54.89	87.406		
11,800.00	10,350.00	13,350.74	11,974.31	44.53	52.19	109.23	-1,420.92	-3,837.13	4,813.17	4,747.30	65.87	73.071		
11,900.00	10,350.00	13,450.73	11,975.39	45.44	53.21	109.24	-1,520.90	-3,836.25	4,813.65	4,746.47	67.17	71.662		
12,000.00	10,350.00	13,550.73	11,976.47	46.39	54.25	109.25	-1,620.88	-3,835.38	4,814.12	4,745.60	68.52	70.257		
12,100.00	10,350.00	13,650.72	11,977.55	47.37	55.32	109.27	-1,720.87	-3,834.51	4,814.60	4,744.69	69.92	68.862		
12,200.00	10,350.00	13,750.72	11,978.63	48.39	56.42	109.28	-1,820.85	-3,833.64	4,815.08	4,743.73	71.35	67.482		
12,300.00	10,350.00	13,850.71	11,979.71	49.45	57.55	109.29	-1,920.84	-3,832.77	4,815.56	4,742.73	72.83	66.120		
12,400.00	10,350.00	13,950.70	11,980.79	50.54	58.70	109.30	-2,020.82	-3,831.89	4,816.04	4,741.69	74.34	64.780		
12,500.00	10,350.00	14,050.70	11,981.87	51.66	59.88	109.31	-2,120.81	-3,831.02	4,816.52	4,740.62	75.89	63.463		
12,600.00	10,350.00	14,150.69	11,982.95	52.80	61.07	109.32	-2,220.79	-3,830.15	4,817.00	4,739.52	77.48	62.173		
12,700.00	10,350.00	14,250.69	11,984.03	53.97	62.29	109.34	-2,320.78	-3,829.28	4,817.47	4,738.38	79.09	60.911		
12,800.00	10,350.00	14,350.68	11,985.11	55.17	63.53	109.35	-2,420.76	-3,828.40	4,817.95	4,737.22	80.73	59.677		
12,900.00	10,350.00	14,450.68	11,986.19	56.39	64.78	109.36	-2,520.74	-3,827.53	4,818.43	4,736.03	82.40	58.474		
13,000.00	10,350.00	14,550.67	11,987.28	57.63	66.06	109.37	-2,620.73	-3,826.66	4,818.91	4,734.81	84.10	57.300		
13,100.00	10,350.00	14,650.66	11,988.36	58.89	67.35	109.38	-2,720.71	-3,825.79	4,819.39	4,733.57	85.82	56.157		
13,200.00	10,350.00	14,750.66	11,989.44	60.17	68.65	109.39	-2,820.70	-3,824.91	4,819.87	4,732.31	87.56	55.045		
13,300.00	10,350.00	14,850.65	11,990.52	61.47	69.97	109.41	-2,920.68	-3,824.04	4,820.35	4,731.03	89.33	53.963		
13,400.00	10,350.00	14,950.65	11,991.60	62.78	71.31	109.42	-3,020.67	-3,823.17	4,820.84	4,729.72	91.11	52.912		
13,500.00	10,350.00	15,050.64	11,992.68	64.11	72.65	109.43	-3,120.65	-3,822.30	4,821.32	4,728.40	92.91	51.890		
13,600.00	10,350.00	15,150.63	11,993.76	65.45	74.01	109.44	-3,220.64	-3,821.43	4,821.80	4,727.06	94.73	50.898		
13,700.00	10,350.00	15,250.63	11,994.84	66.81	75.38	109.45	-3,320.62	-3,820.55	4,822.28	4,725.71	96.57	49.934		
13,800.00	10,350.00	15,350.62	11,995.92	68.18	76.77	109.46	-3,420.60	-3,819.68	4,822.76	4,724.33	98.43	48.999		
13,900.00	10,350.00	15,450.62	11,997.00	69.56	78.16	109.47	-3,520.59	-3,818.81	4,823.24	4,722.95	100.30	48.090		
14,000.00	10,350.00	15,550.61	11,998.08	70.96	79.56	109.49	-3,620.57	-3,817.94	4,823.72	4,721.55	102.18	47.209		
14,100.00	10,350.00	15,650.60	11,999.16	72.36	80.97	109.50	-3,720.56	-3,817.06	4,824.21	4,720.13	104.07	46.353		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	10,350.00	15,750.60	12,000.24	73.78	82.39	109.51	-3,820.54	-3,816.19	4,824.69	4,718.71	105.98	45.523		
14,300.00	10,350.00	15,850.59	12,001.32	75.20	83.82	109.52	-3,920.53	-3,815.32	4,825.17	4,717.27	107.90	44.717		
14,400.00	10,350.00	15,950.59	12,002.41	76.63	85.26	109.53	-4,020.51	-3,814.45	4,825.65	4,715.82	109.84	43.935		
14,500.00	10,350.00	16,050.58	12,003.49	78.08	86.70	109.54	-4,120.50	-3,813.57	4,826.14	4,714.36	111.78	43.176		
14,600.00	10,350.00	16,150.57	12,004.57	79.53	88.15	109.56	-4,220.48	-3,812.70	4,826.62	4,712.89	113.73	42.439		
14,700.00	10,350.00	16,250.57	12,005.65	80.99	89.61	109.57	-4,320.46	-3,811.83	4,827.10	4,711.41	115.69	41.723		
14,800.00	10,350.00	16,350.56	12,006.73	82.45	91.08	109.58	-4,420.45	-3,810.96	4,827.59	4,709.92	117.66	41.029		
14,900.00	10,350.00	16,450.56	12,007.81	83.92	92.55	109.59	-4,520.43	-3,810.09	4,828.07	4,708.43	119.64	40.354		
15,000.00	10,350.00	16,550.55	12,008.89	85.40	94.03	109.60	-4,620.42	-3,809.21	4,828.55	4,706.93	121.63	39.699		
15,100.00	10,350.00	16,650.54	12,009.97	86.89	95.51	109.61	-4,720.40	-3,808.34	4,829.04	4,705.42	123.62	39.063		
15,200.00	10,350.00	16,750.54	12,011.05	88.38	97.00	109.63	-4,820.39	-3,807.47	4,829.52	4,703.90	125.62	38.444		
15,300.00	10,350.00	16,850.53	12,012.13	89.87	98.49	109.64	-4,920.37	-3,806.60	4,830.01	4,702.37	127.63	37.843		
15,400.00	10,350.00	16,950.53	12,013.21	91.38	99.99	109.65	-5,020.36	-3,805.72	4,830.49	4,700.84	129.65	37.259		
15,500.00	10,350.00	17,050.52	12,014.29	92.88	101.50	109.66	-5,120.34	-3,804.85	4,830.98	4,699.31	131.67	36.690		
15,600.00	10,350.00	17,150.52	12,015.37	94.39	103.00	109.67	-5,220.32	-3,803.98	4,831.46	4,697.76	133.70	36.137		
15,700.00	10,350.00	17,250.51	12,016.45	95.91	104.52	109.68	-5,320.31	-3,803.11	4,831.95	4,696.21	135.73	35.599		
15,800.00	10,350.00	17,350.50	12,017.54	97.43	106.03	109.69	-5,420.29	-3,802.23	4,832.43	4,694.66	137.77	35.076		
15,900.00	10,350.00	17,450.50	12,018.62	98.96	107.55	109.71	-5,520.28	-3,801.36	4,832.92	4,693.10	139.82	34.566		
16,000.00	10,350.00	17,550.49	12,019.70	100.49	109.08	109.72	-5,620.26	-3,800.49	4,833.40	4,691.54	141.87	34.070		
16,100.00	10,350.00	17,650.49	12,020.78	102.02	110.61	109.73	-5,720.25	-3,799.62	4,833.89	4,689.97	143.92	33.587		
16,200.00	10,350.00	17,750.48	12,021.86	103.55	112.14	109.74	-5,820.23	-3,798.75	4,834.38	4,688.39	145.98	33.116		
16,300.00	10,350.00	17,850.47	12,022.94	105.09	113.67	109.75	-5,920.22	-3,797.87	4,834.86	4,686.82	148.05	32.658		
16,400.00	10,350.00	17,950.47	12,024.02	106.64	115.21	109.76	-6,020.20	-3,797.00	4,835.35	4,685.24	150.11	32.211		
16,500.00	10,350.00	18,050.46	12,025.10	108.18	116.75	109.78	-6,120.18	-3,796.13	4,835.84	4,683.65	152.18	31.776		
16,600.00	10,350.00	18,150.46	12,026.18	109.73	118.30	109.79	-6,220.17	-3,795.26	4,836.32	4,682.07	154.26	31.352		
16,700.00	10,350.00	18,250.45	12,027.26	111.29	119.84	109.80	-6,320.15	-3,794.38	4,836.81	4,680.48	156.33	30.939		
16,800.00	10,350.00	18,350.44	12,028.34	112.84	121.39	109.81	-6,420.14	-3,793.51	4,837.30	4,678.88	158.42	30.535		
16,900.00	10,350.00	18,450.44	12,029.42	114.40	122.95	109.82	-6,520.12	-3,792.64	4,837.79	4,677.29	160.50	30.142		
17,000.00	10,350.00	18,550.43	12,030.50	115.96	124.50	109.83	-6,620.11	-3,791.77	4,838.27	4,675.68	162.59	29.758		
17,100.00	10,350.00	18,650.43	12,031.58	117.52	126.06	109.84	-6,720.09	-3,790.89	4,838.76	4,674.08	164.68	29.383		
17,200.00	10,350.00	18,750.42	12,032.67	119.09	127.62	109.86	-6,820.08	-3,790.02	4,839.25	4,672.47	166.78	29.016		
17,300.00	10,350.00	18,850.41	12,033.75	120.66	129.18	109.87	-6,920.06	-3,789.15	4,839.74	4,670.86	168.87	28.659		
17,400.00	10,350.00	18,950.41	12,034.83	122.23	130.74	109.88	-7,020.04	-3,788.28	4,840.23	4,669.25	170.98	28.310		
17,500.00	10,350.00	19,050.40	12,035.91	123.80	132.31	109.89	-7,120.03	-3,787.41	4,840.72	4,667.64	173.08	27.969		
17,600.00	10,350.00	19,150.40	12,036.99	125.37	133.88	109.90	-7,220.01	-3,786.53	4,841.20	4,666.02	175.18	27.635		
17,700.00	10,350.00	19,250.39	12,038.07	126.95	135.45	109.91	-7,320.00	-3,785.66	4,841.69	4,664.41	177.29	27.310		
17,800.00	10,350.00	19,350.38	12,039.15	128.52	137.02	109.93	-7,419.98	-3,784.79	4,842.18	4,662.79	179.40	26.992		
17,900.00	10,350.00	19,450.38	12,040.23	130.10	138.60	109.94	-7,519.97	-3,783.92	4,842.67	4,661.17	181.51	26.680		
18,000.00	10,350.00	19,550.37	12,041.31	131.69	140.17	109.95	-7,619.95	-3,783.04	4,843.16	4,659.54	183.62	26.376		
18,100.00	10,350.00	19,650.37	12,042.39	133.27	141.75	109.96	-7,719.94	-3,782.17	4,843.65	4,657.92	185.73	26.078		
18,200.00	10,350.00	19,750.36	12,043.47	134.85	143.33	109.97	-7,819.92	-3,781.30	4,844.14	4,656.29	187.85	25.787		
18,300.00	10,350.00	19,850.36	12,044.55	136.44	144.91	109.98	-7,919.90	-3,780.43	4,844.63	4,654.66	189.97	25.502		
18,400.00	10,350.00	19,950.35	12,045.63	138.03	146.49	109.99	-8,019.89	-3,779.55	4,845.12	4,653.03	192.09	25.223		
18,500.00	10,350.00	20,050.34	12,046.71	139.62	148.08	110.01	-8,119.87	-3,778.68	4,845.61	4,651.40	194.21	24.950		
18,600.00	10,350.00	20,150.34	12,047.80	141.21	149.66	110.02	-8,219.86	-3,777.81	4,846.10	4,649.77	196.34	24.682		
18,700.00	10,350.00	20,250.33	12,048.88	142.80	151.25	110.03	-8,319.84	-3,776.94	4,846.60	4,648.13	198.46	24.421		
18,800.00	10,350.00	20,350.33	12,049.96	144.39	152.84	110.04	-8,419.83	-3,776.07	4,847.09	4,646.50	200.59	24.164		
18,900.00	10,350.00	20,450.32	12,051.04	145.99	154.43	110.05	-8,519.81	-3,775.19	4,847.58	4,644.86	202.72	23.912		
19,000.00	10,350.00	20,550.31	12,052.12	147.58	156.02	110.06	-8,619.80	-3,774.32	4,848.07	4,643.22	204.85	23.666		
19,100.00	10,350.00	20,650.31	12,053.20	149.18	157.61	110.07	-8,719.78	-3,773.45	4,848.56	4,641.58	206.99	23.425		
19,200.00	10,350.00	20,750.30	12,054.28	150.78	159.20	110.09	-8,819.76	-3,772.58	4,849.05	4,639.94	209.12	23.188		
19,300.00	10,350.00	20,850.30	12,055.36	152.38	160.80	110.10	-8,919.75	-3,771.70	4,849.55	4,638.30	211.25	22.956		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Judge Baylor Fed Com - Judge Baylor Fed Com 601H - OH - Plan #5												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	10,350.00	20,950.29	12,056.44	153.98	162.39	110.11	-9,019.73	-3,770.83	4,850.04	4,636.66	213.38	22.729	
19,500.00	10,350.00	21,050.28	12,057.52	155.58	163.99	110.12	-9,119.72	-3,769.96	4,850.53	4,635.01	215.52	22.506	
19,600.00	10,350.00	21,150.28	12,058.60	157.18	165.59	110.13	-9,219.70	-3,769.09	4,851.03	4,633.37	217.66	22.288	
19,700.00	10,350.00	21,250.27	12,059.68	158.79	167.19	110.14	-9,319.69	-3,768.21	4,851.52	4,631.72	219.79	22.073	
19,800.00	10,350.00	21,350.27	12,060.76	160.39	168.79	110.15	-9,419.67	-3,767.34	4,852.01	4,630.08	221.93	21.862	
19,900.00	10,350.00	21,450.26	12,061.84	162.00	170.39	110.17	-9,519.66	-3,766.47	4,852.50	4,628.43	224.07	21.656	
20,000.00	10,350.00	21,550.25	12,062.93	163.61	171.99	110.18	-9,619.64	-3,765.60	4,853.00	4,626.78	226.21	21.453	
20,100.00	10,350.00	21,650.25	12,064.01	165.21	173.59	110.19	-9,719.62	-3,764.73	4,853.49	4,625.14	228.36	21.254	
20,200.00	10,350.00	21,750.24	12,065.09	166.82	175.19	110.20	-9,819.61	-3,763.85	4,853.99	4,623.49	230.50	21.059	
20,300.00	10,350.00	21,850.24	12,066.17	168.43	176.80	110.21	-9,919.59	-3,762.98	4,854.48	4,621.84	232.64	20.867	
20,400.00	10,350.00	21,950.23	12,067.25	170.04	178.40	110.22	-10,019.58	-3,762.11	4,854.98	4,620.19	234.79	20.678	
20,500.00	10,350.00	22,050.23	12,068.33	171.65	180.01	110.23	-10,119.56	-3,761.24	4,855.47	4,618.54	236.93	20.493	
20,529.73	10,350.00	22,079.96	12,068.65	172.13	180.49	110.24	-10,149.29	-3,760.98	4,855.62	4,618.05	237.57	20.439 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	39.00	39.00	0.00	0.05	-82.28	500.35	-3,693.23	3,726.97					
100.00	100.00	139.00	139.00	0.13	0.27	-82.28	500.35	-3,693.23	3,726.97	3,726.67	0.29	N/A		
200.00	200.00	239.00	239.00	0.48	0.62	-82.28	500.35	-3,693.23	3,726.97	3,726.18	0.79	4,720.908		
300.00	300.00	339.00	339.00	0.84	0.98	-82.28	500.35	-3,693.23	3,726.97	3,725.67	1.29	2,880.229		
400.00	400.00	439.00	439.00	1.20	1.34	-82.28	500.35	-3,693.23	3,726.97	3,725.17	1.80	2,070.683		
500.00	500.00	539.00	539.00	1.56	1.70	-82.28	500.35	-3,693.23	3,726.97	3,724.66	2.31	1,616.042		
600.00	600.00	639.00	639.00	1.92	2.06	-82.28	500.35	-3,693.23	3,726.97	3,724.16	2.81	1,325.000		
700.00	700.00	739.00	739.00	2.28	2.42	-82.28	500.35	-3,693.23	3,726.97	3,723.65	3.32	1,122.752		
800.00	800.00	839.00	839.00	2.63	2.77	-82.28	500.35	-3,693.23	3,726.97	3,723.14	3.83	974.051		
900.00	900.00	939.00	939.00	2.99	3.13	-82.28	500.35	-3,693.23	3,726.97	3,722.64	4.33	860.124		
1,000.00	1,000.00	1,039.00	1,039.00	3.35	3.49	-82.28	500.35	-3,693.23	3,726.97	3,722.13	4.84	770.051		
1,100.00	1,100.00	1,139.00	1,139.00	3.71	3.85	-82.28	500.35	-3,693.23	3,726.97	3,721.62	5.35	697.052		
1,200.00	1,200.00	1,239.00	1,239.00	4.07	4.21	-82.28	500.35	-3,693.23	3,726.97	3,721.11	5.85	636.693		
1,300.00	1,300.00	1,339.00	1,339.00	4.43	4.57	-82.28	500.35	-3,693.23	3,726.97	3,720.61	6.36	585.953		
1,400.00	1,400.00	1,439.00	1,439.00	4.79	4.93	-82.28	500.35	-3,693.23	3,726.97	3,720.10	6.87	542.703		
1,500.00	1,500.00	1,539.00	1,539.00	5.14	5.28	-82.28	500.35	-3,693.23	3,726.97	3,719.59	7.37	505.398		
1,600.00	1,600.00	1,639.00	1,639.00	5.50	5.64	-82.28	500.35	-3,693.23	3,726.97	3,719.09	7.88	472.891		
1,700.00	1,700.00	1,739.00	1,739.00	5.86	6.00	-82.28	500.35	-3,693.23	3,726.97	3,718.58	8.39	444.313		
1,800.00	1,800.00	1,839.00	1,839.00	6.22	6.36	-82.28	500.35	-3,693.23	3,726.97	3,718.07	8.90	418.992		
1,900.00	1,900.00	1,939.00	1,939.00	6.58	6.72	-82.28	500.35	-3,693.23	3,726.97	3,717.57	9.40	396.401		
2,000.00	2,000.00	2,039.00	2,039.00	6.94	7.08	-82.28	500.35	-3,693.23	3,726.97	3,717.06	9.91	376.122		
2,100.00	2,100.00	2,139.00	2,139.00	7.29	7.43	-82.28	500.35	-3,693.23	3,726.97	3,716.55	10.42	357.816		
2,200.00	2,200.00	2,239.00	2,239.00	7.65	7.79	-82.28	500.35	-3,693.23	3,726.97	3,716.05	10.92	341.210 CC, ES		
2,300.00	2,299.99	2,338.99	2,338.99	8.01	8.15	-153.06	500.35	-3,693.23	3,728.14	3,716.71	11.43	326.303		
2,400.00	2,399.91	2,438.91	2,438.91	8.35	8.51	-153.06	500.35	-3,693.23	3,731.64	3,719.71	11.92	312.949		
2,500.00	2,499.69	2,538.69	2,538.69	8.70	8.87	-153.07	500.35	-3,693.23	3,737.47	3,725.05	12.42	300.852		
2,600.00	2,599.27	2,638.27	2,638.27	9.06	9.22	-153.08	500.35	-3,693.23	3,745.63	3,732.71	12.92	289.871		
2,700.00	2,698.57	2,784.68	2,784.67	9.42	9.73	-153.14	499.51	-3,692.80	3,755.89	3,742.36	13.53	277.597		
2,800.00	2,797.54	2,984.70	2,984.44	9.78	10.39	-153.39	490.94	-3,688.44	3,765.91	3,751.67	14.24	264.492		
2,815.66	2,813.00	3,000.15	2,999.86	9.84	10.44	-153.41	489.98	-3,687.95	3,767.52	3,753.21	14.31	263.218		
2,900.00	2,896.24	3,083.32	3,082.82	10.15	10.72	-153.57	484.81	-3,685.32	3,776.38	3,761.66	14.72	256.609		
3,000.00	2,994.95	3,181.94	3,181.20	10.53	11.05	-153.77	478.68	-3,682.20	3,786.92	3,771.72	15.20	249.178		
3,100.00	3,093.65	3,280.55	3,279.57	10.91	11.38	-153.96	472.55	-3,679.09	3,797.50	3,781.82	15.68	242.157		
3,200.00	3,192.36	3,379.16	3,377.94	11.29	11.71	-154.15	466.43	-3,675.97	3,808.13	3,791.96	16.17	235.515		
3,300.00	3,291.06	3,477.78	3,476.32	11.68	12.05	-154.34	460.30	-3,672.85	3,818.80	3,802.14	16.66	229.229		
3,400.00	3,389.76	3,576.39	3,574.69	12.07	12.38	-154.53	454.17	-3,669.73	3,829.51	3,812.36	17.15	223.272		
3,500.00	3,488.47	3,675.01	3,673.07	12.47	12.72	-154.72	448.05	-3,666.62	3,840.27	3,822.62	17.65	217.623		
3,600.00	3,587.17	3,773.62	3,771.44	12.87	13.07	-154.91	441.92	-3,663.50	3,851.06	3,832.92	18.14	212.260		
3,700.00	3,685.88	3,872.24	3,869.82	13.27	13.41	-155.09	435.79	-3,660.38	3,861.90	3,843.26	18.64	207.166		
3,800.00	3,784.58	3,970.85	3,968.19	13.67	13.75	-155.28	429.66	-3,657.27	3,872.78	3,853.64	19.14	202.320		
3,900.00	3,883.28	4,069.46	4,066.57	14.08	14.10	-155.46	423.54	-3,654.15	3,883.69	3,864.05	19.64	197.709		
4,000.00	3,981.99	4,168.08	4,164.94	14.49	14.45	-155.64	417.41	-3,651.03	3,894.65	3,874.51	20.15	193.315		
4,100.00	4,080.69	4,266.69	4,263.31	14.90	14.80	-155.83	411.28	-3,647.91	3,905.65	3,885.00	20.65	189.125		
4,200.00	4,179.39	4,365.31	4,361.69	15.31	15.15	-156.01	405.15	-3,644.80	3,916.69	3,895.53	21.16	185.127		
4,300.00	4,278.10	4,463.92	4,460.06	15.72	15.50	-156.19	399.03	-3,641.68	3,927.76	3,906.10	21.66	181.308		
4,400.00	4,376.80	4,562.54	4,558.44	16.13	15.85	-156.37	392.90	-3,638.56	3,938.88	3,916.71	22.17	177.656		
4,500.00	4,475.51	4,661.15	4,656.81	16.55	16.20	-156.54	386.77	-3,635.44	3,950.03	3,927.35	22.68	174.163		
4,600.00	4,574.21	4,759.77	4,755.19	16.97	16.55	-156.72	380.65	-3,632.33	3,961.22	3,938.03	23.19	170.819		
4,700.00	4,672.91	4,858.38	4,853.56	17.38	16.91	-156.90	374.52	-3,629.21	3,972.45	3,948.75	23.70	167.614		
4,800.00	4,771.62	4,956.99	4,951.93	17.80	17.26	-157.07	368.39	-3,626.09	3,983.72	3,959.51	24.21	164.540		
4,900.00	4,870.32	5,055.61	5,050.31	18.22	17.62	-157.25	362.26	-3,622.97	3,995.02	3,970.30	24.72	161.591		
5,000.00	4,969.03	5,154.22	5,148.68	18.64	17.97	-157.42	356.14	-3,619.86	4,006.36	3,981.13	25.24	158.759		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	5,252.84	5,247.06	19.07	18.33	-157.59	350.01	-3,616.74	4,017.74	3,991.99	25.75	156.037		
5,200.00	5,166.43	5,351.45	5,345.43	19.49	18.69	-157.76	343.88	-3,613.62	4,029.15	4,002.89	26.26	153.419		
5,300.00	5,265.14	5,450.07	5,443.81	19.91	19.05	-157.93	337.75	-3,610.50	4,040.60	4,013.82	26.78	150.901		
5,400.00	5,363.84	5,548.68	5,542.18	20.33	19.41	-158.10	331.63	-3,607.39	4,052.09	4,024.79	27.29	148.476		
5,500.00	5,462.54	5,647.29	5,640.56	20.76	19.76	-158.27	325.50	-3,604.27	4,063.60	4,035.80	27.81	146.139		
5,600.00	5,561.25	5,745.91	5,738.93	21.18	20.12	-158.44	319.37	-3,601.15	4,075.16	4,046.84	28.32	143.887		
5,700.00	5,659.95	5,844.52	5,837.30	21.61	20.48	-158.61	313.24	-3,598.03	4,086.75	4,057.91	28.84	141.714		
5,800.00	5,758.66	5,943.14	5,935.68	22.04	20.84	-158.77	307.12	-3,594.92	4,098.37	4,069.02	29.35	139.617		
5,900.00	5,857.36	6,041.75	6,034.05	22.46	21.20	-158.94	300.99	-3,591.80	4,110.03	4,080.16	29.87	137.593		
6,000.00	5,956.06	6,140.37	6,132.43	22.89	21.57	-159.10	294.86	-3,588.68	4,121.72	4,091.33	30.39	135.636		
6,100.00	6,054.77	6,238.98	6,230.80	23.32	21.93	-159.26	288.74	-3,585.56	4,133.45	4,102.54	30.91	133.745		
6,200.00	6,153.47	6,337.60	6,329.18	23.75	22.29	-159.43	282.61	-3,582.45	4,145.21	4,113.78	31.42	131.916		
6,300.00	6,252.18	6,436.21	6,427.55	24.18	22.65	-159.59	276.48	-3,579.33	4,157.00	4,125.06	31.94	130.146		
6,400.00	6,350.88	6,534.82	6,525.93	24.60	23.01	-159.75	270.35	-3,576.21	4,168.82	4,136.36	32.46	128.433		
6,500.00	6,449.58	6,633.44	6,624.30	25.03	23.38	-159.91	264.23	-3,573.09	4,180.68	4,147.70	32.98	126.773		
6,600.00	6,548.29	6,732.05	6,722.67	25.46	23.74	-160.06	258.10	-3,569.98	4,192.57	4,159.07	33.50	125.165		
6,700.00	6,646.99	6,830.67	6,821.05	25.89	24.10	-160.22	251.97	-3,566.86	4,204.49	4,170.47	34.02	123.606		
6,758.77	6,705.00	6,888.62	6,878.86	26.15	24.32	-160.31	248.37	-3,565.03	4,211.51	4,177.19	34.32	122.712		
6,800.00	6,745.73	6,929.31	6,919.46	26.32	24.47	-160.40	245.84	-3,563.74	4,216.23	4,181.70	34.53	122.089		
6,900.00	6,844.79	7,028.26	7,018.16	26.74	24.83	-160.60	239.69	-3,560.61	4,225.97	4,190.92	35.05	120.565		
7,000.00	6,944.17	7,127.50	7,117.16	27.13	25.20	-160.77	233.53	-3,557.48	4,233.28	4,197.72	35.57	119.023		
7,100.00	7,043.80	7,226.97	7,216.39	27.51	25.56	-160.91	227.35	-3,554.33	4,238.15	4,202.07	36.08	117.465		
7,200.00	7,143.63	7,326.61	7,315.79	27.88	25.93	-161.03	221.16	-3,551.18	4,240.55	4,203.96	36.59	115.894		
7,300.00	7,243.57	7,426.34	7,415.28	28.22	26.30	-161.13	214.96	-3,548.03	4,240.50	4,203.40	37.10	114.309		
7,374.43	7,318.00	7,500.60	7,489.35	28.46	26.58	-90.41	210.35	-3,545.68	4,238.86	4,201.39	37.47	113.124		
7,400.00	7,343.57	7,504.97	7,493.71	28.55	26.59	-90.42	210.07	-3,545.54	4,238.11	4,200.57	37.54	112.897		
7,500.00	7,443.57	7,600.00	7,588.58	28.87	26.94	-90.48	205.22	-3,543.07	4,235.55	4,197.53	38.02	111.391		
7,600.00	7,543.57	7,652.69	7,641.24	29.19	27.13	-90.51	203.44	-3,542.17	4,233.74	4,195.35	38.39	110.291		
7,700.00	7,643.57	7,719.62	7,708.15	29.52	27.37	-90.53	202.10	-3,541.49	4,232.74	4,193.96	38.79	109.131		
7,800.00	7,743.57	7,794.04	7,782.57	29.84	27.62	-90.53	201.79	-3,541.33	4,232.51	4,193.31	39.20	107.975		
7,900.00	7,843.57	7,894.04	7,882.57	30.17	27.96	-90.53	201.79	-3,541.33	4,232.51	4,192.83	39.68	106.667		
8,000.00	7,943.57	7,994.04	7,982.57	30.49	28.29	-90.53	201.79	-3,541.33	4,232.51	4,192.35	40.16	105.388		
8,100.00	8,043.57	8,094.04	8,082.57	30.82	28.63	-90.53	201.79	-3,541.33	4,232.51	4,191.87	40.64	104.139		
8,200.00	8,143.57	8,194.04	8,182.57	31.15	28.97	-90.53	201.79	-3,541.33	4,232.51	4,191.39	41.13	102.917		
8,300.00	8,243.57	8,294.04	8,282.57	31.48	29.30	-90.53	201.79	-3,541.33	4,232.51	4,190.90	41.61	101.722		
8,400.00	8,343.57	8,394.04	8,382.57	31.80	29.64	-90.53	201.79	-3,541.33	4,232.51	4,190.42	42.09	100.553		
8,500.00	8,443.57	8,494.04	8,482.57	32.13	29.98	-90.53	201.79	-3,541.33	4,232.51	4,189.93	42.58	99.409		
8,600.00	8,543.57	8,594.04	8,582.57	32.46	30.32	-90.53	201.79	-3,541.33	4,232.51	4,189.45	43.06	98.290		
8,700.00	8,643.57	8,694.04	8,682.57	32.80	30.66	-90.53	201.79	-3,541.33	4,232.51	4,188.96	43.55	97.195		
8,800.00	8,743.57	8,794.04	8,782.57	33.13	31.00	-90.53	201.79	-3,541.33	4,232.51	4,188.48	44.03	96.123		
8,900.00	8,843.57	8,894.04	8,882.57	33.46	31.34	-90.53	201.79	-3,541.33	4,232.51	4,187.99	44.52	95.073		
9,000.00	8,943.57	8,994.04	8,982.57	33.79	31.68	-90.53	201.79	-3,541.33	4,232.51	4,187.51	45.01	94.045		
9,100.00	9,043.57	9,094.04	9,082.57	34.12	32.03	-90.53	201.79	-3,541.33	4,232.51	4,187.02	45.49	93.038		
9,200.00	9,143.57	9,194.04	9,182.57	34.46	32.37	-90.53	201.79	-3,541.33	4,232.51	4,186.53	45.98	92.051		
9,300.00	9,243.57	9,294.04	9,282.57	34.79	32.71	-90.53	201.79	-3,541.33	4,232.51	4,186.04	46.47	91.084		
9,400.00	9,343.57	9,394.04	9,382.57	35.13	33.05	-90.53	201.79	-3,541.33	4,232.51	4,185.55	46.96	90.137		
9,500.00	9,443.57	9,494.04	9,482.57	35.46	33.40	-90.53	201.79	-3,541.33	4,232.51	4,185.07	47.45	89.208		
9,600.00	9,543.57	9,594.04	9,582.57	35.80	33.74	-90.53	201.79	-3,541.33	4,232.51	4,184.58	47.93	88.298		
9,700.00	9,643.57	9,694.04	9,682.57	36.13	34.08	-90.53	201.79	-3,541.33	4,232.51	4,184.09	48.42	87.406		
9,800.00	9,743.57	9,794.04	9,782.57	36.47	34.43	-90.53	201.79	-3,541.33	4,232.51	4,183.60	48.91	86.530		
9,833.47	9,777.04	9,827.51	9,816.04	36.58	34.54	-90.53	201.79	-3,541.33	4,232.51	4,183.43	49.08	86.241		
9,850.00	9,793.56	9,844.04	9,832.56	36.64	34.60	90.05	201.79	-3,541.33	4,232.51	4,183.35	49.16	86.102		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,843.42	9,893.89	9,882.42	36.79	34.77	90.09	201.79	-3,541.33	4,232.52	4,183.13	49.39	85.697		
9,950.00	9,892.77	9,943.24	9,931.77	36.93	34.94	90.20	201.79	-3,541.33	4,232.54	4,182.92	49.62	85.306		
10,000.00	9,941.23	9,991.71	9,980.23	37.06	35.11	90.35	201.79	-3,541.33	4,232.60	4,182.76	49.83	84.934		
10,050.00	9,988.45	10,038.92	10,027.45	37.19	35.27	90.55	201.79	-3,541.33	4,232.73	4,182.69	50.04	84.580		
10,100.00	10,034.06	10,084.53	10,073.06	37.30	35.43	90.77	201.79	-3,541.33	4,232.99	4,182.75	50.25	84.247		
10,150.00	10,077.71	10,128.19	10,116.71	37.41	35.58	91.02	201.79	-3,541.33	4,233.43	4,183.00	50.44	83.936		
10,200.00	10,119.07	10,169.55	10,158.07	37.50	35.72	91.26	201.79	-3,541.33	4,234.11	4,183.49	50.62	83.648		
10,250.00	10,157.84	10,208.31	10,196.84	37.58	35.85	91.50	201.79	-3,541.33	4,235.10	4,184.31	50.79	83.385		
10,300.00	10,193.70	10,244.17	10,232.70	37.65	35.98	91.70	201.79	-3,541.33	4,236.46	4,185.51	50.95	83.148		
10,350.00	10,226.39	10,276.86	10,265.39	37.71	36.09	91.85	201.79	-3,541.33	4,238.26	4,187.15	51.10	82.937		
10,400.00	10,255.66	10,306.14	10,294.66	37.76	36.19	91.94	201.79	-3,541.33	4,240.56	4,189.32	51.24	82.752		
10,450.00	10,281.29	10,331.77	10,320.29	37.81	36.28	91.95	201.79	-3,541.33	4,243.42	4,192.04	51.38	82.596		
10,500.00	10,303.08	10,353.56	10,342.08	37.85	36.35	91.87	201.79	-3,541.33	4,246.88	4,195.38	51.50	82.467		
10,550.00	10,320.87	10,371.35	10,359.87	37.90	36.42	91.69	201.79	-3,541.33	4,250.97	4,199.36	51.61	82.368		
10,600.00	10,334.52	10,385.00	10,373.52	37.96	36.46	91.39	201.79	-3,541.33	4,255.72	4,204.01	51.71	82.297		
10,650.00	10,343.93	10,394.40	10,382.93	38.03	36.50	90.97	201.79	-3,541.33	4,261.12	4,209.32	51.80	82.257		
10,700.00	10,349.02	10,399.49	10,388.02	38.12	36.51	90.43	201.79	-3,541.33	4,267.16	4,215.27	51.88	82.246		
10,733.47	10,350.00	10,400.47	10,389.00	38.19	36.52	90.00	201.79	-3,541.33	4,271.54	4,219.61	51.93	82.256		
10,800.00	10,350.00	10,400.47	10,389.00	38.36	36.52	90.00	201.79	-3,541.33	4,281.02	4,228.99	52.03	82.286		
10,900.00	10,350.00	10,400.47	10,389.00	38.68	36.52	90.00	201.79	-3,541.33	4,297.17	4,244.97	52.20	82.317		
11,000.00	10,350.00	10,400.47	10,389.00	39.08	36.52	90.00	201.79	-3,541.33	4,315.58	4,263.16	52.41	82.338		
11,100.00	10,350.00	10,400.47	10,389.00	39.56	36.52	90.00	201.79	-3,541.33	4,336.21	4,283.56	52.65	82.351		
11,200.00	10,350.00	10,400.47	10,389.00	40.10	36.52	90.00	201.79	-3,541.33	4,359.04	4,306.12	52.93	82.359		
11,300.00	10,350.00	10,400.47	10,389.00	40.70	36.52	90.00	201.79	-3,541.33	4,384.04	4,330.81	53.23	82.364		
11,400.00	10,350.00	10,400.47	10,389.00	41.37	36.52	90.00	201.79	-3,541.33	4,411.16	4,357.61	53.55	82.369		
11,500.00	10,350.00	10,400.47	10,389.00	42.08	36.52	90.00	201.79	-3,541.33	4,440.37	4,386.46	53.90	82.377		
11,600.00	10,350.00	10,400.47	10,389.00	42.85	36.52	90.00	201.79	-3,541.33	4,471.62	4,417.35	54.27	82.392		
11,700.00	10,350.00	10,400.47	10,389.00	43.67	36.52	90.00	201.79	-3,541.33	4,504.88	4,450.22	54.66	82.415		
11,800.00	10,350.00	10,400.47	10,389.00	44.53	36.52	90.00	201.79	-3,541.33	4,540.09	4,485.03	55.07	82.449		
11,900.00	10,350.00	10,400.47	10,389.00	45.44	36.52	90.00	201.79	-3,541.33	4,577.22	4,521.74	55.48	82.497		
12,000.00	10,350.00	10,400.47	10,389.00	46.39	36.52	90.00	201.79	-3,541.33	4,616.22	4,560.31	55.91	82.560		
12,100.00	10,350.00	13,938.42	12,270.55	47.37	56.10	113.95	-1,714.96	-3,524.60	4,634.21	4,564.84	69.38	66.797		
12,200.00	10,350.00	14,038.42	12,271.63	48.39	57.19	113.97	-1,814.95	-3,523.73	4,634.77	4,564.00	70.77	65.494		
12,300.00	10,350.00	14,138.41	12,272.71	49.45	58.30	113.98	-1,914.93	-3,522.86	4,635.33	4,563.13	72.19	64.206		
12,400.00	10,350.00	14,238.40	12,273.79	50.54	59.43	113.99	-2,014.92	-3,521.99	4,635.89	4,562.23	73.66	62.937		
12,500.00	10,350.00	14,338.40	12,274.88	51.66	60.60	114.00	-2,114.90	-3,521.12	4,636.44	4,561.29	75.16	61.689		
12,600.00	10,350.00	14,438.39	12,275.96	52.80	61.78	114.01	-2,214.88	-3,520.24	4,637.00	4,560.31	76.69	60.465		
12,700.00	10,350.00	14,538.39	12,277.04	53.97	62.98	114.02	-2,314.87	-3,519.37	4,637.56	4,559.31	78.25	59.265		
12,800.00	10,350.00	14,638.38	12,278.13	55.17	64.21	114.04	-2,414.85	-3,518.50	4,638.12	4,558.28	79.84	58.092		
12,900.00	10,350.00	14,738.37	12,279.21	56.39	65.45	114.05	-2,514.84	-3,517.63	4,638.68	4,557.22	81.46	56.946		
13,000.00	10,350.00	14,838.37	12,280.29	57.63	66.71	114.06	-2,614.82	-3,516.75	4,639.24	4,556.14	83.10	55.828		
13,100.00	10,350.00	14,938.36	12,281.37	58.89	67.99	114.07	-2,714.81	-3,515.88	4,639.80	4,555.03	84.76	54.737		
13,200.00	10,350.00	15,038.36	12,282.46	60.17	69.28	114.08	-2,814.79	-3,515.01	4,640.36	4,553.90	86.45	53.675		
13,300.00	10,350.00	15,138.35	12,283.54	61.47	70.59	114.09	-2,914.77	-3,514.14	4,640.91	4,552.75	88.16	52.641		
13,400.00	10,350.00	15,238.34	12,284.62	62.78	71.91	114.11	-3,014.76	-3,513.26	4,641.47	4,551.58	89.89	51.635		
13,500.00	10,350.00	15,338.34	12,285.71	64.11	73.25	114.12	-3,114.74	-3,512.39	4,642.03	4,550.40	91.64	50.657		
13,600.00	10,350.00	15,438.33	12,286.79	65.45	74.59	114.13	-3,214.73	-3,511.52	4,642.59	4,549.19	93.40	49.707		
13,700.00	10,350.00	15,538.33	12,287.87	66.81	75.95	114.14	-3,314.71	-3,510.65	4,643.16	4,547.98	95.18	48.783		
13,800.00	10,350.00	15,638.32	12,288.95	68.18	77.33	114.15	-3,414.70	-3,509.77	4,643.72	4,546.74	96.97	47.886		
13,900.00	10,350.00	15,738.31	12,290.04	69.56	78.71	114.16	-3,514.68	-3,508.90	4,644.28	4,545.49	98.79	47.014		
14,000.00	10,350.00	15,838.31	12,291.12	70.96	80.10	114.17	-3,614.67	-3,508.03	4,644.84	4,544.23	100.61	46.167		
14,100.00	10,350.00	15,938.30	12,292.20	72.36	81.50	114.19	-3,714.65	-3,507.16	4,645.40	4,542.95	102.45	45.344		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	10,350.00	16,038.30	12,293.29	73.78	82.91	114.20	-3,814.63	-3,506.28	4,645.96	4,541.66	104.30	44.545		
14,300.00	10,350.00	16,138.29	12,294.37	75.20	84.33	114.21	-3,914.62	-3,505.41	4,646.52	4,540.36	106.16	43.769		
14,400.00	10,350.00	16,238.28	12,295.45	76.63	85.76	114.22	-4,014.60	-3,504.54	4,647.08	4,539.05	108.03	43.016		
14,500.00	10,350.00	16,338.28	12,296.53	78.08	87.20	114.23	-4,114.59	-3,503.67	4,647.64	4,537.73	109.92	42.283		
14,600.00	10,350.00	16,438.27	12,297.62	79.53	88.64	114.24	-4,214.57	-3,502.79	4,648.21	4,536.40	111.81	41.572		
14,700.00	10,350.00	16,538.27	12,298.70	80.99	90.09	114.26	-4,314.56	-3,501.92	4,648.77	4,535.06	113.71	40.881		
14,800.00	10,350.00	16,638.26	12,299.78	82.45	91.55	114.27	-4,414.54	-3,501.05	4,649.33	4,533.71	115.63	40.210		
14,900.00	10,350.00	16,738.26	12,300.87	83.92	93.02	114.28	-4,514.52	-3,500.18	4,649.89	4,532.35	117.55	39.558		
15,000.00	10,350.00	16,838.25	12,301.95	85.40	94.49	114.29	-4,614.51	-3,499.31	4,650.46	4,530.98	119.47	38.925		
15,100.00	10,350.00	16,938.24	12,303.03	86.89	95.96	114.30	-4,714.49	-3,498.43	4,651.02	4,529.61	121.41	38.309		
15,200.00	10,350.00	17,038.24	12,304.11	88.38	97.44	114.31	-4,814.48	-3,497.56	4,651.58	4,528.23	123.35	37.711		
15,300.00	10,350.00	17,138.23	12,305.20	89.87	98.93	114.32	-4,914.46	-3,496.69	4,652.15	4,526.85	125.30	37.129		
15,400.00	10,350.00	17,238.23	12,306.28	91.38	100.42	114.34	-5,014.45	-3,495.82	4,652.71	4,525.46	127.25	36.563		
15,500.00	10,350.00	17,338.22	12,307.36	92.88	101.92	114.35	-5,114.43	-3,494.94	4,653.27	4,524.06	129.21	36.012		
15,600.00	10,350.00	17,438.21	12,308.45	94.39	103.42	114.36	-5,214.42	-3,494.07	4,653.84	4,522.65	131.18	35.476		
15,700.00	10,350.00	17,538.21	12,309.53	95.91	104.93	114.37	-5,314.40	-3,493.20	4,654.40	4,521.24	133.16	34.954		
15,800.00	10,350.00	17,638.20	12,310.61	97.43	106.44	114.38	-5,414.38	-3,492.33	4,654.97	4,519.83	135.14	34.446		
15,900.00	10,350.00	17,738.20	12,311.69	98.96	107.95	114.39	-5,514.37	-3,491.45	4,655.53	4,518.41	137.12	33.951		
16,000.00	10,350.00	17,838.19	12,312.78	100.49	109.47	114.40	-5,614.35	-3,490.58	4,656.09	4,516.98	139.12	33.469		
16,100.00	10,350.00	17,938.18	12,313.86	102.02	111.00	114.42	-5,714.34	-3,489.71	4,656.66	4,515.55	141.11	33.000		
16,200.00	10,350.00	18,038.18	12,314.94	103.55	112.52	114.43	-5,814.32	-3,488.84	4,657.22	4,514.11	143.11	32.543		
16,300.00	10,350.00	18,138.17	12,316.03	105.09	114.05	114.44	-5,914.31	-3,487.96	4,657.79	4,512.68	145.11	32.098		
16,400.00	10,350.00	18,238.17	12,317.11	106.64	115.58	114.45	-6,014.29	-3,487.09	4,658.35	4,511.24	147.12	31.664		
16,500.00	10,350.00	18,338.16	12,318.19	108.18	117.12	114.46	-6,114.27	-3,486.22	4,658.92	4,509.79	149.13	31.241		
16,600.00	10,350.00	18,438.15	12,319.27	109.73	118.66	114.47	-6,214.26	-3,485.35	4,659.49	4,508.34	151.14	30.828		
16,700.00	10,350.00	18,538.15	12,320.36	111.29	120.20	114.49	-6,314.24	-3,484.47	4,660.05	4,506.89	153.16	30.426		
16,800.00	10,350.00	18,638.14	12,321.44	112.84	121.75	114.50	-6,414.23	-3,483.60	4,660.62	4,505.44	155.18	30.033		
16,900.00	10,350.00	18,738.14	12,322.52	114.40	123.30	114.51	-6,514.21	-3,482.73	4,661.18	4,503.98	157.21	29.650		
17,000.00	10,350.00	18,838.13	12,323.61	115.96	124.85	114.52	-6,614.20	-3,481.86	4,661.75	4,502.52	159.23	29.276		
17,100.00	10,350.00	18,938.12	12,324.69	117.52	126.40	114.53	-6,714.18	-3,480.98	4,662.32	4,501.05	161.26	28.911		
17,200.00	10,350.00	19,038.12	12,325.77	119.09	127.95	114.54	-6,814.17	-3,480.11	4,662.88	4,499.59	163.30	28.554		
17,300.00	10,350.00	19,138.11	12,326.86	120.66	129.51	114.55	-6,914.15	-3,479.24	4,663.45	4,498.12	165.33	28.206		
17,400.00	10,350.00	19,238.11	12,327.94	122.23	131.07	114.57	-7,014.13	-3,478.37	4,664.02	4,496.65	167.37	27.866		
17,500.00	10,350.00	19,338.10	12,329.02	123.80	132.64	114.58	-7,114.12	-3,477.49	4,664.59	4,495.17	169.42	27.533		
17,600.00	10,350.00	19,438.09	12,330.10	125.37	134.20	114.59	-7,214.10	-3,476.62	4,665.15	4,493.69	171.46	27.209		
17,700.00	10,350.00	19,538.09	12,331.19	126.95	135.77	114.60	-7,314.09	-3,475.75	4,665.72	4,492.22	173.50	26.891		
17,800.00	10,350.00	19,638.08	12,332.27	128.52	137.34	114.61	-7,414.07	-3,474.88	4,666.29	4,490.74	175.55	26.581		
17,900.00	10,350.00	19,738.08	12,333.35	130.10	138.91	114.62	-7,514.06	-3,474.01	4,666.86	4,489.26	177.60	26.277		
18,000.00	10,350.00	19,838.07	12,334.44	131.69	140.48	114.63	-7,614.04	-3,473.13	4,667.43	4,487.77	179.65	25.980		
18,100.00	10,350.00	19,938.06	12,335.52	133.27	142.05	114.65	-7,714.03	-3,472.26	4,667.99	4,486.29	181.71	25.690		
18,200.00	10,350.00	20,038.06	12,336.60	134.85	143.63	114.66	-7,814.01	-3,471.39	4,668.56	4,484.80	183.76	25.406		
18,300.00	10,350.00	20,138.05	12,337.68	136.44	145.21	114.67	-7,913.99	-3,470.52	4,669.13	4,483.31	185.82	25.127		
18,400.00	10,350.00	20,238.05	12,338.77	138.03	146.79	114.68	-8,013.98	-3,469.64	4,669.70	4,481.82	187.88	24.855		
18,500.00	10,350.00	20,338.04	12,339.85	139.62	148.37	114.69	-8,113.96	-3,468.77	4,670.27	4,480.33	189.94	24.588		
18,600.00	10,350.00	20,438.04	12,340.93	141.21	149.95	114.70	-8,213.95	-3,467.90	4,670.84	4,478.84	192.00	24.327		
18,700.00	10,350.00	20,538.03	12,342.02	142.80	151.53	114.71	-8,313.93	-3,467.03	4,671.41	4,477.34	194.07	24.071		
18,800.00	10,350.00	20,638.02	12,343.10	144.39	153.12	114.73	-8,413.92	-3,466.15	4,671.98	4,475.85	196.13	23.820		
18,900.00	10,350.00	20,738.02	12,344.18	145.99	154.70	114.74	-8,513.90	-3,465.28	4,672.55	4,474.35	198.20	23.575		
19,000.00	10,350.00	20,838.01	12,345.26	147.58	156.29	114.75	-8,613.88	-3,464.41	4,673.12	4,472.85	200.27	23.335		
19,100.00	10,350.00	20,938.01	12,346.35	149.18	157.88	114.76	-8,713.87	-3,463.54	4,673.69	4,471.36	202.33	23.099		
19,200.00	10,350.00	21,038.00	12,347.43	150.78	159.47	114.77	-8,813.85	-3,462.66	4,674.26	4,469.86	204.40	22.868		
19,300.00	10,350.00	21,137.99	12,348.51	152.38	161.06	114.78	-8,913.84	-3,461.79	4,674.83	4,468.36	206.48	22.641		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	10,350.00	21,237.99	12,349.60	153.98	162.66	114.79	-9,013.82	-3,460.92	4,675.40	4,466.85	208.55	22.419	
19,500.00	10,350.00	21,337.98	12,350.68	155.58	164.25	114.80	-9,113.81	-3,460.05	4,675.97	4,465.35	210.62	22.201	
19,600.00	10,350.00	21,437.98	12,351.76	157.18	165.85	114.82	-9,213.79	-3,459.17	4,676.54	4,463.85	212.70	21.987	
19,700.00	10,350.00	21,537.97	12,352.84	158.79	167.44	114.83	-9,313.78	-3,458.30	4,677.12	4,462.34	214.77	21.777	
19,800.00	10,350.00	21,637.96	12,353.93	160.39	169.04	114.84	-9,413.76	-3,457.43	4,677.69	4,460.84	216.85	21.571	
19,900.00	10,350.00	21,737.96	12,355.01	162.00	170.64	114.85	-9,513.74	-3,456.56	4,678.26	4,459.33	218.93	21.369	
20,000.00	10,350.00	21,837.95	12,356.09	163.61	172.24	114.86	-9,613.73	-3,455.68	4,678.83	4,457.83	221.01	21.171	
20,100.00	10,350.00	21,937.95	12,357.18	165.21	173.84	114.87	-9,713.71	-3,454.81	4,679.40	4,456.32	223.08	20.976	
20,200.00	10,350.00	22,037.94	12,358.26	166.82	175.44	114.88	-9,813.70	-3,453.94	4,679.98	4,454.81	225.17	20.785	
20,300.00	10,350.00	22,137.93	12,359.34	168.43	177.04	114.90	-9,913.68	-3,453.07	4,680.55	4,453.30	227.25	20.597	
20,400.00	10,350.00	22,237.93	12,360.42	170.04	178.64	114.91	-10,013.67	-3,452.20	4,681.12	4,451.80	229.33	20.413	
20,500.00	10,350.00	22,337.92	12,361.51	171.65	180.25	114.92	-10,113.65	-3,451.32	4,681.70	4,450.29	231.41	20.231	
20,529.73	10,350.00	22,367.65	12,361.83	172.13	180.72	114.92	-10,143.38	-3,451.06	4,681.87	4,449.84	232.03	20.178 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 604H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 190-MWD, 1393-OWSG (Rev2) MWD, 21860-BLIND													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	0.50	0.50	0.00	0.00	45.35	539.90	546.45	768.18							
100.00	100.00	100.50	100.50	0.13	0.15	45.35	539.90	546.45	768.18	767.98	0.20	3,902.290				
200.00	200.00	201.36	201.36	0.48	0.33	45.35	539.90	546.45	768.17	767.59	0.58	1,316.259				
300.00	300.00	308.43	308.43	0.84	0.70	45.34	539.45	545.96	767.55	766.46	1.09	701.453				
400.00	400.00	412.30	412.29	1.20	1.06	45.32	538.71	544.78	766.25	764.65	1.60	477.837				
500.00	500.00	517.03	516.99	1.56	1.44	45.26	537.94	542.89	764.45	762.33	2.12	360.737				
600.00	600.00	627.77	627.69	1.92	1.83	45.19	536.43	540.08	761.70	759.05	2.65	287.329				
700.00	700.00	729.81	729.65	2.28	2.20	45.14	534.14	536.80	757.83	754.67	3.16	239.689				
800.00	800.00	829.60	829.37	2.63	2.56	45.10	531.86	533.68	754.00	750.34	3.67	205.603				
900.00	900.00	926.64	926.34	2.99	2.91	45.10	529.25	531.10	750.22	746.06	4.17	180.088				
1,000.00	1,000.00	1,029.58	1,029.22	3.35	3.29	45.08	526.95	528.51	746.88	742.20	4.68	159.614				
1,100.00	1,100.00	1,129.37	1,128.92	3.71	3.65	45.01	524.88	524.98	742.91	737.72	5.19	143.259				
1,200.00	1,200.00	1,227.86	1,227.34	4.07	4.01	44.92	523.13	521.72	739.31	733.62	5.69	129.948				
1,300.00	1,300.00	1,328.98	1,328.39	4.43	4.38	44.81	521.44	518.04	735.56	729.36	6.20	118.654				
1,400.00	1,400.00	1,425.63	1,424.96	4.79	4.53	44.69	520.10	514.58	732.05	725.48	6.56	111.543				
1,500.00	1,500.00	1,525.03	1,524.29	5.14	4.57	44.56	518.91	511.03	728.68	721.83	6.85	106.391				
1,600.00	1,600.00	1,624.47	1,623.67	5.50	4.63	44.43	517.81	507.66	725.52	718.36	7.16	101.336				
1,700.00	1,700.00	1,722.57	1,721.71	5.86	4.72	44.31	516.71	504.36	722.37	714.88	7.49	96.437				
1,800.00	1,800.00	1,820.13	1,819.22	6.22	4.83	44.19	515.82	501.45	719.63	711.79	7.84	91.794				
1,900.00	1,900.00	1,919.92	1,918.97	6.58	4.97	44.10	514.80	498.83	717.07	708.87	8.21	87.386				
2,000.00	2,000.00	2,019.76	2,018.78	6.94	5.13	44.09	513.01	496.99	714.50	705.91	8.59	83.223				
2,100.00	2,100.00	2,118.26	2,117.24	7.29	5.30	44.14	510.84	495.74	712.03	703.06	8.98	79.331				
2,200.00	2,200.00	2,210.49	2,209.45	7.65	5.48	44.20	509.14	495.05	710.20	700.83	9.37	75.801				
2,300.00	2,299.99	2,305.39	2,304.35	8.01	5.67	-26.58	508.10	494.93	708.15	698.38	9.77	72.494				
2,400.00	2,399.91	2,402.80	2,401.75	8.35	5.88	-26.70	507.46	495.09	704.28	694.11	10.17	69.233				
2,500.00	2,499.69	2,498.40	2,497.35	8.70	6.09	-26.92	507.05	495.65	698.54	687.96	10.58	66.028				
2,600.00	2,599.27	2,596.00	2,594.95	9.06	6.31	-27.24	506.99	496.65	691.04	680.05	10.99	62.855				
2,700.00	2,698.57	2,709.69	2,708.62	9.42	6.58	-27.72	505.85	497.54	680.44	669.00	11.44	59.464				
2,800.00	2,797.54	2,822.92	2,821.73	9.78	6.88	-28.13	500.79	498.33	664.93	653.03	11.90	55.892				
2,815.66	2,813.00	2,838.66	2,837.45	9.84	6.93	-28.19	499.85	498.51	662.18	650.21	11.97	55.335				
2,900.00	2,896.24	2,916.99	2,915.60	10.15	7.14	-28.33	494.90	499.80	647.30	634.96	12.33	52.481				
3,000.00	2,994.95	3,011.21	3,009.66	10.53	7.40	-28.50	489.78	502.34	630.99	618.21	12.78	49.386				
3,100.00	3,093.65	3,125.28	3,123.49	10.91	7.73	-28.74	482.77	504.34	613.57	600.33	13.25	46.324				
3,200.00	3,192.36	3,249.51	3,247.26	11.29	8.11	-29.09	472.39	503.09	592.74	579.03	13.71	43.230				
3,300.00	3,291.06	3,348.24	3,345.48	11.68	8.43	-29.49	462.93	499.65	569.39	555.22	14.17	40.175				
3,400.00	3,389.76	3,434.11	3,430.99	12.07	8.71	-29.91	455.57	496.96	547.02	532.38	14.64	37.357				
3,500.00	3,488.47	3,524.45	3,521.08	12.47	9.00	-30.40	449.15	495.07	526.45	511.34	15.12	34.826				
3,600.00	3,587.17	3,626.15	3,622.55	12.87	9.33	-31.13	443.01	492.31	506.34	490.75	15.59	32.473				
3,700.00	3,685.88	3,720.05	3,716.25	13.27	9.63	-32.14	438.63	487.89	486.10	470.03	16.07	30.241				
3,800.00	3,784.58	3,805.07	3,801.15	13.67	9.91	-33.21	436.29	484.18	467.72	451.16	16.56	28.244				
3,900.00	3,883.28	3,899.54	3,895.58	14.08	10.21	-34.40	434.78	481.83	451.55	434.50	17.05	26.484				
4,000.00	3,981.99	4,012.23	4,008.15	14.49	10.58	-35.55	430.22	480.45	434.43	416.89	17.54	24.764				
4,100.00	4,080.69	4,117.26	4,112.87	14.90	10.94	-36.45	422.25	478.99	414.44	396.41	18.03	22.986				
4,200.00	4,179.39	4,207.65	4,203.00	15.31	11.25	-37.26	415.49	478.07	394.86	376.32	18.54	21.295				
4,300.00	4,278.10	4,300.30	4,295.51	15.72	11.56	-38.31	410.37	477.25	377.05	357.99	19.05	19.787				
4,400.00	4,376.80	4,402.23	4,397.30	16.13	11.91	-39.84	405.68	475.09	359.53	339.96	19.56	18.378				
4,500.00	4,475.51	4,502.15	4,497.04	16.55	12.25	-41.73	400.91	471.21	341.25	321.17	20.08	16.995				
4,600.00	4,574.21	4,595.18	4,589.91	16.97	12.57	-43.78	397.27	467.41	324.02	303.40	20.62	15.716				
4,700.00	4,672.91	4,690.20	4,684.85	17.38	12.89	-45.93	394.16	464.81	308.43	287.27	21.16	14.577				
4,800.00	4,771.62	4,786.74	4,781.33	17.80	13.22	-48.14	391.20	463.29	293.97	272.27	21.70	13.546				
4,900.00	4,870.32	4,882.86	4,877.41	18.22	13.55	-50.52	388.84	462.20	280.73	258.48	22.25	12.615				
5,000.00	4,969.03	4,980.56	4,975.09	18.64	13.88	-53.18	386.96	461.17	268.57	245.75	22.81	11.773				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 190-MWD, 1393-OWSG (Rev2) MWD, 21860-BLIND													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	5,067.73	5,080.12	5,074.62	19.07	14.21	-56.11	384.92	460.25	256.96	233.58	23.38	10.992		
5,200.00	5,166.43	5,187.37	5,181.77	19.49	14.59	-59.79	381.02	457.90	244.31	220.38	23.93	10.210		
5,300.00	5,265.14	5,290.16	5,284.19	19.91	14.96	-64.27	373.93	452.90	229.02	204.53	24.50	9.349		
5,400.00	5,363.84	5,387.91	5,381.51	20.33	15.31	-69.25	366.48	447.58	214.48	189.37	25.11	8.542		
5,500.00	5,462.54	5,485.33	5,478.50	20.76	15.67	-74.76	358.80	442.63	201.52	175.79	25.73	7.832		
5,600.00	5,561.25	5,583.32	5,576.06	21.18	16.03	-80.89	350.87	437.95	190.45	164.10	26.35	7.229		
5,700.00	5,659.95	5,680.03	5,672.32	21.61	16.39	-87.61	342.75	433.29	181.58	154.62	26.96	6.735		
5,800.00	5,758.66	5,777.09	5,768.98	22.04	16.75	-94.66	335.09	429.19	175.81	148.26	27.54	6.383		
5,900.00	5,857.36	5,875.50	5,866.99	22.46	17.11	-102.11	327.12	425.28	172.69	144.61	28.08	6.149		
5,970.53	5,926.97	5,944.75	5,935.87	22.76	17.37	-107.71	320.73	422.10	171.99	143.55	28.44	6.048 CC		
6,000.00	5,956.06	5,973.59	5,964.53	22.89	17.48	-110.11	317.88	420.67	172.12	143.54	28.57	6.023 ES		
6,100.00	6,054.77	6,070.55	6,060.87	23.32	17.85	-118.16	308.03	415.77	174.76	145.75	29.01	6.023		
6,200.00	6,153.47	6,167.38	6,157.08	23.75	18.22	-125.81	298.21	410.98	180.86	151.45	29.41	6.150		
6,300.00	6,252.18	6,264.59	6,253.63	24.18	18.59	-132.99	288.02	406.08	190.03	160.26	29.78	6.382		
6,400.00	6,350.88	6,361.99	6,350.42	24.60	18.96	-139.33	278.18	401.62	201.73	171.58	30.15	6.692		
6,500.00	6,449.58	6,458.49	6,446.48	25.03	19.32	-144.50	269.81	397.74	215.51	184.99	30.52	7.061		
6,600.00	6,548.29	6,555.63	6,543.34	25.46	19.68	-148.57	263.36	394.09	231.01	200.09	30.92	7.470		
6,700.00	6,646.99	6,654.62	6,642.15	25.89	20.04	-151.80	258.42	390.92	247.24	215.88	31.37	7.882		
6,758.77	6,705.00	6,712.90	6,700.34	26.15	20.25	-153.48	255.60	389.31	256.86	225.22	31.63	8.120		
6,800.00	6,745.73	6,753.79	6,741.17	26.32	20.40	-154.62	253.56	388.28	263.42	231.60	31.82	8.279		
6,900.00	6,844.79	6,852.88	6,840.11	26.74	20.76	-157.00	248.55	385.95	277.85	245.57	32.28	8.608		
7,000.00	6,944.17	6,953.57	6,940.66	27.13	21.12	-158.97	243.48	384.19	289.65	256.89	32.76	8.843		
7,100.00	7,043.80	7,051.46	7,038.43	27.51	21.47	-160.43	239.18	382.48	299.28	266.07	33.21	9.011		
7,200.00	7,143.63	7,150.78	7,137.66	27.88	21.82	-161.53	235.45	380.32	307.02	273.33	33.69	9.114		
7,300.00	7,243.57	7,254.26	7,241.09	28.22	22.19	-162.22	232.86	378.75	311.68	277.49	34.20	9.114		
7,374.43	7,318.00	7,331.34	7,318.16	28.46	22.45	-91.73	231.53	378.43	312.72	278.14	34.57	9.045		
7,400.00	7,343.57	7,357.21	7,344.03	28.55	22.54	-91.81	231.13	378.42	312.73	278.03	34.70	9.013		
7,500.00	7,443.57	7,458.31	7,445.12	28.87	22.89	-92.10	229.57	378.65	312.57	277.38	35.18	8.884		
7,600.00	7,543.57	7,558.61	7,545.41	29.19	23.23	-92.37	228.07	379.14	312.13	276.47	35.66	8.752		
7,700.00	7,643.57	7,659.34	7,646.12	29.52	23.57	-92.66	226.56	379.69	311.65	275.50	36.15	8.622		
7,800.00	7,743.57	7,760.38	7,747.14	29.84	23.91	-92.93	225.14	380.61	310.81	274.18	36.63	8.485		
7,900.00	7,843.57	7,862.03	7,848.78	30.17	24.25	-93.14	224.06	381.92	309.58	272.47	37.11	8.342		
8,000.00	7,943.57	7,962.35	7,949.08	30.49	24.58	-93.30	223.27	383.59	307.96	270.37	37.59	8.193		
8,100.00	8,043.57	8,063.58	8,050.29	30.82	24.91	-93.40	222.83	385.45	306.15	268.09	38.07	8.043		
8,200.00	8,143.57	8,163.75	8,150.45	31.15	25.23	-93.43	222.81	387.53	304.08	265.54	38.54	7.890		
8,300.00	8,243.57	8,264.77	8,251.43	31.48	25.54	-93.33	223.45	389.82	301.78	262.76	39.02	7.735		
8,400.00	8,343.57	8,363.37	8,350.01	31.80	25.85	-93.14	224.60	391.89	299.62	260.14	39.48	7.589		
8,500.00	8,443.57	8,464.48	8,451.08	32.13	26.17	-92.86	226.18	394.00	297.45	257.49	39.96	7.444		
8,600.00	8,543.57	8,565.18	8,551.74	32.46	26.48	-92.53	227.97	396.48	294.91	254.47	40.43	7.293		
8,700.00	8,643.57	8,662.86	8,649.37	32.80	26.79	-92.18	229.89	398.74	292.52	251.62	40.90	7.152		
8,800.00	8,743.57	8,758.68	8,745.18	33.13	27.09	-91.95	231.05	399.57	291.61	250.26	41.35	7.052		
8,900.00	8,843.57	8,858.03	8,844.53	33.46	27.40	-91.81	231.82	399.80	291.34	249.53	41.82	6.967		
8,968.62	8,912.19	8,926.20	8,912.69	33.69	27.62	-91.66	232.55	399.84	291.28	249.14	42.14	6.912		
9,000.00	8,943.57	8,957.20	8,943.69	33.79	27.72	-91.57	233.00	399.81	291.30	249.02	42.29	6.889		
9,100.00	9,043.57	9,057.01	9,043.48	34.12	28.03	-91.20	234.91	399.50	291.56	248.80	42.76	6.818		
9,200.00	9,143.57	9,158.20	9,144.65	34.46	28.36	-90.82	236.84	399.45	291.58	248.33	43.25	6.742		
9,300.00	9,243.57	9,259.50	9,245.93	34.79	28.68	-90.44	238.74	399.86	291.15	247.42	43.73	6.657		
9,400.00	9,343.57	9,359.63	9,346.03	35.13	29.00	-89.96	241.21	400.58	290.43	246.21	44.22	6.568		
9,500.00	9,443.57	9,458.84	9,445.20	35.46	29.31	-89.48	243.64	401.14	289.88	245.19	44.69	6.486		
9,600.00	9,543.57	9,559.10	9,545.44	35.80	29.64	-89.01	246.00	401.55	289.49	244.32	45.17	6.408		
9,700.00	9,643.57	9,660.65	9,646.95	36.13	29.96	-88.51	248.52	402.33	288.79	243.12	45.67	6.324		
9,800.00	9,743.57	9,764.53	9,750.79	36.47	30.30	-88.04	250.81	404.09	287.16	240.99	46.17	6.220		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 190-MWD, 1393-OWSG (Rev2) MWD, 21860-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,833.47	9,777.04	9,799.45	9,785.70	36.58	30.41	-87.90	251.50	405.02	286.29	239.95	46.34	6.179		
9,850.00	9,793.56	9,816.69	9,802.92	36.64	30.46	92.84	251.82	405.55	285.81	239.39	46.42	6.157		
9,900.00	9,843.42	9,868.11	9,854.30	36.79	30.63	93.94	252.74	407.36	284.29	237.63	46.66	6.093		
9,950.00	9,892.77	9,916.53	9,902.69	36.93	30.79	95.71	253.19	409.08	283.21	236.30	46.91	6.037		
9,981.27	9,923.21	9,946.52	9,932.67	37.01	30.89	97.13	253.17	410.06	282.99	235.92	47.07	6.013		
10,000.00	9,941.23	9,964.62	9,950.76	37.06	30.95	98.09	253.06	410.62	283.07	235.91	47.16	6.002		
10,050.00	9,988.45	10,012.73	9,998.84	37.19	31.11	101.08	252.56	412.16	284.21	236.79	47.43	5.993 SF		
10,100.00	10,034.06	10,059.00	10,045.08	37.30	31.27	104.42	251.82	413.72	287.19	239.50	47.69	6.022		
10,150.00	10,077.71	10,102.29	10,088.33	37.41	31.42	107.81	250.87	415.04	292.87	244.92	47.95	6.108		
10,200.00	10,119.07	10,143.72	10,129.74	37.50	31.56	111.12	249.73	416.10	301.97	253.77	48.20	6.264		
10,250.00	10,157.84	10,183.39	10,169.38	37.58	31.70	114.22	248.48	417.00	314.96	266.51	48.44	6.501		
10,300.00	10,193.70	10,220.37	10,206.33	37.65	31.83	116.86	247.27	417.81	332.17	283.51	48.66	6.826		
10,350.00	10,226.39	10,254.38	10,240.31	37.71	31.95	118.89	246.13	418.54	353.77	304.93	48.85	7.243		
10,400.00	10,255.66	10,284.87	10,270.77	37.76	32.05	120.16	245.20	419.28	379.73	330.73	49.00	7.749		
10,450.00	10,281.29	10,311.51	10,297.40	37.81	32.15	120.49	244.48	420.00	409.84	360.71	49.12	8.343		
10,500.00	10,303.08	10,332.00	10,317.87	37.85	32.22	119.42	243.98	420.61	443.73	394.52	49.21	9.017		
10,550.00	10,320.87	10,350.83	10,336.69	37.90	32.28	117.39	243.57	421.15	480.98	431.70	49.28	9.761		
10,600.00	10,334.52	10,363.83	10,349.68	37.96	32.33	113.50	243.32	421.48	521.05	471.73	49.32	10.566		
10,650.00	10,343.93	10,372.92	10,358.77	38.03	32.36	107.71	243.16	421.69	563.37	514.03	49.33	11.420		
10,700.00	10,349.02	10,378.12	10,363.96	38.12	32.38	99.74	243.08	421.80	607.37	558.03	49.33	12.311		
10,733.47	10,350.00	10,379.44	10,365.28	38.19	32.38	93.14	243.06	421.83	637.49	588.17	49.33	12.924		
10,800.00	10,350.00	10,380.35	10,366.20	38.36	32.38	93.34	243.04	421.85	698.35	649.04	49.31	14.163		
10,900.00	10,350.00	10,381.69	10,367.54	38.68	32.39	93.62	243.02	421.88	791.54	742.25	49.28	16.061		
11,000.00	10,350.00	10,383.00	10,368.84	39.08	32.39	93.90	243.00	421.90	886.21	836.95	49.27	17.989		
11,100.00	10,350.00	10,384.27	10,370.11	39.56	32.40	94.17	242.98	421.93	981.94	932.69	49.25	19.937		
11,200.00	10,350.00	10,385.51	10,371.35	40.10	32.40	94.43	242.96	421.95	1,078.44	1,029.20	49.24	21.901		
11,300.00	10,350.00	10,386.71	10,372.55	40.70	32.41	94.69	242.95	421.98	1,175.53	1,126.29	49.24	23.875		
11,400.00	10,350.00	10,387.89	10,373.73	41.37	32.41	94.94	242.93	422.00	1,273.06	1,223.83	49.23	25.858		
11,500.00	10,350.00	10,389.03	10,374.87	42.08	32.41	95.18	242.91	422.02	1,370.95	1,321.72	49.23	27.847		
11,600.00	10,350.00	10,390.15	10,375.99	42.85	32.42	95.41	242.90	422.04	1,469.12	1,419.89	49.23	29.840		
11,700.00	10,350.00	12,994.18	11,789.47	43.67	47.85	167.99	-1,286.39	400.17	1,471.25	1,433.25	38.00	38.720		
11,800.00	10,350.00	13,113.86	11,789.60	44.53	49.13	168.03	-1,406.05	402.31	1,471.11	1,432.47	38.63	38.078		
11,814.85	10,350.00	13,124.12	11,789.60	44.67	49.25	168.03	-1,416.31	402.50	1,471.09	1,432.38	38.71	38.006		
11,900.00	10,350.00	13,188.00	11,790.27	45.44	49.95	168.04	-1,480.18	403.28	1,471.86	1,432.71	39.15	37.599		
12,000.00	10,350.00	13,282.00	11,791.91	46.39	51.01	168.07	-1,574.15	404.68	1,473.47	1,433.72	39.75	37.071		
12,100.00	10,350.00	13,351.85	11,793.91	47.37	51.81	168.12	-1,643.95	406.12	1,476.14	1,435.86	40.28	36.647		
12,200.00	10,350.00	13,432.35	11,797.99	48.39	52.76	168.17	-1,724.34	407.54	1,480.90	1,440.03	40.87	36.236		
12,300.00	10,350.00	13,526.31	11,803.40	49.45	53.89	168.25	-1,818.13	409.29	1,486.35	1,444.84	41.52	35.802		
12,400.00	10,350.00	13,621.87	11,809.29	50.54	55.06	168.35	-1,913.47	411.72	1,492.09	1,449.91	42.18	35.376		
12,500.00	10,350.00	13,709.59	11,815.25	51.66	56.15	168.47	-2,000.94	414.62	1,498.29	1,455.47	42.82	34.990		
12,600.00	10,350.00	13,796.11	11,822.11	52.80	57.25	168.61	-2,087.12	417.91	1,505.50	1,462.03	43.47	34.636		
12,700.00	10,350.00	13,913.34	11,831.83	53.97	58.75	168.84	-2,203.82	423.27	1,513.02	1,468.80	44.22	34.217		
12,800.00	10,350.00	14,106.65	11,839.03	55.17	61.27	169.23	-2,396.64	434.20	1,515.24	1,469.94	45.30	33.450		
12,900.00	10,350.00	14,197.41	11,839.42	56.39	62.48	169.26	-2,487.38	435.87	1,515.53	1,469.49	46.04	32.918		
13,000.00	10,350.00	14,270.71	11,840.76	57.63	63.45	169.26	-2,560.66	436.43	1,517.37	1,470.65	46.71	32.483		
13,100.00	10,350.00	14,351.00	11,843.29	58.89	64.54	169.25	-2,640.92	436.35	1,520.66	1,473.22	47.44	32.053		
13,200.00	10,350.00	14,410.53	11,846.29	60.17	65.35	169.23	-2,700.37	435.96	1,525.94	1,477.86	48.08	31.740		
13,300.00	10,350.00	14,474.04	11,851.25	61.47	66.22	169.23	-2,763.69	435.73	1,533.81	1,485.08	48.74	31.472		
13,400.00	10,350.00	14,550.13	11,859.00	62.78	67.27	169.29	-2,839.37	436.62	1,543.73	1,494.28	49.45	31.221		
13,500.00	10,350.00	14,683.95	11,871.16	64.11	69.15	169.41	-2,972.61	438.89	1,552.34	1,501.89	50.45	30.769		
13,600.00	10,350.00	14,762.85	11,878.29	65.45	70.26	169.49	-3,051.17	440.41	1,561.11	1,509.92	51.18	30.500		
13,700.00	10,350.00	14,845.63	11,887.45	66.81	71.43	169.59	-3,133.42	442.36	1,571.66	1,519.73	51.93	30.264		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 604H - OH - OH		Offset Site Error:	0.00 usft
Survey Program:													190-MWD, 1393-OWSG (Rev2) MWD, 21860-BLIND		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				
18,800.00	10,350.00	20,151.88	12,073.79	144.39	153.22	170.32	-8,430.25	483.86	1,748.42	1,643.17	105.26	16.611				
18,900.00	10,350.00	20,229.36	12,072.99	145.99	154.46	170.31	-8,507.72	484.34	1,747.46	1,641.25	106.20	16.454				
18,945.36	10,350.00	20,267.99	12,072.98	146.71	155.08	170.32	-8,546.34	485.09	1,747.37	1,640.73	106.64	16.385				
19,000.00	10,350.00	20,322.12	12,073.27	147.58	155.95	170.36	-8,600.45	486.80	1,747.46	1,640.26	107.20	16.301				
19,100.00	10,350.00	20,433.14	12,073.30	149.18	157.73	170.47	-8,711.37	491.32	1,746.96	1,638.69	108.27	16.135				
19,200.00	10,350.00	20,523.42	12,073.21	150.78	159.18	170.51	-8,801.61	493.70	1,746.59	1,637.33	109.25	15.987				
19,204.99	10,350.00	20,527.70	12,073.21	150.86	159.25	170.52	-8,805.90	493.80	1,746.58	1,637.29	109.30	15.980				
19,300.00	10,350.00	20,641.96	12,073.41	152.38	161.08	170.56	-8,920.13	496.35	1,746.65	1,636.23	110.43	15.817				
19,400.00	10,350.00	20,812.78	12,068.11	153.98	163.83	170.62	-9,090.80	500.62	1,743.22	1,631.35	111.87	15.582				
19,500.00	10,350.00	20,899.35	12,063.74	155.58	165.22	170.67	-9,177.20	503.74	1,737.90	1,625.05	112.85	15.400				
19,600.00	10,350.00	20,958.00	12,062.22	157.18	166.17	170.72	-9,235.77	506.27	1,734.76	1,621.11	113.65	15.264				
19,700.00	10,350.00	21,038.41	12,061.42	158.79	167.46	170.77	-9,316.14	508.79	1,733.41	1,618.83	114.57	15.129				
19,800.00	10,350.00	21,168.65	12,058.85	160.39	169.56	170.73	-9,446.35	509.20	1,731.54	1,615.65	115.89	14.941				
19,900.00	10,350.00	21,241.00	12,056.96	162.00	170.72	170.68	-9,518.67	508.51	1,729.41	1,612.54	116.86	14.798				
19,973.28	10,350.00	21,296.43	12,056.27	163.18	171.61	170.64	-9,574.09	508.06	1,728.79	1,611.22	117.57	14.704				
20,000.00	10,350.00	21,313.28	12,056.28	163.61	171.88	170.63	-9,590.94	508.02	1,728.87	1,611.07	117.80	14.677				
20,100.00	10,350.00	21,407.11	12,057.19	165.21	173.39	170.61	-9,684.76	508.19	1,729.94	1,611.07	118.86	14.554				
20,200.00	10,350.00	21,515.66	12,057.83	166.82	175.14	170.60	-9,793.31	508.70	1,730.60	1,610.56	120.04	14.416				
20,300.00	10,350.00	21,649.50	12,057.17	168.43	177.30	170.60	-9,927.13	510.37	1,730.08	1,608.70	121.38	14.254				
20,400.00	10,350.00	21,771.13	12,054.82	170.04	179.27	170.67	-10,048.68	514.03	1,727.83	1,605.28	122.54	14.100				
20,500.00	10,350.00	21,860.00	12,052.81	171.65	186.65	170.79	-10,137.39	518.97	1,724.92	1,599.90	125.02	13.797				
20,529.73	10,350.00	21,860.00	12,052.81	172.13	186.65	170.79	-10,137.39	518.97	1,724.54	1,599.35	125.19	13.775				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													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	0.94	0.94	0.00	0.00	47.11	540.21	581.45	793.67							
100.00	100.00	104.91	104.91	0.13	0.15	47.06	540.46	580.85	793.42	793.22	0.19	4,116.333				
200.00	200.00	201.49	201.48	0.48	0.43	47.01	540.69	580.05	792.98	792.33	0.65	1,228.588				
300.00	300.00	304.61	304.59	0.84	0.80	46.95	541.12	579.33	792.75	791.59	1.16	684.202				
400.00	400.00	404.84	404.83	1.20	1.16	46.90	541.36	578.60	792.39	790.72	1.67	475.605				
500.00	500.00	507.76	507.74	1.56	1.53	46.81	541.82	577.22	791.71	789.53	2.18	363.107				
600.00	600.00	614.26	614.21	1.92	1.91	46.69	542.16	575.17	790.53	787.83	2.70	292.386				
700.00	700.00	721.32	721.23	2.28	2.29	46.55	541.92	572.13	788.31	785.08	3.23	244.197				
800.00	800.00	823.00	822.85	2.63	2.66	46.38	541.70	568.50	785.57	781.83	3.74	210.067				
900.00	900.00	925.99	925.76	2.99	3.03	46.22	541.29	564.79	782.69	778.43	4.25	183.976				
1,000.00	1,000.00	1,030.59	1,030.26	3.35	3.41	46.01	540.84	560.20	779.23	774.45	4.77	163.240				
1,100.00	1,100.00	1,126.95	1,126.53	3.71	3.76	45.82	540.29	555.93	775.65	770.38	5.27	147.113				
1,200.00	1,200.00	1,226.06	1,225.56	4.07	4.12	45.66	539.43	552.06	772.25	766.47	5.78	133.660				
1,300.00	1,300.00	1,322.29	1,321.73	4.43	4.47	45.53	538.65	548.75	769.22	762.95	6.28	122.571				
1,400.00	1,400.00	1,418.84	1,418.21	4.79	4.65	45.34	538.79	545.15	766.67	760.02	6.65	115.211				
1,500.00	1,500.00	1,513.58	1,512.90	5.14	4.68	45.15	539.15	542.04	764.61	757.67	6.94	110.234				
1,588.61	1,588.61	1,590.20	1,589.51	5.46	4.72	45.09	539.29	540.95	763.85	756.65	7.20	106.093				
1,600.00	1,600.00	1,599.45	1,598.75	5.50	4.72	45.09	539.31	540.95	763.86	756.63	7.23	105.586				
1,700.00	1,700.00	1,682.33	1,681.63	5.86	4.78	45.14	539.69	542.34	765.36	757.81	7.54	101.458				
1,800.00	1,800.00	1,773.31	1,772.53	6.22	4.85	45.28	540.37	545.77	768.55	760.68	7.87	97.643				
1,900.00	1,900.00	1,871.32	1,870.45	6.58	4.96	45.45	541.46	550.01	772.41	764.19	8.22	93.956				
2,000.00	2,000.00	1,974.07	1,973.10	6.94	5.09	45.58	542.93	554.12	776.27	767.68	8.59	90.348				
2,100.00	2,100.00	2,084.04	2,082.97	7.29	5.26	45.85	542.68	559.00	779.30	770.31	8.99	86.728				
2,200.00	2,200.00	2,191.68	2,190.37	7.65	5.45	46.34	539.11	564.98	781.00	771.61	9.39	83.189				
2,300.00	2,299.99	2,291.98	2,290.38	8.01	5.64	-23.91	534.48	571.11	781.08	771.29	9.79	79.794				
2,400.00	2,399.91	2,384.36	2,382.48	8.35	5.84	-23.52	530.46	577.06	779.24	769.05	10.18	76.514				
2,500.00	2,499.69	2,483.57	2,481.39	8.70	6.06	-23.19	526.80	583.85	775.79	765.19	10.60	73.189				
2,600.00	2,599.27	2,586.63	2,584.12	9.06	6.31	-22.92	522.58	590.87	769.65	758.62	11.03	69.775				
2,700.00	2,698.57	2,704.34	2,701.52	9.42	6.61	-22.74	517.06	597.36	759.78	748.28	11.49	66.111				
2,800.00	2,797.54	2,812.99	2,809.94	9.78	6.90	-22.76	511.14	600.98	745.37	733.43	11.94	62.403				
2,815.66	2,813.00	2,827.91	2,824.83	9.84	6.94	-22.78	510.31	601.41	742.84	730.83	12.01	61.833				
2,900.00	2,896.24	2,905.96	2,902.74	10.15	7.15	-22.80	506.21	603.79	729.32	716.94	12.38	58.908				
3,000.00	2,994.95	2,994.52	2,991.17	10.53	7.40	-22.85	502.63	606.98	714.49	701.67	12.82	55.751				
3,100.00	3,093.65	3,089.05	3,085.59	10.91	7.68	-22.97	500.01	610.78	700.80	687.54	13.27	52.831				
3,200.00	3,192.36	3,193.99	3,190.34	11.29	7.99	-23.00	495.88	615.58	686.76	673.02	13.74	49.992				
3,300.00	3,291.06	3,296.36	3,292.39	11.68	8.30	-22.86	490.09	621.11	672.19	657.98	14.21	47.300				
3,400.00	3,389.76	3,410.14	3,405.82	12.07	8.66	-22.72	482.94	626.17	656.56	641.86	14.70	44.661				
3,500.00	3,488.47	3,520.43	3,515.89	12.47	9.00	-22.80	475.94	627.25	638.26	623.08	15.18	42.047				
3,600.00	3,587.17	3,613.89	3,609.20	12.87	9.29	-23.00	470.76	626.91	619.54	603.89	15.65	39.592				
3,700.00	3,685.88	3,703.37	3,698.60	13.27	9.56	-23.27	467.02	627.01	602.06	585.95	16.12	37.355				
3,800.00	3,784.58	3,794.27	3,789.46	13.67	9.85	-23.59	464.38	627.83	586.04	569.45	16.59	35.323				
3,900.00	3,883.28	3,903.89	3,898.95	14.08	10.21	-23.80	459.82	630.25	570.17	553.09	17.08	33.375				
4,000.00	3,981.99	4,017.75	4,012.49	14.49	10.58	-23.82	451.46	631.76	551.50	533.92	17.57	31.387				
4,100.00	4,080.69	4,106.00	4,100.51	14.90	10.87	-23.90	445.07	632.26	532.35	514.29	18.06	29.475				
4,200.00	4,179.39	4,200.00	4,194.37	15.31	11.19	-24.10	440.12	633.27	514.88	496.32	18.55	27.753				
4,300.00	4,278.10	4,296.15	4,290.43	15.72	11.51	-24.40	436.09	634.39	498.21	479.16	19.05	26.159				
4,400.00	4,376.80	4,400.68	4,394.80	16.13	11.86	-24.67	430.49	635.31	480.56	461.02	19.54	24.595				
4,500.00	4,475.51	4,495.20	4,489.15	16.55	12.18	-24.85	424.90	636.51	462.82	442.78	20.04	23.096				
4,600.00	4,574.21	4,590.19	4,584.00	16.97	12.50	-25.08	420.05	638.16	445.97	425.43	20.54	21.712				
4,700.00	4,672.91	4,692.06	4,685.71	17.38	12.85	-25.33	414.73	639.99	429.11	408.07	21.04	20.393				
4,800.00	4,771.62	4,794.96	4,788.40	17.80	13.21	-25.55	408.35	641.34	411.22	389.68	21.54	19.092				
4,900.00	4,870.32	4,894.17	4,887.42	18.22	13.55	-25.86	402.08	641.85	392.70	370.66	22.04	17.817				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
5,000.00	4,969.03	4,991.52	4,984.59	18.64	13.89	-26.25	396.28	642.07	374.25	351.70	22.55	16.598				
5,100.00	5,067.73	5,090.10	5,083.03	19.07	14.23	-26.77	390.88	642.11	356.03	332.97	23.05	15.443				
5,200.00	5,166.43	5,185.88	5,178.67	19.49	14.56	-27.37	385.73	641.88	337.72	314.15	23.57	14.328				
5,300.00	5,265.14	5,281.19	5,273.81	19.91	14.89	-27.73	380.46	643.82	320.87	296.77	24.09	13.319				
5,400.00	5,363.84	5,379.84	5,372.23	20.33	15.24	-27.94	374.37	646.69	304.16	279.56	24.61	12.361				
5,500.00	5,462.54	5,478.67	5,470.83	20.76	15.59	-28.17	368.28	649.64	287.53	262.40	25.12	11.445				
5,600.00	5,561.25	5,574.62	5,566.53	21.18	15.94	-28.34	362.26	652.82	271.03	245.38	25.65	10.567				
5,700.00	5,659.95	5,671.33	5,662.94	21.61	16.29	-28.29	356.38	657.73	255.85	229.68	26.17	9.775				
5,800.00	5,758.66	5,769.48	5,760.78	22.04	16.64	-28.22	350.60	662.97	240.99	214.29	26.69	9.028				
5,900.00	5,857.36	5,868.41	5,859.41	22.46	17.00	-28.21	345.14	668.20	226.37	199.15	27.22	8.318				
6,000.00	5,956.06	5,967.90	5,958.62	22.89	17.36	-28.21	339.55	673.29	211.55	183.82	27.73	7.628				
6,100.00	6,054.77	6,066.33	6,056.76	23.32	17.71	-28.18	333.87	678.35	196.65	168.39	28.26	6.959				
6,200.00	6,153.47	6,165.33	6,155.48	23.75	18.07	-28.21	328.44	683.42	181.93	153.15	28.78	6.321				
6,300.00	6,252.18	6,264.09	6,253.96	24.18	18.43	-28.25	322.99	688.43	167.17	137.86	29.30	5.705				
6,400.00	6,350.88	6,362.78	6,352.36	24.60	18.79	-28.24	317.54	693.65	152.53	122.71	29.83	5.114				
6,500.00	6,449.58	6,461.65	6,450.93	25.03	19.15	-28.13	312.01	699.09	138.00	107.65	30.35	4.547				
6,600.00	6,548.29	6,560.30	6,549.28	25.46	19.51	-28.05	306.65	704.56	123.61	92.74	30.88	4.003				
6,700.00	6,646.99	6,659.69	6,648.37	25.89	19.87	-27.94	301.19	709.99	109.13	77.74	31.39	3.476				
6,758.77	6,705.00	6,717.81	6,706.35	26.15	20.08	-28.21	298.33	712.67	100.52	68.82	31.70	3.171				
6,800.00	6,745.73	6,758.68	6,747.17	26.32	20.23	-28.69	296.74	714.11	94.68	62.76	31.93	2.966				
6,900.00	6,844.79	6,857.86	6,846.32	26.74	20.57	-31.56	294.57	715.25	81.91	49.42	32.49	2.521				
7,000.00	6,944.17	6,955.92	6,944.36	27.13	20.89	-36.49	295.13	714.86	72.91	39.77	33.13	2.200				
7,100.00	7,043.80	7,055.40	7,043.83	27.51	21.19	-41.81	296.75	714.40	67.46	33.71	33.75	1.999				
7,200.00	7,143.63	7,155.22	7,143.64	27.88	21.50	-46.23	298.44	714.06	64.59	30.24	34.34	1.881				
7,300.00	7,243.57	7,255.27	7,243.68	28.22	21.82	-48.88	299.88	714.07	63.72	28.84	34.88	1.827				
7,302.17	7,245.74	7,257.44	7,245.85	28.23	21.82	-48.92	299.91	714.07	63.72	28.83	34.89	1.826 CC, ES				
7,374.43	7,318.00	7,329.81	7,318.21	28.46	22.05	21.09	300.82	714.07	64.11	28.87	35.24	1.819				
7,400.00	7,343.57	7,355.42	7,343.82	28.55	22.13	21.00	301.10	714.07	64.38	29.02	35.36	1.821				
7,500.00	7,443.57	7,455.61	7,444.00	28.87	22.45	20.88	301.95	714.25	65.24	29.42	35.82	1.821				
7,600.00	7,543.57	7,555.73	7,544.12	29.19	22.78	21.18	302.39	714.79	65.84	29.55	36.28	1.815				
7,700.00	7,643.57	7,655.79	7,644.18	29.52	23.12	21.68	302.62	715.50	66.32	29.58	36.74	1.805				
7,800.00	7,743.57	7,755.56	7,743.94	29.84	23.46	22.54	302.74	716.62	66.85	29.65	37.20	1.797				
7,900.00	7,843.57	7,855.29	7,843.66	30.17	23.80	23.72	303.13	718.30	67.87	30.22	37.65	1.803				
8,000.00	7,943.57	7,955.17	7,943.51	30.49	24.14	25.30	303.54	720.56	69.18	31.09	38.09	1.816				
8,100.00	8,043.57	8,054.84	8,043.15	30.82	24.48	26.86	304.12	722.97	70.77	32.23	38.54	1.836				
8,200.00	8,143.57	8,154.56	8,142.84	31.15	24.81	28.23	305.15	725.44	72.83	33.85	38.98	1.868				
8,300.00	8,243.57	8,254.04	8,242.27	31.48	25.15	29.46	306.61	728.06	75.39	35.95	39.44	1.912				
8,400.00	8,343.57	8,353.89	8,342.07	31.80	25.48	30.51	308.51	730.78	78.39	38.50	39.89	1.965				
8,500.00	8,443.57	8,454.08	8,442.20	32.13	25.82	31.31	310.43	733.24	81.30	40.95	40.35	2.015				
8,600.00	8,543.57	8,554.27	8,542.36	32.46	26.15	31.83	312.38	735.31	84.04	43.23	40.82	2.059				
8,700.00	8,643.57	8,655.64	8,643.71	32.80	26.50	32.21	313.56	736.72	85.77	44.50	41.27	2.078				
8,800.00	8,743.57	8,756.86	8,744.93	33.13	26.85	32.77	313.13	737.43	85.78	44.05	41.72	2.056				
8,900.00	8,843.57	8,857.12	8,845.17	33.46	27.20	33.46	312.01	737.93	85.12	42.93	42.19	2.018				
9,000.00	8,943.57	8,957.33	8,945.37	33.79	27.55	34.48	310.33	738.61	84.11	41.46	42.65	1.972				
9,100.00	9,043.57	9,057.23	9,045.25	34.12	27.90	35.70	308.46	739.47	83.07	39.96	43.11	1.927				
9,200.00	9,143.57	9,156.65	9,144.65	34.46	28.25	36.98	306.81	740.56	82.38	38.79	43.59	1.890				
9,219.18	9,162.75	9,175.66	9,163.65	34.52	28.32	37.21	306.60	740.80	82.36	38.68	43.68	1.885				
9,300.00	9,243.57	9,255.87	9,243.86	34.79	28.60	38.03	306.12	741.94	82.68	38.61	44.07	1.876				
9,400.00	9,343.57	9,356.26	9,344.24	35.13	28.95	38.77	306.05	743.25	83.44	38.90	44.54	1.873				
9,500.00	9,443.57	9,456.37	9,444.35	35.46	29.29	39.10	305.77	743.63	83.46	38.44	45.02	1.854				
9,600.00	9,543.57	9,555.33	9,543.30	35.80	29.63	39.25	306.13	744.21	84.11	38.59	45.52	1.848				
9,700.00	9,643.57	9,656.30	9,644.27	36.13	29.97	39.24	307.01	744.92	85.23	39.25	45.98	1.854				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
9,800.00	9,743.57	9,758.16	9,746.11	36.47	30.31	39.42	306.17	744.58	84.39	37.98	46.41	1.818				
9,833.47	9,777.04	9,791.47	9,779.42	36.58	30.43	39.71	305.40	744.48	83.73	37.16	46.57	1.798				
9,845.53	9,789.10	9,803.40	9,791.34	36.62	30.47	-139.67	305.14	744.48	83.62	36.99	46.63	1.793				
9,850.00	9,793.56	9,807.81	9,795.76	36.64	30.48	-139.67	305.05	744.49	83.64	36.98	46.66	1.793 SF				
9,900.00	9,843.42	9,857.15	9,845.09	36.79	30.66	-140.56	304.09	744.71	85.81	38.88	46.93	1.828				
9,950.00	9,892.77	9,907.37	9,895.29	36.93	30.83	-142.93	303.11	744.92	91.44	44.24	47.20	1.937				
10,000.00	9,941.23	9,956.95	9,944.86	37.06	31.00	-146.37	301.91	744.69	100.39	52.90	47.50	2.114				
10,050.00	9,988.45	10,004.79	9,992.68	37.19	31.17	-150.12	300.60	744.25	113.18	65.37	47.81	2.367				
10,100.00	10,034.06	10,051.15	10,039.01	37.30	31.33	-153.67	299.26	743.77	130.12	82.01	48.11	2.704				
10,150.00	10,077.71	10,094.95	10,082.80	37.41	31.48	-156.68	298.03	743.40	151.36	102.96	48.40	3.127				
10,200.00	10,119.07	10,136.48	10,124.31	37.50	31.63	-159.07	296.95	743.19	176.83	128.17	48.65	3.634				
10,250.00	10,157.84	10,176.00	10,163.82	37.58	31.76	-160.93	295.98	743.11	206.21	157.33	48.87	4.219				
10,300.00	10,193.70	10,212.86	10,200.67	37.65	31.89	-162.27	295.05	743.04	239.12	190.06	49.06	4.874				
10,350.00	10,226.39	10,246.47	10,234.27	37.71	32.01	-163.12	294.18	743.00	275.28	226.05	49.23	5.592				
10,400.00	10,255.66	10,276.06	10,263.85	37.76	32.11	-163.41	293.44	743.04	314.42	265.06	49.37	6.369				
10,450.00	10,281.29	10,302.02	10,289.81	37.81	32.21	-163.15	292.84	743.16	356.22	306.73	49.49	7.198				
10,500.00	10,303.08	10,324.17	10,311.95	37.85	32.28	-162.20	292.36	743.32	400.31	350.72	49.59	8.073				
10,550.00	10,320.87	10,342.80	10,330.57	37.90	32.35	-160.27	291.97	743.49	446.29	396.63	49.66	8.986				
10,600.00	10,334.52	10,357.68	10,345.45	37.96	32.40	-156.64	291.66	743.65	493.79	444.06	49.72	9.931				
10,650.00	10,343.93	10,368.32	10,356.08	38.03	32.44	-149.23	291.43	743.77	542.41	492.65	49.77	10.899				
10,700.00	10,349.02	10,374.62	10,362.38	38.12	32.46	-131.29	291.29	743.84	591.80	542.01	49.79	11.885				
10,733.47	10,350.00	10,376.37	10,364.13	38.19	32.47	-103.93	291.25	743.86	625.10	575.29	49.81	12.551				
10,800.00	10,350.00	10,377.89	10,365.65	38.36	32.47	-105.45	291.22	743.88	691.39	641.57	49.82	13.878				
10,900.00	10,350.00	10,380.17	10,367.94	38.68	32.48	-107.69	291.16	743.90	791.11	741.27	49.84	15.874				
11,000.00	10,350.00	10,382.48	10,370.24	39.08	32.49	-109.90	291.11	743.93	890.88	841.02	49.86	17.869				
11,100.00	10,350.00	10,384.80	10,372.56	39.56	32.50	-112.06	291.06	743.96	990.69	940.82	49.87	19.865				
11,200.00	10,350.00	10,387.14	10,374.90	40.10	32.51	-114.17	291.01	743.99	1,090.54	1,040.65	49.89	21.860				
11,300.00	10,350.00	10,389.50	10,377.26	40.70	32.52	-116.22	290.96	744.02	1,190.40	1,140.50	49.90	23.855				
11,400.00	10,350.00	10,391.88	10,379.63	41.37	32.52	-118.22	290.90	744.05	1,290.28	1,240.37	49.92	25.848				
11,500.00	10,350.00	10,394.27	10,382.02	42.08	32.53	-120.16	290.85	744.08	1,390.18	1,340.25	49.93	27.840				
11,600.00	10,350.00	10,396.68	10,384.44	42.85	32.54	-122.03	290.79	744.11	1,490.09	1,440.13	49.95	29.831				
11,700.00	10,350.00	10,399.11	10,386.86	43.67	32.55	-123.85	290.74	744.14	1,590.00	1,540.03	49.97	31.821				
11,800.00	10,350.00	13,296.46	11,988.34	44.53	48.87	-178.61	-1,318.35	746.46	1,639.86	1,603.15	36.71	44.675				
11,900.00	10,350.00	13,374.00	11,992.31	45.44	49.70	-178.52	-1,395.71	749.81	1,645.14	1,607.95	37.20	44.230				
12,000.00	10,350.00	13,452.63	11,997.30	46.39	50.57	-178.35	-1,473.96	755.64	1,651.74	1,614.03	37.71	43.800				
12,100.00	10,350.00	13,679.32	12,006.40	47.37	53.15	-178.24	-1,700.21	761.28	1,656.28	1,617.67	38.61	42.898				
12,200.00	10,350.00	13,802.59	12,005.36	48.39	54.59	-178.32	-1,823.47	760.25	1,655.37	1,616.06	39.31	42.108				
12,300.00	10,350.00	13,917.73	12,003.21	49.45	55.98	-178.35	-1,938.59	760.52	1,653.50	1,613.48	40.01	41.324				
12,400.00	10,350.00	14,048.19	11,998.87	50.54	57.59	-178.41	-2,068.97	759.83	1,650.14	1,609.33	40.81	40.433				
12,500.00	10,350.00	14,129.57	11,995.64	51.66	58.61	-178.45	-2,150.29	759.51	1,646.18	1,604.78	41.40	39.761				
12,600.00	10,350.00	14,204.67	11,993.86	52.80	59.56	-178.46	-2,225.37	759.79	1,643.78	1,601.80	41.98	39.156				
12,700.00	10,350.00	14,279.74	11,993.16	53.97	60.52	-178.49	-2,300.43	759.86	1,642.83	1,600.26	42.58	38.584				
12,708.85	10,350.00	14,286.08	11,993.15	54.08	60.60	-178.49	-2,306.77	759.85	1,642.83	1,600.19	42.63	38.535				
12,800.00	10,350.00	14,352.38	11,993.70	55.17	61.45	-178.51	-2,373.07	759.78	1,643.54	1,600.36	43.19	38.056				
12,900.00	10,350.00	14,445.00	11,994.66	56.39	62.66	-178.58	-2,465.68	758.87	1,644.58	1,600.69	43.90	37.466				
13,000.00	10,350.00	14,515.83	11,996.15	57.63	63.60	-178.59	-2,536.48	759.35	1,646.90	1,602.37	44.53	36.987				
13,100.00	10,350.00	14,573.19	11,998.98	58.89	64.37	-178.51	-2,593.69	762.12	1,651.93	1,606.81	45.11	36.619				
13,200.00	10,350.00	14,633.00	12,003.43	60.17	65.18	-178.39	-2,653.17	766.55	1,659.51	1,613.78	45.73	36.292				
13,300.00	10,350.00	14,800.79	12,012.31	61.47	67.48	-178.30	-2,820.59	770.96	1,663.94	1,617.13	46.80	35.551				
13,400.00	10,350.00	14,888.69	12,016.70	62.78	68.69	-178.24	-2,908.34	773.87	1,668.99	1,621.43	47.56	35.093				
13,500.00	10,350.00	15,047.76	12,022.79	64.11	70.91	-178.16	-3,067.20	777.75	1,673.03	1,624.37	48.66	34.379				
13,600.00	10,350.00	15,199.00	12,022.21	65.45	73.02	-178.30	-3,218.39	775.26	1,672.18	1,622.41	49.76	33.602				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
13,700.00	10,350.00	15,294.00	12,021.39	66.81	74.36	-178.40	-3,313.36	773.35	1,671.21	1,620.63	50.59	33.036				
13,800.00	10,350.00	15,380.55	12,021.39	68.18	75.58	-178.53	-3,399.84	770.26	1,671.04	1,619.67	51.37	32.529				
13,801.01	10,350.00	15,381.57	12,021.39	68.19	75.60	-178.53	-3,400.85	770.22	1,671.03	1,619.66	51.38	32.523				
13,841.52	10,350.00	15,420.23	12,021.13	68.75	76.15	-178.62	-3,439.45	768.08	1,670.71	1,618.99	51.72	32.300				
13,900.00	10,350.00	15,449.44	12,021.42	69.56	76.56	-178.68	-3,468.62	766.72	1,671.23	1,619.16	52.07	32.096				
14,000.00	10,350.00	15,510.46	12,023.48	70.96	77.43	-178.76	-3,529.58	765.00	1,674.37	1,621.64	52.73	31.754				
14,100.00	10,350.00	15,602.59	12,027.69	72.36	78.76	-178.81	-3,621.61	764.58	1,678.89	1,625.32	53.57	31.343				
14,200.00	10,350.00	15,768.88	12,032.63	73.78	81.18	-178.90	-3,787.81	763.76	1,682.07	1,627.23	54.84	30.673				
14,300.00	10,350.00	15,809.79	12,033.64	75.20	81.78	-178.91	-3,828.71	763.78	1,684.47	1,629.08	55.40	30.408				
14,400.00	10,350.00	15,861.00	12,036.80	76.63	82.53	-178.90	-3,879.81	764.76	1,690.34	1,634.34	56.01	30.181				
14,500.00	10,350.00	15,948.50	12,043.76	78.08	83.82	-178.87	-3,967.02	766.44	1,698.24	1,641.40	56.84	29.876				
14,600.00	10,350.00	16,032.98	12,050.57	79.53	85.08	-178.84	-4,051.19	768.45	1,706.34	1,648.68	57.66	29.591				
14,700.00	10,350.00	16,103.99	12,057.12	80.99	86.14	-178.73	-4,121.77	772.60	1,715.71	1,657.30	58.40	29.378				
14,800.00	10,350.00	16,185.75	12,066.03	82.45	87.37	-178.55	-4,202.80	778.80	1,726.72	1,667.51	59.21	29.161				
14,900.00	10,350.00	16,286.55	12,077.27	83.92	88.89	-178.46	-4,302.88	783.06	1,737.96	1,677.80	60.16	28.891				
15,000.00	10,350.00	16,408.55	12,090.40	85.40	90.73	-178.38	-4,424.11	786.86	1,748.83	1,687.59	61.24	28.557				
15,100.00	10,350.00	16,699.81	12,101.22	86.89	95.10	-178.70	-4,714.71	780.26	1,750.85	1,687.47	63.38	27.624				
15,152.23	10,350.00	16,735.28	12,101.07	87.67	95.63	-178.79	-4,750.09	777.85	1,750.56	1,686.77	63.78	27.445				
15,200.00	10,350.00	16,764.16	12,101.27	88.38	96.06	-178.87	-4,778.90	775.85	1,750.82	1,686.69	64.12	27.304				
15,300.00	10,350.00	16,806.00	12,102.11	89.87	96.68	-178.98	-4,820.63	772.89	1,753.20	1,688.48	64.72	27.090				
15,400.00	10,350.00	16,900.00	12,106.54	91.38	98.10	-179.15	-4,914.41	768.54	1,757.82	1,692.18	65.64	26.778				
15,500.00	10,350.00	16,953.38	12,110.29	92.88	98.91	-179.20	-4,967.65	767.61	1,764.38	1,698.09	66.29	26.615				
15,600.00	10,350.00	17,028.55	12,116.33	94.39	100.06	-179.25	-5,042.57	766.93	1,772.41	1,705.32	67.09	26.419				
15,700.00	10,350.00	17,103.97	12,123.56	95.91	101.21	-179.28	-5,117.64	766.92	1,781.95	1,714.07	67.88	26.250				
15,800.00	10,350.00	17,182.00	12,131.53	97.43	102.41	-179.35	-5,195.26	765.77	1,792.25	1,723.56	68.69	26.091				
15,900.00	10,350.00	17,276.00	12,142.41	98.96	103.85	-179.46	-5,288.59	763.40	1,803.80	1,734.17	69.63	25.905				
16,000.00	10,350.00	17,329.35	12,149.62	100.49	104.66	-179.51	-5,341.44	762.26	1,817.00	1,746.76	70.24	25.869				
16,100.00	10,350.00	17,400.14	12,160.20	102.02	105.75	-179.58	-5,411.42	760.93	1,831.92	1,760.94	70.98	25.808				
16,200.00	10,350.00	17,505.35	12,177.23	103.55	107.37	-179.65	-5,515.24	759.83	1,848.14	1,776.13	72.02	25.663				
16,300.00	10,350.00	17,688.44	12,200.06	105.09	110.21	-179.67	-5,696.87	761.17	1,860.10	1,786.41	73.70	25.240				
16,400.00	10,350.00	17,787.33	12,210.74	106.64	111.75	-179.55	-5,795.05	766.10	1,870.94	1,796.26	74.68	25.052				
16,500.00	10,350.00	17,958.11	12,226.42	108.18	114.43	-179.33	-5,964.84	775.23	1,880.37	1,804.15	76.22	24.669				
16,600.00	10,350.00	18,033.00	12,232.26	109.73	115.60	-179.24	-6,039.41	778.77	1,888.19	1,811.15	77.04	24.510				
16,700.00	10,350.00	18,151.21	12,241.90	111.29	117.46	-179.04	-6,156.94	786.91	1,896.51	1,818.33	78.18	24.258				
16,800.00	10,350.00	18,304.62	12,250.39	112.84	119.87	-178.86	-6,309.90	794.44	1,901.90	1,822.32	79.58	23.899				
16,900.00	10,350.00	18,390.21	12,254.59	114.40	121.22	-178.86	-6,395.39	795.21	1,906.82	1,826.33	80.49	23.690				
17,000.00	10,350.00	18,589.42	12,260.53	115.96	124.34	-178.89	-6,594.47	796.46	1,909.99	1,827.83	82.17	23.245				
17,100.00	10,350.00	18,673.67	12,260.92	117.52	125.66	-178.91	-6,678.71	796.72	1,910.46	1,827.38	83.09	22.994				
17,200.00	10,350.00	18,741.05	12,262.09	119.09	126.72	-178.90	-6,746.08	797.67	1,912.25	1,828.35	83.89	22.793				
17,300.00	10,350.00	18,786.00	12,263.60	120.66	127.43	-178.89	-6,791.00	798.42	1,916.04	1,831.51	84.53	22.668				
17,400.00	10,350.00	18,847.27	12,267.14	122.23	128.40	-178.87	-6,852.14	799.90	1,922.14	1,836.88	85.25	22.546				
17,500.00	10,350.00	18,909.36	12,272.68	123.80	129.38	-178.82	-6,913.95	802.12	1,930.95	1,844.98	85.97	22.461				
17,600.00	10,350.00	19,066.53	12,286.31	125.37	131.87	-178.75	-7,070.45	806.57	1,940.05	1,852.59	87.46	22.181				
17,700.00	10,350.00	19,369.14	12,290.06	126.95	136.67	-178.73	-7,372.70	810.24	1,941.09	1,851.29	89.79	21.617				
17,800.00	10,350.00	19,575.55	12,277.44	128.52	139.94	-178.66	-7,578.63	814.39	1,935.55	1,844.28	91.27	21.207				
17,900.00	10,350.00	19,661.67	12,269.53	130.10	141.30	-178.68	-7,664.39	814.43	1,926.37	1,834.12	92.25	20.883				
18,000.00	10,350.00	19,731.00	12,264.12	131.69	142.40	-178.70	-7,733.50	814.19	1,918.53	1,825.37	93.16	20.594				
18,100.00	10,350.00	19,825.00	12,257.56	133.27	143.89	-178.73	-7,827.27	814.02	1,911.53	1,817.36	94.17	20.299				
18,200.00	10,350.00	19,861.34	12,255.67	134.85	144.47	-178.74	-7,863.57	814.07	1,906.37	1,811.46	94.91	20.086				
18,300.00	10,350.00	19,920.00	12,255.33	136.44	145.40	-178.75	-7,922.21	814.35	1,905.04	1,809.31	95.72	19.901				
18,324.55	10,350.00	19,920.00	12,255.33	136.83	145.40	-178.75	-7,922.21	814.35	1,904.88	1,809.05	95.83	19.877				
18,400.00	10,350.00	20,029.43	12,255.59	138.03	147.14	-178.75	-8,031.63	815.56	1,905.45	1,808.62	96.82	19.680				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													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		
18,500.00	10,350.00	20,137.92	12,253.61	139.62	148.87	-178.72	-8,140.08	817.50	1,903.66	1,805.75	97.92	19.442		
18,600.00	10,350.00	20,227.53	12,251.49	141.21	150.30	-178.67	-8,229.64	819.86	1,901.37	1,802.47	98.90	19.225		
18,700.00	10,350.00	20,297.00	12,251.13	142.80	151.42	-178.57	-8,298.98	823.96	1,900.82	1,801.05	99.77	19.052		
18,701.43	10,350.00	20,297.00	12,251.13	142.82	151.42	-178.57	-8,298.98	823.96	1,900.82	1,801.05	99.77	19.051		
18,800.00	10,350.00	20,356.01	12,251.89	144.39	152.37	-178.45	-8,357.79	828.69	1,902.11	1,801.55	100.55	18.917		
18,900.00	10,350.00	20,441.09	12,254.01	145.99	153.74	-178.27	-8,442.58	835.35	1,904.77	1,803.26	101.50	18.765		
19,000.00	10,350.00	20,567.75	12,256.98	147.58	155.77	-178.14	-8,569.07	841.04	1,907.29	1,804.54	102.76	18.561		
19,100.00	10,350.00	20,780.32	12,252.99	149.18	159.17	-178.19	-8,781.56	841.36	1,904.90	1,800.45	104.45	18.238		
19,200.00	10,350.00	20,877.95	12,248.91	150.78	160.73	-178.25	-8,879.10	840.17	1,900.65	1,795.16	105.49	18.018		
19,300.00	10,350.00	20,980.02	12,244.52	152.38	162.36	-178.33	-8,981.05	838.47	1,896.27	1,789.73	106.54	17.798		
19,400.00	10,350.00	21,052.00	12,241.46	153.98	163.50	-178.41	-9,052.95	836.56	1,892.10	1,784.65	107.46	17.608		
19,500.00	10,350.00	21,126.89	12,239.31	155.58	164.70	-178.48	-9,127.78	834.91	1,889.32	1,780.95	108.37	17.434		
19,582.42	10,350.00	21,179.05	12,238.94	156.90	165.53	-178.51	-9,179.94	834.60	1,888.69	1,779.63	109.06	17.319		
19,600.00	10,350.00	21,190.61	12,238.97	157.18	165.72	-178.51	-9,191.50	834.54	1,888.71	1,779.51	109.20	17.295		
19,700.00	10,350.00	21,365.80	12,237.92	158.79	168.52	-178.66	-9,366.61	831.19	1,888.80	1,778.11	110.69	17.064		
19,800.00	10,350.00	21,502.60	12,231.55	160.39	170.70	-178.86	-9,503.17	826.14	1,883.98	1,772.08	111.91	16.835		
19,900.00	10,350.00	21,632.87	12,223.31	162.00	172.78	-178.98	-9,633.14	823.25	1,877.60	1,764.52	113.07	16.605		
20,000.00	10,350.00	21,686.32	12,220.36	163.61	173.63	-179.01	-9,686.50	822.74	1,871.85	1,757.90	113.95	16.427		
20,100.00	10,350.00	21,773.46	12,216.83	165.21	175.03	-179.03	-9,773.58	822.94	1,867.74	1,752.79	114.95	16.248		
20,200.00	10,350.00	21,870.67	12,212.86	166.82	176.60	-179.00	-9,870.69	824.73	1,863.67	1,747.67	116.00	16.066		
20,300.00	10,350.00	21,965.69	12,209.23	168.43	178.14	-178.91	-9,965.56	828.52	1,859.90	1,742.87	117.04	15.891		
20,400.00	10,350.00	22,094.44	12,203.70	170.04	180.22	-178.73	-10,094.00	835.50	1,855.76	1,737.53	118.24	15.695		
20,500.00	10,350.00	22,225.00	12,195.27	171.65	182.28	-178.51	-10,224.02	843.77	1,849.33	1,728.69	120.65	15.329		
20,529.73	10,350.00	22,230.00	12,194.93	172.13	182.87	-178.50	-10,229.00	844.09	1,847.46	1,726.44	121.03	15.265		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.54	-0.47	-49.87	49.87					
100.00	100.00	100.00	100.00	0.13	0.13	-90.54	-0.47	-49.87	49.87	49.69	0.18	281.067		
200.00	200.00	200.00	200.00	0.48	0.48	-90.54	-0.47	-49.87	49.87	49.19	0.68	72.869		
300.00	300.00	300.00	300.00	0.84	0.84	-90.54	-0.47	-49.87	49.87	48.68	1.19	41.861		
400.00	400.00	400.00	400.00	1.20	1.20	-90.54	-0.47	-49.87	49.87	48.17	1.70	29.365		
500.00	500.00	500.00	500.00	1.56	1.56	-90.54	-0.47	-49.87	49.87	47.67	2.21	22.615		
600.00	600.00	600.00	600.00	1.92	1.92	-90.54	-0.47	-49.87	49.87	47.16	2.71	18.388		
700.00	700.00	700.00	700.00	2.28	2.28	-90.54	-0.47	-49.87	49.87	46.65	3.22	15.492		
800.00	800.00	800.00	800.00	2.63	2.63	-90.54	-0.47	-49.87	49.87	46.14	3.73	13.384		
900.00	900.00	900.00	900.00	2.99	2.99	-90.54	-0.47	-49.87	49.87	45.64	4.23	11.781		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.54	-0.47	-49.87	49.87	45.13	4.74	10.521		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-90.54	-0.47	-49.87	49.87	44.62	5.25	9.505		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-90.54	-0.47	-49.87	49.87	44.12	5.75	8.667		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.54	-0.47	-49.87	49.87	43.61	6.26	7.965		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.54	-0.47	-49.87	49.87	43.10	6.77	7.369		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	-90.54	-0.47	-49.87	49.87	42.60	7.27	6.855		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	-90.54	-0.47	-49.87	49.87	42.09	7.78	6.409		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	-90.54	-0.47	-49.87	49.87	41.58	8.29	6.017		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-90.54	-0.47	-49.87	49.87	41.08	8.80	5.670		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-90.54	-0.47	-49.87	49.87	40.57	9.30	5.361		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-90.54	-0.47	-49.87	49.87	40.06	9.81	5.084 CC, ES		
2,100.00	2,100.00	2,098.72	2,098.70	7.29	7.28	-90.25	-0.22	-51.12	51.14	40.83	10.30	4.962 SF		
2,200.00	2,200.00	2,197.30	2,197.21	7.65	7.62	-89.46	0.52	-54.87	54.94	44.15	10.79	5.092		
2,300.00	2,299.99	2,295.52	2,295.23	8.01	7.97	-159.51	1.75	-61.08	62.51	51.25	11.26	5.551		
2,400.00	2,399.91	2,393.01	2,392.32	8.35	8.31	-159.31	3.45	-69.68	75.03	63.31	11.72	6.401		
2,500.00	2,499.69	2,489.40	2,488.06	8.70	8.66	-159.43	5.61	-80.58	92.45	80.28	12.17	7.595		
2,600.00	2,599.27	2,584.36	2,582.08	9.06	9.00	-159.70	8.20	-93.63	114.69	102.08	12.61	9.092		
2,700.00	2,698.57	2,679.79	2,676.30	9.42	9.36	-160.05	11.15	-108.54	141.17	128.09	13.08	10.793		
2,800.00	2,797.54	2,775.48	2,770.74	9.78	9.72	-160.53	14.14	-123.63	170.16	156.60	13.56	12.548		
2,815.66	2,813.00	2,790.40	2,785.47	9.84	9.77	-160.62	14.60	-125.98	174.91	161.28	13.64	12.826		
2,900.00	2,896.24	2,870.69	2,864.71	10.15	10.08	-161.13	17.11	-138.63	200.69	186.65	14.04	14.294		
3,000.00	2,994.95	2,965.89	2,958.67	10.53	10.45	-161.59	20.08	-153.64	231.26	216.74	14.52	15.927		
3,100.00	3,093.65	3,061.09	3,052.63	10.91	10.82	-161.94	23.05	-168.65	261.84	246.84	15.00	17.453		
3,200.00	3,192.36	3,156.28	3,146.60	11.29	11.20	-162.21	26.02	-183.65	292.43	276.95	15.49	18.883		
3,300.00	3,291.06	3,251.48	3,240.56	11.68	11.57	-162.44	28.99	-198.66	323.03	307.06	15.97	20.225		
3,400.00	3,389.76	3,346.68	3,334.52	12.07	11.96	-162.62	31.96	-213.66	353.63	337.17	16.46	21.485		
3,500.00	3,488.47	3,441.88	3,428.48	12.47	12.34	-162.78	34.94	-228.67	384.23	367.28	16.95	22.671		
3,600.00	3,587.17	3,537.07	3,522.44	12.87	12.73	-162.91	37.91	-243.67	414.84	397.40	17.44	23.789		
3,700.00	3,685.88	3,632.27	3,616.40	13.27	13.11	-163.03	40.88	-258.68	445.44	427.51	17.93	24.844		
3,800.00	3,784.58	3,727.47	3,710.36	13.67	13.51	-163.13	43.85	-273.69	476.05	457.63	18.42	25.841		
3,900.00	3,883.28	3,822.67	3,804.32	14.08	13.90	-163.22	46.82	-288.69	506.66	487.74	18.92	26.785		
4,000.00	3,981.99	3,917.86	3,898.28	14.49	14.29	-163.29	49.79	-303.70	537.27	517.86	19.41	27.679		
4,100.00	4,080.69	4,013.06	3,992.24	14.90	14.69	-163.36	52.76	-318.70	567.88	547.97	19.91	28.527		
4,200.00	4,179.39	4,108.26	4,086.20	15.31	15.08	-163.43	55.74	-333.71	598.49	578.09	20.40	29.333		
4,300.00	4,278.10	4,203.46	4,180.16	15.72	15.48	-163.48	58.71	-348.71	629.10	608.20	20.90	30.099		
4,400.00	4,376.80	4,298.65	4,274.12	16.13	15.88	-163.53	61.68	-363.72	659.71	638.31	21.40	30.829		
4,500.00	4,475.51	4,393.85	4,368.08	16.55	16.28	-163.58	64.65	-378.73	690.33	668.43	21.90	31.524		
4,600.00	4,574.21	4,489.05	4,462.04	16.97	16.68	-163.62	67.62	-393.73	720.94	698.54	22.40	32.187		
4,700.00	4,672.91	4,584.25	4,556.00	17.38	17.08	-163.66	70.59	-408.74	751.55	728.65	22.90	32.820		
4,800.00	4,771.62	4,679.45	4,649.96	17.80	17.49	-163.70	73.56	-423.74	782.17	758.77	23.40	33.426		
4,900.00	4,870.32	4,774.64	4,743.93	18.22	17.89	-163.73	76.54	-438.75	812.78	788.88	23.90	34.005		
5,000.00	4,969.03	4,869.84	4,837.89	18.64	18.29	-163.76	79.51	-453.75	843.39	818.99	24.40	34.559		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	4,965.04	4,931.85	19.07	18.70	-163.79	82.48	-468.76	874.01	849.10	24.91	35.090		
5,200.00	5,166.43	5,060.24	5,025.81	19.49	19.11	-163.82	85.45	-483.77	904.62	879.21	25.41	35.600		
5,300.00	5,265.14	5,155.43	5,119.77	19.91	19.51	-163.84	88.42	-498.77	935.24	909.32	25.91	36.089		
5,400.00	5,363.84	5,250.63	5,213.73	20.33	19.92	-163.87	91.39	-513.78	965.85	939.43	26.42	36.559		
5,500.00	5,462.54	5,345.83	5,307.69	20.76	20.33	-163.89	94.36	-528.78	996.47	969.54	26.92	37.011		
5,600.00	5,561.25	5,441.03	5,401.65	21.18	20.74	-163.91	97.34	-543.79	1,027.08	999.65	27.43	37.445		
5,700.00	5,659.95	5,536.22	5,495.61	21.61	21.14	-163.93	100.31	-558.79	1,057.70	1,029.76	27.93	37.863		
5,800.00	5,758.66	5,631.42	5,589.57	22.04	21.55	-163.95	103.28	-573.80	1,088.31	1,059.87	28.44	38.266		
5,900.00	5,857.36	5,726.62	5,683.53	22.46	21.96	-163.97	106.25	-588.81	1,118.93	1,089.98	28.95	38.654		
6,000.00	5,956.06	5,821.82	5,777.49	22.89	22.37	-163.98	109.22	-603.81	1,149.54	1,120.09	29.45	39.029		
6,100.00	6,054.77	5,917.01	5,871.45	23.32	22.78	-164.00	112.19	-618.82	1,180.16	1,150.20	29.96	39.390		
6,200.00	6,153.47	6,012.21	5,965.41	23.75	23.19	-164.01	115.16	-633.82	1,210.78	1,180.31	30.47	39.739		
6,300.00	6,252.18	6,107.41	6,059.37	24.18	23.61	-164.03	118.14	-648.83	1,241.39	1,210.42	30.98	40.076		
6,400.00	6,350.88	6,202.61	6,153.33	24.60	24.02	-164.04	121.11	-663.83	1,272.01	1,240.52	31.48	40.401		
6,500.00	6,449.58	6,297.81	6,247.29	25.03	24.43	-164.05	124.08	-678.84	1,302.62	1,270.63	31.99	40.716		
6,600.00	6,548.29	6,393.00	6,341.26	25.46	24.84	-164.07	127.05	-693.84	1,333.24	1,300.74	32.50	41.021		
6,700.00	6,646.99	6,488.20	6,435.22	25.89	25.25	-164.08	130.02	-708.85	1,363.86	1,330.84	33.01	41.316		
6,758.77	6,705.00	6,544.15	6,490.44	26.15	25.50	-164.08	131.77	-717.67	1,381.85	1,348.54	33.31	41.485		
6,800.00	6,745.73	6,583.46	6,529.24	26.32	25.67	-164.14	132.99	-723.87	1,394.27	1,360.75	33.52	41.596		
6,900.00	6,844.79	6,679.34	6,623.87	26.74	26.08	-164.24	135.99	-738.98	1,422.69	1,388.66	34.03	41.808		
7,000.00	6,944.17	6,775.89	6,719.17	27.13	26.50	-164.31	139.00	-754.20	1,448.68	1,414.15	34.54	41.944		
7,100.00	7,043.80	6,913.86	6,855.58	27.51	27.09	-164.31	143.01	-774.42	1,471.29	1,436.02	35.27	41.718		
7,200.00	7,143.63	7,011.56	7,012.29	27.88	27.72	-164.30	146.43	-791.72	1,487.71	1,451.66	36.05	41.267		
7,300.00	7,243.57	7,231.52	7,171.84	28.22	28.31	-164.29	148.62	-802.77	1,497.65	1,460.86	36.78	40.716		
7,374.43	7,318.00	7,351.40	7,291.64	28.46	28.72	-93.50	149.41	-806.75	1,500.78	1,463.49	37.29	40.246		
7,400.00	7,343.57	7,392.64	7,332.88	28.55	28.86	-93.49	149.51	-807.27	1,501.10	1,463.64	37.46	40.076		
7,500.00	7,443.57	7,503.33	7,443.57	28.87	29.21	-93.49	149.53	-807.37	1,501.16	1,463.19	37.97	39.540		
7,600.00	7,543.57	7,603.33	7,543.57	29.19	29.53	-93.49	149.53	-807.37	1,501.16	1,462.71	38.45	39.044		
7,700.00	7,643.57	7,703.33	7,643.57	29.52	29.85	-93.49	149.53	-807.37	1,501.16	1,462.23	38.93	38.559		
7,800.00	7,743.57	7,803.33	7,743.57	29.84	30.17	-93.49	149.53	-807.37	1,501.16	1,461.74	39.41	38.086		
7,900.00	7,843.57	7,903.33	7,843.57	30.17	30.49	-93.49	149.53	-807.37	1,501.16	1,461.26	39.90	37.624		
7,906.42	7,849.98	7,909.75	7,849.98	30.19	30.51	-93.49	149.53	-807.37	1,501.16	1,461.23	39.93	37.594		
8,000.00	7,943.57	8,000.00	7,940.22	30.49	30.79	-93.53	148.57	-807.36	1,501.21	1,460.84	40.37	37.183		
8,100.00	8,043.57	8,085.51	8,024.89	30.82	31.04	-93.96	137.28	-807.25	1,501.95	1,461.15	40.80	36.814		
8,200.00	8,143.57	8,166.89	8,103.08	31.15	31.25	-94.81	114.95	-807.03	1,503.86	1,462.67	41.19	36.506		
8,300.00	8,243.57	8,240.69	8,170.61	31.48	31.43	-95.93	85.31	-806.73	1,507.57	1,466.02	41.55	36.284		
8,400.00	8,343.57	8,300.00	8,221.77	31.80	31.55	-97.07	55.35	-806.43	1,513.81	1,471.97	41.83	36.187		
8,500.00	8,443.57	8,362.37	8,271.92	32.13	31.67	-98.46	18.33	-806.07	1,523.24	1,481.16	42.08	36.199		
8,600.00	8,543.57	8,411.01	8,308.06	32.46	31.75	-99.68	-14.20	-805.74	1,536.50	1,494.28	42.22	36.390		
8,700.00	8,643.57	8,450.00	8,334.96	32.80	31.82	-100.72	-42.42	-805.46	1,554.02	1,511.75	42.27	36.765		
8,800.00	8,743.57	8,488.52	8,359.59	33.13	31.87	-101.82	-72.02	-805.17	1,576.05	1,533.81	42.24	37.309		
8,900.00	8,843.57	8,519.37	8,377.84	33.46	31.92	-102.73	-96.88	-804.92	1,602.76	1,560.65	42.11	38.059		
9,000.00	8,943.57	8,550.00	8,394.62	33.79	31.96	-103.66	-122.51	-804.67	1,634.17	1,592.25	41.92	38.986		
9,100.00	9,043.57	8,569.32	8,404.49	34.12	31.99	-104.26	-139.11	-804.50	1,670.16	1,628.56	41.60	40.145		
9,200.00	9,143.57	8,600.00	8,418.99	34.46	32.03	-105.23	-166.15	-804.23	1,710.70	1,669.40	41.31	41.415		
9,300.00	9,243.57	8,600.00	8,418.99	34.79	32.03	-105.23	-166.15	-804.23	1,755.40	1,714.60	40.80	43.025		
9,400.00	9,343.57	8,623.50	8,429.11	35.13	32.06	-105.99	-187.35	-804.02	1,804.11	1,763.70	40.41	44.648		
9,500.00	9,443.57	8,650.00	8,439.47	35.46	32.11	-106.85	-211.74	-803.78	1,856.76	1,816.74	40.02	46.397		
9,600.00	9,543.57	8,650.00	8,439.47	35.80	32.11	-106.85	-211.74	-803.78	1,912.69	1,873.22	39.47	48.454		
9,700.00	9,643.57	8,650.00	8,439.47	36.13	32.11	-106.85	-211.74	-803.78	1,972.11	1,933.17	38.94	50.651		
9,800.00	9,743.57	8,672.03	8,447.21	36.47	32.14	-107.57	-232.36	-803.58	2,034.30	1,995.76	38.54	52.778		
9,833.47	9,777.04	8,675.26	8,448.28	36.58	32.14	-107.68	-235.41	-803.55	2,055.78	2,017.39	38.39	53.546		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 103H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,850.00	9,793.56	8,676.88	8,448.81	36.64	32.15	71.51	-236.94	-803.53	2,066.45	2,028.13	38.32	53.931				
9,900.00	9,843.42	8,700.00	8,455.89	36.79	32.19	66.93	-258.95	-803.31	2,098.67	2,060.49	38.18	54.961				
9,950.00	9,892.77	8,700.00	8,455.89	36.93	32.19	63.31	-258.95	-803.31	2,129.84	2,091.92	37.92	56.165				
10,000.00	9,941.23	8,700.00	8,455.89	37.06	32.19	59.95	-258.95	-803.31	2,160.19	2,122.53	37.66	57.361				
10,050.00	9,988.45	8,700.00	8,455.89	37.19	32.19	56.87	-258.95	-803.31	2,189.54	2,152.14	37.40	58.541				
10,100.00	10,034.06	8,700.00	8,455.89	37.30	32.19	54.06	-258.95	-803.31	2,217.70	2,180.55	37.15	59.696				
10,150.00	10,077.71	8,721.08	8,461.57	37.41	32.23	51.19	-279.25	-803.11	2,244.12	2,207.10	37.02	60.622				
10,200.00	10,119.07	8,730.53	8,463.87	37.50	32.24	48.86	-288.42	-803.02	2,269.00	2,232.17	36.83	61.603				
10,250.00	10,157.84	8,750.00	8,468.13	37.58	32.29	46.69	-307.41	-802.83	2,292.12	2,255.42	36.71	62.445				
10,300.00	10,193.70	8,750.00	8,468.13	37.65	32.29	45.03	-307.41	-802.83	2,313.11	2,276.61	36.50	63.372				
10,350.00	10,226.39	8,750.00	8,468.13	37.71	32.29	43.59	-307.41	-802.83	2,332.17	2,295.86	36.31	64.222				
10,400.00	10,255.66	8,772.16	8,472.20	37.76	32.33	42.20	-329.18	-802.62	2,348.79	2,312.55	36.25	64.799				
10,450.00	10,281.29	8,800.00	8,476.11	37.81	32.40	41.04	-356.75	-802.34	2,363.45	2,327.23	36.22	65.257				
10,500.00	10,303.08	8,800.00	8,476.11	37.85	32.40	40.25	-356.75	-802.34	2,375.23	2,339.13	36.10	65.795				
10,550.00	10,320.87	8,800.00	8,476.11	37.90	32.40	39.62	-356.75	-802.34	2,384.76	2,348.75	36.01	66.218				
10,600.00	10,334.52	8,800.00	8,476.11	37.96	32.40	39.16	-356.75	-802.34	2,392.00	2,356.04	35.96	66.518				
10,650.00	10,343.93	8,829.29	8,478.77	38.03	32.48	38.82	-385.92	-802.05	2,396.14	2,360.11	36.03	66.496				
10,700.00	10,349.02	8,850.00	8,479.75	38.12	32.54	38.70	-406.60	-801.85	2,398.04	2,361.94	36.11	66.418				
10,733.47	10,350.00	8,850.00	8,479.75	38.19	32.54	38.72	-406.60	-801.85	2,397.74	2,361.61	36.13	66.361				
10,800.00	10,350.00	8,866.81	8,480.00	38.36	32.59	38.72	-423.40	-801.68	2,396.83	2,360.57	36.26	66.104				
10,810.79	10,350.00	8,867.53	8,480.00	38.39	32.59	38.72	-424.12	-801.67	2,396.80	2,360.53	36.28	66.066				
10,900.00	10,350.00	8,956.74	8,480.00	38.68	32.91	38.72	-513.33	-800.79	2,396.81	2,360.15	36.66	65.384				
11,000.00	10,350.00	9,056.74	8,480.00	39.08	33.36	38.72	-613.33	-799.79	2,396.81	2,359.67	37.15	64.522				
11,100.00	10,350.00	9,156.74	8,480.00	39.56	33.89	38.72	-713.32	-798.80	2,396.82	2,359.11	37.71	63.565				
11,200.00	10,350.00	9,256.74	8,480.00	40.10	34.50	38.72	-813.32	-797.81	2,396.83	2,358.49	38.33	62.529				
11,300.00	10,350.00	9,356.74	8,480.00	40.70	35.19	38.72	-913.31	-796.82	2,396.83	2,357.81	39.02	61.425				
11,400.00	10,350.00	9,456.74	8,480.00	41.37	35.94	38.72	-1,013.31	-795.82	2,396.84	2,357.07	39.77	60.270				
11,500.00	10,350.00	9,556.74	8,480.00	42.08	36.75	38.72	-1,113.30	-794.83	2,396.84	2,356.27	40.57	59.075				
11,600.00	10,350.00	9,656.74	8,480.00	42.85	37.62	38.72	-1,213.30	-793.84	2,396.85	2,355.42	41.43	57.852				
11,700.00	10,350.00	9,756.74	8,480.00	43.67	38.54	38.72	-1,313.29	-792.84	2,396.85	2,354.51	42.34	56.612				
11,800.00	10,350.00	9,856.74	8,480.00	44.53	39.51	38.72	-1,413.29	-791.85	2,396.86	2,353.57	43.29	55.366				
11,900.00	10,350.00	9,956.74	8,480.00	45.44	40.52	38.72	-1,513.29	-790.86	2,396.86	2,352.57	44.29	54.121				
12,000.00	10,350.00	10,056.74	8,480.00	46.39	41.57	38.72	-1,613.28	-789.87	2,396.87	2,351.54	45.32	52.883				
12,100.00	10,350.00	10,156.74	8,480.00	47.37	42.66	38.72	-1,713.28	-788.87	2,396.87	2,350.47	46.40	51.658				
12,200.00	10,350.00	10,256.74	8,480.00	48.39	43.79	38.72	-1,813.27	-787.88	2,396.88	2,349.37	47.51	50.452				
12,300.00	10,350.00	10,356.74	8,480.00	49.45	44.95	38.72	-1,913.27	-786.89	2,396.88	2,348.23	48.65	49.266				
12,400.00	10,350.00	10,456.74	8,480.00	50.54	46.14	38.72	-2,013.26	-785.89	2,396.89	2,347.06	49.83	48.106				
12,500.00	10,350.00	10,556.74	8,480.00	51.66	47.36	38.72	-2,113.26	-784.90	2,396.89	2,345.87	51.03	46.973				
12,600.00	10,350.00	10,656.74	8,480.00	52.80	48.60	38.72	-2,213.25	-783.91	2,396.90	2,344.64	52.26	45.868				
12,700.00	10,350.00	10,756.74	8,480.00	53.97	49.87	38.72	-2,313.25	-782.91	2,396.90	2,343.39	53.51	44.794				
12,800.00	10,350.00	10,856.74	8,480.00	55.17	51.15	38.72	-2,413.24	-781.92	2,396.91	2,342.12	54.78	43.751				
12,900.00	10,350.00	10,956.74	8,480.00	56.39	52.46	38.72	-2,513.24	-780.93	2,396.91	2,340.83	56.08	42.741				
13,000.00	10,350.00	11,056.74	8,480.00	57.63	53.79	38.72	-2,613.23	-779.94	2,396.92	2,339.53	57.39	41.762				
13,100.00	10,350.00	11,156.74	8,480.00	58.89	55.13	38.72	-2,713.23	-778.94	2,396.92	2,338.20	58.73	40.813				
13,200.00	10,350.00	11,256.74	8,480.00	60.17	56.49	38.72	-2,813.22	-777.95	2,396.93	2,336.85	60.08	39.895				
13,300.00	10,350.00	11,356.74	8,480.00	61.47	57.87	38.72	-2,913.22	-776.96	2,396.94	2,335.49	61.45	39.008				
13,400.00	10,350.00	11,456.74	8,480.00	62.78	59.26	38.72	-3,013.21	-775.96	2,396.94	2,334.11	62.83	38.151				
13,500.00	10,350.00	11,556.74	8,480.00	64.11	60.66	38.72	-3,113.21	-774.97	2,396.95	2,332.72	64.22	37.321				
13,600.00	10,350.00	11,656.74	8,480.00	65.45	62.08	38.72	-3,213.20	-773.98	2,396.95	2,331.32	65.63	36.521				
13,700.00	10,350.00	11,756.74	8,480.00	66.81	63.51	38.73	-3,313.20	-772.99	2,396.96	2,329.91	67.05	35.749				
13,800.00	10,350.00	11,856.74	8,480.00	68.18	64.94	38.73	-3,413.19	-771.99	2,396.96	2,328.48	68.48	35.002				
13,900.00	10,350.00	11,956.74	8,480.00	69.56	66.39	38.73	-3,513.19	-771.00	2,396.97	2,327.04	69.92	34.280				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 103H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD															Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
14,000.00	10,350.00	12,056.74	8,480.00	70.96	67.85	38.73	-3,613.18	-770.01	2,396.97	2,325.60	71.38	33.583				
14,100.00	10,350.00	12,156.74	8,480.00	72.36	69.31	38.73	-3,713.18	-769.01	2,396.98	2,324.14	72.83	32.910				
14,200.00	10,350.00	12,256.74	8,480.00	73.78	70.78	38.73	-3,813.17	-768.02	2,396.98	2,322.68	74.30	32.260				
14,300.00	10,350.00	12,356.74	8,480.00	75.20	72.27	38.73	-3,913.17	-767.03	2,396.99	2,321.21	75.78	31.631				
14,400.00	10,350.00	12,456.74	8,480.00	76.63	73.75	38.73	-4,013.16	-766.04	2,396.99	2,319.73	77.26	31.024				
14,500.00	10,350.00	12,556.74	8,480.00	78.08	75.25	38.73	-4,113.16	-765.04	2,397.00	2,318.24	78.75	30.436				
14,600.00	10,350.00	12,656.74	8,480.00	79.53	76.75	38.73	-4,213.15	-764.05	2,397.00	2,316.75	80.25	29.868				
14,700.00	10,350.00	12,756.74	8,480.00	80.99	78.26	38.73	-4,313.15	-763.06	2,397.01	2,315.25	81.76	29.318				
14,800.00	10,350.00	12,856.74	8,480.00	82.45	79.77	38.73	-4,413.14	-762.06	2,397.01	2,313.75	83.27	28.787				
14,900.00	10,350.00	12,956.74	8,480.00	83.92	81.29	38.73	-4,513.14	-761.07	2,397.02	2,312.24	84.78	28.273				
15,000.00	10,350.00	13,056.74	8,480.00	85.40	82.81	38.73	-4,613.13	-760.08	2,397.02	2,310.72	86.30	27.774				
15,100.00	10,350.00	13,156.74	8,480.00	86.89	84.34	38.73	-4,713.13	-759.09	2,397.03	2,309.20	87.83	27.292				
15,200.00	10,350.00	13,256.74	8,480.00	88.38	85.87	38.73	-4,813.12	-758.09	2,397.04	2,307.68	89.36	26.824				
15,300.00	10,350.00	13,356.74	8,480.00	89.87	87.41	38.73	-4,913.12	-757.10	2,397.04	2,306.15	90.89	26.372				
15,400.00	10,350.00	13,456.74	8,480.00	91.38	88.95	38.73	-5,013.11	-756.11	2,397.05	2,304.61	92.43	25.933				
15,500.00	10,350.00	13,556.74	8,480.00	92.88	90.50	38.73	-5,113.11	-755.11	2,397.05	2,303.08	93.97	25.507				
15,600.00	10,350.00	13,656.74	8,480.00	94.39	92.05	38.73	-5,213.10	-754.12	2,397.06	2,301.54	95.52	25.095				
15,700.00	10,350.00	13,756.74	8,480.00	95.91	93.60	38.73	-5,313.10	-753.13	2,397.06	2,299.99	97.07	24.694				
15,800.00	10,350.00	13,856.74	8,480.00	97.43	95.16	38.73	-5,413.09	-752.13	2,397.07	2,298.44	98.62	24.305				
15,900.00	10,350.00	13,956.74	8,480.00	98.96	96.71	38.73	-5,513.09	-751.14	2,397.07	2,296.89	100.18	23.928				
16,000.00	10,350.00	14,056.74	8,480.00	100.49	98.28	38.73	-5,613.08	-750.15	2,397.08	2,295.34	101.74	23.562				
16,100.00	10,350.00	14,156.74	8,480.00	102.02	99.84	38.73	-5,713.08	-749.16	2,397.08	2,293.79	103.30	23.206				
16,200.00	10,350.00	14,256.74	8,480.00	103.55	101.41	38.73	-5,813.07	-748.16	2,397.09	2,292.23	104.86	22.860				
16,300.00	10,350.00	14,356.74	8,480.00	105.09	102.98	38.73	-5,913.07	-747.17	2,397.09	2,290.67	106.43	22.523				
16,400.00	10,350.00	14,456.74	8,480.00	106.64	104.55	38.73	-6,013.06	-746.18	2,397.10	2,289.10	108.00	22.196				
16,500.00	10,350.00	14,556.74	8,480.00	108.18	106.13	38.73	-6,113.06	-745.18	2,397.10	2,287.54	109.57	21.878				
16,600.00	10,350.00	14,656.74	8,480.00	109.73	107.70	38.73	-6,213.05	-744.19	2,397.11	2,285.97	111.14	21.569				
16,700.00	10,350.00	14,756.74	8,480.00	111.29	109.28	38.73	-6,313.05	-743.20	2,397.11	2,284.40	112.71	21.267				
16,800.00	10,350.00	14,856.74	8,480.00	112.84	110.86	38.73	-6,413.04	-742.21	2,397.12	2,282.83	114.29	20.974				
16,900.00	10,350.00	14,956.74	8,480.00	114.40	112.45	38.73	-6,513.04	-741.21	2,397.12	2,281.26	115.87	20.688				
17,000.00	10,350.00	15,056.74	8,480.00	115.96	114.03	38.73	-6,613.03	-740.22	2,397.13	2,279.68	117.45	20.410				
17,100.00	10,350.00	15,156.74	8,480.00	117.52	115.62	38.73	-6,713.03	-739.23	2,397.13	2,278.11	119.03	20.139				
17,200.00	10,350.00	15,256.74	8,480.00	119.09	117.21	38.73	-6,813.02	-738.23	2,397.14	2,276.53	120.61	19.875				
17,300.00	10,350.00	15,356.74	8,480.00	120.66	118.80	38.73	-6,913.02	-737.24	2,397.15	2,274.95	122.20	19.617				
17,400.00	10,350.00	15,456.74	8,480.00	122.23	120.39	38.73	-7,013.01	-736.25	2,397.15	2,273.37	123.78	19.366				
17,500.00	10,350.00	15,556.74	8,480.00	123.80	121.99	38.73	-7,113.01	-735.26	2,397.16	2,271.79	125.37	19.121				
17,600.00	10,350.00	15,656.74	8,480.00	125.37	123.58	38.73	-7,213.00	-734.26	2,397.16	2,270.20	126.96	18.882				
17,700.00	10,350.00	15,756.74	8,480.00	126.95	125.18	38.73	-7,313.00	-733.27	2,397.17	2,268.62	128.55	18.648				
17,800.00	10,350.00	15,856.74	8,480.00	128.52	126.78	38.73	-7,412.99	-732.28	2,397.17	2,267.04	130.13	18.421				
17,900.00	10,350.00	15,956.74	8,480.00	130.10	128.38	38.73	-7,512.99	-731.28	2,397.18	2,265.45	131.72	18.198				
18,000.00	10,350.00	16,056.74	8,480.00	131.69	129.98	38.73	-7,612.98	-730.29	2,397.18	2,263.87	133.32	17.981				
18,100.00	10,350.00	16,156.74	8,480.00	133.27	131.58	38.73	-7,712.98	-729.30	2,397.19	2,262.28	134.91	17.769				
18,200.00	10,350.00	16,256.74	8,480.00	134.85	133.18	38.73	-7,812.97	-728.31	2,397.19	2,260.69	136.50	17.561				
18,300.00	10,350.00	16,356.74	8,480.00	136.44	134.79	38.73	-7,912.97	-727.31	2,397.20	2,259.10	138.10	17.359				
18,400.00	10,350.00	16,456.74	8,480.00	138.03	136.39	38.73	-8,012.96	-726.32	2,397.20	2,257.51	139.69	17.161				
18,500.00	10,350.00	16,556.74	8,480.00	139.62	138.00	38.73	-8,112.96	-725.33	2,397.21	2,255.92	141.29	16.967				
18,600.00	10,350.00	16,656.74	8,480.00	141.21	139.61	38.73	-8,212.95	-724.33	2,397.21	2,254.33	142.88	16.777				
18,700.00	10,350.00	16,756.74	8,480.00	142.80	141.22	38.73	-8,312.95	-723.34	2,397.22	2,252.74	144.48	16.592				
18,800.00	10,350.00	16,856.74	8,480.00	144.39	142.83	38.73	-8,412.95	-722.35	2,397.22	2,251.15	146.08	16.411				
18,900.00	10,350.00	16,956.74	8,480.00	145.99	144.44	38.73	-8,512.94	-721.35	2,397.23	2,249.55	147.67	16.233				
19,000.00	10,350.00	17,056.74	8,480.00	147.58	146.05	38.73	-8,612.94	-720.36	2,397.23	2,247.96	149.27	16.059				
19,100.00	10,350.00	17,156.74	8,480.00	149.18	147.66	38.73	-8,712.93	-719.37	2,397.24	2,246.37	150.87	15.889				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 103H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program:													0-OWSG (Rev2) MWD		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
19,200.00	10,350.00	17,256.74	8,480.00	150.78	149.28	38.73	-8,812.93	-718.38	2,397.24	2,244.78	152.47	15.723				
19,300.00	10,350.00	17,356.74	8,480.00	152.38	150.89	38.73	-8,912.92	-717.38	2,397.25	2,243.18	154.07	15.560				
19,400.00	10,350.00	17,456.74	8,480.00	153.98	152.50	38.73	-9,012.92	-716.39	2,397.26	2,241.59	155.67	15.400				
19,500.00	10,350.00	17,556.74	8,480.00	155.58	154.12	38.73	-9,112.91	-715.40	2,397.26	2,239.99	157.27	15.243				
19,600.00	10,350.00	17,656.74	8,480.00	157.18	155.74	38.73	-9,212.91	-714.40	2,397.27	2,238.40	158.87	15.090				
19,700.00	10,350.00	17,756.74	8,480.00	158.79	157.35	38.73	-9,312.90	-713.41	2,397.27	2,236.80	160.47	14.939				
19,800.00	10,350.00	17,856.74	8,480.00	160.39	158.97	38.73	-9,412.90	-712.42	2,397.28	2,235.21	162.07	14.792				
19,900.00	10,350.00	17,956.74	8,480.00	162.00	160.59	38.73	-9,512.89	-711.43	2,397.28	2,233.61	163.67	14.647				
20,000.00	10,350.00	18,056.74	8,480.00	163.61	162.21	38.73	-9,612.89	-710.43	2,397.29	2,232.02	165.27	14.505				
20,100.00	10,350.00	18,156.74	8,480.00	165.21	163.83	38.74	-9,712.88	-709.44	2,397.29	2,230.42	166.87	14.366				
20,200.00	10,350.00	18,256.74	8,480.00	166.82	165.45	38.74	-9,812.88	-708.45	2,397.30	2,228.82	168.47	14.230				
20,300.00	10,350.00	18,356.74	8,480.00	168.43	167.07	38.74	-9,912.87	-707.45	2,397.30	2,227.23	170.07	14.096				
20,400.00	10,350.00	18,456.74	8,480.00	170.04	168.69	38.74	-10,012.87	-706.46	2,397.31	2,225.63	171.68	13.964				
20,500.00	10,350.00	18,556.74	8,480.00	171.65	170.32	38.74	-10,112.86	-705.47	2,397.31	2,224.04	173.28	13.835				
20,529.73	10,350.00	18,586.48	8,480.00	172.13	170.80	38.74	-10,142.59	-705.17	2,397.31	2,223.56	173.75	13.797				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	89.46	0.24	25.09	25.09						
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.24	25.09	25.09	24.91	0.18	141.406			
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.24	25.09	25.09	24.41	0.68	36.661			
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.24	25.09	25.09	23.90	1.19	21.061			
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.24	25.09	25.09	23.39	1.70	14.774			
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.24	25.09	25.09	22.89	2.21	11.378			
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.24	25.09	25.09	22.38	2.71	9.251			
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.24	25.09	25.09	21.87	3.22	7.794			
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.24	25.09	25.09	21.36	3.73	6.734			
900.00	900.00	900.00	900.00	2.99	2.99	89.46	0.24	25.09	25.09	20.86	4.23	5.927			
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	89.46	0.24	25.09	25.09	20.35	4.74	5.293			
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	89.46	0.24	25.09	25.09	19.84	5.25	4.782			
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	89.46	0.24	25.09	25.09	19.34	5.75	4.361			
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	89.46	0.24	25.09	25.09	18.83	6.26	4.007			
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	89.46	0.24	25.09	25.09	18.32	6.77	3.707			
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.46	0.24	25.09	25.09	17.82	7.27	3.449			
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	89.46	0.24	25.09	25.09	17.31	7.78	3.224			
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	89.46	0.24	25.09	25.09	16.80	8.29	3.027			
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	89.46	0.24	25.09	25.09	16.29	8.80	2.853			
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	89.46	0.24	25.09	25.09	15.79	9.30	2.697			
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	89.46	0.24	25.09	25.09	15.28	9.81	2.558			
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	89.46	0.24	25.09	25.09	14.77	10.32	2.432 CC, ES			
2,200.00	2,200.00	2,199.34	2,199.33	7.65	7.64	88.83	0.54	26.34	26.36	15.55	10.81	2.438			
2,300.00	2,299.99	2,298.61	2,298.52	8.01	7.99	17.19	1.45	30.11	28.93	17.64	11.29	2.562			
2,400.00	2,399.91	2,397.80	2,397.50	8.35	8.34	16.93	2.96	36.37	31.54	19.79	11.76	2.683			
2,500.00	2,499.69	2,496.93	2,496.22	8.70	8.68	17.13	5.07	45.12	34.20	21.99	12.21	2.800			
2,600.00	2,599.27	2,595.99	2,594.60	9.06	9.04	17.69	7.78	56.35	36.90	24.24	12.66	2.914			
2,700.00	2,698.57	2,695.41	2,693.03	9.42	9.40	18.62	11.05	69.88	39.42	26.29	13.13	3.002			
2,800.00	2,797.54	2,795.39	2,791.98	9.78	9.77	20.55	14.43	83.90	39.90	26.27	13.63	2.928			
2,815.66	2,813.00	2,811.05	2,807.47	9.84	9.83	20.97	14.96	86.10	39.76	26.05	13.71	2.901			
2,900.00	2,896.24	2,895.37	2,890.91	10.15	10.14	23.38	17.82	97.92	38.87	24.74	14.13	2.751			
3,000.00	2,994.95	2,995.35	2,989.84	10.53	10.52	26.38	21.20	111.94	37.92	23.28	14.64	2.591			
3,100.00	3,093.65	3,095.32	3,088.76	10.91	10.90	29.52	24.58	125.96	37.07	21.92	15.15	2.447			
3,200.00	3,192.36	3,195.30	3,187.69	11.29	11.28	32.81	27.97	139.97	36.34	20.67	15.67	2.319			
3,300.00	3,291.06	3,295.27	3,286.62	11.68	11.67	36.21	31.35	153.99	35.73	19.53	16.20	2.205			
3,400.00	3,389.76	3,395.25	3,385.55	12.07	12.06	39.72	34.73	168.01	35.26	18.51	16.74	2.106			
3,500.00	3,488.47	3,495.22	3,484.48	12.47	12.45	43.31	38.12	182.03	34.92	17.62	17.29	2.019			
3,600.00	3,587.17	3,595.20	3,583.41	12.87	12.84	46.96	41.50	196.05	34.72	16.86	17.86	1.944			
3,690.83	3,676.83	3,686.01	3,673.27	13.23	13.20	50.29	44.58	208.78	34.66	16.29	18.37	1.886			
3,700.00	3,685.88	3,695.17	3,682.34	13.27	13.24	50.63	44.89	210.07	34.66	16.23	18.43	1.881			
3,800.00	3,784.58	3,795.15	3,781.27	13.67	13.64	54.30	48.27	224.08	34.74	15.74	19.01	1.828			
3,900.00	3,883.28	3,895.12	3,880.20	14.08	14.04	57.94	51.65	238.10	34.97	15.38	19.59	1.785			
4,000.00	3,981.99	3,995.10	3,979.13	14.49	14.44	61.52	55.04	252.12	35.34	15.15	20.19	1.750			
4,100.00	4,080.69	4,095.07	4,078.06	14.90	14.84	65.01	58.42	266.14	35.84	15.05	20.79	1.724			
4,200.00	4,179.39	4,195.05	4,176.99	15.31	15.24	68.40	61.80	280.16	36.47	15.07	21.40	1.704			
4,300.00	4,278.10	4,295.02	4,275.92	15.72	15.65	71.65	65.19	294.18	37.22	15.21	22.01	1.691			
4,400.00	4,376.80	4,395.00	4,374.85	16.13	16.05	74.77	68.57	308.19	38.08	15.47	22.61	1.684			
4,500.00	4,475.51	4,494.97	4,473.78	16.55	16.46	77.75	71.96	322.21	39.06	15.83	23.22	1.682 SF			
4,600.00	4,574.21	4,594.95	4,572.71	16.97	16.86	80.57	75.34	336.23	40.13	16.30	23.83	1.684			
4,700.00	4,672.91	4,694.92	4,671.64	17.38	17.27	83.23	78.72	350.25	41.30	16.86	24.44	1.690			
4,800.00	4,771.62	4,794.90	4,770.57	17.80	17.68	85.75	82.11	364.27	42.55	17.51	25.05	1.699			
4,900.00	4,870.32	4,894.87	4,869.50	18.22	18.09	88.12	85.49	378.29	43.88	18.23	25.65	1.711			

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,969.03	4,994.85	4,968.43	18.64	18.50	90.34	88.87	392.30	45.28	19.03	26.25	1.725		
5,100.00	5,067.73	5,094.82	5,067.36	19.07	18.91	92.43	92.26	406.32	46.74	19.90	26.85	1.741		
5,200.00	5,166.43	5,194.80	5,166.29	19.49	19.32	94.39	95.64	420.34	48.26	20.83	27.44	1.759		
5,300.00	5,265.14	5,294.78	5,265.22	19.91	19.74	96.23	99.03	434.36	49.84	21.81	28.03	1.778		
5,400.00	5,363.84	5,394.75	5,364.15	20.33	20.15	97.95	102.41	448.38	51.46	22.84	28.62	1.798		
5,500.00	5,462.54	5,494.73	5,463.08	20.76	20.56	99.57	105.79	462.40	53.13	23.92	29.21	1.819		
5,600.00	5,561.25	5,594.70	5,562.01	21.18	20.98	101.08	109.18	476.41	54.83	25.04	29.79	1.841		
5,700.00	5,659.95	5,694.68	5,660.94	21.61	21.39	102.51	112.56	490.43	56.58	26.20	30.37	1.863		
5,800.00	5,758.66	5,794.65	5,759.87	22.04	21.81	103.85	115.94	504.45	58.35	27.40	30.96	1.885		
5,900.00	5,857.36	5,894.63	5,858.80	22.46	22.22	105.11	119.33	518.47	60.16	28.62	31.54	1.908		
6,000.00	5,956.06	5,994.60	5,957.73	22.89	22.64	106.29	122.71	532.49	61.99	29.88	32.11	1.930		
6,100.00	6,054.77	6,094.58	6,056.66	23.32	23.05	107.41	126.10	546.51	63.85	31.16	32.69	1.953		
6,200.00	6,153.47	6,194.55	6,155.59	23.75	23.47	108.46	129.48	560.52	65.73	32.46	33.27	1.976		
6,300.00	6,252.18	6,294.53	6,254.51	24.18	23.89	109.46	132.86	574.54	67.63	33.79	33.84	1.998		
6,400.00	6,350.88	6,394.50	6,353.44	24.60	24.30	110.40	136.25	588.56	69.55	35.13	34.41	2.021		
6,500.00	6,449.58	6,494.48	6,452.37	25.03	24.72	111.29	139.63	602.58	71.49	36.50	34.99	2.043		
6,600.00	6,548.29	6,594.45	6,551.30	25.46	25.14	112.13	143.01	616.60	73.44	37.88	35.56	2.065		
6,700.00	6,646.99	6,694.43	6,650.23	25.89	25.55	112.93	146.40	630.62	75.41	39.28	36.13	2.087		
6,758.77	6,705.00	6,753.18	6,708.37	26.15	25.80	113.38	148.39	638.85	76.57	40.11	36.47	2.100		
6,800.00	6,745.73	6,794.41	6,749.17	26.32	25.97	113.54	149.78	644.63	77.30	40.60	36.70	2.106		
6,900.00	6,844.79	6,894.16	6,847.90	26.74	26.39	112.83	153.11	658.44	78.40	41.10	37.31	2.102		
7,000.00	6,944.17	6,993.56	6,946.56	27.13	26.79	111.84	155.95	670.17	79.13	41.24	37.89	2.088		
7,100.00	7,043.80	7,092.99	7,045.54	27.51	27.17	110.91	158.17	679.40	79.63	41.18	38.45	2.071		
7,200.00	7,143.63	7,192.45	7,144.75	27.88	27.54	110.04	159.80	686.13	79.91	40.92	38.99	2.049		
7,300.00	7,243.57	7,291.94	7,244.14	28.22	27.89	109.21	160.82	690.35	79.95	40.45	39.50	2.024		
7,374.43	7,318.00	7,366.01	7,318.20	28.46	28.14	179.39	161.18	691.86	79.82	39.97	39.86	2.003		
7,400.00	7,343.57	7,391.46	7,343.65	28.55	28.23	179.25	161.23	692.05	79.78	39.80	39.98	1.996		
7,440.36	7,383.93	7,431.74	7,383.93	28.68	28.36	179.22	161.24	692.09	79.77	39.61	40.16	1.986		
7,500.00	7,443.57	7,491.38	7,443.57	28.87	28.55	179.22	161.24	692.09	79.77	39.34	40.44	1.973		
7,600.00	7,543.57	7,591.38	7,543.57	29.19	28.88	179.22	161.24	692.09	79.77	38.87	40.90	1.951		
7,700.00	7,643.57	7,691.38	7,643.57	29.52	29.21	179.22	161.24	692.09	79.77	38.41	41.36	1.929		
7,800.00	7,743.57	7,791.38	7,743.57	29.84	29.53	179.22	161.24	692.09	79.77	37.95	41.82	1.907		
7,900.00	7,843.57	7,891.38	7,843.57	30.17	29.86	179.22	161.24	692.09	79.77	37.49	42.28	1.887		
8,000.00	7,943.57	7,978.97	7,930.86	30.49	30.12	179.23	155.07	692.15	86.87	44.96	41.91	2.073		
8,100.00	8,043.57	8,062.42	8,012.22	30.82	30.36	179.27	136.91	692.33	108.71	68.01	40.71	2.671		
8,200.00	8,143.57	8,139.17	8,084.02	31.15	30.55	179.30	109.93	692.60	143.97	104.79	39.18	3.674		
8,300.00	8,243.57	8,207.64	8,144.52	31.48	30.71	179.33	77.96	692.92	190.78	153.23	37.54	5.082		
8,400.00	8,343.57	8,267.45	8,193.93	31.80	30.83	179.34	44.30	693.26	247.16	211.25	35.91	6.883		
8,500.00	8,443.57	8,319.09	8,233.57	32.13	30.92	179.35	11.23	693.59	311.29	276.91	34.38	9.055		
8,600.00	8,543.57	8,363.45	8,265.11	32.46	31.00	179.36	-19.93	693.90	381.61	348.61	33.00	11.564		
8,700.00	8,643.57	8,400.00	8,289.24	32.80	31.06	179.37	-47.38	694.17	456.86	425.14	31.71	14.406		
8,800.00	8,743.57	8,434.28	8,310.24	33.13	31.11	179.37	-74.47	694.44	536.01	505.25	30.77	17.423		
8,900.00	8,843.57	8,450.00	8,319.31	33.46	31.14	179.38	-87.30	694.57	618.58	589.18	29.40	21.043		
9,000.00	8,943.57	8,500.00	8,345.79	33.79	31.22	179.38	-129.70	694.99	703.40	673.78	29.62	23.746		
9,100.00	9,043.57	8,500.00	8,345.79	34.12	31.22	179.38	-129.70	694.99	790.14	761.83	28.32	27.904		
9,200.00	9,143.57	8,527.63	8,358.80	34.46	31.26	179.39	-154.06	695.24	878.61	850.51	28.10	31.267		
9,300.00	9,243.57	8,550.00	8,368.47	34.79	31.30	179.39	-174.24	695.44	968.63	940.78	27.85	34.782		
9,400.00	9,343.57	8,550.00	8,368.47	35.13	31.30	179.39	-174.24	695.44	1,059.84	1,032.62	27.21	38.945		
9,500.00	9,443.57	8,572.48	8,377.39	35.46	31.34	179.39	-194.88	695.65	1,151.85	1,124.67	27.18	42.382		
9,600.00	9,543.57	8,600.00	8,387.18	35.80	31.39	179.39	-220.58	695.90	1,245.11	1,217.84	27.28	45.649		
9,700.00	9,643.57	8,600.00	8,387.18	36.13	31.39	179.39	-220.58	695.90	1,338.50	1,311.54	26.96	49.646		
9,800.00	9,743.57	8,600.00	8,387.18	36.47	31.39	179.39	-220.58	695.90	1,432.78	1,406.04	26.74	53.575		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,833.47	9,777.04	8,600.00	8,387.18	36.58	31.39	179.39	-220.58	695.90	1,464.51	1,437.82	26.69	54.876		
9,850.00	9,793.56	8,600.00	8,387.18	36.64	31.39	-0.03	-220.58	695.90	1,480.13	1,453.47	26.66	55.520		
9,900.00	9,843.42	8,600.00	8,387.18	36.79	31.39	-0.03	-220.58	695.90	1,526.48	1,499.93	26.55	57.488		
9,950.00	9,892.77	8,620.90	8,393.79	36.93	31.43	-0.02	-240.41	696.10	1,570.82	1,544.14	26.68	58.880		
10,000.00	9,941.23	8,627.75	8,395.80	37.06	31.45	-0.02	-246.96	696.17	1,613.57	1,586.98	26.59	60.673		
10,050.00	9,988.45	8,650.00	8,401.78	37.19	31.50	-0.02	-268.39	696.38	1,654.52	1,627.86	26.66	62.057		
10,100.00	10,034.06	8,650.00	8,401.78	37.30	31.50	-0.01	-268.39	696.38	1,692.78	1,666.32	26.46	63.981		
10,150.00	10,077.71	8,650.00	8,401.78	37.41	31.50	-0.01	-268.39	696.38	1,728.77	1,702.52	26.25	65.859		
10,200.00	10,119.07	8,650.00	8,401.78	37.50	31.50	-0.01	-268.39	696.38	1,762.38	1,736.34	26.05	67.666		
10,250.00	10,157.84	8,670.90	8,406.64	37.58	31.55	-0.01	-288.71	696.58	1,792.99	1,766.97	26.02	68.897		
10,300.00	10,193.70	8,680.88	8,408.70	37.65	31.58	-0.01	-298.47	696.68	1,820.91	1,795.01	25.90	70.300		
10,350.00	10,226.39	8,700.00	8,412.16	37.71	31.63	-0.01	-317.28	696.87	1,845.96	1,820.11	25.85	71.403		
10,400.00	10,255.66	8,700.00	8,412.16	37.76	31.63	-0.01	-317.28	696.87	1,867.80	1,842.13	25.67	72.759		
10,450.00	10,281.29	8,700.00	8,412.16	37.81	31.63	-0.01	-317.28	696.87	1,886.77	1,861.25	25.51	73.949		
10,500.00	10,303.08	8,723.64	8,415.58	37.85	31.69	-0.01	-340.67	697.10	1,902.18	1,876.67	25.51	74.561		
10,550.00	10,320.87	8,750.00	8,418.24	37.90	31.78	-0.01	-366.89	697.36	1,914.77	1,889.25	25.52	75.016		
10,600.00	10,334.52	8,750.00	8,418.24	37.96	31.78	-0.01	-366.89	697.36	1,923.56	1,898.13	25.43	75.627		
10,650.00	10,343.93	8,750.00	8,418.24	38.03	31.78	-0.01	-366.89	697.36	1,929.31	1,903.92	25.38	76.006		
10,700.00	10,349.02	8,768.94	8,419.41	38.12	31.84	-0.01	-385.79	697.55	1,931.58	1,906.16	25.42	75.977		
10,733.47	10,350.00	8,776.60	8,419.71	38.19	31.86	-0.01	-393.44	697.63	1,931.27	1,905.82	25.45	75.887		
10,800.00	10,350.00	8,794.85	8,420.00	38.36	31.93	-0.01	-411.69	697.81	1,930.05	1,904.50	25.55	75.544		
10,838.42	10,350.00	8,820.03	8,420.00	38.47	32.02	-0.01	-436.87	698.06	1,930.00	1,904.35	25.65	75.242		
10,900.00	10,350.00	8,881.61	8,420.00	38.68	32.27	-0.01	-498.45	698.68	1,930.00	1,904.16	25.84	74.693		
11,000.00	10,350.00	8,981.61	8,420.00	39.08	32.75	-0.01	-598.44	699.67	1,930.00	1,903.82	26.18	73.708		
11,100.00	10,350.00	9,081.61	8,420.00	39.56	33.31	-0.01	-698.44	700.67	1,930.00	1,903.43	26.57	72.636		
11,200.00	10,350.00	9,181.61	8,420.00	40.10	33.95	-0.01	-798.43	701.67	1,930.00	1,903.00	27.00	71.488		
11,300.00	10,350.00	9,281.61	8,420.00	40.70	34.65	-0.01	-898.43	702.67	1,930.00	1,902.54	27.46	70.278		
11,400.00	10,350.00	9,381.61	8,420.00	41.37	35.42	-0.01	-998.42	703.67	1,930.00	1,902.04	27.96	69.019		
11,500.00	10,350.00	9,481.61	8,420.00	42.08	36.24	-0.01	-1,098.42	704.67	1,930.00	1,901.50	28.50	67.722		
11,600.00	10,350.00	9,581.61	8,420.00	42.85	37.13	-0.01	-1,198.41	705.67	1,930.00	1,900.93	29.07	66.398		
11,700.00	10,350.00	9,681.61	8,420.00	43.67	38.06	-0.01	-1,298.41	706.66	1,930.00	1,900.33	29.67	65.058		
11,800.00	10,350.00	9,781.61	8,420.00	44.53	39.04	-0.01	-1,398.40	707.66	1,930.00	1,899.71	30.29	63.710		
11,900.00	10,350.00	9,881.61	8,420.00	45.44	40.06	-0.01	-1,498.40	708.66	1,930.00	1,899.05	30.95	62.362		
12,000.00	10,350.00	9,981.61	8,420.00	46.39	41.13	-0.01	-1,598.39	709.66	1,930.00	1,898.37	31.63	61.020		
12,100.00	10,350.00	10,081.61	8,420.00	47.37	42.23	-0.01	-1,698.39	710.66	1,930.00	1,897.67	32.33	59.692		
12,200.00	10,350.00	10,181.61	8,420.00	48.39	43.37	-0.01	-1,798.38	711.66	1,930.00	1,896.94	33.06	58.380		
12,300.00	10,350.00	10,281.61	8,420.00	49.45	44.54	-0.01	-1,898.38	712.65	1,930.00	1,896.19	33.81	57.090		
12,400.00	10,350.00	10,381.61	8,420.00	50.54	45.73	-0.01	-1,998.37	713.65	1,930.00	1,895.43	34.57	55.824		
12,500.00	10,350.00	10,481.61	8,420.00	51.66	46.96	-0.01	-2,098.37	714.65	1,930.00	1,894.64	35.36	54.585		
12,600.00	10,350.00	10,581.61	8,420.00	52.80	48.21	-0.01	-2,198.36	715.65	1,930.00	1,893.84	36.16	53.374		
12,700.00	10,350.00	10,681.61	8,420.00	53.97	49.49	-0.01	-2,298.36	716.65	1,930.00	1,893.02	36.98	52.193		
12,800.00	10,350.00	10,781.61	8,420.00	55.17	50.78	-0.01	-2,398.35	717.65	1,930.00	1,892.19	37.81	51.044		
12,900.00	10,350.00	10,881.61	8,420.00	56.39	52.10	-0.01	-2,498.35	718.65	1,930.00	1,891.34	38.66	49.926		
13,000.00	10,350.00	10,981.61	8,420.00	57.63	53.43	-0.01	-2,598.34	719.64	1,930.00	1,890.48	39.52	48.840		
13,100.00	10,350.00	11,081.61	8,420.00	58.89	54.79	-0.01	-2,698.34	720.64	1,930.00	1,889.61	40.39	47.785		
13,200.00	10,350.00	11,181.61	8,420.00	60.17	56.15	-0.01	-2,798.33	721.64	1,930.00	1,888.73	41.27	46.762		
13,300.00	10,350.00	11,281.61	8,420.00	61.47	57.54	-0.01	-2,898.33	722.64	1,930.00	1,887.83	42.17	45.771		
13,400.00	10,350.00	11,381.61	8,420.00	62.78	58.93	-0.01	-2,998.32	723.64	1,930.00	1,886.93	43.07	44.810		
13,500.00	10,350.00	11,481.61	8,420.00	64.11	60.34	-0.01	-3,098.32	724.64	1,930.00	1,886.02	43.98	43.879		
13,600.00	10,350.00	11,581.61	8,420.00	65.45	61.76	-0.01	-3,198.31	725.63	1,930.00	1,885.09	44.91	42.978		
13,700.00	10,350.00	11,681.61	8,420.00	66.81	63.20	-0.01	-3,298.31	726.63	1,930.00	1,884.16	45.84	42.105		
13,800.00	10,350.00	11,781.61	8,420.00	68.18	64.64	-0.01	-3,398.30	727.63	1,930.00	1,883.22	46.78	41.260		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	10,350.00	11,881.61	8,420.00	69.56	66.09	-0.01	-3,498.30	728.63	1,930.00	1,882.28	47.72	40.442		
14,000.00	10,350.00	11,981.61	8,420.00	70.96	67.55	-0.01	-3,598.29	729.63	1,930.00	1,881.33	48.68	39.651		
14,100.00	10,350.00	12,081.61	8,420.00	72.36	69.02	-0.01	-3,698.29	730.63	1,930.00	1,880.37	49.63	38.884		
14,200.00	10,350.00	12,181.61	8,420.00	73.78	70.50	-0.01	-3,798.28	731.63	1,930.00	1,879.40	50.60	38.142		
14,300.00	10,350.00	12,281.61	8,420.00	75.20	71.99	-0.01	-3,898.28	732.62	1,930.00	1,878.43	51.57	37.424		
14,400.00	10,350.00	12,381.61	8,420.00	76.63	73.48	-0.01	-3,998.27	733.62	1,930.00	1,877.45	52.55	36.728		
14,500.00	10,350.00	12,481.61	8,420.00	78.08	74.98	-0.01	-4,098.27	734.62	1,930.00	1,876.47	53.53	36.054		
14,600.00	10,350.00	12,581.61	8,420.00	79.53	76.49	0.00	-4,198.26	735.62	1,930.00	1,875.48	54.52	35.402		
14,700.00	10,350.00	12,681.61	8,420.00	80.99	78.00	0.00	-4,298.26	736.62	1,930.00	1,874.49	55.51	34.769		
14,800.00	10,350.00	12,781.61	8,420.00	82.45	79.52	0.00	-4,398.25	737.62	1,930.00	1,873.50	56.50	34.156		
14,900.00	10,350.00	12,881.61	8,420.00	83.92	81.04	0.00	-4,498.25	738.61	1,930.00	1,872.50	57.50	33.562		
15,000.00	10,350.00	12,981.61	8,420.00	85.40	82.57	0.00	-4,598.24	739.61	1,930.00	1,871.49	58.51	32.986		
15,100.00	10,350.00	13,081.61	8,420.00	86.89	84.10	0.00	-4,698.24	740.61	1,930.00	1,870.48	59.52	32.428		
15,200.00	10,350.00	13,181.61	8,420.00	88.38	85.63	0.00	-4,798.23	741.61	1,930.00	1,869.47	60.53	31.886		
15,300.00	10,350.00	13,281.61	8,420.00	89.87	87.17	0.00	-4,898.23	742.61	1,930.00	1,868.46	61.54	31.360		
15,400.00	10,350.00	13,381.61	8,420.00	91.38	88.72	0.00	-4,998.22	743.61	1,930.00	1,867.44	62.56	30.850		
15,500.00	10,350.00	13,481.61	8,420.00	92.88	90.27	0.00	-5,098.22	744.61	1,930.00	1,866.42	63.58	30.354		
15,600.00	10,350.00	13,581.61	8,420.00	94.39	91.82	0.00	-5,198.21	745.60	1,930.00	1,865.39	64.61	29.873		
15,700.00	10,350.00	13,681.61	8,420.00	95.91	93.37	0.00	-5,298.21	746.60	1,930.00	1,864.37	65.63	29.406		
15,800.00	10,350.00	13,781.61	8,420.00	97.43	94.93	0.00	-5,398.20	747.60	1,930.00	1,863.34	66.66	28.952		
15,900.00	10,350.00	13,881.61	8,420.00	98.96	96.50	0.00	-5,498.20	748.60	1,930.00	1,862.31	67.69	28.510		
16,000.00	10,350.00	13,981.61	8,420.00	100.49	98.06	0.00	-5,598.19	749.60	1,930.00	1,861.27	68.73	28.081		
16,100.00	10,350.00	14,081.61	8,420.00	102.02	99.63	0.00	-5,698.19	750.60	1,930.00	1,860.23	69.77	27.664		
16,200.00	10,350.00	14,181.61	8,420.00	103.55	101.20	0.00	-5,798.18	751.59	1,930.00	1,859.19	70.81	27.258		
16,300.00	10,350.00	14,281.61	8,420.00	105.09	102.77	0.00	-5,898.18	752.59	1,930.00	1,858.15	71.85	26.863		
16,400.00	10,350.00	14,381.61	8,420.00	106.64	104.35	0.00	-5,998.17	753.59	1,930.00	1,857.11	72.89	26.478		
16,500.00	10,350.00	14,481.61	8,420.00	108.18	105.92	0.00	-6,098.17	754.59	1,930.00	1,856.07	73.93	26.104		
16,600.00	10,350.00	14,581.61	8,420.00	109.73	107.50	0.00	-6,198.16	755.59	1,930.00	1,855.02	74.98	25.740		
16,700.00	10,350.00	14,681.61	8,420.00	111.29	109.08	0.00	-6,298.16	756.59	1,930.00	1,853.97	76.03	25.385		
16,800.00	10,350.00	14,781.61	8,420.00	112.84	110.67	0.00	-6,398.15	757.58	1,930.00	1,852.92	77.08	25.039		
16,900.00	10,350.00	14,881.61	8,420.00	114.40	112.25	0.00	-6,498.15	758.58	1,930.00	1,851.87	78.13	24.701		
17,000.00	10,350.00	14,981.61	8,420.00	115.96	113.84	0.00	-6,598.14	759.58	1,930.00	1,850.81	79.19	24.373		
17,100.00	10,350.00	15,081.61	8,420.00	117.52	115.43	0.00	-6,698.14	760.58	1,930.00	1,849.76	80.24	24.052		
17,200.00	10,350.00	15,181.61	8,420.00	119.09	117.02	0.00	-6,798.13	761.58	1,930.00	1,848.70	81.30	23.740		
17,300.00	10,350.00	15,281.61	8,420.00	120.66	118.61	0.00	-6,898.13	762.58	1,930.00	1,847.64	82.36	23.435		
17,400.00	10,350.00	15,381.61	8,420.00	122.23	120.21	0.00	-6,998.12	763.58	1,930.00	1,846.58	83.42	23.137		
17,500.00	10,350.00	15,481.61	8,420.00	123.80	121.80	0.00	-7,098.12	764.57	1,930.00	1,845.52	84.48	22.847		
17,600.00	10,350.00	15,581.61	8,420.00	125.37	123.40	0.00	-7,198.11	765.57	1,930.00	1,844.46	85.54	22.563		
17,700.00	10,350.00	15,681.61	8,420.00	126.95	125.00	0.00	-7,298.11	766.57	1,930.00	1,843.40	86.60	22.286		
17,800.00	10,350.00	15,781.61	8,420.00	128.52	126.60	0.00	-7,398.10	767.57	1,930.00	1,842.33	87.67	22.015		
17,900.00	10,350.00	15,881.61	8,420.00	130.10	128.20	0.00	-7,498.10	768.57	1,930.00	1,841.27	88.73	21.751		
18,000.00	10,350.00	15,981.61	8,420.00	131.69	129.80	0.00	-7,598.09	769.57	1,930.00	1,840.20	89.80	21.493		
18,100.00	10,350.00	16,081.61	8,420.00	133.27	131.41	0.00	-7,698.09	770.56	1,930.00	1,839.13	90.87	21.240		
18,200.00	10,350.00	16,181.61	8,420.00	134.85	133.01	0.00	-7,798.08	771.56	1,930.00	1,838.07	91.93	20.993		
18,300.00	10,350.00	16,281.61	8,420.00	136.44	134.62	0.00	-7,898.08	772.56	1,930.00	1,837.00	93.00	20.752		
18,400.00	10,350.00	16,381.61	8,420.00	138.03	136.23	0.00	-7,998.07	773.56	1,930.00	1,835.93	94.07	20.516		
18,500.00	10,350.00	16,481.61	8,420.00	139.62	137.84	0.00	-8,098.07	774.56	1,930.00	1,834.85	95.15	20.285		
18,600.00	10,350.00	16,581.61	8,420.00	141.21	139.44	0.00	-8,198.06	775.56	1,930.00	1,833.78	96.22	20.059		
18,700.00	10,350.00	16,681.61	8,420.00	142.80	141.05	0.00	-8,298.06	776.56	1,930.00	1,832.71	97.29	19.837		
18,800.00	10,350.00	16,781.61	8,420.00	144.39	142.67	0.00	-8,398.05	777.55	1,930.00	1,831.64	98.36	19.621		
18,900.00	10,350.00	16,881.61	8,420.00	145.99	144.28	0.00	-8,498.05	778.55	1,930.00	1,830.56	99.44	19.409		
19,000.00	10,350.00	16,981.61	8,420.00	147.58	145.89	0.00	-8,598.04	779.55	1,930.00	1,829.49	100.51	19.201		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 104H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
19,100.00	10,350.00	17,081.61	8,420.00	149.18	147.50	0.00	-8,698.04	780.55	1,930.00	1,828.41	101.59	18.998	
19,200.00	10,350.00	17,181.61	8,420.00	150.78	149.12	0.00	-8,798.03	781.55	1,930.00	1,827.33	102.67	18.798	
19,300.00	10,350.00	17,281.61	8,420.00	152.38	150.74	0.00	-8,898.03	782.55	1,930.00	1,826.25	103.75	18.603	
19,400.00	10,350.00	17,381.61	8,420.00	153.98	152.35	0.00	-8,998.02	783.54	1,930.00	1,825.18	104.82	18.412	
19,500.00	10,350.00	17,481.61	8,420.00	155.58	153.97	0.00	-9,098.02	784.54	1,930.00	1,824.10	105.90	18.224	
19,600.00	10,350.00	17,581.61	8,420.00	157.18	155.59	0.00	-9,198.01	785.54	1,930.00	1,823.02	106.98	18.040	
19,700.00	10,350.00	17,681.61	8,420.00	158.79	157.20	0.00	-9,298.01	786.54	1,930.00	1,821.94	108.06	17.860	
19,800.00	10,350.00	17,781.61	8,420.00	160.39	158.82	0.00	-9,398.00	787.54	1,930.00	1,820.86	109.14	17.683	
19,900.00	10,350.00	17,881.61	8,420.00	162.00	160.44	0.00	-9,498.00	788.54	1,930.00	1,819.78	110.22	17.510	
20,000.00	10,350.00	17,981.61	8,420.00	163.61	162.06	0.00	-9,597.99	789.54	1,930.00	1,818.69	111.31	17.340	
20,100.00	10,350.00	18,081.61	8,420.00	165.21	163.68	0.00	-9,697.99	790.53	1,930.00	1,817.61	112.39	17.173	
20,200.00	10,350.00	18,181.61	8,420.00	166.82	165.31	0.00	-9,797.98	791.53	1,930.00	1,816.53	113.47	17.009	
20,300.00	10,350.00	18,281.61	8,420.00	168.43	166.93	0.00	-9,897.98	792.53	1,930.00	1,815.44	114.56	16.848	
20,400.00	10,350.00	18,381.61	8,420.00	170.04	168.55	0.00	-9,997.97	793.53	1,930.00	1,814.36	115.64	16.690	
20,500.00	10,350.00	18,481.61	8,420.00	171.65	170.17	0.00	-10,097.97	794.53	1,930.00	1,813.28	116.72	16.535	
20,519.93	10,350.00	18,501.54	8,420.00	171.97	170.50	0.00	-10,117.90	794.73	1,930.00	1,813.06	116.94	16.504	
20,529.73	10,350.00	18,511.34	8,420.00	172.13	170.66	0.00	-10,127.70	794.82	1,930.00	1,812.95	117.05	16.489	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.54	-0.24	-25.09	25.09					
100.00	100.00	100.00	100.00	0.13	0.13	-90.54	-0.24	-25.09	25.09	24.91	0.18	141.406		
200.00	200.00	200.00	200.00	0.48	0.48	-90.54	-0.24	-25.09	25.09	24.41	0.68	36.661		
300.00	300.00	300.00	300.00	0.84	0.84	-90.54	-0.24	-25.09	25.09	23.90	1.19	21.061		
400.00	400.00	400.00	400.00	1.20	1.20	-90.54	-0.24	-25.09	25.09	23.39	1.70	14.774		
500.00	500.00	500.00	500.00	1.56	1.56	-90.54	-0.24	-25.09	25.09	22.89	2.21	11.378		
600.00	600.00	600.00	600.00	1.92	1.92	-90.54	-0.24	-25.09	25.09	22.38	2.71	9.251		
700.00	700.00	700.00	700.00	2.28	2.28	-90.54	-0.24	-25.09	25.09	21.87	3.22	7.794		
800.00	800.00	800.00	800.00	2.63	2.63	-90.54	-0.24	-25.09	25.09	21.36	3.73	6.734		
900.00	900.00	900.00	900.00	2.99	2.99	-90.54	-0.24	-25.09	25.09	20.86	4.23	5.927		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.54	-0.24	-25.09	25.09	20.35	4.74	5.293		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-90.54	-0.24	-25.09	25.09	19.84	5.25	4.782		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-90.54	-0.24	-25.09	25.09	19.34	5.75	4.361		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.54	-0.24	-25.09	25.09	18.83	6.26	4.007		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.54	-0.24	-25.09	25.09	18.32	6.77	3.707		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	-90.54	-0.24	-25.09	25.09	17.82	7.27	3.449		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	-90.54	-0.24	-25.09	25.09	17.31	7.78	3.224		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	-90.54	-0.24	-25.09	25.09	16.80	8.29	3.027		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-90.54	-0.24	-25.09	25.09	16.29	8.80	2.853		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-90.54	-0.24	-25.09	25.09	15.79	9.30	2.697		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-90.54	-0.24	-25.09	25.09	15.28	9.81	2.558		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	-90.54	-0.24	-25.09	25.09	14.77	10.32	2.432	CC, ES, SF	
2,200.00	2,200.00	2,199.35	2,199.34	7.65	7.64	-89.73	0.12	-26.33	26.34	15.53	10.81	2.436		
2,300.00	2,299.99	2,298.50	2,298.41	8.01	7.99	-159.33	1.20	-30.04	31.33	20.03	11.29	2.774		
2,400.00	2,399.91	2,397.10	2,396.80	8.35	8.33	-158.92	2.98	-36.18	41.26	29.50	11.76	3.508		
2,500.00	2,499.69	2,494.79	2,494.09	8.70	8.68	-158.95	5.44	-44.67	56.09	43.86	12.22	4.589		
2,600.00	2,599.27	2,591.23	2,589.88	9.06	9.02	-159.14	8.55	-55.39	75.75	63.07	12.67	5.976		
2,700.00	2,698.57	2,686.09	2,683.80	9.42	9.37	-159.35	12.26	-68.19	100.15	87.04	13.12	7.636		
2,800.00	2,797.54	2,779.32	2,775.75	9.78	9.72	-159.53	16.54	-82.95	129.21	115.66	13.55	9.536		
2,815.66	2,813.00	2,794.19	2,790.39	9.84	9.77	-159.56	17.26	-85.45	134.12	120.49	13.63	9.843		
2,900.00	2,896.24	2,874.22	2,869.18	10.15	10.08	-159.85	21.16	-98.90	160.72	146.69	14.03	11.456		
3,000.00	2,994.95	2,969.12	2,962.61	10.53	10.44	-160.08	25.78	-114.84	192.26	177.75	14.51	13.252		
3,100.00	3,093.65	3,064.01	3,056.04	10.91	10.81	-160.25	30.41	-130.79	223.81	208.82	14.99	14.931		
3,200.00	3,192.36	3,158.90	3,149.47	11.29	11.19	-160.37	35.03	-146.74	255.35	239.88	15.47	16.504		
3,300.00	3,291.06	3,253.79	3,242.90	11.68	11.57	-160.47	39.65	-162.68	286.90	270.94	15.96	17.979		
3,400.00	3,389.76	3,348.68	3,336.33	12.07	11.95	-160.55	44.28	-178.63	318.45	302.01	16.44	19.365		
3,500.00	3,488.47	3,443.58	3,429.76	12.47	12.33	-160.61	48.90	-194.58	350.00	333.07	16.93	20.670		
3,600.00	3,587.17	3,538.47	3,523.18	12.87	12.72	-160.67	53.52	-210.52	381.55	364.13	17.42	21.899		
3,700.00	3,685.88	3,633.36	3,616.61	13.27	13.12	-160.71	58.15	-226.47	413.10	395.18	17.91	23.059		
3,800.00	3,784.58	3,728.25	3,710.04	13.67	13.51	-160.75	62.77	-242.42	444.65	426.24	18.41	24.155		
3,900.00	3,883.28	3,823.15	3,803.47	14.08	13.91	-160.79	67.39	-258.36	476.20	457.30	18.90	25.193		
4,000.00	3,981.99	3,918.04	3,896.90	14.49	14.30	-160.82	72.01	-274.31	507.75	488.35	19.40	26.176		
4,100.00	4,080.69	4,012.93	3,990.33	14.90	14.70	-160.84	76.64	-290.25	539.30	519.40	19.89	27.109		
4,200.00	4,179.39	4,107.82	4,083.75	15.31	15.11	-160.86	81.26	-306.20	570.85	550.46	20.39	27.994		
4,300.00	4,278.10	4,202.71	4,177.18	15.72	15.51	-160.89	85.88	-322.15	602.40	581.51	20.89	28.836		
4,400.00	4,376.80	4,297.61	4,270.61	16.13	15.92	-160.90	90.51	-338.09	633.95	612.56	21.39	29.638		
4,500.00	4,475.51	4,392.50	4,364.04	16.55	16.32	-160.92	95.13	-354.04	665.50	643.61	21.89	30.402		
4,600.00	4,574.21	4,487.39	4,457.47	16.97	16.73	-160.94	99.75	-369.99	697.05	674.66	22.39	31.130		
4,700.00	4,672.91	4,582.28	4,550.90	17.38	17.14	-160.95	104.38	-385.93	728.60	705.71	22.89	31.826		
4,800.00	4,771.62	4,677.18	4,644.33	17.80	17.55	-160.96	109.00	-401.88	760.15	736.75	23.40	32.490		
4,900.00	4,870.32	4,772.07	4,737.75	18.22	17.96	-160.98	113.62	-417.83	791.70	767.80	23.90	33.126		
5,000.00	4,969.03	4,866.96	4,831.18	18.64	18.37	-160.99	118.25	-433.77	823.25	798.85	24.40	33.735		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,843.42	9,911.82	9,843.42	36.79	37.33	90.18	226.76	-808.09	1,499.16	1,449.38	49.78	30.116		
9,950.00	9,892.77	9,962.11	9,893.65	36.93	37.49	90.40	224.70	-808.07	1,499.19	1,449.19	50.00	29.984		
10,000.00	9,941.23	10,012.95	9,944.05	37.06	37.64	90.62	218.14	-808.00	1,499.25	1,449.04	50.21	29.862		
10,050.00	9,988.45	10,064.34	9,994.20	37.19	37.78	90.84	207.01	-807.89	1,499.32	1,448.92	50.40	29.747		
10,100.00	10,034.06	10,116.28	10,043.67	37.30	37.91	91.06	191.24	-807.74	1,499.42	1,448.83	50.59	29.639		
10,150.00	10,077.71	10,168.77	10,092.00	37.41	38.03	91.26	170.81	-807.53	1,499.53	1,448.77	50.77	29.538		
10,200.00	10,119.07	10,221.81	10,138.74	37.50	38.14	91.46	145.77	-807.29	1,499.66	1,448.72	50.93	29.444		
10,250.00	10,157.84	10,275.39	10,183.39	37.58	38.24	91.65	116.20	-806.99	1,499.79	1,448.70	51.09	29.353		
10,300.00	10,193.70	10,329.48	10,225.47	37.65	38.32	91.82	82.24	-806.65	1,499.94	1,448.69	51.25	29.267		
10,350.00	10,226.39	10,384.07	10,264.50	37.71	38.40	91.99	44.11	-806.28	1,500.08	1,448.67	51.40	29.182		
10,400.00	10,255.66	10,439.11	10,300.01	37.76	38.46	92.13	2.08	-805.86	1,500.22	1,448.66	51.56	29.097		
10,450.00	10,281.29	10,494.57	10,331.53	37.81	38.51	92.26	-43.52	-805.41	1,500.35	1,448.63	51.72	29.011		
10,500.00	10,303.08	10,550.40	10,358.67	37.85	38.56	92.37	-92.28	-804.92	1,500.47	1,448.59	51.88	28.923		
10,550.00	10,320.87	10,606.54	10,381.04	37.90	38.60	92.46	-143.74	-804.41	1,500.57	1,448.52	52.05	28.831		
10,600.00	10,334.52	10,662.93	10,398.34	37.96	38.65	92.52	-197.39	-803.88	1,500.65	1,448.43	52.23	28.734		
10,650.00	10,343.93	10,719.50	10,410.31	38.03	38.71	92.57	-252.65	-803.33	1,500.71	1,448.30	52.41	28.633		
10,700.00	10,349.02	10,776.19	10,416.79	38.12	38.78	92.59	-308.94	-802.77	1,500.74	1,448.13	52.61	28.527		
10,733.47	10,350.00	10,814.17	10,418.00	38.19	38.85	92.60	-346.90	-802.40	1,500.75	1,448.01	52.74	28.454		
10,800.00	10,350.00	10,880.61	10,418.00	38.36	38.99	92.60	-413.33	-801.74	1,500.75	1,447.73	53.02	28.303		
10,900.00	10,350.00	10,980.61	10,418.00	38.68	39.27	92.60	-513.33	-800.74	1,500.76	1,447.24	53.53	28.038		
11,000.00	10,350.00	11,080.61	10,418.00	39.08	39.64	92.60	-613.32	-799.75	1,500.77	1,446.65	54.12	27.728		
11,100.00	10,350.00	11,180.61	10,418.00	39.56	40.09	92.60	-713.32	-798.76	1,500.78	1,445.97	54.81	27.379		
11,200.00	10,350.00	11,280.61	10,418.00	40.10	40.62	92.60	-813.31	-797.77	1,500.79	1,445.19	55.59	26.995		
11,300.00	10,350.00	11,380.61	10,418.00	40.70	41.20	92.60	-913.31	-796.77	1,500.80	1,444.34	56.46	26.582		
11,400.00	10,350.00	11,480.61	10,418.00	41.37	41.85	92.60	-1,013.30	-795.78	1,500.81	1,443.40	57.41	26.143		
11,500.00	10,350.00	11,580.61	10,418.00	42.08	42.56	92.60	-1,113.30	-794.79	1,500.82	1,442.38	58.43	25.684		
11,600.00	10,350.00	11,680.61	10,418.00	42.85	43.32	92.60	-1,213.29	-793.80	1,500.82	1,441.29	59.53	25.210		
11,700.00	10,350.00	11,780.61	10,418.00	43.67	44.13	92.60	-1,313.29	-792.80	1,500.83	1,440.13	60.70	24.725		
11,800.00	10,350.00	11,880.61	10,418.00	44.53	44.98	92.60	-1,413.28	-791.81	1,500.84	1,438.91	61.94	24.232		
11,900.00	10,350.00	11,980.61	10,418.00	45.44	45.88	92.60	-1,513.28	-790.82	1,500.85	1,437.62	63.23	23.735		
12,000.00	10,350.00	12,080.61	10,418.00	46.39	46.82	92.60	-1,613.27	-789.83	1,500.86	1,436.27	64.59	23.237		
12,100.00	10,350.00	12,180.61	10,418.00	47.37	47.80	92.60	-1,713.27	-788.83	1,500.87	1,434.87	66.00	22.741		
12,200.00	10,350.00	12,280.61	10,418.00	48.39	48.82	92.60	-1,813.26	-787.84	1,500.88	1,433.42	67.46	22.248		
12,300.00	10,350.00	12,380.61	10,418.00	49.45	49.87	92.60	-1,913.26	-786.85	1,500.89	1,431.92	68.97	21.761		
12,400.00	10,350.00	12,480.61	10,418.00	50.54	50.95	92.60	-2,013.25	-785.86	1,500.89	1,430.37	70.52	21.282		
12,500.00	10,350.00	12,580.61	10,418.00	51.66	52.06	92.60	-2,113.25	-784.86	1,500.90	1,428.78	72.12	20.811		
12,600.00	10,350.00	12,680.61	10,418.00	52.80	53.20	92.60	-2,213.24	-783.87	1,500.91	1,427.16	73.76	20.350		
12,700.00	10,350.00	12,780.61	10,418.00	53.97	54.36	92.60	-2,313.24	-782.88	1,500.92	1,425.49	75.43	19.898		
12,800.00	10,350.00	12,880.61	10,418.00	55.17	55.55	92.60	-2,413.23	-781.89	1,500.93	1,423.79	77.14	19.458		
12,900.00	10,350.00	12,980.61	10,418.00	56.39	56.76	92.60	-2,513.23	-780.89	1,500.94	1,422.06	78.87	19.029		
13,000.00	10,350.00	13,080.61	10,418.00	57.63	58.00	92.60	-2,613.22	-779.90	1,500.95	1,420.30	80.64	18.612		
13,100.00	10,350.00	13,180.61	10,418.00	58.89	59.25	92.60	-2,713.22	-778.91	1,500.96	1,418.52	82.44	18.206		
13,200.00	10,350.00	13,280.61	10,418.00	60.17	60.53	92.60	-2,813.21	-777.92	1,500.96	1,416.70	84.26	17.813		
13,300.00	10,350.00	13,380.61	10,418.00	61.47	61.82	92.60	-2,913.21	-776.92	1,500.97	1,414.86	86.11	17.431		
13,400.00	10,350.00	13,480.61	10,418.00	62.78	63.13	92.60	-3,013.20	-775.93	1,500.98	1,413.00	87.98	17.060		
13,500.00	10,350.00	13,580.61	10,418.00	64.11	64.45	92.60	-3,113.20	-774.94	1,500.99	1,411.12	89.88	16.701		
13,600.00	10,350.00	13,680.61	10,418.00	65.45	65.79	92.60	-3,213.19	-773.95	1,501.00	1,409.21	91.79	16.353		
13,700.00	10,350.00	13,780.61	10,418.00	66.81	67.14	92.60	-3,313.19	-772.95	1,501.01	1,407.29	93.72	16.016		
13,800.00	10,350.00	13,880.61	10,418.00	68.18	68.51	92.60	-3,413.18	-771.96	1,501.02	1,405.35	95.67	15.690		
13,900.00	10,350.00	13,980.61	10,418.00	69.56	69.88	92.60	-3,513.18	-770.97	1,501.03	1,403.39	97.64	15.374		
14,000.00	10,350.00	14,080.61	10,418.00	70.96	71.27	92.60	-3,613.17	-769.98	1,501.03	1,401.42	99.62	15.068		
14,100.00	10,350.00	14,180.61	10,418.00	72.36	72.67	92.60	-3,713.17	-768.98	1,501.04	1,399.43	101.62	14.772		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
14,200.00	10,350.00	14,280.61	10,418.00	73.78	74.08	92.60	-3,813.17	-767.99	1,501.05	1,397.42	103.63	14.485				
14,300.00	10,350.00	14,380.61	10,418.00	75.20	75.50	92.60	-3,913.16	-767.00	1,501.06	1,395.41	105.65	14.208				
14,400.00	10,350.00	14,480.61	10,418.00	76.63	76.93	92.60	-4,013.16	-766.01	1,501.07	1,393.38	107.69	13.939				
14,500.00	10,350.00	14,580.61	10,418.00	78.08	78.37	92.60	-4,113.15	-765.01	1,501.08	1,391.34	109.74	13.679				
14,600.00	10,350.00	14,680.61	10,418.00	79.53	79.82	92.60	-4,213.15	-764.02	1,501.09	1,389.29	111.80	13.427				
14,700.00	10,350.00	14,780.61	10,418.00	80.99	81.27	92.60	-4,313.14	-763.03	1,501.10	1,387.23	113.87	13.183				
14,800.00	10,350.00	14,880.61	10,418.00	82.45	82.73	92.60	-4,413.14	-762.04	1,501.10	1,385.16	115.95	12.946				
14,900.00	10,350.00	14,980.61	10,418.00	83.92	84.20	92.60	-4,513.13	-761.04	1,501.11	1,383.07	118.04	12.717				
15,000.00	10,350.00	15,080.61	10,418.00	85.40	85.68	92.60	-4,613.13	-760.05	1,501.12	1,380.98	120.14	12.495				
15,100.00	10,350.00	15,180.61	10,418.00	86.89	87.16	92.60	-4,713.12	-759.06	1,501.13	1,378.89	122.25	12.280				
15,200.00	10,350.00	15,280.61	10,418.00	88.38	88.65	92.60	-4,813.12	-758.07	1,501.14	1,376.78	124.36	12.071				
15,300.00	10,350.00	15,380.61	10,418.00	89.87	90.14	92.60	-4,913.11	-757.07	1,501.15	1,374.66	126.48	11.868				
15,400.00	10,350.00	15,480.61	10,418.00	91.38	91.64	92.60	-5,013.11	-756.08	1,501.16	1,372.54	128.62	11.672				
15,500.00	10,350.00	15,580.61	10,418.00	92.88	93.14	92.60	-5,113.10	-755.09	1,501.17	1,370.41	130.75	11.481				
15,600.00	10,350.00	15,680.61	10,418.00	94.39	94.65	92.60	-5,213.10	-754.10	1,501.18	1,368.28	132.90	11.296				
15,700.00	10,350.00	15,780.61	10,418.00	95.91	96.16	92.60	-5,313.09	-753.10	1,501.18	1,366.14	135.05	11.116				
15,800.00	10,350.00	15,880.61	10,418.00	97.43	97.68	92.60	-5,413.09	-752.11	1,501.19	1,363.99	137.20	10.941				
15,900.00	10,350.00	15,980.61	10,418.00	98.96	99.20	92.60	-5,513.08	-751.12	1,501.20	1,361.84	139.37	10.772				
16,000.00	10,350.00	16,080.61	10,418.00	100.49	100.73	92.60	-5,613.08	-750.13	1,501.21	1,359.68	141.53	10.607				
16,100.00	10,350.00	16,180.61	10,418.00	102.02	102.26	92.60	-5,713.07	-749.13	1,501.22	1,357.51	143.71	10.446				
16,200.00	10,350.00	16,280.61	10,418.00	103.55	103.79	92.60	-5,813.07	-748.14	1,501.23	1,355.34	145.88	10.291				
16,300.00	10,350.00	16,380.61	10,418.00	105.09	105.33	92.60	-5,913.06	-747.15	1,501.24	1,353.17	148.07	10.139				
16,400.00	10,350.00	16,480.61	10,418.00	106.64	106.87	92.60	-6,013.06	-746.16	1,501.25	1,350.99	150.25	9.991				
16,500.00	10,350.00	16,580.61	10,418.00	108.18	108.42	92.60	-6,113.05	-745.16	1,501.25	1,348.81	152.44	9.848				
16,600.00	10,350.00	16,680.61	10,418.00	109.73	109.96	92.60	-6,213.05	-744.17	1,501.26	1,346.62	154.64	9.708				
16,700.00	10,350.00	16,780.61	10,418.00	111.29	111.51	92.60	-6,313.04	-743.18	1,501.27	1,344.43	156.84	9.572				
16,800.00	10,350.00	16,880.61	10,418.00	112.84	113.07	92.60	-6,413.04	-742.19	1,501.28	1,342.24	159.04	9.440				
16,900.00	10,350.00	16,980.61	10,418.00	114.40	114.62	92.60	-6,513.03	-741.19	1,501.29	1,340.04	161.25	9.310				
17,000.00	10,350.00	17,080.61	10,418.00	115.96	116.18	92.60	-6,613.03	-740.20	1,501.30	1,337.84	163.46	9.185				
17,100.00	10,350.00	17,180.61	10,418.00	117.52	117.74	92.60	-6,713.02	-739.21	1,501.31	1,335.63	165.67	9.062				
17,200.00	10,350.00	17,280.61	10,418.00	119.09	119.30	92.60	-6,813.02	-738.22	1,501.32	1,333.43	167.89	8.942				
17,300.00	10,350.00	17,380.61	10,418.00	120.66	120.87	92.60	-6,913.01	-737.22	1,501.32	1,331.21	170.11	8.826				
17,400.00	10,350.00	17,480.61	10,418.00	122.23	122.44	92.60	-7,013.01	-736.23	1,501.33	1,329.00	172.33	8.712				
17,500.00	10,350.00	17,580.61	10,418.00	123.80	124.01	92.60	-7,113.00	-735.24	1,501.34	1,326.78	174.56	8.601				
17,600.00	10,350.00	17,680.61	10,418.00	125.37	125.58	92.60	-7,213.00	-734.25	1,501.35	1,324.56	176.79	8.492				
17,700.00	10,350.00	17,780.61	10,418.00	126.95	127.15	92.60	-7,312.99	-733.25	1,501.36	1,322.34	179.02	8.387				
17,800.00	10,350.00	17,880.61	10,418.00	128.52	128.73	92.60	-7,412.99	-732.26	1,501.37	1,320.12	181.25	8.283				
17,900.00	10,350.00	17,980.61	10,418.00	130.10	130.31	92.60	-7,512.98	-731.27	1,501.38	1,317.89	183.49	8.182				
18,000.00	10,350.00	18,080.61	10,418.00	131.69	131.89	92.60	-7,612.98	-730.28	1,501.39	1,315.66	185.73	8.084				
18,100.00	10,350.00	18,180.61	10,418.00	133.27	133.47	92.60	-7,712.97	-729.28	1,501.39	1,313.43	187.97	7.987				
18,200.00	10,350.00	18,280.61	10,418.00	134.85	135.05	92.60	-7,812.97	-728.29	1,501.40	1,311.19	190.21	7.893				
18,300.00	10,350.00	18,380.61	10,418.00	136.44	136.64	92.60	-7,912.96	-727.30	1,501.41	1,308.95	192.46	7.801				
18,400.00	10,350.00	18,480.61	10,418.00	138.03	138.22	92.60	-8,012.96	-726.31	1,501.42	1,306.72	194.71	7.711				
18,500.00	10,350.00	18,580.61	10,418.00	139.62	139.81	92.60	-8,112.95	-725.31	1,501.43	1,304.47	196.95	7.623				
18,600.00	10,350.00	18,680.61	10,418.00	141.21	141.40	92.60	-8,212.95	-724.32	1,501.44	1,302.23	199.21	7.537				
18,700.00	10,350.00	18,780.61	10,418.00	142.80	142.99	92.60	-8,312.94	-723.33	1,501.45	1,299.99	201.46	7.453				
18,800.00	10,350.00	18,880.61	10,418.00	144.39	144.58	92.60	-8,412.94	-722.34	1,501.46	1,297.74	203.71	7.370				
18,900.00	10,350.00	18,980.61	10,418.00	145.99	146.18	92.60	-8,512.93	-721.34	1,501.46	1,295.49	205.97	7.290				
19,000.00	10,350.00	19,080.61	10,418.00	147.58	147.77	92.60	-8,612.93	-720.35	1,501.47	1,293.24	208.23	7.211				
19,100.00	10,350.00	19,180.61	10,418.00	149.18	149.37	92.60	-8,712.92	-719.36	1,501.48	1,290.99	210.49	7.133				
19,200.00	10,350.00	19,280.61	10,418.00	150.78	150.96	92.60	-8,812.92	-718.37	1,501.49	1,288.74	212.75	7.057				
19,300.00	10,350.00	19,380.61	10,418.00	152.38	152.56	92.60	-8,912.91	-717.37	1,501.50	1,286.48	215.02	6.983				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
19,400.00	10,350.00	19,480.61	10,418.00	153.98	154.16	92.60	-9,012.91	-716.38	1,501.51	1,284.23	217.28	6.910	
19,500.00	10,350.00	19,580.61	10,418.00	155.58	155.76	92.60	-9,112.90	-715.39	1,501.52	1,281.97	219.55	6.839	
19,600.00	10,350.00	19,680.61	10,418.00	157.18	157.36	92.60	-9,212.90	-714.40	1,501.53	1,279.71	221.81	6.769	
19,700.00	10,350.00	19,780.61	10,418.00	158.79	158.97	92.60	-9,312.89	-713.40	1,501.53	1,277.45	224.08	6.701	
19,800.00	10,350.00	19,880.61	10,418.00	160.39	160.57	92.60	-9,412.89	-712.41	1,501.54	1,275.19	226.35	6.634	
19,900.00	10,350.00	19,980.61	10,418.00	162.00	162.17	92.60	-9,512.88	-711.42	1,501.55	1,272.93	228.63	6.568	
20,000.00	10,350.00	20,080.61	10,418.00	163.61	163.78	92.60	-9,612.88	-710.43	1,501.56	1,270.66	230.90	6.503	
20,100.00	10,350.00	20,180.61	10,418.00	165.21	165.39	92.60	-9,712.87	-709.43	1,501.57	1,268.40	233.17	6.440	
20,200.00	10,350.00	20,280.61	10,418.00	166.82	166.99	92.60	-9,812.87	-708.44	1,501.58	1,266.13	235.45	6.378	
20,300.00	10,350.00	20,380.61	10,418.00	168.43	168.60	92.60	-9,912.86	-707.45	1,501.59	1,263.86	237.72	6.317	
20,400.00	10,350.00	20,480.61	10,418.00	170.04	170.21	92.60	-10,012.86	-706.46	1,501.60	1,261.60	240.00	6.257	
20,500.00	10,350.00	20,580.61	10,418.00	171.65	171.82	92.60	-10,112.85	-705.46	1,501.60	1,259.33	242.28	6.198	
20,529.73	10,350.00	20,610.34	10,418.00	172.13	172.30	92.60	-10,142.59	-705.17	1,501.61	1,258.65	242.96	6.181	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	-27.11	74.59	-38.19	83.80					
100.00	100.00	100.00	100.00	0.13	0.13	-27.11	74.59	-38.19	83.80	83.62	0.18	472.260		
200.00	200.00	200.00	200.00	0.48	0.48	-27.11	74.59	-38.19	83.80	83.11	0.68	122.438		
300.00	300.00	300.00	300.00	0.84	0.84	-27.11	74.59	-38.19	83.80	82.60	1.19	70.337		
400.00	400.00	400.00	400.00	1.20	1.20	-27.11	74.59	-38.19	83.80	82.10	1.70	49.341		
500.00	500.00	500.00	500.00	1.56	1.56	-27.11	74.59	-38.19	83.80	81.59	2.21	37.998		
600.00	600.00	600.00	600.00	1.92	1.92	-27.11	74.59	-38.19	83.80	81.08	2.71	30.896		
700.00	700.00	700.00	700.00	2.28	2.28	-27.11	74.59	-38.19	83.80	80.58	3.22	26.030		
800.00	800.00	800.00	800.00	2.63	2.63	-27.11	74.59	-38.19	83.80	80.07	3.73	22.489		
900.00	900.00	900.00	900.00	2.99	2.99	-27.11	74.59	-38.19	83.80	79.56	4.23	19.795		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-27.11	74.59	-38.19	83.80	79.06	4.74	17.678		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-27.11	74.59	-38.19	83.80	78.55	5.25	15.970		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-27.11	74.59	-38.19	83.80	78.04	5.75	14.563		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-27.11	74.59	-38.19	83.80	77.53	6.26	13.384		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-27.11	74.59	-38.19	83.80	77.03	6.77	12.381		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	-27.11	74.59	-38.19	83.80	76.52	7.27	11.519		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	-27.11	74.59	-38.19	83.80	76.01	7.78	10.768		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	-27.11	74.59	-38.19	83.80	75.51	8.29	10.110		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-27.11	74.59	-38.19	83.80	75.00	8.80	9.527		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-27.11	74.59	-38.19	83.80	74.49	9.30	9.008		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-27.11	74.59	-38.19	83.80	73.99	9.81	8.542 CC, ES		
2,100.00	2,100.00	2,098.52	2,098.51	7.29	7.28	-27.74	74.93	-39.41	84.67	74.37	10.31	8.215		
2,200.00	2,200.00	2,196.90	2,196.82	7.65	7.63	-29.57	75.94	-43.08	87.36	76.57	10.80	8.091 SF		
2,300.00	2,299.99	2,294.94	2,294.64	8.01	7.97	-103.83	77.61	-49.16	92.33	81.05	11.28	8.187		
2,400.00	2,399.91	2,392.25	2,391.56	8.35	8.31	-109.15	79.93	-57.59	100.48	88.73	11.75	8.555		
2,500.00	2,499.69	2,489.25	2,487.93	8.70	8.66	-115.41	82.87	-68.24	112.58	100.37	12.21	9.220		
2,600.00	2,599.27	2,587.21	2,585.18	9.06	9.01	-121.53	85.98	-79.55	127.73	115.04	12.69	10.063		
2,700.00	2,698.57	2,684.64	2,681.91	9.42	9.37	-127.07	89.08	-90.80	145.64	132.47	13.18	11.054		
2,800.00	2,797.54	2,781.48	2,778.05	9.78	9.73	-131.98	92.16	-101.99	166.40	152.74	13.66	12.182		
2,815.66	2,813.00	2,796.58	2,793.05	9.84	9.78	-132.70	92.64	-103.73	169.91	156.17	13.74	12.370		
2,900.00	2,896.24	2,877.89	2,873.77	10.15	10.09	-136.30	95.23	-113.12	189.36	175.22	14.14	13.389		
3,000.00	2,994.95	2,974.31	2,969.49	10.53	10.45	-139.73	98.30	-124.26	213.18	198.55	14.63	14.572		
3,100.00	3,093.65	3,070.72	3,065.21	10.91	10.81	-142.46	101.36	-135.39	237.57	222.45	15.12	15.717		
3,200.00	3,192.36	3,167.13	3,160.92	11.29	11.17	-144.69	104.43	-146.53	262.38	246.78	15.60	16.814		
3,300.00	3,291.06	3,263.54	3,256.64	11.68	11.54	-146.53	107.50	-157.66	287.51	271.41	16.10	17.863		
3,400.00	3,389.76	3,359.95	3,352.36	12.07	11.91	-148.08	110.56	-168.80	312.87	296.28	16.59	18.862		
3,500.00	3,488.47	3,456.36	3,448.07	12.47	12.28	-149.39	113.63	-179.93	338.41	321.33	17.08	19.813		
3,600.00	3,587.17	3,552.77	3,543.79	12.87	12.65	-150.53	116.70	-191.07	364.10	346.52	17.57	20.718		
3,700.00	3,685.88	3,649.18	3,639.51	13.27	13.02	-151.51	119.77	-202.20	389.90	371.83	18.07	21.578		
3,800.00	3,784.58	3,745.59	3,735.22	13.67	13.39	-152.37	122.83	-213.34	415.79	397.23	18.57	22.396		
3,900.00	3,883.28	3,842.01	3,830.94	14.08	13.77	-153.13	125.90	-224.47	441.77	422.71	19.06	23.174		
4,000.00	3,981.99	3,938.42	3,926.66	14.49	14.14	-153.81	128.97	-235.61	467.81	448.25	19.56	23.915		
4,100.00	4,080.69	4,034.83	4,022.38	14.90	14.52	-154.41	132.03	-246.74	493.90	473.84	20.06	24.621		
4,200.00	4,179.39	4,131.24	4,118.09	15.31	14.90	-154.95	135.10	-257.88	520.04	499.48	20.56	25.294		
4,300.00	4,278.10	4,227.65	4,213.81	15.72	15.27	-155.45	138.17	-269.01	546.22	525.16	21.06	25.936		
4,400.00	4,376.80	4,324.06	4,309.53	16.13	15.65	-155.89	141.23	-280.15	572.43	550.87	21.56	26.549		
4,500.00	4,475.51	4,420.47	4,405.24	16.55	16.03	-156.30	144.30	-291.28	598.68	576.61	22.06	27.135		
4,600.00	4,574.21	4,516.88	4,500.96	16.97	16.41	-156.68	147.37	-302.42	624.94	602.38	22.57	27.695		
4,700.00	4,672.91	4,613.29	4,596.68	17.38	16.79	-157.02	150.44	-313.55	651.24	628.17	23.07	28.231		
4,800.00	4,771.62	4,709.70	4,692.39	17.80	17.17	-157.34	153.50	-324.69	677.55	653.98	23.57	28.744		
4,900.00	4,870.32	4,806.12	4,788.11	18.22	17.55	-157.63	156.57	-335.82	703.88	679.80	24.08	29.237		
5,000.00	4,969.03	4,902.53	4,883.83	18.64	17.93	-157.90	159.64	-346.96	730.22	705.64	24.58	29.708		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	4,998.94	4,979.54	19.07	18.31	-158.16	162.70	-358.09	756.58	731.50	25.08	30.161		
5,200.00	5,166.43	5,095.35	5,075.26	19.49	18.70	-158.39	165.77	-369.23	782.96	757.37	25.59	30.597		
5,300.00	5,265.14	5,191.76	5,170.98	19.91	19.08	-158.61	168.84	-380.36	809.34	783.24	26.10	31.015		
5,400.00	5,363.84	5,288.17	5,266.69	20.33	19.46	-158.82	171.90	-391.50	835.73	809.13	26.60	31.417		
5,500.00	5,462.54	5,384.58	5,362.41	20.76	19.84	-159.01	174.97	-402.63	862.14	835.03	27.11	31.804		
5,600.00	5,561.25	5,480.99	5,458.13	21.18	20.23	-159.20	178.04	-413.76	888.55	860.94	27.61	32.177		
5,700.00	5,659.95	5,577.40	5,553.84	21.61	20.61	-159.37	181.11	-424.90	914.97	886.85	28.12	32.537		
5,800.00	5,758.66	5,673.82	5,649.56	22.04	21.00	-159.53	184.17	-436.03	941.40	912.77	28.63	32.883		
5,900.00	5,857.36	5,770.23	5,745.28	22.46	21.38	-159.69	187.24	-447.17	967.84	938.70	29.14	33.217		
6,000.00	5,956.06	5,866.64	5,840.99	22.89	21.76	-159.83	190.31	-458.30	994.28	964.63	29.64	33.540		
6,100.00	6,054.77	5,963.05	5,936.71	23.32	22.15	-159.97	193.37	-469.44	1,020.72	990.57	30.15	33.852		
6,200.00	6,153.47	6,059.46	6,032.43	23.75	22.53	-160.10	196.44	-480.57	1,047.18	1,016.51	30.66	34.153		
6,300.00	6,252.18	6,155.87	6,128.14	24.18	22.92	-160.22	199.51	-491.71	1,073.63	1,042.46	31.17	34.444		
6,400.00	6,350.88	6,252.28	6,223.86	24.60	23.30	-160.34	202.57	-502.84	1,100.09	1,068.42	31.68	34.726		
6,500.00	6,449.58	6,348.69	6,319.58	25.03	23.69	-160.46	205.64	-513.98	1,126.56	1,094.37	32.19	34.999		
6,600.00	6,548.29	6,445.10	6,415.29	25.46	24.08	-160.56	208.71	-525.11	1,153.03	1,120.33	32.70	35.263		
6,700.00	6,646.99	6,541.52	6,511.01	25.89	24.46	-160.67	211.77	-536.25	1,179.50	1,146.29	33.21	35.519		
6,758.77	6,705.00	6,598.18	6,567.26	26.15	24.69	-160.73	213.58	-542.79	1,195.06	1,161.55	33.51	35.666		
6,800.00	6,745.73	6,637.98	6,606.78	26.32	24.85	-160.82	214.84	-547.39	1,205.78	1,172.06	33.72	35.761		
6,900.00	6,844.79	6,734.98	6,703.08	26.74	25.24	-161.00	217.93	-558.59	1,230.07	1,195.84	34.23	35.939		
7,000.00	6,944.17	6,832.55	6,799.95	27.13	25.63	-161.12	221.03	-569.86	1,251.96	1,217.22	34.74	36.042		
7,100.00	7,043.80	6,930.63	6,897.32	27.51	26.02	-161.19	224.15	-581.19	1,271.42	1,236.18	35.24	36.075		
7,200.00	7,143.63	7,074.45	7,040.38	27.88	26.58	-161.21	228.05	-595.35	1,286.79	1,250.81	35.98	35.765		
7,300.00	7,243.57	7,222.01	7,187.63	28.22	27.13	-161.20	230.57	-604.48	1,296.04	1,259.36	36.68	35.333		
7,374.43	7,318.00	7,332.50	7,298.06	28.46	27.52	-90.42	231.46	-607.72	1,298.91	1,261.73	37.17	34.944		
7,400.00	7,343.57	7,370.50	7,336.06	28.55	27.65	-90.42	231.57	-608.12	1,299.18	1,261.84	37.33	34.801		
7,500.00	7,443.57	7,478.00	7,443.57	28.87	28.00	-90.42	231.59	-608.19	1,299.22	1,261.38	37.84	34.337		
7,600.00	7,543.57	7,578.00	7,543.57	29.19	28.34	-90.42	231.59	-608.19	1,299.22	1,260.90	38.32	33.901		
7,700.00	7,643.57	7,678.00	7,643.57	29.52	28.67	-90.42	231.59	-608.19	1,299.22	1,260.41	38.81	33.477		
7,800.00	7,743.57	7,778.00	7,743.57	29.84	29.00	-90.42	231.59	-608.19	1,299.22	1,259.92	39.30	33.062		
7,900.00	7,843.57	7,878.00	7,843.57	30.17	29.33	-90.42	231.59	-608.19	1,299.22	1,259.44	39.78	32.657		
8,000.00	7,943.57	7,978.00	7,943.57	30.49	29.67	-90.42	231.59	-608.19	1,299.22	1,258.95	40.27	32.262		
8,100.00	8,043.57	8,078.00	8,043.57	30.82	30.00	-90.42	231.59	-608.19	1,299.22	1,258.46	40.76	31.875		
8,200.00	8,143.57	8,178.00	8,143.57	31.15	30.34	-90.42	231.59	-608.19	1,299.22	1,257.97	41.25	31.497		
8,300.00	8,243.57	8,278.00	8,243.57	31.48	30.68	-90.42	231.59	-608.19	1,299.22	1,257.48	41.74	31.128		
8,400.00	8,343.57	8,378.00	8,343.57	31.80	31.01	-90.42	231.59	-608.19	1,299.22	1,256.99	42.23	30.767		
8,500.00	8,443.57	8,478.00	8,443.57	32.13	31.35	-90.42	231.59	-608.19	1,299.22	1,256.50	42.72	30.415		
8,600.00	8,543.57	8,578.00	8,543.57	32.46	31.69	-90.42	231.59	-608.19	1,299.22	1,256.01	43.21	30.069		
8,700.00	8,643.57	8,678.00	8,643.57	32.80	32.02	-90.42	231.59	-608.19	1,299.22	1,255.52	43.70	29.732		
8,800.00	8,743.57	8,778.00	8,743.57	33.13	32.36	-90.42	231.59	-608.19	1,299.22	1,255.03	44.19	29.401		
8,900.00	8,843.57	8,878.00	8,843.57	33.46	32.70	-90.42	231.59	-608.19	1,299.22	1,254.54	44.68	29.078		
9,000.00	8,943.57	8,978.00	8,943.57	33.79	33.04	-90.42	231.59	-608.19	1,299.22	1,254.05	45.17	28.761		
9,100.00	9,043.57	9,078.00	9,043.57	34.12	33.38	-90.42	231.59	-608.19	1,299.22	1,253.56	45.66	28.451		
9,200.00	9,143.57	9,178.00	9,143.57	34.46	33.72	-90.42	231.59	-608.19	1,299.22	1,253.06	46.16	28.148		
9,300.00	9,243.57	9,278.00	9,243.57	34.79	34.06	-90.42	231.59	-608.19	1,299.22	1,252.57	46.65	27.851		
9,400.00	9,343.57	9,378.00	9,343.57	35.13	34.40	-90.42	231.59	-608.19	1,299.22	1,252.08	47.14	27.559		
9,500.00	9,443.57	9,478.00	9,443.57	35.46	34.74	-90.42	231.59	-608.19	1,299.22	1,251.58	47.64	27.274		
9,600.00	9,543.57	9,578.00	9,543.57	35.80	35.08	-90.42	231.59	-608.19	1,299.22	1,251.09	48.13	26.994		
9,700.00	9,643.57	9,678.00	9,643.57	36.13	35.43	-90.42	231.59	-608.19	1,299.22	1,250.60	48.62	26.720		
9,800.00	9,743.57	9,778.00	9,743.57	36.47	35.77	-90.42	231.59	-608.19	1,299.22	1,250.10	49.12	26.451		
9,833.47	9,777.04	9,811.48	9,777.04	36.58	35.88	-90.42	231.59	-608.19	1,299.22	1,249.94	49.28	26.362		
9,850.00	9,793.56	9,828.00	9,793.56	36.64	35.94	90.17	231.59	-608.19	1,299.22	1,249.86	49.36	26.320		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 804H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,843.42	9,877.86	9,843.42	36.79	36.11	90.33	231.59	-608.19	1,299.24	1,249.64	49.60	26.195		
9,950.00	9,892.77	9,927.20	9,892.77	36.93	36.28	90.67	231.59	-608.19	1,299.31	1,249.48	49.83	26.076		
10,000.00	9,941.23	9,975.67	9,941.23	37.06	36.44	91.17	231.59	-608.19	1,299.51	1,249.46	50.05	25.964		
10,050.00	9,988.45	10,022.89	9,988.45	37.19	36.61	91.80	231.59	-608.19	1,299.96	1,249.70	50.26	25.863		
10,100.00	10,034.06	10,068.50	10,034.06	37.30	36.76	92.54	231.59	-608.19	1,300.81	1,250.34	50.47	25.775		
10,150.00	10,077.71	10,112.15	10,077.71	37.41	36.91	93.33	231.59	-608.19	1,302.25	1,251.58	50.66	25.703		
10,200.00	10,119.07	10,153.51	10,119.07	37.50	37.05	94.13	231.59	-608.19	1,304.46	1,253.61	50.85	25.653		
10,250.00	10,157.84	10,192.27	10,157.84	37.58	37.19	94.88	231.59	-608.19	1,307.67	1,256.64	51.03	25.628		
10,300.00	10,193.70	10,228.14	10,193.70	37.65	37.31	95.53	231.59	-608.19	1,312.08	1,260.89	51.19	25.631		
10,350.00	10,226.39	10,260.83	10,226.39	37.71	37.42	96.03	231.59	-608.19	1,317.89	1,266.55	51.34	25.668		
10,400.00	10,255.66	10,290.10	10,255.66	37.76	37.52	96.32	231.59	-608.19	1,325.29	1,273.80	51.49	25.741		
10,450.00	10,281.29	10,315.73	10,281.29	37.81	37.61	96.35	231.59	-608.19	1,334.42	1,282.81	51.62	25.853		
10,500.00	10,303.08	10,337.52	10,303.08	37.85	37.69	96.09	231.59	-608.19	1,345.40	1,293.67	51.73	26.007		
10,550.00	10,320.87	10,355.31	10,320.87	37.90	37.75	95.48	231.59	-608.19	1,358.28	1,306.45	51.83	26.204		
10,600.00	10,334.52	10,368.96	10,334.52	37.96	37.80	94.51	231.59	-608.19	1,373.08	1,321.16	51.92	26.445		
10,650.00	10,343.93	10,378.37	10,343.93	38.03	37.83	93.16	231.59	-608.19	1,389.74	1,337.75	51.99	26.730		
10,700.00	10,349.02	10,383.46	10,349.02	38.12	37.85	91.40	231.59	-608.19	1,408.16	1,356.11	52.05	27.056		
10,733.47	10,350.00	10,384.44	10,350.00	38.19	37.85	90.00	231.59	-608.19	1,421.40	1,369.33	52.07	27.296		
10,800.00	10,350.00	10,384.44	10,350.00	38.36	37.85	90.00	231.59	-608.19	1,449.66	1,397.54	52.12	27.813		
10,900.00	10,350.00	10,384.44	10,350.00	38.68	37.85	90.00	231.59	-608.19	1,496.71	1,444.50	52.20	28.670		
11,000.00	10,350.00	10,384.44	10,350.00	39.08	37.85	90.00	231.59	-608.19	1,548.79	1,496.49	52.30	29.616		
11,100.00	10,350.00	10,384.44	10,350.00	39.56	37.85	90.00	231.59	-608.19	1,605.42	1,553.03	52.39	30.644		
11,200.00	10,350.00	10,384.44	10,350.00	40.10	37.85	90.00	231.59	-608.19	1,666.13	1,613.64	52.49	31.744		
11,300.00	10,350.00	10,384.44	10,350.00	40.70	37.85	90.00	231.59	-608.19	1,730.49	1,677.91	52.58	32.911		
11,400.00	10,350.00	10,384.44	10,350.00	41.37	37.85	90.00	231.59	-608.19	1,798.11	1,745.44	52.68	34.136		
11,500.00	10,350.00	10,384.44	10,350.00	42.08	37.85	90.00	231.59	-608.19	1,868.64	1,815.88	52.77	35.414		
11,600.00	10,350.00	10,384.44	10,350.00	42.85	37.85	90.00	231.59	-608.19	1,941.76	1,888.91	52.85	36.738		
11,700.00	10,350.00	10,384.44	10,350.00	43.67	37.85	90.00	231.59	-608.19	2,017.19	1,964.25	52.94	38.105		
11,800.00	10,350.00	10,384.44	10,350.00	44.53	37.85	90.00	231.59	-608.19	2,094.68	2,041.66	53.02	39.509		
11,900.00	10,350.00	10,384.44	10,350.00	45.44	37.85	90.00	231.59	-608.19	2,174.00	2,120.91	53.09	40.947		
12,000.00	10,350.00	10,384.44	10,350.00	46.39	37.85	90.00	231.59	-608.19	2,254.98	2,201.81	53.17	42.414		
12,100.00	10,350.00	10,384.44	10,350.00	47.37	37.85	90.00	231.59	-608.19	2,337.42	2,284.18	53.23	43.908		
12,200.00	10,350.00	10,384.44	10,350.00	48.39	37.85	90.00	231.59	-608.19	2,421.19	2,367.89	53.30	45.425		
12,300.00	10,350.00	14,330.51	12,399.00	49.45	55.22	147.62	-1,911.30	-586.87	2,426.26	2,373.91	52.35	46.351		
12,400.00	10,350.00	14,430.51	12,399.00	50.54	56.22	147.62	-2,011.29	-585.88	2,426.26	2,372.97	53.29	45.526		
12,500.00	10,350.00	14,530.51	12,399.00	51.66	57.25	147.62	-2,111.29	-584.89	2,426.27	2,372.00	54.27	44.707		
12,600.00	10,350.00	14,630.51	12,399.00	52.80	58.31	147.62	-2,211.28	-583.89	2,426.27	2,371.00	55.27	43.897		
12,700.00	10,350.00	14,730.51	12,399.00	53.97	59.39	147.62	-2,311.28	-582.90	2,426.27	2,369.98	56.30	43.096		
12,800.00	10,350.00	14,830.51	12,399.00	55.17	60.50	147.62	-2,411.27	-581.90	2,426.28	2,368.93	57.35	42.309		
12,900.00	10,350.00	14,930.51	12,399.00	56.39	61.64	147.62	-2,511.27	-580.91	2,426.28	2,367.87	58.42	41.534		
13,000.00	10,350.00	15,030.51	12,399.00	57.63	62.80	147.62	-2,611.26	-579.91	2,426.29	2,366.78	59.51	40.772		
13,100.00	10,350.00	15,130.51	12,399.00	58.89	63.98	147.62	-2,711.26	-578.92	2,426.29	2,365.67	60.62	40.025		
13,200.00	10,350.00	15,230.51	12,399.00	60.17	65.18	147.62	-2,811.25	-577.92	2,426.29	2,364.54	61.75	39.292		
13,300.00	10,350.00	15,330.51	12,399.00	61.47	66.40	147.62	-2,911.25	-576.93	2,426.30	2,363.40	62.90	38.577		
13,400.00	10,350.00	15,430.51	12,399.00	62.78	67.64	147.62	-3,011.24	-575.94	2,426.30	2,362.24	64.06	37.877		
13,500.00	10,350.00	15,530.51	12,399.00	64.11	68.89	147.62	-3,111.24	-574.94	2,426.30	2,361.07	65.24	37.193		
13,600.00	10,350.00	15,630.51	12,399.00	65.45	70.17	147.62	-3,211.23	-573.95	2,426.31	2,359.88	66.43	36.525		
13,700.00	10,350.00	15,730.51	12,399.00	66.81	71.45	147.62	-3,311.23	-572.95	2,426.31	2,358.67	67.64	35.873		
13,800.00	10,350.00	15,830.51	12,399.00	68.18	72.75	147.62	-3,411.22	-571.96	2,426.31	2,357.46	68.86	35.237		
13,900.00	10,350.00	15,930.51	12,399.00	69.56	74.07	147.62	-3,511.22	-570.96	2,426.32	2,356.23	70.09	34.618		
14,000.00	10,350.00	16,030.51	12,399.00	70.96	75.40	147.62	-3,611.21	-569.97	2,426.32	2,354.99	71.33	34.015		
14,100.00	10,350.00	16,130.51	12,399.00	72.36	76.74	147.62	-3,711.21	-568.97	2,426.33	2,353.74	72.59	33.427		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	10,350.00	16,230.51	12,399.00	73.78	78.10	147.62	-3,811.21	-567.98	2,426.33	2,352.48	73.85	32.855		
14,300.00	10,350.00	16,330.51	12,399.00	75.20	79.46	147.62	-3,911.20	-566.98	2,426.33	2,351.21	75.13	32.297		
14,400.00	10,350.00	16,430.51	12,399.00	76.63	80.84	147.62	-4,011.20	-565.99	2,426.34	2,349.93	76.41	31.755		
14,500.00	10,350.00	16,530.51	12,399.00	78.08	82.22	147.62	-4,111.19	-565.00	2,426.34	2,348.64	77.70	31.227		
14,600.00	10,350.00	16,630.51	12,399.00	79.53	83.62	147.62	-4,211.19	-564.00	2,426.34	2,347.34	79.00	30.713		
14,700.00	10,350.00	16,730.51	12,399.00	80.99	85.02	147.62	-4,311.18	-563.01	2,426.35	2,346.04	80.31	30.212		
14,800.00	10,350.00	16,830.51	12,399.00	82.45	86.43	147.62	-4,411.18	-562.01	2,426.35	2,344.72	81.63	29.725		
14,900.00	10,350.00	16,930.51	12,399.00	83.92	87.86	147.62	-4,511.17	-561.02	2,426.36	2,343.40	82.95	29.251		
15,000.00	10,350.00	17,030.51	12,399.00	85.40	89.28	147.62	-4,611.17	-560.02	2,426.36	2,342.08	84.28	28.789		
15,100.00	10,350.00	17,130.51	12,399.00	86.89	90.72	147.62	-4,711.16	-559.03	2,426.36	2,340.75	85.62	28.340		
15,200.00	10,350.00	17,230.51	12,399.00	88.38	92.17	147.62	-4,811.16	-558.03	2,426.37	2,339.41	86.96	27.902		
15,300.00	10,350.00	17,330.51	12,399.00	89.87	93.62	147.62	-4,911.15	-557.04	2,426.37	2,338.06	88.31	27.476		
15,400.00	10,350.00	17,430.51	12,399.00	91.38	95.07	147.62	-5,011.15	-556.05	2,426.37	2,336.71	89.66	27.062		
15,500.00	10,350.00	17,530.51	12,399.00	92.88	96.54	147.62	-5,111.14	-555.05	2,426.38	2,335.36	91.02	26.658		
15,600.00	10,350.00	17,630.51	12,399.00	94.39	98.01	147.61	-5,211.14	-554.06	2,426.38	2,334.00	92.39	26.264		
15,700.00	10,350.00	17,730.51	12,399.00	95.91	99.48	147.61	-5,311.13	-553.06	2,426.38	2,332.63	93.75	25.880		
15,800.00	10,350.00	17,830.51	12,399.00	97.43	100.96	147.61	-5,411.13	-552.07	2,426.39	2,331.26	95.13	25.507		
15,900.00	10,350.00	17,930.51	12,399.00	98.96	102.45	147.61	-5,511.12	-551.07	2,426.39	2,329.89	96.50	25.143		
16,000.00	10,350.00	18,030.51	12,399.00	100.49	103.94	147.61	-5,611.12	-550.08	2,426.40	2,328.51	97.89	24.788		
16,100.00	10,350.00	18,130.51	12,399.00	102.02	105.44	147.61	-5,711.11	-549.08	2,426.40	2,327.13	99.27	24.442		
16,200.00	10,350.00	18,230.51	12,399.00	103.55	106.94	147.61	-5,811.11	-548.09	2,426.40	2,325.74	100.66	24.105		
16,300.00	10,350.00	18,330.51	12,399.00	105.09	108.44	147.61	-5,911.10	-547.10	2,426.41	2,324.35	102.05	23.776		
16,400.00	10,350.00	18,430.51	12,399.00	106.64	109.95	147.61	-6,011.10	-546.10	2,426.41	2,322.96	103.45	23.456		
16,500.00	10,350.00	18,530.51	12,399.00	108.18	111.46	147.61	-6,111.09	-545.11	2,426.41	2,321.57	104.85	23.143		
16,600.00	10,350.00	18,630.51	12,399.00	109.73	112.98	147.61	-6,211.09	-544.11	2,426.42	2,320.17	106.25	22.837		
16,700.00	10,350.00	18,730.51	12,399.00	111.29	114.50	147.61	-6,311.08	-543.12	2,426.42	2,318.77	107.65	22.539		
16,800.00	10,350.00	18,830.51	12,399.00	112.84	116.03	147.61	-6,411.08	-542.12	2,426.42	2,317.37	109.06	22.249		
16,900.00	10,350.00	18,930.51	12,399.00	114.40	117.55	147.61	-6,511.07	-541.13	2,426.43	2,315.96	110.47	21.965		
17,000.00	10,350.00	19,030.51	12,399.00	115.96	119.08	147.61	-6,611.07	-540.13	2,426.43	2,314.55	111.88	21.687		
17,100.00	10,350.00	19,130.51	12,399.00	117.52	120.62	147.61	-6,711.06	-539.14	2,426.44	2,313.14	113.30	21.416		
17,200.00	10,350.00	19,230.51	12,399.00	119.09	122.16	147.61	-6,811.06	-538.15	2,426.44	2,311.72	114.71	21.152		
17,300.00	10,350.00	19,330.51	12,399.00	120.66	123.70	147.61	-6,911.05	-537.15	2,426.44	2,310.31	116.13	20.894		
17,400.00	10,350.00	19,430.51	12,399.00	122.23	125.24	147.61	-7,011.05	-536.16	2,426.45	2,308.89	117.55	20.641		
17,500.00	10,350.00	19,530.51	12,399.00	123.80	126.78	147.61	-7,111.04	-535.16	2,426.45	2,307.47	118.98	20.394		
17,600.00	10,350.00	19,630.51	12,399.00	125.37	128.33	147.61	-7,211.04	-534.17	2,426.45	2,306.05	120.40	20.153		
17,700.00	10,350.00	19,730.51	12,399.00	126.95	129.88	147.61	-7,311.03	-533.17	2,426.46	2,304.63	121.83	19.917		
17,800.00	10,350.00	19,830.51	12,399.00	128.52	131.44	147.61	-7,411.03	-532.18	2,426.46	2,303.20	123.26	19.686		
17,900.00	10,350.00	19,930.51	12,399.00	130.10	132.99	147.61	-7,511.02	-531.18	2,426.46	2,301.78	124.69	19.460		
18,000.00	10,350.00	20,030.51	12,399.00	131.69	134.55	147.61	-7,611.02	-530.19	2,426.47	2,300.35	126.12	19.239		
18,100.00	10,350.00	20,130.51	12,399.00	133.27	136.11	147.61	-7,711.01	-529.19	2,426.47	2,298.92	127.55	19.023		
18,200.00	10,350.00	20,230.51	12,399.00	134.85	137.67	147.61	-7,811.01	-528.20	2,426.48	2,297.49	128.99	18.812		
18,300.00	10,350.00	20,330.51	12,399.00	136.44	139.24	147.61	-7,911.00	-527.21	2,426.48	2,296.06	130.42	18.605		
18,400.00	10,350.00	20,430.51	12,399.00	138.03	140.80	147.61	-8,011.00	-526.21	2,426.48	2,294.62	131.86	18.402		
18,500.00	10,350.00	20,530.51	12,399.00	139.62	142.37	147.61	-8,110.99	-525.22	2,426.49	2,293.19	133.30	18.204		
18,600.00	10,350.00	20,630.51	12,399.00	141.21	143.94	147.61	-8,210.99	-524.22	2,426.49	2,291.75	134.74	18.009		
18,700.00	10,350.00	20,730.51	12,399.00	142.80	145.51	147.61	-8,310.98	-523.23	2,426.49	2,290.32	136.18	17.819		
18,800.00	10,350.00	20,830.51	12,399.00	144.39	147.09	147.61	-8,410.98	-522.23	2,426.50	2,288.88	137.62	17.632		
18,900.00	10,350.00	20,930.51	12,399.00	145.99	148.66	147.61	-8,510.97	-521.24	2,426.50	2,287.44	139.06	17.449		
19,000.00	10,350.00	21,030.51	12,399.00	147.58	150.24	147.61	-8,610.97	-520.24	2,426.50	2,286.00	140.51	17.270		
19,100.00	10,350.00	21,130.51	12,399.00	149.18	151.82	147.61	-8,710.96	-519.25	2,426.51	2,284.56	141.95	17.094		
19,200.00	10,350.00	21,230.51	12,399.00	150.78	153.40	147.61	-8,810.96	-518.26	2,426.51	2,283.12	143.39	16.922		
19,300.00	10,350.00	21,330.51	12,399.00	152.38	154.98	147.61	-8,910.95	-517.26	2,426.52	2,281.67	144.84	16.753		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 804H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,400.00	10,350.00	21,430.51	12,399.00	153.98	156.56	147.61	-9,010.95	-516.27	2,426.52	2,280.23	146.29	16.587	
19,500.00	10,350.00	21,530.51	12,399.00	155.58	158.15	147.61	-9,110.94	-515.27	2,426.52	2,278.79	147.73	16.425	
19,600.00	10,350.00	21,630.51	12,399.00	157.18	159.73	147.61	-9,210.94	-514.28	2,426.53	2,277.35	149.18	16.266	
19,700.00	10,350.00	21,730.51	12,399.00	158.79	161.32	147.61	-9,310.93	-513.28	2,426.53	2,275.90	150.63	16.109	
19,800.00	10,350.00	21,830.51	12,399.00	160.39	162.91	147.61	-9,410.93	-512.29	2,426.53	2,274.45	152.08	15.956	
19,900.00	10,350.00	21,930.51	12,399.00	162.00	164.50	147.61	-9,510.92	-511.29	2,426.54	2,273.01	153.53	15.805	
20,000.00	10,350.00	22,030.51	12,399.00	163.61	166.09	147.61	-9,610.92	-510.30	2,426.54	2,271.56	154.98	15.657	
20,100.00	10,350.00	22,130.51	12,399.00	165.21	167.68	147.61	-9,710.91	-509.31	2,426.54	2,270.11	156.43	15.512	
20,200.00	10,350.00	22,230.51	12,399.00	166.82	169.27	147.61	-9,810.91	-508.31	2,426.55	2,268.67	157.88	15.369	
20,300.00	10,350.00	22,330.51	12,399.00	168.43	170.87	147.61	-9,910.90	-507.32	2,426.55	2,267.22	159.33	15.229	
20,400.00	10,350.00	22,430.51	12,399.00	170.04	172.46	147.61	-10,010.90	-506.32	2,426.56	2,265.77	160.78	15.092	
20,500.00	10,350.00	22,530.51	12,399.00	171.65	174.06	147.61	-10,110.89	-505.33	2,426.56	2,264.32	162.24	14.957	
20,529.73	10,350.00	22,560.25	12,399.00	172.13	174.53	147.61	-10,140.62	-505.03	2,426.56	2,263.89	162.67	14.917	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	-9.93	74.83	-13.10	75.96					
100.00	100.00	100.00	100.00	0.13	0.13	-9.93	74.83	-13.10	75.96	75.79	0.18	428.118		
200.00	200.00	200.00	200.00	0.48	0.48	-9.93	74.83	-13.10	75.96	75.28	0.68	110.994		
300.00	300.00	300.00	300.00	0.84	0.84	-9.93	74.83	-13.10	75.96	74.77	1.19	63.762		
400.00	400.00	400.00	400.00	1.20	1.20	-9.93	74.83	-13.10	75.96	74.26	1.70	44.729		
500.00	500.00	500.00	500.00	1.56	1.56	-9.93	74.83	-13.10	75.96	73.76	2.21	34.446		
600.00	600.00	600.00	600.00	1.92	1.92	-9.93	74.83	-13.10	75.96	73.25	2.71	28.008		
700.00	700.00	700.00	700.00	2.28	2.28	-9.93	74.83	-13.10	75.96	72.74	3.22	23.597		
800.00	800.00	800.00	800.00	2.63	2.63	-9.93	74.83	-13.10	75.96	72.24	3.73	20.387		
900.00	900.00	900.00	900.00	2.99	2.99	-9.93	74.83	-13.10	75.96	71.73	4.23	17.945		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-9.93	74.83	-13.10	75.96	71.22	4.74	16.026		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-9.93	74.83	-13.10	75.96	70.72	5.25	14.477		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-9.93	74.83	-13.10	75.96	70.21	5.75	13.202		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-9.93	74.83	-13.10	75.96	69.70	6.26	12.133		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-9.93	74.83	-13.10	75.96	69.20	6.77	11.224		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	-9.93	74.83	-13.10	75.96	68.69	7.27	10.442		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	-9.93	74.83	-13.10	75.96	68.18	7.78	9.762		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	-9.93	74.83	-13.10	75.96	67.67	8.29	9.165		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-9.93	74.83	-13.10	75.96	67.17	8.80	8.636		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-9.93	74.83	-13.10	75.96	66.66	9.30	8.166		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-9.93	74.83	-13.10	75.96	66.15	9.81	7.744		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	-9.93	74.83	-13.10	75.96	65.65	10.32	7.363		
2,200.00	2,200.00	2,200.00	2,200.00	7.65	7.65	-9.93	74.83	-13.10	75.96	65.14	10.82	7.018 CC		
2,300.00	2,299.99	2,299.38	2,299.37	8.01	8.01	-80.74	75.43	-11.96	76.16	64.84	11.32	6.727 ES		
2,400.00	2,399.91	2,398.76	2,398.67	8.35	8.35	-80.85	77.26	-8.54	76.74	64.93	11.81	6.497		
2,500.00	2,499.69	2,498.31	2,498.01	8.70	8.70	-81.11	80.27	-2.91	77.69	65.38	12.31	6.312		
2,600.00	2,599.27	2,598.27	2,597.72	9.06	9.06	-82.77	83.61	3.35	78.47	65.67	12.81	6.127		
2,700.00	2,698.57	2,698.15	2,697.35	9.42	9.41	-86.27	86.96	9.61	79.11	65.80	13.31	5.943		
2,800.00	2,797.54	2,797.87	2,796.82	9.78	9.77	-91.56	90.30	15.85	80.08	66.25	13.82	5.794		
2,815.66	2,813.00	2,813.47	2,812.38	9.84	9.82	-92.54	90.82	16.83	80.30	66.40	13.90	5.776		
2,900.00	2,896.24	2,897.45	2,896.15	10.15	10.13	-97.85	93.63	22.09	81.92	67.59	14.33	5.716		
3,000.00	2,994.95	2,997.03	2,995.48	10.53	10.48	-103.83	96.96	28.33	84.72	69.88	14.85	5.707 SF		
3,100.00	3,093.65	3,096.62	3,094.81	10.91	10.84	-109.36	100.30	34.56	88.39	73.03	15.36	5.754		
3,200.00	3,192.36	3,196.20	3,194.14	11.29	11.20	-114.42	103.63	40.80	92.81	76.94	15.87	5.847		
3,300.00	3,291.06	3,295.78	3,293.47	11.68	11.56	-118.99	106.96	47.04	97.89	81.51	16.38	5.975		
3,400.00	3,389.76	3,395.36	3,392.80	12.07	11.92	-123.08	110.30	53.27	103.53	86.64	16.90	6.128		
3,500.00	3,488.47	3,494.94	3,492.13	12.47	12.29	-126.74	113.63	59.51	109.65	92.24	17.41	6.300		
3,600.00	3,587.17	3,594.52	3,591.45	12.87	12.65	-130.00	116.96	65.75	116.16	98.25	17.91	6.484		
3,700.00	3,685.88	3,694.10	3,690.78	13.27	13.01	-132.91	120.29	71.98	123.01	104.59	18.42	6.677		
3,800.00	3,784.58	3,793.68	3,790.11	13.67	13.37	-135.51	123.63	78.22	130.15	111.22	18.93	6.874		
3,900.00	3,883.28	3,893.26	3,889.44	14.08	13.74	-137.83	126.96	84.46	137.52	118.08	19.44	7.074		
4,000.00	3,981.99	3,992.84	3,988.77	14.49	14.10	-139.91	130.29	90.69	145.10	125.15	19.95	7.273		
4,100.00	4,080.69	4,092.42	4,088.10	14.90	14.47	-141.79	133.63	96.93	152.84	132.38	20.46	7.471		
4,200.00	4,179.39	4,192.00	4,187.43	15.31	14.83	-143.48	136.96	103.17	160.74	139.77	20.97	7.666		
4,300.00	4,278.10	4,291.58	4,286.76	15.72	15.20	-145.02	140.29	109.41	168.76	147.28	21.48	7.857		
4,400.00	4,376.80	4,391.16	4,386.09	16.13	15.57	-146.41	143.63	115.64	176.89	154.90	21.99	8.045		
4,500.00	4,475.51	4,490.74	4,485.42	16.55	15.93	-147.68	146.96	121.88	185.11	162.62	22.50	8.228		
4,600.00	4,574.21	4,590.32	4,584.75	16.97	16.30	-148.84	150.29	128.12	193.42	170.41	23.01	8.407		
4,700.00	4,672.91	4,689.91	4,684.08	17.38	16.67	-149.91	153.63	134.35	201.80	178.28	23.52	8.580		
4,800.00	4,771.62	4,789.49	4,783.41	17.80	17.03	-150.89	156.96	140.59	210.25	186.22	24.03	8.749		
4,900.00	4,870.32	4,889.07	4,882.73	18.22	17.40	-151.80	160.29	146.83	218.75	194.21	24.54	8.913		
5,000.00	4,969.03	4,988.65	4,982.06	18.64	17.77	-152.64	163.63	153.06	227.30	202.25	25.05	9.072		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	5,088.23	5,081.39	19.07	18.14	-153.41	166.96	159.30	235.90	210.33	25.57	9.227		
5,200.00	5,166.43	5,187.81	5,180.72	19.49	18.51	-154.14	170.29	165.54	244.54	218.46	26.08	9.377		
5,300.00	5,265.14	5,287.39	5,280.05	19.91	18.87	-154.81	173.63	171.78	253.21	226.62	26.59	9.522		
5,400.00	5,363.84	5,386.97	5,379.38	20.33	19.24	-155.44	176.96	178.01	261.92	234.81	27.11	9.663		
5,500.00	5,462.54	5,486.55	5,478.71	20.76	19.61	-156.02	180.29	184.25	270.65	243.03	27.62	9.800		
5,600.00	5,561.25	5,586.13	5,578.04	21.18	19.98	-156.57	183.63	190.49	279.41	251.28	28.13	9.932		
5,700.00	5,659.95	5,685.71	5,677.37	21.61	20.35	-157.09	186.96	196.72	288.20	259.55	28.65	10.061		
5,800.00	5,758.66	5,785.29	5,776.70	22.04	20.72	-157.58	190.29	202.96	297.00	267.84	29.16	10.185		
5,900.00	5,857.36	5,884.87	5,876.03	22.46	21.09	-158.04	193.63	209.20	305.83	276.16	29.67	10.306		
6,000.00	5,956.06	5,984.45	5,975.36	22.89	21.46	-158.47	196.96	215.43	314.68	284.49	30.19	10.424		
6,100.00	6,054.77	6,084.03	6,074.68	23.32	21.83	-158.88	200.29	221.67	323.54	292.83	30.70	10.537		
6,200.00	6,153.47	6,183.61	6,174.01	23.75	22.20	-159.27	203.62	227.91	332.42	301.20	31.22	10.648		
6,300.00	6,252.18	6,283.20	6,273.34	24.18	22.57	-159.63	206.96	234.15	341.31	309.57	31.73	10.755		
6,400.00	6,350.88	6,382.78	6,372.67	24.60	22.94	-159.98	210.29	240.38	350.21	317.96	32.25	10.860		
6,500.00	6,449.58	6,482.36	6,472.00	25.03	23.31	-160.31	213.62	246.62	359.13	326.37	32.76	10.961		
6,600.00	6,548.29	6,581.94	6,571.33	25.46	23.68	-160.63	216.96	252.86	368.06	334.78	33.28	11.059		
6,700.00	6,646.99	6,681.52	6,670.66	25.89	24.05	-160.93	220.29	259.09	377.00	343.20	33.80	11.155		
6,758.77	6,705.00	6,740.04	6,729.04	26.15	24.27	-161.10	222.25	262.76	382.26	348.16	34.10	11.210		
6,800.00	6,745.73	6,781.12	6,770.01	26.32	24.42	-161.22	223.62	265.33	385.74	351.43	34.31	11.242		
6,900.00	6,844.79	6,880.88	6,869.52	26.74	24.79	-161.42	226.96	271.58	392.44	357.61	34.83	11.268		
7,000.00	6,944.17	6,980.79	6,969.18	27.13	25.16	-161.48	230.31	277.84	396.66	361.32	35.34	11.283		
7,100.00	7,043.80	7,079.82	7,067.96	27.51	25.53	-161.40	233.62	284.03	398.42	362.57	35.85	11.112		
7,200.00	7,143.63	7,179.35	7,159.34	27.88	25.86	-161.31	236.05	288.58	398.99	362.66	36.33	10.983		
7,300.00	7,243.57	7,262.87	7,250.81	28.22	26.19	-161.25	237.45	291.20	399.20	362.41	36.78	10.852		
7,374.43	7,318.00	7,331.00	7,318.93	28.46	26.43	-90.46	237.82	291.89	399.12	362.01	37.11	10.755		
7,389.39	7,332.96	7,345.02	7,332.96	28.51	26.48	-90.46	237.83	291.90	399.11	361.93	37.17	10.736		
7,400.00	7,343.57	7,355.63	7,343.57	28.55	26.52	-90.46	237.83	291.90	399.11	361.88	37.23	10.721		
7,500.00	7,443.57	7,455.63	7,443.57	28.87	26.87	-90.46	237.83	291.90	399.11	361.39	37.72	10.582		
7,600.00	7,543.57	7,555.63	7,543.57	29.19	27.21	-90.46	237.83	291.90	399.11	360.90	38.21	10.446		
7,700.00	7,643.57	7,655.63	7,643.57	29.52	27.56	-90.46	237.83	291.90	399.11	360.41	38.70	10.314		
7,800.00	7,743.57	7,755.63	7,743.57	29.84	27.91	-90.46	237.83	291.90	399.11	359.92	39.19	10.185		
7,900.00	7,843.57	7,855.63	7,843.57	30.17	28.26	-90.46	237.83	291.90	399.11	359.43	39.68	10.059		
8,000.00	7,943.57	7,955.63	7,943.57	30.49	28.61	-90.46	237.83	291.90	399.11	358.94	40.17	9.936		
8,100.00	8,043.57	8,055.63	8,043.57	30.82	28.95	-90.46	237.83	291.90	399.11	358.45	40.66	9.815		
8,200.00	8,143.57	8,155.63	8,143.57	31.15	29.30	-90.46	237.83	291.90	399.11	357.96	41.15	9.698		
8,300.00	8,243.57	8,255.63	8,243.57	31.48	29.65	-90.46	237.83	291.90	399.11	357.46	41.65	9.583		
8,400.00	8,343.57	8,355.63	8,343.57	31.80	30.00	-90.46	237.83	291.90	399.11	356.97	42.14	9.471		
8,500.00	8,443.57	8,455.63	8,443.57	32.13	30.35	-90.46	237.83	291.90	399.11	356.48	42.63	9.362		
8,600.00	8,543.57	8,555.63	8,543.57	32.46	30.70	-90.46	237.83	291.90	399.11	355.98	43.13	9.254		
8,700.00	8,643.57	8,655.63	8,643.57	32.80	31.05	-90.46	237.83	291.90	399.11	355.49	43.62	9.150		
8,800.00	8,743.57	8,755.63	8,743.57	33.13	31.40	-90.46	237.83	291.90	399.11	354.99	44.11	9.047		
8,900.00	8,843.57	8,855.63	8,843.57	33.46	31.75	-90.46	237.83	291.90	399.11	354.50	44.61	8.947		
9,000.00	8,943.57	8,955.63	8,943.57	33.79	32.10	-90.46	237.83	291.90	399.11	354.01	45.10	8.849		
9,100.00	9,043.57	9,055.63	9,043.57	34.12	32.45	-90.46	237.83	291.90	399.11	353.51	45.60	8.753		
9,200.00	9,143.57	9,155.63	9,143.57	34.46	32.80	-90.46	237.83	291.90	399.11	353.02	46.09	8.659		
9,300.00	9,243.57	9,255.63	9,243.57	34.79	33.15	-90.46	237.83	291.90	399.11	352.52	46.59	8.567		
9,400.00	9,343.57	9,355.63	9,343.57	35.13	33.51	-90.46	237.83	291.90	399.11	352.02	47.08	8.476		
9,500.00	9,443.57	9,455.63	9,443.57	35.46	33.86	-90.46	237.83	291.90	399.11	351.53	47.58	8.388		
9,600.00	9,543.57	9,555.63	9,543.57	35.80	34.21	-90.46	237.83	291.90	399.11	351.03	48.08	8.301		
9,700.00	9,643.57	9,655.63	9,643.57	36.13	34.56	-90.46	237.83	291.90	399.11	350.54	48.57	8.217		
9,800.00	9,743.57	9,755.63	9,743.57	36.47	34.91	-90.46	237.83	291.90	399.11	350.04	49.07	8.133		
9,833.47	9,777.04	9,789.11	9,777.04	36.58	35.03	-90.46	237.83	291.90	399.11	349.87	49.24	8.106		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,850.00	9,793.56	9,805.63	9,793.56	36.64	35.09	90.15	237.83	291.90	399.11	349.79	49.32	8.093		
9,900.00	9,843.42	9,855.48	9,843.42	36.79	35.26	90.67	237.83	291.90	399.14	349.58	49.56	8.053		
9,950.00	9,892.77	9,904.83	9,892.77	36.93	35.44	91.78	237.83	291.90	399.31	349.50	49.81	8.017		
10,000.00	9,941.23	9,953.30	9,941.23	37.06	35.61	93.41	237.83	291.90	399.88	349.83	50.05	7.989		
10,050.00	9,988.45	10,000.52	9,988.45	37.19	35.77	95.49	237.83	291.90	401.23	350.93	50.30	7.977		
10,100.00	10,034.06	10,046.12	10,034.06	37.30	35.93	97.87	237.83	291.90	403.85	353.30	50.55	7.989		
10,150.00	10,077.71	10,089.78	10,077.71	37.41	36.09	100.40	237.83	291.90	408.28	357.48	50.80	8.037		
10,200.00	10,119.07	10,131.14	10,119.07	37.50	36.23	102.92	237.83	291.90	415.10	364.06	51.04	8.133		
10,250.00	10,157.84	10,169.90	10,157.84	37.58	36.37	105.25	237.83	291.90	424.86	373.58	51.28	8.285		
10,300.00	10,193.70	10,205.77	10,193.70	37.65	36.50	107.25	237.83	291.90	438.02	386.52	51.51	8.504		
10,350.00	10,226.39	10,238.46	10,226.39	37.71	36.61	108.74	237.83	291.90	454.91	403.20	51.71	8.797		
10,400.00	10,255.66	10,267.73	10,255.66	37.76	36.71	109.62	237.83	291.90	475.68	423.78	51.90	9.165		
10,450.00	10,281.29	10,293.36	10,281.29	37.81	36.80	109.75	237.83	291.90	500.33	448.27	52.06	9.610		
10,500.00	10,303.08	10,315.15	10,303.08	37.85	36.88	109.00	237.83	291.90	528.68	476.48	52.19	10.129		
10,550.00	10,320.87	10,332.94	10,320.87	37.90	36.94	107.24	237.83	291.90	560.42	508.12	52.30	10.716		
10,600.00	10,334.52	10,346.59	10,334.52	37.96	36.99	104.33	237.83	291.90	595.16	542.79	52.38	11.363		
10,650.00	10,343.93	10,355.99	10,343.93	38.03	37.03	100.12	237.83	291.90	632.44	580.01	52.43	12.064		
10,700.00	10,349.02	10,361.09	10,349.02	38.12	37.04	94.52	237.83	291.90	671.74	619.29	52.45	12.807		
10,733.47	10,350.00	10,362.06	10,350.00	38.19	37.05	90.00	237.83	291.90	698.94	646.48	52.46	13.324		
10,800.00	10,350.00	10,362.06	10,350.00	38.36	37.05	90.00	237.83	291.90	754.51	702.05	52.46	14.383		
10,900.00	10,350.00	10,362.06	10,350.00	38.68	37.05	90.00	237.83	291.90	841.04	788.58	52.46	16.032		
11,000.00	10,350.00	10,362.06	10,350.00	39.08	37.05	90.00	237.83	291.90	930.27	877.81	52.46	17.734		
11,100.00	10,350.00	10,362.06	10,350.00	39.56	37.05	90.00	237.83	291.90	1,021.50	969.05	52.45	19.475		
11,200.00	10,350.00	10,362.06	10,350.00	40.10	37.05	90.00	237.83	291.90	1,114.24	1,061.79	52.45	21.244		
11,300.00	10,350.00	10,362.06	10,350.00	40.70	37.05	90.00	237.83	291.90	1,208.13	1,155.69	52.45	23.035		
11,400.00	10,350.00	10,362.06	10,350.00	41.37	37.05	90.00	237.83	291.90	1,302.94	1,250.49	52.45	24.843		
11,500.00	10,350.00	10,362.06	10,350.00	42.08	37.05	90.00	237.83	291.90	1,398.47	1,346.02	52.45	26.664		
11,600.00	10,350.00	10,362.06	10,350.00	42.85	37.05	90.00	237.83	291.90	1,494.58	1,442.13	52.45	28.495		
11,700.00	10,350.00	10,362.06	10,350.00	43.67	37.05	90.00	237.83	291.90	1,591.17	1,538.72	52.45	30.335		
11,800.00	10,350.00	10,362.06	10,350.00	44.53	37.05	90.00	237.83	291.90	1,688.16	1,635.70	52.46	32.181		
11,900.00	10,350.00	10,362.06	10,350.00	45.44	37.05	90.00	237.83	291.90	1,785.48	1,733.02	52.46	34.032		
12,000.00	10,350.00	10,362.06	10,350.00	46.39	37.05	90.00	237.83	291.90	1,883.09	1,830.61	52.47	35.887		
12,100.00	10,350.00	10,362.06	10,350.00	47.37	37.05	90.00	237.83	291.90	1,980.93	1,928.45	52.48	37.746		
12,200.00	10,350.00	10,362.06	10,350.00	48.39	37.05	90.00	237.83	291.90	2,078.98	2,026.49	52.49	39.607		
12,300.00	10,350.00	10,362.06	10,350.00	49.45	37.05	90.00	237.83	291.90	2,177.20	2,124.70	52.50	41.470		
12,400.00	10,350.00	10,362.06	10,350.00	50.54	37.05	90.00	237.83	291.90	2,275.58	2,223.07	52.51	43.335		
12,500.00	10,350.00	10,362.06	10,350.00	51.66	37.05	90.00	237.83	291.90	2,374.09	2,321.57	52.52	45.200		
12,600.00	10,350.00	14,946.42	12,740.00	52.80	58.88	170.51	-2,202.33	316.12	2,423.13	2,377.35	45.78	52.925		
12,700.00	10,350.00	15,046.42	12,740.00	53.97	59.95	170.51	-2,302.32	317.12	2,423.13	2,376.62	46.51	52.102		
12,800.00	10,350.00	15,146.42	12,740.00	55.17	61.05	170.51	-2,402.32	318.11	2,423.13	2,375.88	47.25	51.285		
12,900.00	10,350.00	15,246.42	12,740.00	56.39	62.18	170.51	-2,502.31	319.10	2,423.13	2,375.13	48.01	50.477		
13,000.00	10,350.00	15,346.42	12,740.00	57.63	63.32	170.51	-2,602.31	320.09	2,423.14	2,374.36	48.78	49.677		
13,100.00	10,350.00	15,446.42	12,740.00	58.89	64.49	170.51	-2,702.30	321.09	2,423.14	2,373.57	49.56	48.889		
13,200.00	10,350.00	15,546.42	12,740.00	60.17	65.68	170.51	-2,802.30	322.08	2,423.14	2,372.77	50.37	48.111		
13,300.00	10,350.00	15,646.42	12,740.00	61.47	66.89	170.51	-2,902.29	323.07	2,423.14	2,371.96	51.18	47.346		
13,400.00	10,350.00	15,746.42	12,740.00	62.78	68.12	170.51	-3,002.29	324.06	2,423.14	2,371.13	52.01	46.592		
13,500.00	10,350.00	15,846.42	12,740.00	64.11	69.36	170.51	-3,102.28	325.06	2,423.14	2,370.30	52.85	45.852		
13,600.00	10,350.00	15,946.42	12,740.00	65.45	70.62	170.51	-3,202.28	326.05	2,423.14	2,369.45	53.70	45.125		
13,700.00	10,350.00	16,046.42	12,740.00	66.81	71.90	170.51	-3,302.27	327.04	2,423.15	2,368.59	54.56	44.413		
13,800.00	10,350.00	16,146.42	12,740.00	68.18	73.20	170.51	-3,402.27	328.03	2,423.15	2,367.72	55.43	43.714		
13,900.00	10,350.00	16,246.42	12,740.00	69.56	74.50	170.51	-3,502.26	329.03	2,423.15	2,366.83	56.31	43.029		
14,000.00	10,350.00	16,346.42	12,740.00	70.96	75.82	170.51	-3,602.26	330.02	2,423.15	2,365.94	57.21	42.358		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 805H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,300.00	10,350.00	21,646.42	12,740.00	152.38	155.15	170.50	-8,902.00	382.62	2,423.23	2,311.75	111.48	21.737	
19,400.00	10,350.00	21,746.42	12,740.00	153.98	156.73	170.50	-9,001.99	383.61	2,423.23	2,310.66	112.57	21.527	
19,500.00	10,350.00	21,846.42	12,740.00	155.58	158.32	170.50	-9,101.99	384.61	2,423.23	2,309.57	113.66	21.320	
19,600.00	10,350.00	21,946.42	12,740.00	157.18	159.90	170.50	-9,201.98	385.60	2,423.23	2,308.48	114.75	21.118	
19,700.00	10,350.00	22,046.42	12,740.00	158.79	161.48	170.50	-9,301.98	386.59	2,423.23	2,307.39	115.84	20.919	
19,800.00	10,350.00	22,146.42	12,740.00	160.39	163.07	170.50	-9,401.97	387.58	2,423.23	2,306.30	116.93	20.723	
19,900.00	10,350.00	22,246.42	12,740.00	162.00	164.66	170.50	-9,501.97	388.58	2,423.24	2,305.21	118.03	20.531	
20,000.00	10,350.00	22,346.42	12,740.00	163.61	166.25	170.50	-9,601.96	389.57	2,423.24	2,304.12	119.12	20.343	
20,100.00	10,350.00	22,446.42	12,740.00	165.21	167.84	170.50	-9,701.96	390.56	2,423.24	2,303.02	120.22	20.157	
20,200.00	10,350.00	22,546.42	12,740.00	166.82	169.43	170.50	-9,801.95	391.55	2,423.24	2,301.93	121.31	19.975	
20,300.00	10,350.00	22,646.42	12,740.00	168.43	171.02	170.50	-9,901.95	392.55	2,423.24	2,300.83	122.41	19.796	
20,400.00	10,350.00	22,746.42	12,740.00	170.04	172.61	170.50	-10,001.94	393.54	2,423.24	2,299.73	123.51	19.620	
20,500.00	10,350.00	22,846.42	12,740.00	171.65	174.21	170.50	-10,101.94	394.53	2,423.24	2,298.64	124.61	19.447	
20,502.31	10,350.00	22,848.73	12,740.00	171.69	174.25	170.50	-10,104.24	394.55	2,423.24	2,298.61	124.63	19.443	
20,529.73	10,350.00	22,874.14	12,740.00	172.13	174.65	170.50	-10,129.65	394.81	2,423.25	2,298.33	124.91	19.399	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - Paul Foster Fed Com 806H - OH - Plan #1											Offset Site Error: 0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	8.85	75.06	11.68	75.96					
100.00	100.00	100.00	100.00	0.13	0.13	8.85	75.06	11.68	75.96	75.79	0.18	428.118		
200.00	200.00	200.00	200.00	0.48	0.48	8.85	75.06	11.68	75.96	75.28	0.68	110.994		
300.00	300.00	300.00	300.00	0.84	0.84	8.85	75.06	11.68	75.96	74.77	1.19	63.762		
400.00	400.00	400.00	400.00	1.20	1.20	8.85	75.06	11.68	75.96	74.26	1.70	44.729		
500.00	500.00	500.00	500.00	1.56	1.56	8.85	75.06	11.68	75.96	73.76	2.21	34.446		
600.00	600.00	600.00	600.00	1.92	1.92	8.85	75.06	11.68	75.96	73.25	2.71	28.008		
700.00	700.00	700.00	700.00	2.28	2.28	8.85	75.06	11.68	75.96	72.74	3.22	23.597		
800.00	800.00	800.00	800.00	2.63	2.63	8.85	75.06	11.68	75.96	72.24	3.73	20.387		
900.00	900.00	900.00	900.00	2.99	2.99	8.85	75.06	11.68	75.96	71.73	4.23	17.945		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	8.85	75.06	11.68	75.96	71.22	4.74	16.026		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	8.85	75.06	11.68	75.96	70.72	5.25	14.477		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	8.85	75.06	11.68	75.96	70.21	5.75	13.202		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	8.85	75.06	11.68	75.96	69.70	6.26	12.133		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	8.85	75.06	11.68	75.96	69.20	6.77	11.224		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	8.85	75.06	11.68	75.96	68.69	7.27	10.442		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	8.85	75.06	11.68	75.96	68.18	7.78	9.762		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	8.85	75.06	11.68	75.96	67.67	8.29	9.165		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	8.85	75.06	11.68	75.96	67.17	8.80	8.636		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	8.85	75.06	11.68	75.96	66.66	9.30	8.166		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	8.85	75.06	11.68	75.96	66.15	9.81	7.744		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	8.85	75.06	11.68	75.96	65.65	10.32	7.363		
2,200.00	2,200.00	2,199.17	2,199.15	7.65	7.64	9.73	75.40	12.92	76.51	65.69	10.82	7.073		
2,300.00	2,299.99	2,298.25	2,298.16	8.01	7.99	-59.29	76.43	16.64	77.57	66.26	11.31	6.860		
2,400.00	2,399.91	2,397.28	2,396.98	8.35	8.33	-57.54	78.14	22.83	78.54	66.75	11.79	6.660		
2,500.00	2,499.69	2,496.23	2,495.52	8.70	8.68	-55.79	80.53	31.47	79.42	67.14	12.28	6.468		
2,600.00	2,599.27	2,595.12	2,593.74	9.06	9.04	-54.03	83.60	42.57	80.22	67.46	12.77	6.284		
2,700.00	2,698.57	2,695.04	2,692.79	9.42	9.40	-52.91	87.09	55.17	80.31	67.05	13.27	6.053		
2,800.00	2,797.54	2,795.02	2,791.92	9.78	9.77	-53.31	90.58	67.78	78.85	65.06	13.78	5.721		
2,815.66	2,813.00	2,810.68	2,807.44	9.84	9.82	-53.51	91.12	69.75	78.47	64.61	13.86	5.661		
2,900.00	2,896.24	2,894.97	2,891.01	10.15	10.14	-54.72	94.07	80.38	76.39	62.09	14.30	5.341		
3,000.00	2,994.95	2,994.93	2,990.10	10.53	10.51	-56.25	97.55	92.99	73.97	59.14	14.83	4.988		
3,100.00	3,093.65	3,094.88	3,089.19	10.91	10.89	-57.88	101.04	105.60	71.61	56.25	15.36	4.661		
3,200.00	3,192.36	3,194.83	3,188.28	11.29	11.26	-59.61	104.53	118.21	69.31	53.41	15.90	4.358		
3,300.00	3,291.06	3,294.78	3,287.37	11.68	11.65	-61.47	108.02	130.81	67.07	50.63	16.45	4.078		
3,400.00	3,389.76	3,394.73	3,386.47	12.07	12.03	-63.45	111.51	143.42	64.92	47.92	17.00	3.819		
3,500.00	3,488.47	3,494.68	3,485.56	12.47	12.41	-65.56	114.99	156.03	62.84	45.29	17.55	3.580		
3,600.00	3,587.17	3,594.63	3,584.65	12.87	12.80	-67.82	118.48	168.63	60.85	42.74	18.11	3.359		
3,700.00	3,685.88	3,694.58	3,683.74	13.27	13.19	-70.22	121.97	181.24	58.97	40.29	18.68	3.157		
3,800.00	3,784.58	3,794.53	3,782.83	13.67	13.58	-72.78	125.46	193.85	57.20	37.95	19.25	2.972		
3,900.00	3,883.28	3,894.48	3,881.92	14.08	13.97	-75.49	128.95	206.46	55.54	35.72	19.82	2.802		
4,000.00	3,981.99	3,994.43	3,981.01	14.49	14.36	-78.36	132.43	219.06	54.02	33.63	20.39	2.649		
4,100.00	4,080.69	4,094.38	4,080.10	14.90	14.76	-81.39	135.92	231.67	52.65	31.68	20.97	2.511		
4,200.00	4,179.39	4,194.33	4,179.19	15.31	15.15	-84.58	139.41	244.28	51.42	29.88	21.54	2.388		
4,300.00	4,278.10	4,294.28	4,278.29	15.72	15.55	-87.91	142.90	256.88	50.37	28.26	22.11	2.278		
4,400.00	4,376.80	4,394.23	4,377.38	16.13	15.95	-91.37	146.39	269.49	49.49	26.82	22.67	2.183		
4,500.00	4,475.51	4,494.19	4,476.47	16.55	16.34	-94.94	149.87	282.10	48.80	25.57	23.23	2.101		
4,600.00	4,574.21	4,594.14	4,575.56	16.97	16.74	-98.60	153.36	294.71	48.30	24.52	23.78	2.031		
4,700.00	4,672.91	4,694.09	4,674.65	17.38	17.14	-102.31	156.85	307.31	48.00	23.69	24.31	1.974		
4,794.87	4,766.55	4,788.91	4,768.65	17.78	17.52	-105.87	160.16	319.27	47.91	23.10	24.81	1.931 CC		
4,800.00	4,771.62	4,794.04	4,773.74	17.80	17.54	-106.06	160.34	319.92	47.91	23.07	24.84	1.929		
4,900.00	4,870.32	4,893.99	4,872.83	18.22	17.94	-109.81	163.83	332.53	48.02	22.67	25.35	1.894		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,969.03	4,993.94	4,971.92	18.64	18.34	-113.52	167.31	345.13	48.34	22.48	25.86	1.870	ES	
5,100.00	5,067.73	5,093.89	5,071.01	19.07	18.74	-117.17	170.80	357.74	48.86	22.51	26.35	1.854		
5,200.00	5,166.43	5,193.84	5,170.10	19.49	19.15	-120.73	174.29	370.35	49.57	22.74	26.83	1.847		
5,300.00	5,265.14	5,293.79	5,269.20	19.91	19.55	-124.18	177.78	382.96	50.47	23.16	27.31	1.848		
5,400.00	5,363.84	5,393.74	5,368.29	20.33	19.95	-127.50	181.27	395.56	51.54	23.76	27.78	1.855		
5,500.00	5,462.54	5,493.69	5,467.38	20.76	20.36	-130.67	184.75	408.17	52.78	24.53	28.25	1.868		
5,600.00	5,561.25	5,593.64	5,566.47	21.18	20.76	-133.68	188.24	420.78	54.17	25.45	28.72	1.886		
5,700.00	5,659.95	5,693.59	5,665.56	21.61	21.16	-136.54	191.73	433.38	55.71	26.52	29.18	1.909		
5,800.00	5,758.66	5,793.54	5,764.65	22.04	21.57	-139.23	195.22	445.99	57.37	27.72	29.65	1.935		
5,900.00	5,857.36	5,893.49	5,863.74	22.46	21.97	-141.77	198.71	458.60	59.16	29.04	30.12	1.964		
6,000.00	5,956.06	5,993.45	5,962.83	22.89	22.38	-144.16	202.19	471.21	61.05	30.46	30.59	1.996		
6,100.00	6,054.77	6,093.40	6,061.92	23.32	22.78	-146.40	205.68	483.81	63.05	31.98	31.07	2.029		
6,200.00	6,153.47	6,193.35	6,161.01	23.75	23.19	-148.50	209.17	496.42	65.13	33.59	31.54	2.065		
6,300.00	6,252.18	6,293.30	6,260.11	24.18	23.60	-150.47	212.66	509.03	67.30	35.28	32.03	2.101		
6,400.00	6,350.88	6,393.25	6,359.20	24.60	24.00	-152.31	216.15	521.63	69.54	37.03	32.51	2.139		
6,500.00	6,449.58	6,493.20	6,458.29	25.03	24.41	-154.04	219.63	534.24	71.85	38.85	33.00	2.178		
6,600.00	6,548.29	6,593.15	6,557.38	25.46	24.82	-155.65	223.12	546.85	74.22	40.73	33.49	2.216		
6,700.00	6,646.99	6,693.10	6,656.47	25.89	25.22	-157.17	226.61	559.46	76.65	42.67	33.98	2.256		
6,758.77	6,705.00	6,751.84	6,714.71	26.15	25.46	-158.01	228.66	566.86	78.09	43.82	34.27	2.279		
6,800.00	6,745.73	6,793.06	6,755.57	26.32	25.63	-158.54	230.10	572.06	78.91	44.44	34.48	2.289		
6,900.00	6,844.79	6,892.33	6,854.01	26.74	26.03	-159.32	233.52	584.42	79.36	44.37	35.00	2.268		
7,000.00	6,944.17	6,990.38	6,951.47	27.13	26.42	-159.85	236.36	594.69	79.34	43.83	35.51	2.234		
7,100.00	7,043.80	7,088.42	7,049.17	27.51	26.79	-160.26	238.53	602.55	79.33	43.32	36.00	2.203		
7,200.00	7,143.63	7,186.46	7,147.05	27.88	27.15	-160.54	240.04	607.99	79.32	42.86	36.46	2.176		
7,300.00	7,243.57	7,284.50	7,245.03	28.22	27.49	-160.70	240.87	611.01	79.32	42.44	36.88	2.151		
7,374.43	7,318.00	7,357.47	7,318.00	28.46	27.74	-89.96	241.06	611.68	79.32	42.14	37.17	2.134		
7,400.00	7,343.57	7,383.04	7,343.57	28.55	27.82	-89.96	241.06	611.68	79.32	42.02	37.30	2.127		
7,500.00	7,443.57	7,483.04	7,443.57	28.87	28.15	-89.96	241.06	611.68	79.32	41.53	37.78	2.099		
7,600.00	7,543.57	7,583.04	7,543.57	29.19	28.48	-89.96	241.06	611.68	79.32	41.05	38.27	2.073		
7,700.00	7,643.57	7,683.04	7,643.57	29.52	28.81	-89.96	241.06	611.68	79.32	40.56	38.75	2.047		
7,800.00	7,743.57	7,783.04	7,743.57	29.84	29.14	-89.96	241.06	611.68	79.32	40.08	39.24	2.021		
7,900.00	7,843.57	7,883.04	7,843.57	30.17	29.48	-89.96	241.06	611.68	79.32	39.59	39.73	1.996		
8,000.00	7,943.57	7,983.04	7,943.57	30.49	29.81	-89.96	241.06	611.68	79.32	39.10	40.22	1.972		
8,100.00	8,043.57	8,083.04	8,043.57	30.82	30.14	-89.96	241.06	611.68	79.32	38.61	40.70	1.949		
8,200.00	8,143.57	8,183.04	8,143.57	31.15	30.48	-89.96	241.06	611.68	79.32	38.12	41.19	1.925		
8,300.00	8,243.57	8,283.04	8,243.57	31.48	30.81	-89.96	241.06	611.68	79.32	37.64	41.68	1.903		
8,400.00	8,343.57	8,383.04	8,343.57	31.80	31.15	-89.96	241.06	611.68	79.32	37.15	42.17	1.881		
8,500.00	8,443.57	8,483.04	8,443.57	32.13	31.48	-89.96	241.06	611.68	79.32	36.66	42.66	1.859		
8,600.00	8,543.57	8,583.04	8,543.57	32.46	31.82	-89.96	241.06	611.68	79.32	36.17	43.15	1.838		
8,700.00	8,643.57	8,683.04	8,643.57	32.80	32.16	-89.96	241.06	611.68	79.32	35.67	43.64	1.817		
8,800.00	8,743.57	8,783.04	8,743.57	33.13	32.49	-89.96	241.06	611.68	79.32	35.18	44.13	1.797		
8,900.00	8,843.57	8,883.04	8,843.57	33.46	32.83	-89.96	241.06	611.68	79.32	34.69	44.62	1.777		
9,000.00	8,943.57	8,983.04	8,943.57	33.79	33.17	-89.96	241.06	611.68	79.32	34.20	45.12	1.758		
9,100.00	9,043.57	9,083.04	9,043.57	34.12	33.51	-89.96	241.06	611.68	79.32	33.71	45.61	1.739		
9,200.00	9,143.57	9,183.04	9,143.57	34.46	33.85	-89.96	241.06	611.68	79.32	33.22	46.10	1.721		
9,300.00	9,243.57	9,283.04	9,243.57	34.79	34.18	-89.96	241.06	611.68	79.32	32.72	46.59	1.702		
9,400.00	9,343.57	9,383.04	9,343.57	35.13	34.52	-89.96	241.06	611.68	79.32	32.23	47.09	1.684		
9,500.00	9,443.57	9,483.04	9,443.57	35.46	34.86	-89.96	241.06	611.68	79.32	31.74	47.58	1.667		
9,600.00	9,543.57	9,583.04	9,543.57	35.80	35.20	-89.96	241.06	611.68	79.32	31.24	48.07	1.650		
9,700.00	9,643.57	9,683.04	9,643.57	36.13	35.55	-89.96	241.06	611.68	79.32	30.75	48.57	1.633		
9,800.00	9,743.57	9,783.04	9,743.57	36.47	35.89	-89.96	241.06	611.68	79.32	30.26	49.06	1.617		
9,833.47	9,777.04	9,816.51	9,777.04	36.58	36.00	-89.96	241.06	611.68	79.32	30.09	49.23	1.611		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,850.00	9,793.56	9,833.04	9,793.56	36.64	36.06	90.79	241.06	611.68	79.32	30.01	49.31	1.609		
9,900.00	9,843.42	9,882.89	9,843.42	36.79	36.23	93.38	241.06	611.68	79.45	29.86	49.60	1.602 SF		
9,950.00	9,892.77	9,932.24	9,892.77	36.93	36.40	98.89	241.06	611.68	80.32	30.36	49.96	1.608		
10,000.00	9,941.23	9,980.70	9,941.23	37.06	36.56	106.73	241.06	611.68	83.12	32.69	50.43	1.648		
10,050.00	9,988.45	10,027.92	9,988.45	37.19	36.72	115.82	241.06	611.68	89.41	38.42	50.99	1.753		
10,100.00	10,034.06	10,073.53	10,034.06	37.30	36.88	124.83	241.06	611.68	100.51	48.94	51.57	1.949		
10,150.00	10,077.71	10,117.18	10,077.71	37.41	37.03	132.74	241.06	611.68	117.05	64.98	52.07	2.248		
10,200.00	10,119.07	10,158.55	10,119.07	37.50	37.17	139.10	241.06	611.68	138.99	86.54	52.45	2.650		
10,250.00	10,157.84	10,197.31	10,157.84	37.58	37.30	143.93	241.06	611.68	165.89	113.15	52.74	3.146		
10,300.00	10,193.70	10,233.17	10,193.70	37.65	37.43	147.38	241.06	611.68	197.18	144.23	52.95	3.724		
10,350.00	10,226.39	10,265.86	10,226.39	37.71	37.54	149.65	241.06	611.68	232.29	179.18	53.11	4.374		
10,400.00	10,255.66	10,295.13	10,255.66	37.76	37.64	150.87	241.06	611.68	270.73	217.49	53.24	5.085		
10,450.00	10,281.29	10,320.76	10,281.29	37.81	37.73	151.03	241.06	611.68	312.01	258.68	53.33	5.850		
10,500.00	10,303.08	10,342.55	10,303.08	37.85	37.80	150.01	241.06	611.68	355.70	302.29	53.41	6.660		
10,550.00	10,320.87	10,360.34	10,320.87	37.90	37.86	147.37	241.06	611.68	401.37	347.91	53.46	7.507		
10,600.00	10,334.52	10,373.99	10,334.52	37.96	37.91	142.11	241.06	611.68	448.61	395.11	53.50	8.385		
10,650.00	10,343.93	10,383.40	10,343.93	38.03	37.94	131.93	241.06	611.68	497.00	443.48	53.53	9.285		
10,700.00	10,349.02	10,388.49	10,349.02	38.12	37.96	111.69	241.06	611.68	546.15	492.61	53.53	10.202		
10,733.47	10,350.00	10,389.47	10,350.00	38.19	37.96	90.00	241.06	611.68	579.27	525.73	53.53	10.821		
10,800.00	10,350.00	10,389.47	10,350.00	38.36	37.96	90.00	241.06	611.68	645.23	591.71	53.53	12.055		
10,900.00	10,350.00	10,389.47	10,350.00	38.68	37.96	90.00	241.06	611.68	744.57	691.06	53.52	13.913		
11,000.00	10,350.00	10,389.47	10,350.00	39.08	37.96	90.00	241.06	611.68	844.07	790.56	53.51	15.773		
11,100.00	10,350.00	10,389.47	10,350.00	39.56	37.96	90.00	241.06	611.68	943.68	890.17	53.51	17.636		
11,200.00	10,350.00	10,389.47	10,350.00	40.10	37.96	90.00	241.06	611.68	1,043.36	989.85	53.51	19.499		
11,300.00	10,350.00	10,389.47	10,350.00	40.70	37.96	90.00	241.06	611.68	1,143.09	1,089.58	53.51	21.362		
11,400.00	10,350.00	10,389.47	10,350.00	41.37	37.96	90.00	241.06	611.68	1,242.87	1,189.36	53.51	23.225		
11,500.00	10,350.00	10,389.47	10,350.00	42.08	37.96	90.00	241.06	611.68	1,342.68	1,289.16	53.52	25.088		
11,600.00	10,350.00	10,389.47	10,350.00	42.85	37.96	90.00	241.06	611.68	1,442.52	1,389.00	53.52	26.951		
11,700.00	10,350.00	10,389.47	10,350.00	43.67	37.96	90.00	241.06	611.68	1,542.38	1,488.85	53.53	28.813		
11,800.00	10,350.00	10,389.47	10,350.00	44.53	37.96	90.00	241.06	611.68	1,642.25	1,588.72	53.54	30.674		
11,900.00	10,350.00	10,389.47	10,350.00	45.44	37.96	90.00	241.06	611.68	1,742.14	1,688.60	53.55	32.535		
12,000.00	10,350.00	10,389.47	10,350.00	46.39	37.96	90.00	241.06	611.68	1,842.05	1,788.49	53.56	34.394		
12,100.00	10,350.00	10,389.47	10,350.00	47.37	37.96	90.00	241.06	611.68	1,941.96	1,888.39	53.57	36.252		
12,200.00	10,350.00	14,218.02	12,380.00	48.39	54.61	-179.97	-1,798.37	712.53	2,030.00	1,989.58	40.43	50.216		
12,300.00	10,350.00	14,318.02	12,380.00	49.45	55.57	-179.97	-1,898.37	713.52	2,030.00	1,988.95	41.05	49.454		
12,400.00	10,350.00	14,418.02	12,380.00	50.54	56.57	-179.97	-1,998.36	714.51	2,030.00	1,988.31	41.69	48.690		
12,500.00	10,350.00	14,518.02	12,380.00	51.66	57.60	-179.97	-2,098.36	715.50	2,030.00	1,987.65	42.35	47.928		
12,600.00	10,350.00	14,618.02	12,380.00	52.80	58.65	-179.97	-2,198.35	716.49	2,030.00	1,986.96	43.04	47.169		
12,700.00	10,350.00	14,718.02	12,380.00	53.97	59.73	-179.97	-2,298.35	717.47	2,030.00	1,986.27	43.74	46.416		
12,800.00	10,350.00	14,818.02	12,380.00	55.17	60.84	-179.97	-2,398.34	718.46	2,030.00	1,985.55	44.45	45.668		
12,900.00	10,350.00	14,918.02	12,380.00	56.39	61.97	-179.97	-2,498.34	719.45	2,030.00	1,984.82	45.18	44.929		
13,000.00	10,350.00	15,018.02	12,380.00	57.63	63.13	-179.97	-2,598.33	720.44	2,030.00	1,984.07	45.93	44.199		
13,100.00	10,350.00	15,118.02	12,380.00	58.89	64.31	-179.97	-2,698.33	721.43	2,030.00	1,983.31	46.69	43.478		
13,200.00	10,350.00	15,218.02	12,380.00	60.17	65.50	-179.97	-2,798.32	722.41	2,030.00	1,982.53	47.47	42.768		
13,300.00	10,350.00	15,318.02	12,380.00	61.47	66.72	-179.97	-2,898.32	723.40	2,030.00	1,981.75	48.25	42.070		
13,400.00	10,350.00	15,418.02	12,380.00	62.78	67.95	-179.97	-2,998.31	724.39	2,030.00	1,980.95	49.05	41.383		
13,500.00	10,350.00	15,518.02	12,380.00	64.11	69.21	-179.97	-3,098.31	725.38	2,030.00	1,980.13	49.87	40.709		
13,600.00	10,350.00	15,618.02	12,380.00	65.45	70.47	-179.97	-3,198.30	726.36	2,030.00	1,979.31	50.69	40.048		
13,700.00	10,350.00	15,718.02	12,380.00	66.81	71.76	-179.97	-3,298.30	727.35	2,030.00	1,978.48	51.52	39.399		
13,800.00	10,350.00	15,818.02	12,380.00	68.18	73.06	-179.97	-3,398.29	728.34	2,030.00	1,977.63	52.37	38.764		
13,900.00	10,350.00	15,918.02	12,380.00	69.56	74.37	-179.97	-3,498.29	729.33	2,030.00	1,976.78	53.22	38.141		
14,000.00	10,350.00	16,018.02	12,380.00	70.96	75.70	-179.98	-3,598.28	730.32	2,030.00	1,975.91	54.09	37.532		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 806H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.00	10,350.00	21,318.02	12,380.00	152.38	155.18	-180.00	-8,898.02	782.68	2,030.00	1,923.40	106.60	19.043	
19,400.00	10,350.00	21,418.02	12,380.00	153.98	156.76	-180.00	-8,998.02	783.66	2,030.00	1,922.35	107.65	18.857	
19,500.00	10,350.00	21,518.02	12,380.00	155.58	158.35	-180.00	-9,098.02	784.65	2,030.00	1,921.29	108.71	18.674	
19,600.00	10,350.00	21,618.02	12,380.00	157.18	159.93	-180.00	-9,198.01	785.64	2,030.00	1,920.24	109.76	18.495	
19,700.00	10,350.00	21,718.02	12,380.00	158.79	161.52	-180.00	-9,298.01	786.63	2,030.00	1,919.18	110.82	18.318	
19,800.00	10,350.00	21,818.02	12,380.00	160.39	163.11	-180.00	-9,398.00	787.62	2,030.00	1,918.12	111.88	18.145	
19,900.00	10,350.00	21,918.02	12,380.00	162.00	164.70	-180.00	-9,498.00	788.60	2,030.00	1,917.06	112.94	17.975	
20,000.00	10,350.00	22,018.02	12,380.00	163.61	166.29	-180.00	-9,597.99	789.59	2,030.00	1,916.00	114.00	17.808	
20,100.00	10,350.00	22,118.02	12,380.00	165.21	167.88	-180.00	-9,697.99	790.58	2,030.00	1,914.94	115.06	17.644	
20,123.19	10,350.00	22,141.21	12,380.00	165.59	168.25	-180.00	-9,721.17	790.81	2,030.00	1,914.70	115.30	17.606	
20,200.00	10,350.00	22,218.02	12,380.00	166.82	169.47	-180.00	-9,797.98	791.57	2,030.00	1,913.88	116.12	17.482	
20,300.00	10,350.00	22,318.02	12,380.00	168.43	171.06	-180.00	-9,897.98	792.56	2,030.00	1,912.82	117.18	17.324	
20,400.00	10,350.00	22,418.02	12,380.00	170.04	172.66	-180.00	-9,997.97	793.54	2,030.00	1,911.76	118.24	17.168	
20,500.00	10,350.00	22,518.02	12,380.00	171.65	174.25	-180.00	-10,097.97	794.53	2,030.00	1,910.69	119.31	17.015	
20,529.73	10,350.00	22,547.75	12,380.00	172.13	174.73	-180.00	-10,127.70	794.82	2,030.00	1,910.37	119.63	16.970	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - PF Fed Com 101H - OH - Plan #1											Offset Site Error:		0.00 usft
Survey Program:		0-OWSG (Rev2) MWD											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
19,200.00	10,350.00	17,309.28	8,565.00	150.78	144.82	65.72	-8,837.36	-3,223.80	4,394.23	4,200.20	194.03	22.647			
19,300.00	10,350.00	17,409.28	8,565.00	152.38	146.43	65.72	-8,937.35	-3,222.81	4,394.25	4,198.11	196.14	22.403			
19,400.00	10,350.00	17,509.28	8,565.00	153.98	148.04	65.72	-9,037.35	-3,221.83	4,394.27	4,196.02	198.25	22.165			
19,500.00	10,350.00	17,609.28	8,565.00	155.58	149.66	65.72	-9,137.34	-3,220.85	4,394.29	4,193.92	200.36	21.932			
19,600.00	10,350.00	17,709.28	8,565.00	157.18	151.28	65.72	-9,237.34	-3,219.87	4,394.30	4,191.83	202.47	21.703			
19,700.00	10,350.00	17,809.28	8,565.00	158.79	152.89	65.72	-9,337.33	-3,218.89	4,394.32	4,189.74	204.59	21.479			
19,800.00	10,350.00	17,909.28	8,565.00	160.39	154.51	65.72	-9,437.33	-3,217.91	4,394.34	4,187.64	206.70	21.260			
19,900.00	10,350.00	18,009.28	8,565.00	162.00	156.13	65.72	-9,537.32	-3,216.92	4,394.36	4,185.54	208.81	21.044			
20,000.00	10,350.00	18,109.28	8,565.00	163.61	157.75	65.72	-9,637.32	-3,215.94	4,394.37	4,183.44	210.93	20.833			
20,100.00	10,350.00	18,209.28	8,565.00	165.21	159.37	65.72	-9,737.32	-3,214.96	4,394.39	4,181.34	213.05	20.626			
20,200.00	10,350.00	18,309.28	8,565.00	166.82	160.99	65.72	-9,837.31	-3,213.98	4,394.41	4,179.24	215.17	20.423			
20,300.00	10,350.00	18,409.28	8,565.00	168.43	162.61	65.72	-9,937.31	-3,213.00	4,394.43	4,177.14	217.29	20.224			
20,400.00	10,350.00	18,509.28	8,565.00	170.04	164.23	65.72	-10,037.30	-3,212.02	4,394.45	4,175.04	219.41	20.029			
20,500.00	10,350.00	18,609.28	8,565.00	171.65	165.85	65.72	-10,137.30	-3,211.03	4,394.46	4,172.94	221.53	19.837			
20,529.73	10,350.00	18,634.72	8,565.00	172.13	166.26	65.72	-10,162.73	-3,210.78	4,394.47	4,172.36	222.11	19.785 SF			

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	22.00	22.00	0.00	0.03	-97.80	-391.78	-2,861.72	2,888.42					
100.00	100.00	122.00	122.00	0.13	0.20	-97.80	-391.78	-2,861.72	2,888.42	2,888.18	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.80	-391.78	-2,861.72	2,888.42	2,887.67	0.74	3,891.418		
300.00	300.00	322.00	322.00	0.84	0.92	-97.80	-391.78	-2,861.72	2,888.42	2,887.17	1.25	2,313.775		
400.00	400.00	422.00	422.00	1.20	1.28	-97.80	-391.78	-2,861.72	2,888.42	2,886.66	1.75	1,645.866		
500.00	500.00	522.00	522.00	1.56	1.64	-97.80	-391.78	-2,861.72	2,888.42	2,886.15	2.26	1,277.095		
600.00	600.00	622.00	622.00	1.92	2.00	-97.80	-391.78	-2,861.72	2,888.42	2,885.65	2.77	1,043.300		
700.00	700.00	722.00	722.00	2.28	2.36	-97.80	-391.78	-2,861.72	2,888.42	2,885.14	3.28	881.850		
800.00	800.00	822.00	822.00	2.63	2.71	-97.80	-391.78	-2,861.72	2,888.42	2,884.63	3.78	763.667		
900.00	900.00	922.00	922.00	2.99	3.07	-97.80	-391.78	-2,861.72	2,888.42	2,884.13	4.29	673.415		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.80	-391.78	-2,861.72	2,888.42	2,883.62	4.80	602.240		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.80	-391.78	-2,861.72	2,888.42	2,883.11	5.30	544.671		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.80	-391.78	-2,861.72	2,888.42	2,882.61	5.81	497.148		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.80	-391.78	-2,861.72	2,888.42	2,882.10	6.32	457.251		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.80	-391.78	-2,861.72	2,888.42	2,881.59	6.82	423.283		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.80	-391.78	-2,861.72	2,888.42	2,881.09	7.33	394.012		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.80	-391.78	-2,861.72	2,888.42	2,880.58	7.84	368.527		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.80	-391.78	-2,861.72	2,888.42	2,880.07	8.34	346.139		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.80	-391.78	-2,861.72	2,888.42	2,879.56	8.85	326.315		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.80	-391.78	-2,861.72	2,888.42	2,879.06	9.36	308.639		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.80	-391.78	-2,861.72	2,888.42	2,878.55	9.87	292.779		
2,100.00	2,100.00	2,122.00	2,122.00	7.29	7.37	-97.80	-391.78	-2,861.72	2,888.42	2,878.04	10.37	278.470		
2,200.00	2,200.00	2,267.50	2,267.50	7.65	7.89	-97.79	-391.44	-2,861.23	2,888.24	2,877.25	10.99	262.738		
2,300.00	2,299.99	2,573.53	2,572.94	8.01	8.98	-168.43	-381.38	-2,846.73	2,884.38	2,872.39	11.98	240.676		
2,400.00	2,399.91	2,876.58	2,873.04	8.35	10.08	-168.13	-357.73	-2,812.61	2,875.99	2,863.06	12.93	222.359		
2,500.00	2,499.69	3,027.12	3,020.82	8.70	10.65	-167.93	-341.35	-2,788.99	2,865.12	2,851.58	13.54	211.628		
2,600.00	2,599.27	3,126.50	3,118.26	9.06	11.04	-167.82	-330.26	-2,772.99	2,856.59	2,842.55	14.04	203.513		
2,700.00	2,698.57	3,226.09	3,215.93	9.42	11.44	-167.70	-319.14	-2,756.95	2,850.62	2,836.09	14.54	196.076		
2,800.00	2,797.54	3,325.85	3,313.75	9.78	11.84	-167.59	-308.00	-2,740.88	2,847.23	2,832.19	15.04	189.260		
2,815.66	2,813.00	3,341.48	3,329.08	9.84	11.90	-167.57	-306.26	-2,738.37	2,846.93	2,831.81	15.12	188.245		
2,900.00	2,896.24	3,425.67	3,411.64	10.15	12.25	-167.47	-296.86	-2,724.81	2,845.50	2,829.94	15.55	182.954		
3,000.00	2,994.95	3,525.49	3,509.52	10.53	12.66	-167.36	-285.71	-2,708.74	2,843.81	2,827.74	16.07	177.015		
3,100.00	3,093.65	3,625.31	3,607.41	10.91	13.07	-167.24	-274.57	-2,692.66	2,842.13	2,825.55	16.58	171.416		
3,200.00	3,192.36	3,725.13	3,705.29	11.29	13.49	-167.13	-263.42	-2,676.59	2,840.46	2,823.36	17.10	166.129		
3,300.00	3,291.06	3,824.95	3,803.18	11.68	13.92	-167.01	-252.28	-2,660.51	2,838.80	2,821.18	17.62	161.132		
3,400.00	3,389.76	3,924.77	3,901.06	12.07	14.34	-166.90	-241.13	-2,644.44	2,837.16	2,819.02	18.14	156.403		
3,500.00	3,488.47	4,024.59	3,998.95	12.47	14.77	-166.78	-229.99	-2,628.37	2,835.52	2,816.86	18.66	151.923		
3,600.00	3,587.17	4,124.41	4,096.83	12.87	15.20	-166.66	-218.84	-2,612.29	2,833.90	2,814.71	19.19	147.674		
3,700.00	3,685.88	4,224.23	4,194.72	13.27	15.64	-166.55	-207.70	-2,596.22	2,832.29	2,812.57	19.72	143.639		
3,800.00	3,784.58	4,324.05	4,292.60	13.67	16.07	-166.43	-196.55	-2,580.14	2,830.69	2,810.45	20.25	139.803		
3,900.00	3,883.28	4,423.87	4,390.49	14.08	16.51	-166.31	-185.41	-2,564.07	2,829.11	2,808.33	20.78	136.153		
4,000.00	3,981.99	4,523.69	4,488.38	14.49	16.95	-166.20	-174.26	-2,547.99	2,827.53	2,806.22	21.31	132.677		
4,100.00	4,080.69	4,623.51	4,586.26	14.90	17.39	-166.08	-163.12	-2,531.92	2,825.97	2,804.13	21.85	129.362		
4,200.00	4,179.39	4,723.33	4,684.15	15.31	17.84	-165.96	-151.97	-2,515.85	2,824.42	2,802.04	22.38	126.199		
4,300.00	4,278.10	4,823.15	4,782.03	15.72	18.28	-165.85	-140.83	-2,499.77	2,822.88	2,799.96	22.92	123.177		
4,400.00	4,376.80	4,922.97	4,879.92	16.13	18.73	-165.73	-129.68	-2,483.70	2,821.35	2,797.90	23.46	120.288		
4,500.00	4,475.51	5,022.80	4,977.80	16.55	19.18	-165.61	-118.54	-2,467.62	2,819.84	2,795.84	23.99	117.523		
4,600.00	4,574.21	5,122.62	5,075.69	16.97	19.63	-165.49	-107.39	-2,451.55	2,818.34	2,793.80	24.53	114.875		
4,700.00	4,672.91	5,222.44	5,173.57	17.38	20.08	-165.37	-96.25	-2,435.48	2,816.84	2,791.77	25.07	112.337		
4,800.00	4,771.62	5,322.26	5,271.46	17.80	20.53	-165.26	-85.11	-2,419.40	2,815.36	2,789.75	25.62	109.902		
4,900.00	4,870.32	5,422.08	5,369.34	18.22	20.98	-165.14	-73.96	-2,403.33	2,813.90	2,787.74	26.16	107.565		
5,000.00	4,969.03	5,521.90	5,467.23	18.64	21.43	-165.02	-62.82	-2,387.25	2,812.44	2,785.74	26.70	105.320		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	5,621.72	5,565.11	19.07	21.89	-164.90	-51.67	-2,371.18	2,811.00	2,783.75	27.25	103.161		
5,200.00	5,166.43	5,721.54	5,663.00	19.49	22.34	-164.78	-40.53	-2,355.10	2,809.57	2,781.77	27.79	101.085		
5,300.00	5,265.14	5,821.36	5,760.89	19.91	22.80	-164.67	-29.38	-2,339.03	2,808.15	2,779.81	28.34	99.085		
5,400.00	5,363.84	5,921.18	5,858.77	20.33	23.25	-164.55	-18.24	-2,322.96	2,806.74	2,777.85	28.89	97.159		
5,500.00	5,462.54	6,021.00	5,956.66	20.76	23.71	-164.43	-7.09	-2,306.88	2,805.34	2,775.91	29.44	95.303		
5,600.00	5,561.25	6,120.82	6,054.54	21.18	24.17	-164.31	4.05	-2,290.81	2,803.96	2,773.98	29.98	93.513		
5,700.00	5,659.95	6,220.64	6,152.43	21.61	24.62	-164.19	15.20	-2,274.73	2,802.59	2,772.06	30.53	91.785		
5,800.00	5,758.66	6,320.46	6,250.31	22.04	25.08	-164.07	26.34	-2,258.66	2,801.23	2,770.15	31.08	90.116		
5,900.00	5,857.36	6,420.28	6,348.20	22.46	25.54	-163.95	37.49	-2,242.59	2,799.89	2,768.25	31.64	88.504		
6,000.00	5,956.06	6,520.10	6,446.08	22.89	26.00	-163.83	48.63	-2,226.51	2,798.55	2,766.36	32.19	86.945		
6,100.00	6,054.77	6,619.92	6,543.97	23.32	26.46	-163.71	59.78	-2,210.44	2,797.23	2,764.49	32.74	85.438		
6,200.00	6,153.47	6,719.74	6,641.85	23.75	26.92	-163.59	70.92	-2,194.36	2,795.92	2,762.62	33.29	83.980		
6,300.00	6,252.18	6,819.57	6,739.74	24.18	27.38	-163.47	82.07	-2,178.29	2,794.62	2,760.77	33.85	82.567		
6,400.00	6,350.88	6,900.00	6,818.67	24.60	27.75	-163.38	90.90	-2,165.55	2,793.63	2,759.27	34.35	81.320		
6,439.97	6,390.33	6,919.36	6,837.71	24.78	27.84	-163.36	92.91	-2,162.65	2,793.57	2,759.04	34.52	80.918 CC, ES		
6,500.00	6,449.58	6,956.36	6,874.14	25.03	28.00	-163.33	96.59	-2,157.34	2,793.91	2,759.11	34.80	80.295		
6,600.00	6,548.29	7,000.00	6,917.18	25.46	28.20	-163.29	100.67	-2,151.45	2,795.67	2,760.47	35.20	79.429		
6,700.00	6,646.99	7,079.68	6,995.98	25.89	28.53	-163.23	107.40	-2,141.74	2,798.61	2,762.92	35.68	78.428		
6,758.77	6,705.00	7,100.00	7,016.11	26.15	28.62	-163.22	108.97	-2,139.48	2,801.10	2,765.21	35.89	78.036		
6,800.00	6,745.73	7,141.31	7,057.09	26.32	28.78	-163.21	111.97	-2,135.16	2,802.80	2,766.68	36.11	77.608		
6,900.00	6,844.79	7,200.00	7,115.39	26.74	29.02	-163.20	115.79	-2,129.65	2,806.28	2,769.75	36.53	76.824		
7,000.00	6,944.17	7,264.57	7,179.65	27.13	29.27	-163.19	119.41	-2,124.43	2,808.63	2,771.68	36.95	76.018		
7,100.00	7,043.80	7,326.22	7,241.09	27.51	29.50	-163.17	122.28	-2,120.28	2,809.83	2,772.48	37.35	75.236		
7,200.00	7,143.63	7,400.00	7,314.72	27.88	29.77	-163.14	124.98	-2,116.39	2,809.94	2,772.16	37.77	74.389		
7,300.00	7,243.57	7,449.54	7,364.20	28.22	29.93	-163.12	126.34	-2,114.44	2,808.82	2,770.70	38.11	73.698		
7,374.43	7,318.00	7,500.00	7,414.63	28.46	30.11	-92.32	127.34	-2,112.99	2,807.28	2,768.88	38.40	73.105		
7,400.00	7,343.57	7,500.00	7,414.63	28.55	30.11	-92.32	127.34	-2,112.99	2,806.72	2,768.28	38.44	73.015		
7,500.00	7,443.57	7,572.93	7,487.55	28.87	30.34	-92.31	128.12	-2,111.86	2,805.22	2,766.39	38.83	72.243		
7,578.31	7,521.87	7,629.26	7,543.87	29.12	30.52	-92.30	128.22	-2,111.72	2,804.99	2,765.86	39.13	71.684		
7,600.00	7,543.57	7,650.95	7,565.57	29.19	30.59	-92.30	128.22	-2,111.72	2,804.99	2,765.76	39.23	71.495		
7,700.00	7,643.57	7,750.95	7,665.57	29.52	30.90	-92.30	128.22	-2,111.72	2,804.99	2,765.28	39.71	70.637		
7,800.00	7,743.57	7,850.95	7,765.57	29.84	31.21	-92.30	128.22	-2,111.72	2,804.99	2,764.80	40.19	69.797		
7,900.00	7,843.57	7,950.95	7,865.57	30.17	31.53	-92.30	128.22	-2,111.72	2,804.99	2,764.32	40.67	68.977		
8,000.00	7,943.57	8,050.95	7,965.57	30.49	31.84	-92.30	128.22	-2,111.72	2,804.99	2,763.85	41.14	68.174		
8,100.00	8,043.57	8,150.95	8,065.57	30.82	32.16	-92.30	128.22	-2,111.72	2,804.99	2,763.37	41.62	67.388		
8,200.00	8,143.57	8,238.00	8,152.32	31.15	32.39	-92.43	122.28	-2,111.66	2,805.21	2,763.18	42.03	66.748		
8,300.00	8,243.57	8,320.85	8,233.18	31.48	32.57	-92.79	104.50	-2,111.49	2,806.00	2,763.63	42.37	66.229		
8,400.00	8,343.57	8,400.00	8,307.25	31.80	32.71	-93.35	76.81	-2,111.22	2,807.63	2,764.97	42.66	65.814		
8,500.00	8,443.57	8,465.42	8,365.13	32.13	32.78	-93.97	46.39	-2,110.92	2,810.47	2,767.58	42.89	65.530		
8,600.00	8,543.57	8,525.13	8,414.62	32.46	32.82	-94.65	13.03	-2,110.59	2,814.90	2,771.82	43.08	65.342		
8,700.00	8,643.57	8,576.77	8,454.42	32.80	32.84	-95.32	-19.84	-2,110.27	2,821.30	2,778.07	43.23	65.262		
8,800.00	8,743.57	8,621.18	8,486.17	33.13	32.85	-95.95	-50.88	-2,109.97	2,829.96	2,786.62	43.34	65.291		
8,900.00	8,843.57	8,650.00	8,505.44	33.46	32.85	-96.38	-72.30	-2,109.76	2,841.14	2,797.74	43.40	65.457		
9,000.00	8,943.57	8,700.00	8,536.25	33.79	32.84	-97.18	-111.66	-2,109.37	2,854.96	2,811.48	43.48	65.665		
9,100.00	9,043.57	8,720.68	8,547.96	34.12	32.83	-97.52	-128.70	-2,109.21	2,871.54	2,828.07	43.47	66.060		
9,200.00	9,143.57	8,750.00	8,563.50	34.46	32.81	-98.02	-153.56	-2,108.96	2,891.01	2,847.56	43.45	66.536		
9,300.00	9,243.57	8,767.05	8,571.94	34.79	32.80	-98.32	-168.37	-2,108.82	2,913.36	2,869.98	43.38	67.155		
9,400.00	9,343.57	8,800.00	8,587.00	35.13	32.78	-98.91	-197.67	-2,108.53	2,938.70	2,895.38	43.33	67.829		
9,500.00	9,443.57	8,800.00	8,587.00	35.46	32.78	-98.91	-197.67	-2,108.53	2,966.76	2,923.59	43.17	68.718		
9,600.00	9,543.57	8,817.85	8,594.44	35.80	32.77	-99.23	-213.90	-2,108.37	2,997.75	2,954.71	43.04	69.648		
9,700.00	9,643.57	8,831.23	8,599.69	36.13	32.76	-99.48	-226.20	-2,108.25	3,031.53	2,988.65	42.88	70.694		
9,800.00	9,743.57	8,850.00	8,606.56	36.47	32.74	-99.82	-243.67	-2,108.08	3,068.07	3,025.35	42.72	71.818		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 102H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,833.47	9,777.04	8,850.00	8,606.56	36.58	32.74	-99.82	-243.67	-2,108.08	3,080.87	3,038.22	42.65	72.238		
9,850.00	9,793.56	8,850.00	8,606.56	36.64	32.74	80.07	-243.67	-2,108.08	3,087.27	3,044.66	42.61	72.452		
9,900.00	9,843.42	8,850.00	8,606.56	36.79	32.74	78.01	-243.67	-2,108.08	3,106.60	3,064.11	42.49	73.113		
9,950.00	9,892.77	8,850.00	8,606.56	36.93	32.74	75.98	-243.67	-2,108.08	3,125.78	3,083.41	42.36	73.783		
10,000.00	9,941.23	8,870.21	8,613.32	37.06	32.72	73.71	-262.71	-2,107.89	3,144.44	3,102.16	42.28	74.364		
10,050.00	9,988.45	8,878.80	8,615.99	37.19	32.72	71.71	-270.88	-2,107.81	3,162.66	3,120.49	42.17	74.991		
10,100.00	10,034.06	8,900.00	8,622.05	37.30	32.70	69.66	-291.19	-2,107.61	3,180.28	3,138.19	42.09	75.558		
10,150.00	10,077.71	8,900.00	8,622.05	37.41	32.70	68.01	-291.19	-2,107.61	3,196.92	3,154.96	41.96	76.184		
10,200.00	10,119.07	8,900.00	8,622.05	37.50	32.70	66.48	-291.19	-2,107.61	3,212.71	3,170.87	41.84	76.784		
10,250.00	10,157.84	8,918.65	8,626.75	37.58	32.68	64.89	-309.24	-2,107.44	3,227.35	3,185.59	41.76	77.275		
10,300.00	10,193.70	8,929.68	8,629.25	37.65	32.67	63.53	-319.98	-2,107.33	3,240.83	3,199.15	41.68	77.755		
10,350.00	10,226.39	8,950.00	8,633.33	37.71	32.66	62.26	-339.88	-2,107.14	3,253.04	3,211.42	41.62	78.157		
10,400.00	10,255.66	8,950.00	8,633.33	37.76	32.66	61.29	-339.88	-2,107.14	3,263.76	3,222.22	41.54	78.565		
10,450.00	10,281.29	8,950.00	8,633.33	37.81	32.66	60.45	-339.88	-2,107.14	3,273.17	3,231.69	41.48	78.910		
10,500.00	10,303.08	8,976.56	8,637.58	37.85	32.63	59.65	-366.09	-2,106.88	3,280.77	3,239.29	41.48	79.097		
10,550.00	10,320.87	9,000.00	8,640.32	37.90	32.62	59.04	-389.37	-2,106.65	3,286.96	3,245.48	41.48	79.233		
10,600.00	10,334.52	9,000.00	8,640.32	37.96	32.62	58.66	-389.37	-2,106.65	3,291.34	3,249.86	41.48	79.343		
10,650.00	10,343.93	9,000.00	8,640.32	38.03	32.62	58.42	-389.37	-2,106.65	3,294.21	3,252.71	41.51	79.369		
10,700.00	10,349.02	9,025.88	8,642.24	38.12	32.60	58.31	-415.17	-2,106.40	3,295.15	3,253.57	41.58	79.250		
10,733.47	10,350.00	9,050.00	8,642.97	38.19	32.59	58.34	-439.28	-2,106.16	3,295.04	3,253.40	41.64	79.126		
10,800.00	10,350.00	9,050.00	8,642.97	38.36	32.59	58.34	-439.28	-2,106.16	3,294.11	3,252.36	41.75	78.897		
10,818.19	10,350.00	9,055.43	8,643.00	38.41	32.59	58.34	-444.71	-2,106.11	3,294.08	3,252.28	41.79	78.819		
10,900.00	10,350.00	9,136.63	8,643.00	38.68	32.59	58.34	-525.91	-2,105.32	3,294.09	3,252.06	42.03	78.366		
11,000.00	10,350.00	9,236.63	8,643.00	39.08	32.70	58.34	-625.90	-2,104.34	3,294.11	3,251.69	42.42	77.656		
11,100.00	10,350.00	9,336.63	8,643.00	39.56	32.95	58.34	-725.90	-2,103.36	3,294.13	3,251.23	42.90	76.786		
11,200.00	10,350.00	9,436.63	8,643.00	40.10	33.34	58.34	-825.89	-2,102.38	3,294.15	3,250.68	43.47	75.777		
11,300.00	10,350.00	9,536.63	8,643.00	40.70	33.84	58.34	-925.89	-2,101.40	3,294.17	3,250.03	44.13	74.642		
11,400.00	10,350.00	9,636.63	8,643.00	41.37	34.42	58.34	-1,025.88	-2,100.42	3,294.19	3,249.31	44.88	73.400		
11,500.00	10,350.00	9,736.63	8,643.00	42.08	35.07	58.34	-1,125.88	-2,099.44	3,294.20	3,248.50	45.71	72.071		
11,600.00	10,350.00	9,836.63	8,643.00	42.85	35.79	58.34	-1,225.87	-2,098.46	3,294.22	3,247.61	46.61	70.672		
11,700.00	10,350.00	9,936.63	8,643.00	43.67	36.56	58.34	-1,325.87	-2,097.48	3,294.24	3,246.65	47.59	69.219		
11,800.00	10,350.00	10,036.63	8,643.00	44.53	37.40	58.34	-1,425.86	-2,096.50	3,294.26	3,245.62	48.64	67.729		
11,900.00	10,350.00	10,136.63	8,643.00	45.44	38.28	58.34	-1,525.86	-2,095.52	3,294.28	3,244.53	49.75	66.218		
12,000.00	10,350.00	10,236.63	8,643.00	46.39	39.21	58.34	-1,625.85	-2,094.54	3,294.30	3,243.38	50.92	64.696		
12,100.00	10,350.00	10,336.63	8,643.00	47.37	40.19	58.34	-1,725.85	-2,093.56	3,294.32	3,242.17	52.15	63.176		
12,200.00	10,350.00	10,436.63	8,643.00	48.39	41.21	58.34	-1,825.84	-2,092.58	3,294.33	3,240.91	53.42	61.667		
12,300.00	10,350.00	10,536.63	8,643.00	49.45	42.27	58.34	-1,925.84	-2,091.61	3,294.35	3,239.61	54.75	60.176		
12,400.00	10,350.00	10,636.63	8,643.00	50.54	43.37	58.34	-2,025.84	-2,090.63	3,294.37	3,238.26	56.11	58.709		
12,500.00	10,350.00	10,736.63	8,643.00	51.66	44.49	58.34	-2,125.83	-2,089.65	3,294.39	3,236.87	57.52	57.271		
12,600.00	10,350.00	10,836.63	8,643.00	52.80	45.65	58.34	-2,225.83	-2,088.67	3,294.41	3,235.44	58.97	55.865		
12,700.00	10,350.00	10,936.63	8,643.00	53.97	46.84	58.34	-2,325.82	-2,087.69	3,294.43	3,233.97	60.46	54.494		
12,800.00	10,350.00	11,036.63	8,643.00	55.17	48.06	58.34	-2,425.82	-2,086.71	3,294.45	3,232.47	61.97	53.159		
12,900.00	10,350.00	11,136.63	8,643.00	56.39	49.30	58.34	-2,525.81	-2,085.73	3,294.47	3,230.94	63.52	51.862		
13,000.00	10,350.00	11,236.63	8,643.00	57.63	50.56	58.34	-2,625.81	-2,084.75	3,294.48	3,229.38	65.10	50.606		
13,100.00	10,350.00	11,336.63	8,643.00	58.89	51.85	58.34	-2,725.80	-2,083.77	3,294.50	3,227.80	66.71	49.389		
13,200.00	10,350.00	11,436.63	8,643.00	60.17	53.15	58.34	-2,825.80	-2,082.79	3,294.52	3,226.19	68.33	48.213		
13,300.00	10,350.00	11,536.63	8,643.00	61.47	54.48	58.34	-2,925.79	-2,081.81	3,294.54	3,224.56	69.98	47.077		
13,400.00	10,350.00	11,636.63	8,643.00	62.78	55.82	58.34	-3,025.79	-2,080.83	3,294.56	3,222.91	71.65	45.979		
13,500.00	10,350.00	11,736.63	8,643.00	64.11	57.17	58.35	-3,125.78	-2,079.85	3,294.58	3,221.23	73.34	44.920		
13,600.00	10,350.00	11,836.63	8,643.00	65.45	58.55	58.35	-3,225.78	-2,078.87	3,294.60	3,219.54	75.05	43.897		
13,700.00	10,350.00	11,936.63	8,643.00	66.81	59.93	58.35	-3,325.77	-2,077.89	3,294.62	3,217.83	76.78	42.910		
13,800.00	10,350.00	12,036.63	8,643.00	68.18	61.33	58.35	-3,425.77	-2,076.92	3,294.63	3,216.11	78.52	41.957		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - PF Fed Com 102H - OH - Plan #1											Offset Site Error:		0.00 usft
Survey Program:		0-OWSG (Rev2) MWD											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
13,900.00	10,350.00	12,136.63	8,643.00	69.56	62.74	58.35	-3,525.76	-2,075.94	3,294.65	3,214.37	80.28	41.039			
14,000.00	10,350.00	12,236.63	8,643.00	70.96	64.16	58.35	-3,625.76	-2,074.96	3,294.67	3,212.62	82.05	40.152			
14,100.00	10,350.00	12,336.63	8,643.00	72.36	65.60	58.35	-3,725.75	-2,073.98	3,294.69	3,210.85	83.84	39.298			
14,200.00	10,350.00	12,436.63	8,643.00	73.78	67.04	58.35	-3,825.75	-2,073.00	3,294.71	3,209.07	85.64	38.473			
14,300.00	10,350.00	12,536.63	8,643.00	75.20	68.49	58.35	-3,925.74	-2,072.02	3,294.73	3,207.28	87.45	37.677			
14,400.00	10,350.00	12,636.63	8,643.00	76.63	69.95	58.35	-4,025.74	-2,071.04	3,294.75	3,205.48	89.27	36.910			
14,500.00	10,350.00	12,736.63	8,643.00	78.08	71.42	58.35	-4,125.73	-2,070.06	3,294.76	3,203.67	91.09	36.169			
14,600.00	10,350.00	12,836.63	8,643.00	79.53	72.90	58.35	-4,225.73	-2,069.08	3,294.78	3,201.85	92.93	35.453			
14,700.00	10,350.00	12,936.63	8,643.00	80.99	74.38	58.35	-4,325.72	-2,068.10	3,294.80	3,200.02	94.78	34.762			
14,800.00	10,350.00	13,036.63	8,643.00	82.45	75.87	58.35	-4,425.72	-2,067.12	3,294.82	3,198.18	96.64	34.094			
14,900.00	10,350.00	13,136.63	8,643.00	83.92	77.37	58.35	-4,525.72	-2,066.14	3,294.84	3,196.34	98.50	33.450			
15,000.00	10,350.00	13,236.63	8,643.00	85.40	78.87	58.35	-4,625.71	-2,065.16	3,294.86	3,194.49	100.37	32.827			
15,100.00	10,350.00	13,336.63	8,643.00	86.89	80.38	58.35	-4,725.71	-2,064.18	3,294.88	3,192.63	102.25	32.224			
15,200.00	10,350.00	13,436.63	8,643.00	88.38	81.90	58.35	-4,825.70	-2,063.20	3,294.90	3,190.76	104.13	31.641			
15,300.00	10,350.00	13,536.63	8,643.00	89.87	83.42	58.35	-4,925.70	-2,062.23	3,294.91	3,188.89	106.02	31.077			
15,400.00	10,350.00	13,636.63	8,643.00	91.38	84.94	58.35	-5,025.69	-2,061.25	3,294.93	3,187.01	107.92	30.531			
15,500.00	10,350.00	13,736.63	8,643.00	92.88	86.47	58.35	-5,125.69	-2,060.27	3,294.95	3,185.13	109.82	30.002			
15,600.00	10,350.00	13,836.63	8,643.00	94.39	88.00	58.35	-5,225.68	-2,059.29	3,294.97	3,183.24	111.73	29.490			
15,700.00	10,350.00	13,936.63	8,643.00	95.91	89.54	58.35	-5,325.68	-2,058.31	3,294.99	3,181.34	113.65	28.994			
15,800.00	10,350.00	14,036.63	8,643.00	97.43	91.08	58.35	-5,425.67	-2,057.33	3,295.01	3,179.44	115.56	28.512			
15,900.00	10,350.00	14,136.63	8,643.00	98.96	92.63	58.35	-5,525.67	-2,056.35	3,295.03	3,177.54	117.49	28.046			
16,000.00	10,350.00	14,236.63	8,643.00	100.49	94.18	58.35	-5,625.66	-2,055.37	3,295.05	3,175.63	119.41	27.593			
16,100.00	10,350.00	14,336.63	8,643.00	102.02	95.73	58.35	-5,725.66	-2,054.39	3,295.06	3,173.72	121.34	27.155			
16,200.00	10,350.00	14,436.63	8,643.00	103.55	97.29	58.35	-5,825.65	-2,053.41	3,295.08	3,171.80	123.28	26.729			
16,300.00	10,350.00	14,536.63	8,643.00	105.09	98.85	58.35	-5,925.65	-2,052.43	3,295.10	3,169.88	125.22	26.315			
16,400.00	10,350.00	14,636.63	8,643.00	106.64	100.41	58.35	-6,025.64	-2,051.45	3,295.12	3,167.96	127.16	25.914			
16,500.00	10,350.00	14,736.63	8,643.00	108.18	101.97	58.35	-6,125.64	-2,050.47	3,295.14	3,166.04	129.10	25.524			
16,600.00	10,350.00	14,836.63	8,643.00	109.73	103.54	58.35	-6,225.63	-2,049.49	3,295.16	3,164.11	131.05	25.145			
16,700.00	10,350.00	14,936.63	8,643.00	111.29	105.11	58.35	-6,325.63	-2,048.51	3,295.18	3,162.18	133.00	24.776			
16,800.00	10,350.00	15,036.63	8,643.00	112.84	106.68	58.35	-6,425.62	-2,047.54	3,295.19	3,160.24	134.95	24.418			
16,900.00	10,350.00	15,136.63	8,643.00	114.40	108.26	58.35	-6,525.62	-2,046.56	3,295.21	3,158.31	136.91	24.069			
17,000.00	10,350.00	15,236.63	8,643.00	115.96	109.83	58.35	-6,625.61	-2,045.58	3,295.23	3,156.37	138.87	23.730			
17,100.00	10,350.00	15,336.63	8,643.00	117.52	111.41	58.35	-6,725.61	-2,044.60	3,295.25	3,154.42	140.83	23.399			
17,200.00	10,350.00	15,436.63	8,643.00	119.09	112.99	58.35	-6,825.60	-2,043.62	3,295.27	3,152.48	142.79	23.078			
17,300.00	10,350.00	15,536.63	8,643.00	120.66	114.58	58.35	-6,925.60	-2,042.64	3,295.29	3,150.53	144.76	22.764			
17,400.00	10,350.00	15,636.63	8,643.00	122.23	116.16	58.35	-7,025.60	-2,041.66	3,295.31	3,148.58	146.73	22.459			
17,500.00	10,350.00	15,736.63	8,643.00	123.80	117.75	58.35	-7,125.59	-2,040.68	3,295.33	3,146.63	148.70	22.161			
17,600.00	10,350.00	15,836.63	8,643.00	125.37	119.34	58.35	-7,225.59	-2,039.70	3,295.34	3,144.67	150.67	21.871			
17,700.00	10,350.00	15,936.63	8,643.00	126.95	120.93	58.35	-7,325.58	-2,038.72	3,295.36	3,142.72	152.65	21.588			
17,800.00	10,350.00	16,036.63	8,643.00	128.52	122.52	58.35	-7,425.58	-2,037.74	3,295.38	3,140.76	154.62	21.313			
17,900.00	10,350.00	16,136.63	8,643.00	130.10	124.11	58.35	-7,525.57	-2,036.76	3,295.40	3,138.80	156.60	21.044			
18,000.00	10,350.00	16,236.63	8,643.00	131.69	125.71	58.35	-7,625.57	-2,035.78	3,295.42	3,136.84	158.58	20.781			
18,100.00	10,350.00	16,336.63	8,643.00	133.27	127.30	58.35	-7,725.56	-2,034.80	3,295.44	3,134.88	160.56	20.525			
18,200.00	10,350.00	16,436.63	8,643.00	134.85	128.90	58.35	-7,825.56	-2,033.83	3,295.46	3,132.92	162.54	20.275			
18,300.00	10,350.00	16,536.63	8,643.00	136.44	130.50	58.35	-7,925.55	-2,032.85	3,295.47	3,130.95	164.52	20.031			
18,400.00	10,350.00	16,636.63	8,643.00	138.03	132.10	58.35	-8,025.55	-2,031.87	3,295.49	3,128.99	166.50	19.792			
18,500.00	10,350.00	16,736.63	8,643.00	139.62	133.70	58.36	-8,125.54	-2,030.89	3,295.51	3,127.02	168.49	19.559			
18,600.00	10,350.00	16,836.63	8,643.00	141.21	135.30	58.36	-8,225.54	-2,029.91	3,295.53	3,125.05	170.48	19.331			
18,700.00	10,350.00	16,936.63	8,643.00	142.80	136.91	58.36	-8,325.53	-2,028.93	3,295.55	3,123.08	172.47	19.108			
18,800.00	10,350.00	17,036.63	8,643.00	144.39	138.51	58.36	-8,425.53	-2,027.95	3,295.57	3,121.11	174.46	18.890			
18,900.00	10,350.00	17,136.63	8,643.00	145.99	140.12	58.36	-8,525.52	-2,026.97	3,295.59	3,119.14	176.45	18.677			
19,000.00	10,350.00	17,236.63	8,643.00	147.58	141.73	58.36	-8,625.52	-2,025.99	3,295.61	3,117.16	178.44	18.469			

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - PF Fed Com 102H - OH - Plan #1											Offset Site Error:	0.00 usft
Survey Program:		0-OWSG (Rev2) MWD											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,100.00	10,350.00	17,336.63	8,643.00	149.18	143.33	58.36	-8,725.51	-2,025.01	3,295.62	3,115.19	180.44	18.265		
19,200.00	10,350.00	17,436.63	8,643.00	150.78	144.94	58.36	-8,825.51	-2,024.03	3,295.64	3,113.21	182.43	18.065		
19,300.00	10,350.00	17,536.63	8,643.00	152.38	146.55	58.36	-8,925.50	-2,023.05	3,295.66	3,111.24	184.43	17.870		
19,400.00	10,350.00	17,636.63	8,643.00	153.98	148.16	58.36	-9,025.50	-2,022.07	3,295.68	3,109.26	186.42	17.679		
19,500.00	10,350.00	17,736.63	8,643.00	155.58	149.78	58.36	-9,125.49	-2,021.09	3,295.70	3,107.28	188.42	17.491		
19,600.00	10,350.00	17,836.63	8,643.00	157.18	151.39	58.36	-9,225.49	-2,020.11	3,295.72	3,105.30	190.41	17.308		
19,700.00	10,350.00	17,936.63	8,643.00	158.79	153.00	58.36	-9,325.49	-2,019.14	3,295.74	3,103.33	192.41	17.129		
19,800.00	10,350.00	18,036.63	8,643.00	160.39	154.62	58.36	-9,425.48	-2,018.16	3,295.76	3,101.35	194.41	16.953		
19,900.00	10,350.00	18,136.63	8,643.00	162.00	156.23	58.36	-9,525.48	-2,017.18	3,295.77	3,099.37	196.41	16.780		
20,000.00	10,350.00	18,236.63	8,643.00	163.61	157.85	58.36	-9,625.47	-2,016.20	3,295.79	3,097.38	198.41	16.611		
20,100.00	10,350.00	18,336.63	8,643.00	165.21	159.46	58.36	-9,725.47	-2,015.22	3,295.81	3,095.40	200.41	16.445		
20,200.00	10,350.00	18,436.63	8,643.00	166.82	161.08	58.36	-9,825.46	-2,014.24	3,295.83	3,093.42	202.41	16.283		
20,300.00	10,350.00	18,536.63	8,643.00	168.43	162.70	58.36	-9,925.46	-2,013.26	3,295.85	3,091.43	204.41	16.123		
20,400.00	10,350.00	18,636.63	8,643.00	170.04	164.32	58.36	-10,025.45	-2,012.28	3,295.87	3,089.45	206.42	15.967		
20,500.00	10,350.00	18,736.63	8,643.00	171.65	165.94	58.36	-10,125.45	-2,011.30	3,295.89	3,087.46	208.42	15.813		
20,529.73	10,350.00	18,766.36	8,643.00	172.13	166.42	58.36	-10,155.18	-2,011.01	3,295.89	3,086.87	209.02	15.768 SF		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	22.00	22.00	0.00	0.03	-97.67	-392.25	-2,911.90	2,938.20					
100.00	100.00	122.00	122.00	0.13	0.20	-97.67	-392.25	-2,911.90	2,938.20	2,937.96	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.67	-392.25	-2,911.90	2,938.20	2,937.46	0.74	3,958.492		
300.00	300.00	322.00	322.00	0.84	0.92	-97.67	-392.25	-2,911.90	2,938.20	2,936.95	1.25	2,353.656		
400.00	400.00	422.00	422.00	1.20	1.28	-97.67	-392.25	-2,911.90	2,938.20	2,936.45	1.75	1,674.235		
500.00	500.00	522.00	522.00	1.56	1.64	-97.67	-392.25	-2,911.90	2,938.20	2,935.94	2.26	1,299.107		
600.00	600.00	622.00	622.00	1.92	2.00	-97.67	-392.25	-2,911.90	2,938.20	2,935.43	2.77	1,061.283		
700.00	700.00	722.00	722.00	2.28	2.36	-97.67	-392.25	-2,911.90	2,938.20	2,934.93	3.28	897.050		
800.00	800.00	822.00	822.00	2.63	2.71	-97.67	-392.25	-2,911.90	2,938.20	2,934.42	3.78	776.830		
900.00	900.00	922.00	922.00	2.99	3.07	-97.67	-392.25	-2,911.90	2,938.20	2,933.91	4.29	685.023		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.67	-392.25	-2,911.90	2,938.20	2,933.41	4.80	612.620		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.67	-392.25	-2,911.90	2,938.20	2,932.90	5.30	554.059		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.67	-392.25	-2,911.90	2,938.20	2,932.39	5.81	505.717		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.67	-392.25	-2,911.90	2,938.20	2,931.88	6.32	465.133		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.67	-392.25	-2,911.90	2,938.20	2,931.38	6.82	430.579		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.67	-392.25	-2,911.90	2,938.20	2,930.87	7.33	400.803		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.67	-392.25	-2,911.90	2,938.20	2,930.36	7.84	374.879		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.67	-392.25	-2,911.90	2,938.20	2,929.86	8.34	352.105		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.67	-392.25	-2,911.90	2,938.20	2,929.35	8.85	331.940		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.67	-392.25	-2,911.90	2,938.20	2,928.84	9.36	313.959		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.67	-392.25	-2,911.90	2,938.20	2,928.34	9.87	297.826		
2,007.27	2,007.27	2,029.27	2,029.27	6.96	7.04	-97.67	-392.25	-2,911.90	2,938.20	2,928.30	9.90	296.718 CC		
2,100.00	2,100.00	2,116.42	2,116.42	7.29	7.35	-97.67	-392.22	-2,911.92	2,938.22	2,927.86	10.36	283.666 ES		
2,200.00	2,200.00	2,200.00	2,199.99	7.65	7.65	-97.65	-391.16	-2,912.63	2,938.86	2,928.04	10.82	271.565		
2,300.00	2,299.99	2,265.60	2,265.55	8.01	7.89	-168.38	-389.27	-2,913.90	2,941.61	2,930.38	11.23	261.833		
2,400.00	2,399.91	2,339.93	2,339.77	8.35	8.15	-168.30	-386.00	-2,916.10	2,947.81	2,936.14	11.67	252.696		
2,500.00	2,499.69	2,413.91	2,413.55	8.70	8.41	-168.20	-381.55	-2,919.09	2,957.42	2,945.33	12.10	244.514		
2,600.00	2,599.27	2,500.00	2,499.27	9.06	8.72	-168.05	-374.88	-2,923.56	2,970.48	2,957.93	12.56	236.574		
2,700.00	2,698.57	2,560.28	2,559.17	9.42	8.94	-167.91	-369.25	-2,927.34	2,986.87	2,973.92	12.95	230.652		
2,800.00	2,797.54	2,632.42	2,630.70	9.78	9.20	-167.72	-361.49	-2,932.55	3,006.66	2,993.29	13.37	224.817		
2,815.66	2,813.00	2,643.65	2,641.82	9.84	9.24	-167.69	-360.18	-2,933.42	3,010.06	2,996.62	13.44	223.947		
2,900.00	2,896.24	2,713.86	2,711.25	10.15	9.50	-167.56	-351.53	-2,939.23	3,028.86	3,015.03	13.82	219.108		
3,000.00	2,994.95	2,810.83	2,807.12	10.53	9.86	-167.37	-339.44	-2,947.35	3,051.27	3,036.95	14.32	213.100		
3,100.00	3,093.65	2,907.80	2,902.99	10.91	10.23	-167.19	-327.34	-2,955.47	3,073.71	3,058.90	14.82	207.446		
3,200.00	3,192.36	3,004.78	2,998.86	11.29	10.60	-167.01	-315.24	-2,963.59	3,096.19	3,080.87	15.32	202.118		
3,300.00	3,291.06	3,101.75	3,094.74	11.68	10.97	-166.83	-303.14	-2,971.71	3,118.69	3,102.87	15.82	197.093		
3,400.00	3,389.76	3,198.72	3,190.61	12.07	11.34	-166.65	-291.04	-2,979.83	3,141.22	3,124.89	16.33	192.349		
3,500.00	3,488.47	3,295.70	3,286.48	12.47	11.72	-166.48	-278.94	-2,987.95	3,163.78	3,146.94	16.84	187.866		
3,600.00	3,587.17	3,392.67	3,382.35	12.87	12.10	-166.31	-266.84	-2,996.07	3,186.37	3,169.02	17.35	183.624		
3,700.00	3,685.88	3,489.65	3,478.23	13.27	12.48	-166.14	-254.74	-3,004.19	3,208.98	3,191.12	17.87	179.607		
3,800.00	3,784.58	3,586.62	3,574.10	13.67	12.87	-165.97	-242.65	-3,012.31	3,231.62	3,213.24	18.38	175.798		
3,900.00	3,883.28	3,683.59	3,669.97	14.08	13.25	-165.81	-230.55	-3,020.43	3,254.29	3,235.39	18.90	172.183		
4,000.00	3,981.99	3,780.57	3,765.85	14.49	13.64	-165.65	-218.45	-3,028.55	3,276.98	3,257.56	19.42	168.749		
4,100.00	4,080.69	3,877.54	3,861.72	14.90	14.03	-165.49	-206.35	-3,036.67	3,299.69	3,279.75	19.94	165.483		
4,200.00	4,179.39	3,974.51	3,957.59	15.31	14.42	-165.33	-194.25	-3,044.79	3,322.43	3,301.97	20.46	162.374		
4,300.00	4,278.10	4,071.49	4,053.46	15.72	14.81	-165.18	-182.15	-3,052.91	3,345.19	3,324.21	20.98	159.412		
4,400.00	4,376.80	4,168.46	4,149.34	16.13	15.21	-165.02	-170.05	-3,061.03	3,367.98	3,346.47	21.51	156.586		
4,500.00	4,475.51	4,265.44	4,245.21	16.55	15.60	-164.87	-157.95	-3,069.15	3,390.79	3,368.76	22.03	153.889		
4,600.00	4,574.21	4,362.41	4,341.08	16.97	16.00	-164.72	-145.85	-3,077.27	3,413.62	3,391.06	22.56	151.312		
4,700.00	4,672.91	4,459.38	4,436.96	17.38	16.39	-164.58	-133.76	-3,085.39	3,436.47	3,413.39	23.09	148.847		
4,800.00	4,771.62	4,556.36	4,532.83	17.80	16.79	-164.43	-121.66	-3,093.51	3,459.35	3,435.73	23.62	146.488		
4,900.00	4,870.32	4,653.33	4,628.70	18.22	17.19	-164.29	-109.56	-3,101.63	3,482.24	3,458.10	24.14	144.229		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,969.03	4,750.30	4,724.57	18.64	17.59	-164.15	-97.46	-3,109.75	3,505.16	3,480.48	24.67	142.063		
5,100.00	5,067.73	4,847.28	4,820.45	19.07	17.99	-164.01	-85.36	-3,117.87	3,528.09	3,502.89	25.20	139.984		
5,200.00	5,166.43	4,944.25	4,916.32	19.49	18.39	-163.87	-73.26	-3,125.99	3,551.05	3,525.31	25.73	137.989		
5,300.00	5,265.14	5,041.23	5,012.19	19.91	18.79	-163.73	-61.16	-3,134.11	3,574.02	3,547.76	26.27	136.072		
5,400.00	5,363.84	5,138.20	5,108.07	20.33	19.19	-163.60	-49.06	-3,142.23	3,597.02	3,570.22	26.80	134.229		
5,500.00	5,462.54	5,235.17	5,203.94	20.76	19.59	-163.47	-36.96	-3,150.35	3,620.03	3,592.70	27.33	132.455		
5,600.00	5,561.25	5,332.15	5,299.81	21.18	20.00	-163.33	-24.87	-3,158.47	3,643.06	3,615.20	27.86	130.748		
5,700.00	5,659.95	5,429.12	5,395.68	21.61	20.40	-163.21	-12.77	-3,166.59	3,666.11	3,637.71	28.40	129.103		
5,800.00	5,758.66	5,526.10	5,491.56	22.04	20.80	-163.08	-0.67	-3,174.71	3,689.17	3,660.24	28.93	127.517		
5,900.00	5,857.36	5,623.07	5,587.43	22.46	21.21	-162.95	11.43	-3,182.83	3,712.26	3,682.79	29.47	125.988		
6,000.00	5,956.06	5,720.04	5,683.30	22.89	21.61	-162.83	23.53	-3,190.95	3,735.36	3,705.36	30.00	124.511		
6,100.00	6,054.77	5,817.02	5,779.18	23.32	22.02	-162.70	35.63	-3,199.07	3,758.47	3,727.94	30.54	123.086		
6,200.00	6,153.47	5,913.99	5,875.05	23.75	22.42	-162.58	47.73	-3,207.19	3,781.61	3,750.54	31.07	121.709		
6,300.00	6,252.18	6,010.96	5,970.92	24.18	22.83	-162.46	59.83	-3,215.31	3,804.76	3,773.15	31.61	120.377		
6,400.00	6,350.88	6,107.94	6,066.79	24.60	23.23	-162.34	71.93	-3,223.43	3,827.92	3,795.78	32.14	119.089		
6,500.00	6,449.58	6,204.91	6,162.67	25.03	23.64	-162.23	84.02	-3,231.55	3,851.10	3,818.42	32.68	117.843		
6,600.00	6,548.29	6,301.89	6,258.54	25.46	24.04	-162.11	96.12	-3,239.67	3,874.30	3,841.08	33.22	116.636		
6,700.00	6,646.99	6,398.86	6,354.41	25.89	24.45	-162.00	108.22	-3,247.79	3,897.51	3,863.75	33.75	115.467		
6,758.77	6,705.00	6,455.85	6,410.76	26.15	24.69	-161.93	115.33	-3,252.56	3,911.15	3,877.08	34.07	114.797		
6,800.00	6,745.73	6,495.88	6,450.33	26.32	24.86	-161.93	120.33	-3,255.91	3,920.53	3,886.23	34.29	114.329		
6,900.00	6,844.79	6,593.29	6,546.63	26.74	25.27	-161.90	132.48	-3,264.07	3,941.55	3,906.72	34.83	113.171		
7,000.00	6,944.17	6,691.12	6,643.35	27.13	25.68	-161.86	144.69	-3,272.26	3,960.16	3,924.79	35.36	111.983		
7,100.00	7,043.80	6,789.30	6,740.42	27.51	26.09	-161.79	156.93	-3,280.48	3,976.34	3,940.44	35.90	110.769		
7,200.00	7,143.63	6,903.56	6,853.40	27.88	26.57	-161.68	171.11	-3,289.99	3,990.06	3,953.57	36.49	109.358		
7,300.00	7,243.57	7,135.83	7,084.15	28.22	27.49	-161.44	192.89	-3,304.61	3,999.33	3,961.88	37.46	106.776		
7,374.43	7,318.00	7,310.63	7,258.62	28.46	28.13	-90.56	201.58	-3,310.44	4,002.46	3,964.34	38.13	104.971		
7,400.00	7,343.57	7,370.87	7,318.83	28.55	28.34	-90.54	203.03	-3,311.42	4,002.87	3,964.52	38.35	104.380		
7,500.00	7,443.57	7,517.61	7,465.57	28.87	28.82	-90.53	203.75	-3,311.90	4,003.07	3,964.12	38.95	102.772		
7,600.00	7,543.57	7,617.61	7,565.57	29.19	29.15	-90.53	203.75	-3,311.90	4,003.07	3,963.65	39.43	101.529		
7,700.00	7,643.57	7,717.61	7,665.57	29.52	29.48	-90.53	203.75	-3,311.90	4,003.07	3,963.17	39.91	100.314		
7,800.00	7,743.57	7,817.61	7,765.57	29.84	29.81	-90.53	203.75	-3,311.90	4,003.07	3,962.69	40.38	99.125		
7,900.00	7,843.57	7,917.61	7,865.57	30.17	30.14	-90.53	203.75	-3,311.90	4,003.07	3,962.21	40.86	97.963		
8,000.00	7,943.57	8,017.61	7,965.57	30.49	30.47	-90.53	203.75	-3,311.90	4,003.07	3,961.73	41.34	96.826		
8,100.00	8,043.57	8,117.61	8,065.57	30.82	30.80	-90.53	203.75	-3,311.90	4,003.07	3,961.25	41.82	95.714		
8,200.00	8,143.57	8,217.61	8,165.57	31.15	31.13	-90.53	203.75	-3,311.90	4,003.07	3,960.77	42.30	94.625		
8,300.00	8,243.57	8,317.61	8,265.57	31.48	31.46	-90.53	203.75	-3,311.90	4,003.07	3,960.29	42.79	93.560		
8,400.00	8,343.57	8,417.61	8,365.57	31.80	31.80	-90.53	203.75	-3,311.90	4,003.07	3,959.81	43.27	92.518		
8,500.00	8,443.57	8,517.61	8,465.57	32.13	32.13	-90.53	203.75	-3,311.90	4,003.07	3,959.32	43.75	91.497		
8,600.00	8,543.57	8,617.61	8,565.57	32.46	32.46	-90.53	203.75	-3,311.90	4,003.07	3,958.84	44.23	90.497		
8,700.00	8,643.57	8,717.61	8,665.57	32.80	32.80	-90.53	203.75	-3,311.90	4,003.07	3,958.36	44.72	89.518		
8,800.00	8,743.57	8,817.61	8,765.57	33.13	33.13	-90.53	203.75	-3,311.90	4,003.07	3,957.87	45.20	88.559		
8,900.00	8,843.57	8,917.61	8,865.57	33.46	33.47	-90.53	203.75	-3,311.90	4,003.07	3,957.39	45.69	87.619		
9,000.00	8,943.57	9,017.61	8,965.57	33.79	33.80	-90.53	203.75	-3,311.90	4,003.07	3,956.90	46.17	86.698		
9,100.00	9,043.57	9,117.61	9,065.57	34.12	34.14	-90.53	203.75	-3,311.90	4,003.07	3,956.42	46.66	85.795		
9,200.00	9,143.57	9,217.61	9,165.57	34.46	34.48	-90.53	203.75	-3,311.90	4,003.07	3,955.93	47.14	84.910		
9,300.00	9,243.57	9,317.61	9,265.57	34.79	34.81	-90.53	203.75	-3,311.90	4,003.07	3,955.44	47.63	84.043		
9,400.00	9,343.57	9,417.61	9,365.57	35.13	35.15	-90.53	203.75	-3,311.90	4,003.07	3,954.96	48.12	83.192		
9,500.00	9,443.57	9,517.61	9,465.57	35.46	35.49	-90.53	203.75	-3,311.90	4,003.07	3,954.47	48.61	82.358		
9,600.00	9,543.57	9,617.61	9,565.57	35.80	35.83	-90.53	203.75	-3,311.90	4,003.07	3,953.98	49.09	81.539		
9,700.00	9,643.57	9,717.61	9,665.57	36.13	36.17	-90.53	203.75	-3,311.90	4,003.07	3,953.49	49.58	80.736		
9,800.00	9,743.57	9,817.61	9,765.57	36.47	36.50	-90.53	203.75	-3,311.90	4,003.07	3,953.00	50.07	79.949		
9,833.47	9,777.04	9,851.09	9,799.04	36.58	36.62	-90.53	203.75	-3,311.90	4,003.07	3,952.84	50.23	79.688		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - PF Fed Com 501H - OH - Plan #1											Offset Site Error:		0.00 usft	
Survey Program:		0-OWSG (Rev2) MWD											Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis		Distance								Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,850.00	9,793.56	9,867.61	9,815.56	36.64	36.67	90.04	203.75	-3,311.90	4,003.07	3,952.76	50.31	79.563				
9,900.00	9,843.42	9,917.46	9,865.42	36.79	36.84	90.10	203.75	-3,311.90	4,003.08	3,952.53	50.54	79.199				
9,950.00	9,892.77	9,966.81	9,914.77	36.93	37.01	90.21	203.75	-3,311.90	4,003.10	3,952.33	50.77	78.849				
10,000.00	9,941.23	10,015.28	9,963.23	37.06	37.18	90.37	203.75	-3,311.90	4,003.16	3,952.18	50.99	78.516				
10,050.00	9,988.45	10,062.50	10,010.45	37.19	37.34	90.58	203.75	-3,311.90	4,003.31	3,952.12	51.19	78.202				
10,100.00	10,034.06	10,109.33	10,057.29	37.30	37.49	90.82	203.64	-3,311.90	4,003.58	3,952.19	51.39	77.908				
10,150.00	10,077.71	10,161.11	10,108.94	37.41	37.64	91.10	200.29	-3,311.87	4,003.98	3,952.40	51.58	77.631				
10,200.00	10,119.07	10,215.34	10,162.48	37.50	37.78	91.38	191.79	-3,311.78	4,004.49	3,952.74	51.75	77.376				
10,250.00	10,157.84	10,272.33	10,217.61	37.58	37.90	91.66	177.46	-3,311.64	4,005.10	3,953.18	51.92	77.142				
10,300.00	10,193.70	10,332.39	10,273.87	37.65	38.02	91.93	156.51	-3,311.44	4,005.79	3,953.72	52.07	76.929				
10,350.00	10,226.39	10,395.83	10,330.57	37.71	38.11	92.21	128.11	-3,311.16	4,006.55	3,954.34	52.21	76.735				
10,400.00	10,255.66	10,462.96	10,386.75	37.76	38.18	92.47	91.45	-3,310.81	4,007.34	3,955.00	52.34	76.562				
10,450.00	10,281.29	10,533.97	10,441.08	37.81	38.23	92.72	45.80	-3,310.36	4,008.14	3,955.68	52.46	76.403				
10,500.00	10,303.08	10,608.95	10,491.85	37.85	38.26	92.96	-9.30	-3,309.82	4,008.90	3,956.32	52.57	76.251				
10,550.00	10,320.87	10,687.80	10,537.01	37.90	38.26	93.17	-73.85	-3,309.19	4,009.58	3,956.90	52.69	76.104				
10,600.00	10,334.52	10,770.15	10,574.25	37.96	38.24	93.33	-147.22	-3,308.48	4,010.15	3,957.35	52.80	75.947				
10,650.00	10,343.93	10,855.35	10,601.31	38.03	38.21	93.46	-227.92	-3,307.69	4,010.56	3,957.63	52.93	75.775				
10,700.00	10,349.02	10,942.44	10,616.30	38.12	38.17	93.52	-313.63	-3,306.85	4,010.79	3,957.72	53.07	75.579				
10,733.47	10,350.00	10,999.88	10,619.00	38.19	38.16	93.53	-370.98	-3,306.30	4,010.84	3,957.67	53.17	75.436				
10,800.00	10,350.00	11,066.41	10,619.00	38.36	38.17	93.53	-437.50	-3,305.65	4,010.85	3,957.49	53.36	75.159				
10,900.00	10,350.00	11,166.41	10,619.00	38.68	38.30	93.53	-537.49	-3,304.67	4,010.88	3,957.14	53.73	74.642				
11,000.00	10,350.00	11,266.41	10,619.00	39.08	38.54	93.53	-637.49	-3,303.70	4,010.90	3,956.70	54.20	73.997				
11,100.00	10,350.00	11,366.41	10,619.00	39.56	38.87	93.53	-737.49	-3,302.72	4,010.93	3,956.16	54.77	73.236				
11,200.00	10,350.00	11,466.41	10,619.00	40.10	39.27	93.53	-837.48	-3,301.74	4,010.96	3,955.53	55.42	72.369				
11,300.00	10,350.00	11,566.41	10,619.00	40.70	39.73	93.53	-937.48	-3,300.77	4,010.98	3,954.81	56.17	71.409				
11,400.00	10,350.00	11,666.41	10,619.00	41.37	40.25	93.53	-1,037.47	-3,299.79	4,011.01	3,954.01	57.00	70.369				
11,500.00	10,350.00	11,766.41	10,619.00	42.08	40.83	93.53	-1,137.47	-3,298.82	4,011.03	3,953.12	57.91	69.260				
11,600.00	10,350.00	11,866.41	10,619.00	42.85	41.46	93.53	-1,237.46	-3,297.84	4,011.06	3,952.15	58.90	68.094				
11,700.00	10,350.00	11,966.41	10,619.00	43.67	42.15	93.53	-1,337.46	-3,296.87	4,011.09	3,951.12	59.97	66.885				
11,800.00	10,350.00	12,066.41	10,619.00	44.53	42.89	93.53	-1,437.45	-3,295.89	4,011.11	3,950.00	61.11	65.642				
11,900.00	10,350.00	12,166.41	10,619.00	45.44	43.67	93.53	-1,537.45	-3,294.92	4,011.14	3,948.83	62.31	64.375				
12,000.00	10,350.00	12,266.41	10,619.00	46.39	44.51	93.53	-1,637.44	-3,293.94	4,011.16	3,947.59	63.57	63.094				
12,100.00	10,350.00	12,366.41	10,619.00	47.37	45.38	93.53	-1,737.44	-3,292.97	4,011.19	3,946.29	64.90	61.806				
12,200.00	10,350.00	12,466.41	10,619.00	48.39	46.30	93.53	-1,837.43	-3,291.99	4,011.21	3,944.93	66.28	60.519				
12,300.00	10,350.00	12,566.41	10,619.00	49.45	47.26	93.53	-1,937.43	-3,291.02	4,011.24	3,943.53	67.71	59.239				
12,400.00	10,350.00	12,666.41	10,619.00	50.54	48.26	93.53	-2,037.42	-3,290.04	4,011.27	3,942.07	69.19	57.971				
12,500.00	10,350.00	12,766.41	10,619.00	51.66	49.29	93.53	-2,137.42	-3,289.06	4,011.29	3,940.57	70.72	56.720				
12,600.00	10,350.00	12,866.41	10,619.00	52.80	50.35	93.53	-2,237.41	-3,288.09	4,011.32	3,939.03	72.29	55.488				
12,700.00	10,350.00	12,966.41	10,619.00	53.97	51.44	93.53	-2,337.41	-3,287.11	4,011.34	3,937.44	73.90	54.279				
12,800.00	10,350.00	13,066.41	10,619.00	55.17	52.57	93.53	-2,437.40	-3,286.14	4,011.37	3,935.82	75.55	53.095				
12,900.00	10,350.00	13,166.41	10,619.00	56.39	53.72	93.53	-2,537.40	-3,285.16	4,011.40	3,934.16	77.23	51.938				
13,000.00	10,350.00	13,266.41	10,619.00	57.63	54.89	93.53	-2,637.39	-3,284.19	4,011.42	3,932.47	78.95	50.809				
13,100.00	10,350.00	13,366.41	10,619.00	58.89	56.09	93.53	-2,737.39	-3,283.21	4,011.45	3,930.75	80.70	49.709				
13,200.00	10,350.00	13,466.41	10,619.00	60.17	57.31	93.53	-2,837.39	-3,282.24	4,011.47	3,929.00	82.47	48.639				
13,300.00	10,350.00	13,566.41	10,619.00	61.47	58.55	93.53	-2,937.38	-3,281.26	4,011.50	3,927.22	84.28	47.598				
13,400.00	10,350.00	13,666.41	10,619.00	62.78	59.82	93.53	-3,037.38	-3,280.29	4,011.52	3,925.42	86.11	46.588				
13,500.00	10,350.00	13,766.41	10,619.00	64.11	61.10	93.53	-3,137.37	-3,279.31	4,011.55	3,923.59	87.96	45.607				
13,600.00	10,350.00	13,866.41	10,619.00	65.45	62.39	93.53	-3,237.37	-3,278.34	4,011.58	3,921.74	89.83	44.655				
13,700.00	10,350.00	13,966.41	10,619.00	66.81	63.71	93.53	-3,337.36	-3,277.36	4,011.60	3,919.87	91.73	43.733				
13,800.00	10,350.00	14,066.41	10,619.00	68.18	65.04	93.53	-3,437.36	-3,276.38	4,011.63	3,917.98	93.65	42.838				
13,900.00	10,350.00	14,166.41	10,619.00	69.56	66.38	93.53	-3,537.35	-3,275.41	4,011.65	3,916.07	95.58	41.972				
14,000.00	10,350.00	14,266.41	10,619.00	70.96	67.74	93.53	-3,637.35	-3,274.43	4,011.68	3,914.15	97.53	41.132				

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - PF Fed Com 501H - OH - Plan #1											Offset Site Error: 0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	10,350.00	14,366.41	10,619.00	72.36	69.11	93.53	-3,737.34	-3,273.46	4,011.71	3,912.21	99.50	40.319		
14,200.00	10,350.00	14,466.41	10,619.00	73.78	70.49	93.53	-3,837.34	-3,272.48	4,011.73	3,910.25	101.48	39.531		
14,300.00	10,350.00	14,566.41	10,619.00	75.20	71.88	93.53	-3,937.33	-3,271.51	4,011.76	3,908.28	103.48	38.768		
14,400.00	10,350.00	14,666.41	10,619.00	76.63	73.29	93.53	-4,037.33	-3,270.53	4,011.78	3,906.29	105.49	38.029		
14,500.00	10,350.00	14,766.41	10,619.00	78.08	74.70	93.53	-4,137.32	-3,269.56	4,011.81	3,904.29	107.52	37.313		
14,600.00	10,350.00	14,866.41	10,619.00	79.53	76.13	93.53	-4,237.32	-3,268.58	4,011.83	3,902.28	109.55	36.620		
14,700.00	10,350.00	14,966.41	10,619.00	80.99	77.56	93.53	-4,337.31	-3,267.61	4,011.86	3,900.26	111.60	35.948		
14,800.00	10,350.00	15,066.41	10,619.00	82.45	79.00	93.53	-4,437.31	-3,266.63	4,011.89	3,898.22	113.66	35.297		
14,900.00	10,350.00	15,166.41	10,619.00	83.92	80.45	93.53	-4,537.30	-3,265.66	4,011.91	3,896.18	115.73	34.666		
15,000.00	10,350.00	15,266.41	10,619.00	85.40	81.91	93.53	-4,637.30	-3,264.68	4,011.94	3,894.13	117.81	34.054		
15,100.00	10,350.00	15,366.41	10,619.00	86.89	83.37	93.53	-4,737.30	-3,263.70	4,011.96	3,892.06	119.90	33.461		
15,200.00	10,350.00	15,466.41	10,619.00	88.38	84.84	93.53	-4,837.29	-3,262.73	4,011.99	3,889.99	122.00	32.886		
15,300.00	10,350.00	15,566.41	10,619.00	89.87	86.32	93.53	-4,937.29	-3,261.75	4,012.02	3,887.91	124.10	32.328		
15,400.00	10,350.00	15,666.41	10,619.00	91.38	87.80	93.53	-5,037.28	-3,260.78	4,012.04	3,885.82	126.22	31.787		
15,500.00	10,350.00	15,766.41	10,619.00	92.88	89.29	93.53	-5,137.28	-3,259.80	4,012.07	3,883.73	128.34	31.261		
15,600.00	10,350.00	15,866.41	10,619.00	94.39	90.79	93.53	-5,237.27	-3,258.83	4,012.09	3,881.62	130.47	30.752		
15,700.00	10,350.00	15,966.41	10,619.00	95.91	92.29	93.53	-5,337.27	-3,257.85	4,012.12	3,879.52	132.60	30.256		
15,800.00	10,350.00	16,066.41	10,619.00	97.43	93.80	93.53	-5,437.26	-3,256.88	4,012.14	3,877.40	134.75	29.776		
15,900.00	10,350.00	16,166.41	10,619.00	98.96	95.31	93.53	-5,537.26	-3,255.90	4,012.17	3,875.28	136.89	29.309		
16,000.00	10,350.00	16,266.41	10,619.00	100.49	96.82	93.53	-5,637.25	-3,254.93	4,012.20	3,873.15	139.05	28.855		
16,100.00	10,350.00	16,366.41	10,619.00	102.02	98.34	93.53	-5,737.25	-3,253.95	4,012.22	3,871.01	141.21	28.414		
16,200.00	10,350.00	16,466.41	10,619.00	103.55	99.86	93.53	-5,837.24	-3,252.98	4,012.25	3,868.87	143.37	27.985		
16,300.00	10,350.00	16,566.41	10,619.00	105.09	101.39	93.53	-5,937.24	-3,252.00	4,012.27	3,866.73	145.54	27.567		
16,400.00	10,350.00	16,666.41	10,619.00	106.64	102.92	93.53	-6,037.23	-3,251.02	4,012.30	3,864.58	147.72	27.162		
16,500.00	10,350.00	16,766.41	10,619.00	108.18	104.46	93.53	-6,137.23	-3,250.05	4,012.33	3,862.43	149.90	26.767		
16,600.00	10,350.00	16,866.41	10,619.00	109.73	106.00	93.53	-6,237.22	-3,249.07	4,012.35	3,860.27	152.08	26.382		
16,700.00	10,350.00	16,966.41	10,619.00	111.29	107.54	93.53	-6,337.22	-3,248.10	4,012.38	3,858.10	154.27	26.008		
16,800.00	10,350.00	17,066.41	10,619.00	112.84	109.08	93.53	-6,437.21	-3,247.12	4,012.40	3,855.94	156.47	25.644		
16,900.00	10,350.00	17,166.41	10,619.00	114.40	110.63	93.53	-6,537.21	-3,246.15	4,012.43	3,853.77	158.66	25.289		
17,000.00	10,350.00	17,266.41	10,619.00	115.96	112.18	93.53	-6,637.20	-3,245.17	4,012.46	3,851.59	160.86	24.943		
17,100.00	10,350.00	17,366.41	10,619.00	117.52	113.74	93.53	-6,737.20	-3,244.20	4,012.48	3,849.41	163.07	24.606		
17,200.00	10,350.00	17,466.41	10,619.00	119.09	115.29	93.53	-6,837.20	-3,243.22	4,012.51	3,847.23	165.28	24.278		
17,300.00	10,350.00	17,566.41	10,619.00	120.66	116.85	93.53	-6,937.19	-3,242.25	4,012.53	3,845.05	167.49	23.957		
17,400.00	10,350.00	17,666.41	10,619.00	122.23	118.41	93.53	-7,037.19	-3,241.27	4,012.56	3,842.86	169.70	23.645		
17,500.00	10,350.00	17,766.41	10,619.00	123.80	119.98	93.53	-7,137.18	-3,240.30	4,012.58	3,840.67	171.92	23.340		
17,600.00	10,350.00	17,866.41	10,619.00	125.37	121.54	93.53	-7,237.18	-3,239.32	4,012.61	3,838.47	174.14	23.043		
17,700.00	10,350.00	17,966.41	10,619.00	126.95	123.11	93.53	-7,337.17	-3,238.34	4,012.64	3,836.27	176.36	22.752		
17,800.00	10,350.00	18,066.41	10,619.00	128.52	124.68	93.53	-7,437.17	-3,237.37	4,012.66	3,834.07	178.59	22.469		
17,900.00	10,350.00	18,166.41	10,619.00	130.10	126.26	93.53	-7,537.16	-3,236.39	4,012.69	3,831.87	180.82	22.192		
18,000.00	10,350.00	18,266.41	10,619.00	131.69	127.83	93.53	-7,637.16	-3,235.42	4,012.71	3,829.67	183.05	21.922		
18,100.00	10,350.00	18,366.41	10,619.00	133.27	129.41	93.53	-7,737.15	-3,234.44	4,012.74	3,827.46	185.28	21.658		
18,200.00	10,350.00	18,466.41	10,619.00	134.85	130.99	93.53	-7,837.15	-3,233.47	4,012.77	3,825.25	187.52	21.399		
18,300.00	10,350.00	18,566.41	10,619.00	136.44	132.57	93.53	-7,937.14	-3,232.49	4,012.79	3,823.04	189.76	21.147		
18,400.00	10,350.00	18,666.41	10,619.00	138.03	134.15	93.53	-8,037.14	-3,231.52	4,012.82	3,820.82	192.00	20.901		
18,500.00	10,350.00	18,766.41	10,619.00	139.62	135.73	93.53	-8,137.13	-3,230.54	4,012.84	3,818.60	194.24	20.659		
18,600.00	10,350.00	18,866.41	10,619.00	141.21	137.32	93.53	-8,237.13	-3,229.57	4,012.87	3,816.38	196.48	20.423		
18,700.00	10,350.00	18,966.41	10,619.00	142.80	138.90	93.53	-8,337.12	-3,228.59	4,012.89	3,814.16	198.73	20.193		
18,800.00	10,350.00	19,066.41	10,619.00	144.39	140.49	93.53	-8,437.12	-3,227.62	4,012.92	3,811.94	200.98	19.967		
18,900.00	10,350.00	19,166.41	10,619.00	145.99	142.08	93.53	-8,537.11	-3,226.64	4,012.95	3,809.72	203.23	19.746		
19,000.00	10,350.00	19,266.41	10,619.00	147.58	143.67	93.53	-8,637.11	-3,225.66	4,012.97	3,807.49	205.48	19.530		
19,100.00	10,350.00	19,366.41	10,619.00	149.18	145.27	93.53	-8,737.10	-3,224.69	4,013.00	3,805.26	207.74	19.318		
19,200.00	10,350.00	19,466.41	10,619.00	150.78	146.86	93.53	-8,837.10	-3,223.71	4,013.02	3,803.03	209.99	19.110		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 501H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.00	10,350.00	19,566.41	10,619.00	152.38	148.46	93.53	-8,937.10	-3,222.74	4,013.05	3,800.80	212.25	18.907	
19,400.00	10,350.00	19,666.41	10,619.00	153.98	150.05	93.53	-9,037.09	-3,221.76	4,013.08	3,798.57	214.51	18.708	
19,500.00	10,350.00	19,766.41	10,619.00	155.58	151.65	93.53	-9,137.09	-3,220.79	4,013.10	3,796.33	216.77	18.513	
19,600.00	10,350.00	19,866.41	10,619.00	157.18	153.25	93.53	-9,237.08	-3,219.81	4,013.13	3,794.09	219.03	18.322	
19,700.00	10,350.00	19,966.41	10,619.00	158.79	154.85	93.53	-9,337.08	-3,218.84	4,013.15	3,791.86	221.30	18.135	
19,800.00	10,350.00	20,066.41	10,619.00	160.39	156.45	93.53	-9,437.07	-3,217.86	4,013.18	3,789.62	223.56	17.951	
19,900.00	10,350.00	20,166.41	10,619.00	162.00	158.05	93.53	-9,537.07	-3,216.89	4,013.20	3,787.38	225.83	17.771	
20,000.00	10,350.00	20,266.41	10,619.00	163.61	159.65	93.53	-9,637.06	-3,215.91	4,013.23	3,785.13	228.10	17.594	
20,100.00	10,350.00	20,366.41	10,619.00	165.21	161.26	93.53	-9,737.06	-3,214.94	4,013.26	3,782.89	230.37	17.421	
20,200.00	10,350.00	20,466.41	10,619.00	166.82	162.86	93.53	-9,837.05	-3,213.96	4,013.28	3,780.65	232.64	17.251	
20,300.00	10,350.00	20,566.41	10,619.00	168.43	164.47	93.53	-9,937.05	-3,212.98	4,013.31	3,778.40	234.91	17.085	
20,400.00	10,350.00	20,666.41	10,619.00	170.04	166.07	93.53	-10,037.04	-3,212.01	4,013.33	3,776.15	237.18	16.921	
20,500.00	10,350.00	20,766.41	10,619.00	171.65	167.56	93.53	-10,137.04	-3,211.03	4,013.36	3,773.99	239.37	16.767	
20,529.73	10,350.00	20,792.10	10,619.00	172.13	167.92	93.53	-10,162.73	-3,210.78	4,013.37	3,773.41	239.96	16.725 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	22.00	22.00	0.00	0.03	-97.73	-392.02	-2,886.81	2,913.31					
100.00	100.00	122.00	122.00	0.13	0.20	-97.73	-392.02	-2,886.81	2,913.31	2,913.07	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.73	-392.02	-2,886.81	2,913.31	2,912.56	0.74	3,924.953		
300.00	300.00	322.00	322.00	0.84	0.92	-97.73	-392.02	-2,886.81	2,913.31	2,912.06	1.25	2,333.714		
400.00	400.00	422.00	422.00	1.20	1.28	-97.73	-392.02	-2,886.81	2,913.31	2,911.55	1.75	1,660.050		
500.00	500.00	522.00	522.00	1.56	1.64	-97.73	-392.02	-2,886.81	2,913.31	2,911.05	2.26	1,288.100		
600.00	600.00	622.00	622.00	1.92	2.00	-97.73	-392.02	-2,886.81	2,913.31	2,910.54	2.77	1,052.291		
700.00	700.00	722.00	722.00	2.28	2.36	-97.73	-392.02	-2,886.81	2,913.31	2,910.03	3.28	889.449		
800.00	800.00	822.00	822.00	2.63	2.71	-97.73	-392.02	-2,886.81	2,913.31	2,909.52	3.78	770.248		
900.00	900.00	922.00	922.00	2.99	3.07	-97.73	-392.02	-2,886.81	2,913.31	2,909.02	4.29	679.218		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.73	-392.02	-2,886.81	2,913.31	2,908.51	4.80	607.430		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.73	-392.02	-2,886.81	2,913.31	2,908.00	5.30	549.365		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.73	-392.02	-2,886.81	2,913.31	2,907.50	5.81	501.432		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.73	-392.02	-2,886.81	2,913.31	2,906.99	6.32	461.192		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.73	-392.02	-2,886.81	2,913.31	2,906.48	6.82	426.930		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.73	-392.02	-2,886.81	2,913.31	2,905.98	7.33	397.407		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.73	-392.02	-2,886.81	2,913.31	2,905.47	7.84	371.703		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.73	-392.02	-2,886.81	2,913.31	2,904.96	8.34	349.122		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.73	-392.02	-2,886.81	2,913.31	2,904.46	8.85	329.127		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.73	-392.02	-2,886.81	2,913.31	2,903.95	9.36	311.299		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.73	-392.02	-2,886.81	2,913.31	2,903.44	9.87	295.302		
2,100.00	2,100.00	2,122.00	2,122.00	7.29	7.37	-97.73	-392.02	-2,886.81	2,913.31	2,902.93	10.37	280.870		
2,200.00	2,200.00	2,222.00	2,222.00	7.65	7.73	-97.73	-392.02	-2,886.81	2,913.31	2,902.43	10.88	267.782		
2,300.00	2,299.99	2,363.02	2,363.02	8.01	8.24	-168.51	-391.69	-2,886.41	2,914.44	2,902.95	11.48	253.772		
2,400.00	2,399.91	2,649.42	2,649.42	8.35	9.25	-168.39	-381.93	-2,874.43	2,913.68	2,901.25	12.43	234.449		
2,500.00	2,499.69	2,879.59	2,877.33	8.70	10.08	-168.17	-364.17	-2,852.62	2,909.11	2,895.89	13.22	220.054		
2,600.00	2,599.27	3,163.88	3,156.56	9.06	11.16	-167.75	-330.65	-2,811.47	2,901.09	2,886.97	14.12	205.474		
2,700.00	2,698.57	3,263.22	3,253.53	9.42	11.55	-167.59	-317.04	-2,794.76	2,894.06	2,879.44	14.62	197.937		
2,800.00	2,797.54	3,362.75	3,350.69	9.78	11.95	-167.43	-303.40	-2,778.02	2,889.61	2,874.49	15.13	191.012		
2,815.66	2,813.00	3,378.35	3,365.92	9.84	12.01	-167.41	-301.26	-2,775.39	2,889.15	2,873.94	15.21	189.982		
2,900.00	2,896.24	3,462.37	3,447.94	10.15	12.36	-167.27	-289.75	-2,761.26	2,886.84	2,871.20	15.64	184.592		
3,000.00	2,994.95	3,562.00	3,545.19	10.53	12.78	-167.11	-276.10	-2,744.50	2,884.11	2,867.96	16.15	178.537		
3,100.00	3,093.65	3,661.63	3,642.45	10.91	13.20	-166.95	-262.45	-2,727.74	2,881.41	2,864.74	16.67	172.820		
3,200.00	3,192.36	3,761.25	3,739.70	11.29	13.62	-166.79	-248.80	-2,710.98	2,878.73	2,861.54	17.19	167.418		
3,300.00	3,291.06	3,860.88	3,836.95	11.68	14.05	-166.62	-235.14	-2,694.22	2,876.08	2,858.36	17.72	162.307		
3,400.00	3,389.76	3,960.50	3,934.20	12.07	14.49	-166.46	-221.49	-2,677.46	2,873.45	2,855.20	18.25	157.468		
3,500.00	3,488.47	4,060.13	4,031.46	12.47	14.93	-166.29	-207.84	-2,660.70	2,870.84	2,852.06	18.78	152.880		
3,600.00	3,587.17	4,159.76	4,128.71	12.87	15.37	-166.13	-194.19	-2,643.94	2,868.26	2,848.95	19.31	148.527		
3,700.00	3,685.88	4,259.38	4,225.96	13.27	15.81	-165.97	-180.54	-2,627.18	2,865.70	2,845.85	19.85	144.391		
3,800.00	3,784.58	4,359.01	4,323.22	13.67	16.26	-165.80	-166.89	-2,610.42	2,863.16	2,842.78	20.38	140.459		
3,900.00	3,883.28	4,458.63	4,420.47	14.08	16.71	-165.64	-153.24	-2,593.66	2,860.65	2,839.73	20.92	136.716		
4,000.00	3,981.99	4,558.26	4,517.72	14.49	17.16	-165.47	-139.59	-2,576.90	2,858.16	2,836.70	21.47	133.151		
4,100.00	4,080.69	4,657.89	4,614.97	14.90	17.62	-165.31	-125.94	-2,560.14	2,855.70	2,833.69	22.01	129.751		
4,200.00	4,179.39	4,757.51	4,712.23	15.31	18.07	-165.14	-112.29	-2,543.38	2,853.26	2,830.70	22.55	126.506		
4,300.00	4,278.10	4,857.14	4,809.48	15.72	18.53	-164.97	-98.63	-2,526.62	2,850.84	2,827.74	23.10	123.406		
4,400.00	4,376.80	4,956.76	4,906.73	16.13	18.99	-164.81	-84.98	-2,509.86	2,848.45	2,824.80	23.65	120.442		
4,500.00	4,475.51	5,056.39	5,003.98	16.55	19.46	-164.64	-71.33	-2,493.10	2,846.08	2,821.88	24.20	117.606		
4,600.00	4,574.21	5,156.01	5,101.24	16.97	19.92	-164.47	-57.68	-2,476.34	2,843.74	2,818.99	24.75	114.891		
4,700.00	4,672.91	5,255.64	5,198.49	17.38	20.39	-164.31	-44.03	-2,459.58	2,841.42	2,816.12	25.30	112.288		
4,800.00	4,771.62	5,355.27	5,295.74	17.80	20.85	-164.14	-30.38	-2,442.82	2,839.13	2,813.27	25.86	109.791		
4,900.00	4,870.32	5,454.89	5,392.99	18.22	21.32	-163.97	-16.73	-2,426.06	2,836.86	2,810.44	26.42	107.395		
5,000.00	4,969.03	5,554.52	5,490.25	18.64	21.79	-163.80	-3.08	-2,409.30	2,834.61	2,807.64	26.97	105.093		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	5,654.14	5,587.50	19.07	22.26	-163.63	10.57	-2,392.54	2,832.39	2,804.86	27.53	102.881		
5,200.00	5,166.43	5,753.77	5,684.75	19.49	22.73	-163.47	24.23	-2,375.78	2,830.19	2,802.10	28.09	100.753		
5,300.00	5,265.14	5,853.40	5,782.01	19.91	23.20	-163.30	37.88	-2,359.02	2,828.02	2,799.37	28.65	98.704		
5,400.00	5,363.84	5,953.02	5,879.26	20.33	23.68	-163.13	51.53	-2,342.26	2,825.88	2,796.66	29.21	96.732		
5,500.00	5,462.54	6,052.65	5,976.51	20.76	24.15	-162.96	65.18	-2,325.50	2,823.75	2,793.98	29.78	94.831		
5,600.00	5,561.25	6,152.27	6,073.76	21.18	24.63	-162.79	78.83	-2,308.74	2,821.66	2,791.32	30.34	92.998		
5,700.00	5,659.95	6,251.90	6,171.02	21.61	25.10	-162.62	92.48	-2,291.98	2,819.59	2,788.68	30.91	91.229		
5,800.00	5,758.66	6,351.53	6,268.27	22.04	25.58	-162.45	106.13	-2,275.22	2,817.54	2,786.06	31.47	89.522		
5,900.00	5,857.36	6,451.15	6,365.52	22.46	26.06	-162.28	119.78	-2,258.46	2,815.52	2,783.48	32.04	87.873		
6,000.00	5,956.06	6,550.78	6,462.77	22.89	26.53	-162.11	133.43	-2,241.70	2,813.52	2,780.91	32.61	86.280		
6,100.00	6,054.77	6,650.40	6,560.03	23.32	27.01	-161.94	147.09	-2,224.94	2,811.55	2,778.37	33.18	84.739		
6,200.00	6,153.47	6,738.72	6,646.25	23.75	27.44	-161.79	159.16	-2,210.13	2,809.66	2,775.94	33.72	83.322		
6,300.00	6,252.18	6,800.00	6,706.24	24.18	27.73	-161.69	167.06	-2,200.43	2,808.79	2,774.60	34.19	82.152		
6,304.20	6,256.32	6,800.00	6,706.24	24.19	27.73	-161.69	167.06	-2,200.43	2,808.79	2,774.59	34.20	82.122		
6,400.00	6,350.88	6,864.97	6,770.05	24.60	28.02	-161.60	174.77	-2,190.96	2,809.24	2,774.58	34.66	81.052		
6,500.00	6,449.58	6,928.20	6,832.35	25.03	28.30	-161.53	181.61	-2,182.55	2,811.00	2,775.88	35.12	80.046		
6,600.00	6,548.29	7,000.00	6,903.29	25.46	28.61	-161.47	188.60	-2,173.98	2,814.08	2,778.49	35.59	79.067		
6,700.00	6,646.99	7,054.71	6,957.48	25.89	28.84	-161.43	193.35	-2,168.14	2,818.44	2,782.43	36.01	78.274		
6,758.77	6,705.00	7,100.00	7,002.41	26.15	29.02	-161.40	196.92	-2,163.77	2,821.63	2,785.34	36.29	77.760		
6,800.00	6,745.73	7,100.00	7,002.41	26.32	29.02	-161.41	196.92	-2,163.77	2,823.99	2,787.60	36.39	77.610		
6,900.00	6,844.79	7,181.15	7,083.08	26.74	29.34	-161.40	202.46	-2,156.96	2,828.60	2,791.74	36.86	76.739		
7,000.00	6,944.17	7,244.38	7,146.06	27.13	29.58	-161.39	206.03	-2,152.58	2,832.13	2,794.86	37.27	75.991		
7,100.00	7,043.80	7,300.00	7,201.53	27.51	29.78	-161.38	208.63	-2,149.39	2,834.49	2,796.84	37.64	75.295		
7,200.00	7,143.63	7,370.87	7,272.28	27.88	30.03	-161.36	211.19	-2,146.24	2,835.63	2,797.57	38.05	74.514		
7,300.00	7,243.57	7,434.14	7,335.50	28.22	30.24	-161.34	212.78	-2,144.29	2,835.60	2,797.17	38.43	73.786		
7,374.43	7,318.00	7,481.24	7,382.58	28.46	30.40	-90.56	213.54	-2,143.36	2,834.81	2,796.11	38.70	73.250		
7,400.00	7,343.57	7,500.00	7,401.34	28.55	30.46	-90.55	213.74	-2,143.12	2,834.47	2,795.67	38.80	73.051		
7,500.00	7,443.57	7,564.23	7,465.57	28.87	30.66	-90.55	213.98	-2,142.81	2,833.94	2,794.79	39.16	72.377		
7,600.00	7,543.57	7,664.23	7,565.57	29.19	30.96	-90.55	213.98	-2,142.81	2,833.94	2,794.31	39.63	71.516		
7,700.00	7,643.57	7,764.23	7,665.57	29.52	31.27	-90.55	213.98	-2,142.81	2,833.94	2,793.84	40.10	70.673		
7,800.00	7,743.57	7,864.23	7,765.57	29.84	31.58	-90.55	213.98	-2,142.81	2,833.94	2,793.37	40.57	69.849		
7,900.00	7,843.57	7,964.23	7,865.57	30.17	31.89	-90.55	213.98	-2,142.81	2,833.94	2,792.89	41.05	69.042		
8,000.00	7,943.57	8,064.23	7,965.57	30.49	32.20	-90.55	213.98	-2,142.81	2,833.94	2,792.42	41.52	68.252		
8,100.00	8,043.57	8,164.23	8,065.57	30.82	32.52	-90.55	213.98	-2,142.81	2,833.94	2,791.94	42.00	67.479		
8,200.00	8,143.57	8,264.23	8,165.57	31.15	32.83	-90.55	213.98	-2,142.81	2,833.94	2,791.47	42.47	66.722		
8,300.00	8,243.57	8,364.23	8,265.57	31.48	33.14	-90.55	213.98	-2,142.81	2,833.94	2,790.99	42.95	65.981		
8,400.00	8,343.57	8,464.23	8,365.57	31.80	33.46	-90.55	213.98	-2,142.81	2,833.94	2,790.51	43.43	65.256		
8,500.00	8,443.57	8,564.23	8,465.57	32.13	33.77	-90.55	213.98	-2,142.81	2,833.94	2,790.03	43.91	64.545		
8,600.00	8,543.57	8,664.23	8,565.57	32.46	34.09	-90.55	213.98	-2,142.81	2,833.94	2,789.55	44.39	63.848		
8,700.00	8,643.57	8,764.23	8,665.57	32.80	34.41	-90.55	213.98	-2,142.81	2,833.94	2,789.08	44.87	63.165		
8,800.00	8,743.57	8,864.23	8,765.57	33.13	34.73	-90.55	213.98	-2,142.81	2,833.94	2,788.59	45.35	62.496		
8,900.00	8,843.57	8,964.23	8,865.57	33.46	35.05	-90.55	213.98	-2,142.81	2,833.94	2,788.11	45.83	61.841		
9,000.00	8,943.57	9,064.23	8,965.57	33.79	35.37	-90.55	213.98	-2,142.81	2,833.94	2,787.63	46.31	61.198		
9,100.00	9,043.57	9,164.23	9,065.57	34.12	35.69	-90.55	213.98	-2,142.81	2,833.94	2,787.15	46.79	60.568		
9,200.00	9,143.57	9,264.23	9,165.57	34.46	36.01	-90.55	213.98	-2,142.81	2,833.94	2,786.67	47.27	59.949		
9,300.00	9,243.57	9,364.23	9,265.57	34.79	36.33	-90.55	213.98	-2,142.81	2,833.94	2,786.19	47.76	59.343		
9,400.00	9,343.57	9,464.23	9,365.57	35.13	36.65	-90.55	213.98	-2,142.81	2,833.94	2,785.70	48.24	58.748		
9,500.00	9,443.57	9,564.23	9,465.57	35.46	36.98	-90.55	213.98	-2,142.81	2,833.94	2,785.22	48.72	58.165		
9,600.00	9,543.57	9,664.23	9,565.57	35.80	37.30	-90.55	213.98	-2,142.81	2,833.94	2,784.73	49.21	57.592		
9,700.00	9,643.57	9,764.23	9,665.57	36.13	37.62	-90.55	213.98	-2,142.81	2,833.94	2,784.25	49.69	57.031		
9,800.00	9,743.57	9,864.23	9,765.57	36.47	37.95	-90.55	213.98	-2,142.81	2,833.94	2,783.76	50.18	56.479		
9,833.47	9,777.04	9,897.70	9,799.04	36.58	38.06	-90.55	213.98	-2,142.81	2,833.94	2,783.60	50.34	56.297		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,850.00	9,793.56	9,914.23	9,815.56	36.64	38.11	90.03	213.98	-2,142.81	2,833.94	2,783.52	50.42	56.209		
9,900.00	9,843.42	9,964.08	9,865.42	36.79	38.28	90.10	213.98	-2,142.81	2,833.95	2,783.29	50.65	55.950		
9,950.00	9,892.77	10,013.43	9,914.77	36.93	38.44	90.26	213.98	-2,142.81	2,833.97	2,783.09	50.88	55.696		
10,000.00	9,941.23	10,071.62	9,972.94	37.06	38.61	90.53	212.92	-2,142.75	2,834.01	2,782.88	51.13	55.426		
10,050.00	9,988.45	10,140.22	10,040.99	37.19	38.79	90.84	204.67	-2,142.27	2,833.85	2,782.47	51.38	55.153		
10,100.00	10,034.06	10,210.96	10,109.63	37.30	38.95	91.14	187.73	-2,141.30	2,833.42	2,781.82	51.60	54.907		
10,150.00	10,077.71	10,283.60	10,177.36	37.41	39.07	91.41	161.69	-2,139.80	2,832.72	2,780.93	51.79	54.692		
10,200.00	10,119.07	10,357.72	10,242.53	37.50	39.17	91.67	126.53	-2,137.77	2,831.72	2,779.77	51.96	54.503		
10,250.00	10,157.84	10,432.86	10,303.38	37.58	39.22	91.89	82.62	-2,135.24	2,830.42	2,778.33	52.09	54.337		
10,300.00	10,193.70	10,508.45	10,358.27	37.65	39.25	92.07	30.80	-2,132.25	2,828.81	2,776.60	52.21	54.186		
10,350.00	10,226.39	10,583.91	10,405.77	37.71	39.24	92.22	-27.66	-2,128.88	2,826.91	2,774.60	52.31	54.043		
10,400.00	10,255.66	10,658.65	10,444.85	37.76	39.20	92.32	-91.20	-2,125.21	2,824.73	2,772.32	52.41	53.898		
10,450.00	10,281.29	10,732.15	10,474.87	37.81	39.15	92.39	-158.12	-2,121.36	2,822.30	2,769.79	52.51	53.745		
10,500.00	10,303.08	10,803.97	10,495.69	37.85	39.08	92.43	-226.69	-2,117.40	2,819.67	2,767.04	52.63	53.580		
10,550.00	10,320.87	10,873.77	10,507.55	37.90	39.02	92.44	-295.33	-2,113.45	2,816.87	2,764.12	52.75	53.401		
10,600.00	10,334.52	10,941.34	10,510.98	37.96	38.97	92.43	-362.65	-2,109.56	2,813.95	2,761.07	52.88	53.212		
10,650.00	10,343.93	10,963.18	10,511.00	38.03	38.95	92.61	-384.46	-2,108.43	2,811.36	2,758.37	52.99	53.055		
10,700.00	10,349.02	11,000.00	10,511.00	38.12	38.94	92.74	-421.25	-2,106.88	2,809.46	2,756.35	53.11	52.896		
10,733.47	10,350.00	11,000.00	10,511.00	38.19	38.94	92.84	-421.25	-2,106.88	2,808.49	2,755.31	53.17	52.819		
10,800.00	10,350.00	11,038.79	10,511.00	38.36	38.92	92.84	-460.02	-2,105.77	2,807.29	2,753.94	53.35	52.618		
10,868.46	10,350.00	11,073.75	10,511.00	38.57	38.93	92.84	-494.98	-2,105.22	2,806.89	2,753.34	53.55	52.417 CC		
10,900.00	10,350.00	11,104.57	10,511.00	38.68	38.94	92.84	-525.80	-2,104.92	2,806.90	2,753.23	53.67	52.298		
11,000.00	10,350.00	11,204.57	10,511.00	39.08	39.04	92.84	-625.80	-2,103.94	2,806.92	2,752.78	54.14	51.846		
11,100.00	10,350.00	11,304.57	10,511.00	39.56	39.27	92.84	-725.79	-2,102.96	2,806.95	2,752.24	54.70	51.312		
11,200.00	10,350.00	11,404.57	10,511.00	40.10	39.61	92.84	-825.79	-2,101.99	2,806.97	2,751.61	55.36	50.704		
11,300.00	10,350.00	11,504.57	10,511.00	40.70	40.05	92.84	-925.78	-2,101.01	2,807.00	2,750.89	56.11	50.030		
11,400.00	10,350.00	11,604.57	10,511.00	41.37	40.56	92.84	-1,025.78	-2,100.04	2,807.02	2,750.09	56.94	49.299		
11,500.00	10,350.00	11,704.57	10,511.00	42.08	41.13	92.84	-1,125.77	-2,099.06	2,807.05	2,749.20	57.85	48.521		
11,600.00	10,350.00	11,804.57	10,511.00	42.85	41.76	92.84	-1,225.77	-2,098.09	2,807.08	2,748.23	58.85	47.703		
11,700.00	10,350.00	11,904.57	10,511.00	43.67	42.45	92.84	-1,325.76	-2,097.11	2,807.10	2,747.19	59.91	46.854		
11,800.00	10,350.00	12,004.57	10,511.00	44.53	43.18	92.84	-1,425.76	-2,096.13	2,807.13	2,746.08	61.05	45.982		
11,900.00	10,350.00	12,104.57	10,511.00	45.44	43.96	92.84	-1,525.75	-2,095.16	2,807.15	2,744.90	62.25	45.094		
12,000.00	10,350.00	12,204.57	10,511.00	46.39	44.79	92.84	-1,625.75	-2,094.18	2,807.18	2,743.66	63.52	44.195		
12,100.00	10,350.00	12,304.57	10,511.00	47.37	45.66	92.84	-1,725.74	-2,093.21	2,807.20	2,742.36	64.84	43.293		
12,200.00	10,350.00	12,404.57	10,511.00	48.39	46.58	92.84	-1,825.74	-2,092.23	2,807.23	2,741.01	66.22	42.390		
12,300.00	10,350.00	12,504.57	10,511.00	49.45	47.53	92.84	-1,925.73	-2,091.26	2,807.26	2,739.60	67.66	41.493		
12,400.00	10,350.00	12,604.57	10,511.00	50.54	48.52	92.84	-2,025.73	-2,090.28	2,807.28	2,738.14	69.14	40.603		
12,500.00	10,350.00	12,704.57	10,511.00	51.66	49.54	92.84	-2,125.72	-2,089.30	2,807.31	2,736.64	70.67	39.726		
12,600.00	10,350.00	12,804.57	10,511.00	52.80	50.60	92.84	-2,225.72	-2,088.33	2,807.33	2,735.09	72.24	38.862		
12,700.00	10,350.00	12,904.57	10,511.00	53.97	51.68	92.84	-2,325.71	-2,087.35	2,807.36	2,733.51	73.85	38.014		
12,800.00	10,350.00	13,004.57	10,511.00	55.17	52.80	92.84	-2,425.71	-2,086.38	2,807.38	2,731.88	75.50	37.184		
12,900.00	10,350.00	13,104.57	10,511.00	56.39	53.94	92.84	-2,525.70	-2,085.40	2,807.41	2,730.22	77.18	36.373		
13,000.00	10,350.00	13,204.57	10,511.00	57.63	55.11	92.84	-2,625.70	-2,084.43	2,807.43	2,728.53	78.90	35.581		
13,100.00	10,350.00	13,304.57	10,511.00	58.89	56.30	92.84	-2,725.70	-2,083.45	2,807.46	2,726.81	80.65	34.810		
13,200.00	10,350.00	13,404.57	10,511.00	60.17	57.51	92.84	-2,825.69	-2,082.48	2,807.49	2,725.06	82.43	34.059		
13,300.00	10,350.00	13,504.57	10,511.00	61.47	58.75	92.84	-2,925.69	-2,081.50	2,807.51	2,723.28	84.23	33.330		
13,400.00	10,350.00	13,604.57	10,511.00	62.78	60.00	92.84	-3,025.68	-2,080.52	2,807.54	2,721.47	86.06	32.621		
13,500.00	10,350.00	13,704.57	10,511.00	64.11	61.28	92.84	-3,125.68	-2,079.55	2,807.56	2,719.64	87.92	31.934		
13,600.00	10,350.00	13,804.57	10,511.00	65.45	62.57	92.84	-3,225.67	-2,078.57	2,807.59	2,717.79	89.79	31.267		
13,700.00	10,350.00	13,904.57	10,511.00	66.81	63.87	92.84	-3,325.67	-2,077.60	2,807.61	2,715.92	91.69	30.620		
13,800.00	10,350.00	14,004.57	10,511.00	68.18	65.20	92.84	-3,425.66	-2,076.62	2,807.64	2,714.03	93.61	29.993		
13,900.00	10,350.00	14,104.57	10,511.00	69.56	66.53	92.84	-3,525.66	-2,075.65	2,807.66	2,712.12	95.55	29.386		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 502H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,000.00	10,350.00	14,204.57	10,511.00	70.96	67.88	92.84	-3,625.65	-2,074.67	2,807.69	2,710.19	97.50	28.797		
14,100.00	10,350.00	14,304.57	10,511.00	72.36	69.25	92.84	-3,725.65	-2,073.69	2,807.72	2,708.25	99.47	28.227		
14,200.00	10,350.00	14,404.57	10,511.00	73.78	70.62	92.84	-3,825.64	-2,072.72	2,807.74	2,706.29	101.45	27.675		
14,300.00	10,350.00	14,504.57	10,511.00	75.20	72.01	92.84	-3,925.64	-2,071.74	2,807.77	2,704.31	103.45	27.141		
14,400.00	10,350.00	14,604.57	10,511.00	76.63	73.41	92.84	-4,025.63	-2,070.77	2,807.79	2,702.33	105.47	26.623		
14,500.00	10,350.00	14,704.57	10,511.00	78.08	74.82	92.84	-4,125.63	-2,069.79	2,807.82	2,700.33	107.49	26.121		
14,600.00	10,350.00	14,804.57	10,511.00	79.53	76.23	92.84	-4,225.62	-2,068.82	2,807.84	2,698.31	109.53	25.635		
14,700.00	10,350.00	14,904.57	10,511.00	80.99	77.66	92.84	-4,325.62	-2,067.84	2,807.87	2,696.29	111.58	25.165		
14,800.00	10,350.00	15,004.57	10,511.00	82.45	79.10	92.84	-4,425.61	-2,066.86	2,807.89	2,694.25	113.64	24.708		
14,900.00	10,350.00	15,104.57	10,511.00	83.92	80.54	92.84	-4,525.61	-2,065.89	2,807.92	2,692.21	115.71	24.266		
15,000.00	10,350.00	15,204.57	10,511.00	85.40	81.99	92.84	-4,625.60	-2,064.91	2,807.95	2,690.15	117.79	23.838		
15,100.00	10,350.00	15,304.57	10,511.00	86.89	83.45	92.84	-4,725.60	-2,063.94	2,807.97	2,688.09	119.88	23.423		
15,200.00	10,350.00	15,404.57	10,511.00	88.38	84.92	92.84	-4,825.60	-2,062.96	2,808.00	2,686.02	121.98	23.020		
15,300.00	10,350.00	15,504.57	10,511.00	89.87	86.39	92.84	-4,925.59	-2,061.99	2,808.02	2,683.93	124.09	22.629		
15,400.00	10,350.00	15,604.57	10,511.00	91.38	87.87	92.84	-5,025.59	-2,061.01	2,808.05	2,681.84	126.20	22.250		
15,500.00	10,350.00	15,704.57	10,511.00	92.88	89.35	92.84	-5,125.58	-2,060.04	2,808.07	2,679.75	128.33	21.882		
15,600.00	10,350.00	15,804.57	10,511.00	94.39	90.85	92.84	-5,225.58	-2,059.06	2,808.10	2,677.64	130.46	21.525		
15,700.00	10,350.00	15,904.57	10,511.00	95.91	92.34	92.84	-5,325.57	-2,058.08	2,808.13	2,675.53	132.59	21.178		
15,800.00	10,350.00	16,004.57	10,511.00	97.43	93.84	92.84	-5,425.57	-2,057.11	2,808.15	2,673.41	134.74	20.842		
15,900.00	10,350.00	16,104.57	10,511.00	98.96	95.35	92.84	-5,525.56	-2,056.13	2,808.18	2,671.29	136.89	20.515		
16,000.00	10,350.00	16,204.57	10,511.00	100.49	96.86	92.84	-5,625.56	-2,055.16	2,808.20	2,669.16	139.04	20.197		
16,100.00	10,350.00	16,304.57	10,511.00	102.02	98.38	92.84	-5,725.55	-2,054.18	2,808.23	2,667.02	141.20	19.888		
16,200.00	10,350.00	16,404.57	10,511.00	103.55	99.90	92.84	-5,825.55	-2,053.21	2,808.25	2,664.88	143.37	19.587		
16,300.00	10,350.00	16,504.57	10,511.00	105.09	101.42	92.84	-5,925.54	-2,052.23	2,808.28	2,662.74	145.54	19.295		
16,400.00	10,350.00	16,604.57	10,511.00	106.64	102.95	92.84	-6,025.54	-2,051.25	2,808.30	2,660.59	147.72	19.011		
16,500.00	10,350.00	16,704.57	10,511.00	108.18	104.48	92.84	-6,125.53	-2,050.28	2,808.33	2,658.43	149.90	18.735		
16,600.00	10,350.00	16,804.57	10,511.00	109.73	106.01	92.84	-6,225.53	-2,049.30	2,808.36	2,656.27	152.09	18.466		
16,700.00	10,350.00	16,904.57	10,511.00	111.29	107.55	92.84	-6,325.52	-2,048.33	2,808.38	2,654.10	154.28	18.204		
16,800.00	10,350.00	17,004.57	10,511.00	112.84	109.09	92.84	-6,425.52	-2,047.35	2,808.41	2,651.94	156.47	17.948		
16,900.00	10,350.00	17,104.57	10,511.00	114.40	110.64	92.84	-6,525.51	-2,046.38	2,808.43	2,649.76	158.67	17.700		
17,000.00	10,350.00	17,204.57	10,511.00	115.96	112.19	92.84	-6,625.51	-2,045.40	2,808.46	2,647.59	160.87	17.458		
17,100.00	10,350.00	17,304.57	10,511.00	117.52	113.74	92.84	-6,725.50	-2,044.42	2,808.48	2,645.41	163.08	17.222		
17,200.00	10,350.00	17,404.57	10,511.00	119.09	115.29	92.84	-6,825.50	-2,043.45	2,808.51	2,643.22	165.29	16.992		
17,300.00	10,350.00	17,504.57	10,511.00	120.66	116.85	92.84	-6,925.50	-2,042.47	2,808.53	2,641.04	167.50	16.767		
17,400.00	10,350.00	17,604.57	10,511.00	122.23	118.41	92.84	-7,025.49	-2,041.50	2,808.56	2,638.85	169.72	16.549		
17,500.00	10,350.00	17,704.57	10,511.00	123.80	119.97	92.84	-7,125.49	-2,040.52	2,808.59	2,636.65	171.93	16.335		
17,600.00	10,350.00	17,804.57	10,511.00	125.37	121.53	92.84	-7,225.48	-2,039.55	2,808.61	2,634.46	174.16	16.127		
17,700.00	10,350.00	17,904.57	10,511.00	126.95	123.10	92.84	-7,325.48	-2,038.57	2,808.64	2,632.26	176.38	15.924		
17,800.00	10,350.00	18,004.57	10,511.00	128.52	124.67	92.84	-7,425.47	-2,037.60	2,808.66	2,630.05	178.61	15.725		
17,900.00	10,350.00	18,104.57	10,511.00	130.10	126.24	92.84	-7,525.47	-2,036.62	2,808.69	2,627.85	180.84	15.532		
18,000.00	10,350.00	18,204.57	10,511.00	131.69	127.81	92.84	-7,625.46	-2,035.64	2,808.71	2,625.64	183.07	15.342		
18,100.00	10,350.00	18,304.57	10,511.00	133.27	129.38	92.84	-7,725.46	-2,034.67	2,808.74	2,623.43	185.31	15.157		
18,200.00	10,350.00	18,404.57	10,511.00	134.85	130.96	92.84	-7,825.45	-2,033.69	2,808.76	2,621.22	187.54	14.977		
18,300.00	10,350.00	18,504.57	10,511.00	136.44	132.54	92.84	-7,925.45	-2,032.72	2,808.79	2,619.01	189.78	14.800		
18,400.00	10,350.00	18,604.57	10,511.00	138.03	134.12	92.84	-8,025.44	-2,031.74	2,808.82	2,616.79	192.03	14.627		
18,500.00	10,350.00	18,704.57	10,511.00	139.62	135.70	92.84	-8,125.44	-2,030.77	2,808.84	2,614.57	194.27	14.458		
18,600.00	10,350.00	18,804.57	10,511.00	141.21	137.28	92.84	-8,225.43	-2,029.79	2,808.87	2,612.35	196.52	14.293		
18,700.00	10,350.00	18,904.57	10,511.00	142.80	138.87	92.84	-8,325.43	-2,028.81	2,808.89	2,610.13	198.76	14.132		
18,800.00	10,350.00	19,004.57	10,511.00	144.39	140.45	92.84	-8,425.42	-2,027.84	2,808.92	2,607.90	201.01	13.974		
18,900.00	10,350.00	19,104.57	10,511.00	145.99	142.04	92.84	-8,525.42	-2,026.86	2,808.94	2,605.68	203.27	13.819		
19,000.00	10,350.00	19,204.57	10,511.00	147.58	143.63	92.84	-8,625.41	-2,025.89	2,808.97	2,603.45	205.52	13.668		
19,100.00	10,350.00	19,304.57	10,511.00	149.18	145.22	92.84	-8,725.41	-2,024.91	2,809.00	2,601.22	207.78	13.519		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 502H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,200.00	10,350.00	19,404.57	10,511.00	150.78	146.81	92.84	-8,825.40	-2,023.94	2,809.02	2,598.99	210.03	13.374		
19,300.00	10,350.00	19,504.57	10,511.00	152.38	148.40	92.84	-8,925.40	-2,022.96	2,809.05	2,596.75	212.29	13.232		
19,400.00	10,350.00	19,604.57	10,511.00	153.98	150.00	92.84	-9,025.40	-2,021.98	2,809.07	2,594.52	214.55	13.093		
19,500.00	10,350.00	19,704.57	10,511.00	155.58	151.59	92.84	-9,125.39	-2,021.01	2,809.10	2,592.28	216.82	12.956		
19,600.00	10,350.00	19,804.57	10,511.00	157.18	153.19	92.84	-9,225.39	-2,020.03	2,809.12	2,590.04	219.08	12.822		
19,700.00	10,350.00	19,904.57	10,511.00	158.79	154.79	92.84	-9,325.38	-2,019.06	2,809.15	2,587.81	221.34	12.691		
19,800.00	10,350.00	20,004.57	10,511.00	160.39	156.39	92.84	-9,425.38	-2,018.08	2,809.17	2,585.56	223.61	12.563		
19,900.00	10,350.00	20,104.57	10,511.00	162.00	157.99	92.84	-9,525.37	-2,017.11	2,809.20	2,583.32	225.88	12.437		
20,000.00	10,350.00	20,204.57	10,511.00	163.61	159.59	92.84	-9,625.37	-2,016.13	2,809.23	2,581.08	228.15	12.313		
20,100.00	10,350.00	20,304.57	10,511.00	165.21	161.19	92.84	-9,725.36	-2,015.15	2,809.25	2,578.83	230.42	12.192		
20,200.00	10,350.00	20,404.57	10,511.00	166.82	162.80	92.84	-9,825.36	-2,014.18	2,809.28	2,576.59	232.69	12.073		
20,300.00	10,350.00	20,504.57	10,511.00	168.43	164.40	92.84	-9,925.35	-2,013.20	2,809.30	2,574.34	234.96	11.956		
20,400.00	10,350.00	20,604.57	10,511.00	170.04	166.00	92.84	-10,025.35	-2,012.23	2,809.33	2,572.09	237.24	11.842		
20,500.00	10,350.00	20,704.57	10,511.00	171.65	167.61	92.84	-10,125.34	-2,011.25	2,809.35	2,569.84	239.51	11.730		
20,529.73	10,350.00	20,734.30	10,511.00	172.13	168.09	92.84	-10,155.07	-2,010.96	2,809.36	2,569.17	240.19	11.697 ES, SF		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	22.00	22.00	0.00	0.03	-96.19	-317.42	-2,924.99	2,942.16					
100.00	100.00	122.00	122.00	0.13	0.20	-96.19	-317.42	-2,924.99	2,942.16	2,941.92	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.19	-317.42	-2,924.99	2,942.16	2,941.42	0.74	3,963.831		
300.00	300.00	322.00	322.00	0.84	0.92	-96.19	-317.42	-2,924.99	2,942.16	2,940.92	1.25	2,356.830		
400.00	400.00	422.00	422.00	1.20	1.28	-96.19	-317.42	-2,924.99	2,942.16	2,940.41	1.75	1,676.493		
500.00	500.00	522.00	522.00	1.56	1.64	-96.19	-317.42	-2,924.99	2,942.16	2,939.90	2.26	1,300.859		
600.00	600.00	622.00	622.00	1.92	2.00	-96.19	-317.42	-2,924.99	2,942.16	2,939.40	2.77	1,062.714		
700.00	700.00	722.00	722.00	2.28	2.36	-96.19	-317.42	-2,924.99	2,942.16	2,938.89	3.28	898.259		
800.00	800.00	822.00	822.00	2.63	2.71	-96.19	-317.42	-2,924.99	2,942.16	2,938.38	3.78	777.877		
900.00	900.00	922.00	922.00	2.99	3.07	-96.19	-317.42	-2,924.99	2,942.16	2,937.88	4.29	685.946		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.19	-317.42	-2,924.99	2,942.16	2,937.37	4.80	613.447		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.19	-317.42	-2,924.99	2,942.16	2,936.86	5.30	554.807		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.19	-317.42	-2,924.99	2,942.16	2,936.35	5.81	506.399		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.19	-317.42	-2,924.99	2,942.16	2,935.85	6.32	465.760		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.19	-317.42	-2,924.99	2,942.16	2,935.34	6.82	431.159		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.19	-317.42	-2,924.99	2,942.16	2,934.83	7.33	401.344		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-96.19	-317.42	-2,924.99	2,942.16	2,934.33	7.84	375.385		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-96.19	-317.42	-2,924.99	2,942.16	2,933.82	8.34	352.580		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-96.19	-317.42	-2,924.99	2,942.16	2,933.31	8.85	332.387		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-96.19	-317.42	-2,924.99	2,942.16	2,932.81	9.36	314.382		
1,907.26	1,907.26	1,929.26	1,929.26	6.60	6.68	-96.19	-317.42	-2,924.99	2,942.16	2,932.77	9.40	313.150 CC		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-96.19	-317.42	-2,924.99	2,942.25	2,932.44	9.81	299.942 ES		
2,100.00	2,100.00	2,083.39	2,083.38	7.29	7.23	-96.18	-316.76	-2,925.61	2,942.96	2,932.69	10.27	286.497		
2,200.00	2,200.00	2,151.68	2,151.64	7.65	7.48	-96.15	-315.23	-2,927.05	2,944.82	2,934.12	10.70	275.331		
2,300.00	2,299.99	2,219.85	2,219.73	8.01	7.72	-166.86	-312.81	-2,929.32	2,949.02	2,937.90	11.11	265.357		
2,400.00	2,399.91	2,300.00	2,299.69	8.35	8.00	-166.76	-308.83	-2,933.04	2,956.88	2,945.32	11.56	255.834		
2,500.00	2,499.69	2,355.31	2,354.80	8.70	8.20	-166.66	-305.37	-2,936.28	2,968.27	2,956.33	11.94	248.646		
2,600.00	2,599.27	2,422.34	2,421.48	9.06	8.44	-166.53	-300.40	-2,940.94	2,983.29	2,970.95	12.35	241.621		
2,700.00	2,698.57	2,500.00	2,498.57	9.42	8.72	-166.36	-293.57	-2,947.33	3,001.91	2,989.13	12.78	234.817		
2,800.00	2,797.54	2,559.95	2,557.95	9.78	8.94	-166.20	-287.52	-2,953.00	3,024.01	3,010.84	13.17	229.566		
2,815.66	2,813.00	2,566.90	2,564.83	9.84	8.97	-166.17	-286.78	-2,953.69	3,027.79	3,014.56	13.23	228.896		
2,900.00	2,896.24	2,648.45	2,645.50	10.15	9.27	-166.05	-278.08	-2,961.83	3,048.33	3,034.69	13.64	223.483		
3,000.00	2,994.95	2,745.15	2,741.16	10.53	9.63	-165.90	-267.78	-2,971.49	3,072.71	3,058.58	14.13	217.432		
3,100.00	3,093.65	2,841.84	2,836.82	10.91	10.00	-165.76	-257.47	-2,981.14	3,097.10	3,082.48	14.63	211.742		
3,200.00	3,192.36	2,938.54	2,932.48	11.29	10.37	-165.62	-247.16	-2,990.80	3,121.52	3,106.39	15.12	206.387		
3,300.00	3,291.06	3,035.24	3,028.13	11.68	10.74	-165.49	-236.85	-3,000.45	3,145.95	3,130.32	15.63	201.340		
3,400.00	3,389.76	3,131.93	3,123.79	12.07	11.11	-165.35	-226.54	-3,010.11	3,170.39	3,154.27	16.13	196.580		
3,500.00	3,488.47	3,228.63	3,219.45	12.47	11.49	-165.22	-216.23	-3,019.76	3,194.86	3,178.23	16.63	192.083		
3,600.00	3,587.17	3,325.32	3,315.11	12.87	11.87	-165.09	-205.92	-3,029.42	3,219.34	3,202.20	17.14	187.831		
3,700.00	3,685.88	3,422.02	3,410.77	13.27	12.25	-164.96	-195.61	-3,039.07	3,243.83	3,226.18	17.65	183.805		
3,800.00	3,784.58	3,518.71	3,506.43	13.67	12.63	-164.83	-185.30	-3,048.73	3,268.34	3,250.18	18.16	179.990		
3,900.00	3,883.28	3,615.41	3,602.09	14.08	13.02	-164.71	-174.99	-3,058.38	3,292.87	3,274.20	18.67	176.370		
4,000.00	3,981.99	3,712.10	3,697.74	14.49	13.41	-164.58	-164.68	-3,068.04	3,317.41	3,298.23	19.18	172.932		
4,100.00	4,080.69	3,808.80	3,793.40	14.90	13.79	-164.46	-154.37	-3,077.69	3,341.96	3,322.27	19.70	169.662		
4,200.00	4,179.39	3,905.50	3,889.06	15.31	14.18	-164.34	-144.07	-3,087.35	3,366.53	3,346.32	20.21	166.550		
4,300.00	4,278.10	4,002.19	3,984.72	15.72	14.57	-164.23	-133.76	-3,097.00	3,391.11	3,370.38	20.73	163.585		
4,400.00	4,376.80	4,098.89	4,080.38	16.13	14.97	-164.11	-123.45	-3,106.66	3,415.71	3,394.46	21.25	160.757		
4,500.00	4,475.51	4,195.58	4,176.04	16.55	15.36	-163.99	-113.14	-3,116.31	3,440.32	3,418.55	21.77	158.058		
4,600.00	4,574.21	4,292.28	4,271.69	16.97	15.75	-163.88	-102.83	-3,125.97	3,464.94	3,442.65	22.29	155.478		
4,700.00	4,672.91	4,388.97	4,367.35	17.38	16.15	-163.77	-92.52	-3,135.62	3,489.57	3,466.77	22.81	153.011		
4,800.00	4,771.62	4,485.67	4,463.01	17.80	16.54	-163.66	-82.21	-3,145.28	3,514.22	3,490.89	23.33	150.650		
4,900.00	4,870.32	4,582.37	4,558.67	18.22	16.94	-163.55	-71.90	-3,154.93	3,538.88	3,515.03	23.85	148.388		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,969.03	4,679.06	4,654.33	18.64	17.33	-163.44	-61.59	-3,164.59	3,563.55	3,539.17	24.37	146.220		
5,100.00	5,067.73	4,775.76	4,749.99	19.07	17.73	-163.34	-51.28	-3,174.24	3,588.23	3,563.33	24.89	144.139		
5,200.00	5,166.43	4,872.45	4,845.65	19.49	18.13	-163.24	-40.97	-3,183.90	3,612.92	3,587.50	25.42	142.141		
5,300.00	5,265.14	4,969.15	4,941.30	19.91	18.53	-163.13	-30.66	-3,193.55	3,637.62	3,611.68	25.94	140.221		
5,400.00	5,363.84	5,065.84	5,036.96	20.33	18.93	-163.03	-20.35	-3,203.21	3,662.34	3,635.87	26.47	138.375		
5,500.00	5,462.54	5,162.54	5,132.62	20.76	19.33	-162.93	-10.05	-3,212.86	3,687.06	3,660.07	26.99	136.599		
5,600.00	5,561.25	5,259.23	5,228.28	21.18	19.73	-162.83	0.26	-3,222.52	3,711.80	3,684.28	27.52	134.888		
5,700.00	5,659.95	5,355.93	5,323.94	21.61	20.13	-162.74	10.57	-3,232.17	3,736.54	3,708.50	28.04	133.240		
5,800.00	5,758.66	5,452.63	5,419.60	22.04	20.53	-162.64	20.88	-3,241.83	3,761.30	3,732.73	28.57	131.651		
5,900.00	5,857.36	5,549.32	5,515.25	22.46	20.93	-162.55	31.19	-3,251.48	3,786.07	3,756.97	29.10	130.118		
6,000.00	5,956.06	5,646.02	5,610.91	22.89	21.33	-162.45	41.50	-3,261.14	3,810.84	3,781.22	29.62	128.638		
6,100.00	6,054.77	5,742.71	5,706.57	23.32	21.73	-162.36	51.81	-3,270.79	3,835.63	3,805.47	30.15	127.209		
6,200.00	6,153.47	5,839.41	5,802.23	23.75	22.13	-162.27	62.12	-3,280.45	3,860.42	3,829.74	30.68	125.828		
6,300.00	6,252.18	5,936.10	5,897.89	24.18	22.54	-162.18	72.43	-3,290.10	3,885.22	3,854.01	31.21	124.492		
6,400.00	6,350.88	6,032.80	5,993.55	24.60	22.94	-162.09	82.74	-3,299.76	3,910.03	3,878.30	31.74	123.200		
6,500.00	6,449.58	6,129.49	6,089.20	25.03	23.34	-162.00	93.05	-3,309.41	3,934.85	3,902.59	32.27	121.949		
6,600.00	6,548.29	6,226.19	6,184.86	25.46	23.75	-161.92	103.36	-3,319.07	3,959.68	3,926.89	32.80	120.738		
6,700.00	6,646.99	6,322.89	6,280.52	25.89	24.15	-161.83	113.67	-3,328.72	3,984.52	3,951.20	33.33	119.565		
6,758.77	6,705.00	6,379.71	6,336.74	26.15	24.39	-161.78	119.72	-3,334.40	3,999.12	3,965.48	33.64	118.892		
6,800.00	6,745.73	6,419.63	6,376.23	26.32	24.55	-161.79	123.98	-3,338.38	4,009.16	3,975.31	33.85	118.422		
6,900.00	6,844.79	6,516.81	6,472.37	26.74	24.96	-161.81	134.34	-3,348.09	4,031.81	3,997.43	34.38	117.259		
7,000.00	6,944.17	6,614.47	6,568.98	27.13	25.37	-161.80	144.75	-3,357.84	4,052.05	4,017.13	34.91	116.065		
7,100.00	7,043.80	6,712.54	6,665.99	27.51	25.78	-161.77	155.21	-3,367.63	4,069.85	4,034.41	35.44	114.843		
7,200.00	7,143.63	6,810.94	6,763.34	27.88	26.19	-161.72	165.70	-3,377.45	4,085.22	4,049.26	35.96	113.596		
7,300.00	7,243.57	6,907.37	6,848.03	28.22	26.96	-161.54	184.19	-3,394.77	4,097.80	4,061.01	36.79	111.381		
7,374.43	7,318.00	7,267.96	7,217.72	28.46	27.98	-90.57	199.87	-3,409.46	4,102.49	4,064.71	37.78	108.592		
7,400.00	7,343.57	7,361.49	7,311.19	28.55	28.30	-90.54	202.04	-3,411.49	4,103.04	4,064.94	38.09	107.714		
7,500.00	7,443.57	7,515.87	7,465.57	28.87	28.81	-90.54	202.58	-3,411.99	4,103.17	4,064.46	38.71	105.989		
7,600.00	7,543.57	7,615.87	7,565.57	29.19	29.14	-90.54	202.58	-3,411.99	4,103.17	4,063.98	39.19	104.694		
7,700.00	7,643.57	7,715.87	7,665.57	29.52	29.47	-90.54	202.58	-3,411.99	4,103.17	4,063.50	39.67	103.427		
7,800.00	7,743.57	7,815.87	7,765.57	29.84	29.79	-90.54	202.58	-3,411.99	4,103.17	4,063.02	40.15	102.190		
7,900.00	7,843.57	7,915.87	7,865.57	30.17	30.12	-90.54	202.58	-3,411.99	4,103.17	4,062.54	40.63	100.980		
8,000.00	7,943.57	8,015.87	7,965.57	30.49	30.45	-90.54	202.58	-3,411.99	4,103.17	4,062.06	41.12	99.797		
8,100.00	8,043.57	8,115.87	8,065.57	30.82	30.78	-90.54	202.58	-3,411.99	4,103.17	4,061.57	41.60	98.640		
8,200.00	8,143.57	8,215.87	8,165.57	31.15	31.12	-90.54	202.58	-3,411.99	4,103.17	4,061.09	42.08	97.508		
8,300.00	8,243.57	8,315.87	8,265.57	31.48	31.45	-90.54	202.58	-3,411.99	4,103.17	4,060.61	42.56	96.401		
8,400.00	8,343.57	8,415.87	8,365.57	31.80	31.78	-90.54	202.58	-3,411.99	4,103.17	4,060.12	43.05	95.317		
8,500.00	8,443.57	8,515.87	8,465.57	32.13	32.11	-90.54	202.58	-3,411.99	4,103.17	4,059.64	43.53	94.256		
8,600.00	8,543.57	8,615.87	8,565.57	32.46	32.45	-90.54	202.58	-3,411.99	4,103.17	4,059.15	44.02	93.218		
8,700.00	8,643.57	8,715.87	8,665.57	32.80	32.78	-90.54	202.58	-3,411.99	4,103.17	4,058.67	44.50	92.201		
8,800.00	8,743.57	8,815.87	8,765.57	33.13	33.12	-90.54	202.58	-3,411.99	4,103.17	4,058.18	44.99	91.205		
8,900.00	8,843.57	8,915.87	8,865.57	33.46	33.45	-90.54	202.58	-3,411.99	4,103.17	4,057.70	45.47	90.229		
9,000.00	8,943.57	9,015.87	8,965.57	33.79	33.79	-90.54	202.58	-3,411.99	4,103.17	4,057.21	45.96	89.273		
9,100.00	9,043.57	9,115.87	9,065.57	34.12	34.12	-90.54	202.58	-3,411.99	4,103.17	4,056.72	46.45	88.337		
9,200.00	9,143.57	9,215.87	9,165.57	34.46	34.46	-90.54	202.58	-3,411.99	4,103.17	4,056.23	46.94	87.419		
9,300.00	9,243.57	9,315.87	9,265.57	34.79	34.80	-90.54	202.58	-3,411.99	4,103.17	4,055.75	47.42	86.519		
9,400.00	9,343.57	9,415.87	9,365.57	35.13	35.13	-90.54	202.58	-3,411.99	4,103.17	4,055.26	47.91	85.637		
9,500.00	9,443.57	9,515.87	9,465.57	35.46	35.47	-90.54	202.58	-3,411.99	4,103.17	4,054.77	48.40	84.772		
9,600.00	9,543.57	9,615.87	9,565.57	35.80	35.81	-90.54	202.58	-3,411.99	4,103.17	4,054.28	48.89	83.924		
9,700.00	9,643.57	9,715.87	9,665.57	36.13	36.15	-90.54	202.58	-3,411.99	4,103.17	4,053.79	49.38	83.092		
9,800.00	9,743.57	9,815.87	9,765.57	36.47	36.49	-90.54	202.58	-3,411.99	4,103.17	4,053.30	49.87	82.276		
9,833.47	9,777.04	9,849.34	9,799.04	36.58	36.60	-90.54	202.58	-3,411.99	4,103.17	4,053.14	50.04	82.006		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,850.00	9,793.56	9,865.87	9,815.56	36.64	36.66	90.04	202.58	-3,411.99	4,103.17	4,053.06	50.11	81.876		
9,900.00	9,843.42	9,915.72	9,865.42	36.79	36.83	90.09	202.58	-3,411.99	4,103.18	4,052.83	50.35	81.499		
9,950.00	9,892.77	9,965.07	9,914.77	36.93	36.99	90.20	202.58	-3,411.99	4,103.20	4,052.62	50.57	81.137		
10,000.00	9,941.23	10,013.54	9,963.23	37.06	37.16	90.36	202.58	-3,411.99	4,103.26	4,052.47	50.79	80.792		
10,050.00	9,988.45	10,060.75	10,010.45	37.19	37.32	90.56	202.58	-3,411.99	4,103.40	4,052.40	50.99	80.467		
10,100.00	10,034.06	10,106.36	10,056.06	37.30	37.47	90.79	202.58	-3,411.99	4,103.66	4,052.47	51.19	80.162		
10,150.00	10,077.71	10,150.01	10,099.71	37.41	37.62	91.04	202.58	-3,411.99	4,104.11	4,052.73	51.38	79.880		
10,200.00	10,119.07	10,191.38	10,141.07	37.50	37.76	91.30	202.58	-3,411.99	4,104.81	4,053.25	51.55	79.620		
10,250.00	10,157.84	10,230.14	10,179.84	37.58	37.90	91.54	202.58	-3,411.99	4,105.82	4,054.10	51.72	79.385		
10,300.00	10,193.70	10,266.00	10,215.70	37.65	38.02	91.75	202.58	-3,411.99	4,107.22	4,055.34	51.87	79.176		
10,350.00	10,226.39	10,298.69	10,248.39	37.71	38.13	91.91	202.58	-3,411.99	4,109.07	4,057.05	52.02	78.992		
10,400.00	10,255.66	10,327.97	10,277.66	37.76	38.23	92.00	202.58	-3,411.99	4,111.44	4,059.29	52.15	78.835		
10,450.00	10,281.29	10,353.60	10,303.29	37.81	38.32	92.01	202.58	-3,411.99	4,114.38	4,062.11	52.28	78.706		
10,500.00	10,303.08	10,375.39	10,325.08	37.85	38.39	91.93	202.58	-3,411.99	4,117.95	4,065.56	52.39	78.604		
10,550.00	10,320.87	10,393.18	10,342.87	37.90	38.45	91.74	202.58	-3,411.99	4,122.16	4,069.67	52.49	78.532		
10,600.00	10,334.52	10,406.83	10,356.52	37.96	38.50	91.43	202.58	-3,411.99	4,127.05	4,074.47	52.58	78.488		
10,650.00	10,343.93	10,416.23	10,365.93	38.03	38.53	91.00	202.58	-3,411.99	4,132.61	4,079.95	52.66	78.473		
10,700.00	10,349.02	10,421.32	10,371.02	38.12	38.55	90.44	202.58	-3,411.99	4,138.83	4,086.10	52.73	78.488		
10,733.47	10,350.00	10,422.30	10,372.00	38.19	38.55	90.00	202.58	-3,411.99	4,143.35	4,090.58	52.77	78.515		
10,800.00	10,350.00	10,422.30	10,372.00	38.36	38.55	90.00	202.58	-3,411.99	4,153.11	4,100.26	52.85	78.578		
10,900.00	10,350.00	10,422.30	10,372.00	38.68	38.55	90.00	202.58	-3,411.99	4,169.75	4,116.74	53.01	78.664		
11,000.00	10,350.00	10,422.30	10,372.00	39.08	38.55	90.00	202.58	-3,411.99	4,188.70	4,135.51	53.19	78.743		
11,100.00	10,350.00	10,422.30	10,372.00	39.56	38.55	90.00	202.58	-3,411.99	4,209.95	4,156.53	53.41	78.818		
11,200.00	10,350.00	10,422.30	10,372.00	40.10	38.55	90.00	202.58	-3,411.99	4,233.45	4,179.78	53.66	78.889		
11,300.00	10,350.00	10,422.30	10,372.00	40.70	38.55	90.00	202.58	-3,411.99	4,259.17	4,205.23	53.94	78.961		
11,400.00	10,350.00	10,422.30	10,372.00	41.37	38.55	90.00	202.58	-3,411.99	4,287.07	4,232.82	54.24	79.035		
11,500.00	10,350.00	10,422.30	10,372.00	42.08	38.55	90.00	202.58	-3,411.99	4,317.10	4,262.53	54.57	79.114		
11,600.00	10,350.00	10,422.30	10,372.00	42.85	38.55	90.00	202.58	-3,411.99	4,349.23	4,294.31	54.91	79.200		
11,700.00	10,350.00	10,422.30	10,372.00	43.67	38.55	90.00	202.58	-3,411.99	4,383.40	4,328.12	55.28	79.296		
11,800.00	10,350.00	10,422.30	10,372.00	44.53	38.55	90.00	202.58	-3,411.99	4,419.58	4,363.92	55.66	79.404		
11,900.00	10,350.00	10,422.30	10,372.00	45.44	38.55	90.00	202.58	-3,411.99	4,457.70	4,401.65	56.05	79.526		
12,000.00	10,350.00	10,422.30	10,372.00	46.39	38.55	90.00	202.58	-3,411.99	4,497.72	4,441.26	56.46	79.664		
12,100.00	10,350.00	10,422.30	10,372.00	47.37	38.55	90.00	202.58	-3,411.99	4,539.60	4,482.72	56.87	79.818		
12,200.00	10,350.00	10,422.30	10,372.00	48.39	38.55	90.00	202.58	-3,411.99	4,583.27	4,525.97	57.30	79.994		
12,300.00	10,350.00	10,422.30	10,372.00	49.45	38.55	90.00	202.58	-3,411.99	4,628.69	4,570.97	57.72	80.191		
12,400.00	10,350.00	14,589.47	12,544.00	50.54	54.14	117.89	-2,038.41	-3,390.13	4,643.09	4,575.09	68.00	68.277		
12,500.00	10,350.00	14,689.47	12,544.00	51.66	55.08	117.89	-2,138.40	-3,389.15	4,643.12	4,573.79	69.33	66.972		
12,600.00	10,350.00	14,789.47	12,544.00	52.80	56.06	117.89	-2,238.40	-3,388.18	4,643.14	4,572.45	70.69	65.680		
12,700.00	10,350.00	14,889.47	12,544.00	53.97	57.06	117.89	-2,338.39	-3,387.20	4,643.16	4,571.07	72.09	64.404		
12,800.00	10,350.00	14,989.47	12,544.00	55.17	58.10	117.89	-2,438.39	-3,386.23	4,643.19	4,569.66	73.53	63.146		
12,900.00	10,350.00	15,089.47	12,544.00	56.39	59.16	117.89	-2,538.38	-3,385.25	4,643.21	4,568.21	75.00	61.910		
13,000.00	10,350.00	15,189.47	12,544.00	57.63	60.25	117.89	-2,638.38	-3,384.28	4,643.23	4,566.73	76.50	60.697		
13,100.00	10,350.00	15,289.47	12,544.00	58.89	61.36	117.89	-2,738.37	-3,383.30	4,643.25	4,565.23	78.03	59.508		
13,200.00	10,350.00	15,389.47	12,544.00	60.17	62.50	117.89	-2,838.37	-3,382.32	4,643.28	4,563.69	79.58	58.344		
13,300.00	10,350.00	15,489.47	12,544.00	61.47	63.66	117.89	-2,938.36	-3,381.35	4,643.30	4,562.13	81.17	57.208		
13,400.00	10,350.00	15,589.47	12,544.00	62.78	64.84	117.89	-3,038.36	-3,380.37	4,643.32	4,560.55	82.77	56.098		
13,500.00	10,350.00	15,689.47	12,544.00	64.11	66.04	117.89	-3,138.35	-3,379.40	4,643.35	4,558.94	84.40	55.016		
13,600.00	10,350.00	15,789.47	12,544.00	65.45	67.26	117.89	-3,238.35	-3,378.42	4,643.37	4,557.32	86.05	53.962		
13,700.00	10,350.00	15,889.47	12,544.00	66.81	68.50	117.89	-3,338.34	-3,377.45	4,643.39	4,555.67	87.72	52.935		
13,800.00	10,350.00	15,989.47	12,544.00	68.18	69.76	117.89	-3,438.34	-3,376.47	4,643.41	4,554.01	89.41	51.936		
13,900.00	10,350.00	16,089.47	12,544.00	69.56	71.03	117.89	-3,538.33	-3,375.50	4,643.44	4,552.32	91.11	50.963		
14,000.00	10,350.00	16,189.47	12,544.00	70.96	72.31	117.89	-3,638.33	-3,374.52	4,643.46	4,550.62	92.84	50.017		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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		
14,100.00	10,350.00	16,289.47	12,544.00	72.36	73.62	117.89	-3,738.32	-3,373.54	4,643.48	4,548.90	94.58	49.097		
14,200.00	10,350.00	16,389.47	12,544.00	73.78	74.93	117.89	-3,838.32	-3,372.57	4,643.50	4,547.17	96.33	48.202		
14,300.00	10,350.00	16,489.47	12,544.00	75.20	76.26	117.89	-3,938.31	-3,371.59	4,643.53	4,545.42	98.10	47.333		
14,400.00	10,350.00	16,589.47	12,544.00	76.63	77.60	117.89	-4,038.31	-3,370.62	4,643.55	4,543.66	99.89	46.487		
14,500.00	10,350.00	16,689.47	12,544.00	78.08	78.95	117.89	-4,138.31	-3,369.64	4,643.57	4,541.89	101.69	45.666		
14,600.00	10,350.00	16,789.47	12,544.00	79.53	80.31	117.89	-4,238.30	-3,368.67	4,643.60	4,540.10	103.50	44.867		
14,700.00	10,350.00	16,889.47	12,544.00	80.99	81.69	117.89	-4,338.30	-3,367.69	4,643.62	4,538.30	105.32	44.091		
14,800.00	10,350.00	16,989.47	12,544.00	82.45	83.07	117.89	-4,438.29	-3,366.72	4,643.64	4,536.49	107.15	43.337		
14,900.00	10,350.00	17,089.47	12,544.00	83.92	84.46	117.89	-4,538.29	-3,365.74	4,643.66	4,534.67	108.99	42.605		
15,000.00	10,350.00	17,189.47	12,544.00	85.40	85.87	117.89	-4,638.28	-3,364.77	4,643.69	4,532.84	110.84	41.894		
15,100.00	10,350.00	17,289.47	12,544.00	86.89	87.28	117.89	-4,738.28	-3,363.79	4,643.71	4,531.00	112.70	41.202		
15,200.00	10,350.00	17,389.47	12,544.00	88.38	88.70	117.89	-4,838.27	-3,362.81	4,643.73	4,529.16	114.57	40.530		
15,300.00	10,350.00	17,489.47	12,544.00	89.87	90.13	117.89	-4,938.27	-3,361.84	4,643.75	4,527.30	116.45	39.876		
15,400.00	10,350.00	17,589.47	12,544.00	91.38	91.56	117.89	-5,038.26	-3,360.86	4,643.78	4,525.43	118.34	39.240		
15,500.00	10,350.00	17,689.47	12,544.00	92.88	93.00	117.89	-5,138.26	-3,359.89	4,643.80	4,523.56	120.24	38.622		
15,600.00	10,350.00	17,789.47	12,544.00	94.39	94.45	117.89	-5,238.25	-3,358.91	4,643.82	4,521.68	122.14	38.020		
15,700.00	10,350.00	17,889.47	12,544.00	95.91	95.91	117.89	-5,338.25	-3,357.94	4,643.85	4,519.80	124.05	37.436		
15,800.00	10,350.00	17,989.47	12,544.00	97.43	97.37	117.89	-5,438.24	-3,356.96	4,643.87	4,517.90	125.96	36.867		
15,900.00	10,350.00	18,089.47	12,544.00	98.96	98.84	117.89	-5,538.24	-3,355.99	4,643.89	4,516.01	127.89	36.313		
16,000.00	10,350.00	18,189.47	12,544.00	100.49	100.31	117.89	-5,638.23	-3,355.01	4,643.91	4,514.10	129.81	35.774		
16,100.00	10,350.00	18,289.47	12,544.00	102.02	101.79	117.89	-5,738.23	-3,354.03	4,643.94	4,512.19	131.75	35.249		
16,200.00	10,350.00	18,389.47	12,544.00	103.55	103.27	117.89	-5,838.22	-3,353.06	4,643.96	4,510.27	133.69	34.738		
16,300.00	10,350.00	18,489.47	12,544.00	105.09	104.76	117.89	-5,938.22	-3,352.08	4,643.98	4,508.35	135.63	34.240		
16,400.00	10,350.00	18,589.47	12,544.00	106.64	106.26	117.89	-6,038.21	-3,351.11	4,644.01	4,506.42	137.58	33.755		
16,500.00	10,350.00	18,689.47	12,544.00	108.18	107.75	117.88	-6,138.21	-3,350.13	4,644.03	4,504.49	139.54	33.282		
16,600.00	10,350.00	18,789.47	12,544.00	109.73	109.26	117.88	-6,238.21	-3,349.16	4,644.05	4,502.55	141.50	32.821		
16,700.00	10,350.00	18,889.47	12,544.00	111.29	110.76	117.88	-6,338.20	-3,348.18	4,644.07	4,500.61	143.46	32.371		
16,800.00	10,350.00	18,989.47	12,544.00	112.84	112.27	117.88	-6,438.20	-3,347.21	4,644.10	4,498.66	145.43	31.933		
16,900.00	10,350.00	19,089.47	12,544.00	114.40	113.79	117.88	-6,538.19	-3,346.23	4,644.12	4,496.72	147.40	31.506		
17,000.00	10,350.00	19,189.47	12,544.00	115.96	115.31	117.88	-6,638.19	-3,345.25	4,644.14	4,494.76	149.38	31.090		
17,100.00	10,350.00	19,289.47	12,544.00	117.52	116.83	117.88	-6,738.18	-3,344.28	4,644.16	4,492.81	151.36	30.683		
17,200.00	10,350.00	19,389.47	12,544.00	119.09	118.36	117.88	-6,838.18	-3,343.30	4,644.19	4,490.85	153.34	30.287		
17,300.00	10,350.00	19,489.47	12,544.00	120.66	119.89	117.88	-6,938.17	-3,342.33	4,644.21	4,488.88	155.33	29.900		
17,400.00	10,350.00	19,589.47	12,544.00	122.23	121.42	117.88	-7,038.17	-3,341.35	4,644.23	4,486.92	157.32	29.522		
17,500.00	10,350.00	19,689.47	12,544.00	123.80	122.95	117.88	-7,138.16	-3,340.38	4,644.26	4,484.95	159.31	29.152		
17,600.00	10,350.00	19,789.47	12,544.00	125.37	124.49	117.88	-7,238.16	-3,339.40	4,644.28	4,482.97	161.31	28.792		
17,700.00	10,350.00	19,889.47	12,544.00	126.95	126.03	117.88	-7,338.15	-3,338.43	4,644.30	4,481.00	163.31	28.439		
17,800.00	10,350.00	19,989.47	12,544.00	128.52	127.58	117.88	-7,438.15	-3,337.45	4,644.32	4,479.02	165.31	28.095		
17,900.00	10,350.00	20,089.47	12,544.00	130.10	129.12	117.88	-7,538.14	-3,336.48	4,644.35	4,477.03	167.31	27.758		
18,000.00	10,350.00	20,189.47	12,544.00	131.69	130.67	117.88	-7,638.14	-3,335.50	4,644.37	4,475.05	169.32	27.429		
18,100.00	10,350.00	20,289.47	12,544.00	133.27	132.22	117.88	-7,738.13	-3,334.52	4,644.39	4,473.06	171.33	27.108		
18,200.00	10,350.00	20,389.47	12,544.00	134.85	133.78	117.88	-7,838.13	-3,333.55	4,644.42	4,471.07	173.34	26.793		
18,300.00	10,350.00	20,489.47	12,544.00	136.44	135.33	117.88	-7,938.12	-3,332.57	4,644.44	4,469.08	175.36	26.485		
18,400.00	10,350.00	20,589.47	12,544.00	138.03	136.89	117.88	-8,038.12	-3,331.60	4,644.46	4,467.08	177.38	26.184		
18,500.00	10,350.00	20,689.47	12,544.00	139.62	138.45	117.88	-8,138.11	-3,330.62	4,644.48	4,465.08	179.40	25.889		
18,600.00	10,350.00	20,789.47	12,544.00	141.21	140.02	117.88	-8,238.11	-3,329.65	4,644.51	4,463.08	181.42	25.601		
18,700.00	10,350.00	20,889.47	12,544.00	142.80	141.58	117.88	-8,338.11	-3,328.67	4,644.53	4,461.09	183.44	25.319		
18,800.00	10,350.00	20,989.47	12,544.00	144.39	143.15	117.88	-8,438.10	-3,327.70	4,644.55	4,459.08	185.47	25.042		
18,900.00	10,350.00	21,089.47	12,544.00	145.99	144.72	117.88	-8,538.10	-3,326.72	4,644.57	4,457.08	187.49	24.772		
19,000.00	10,350.00	21,189.47	12,544.00	147.58	146.29	117.88	-8,638.09	-3,325.74	4,644.60	4,455.07	189.52	24.507		
19,100.00	10,350.00	21,289.47	12,544.00	149.18	147.86	117.88	-8,738.09	-3,324.77	4,644.62	4,453.06	191.56	24.247		
19,200.00	10,350.00	21,389.47	12,544.00	150.78	149.43	117.88	-8,838.08	-3,323.79	4,644.64	4,451.05	193.59	23.992		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 801H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.00	10,350.00	21,489.47	12,544.00	152.38	151.01	117.88	-8,938.08	-3,322.82	4,644.67	4,449.04	195.62	23.743	
19,400.00	10,350.00	21,589.47	12,544.00	153.98	152.59	117.88	-9,038.07	-3,321.84	4,644.69	4,447.03	197.66	23.498	
19,500.00	10,350.00	21,689.47	12,544.00	155.58	154.16	117.88	-9,138.07	-3,320.87	4,644.71	4,445.02	199.70	23.259	
19,600.00	10,350.00	21,789.47	12,544.00	157.18	155.75	117.88	-9,238.06	-3,319.89	4,644.73	4,443.00	201.73	23.024	
19,700.00	10,350.00	21,889.47	12,544.00	158.79	157.33	117.88	-9,338.06	-3,318.92	4,644.76	4,440.98	203.77	22.794	
19,800.00	10,350.00	21,989.47	12,544.00	160.39	158.91	117.88	-9,438.05	-3,317.94	4,644.78	4,438.97	205.81	22.568	
19,900.00	10,350.00	22,089.47	12,544.00	162.00	160.49	117.88	-9,538.05	-3,316.96	4,644.80	4,436.95	207.86	22.346	
20,000.00	10,350.00	22,189.47	12,544.00	163.61	162.08	117.88	-9,638.04	-3,315.99	4,644.82	4,434.92	209.90	22.129	
20,100.00	10,350.00	22,289.47	12,544.00	165.21	163.67	117.88	-9,738.04	-3,315.01	4,644.85	4,432.90	211.95	21.915	
20,200.00	10,350.00	22,389.47	12,544.00	166.82	165.26	117.88	-9,838.03	-3,314.04	4,644.87	4,430.88	213.99	21.706	
20,300.00	10,350.00	22,489.47	12,544.00	168.43	166.85	117.88	-9,938.03	-3,313.06	4,644.89	4,428.85	216.04	21.500	
20,400.00	10,350.00	22,589.47	12,544.00	170.04	168.44	117.88	-10,038.02	-3,312.09	4,644.92	4,426.83	218.09	21.298	
20,500.00	10,350.00	22,689.47	12,544.00	171.65	170.03	117.88	-10,138.02	-3,311.11	4,644.94	4,424.80	220.14	21.100	
20,529.73	10,350.00	22,715.49	12,544.00	172.13	170.44	117.88	-10,164.03	-3,310.86	4,644.95	4,424.24	220.71	21.046 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	22.00	22.00	0.00	0.03	-96.24	-317.19	-2,899.90	2,917.20					
100.00	100.00	122.00	122.00	0.13	0.20	-96.24	-317.19	-2,899.90	2,917.20	2,916.96	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.24	-317.19	-2,899.90	2,917.20	2,916.45	0.74	3,930.193		
300.00	300.00	322.00	322.00	0.84	0.92	-96.24	-317.19	-2,899.90	2,917.20	2,915.95	1.25	2,336.830		
400.00	400.00	422.00	422.00	1.20	1.28	-96.24	-317.19	-2,899.90	2,917.20	2,915.44	1.75	1,662.266		
500.00	500.00	522.00	522.00	1.56	1.64	-96.24	-317.19	-2,899.90	2,917.20	2,914.94	2.26	1,289.820		
600.00	600.00	622.00	622.00	1.92	2.00	-96.24	-317.19	-2,899.90	2,917.20	2,914.43	2.77	1,053.696		
700.00	700.00	722.00	722.00	2.28	2.36	-96.24	-317.19	-2,899.90	2,917.20	2,913.92	3.28	890.637		
800.00	800.00	822.00	822.00	2.63	2.71	-96.24	-317.19	-2,899.90	2,917.20	2,913.41	3.78	771.276		
900.00	900.00	922.00	922.00	2.99	3.07	-96.24	-317.19	-2,899.90	2,917.20	2,912.91	4.29	680.125		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.24	-317.19	-2,899.90	2,917.20	2,912.40	4.80	608.241		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.24	-317.19	-2,899.90	2,917.20	2,911.89	5.30	550.098		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.24	-317.19	-2,899.90	2,917.20	2,911.39	5.81	502.101		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.24	-317.19	-2,899.90	2,917.20	2,910.88	6.32	461.808		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.24	-317.19	-2,899.90	2,917.20	2,910.37	6.82	427.500		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.24	-317.19	-2,899.90	2,917.20	2,909.87	7.33	397.938		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-96.24	-317.19	-2,899.90	2,917.20	2,909.36	7.84	372.199		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-96.24	-317.19	-2,899.90	2,917.20	2,908.85	8.34	349.588		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-96.24	-317.19	-2,899.90	2,917.20	2,908.35	8.85	329.567		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-96.24	-317.19	-2,899.90	2,917.20	2,907.84	9.36	311.714		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-96.24	-317.19	-2,899.90	2,917.20	2,907.33	9.87	295.697		
2,100.00	2,100.00	2,122.00	2,122.00	7.29	7.37	-96.24	-317.19	-2,899.90	2,917.20	2,906.82	10.37	281.245		
2,200.00	2,200.00	2,239.57	2,239.57	7.65	7.79	-96.24	-317.01	-2,899.80	2,917.13	2,906.21	10.92	267.047		
2,300.00	2,299.99	2,419.29	2,419.17	8.01	8.44	-166.93	-311.70	-2,896.82	2,916.44	2,904.81	11.62	250.911		
2,400.00	2,399.91	2,598.46	2,597.74	8.35	9.08	-166.73	-299.08	-2,889.74	2,915.57	2,903.26	12.31	236.787		
2,487.77	2,487.50	2,724.48	2,722.86	8.66	9.53	-166.53	-286.01	-2,882.40	2,914.91	2,902.06	12.84	226.964 CC		
2,500.00	2,499.69	2,736.66	2,734.94	8.70	9.58	-166.51	-284.66	-2,881.64	2,914.92	2,902.02	12.90	225.892 ES		
2,600.00	2,599.27	2,836.31	2,833.78	9.06	9.94	-166.34	-273.64	-2,875.45	2,916.52	2,903.12	13.40	217.570		
2,700.00	2,698.57	2,935.93	2,932.60	9.42	10.31	-166.17	-262.63	-2,869.27	2,920.69	2,906.78	13.91	209.998		
2,800.00	2,797.54	3,035.45	3,031.32	9.78	10.68	-166.01	-251.62	-2,863.09	2,927.41	2,912.99	14.41	203.103		
2,815.66	2,813.00	3,051.03	3,046.77	9.84	10.73	-165.99	-249.90	-2,862.12	2,928.69	2,914.20	14.49	202.075		
2,900.00	2,896.24	3,134.89	3,129.95	10.15	11.05	-165.88	-240.62	-2,856.91	2,935.77	2,920.85	14.92	196.760		
3,000.00	2,994.95	3,234.32	3,228.58	10.53	11.42	-165.75	-229.62	-2,850.74	2,944.19	2,928.76	15.43	190.811		
3,100.00	3,093.65	3,333.75	3,327.21	10.91	11.80	-165.63	-218.63	-2,844.57	2,952.61	2,936.67	15.94	185.214		
3,200.00	3,192.36	3,433.18	3,425.84	11.29	12.18	-165.50	-207.63	-2,838.39	2,961.06	2,944.60	16.46	179.941		
3,300.00	3,291.06	3,532.61	3,524.47	11.68	12.56	-165.38	-196.63	-2,832.22	2,969.51	2,952.54	16.97	174.968		
3,400.00	3,389.76	3,632.05	3,623.10	12.07	12.94	-165.25	-185.64	-2,826.04	2,977.98	2,960.49	17.49	170.270		
3,500.00	3,488.47	3,731.48	3,721.73	12.47	13.32	-165.13	-174.64	-2,819.87	2,986.47	2,968.46	18.01	165.827		
3,600.00	3,587.17	3,830.91	3,820.35	12.87	13.70	-165.01	-163.64	-2,813.70	2,994.96	2,976.43	18.53	161.620		
3,700.00	3,685.88	3,930.34	3,919.98	13.27	14.09	-164.88	-152.65	-2,807.52	3,003.48	2,984.42	19.05	157.632		
3,800.00	3,784.58	4,029.78	4,017.61	13.67	14.47	-164.76	-141.65	-2,801.35	3,012.00	2,992.42	19.58	153.846		
3,900.00	3,883.28	4,129.21	4,116.24	14.08	14.86	-164.64	-130.65	-2,795.17	3,020.54	3,000.44	20.10	150.249		
4,000.00	3,981.99	4,228.64	4,214.87	14.49	15.25	-164.52	-119.66	-2,789.00	3,029.09	3,008.46	20.63	146.827		
4,100.00	4,080.69	4,328.07	4,313.50	14.90	15.64	-164.40	-108.66	-2,782.83	3,037.66	3,016.50	21.16	143.568		
4,200.00	4,179.39	4,427.50	4,412.13	15.31	16.03	-164.28	-97.66	-2,776.65	3,046.23	3,024.55	21.69	140.462		
4,300.00	4,278.10	4,526.94	4,510.76	15.72	16.42	-164.16	-86.67	-2,770.48	3,054.83	3,032.61	22.22	137.497		
4,400.00	4,376.80	4,626.37	4,609.39	16.13	16.81	-164.05	-75.67	-2,764.30	3,063.43	3,040.68	22.75	134.666		
4,500.00	4,475.51	4,725.80	4,708.02	16.55	17.20	-163.93	-64.67	-2,758.13	3,072.05	3,048.77	23.28	131.960		
4,600.00	4,574.21	4,825.23	4,806.65	16.97	17.60	-163.81	-53.68	-2,751.96	3,080.68	3,056.86	23.81	129.370		
4,700.00	4,672.91	4,924.66	4,905.27	17.38	17.99	-163.70	-42.68	-2,745.78	3,089.32	3,064.97	24.35	126.890		
4,800.00	4,771.62	5,024.10	5,003.90	17.80	18.38	-163.58	-31.68	-2,739.61	3,097.97	3,073.09	24.88	124.513		
4,900.00	4,870.32	5,123.53	5,102.53	18.22	18.78	-163.47	-20.69	-2,733.43	3,106.64	3,081.22	25.42	122.233		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,969.03	5,222.96	5,201.16	18.64	19.17	-163.36	-9.69	-2,727.26	3,115.32	3,089.37	25.95	120.044		
5,100.00	5,067.73	5,322.39	5,299.79	19.07	19.57	-163.24	1.31	-2,721.09	3,124.01	3,097.52	26.49	117.941		
5,200.00	5,166.43	5,421.82	5,398.42	19.49	19.96	-163.13	12.30	-2,714.91	3,132.71	3,105.69	27.03	115.919		
5,300.00	5,265.14	5,521.26	5,497.05	19.91	20.36	-163.02	23.30	-2,708.74	3,141.43	3,113.87	27.56	113.974		
5,400.00	5,363.84	5,620.69	5,595.68	20.33	20.75	-162.91	34.30	-2,702.56	3,150.15	3,122.05	28.10	112.102		
5,500.00	5,462.54	5,720.12	5,694.31	20.76	21.15	-162.80	45.29	-2,696.39	3,158.89	3,130.25	28.64	110.298		
5,600.00	5,561.25	5,819.55	5,792.94	21.18	21.55	-162.69	56.29	-2,690.22	3,167.64	3,138.46	29.18	108.559		
5,700.00	5,659.95	5,918.99	5,891.57	21.61	21.94	-162.58	67.29	-2,684.04	3,176.41	3,146.69	29.72	106.882		
5,800.00	5,758.66	6,018.42	5,990.19	22.04	22.34	-162.47	78.28	-2,677.87	3,185.18	3,154.92	30.26	105.263		
5,900.00	5,857.36	6,117.85	6,088.82	22.46	22.74	-162.36	89.28	-2,671.69	3,193.96	3,163.16	30.80	103.700		
6,000.00	5,956.06	6,217.28	6,187.45	22.89	23.14	-162.25	100.28	-2,665.52	3,202.76	3,171.42	31.34	102.189		
6,100.00	6,054.77	6,316.71	6,286.08	23.32	23.53	-162.15	111.27	-2,659.35	3,211.57	3,179.68	31.88	100.729		
6,200.00	6,153.47	6,416.15	6,384.71	23.75	23.93	-162.04	122.27	-2,653.17	3,220.39	3,187.96	32.43	99.317		
6,300.00	6,252.18	6,515.58	6,483.34	24.18	24.33	-161.93	133.27	-2,647.00	3,229.21	3,196.25	32.97	97.950		
6,400.00	6,350.88	6,615.01	6,581.97	24.60	24.73	-161.83	144.26	-2,640.82	3,238.05	3,204.54	33.51	96.626		
6,500.00	6,449.58	6,714.44	6,680.60	25.03	25.13	-161.72	155.26	-2,634.65	3,246.91	3,212.85	34.05	95.344		
6,600.00	6,548.29	6,813.87	6,779.23	25.46	25.53	-161.62	166.26	-2,628.48	3,255.77	3,221.17	34.60	94.102		
6,700.00	6,646.99	6,913.31	6,877.86	25.89	25.93	-161.52	177.26	-2,622.30	3,264.64	3,229.50	35.14	92.897		
6,758.77	6,705.00	6,971.74	6,935.82	26.15	26.16	-161.46	183.72	-2,618.67	3,269.86	3,234.40	35.46	92.206		
6,800.00	6,745.73	7,000.00	6,963.85	26.32	26.28	-161.44	186.81	-2,616.94	3,273.36	3,237.71	35.65	91.821		
6,900.00	6,844.79	7,073.25	7,036.64	26.74	26.56	-161.41	194.01	-2,612.89	3,280.72	3,244.61	36.11	90.855		
7,000.00	6,944.17	7,142.96	7,106.04	27.13	26.83	-161.38	199.74	-2,609.68	3,286.53	3,249.98	36.55	89.918		
7,100.00	7,043.80	7,200.00	7,162.90	27.51	27.05	-161.36	203.60	-2,607.51	3,290.82	3,253.87	36.94	89.074		
7,200.00	7,143.63	7,282.64	7,245.39	27.88	27.35	-161.33	207.88	-2,605.11	3,293.47	3,256.07	37.40	88.051		
7,300.00	7,243.57	7,352.56	7,315.26	28.22	27.60	-161.31	210.28	-2,603.76	3,294.59	3,256.78	37.82	87.123		
7,374.43	7,318.00	7,400.00	7,362.69	28.46	27.77	-90.52	211.28	-2,603.20	3,294.41	3,256.31	38.10	86.465		
7,400.00	7,343.57	7,422.53	7,385.21	28.55	27.84	-90.51	211.57	-2,603.04	3,294.23	3,256.01	38.22	86.200		
7,496.42	7,439.99	7,499.30	7,461.99	28.86	28.10	-90.51	211.81	-2,602.90	3,294.03	3,255.41	38.62	85.289		
7,500.00	7,443.57	7,502.88	7,465.57	28.87	28.11	-90.51	211.81	-2,602.90	3,294.03	3,255.39	38.64	85.251		
7,600.00	7,543.57	7,602.88	7,565.57	29.19	28.45	-90.51	211.81	-2,602.90	3,294.03	3,254.91	39.12	84.202		
7,700.00	7,643.57	7,702.88	7,665.57	29.52	28.79	-90.51	211.81	-2,602.90	3,294.03	3,254.43	39.60	83.178		
7,800.00	7,743.57	7,802.88	7,765.57	29.84	29.12	-90.51	211.81	-2,602.90	3,294.03	3,253.95	40.08	82.176		
7,900.00	7,843.57	7,902.88	7,865.57	30.17	29.46	-90.51	211.81	-2,602.90	3,294.03	3,253.46	40.57	81.198		
8,000.00	7,943.57	8,002.88	7,965.57	30.49	29.80	-90.51	211.81	-2,602.90	3,294.03	3,252.98	41.05	80.241		
8,100.00	8,043.57	8,102.88	8,065.57	30.82	30.14	-90.51	211.81	-2,602.90	3,294.03	3,252.50	41.54	79.305		
8,200.00	8,143.57	8,202.88	8,165.57	31.15	30.47	-90.51	211.81	-2,602.90	3,294.03	3,252.01	42.02	78.390		
8,300.00	8,243.57	8,302.88	8,265.57	31.48	30.81	-90.51	211.81	-2,602.90	3,294.03	3,251.52	42.51	77.495		
8,400.00	8,343.57	8,402.88	8,365.57	31.80	31.15	-90.51	211.81	-2,602.90	3,294.03	3,251.04	42.99	76.620		
8,500.00	8,443.57	8,502.88	8,465.57	32.13	31.49	-90.51	211.81	-2,602.90	3,294.03	3,250.55	43.48	75.763		
8,600.00	8,543.57	8,602.88	8,565.57	32.46	31.83	-90.51	211.81	-2,602.90	3,294.03	3,250.07	43.97	74.924		
8,700.00	8,643.57	8,702.88	8,665.57	32.80	32.17	-90.51	211.81	-2,602.90	3,294.03	3,249.58	44.45	74.103		
8,800.00	8,743.57	8,802.88	8,765.57	33.13	32.51	-90.51	211.81	-2,602.90	3,294.03	3,249.09	44.94	73.299		
8,900.00	8,843.57	8,902.88	8,865.57	33.46	32.86	-90.51	211.81	-2,602.90	3,294.03	3,248.60	45.43	72.511		
9,000.00	8,943.57	9,002.88	8,965.57	33.79	33.20	-90.51	211.81	-2,602.90	3,294.03	3,248.11	45.92	71.740		
9,100.00	9,043.57	9,102.88	9,065.57	34.12	33.54	-90.51	211.81	-2,602.90	3,294.03	3,247.63	46.41	70.984		
9,200.00	9,143.57	9,202.88	9,165.57	34.46	33.88	-90.51	211.81	-2,602.90	3,294.03	3,247.14	46.89	70.243		
9,300.00	9,243.57	9,302.88	9,265.57	34.79	34.23	-90.51	211.81	-2,602.90	3,294.03	3,246.65	47.38	69.517		
9,400.00	9,343.57	9,402.88	9,365.57	35.13	34.57	-90.51	211.81	-2,602.90	3,294.03	3,246.16	47.87	68.806		
9,500.00	9,443.57	9,502.88	9,465.57	35.46	34.91	-90.51	211.81	-2,602.90	3,294.03	3,245.67	48.36	68.108		
9,600.00	9,543.57	9,602.88	9,565.57	35.80	35.26	-90.51	211.81	-2,602.90	3,294.03	3,245.18	48.86	67.424		
9,700.00	9,643.57	9,702.88	9,665.57	36.13	35.60	-90.51	211.81	-2,602.90	3,294.03	3,244.68	49.35	66.753		
9,800.00	9,743.57	9,802.88	9,765.57	36.47	35.94	-90.51	211.81	-2,602.90	3,294.03	3,244.19	49.84	66.095		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,833.47	9,777.04	9,836.36	9,799.04	36.58	36.06	-90.51	211.81	-2,602.90	3,294.03	3,244.03	50.00	65.878		
9,850.00	9,793.56	9,852.88	9,815.56	36.64	36.12	90.07	211.81	-2,602.90	3,294.03	3,243.95	50.08	65.773		
9,900.00	9,843.42	9,902.74	9,865.42	36.79	36.29	90.13	211.81	-2,602.90	3,294.04	3,243.72	50.32	65.467		
9,950.00	9,892.77	9,952.08	9,914.77	36.93	36.46	90.27	211.81	-2,602.90	3,294.07	3,243.52	50.55	65.170		
10,000.00	9,941.23	10,000.55	9,963.23	37.06	36.63	90.46	211.81	-2,602.90	3,294.15	3,243.38	50.77	64.885		
10,050.00	9,988.45	10,047.77	10,010.45	37.19	36.79	90.71	211.81	-2,602.90	3,294.33	3,243.34	50.98	64.614		
10,100.00	10,034.06	10,093.38	10,056.06	37.30	36.95	91.01	211.81	-2,602.90	3,294.66	3,243.47	51.19	64.359		
10,150.00	10,077.71	10,137.03	10,099.71	37.41	37.10	91.32	211.81	-2,602.90	3,295.23	3,243.84	51.39	64.121		
10,200.00	10,119.07	10,178.39	10,141.07	37.50	37.24	91.63	211.81	-2,602.90	3,296.11	3,244.53	51.58	63.902		
10,250.00	10,157.84	10,217.15	10,179.84	37.58	37.37	91.93	211.81	-2,602.90	3,297.38	3,245.62	51.76	63.705		
10,300.00	10,193.70	10,253.02	10,215.70	37.65	37.50	92.19	211.81	-2,602.90	3,299.13	3,247.20	51.93	63.529		
10,350.00	10,226.39	10,285.71	10,248.39	37.71	37.61	92.39	211.81	-2,602.90	3,301.45	3,249.36	52.09	63.378		
10,400.00	10,255.66	10,314.98	10,277.66	37.76	37.71	92.50	211.81	-2,602.90	3,304.42	3,252.17	52.24	63.252		
10,450.00	10,281.29	10,340.61	10,303.29	37.81	37.80	92.51	211.81	-2,602.90	3,308.09	3,255.71	52.38	63.153		
10,500.00	10,303.08	10,362.40	10,325.08	37.85	37.88	92.41	211.81	-2,602.90	3,312.54	3,260.03	52.51	63.081		
10,550.00	10,320.87	10,380.19	10,342.87	37.90	37.94	92.17	211.81	-2,602.90	3,317.79	3,265.16	52.63	63.038		
10,600.00	10,334.52	10,393.84	10,356.52	37.96	37.98	91.78	211.81	-2,602.90	3,323.88	3,271.14	52.74	63.025		
10,650.00	10,343.93	10,403.25	10,365.93	38.03	38.02	91.25	211.81	-2,602.90	3,330.80	3,277.97	52.83	63.042		
10,700.00	10,349.02	10,408.34	10,371.02	38.12	38.03	90.55	211.81	-2,602.90	3,338.53	3,285.61	52.92	63.089		
10,733.47	10,350.00	10,409.32	10,372.00	38.19	38.04	90.00	211.81	-2,602.90	3,344.14	3,291.17	52.97	63.137		
10,800.00	10,350.00	10,409.32	10,372.00	38.36	38.04	90.00	211.81	-2,602.90	3,356.25	3,303.19	53.06	63.249		
10,900.00	10,350.00	10,409.32	10,372.00	38.68	38.04	90.00	211.81	-2,602.90	3,376.85	3,323.61	53.24	63.432		
11,000.00	10,350.00	10,409.32	10,372.00	39.08	38.04	90.00	211.81	-2,602.90	3,400.26	3,346.82	53.43	63.635		
11,100.00	10,350.00	10,409.32	10,372.00	39.56	38.04	90.00	211.81	-2,602.90	3,426.43	3,372.77	53.66	63.857		
11,200.00	10,350.00	10,409.32	10,372.00	40.10	38.04	90.00	211.81	-2,602.90	3,455.29	3,401.39	53.90	64.101		
11,300.00	10,350.00	10,409.32	10,372.00	40.70	38.04	90.00	211.81	-2,602.90	3,486.79	3,432.62	54.17	64.368		
11,400.00	10,350.00	10,409.32	10,372.00	41.37	38.04	90.00	211.81	-2,602.90	3,520.85	3,466.39	54.45	64.659		
11,500.00	10,350.00	10,409.32	10,372.00	42.08	38.04	90.00	211.81	-2,602.90	3,557.39	3,502.64	54.75	64.975		
11,600.00	10,350.00	10,409.32	10,372.00	42.85	38.04	90.00	211.81	-2,602.90	3,596.34	3,541.28	55.06	65.317		
11,700.00	10,350.00	10,409.32	10,372.00	43.67	38.04	90.00	211.81	-2,602.90	3,637.63	3,582.25	55.38	65.686		
11,800.00	10,350.00	10,409.32	10,372.00	44.53	38.04	90.00	211.81	-2,602.90	3,681.17	3,625.46	55.71	66.082		
11,900.00	10,350.00	10,409.32	10,372.00	45.44	38.04	90.00	211.81	-2,602.90	3,726.88	3,670.84	56.04	66.506		
12,000.00	10,350.00	10,409.32	10,372.00	46.39	38.04	90.00	211.81	-2,602.90	3,774.69	3,718.32	56.37	66.957		
12,100.00	10,350.00	14,187.23	12,446.00	47.37	51.36	123.08	-1,729.71	-2,473.87	3,800.28	3,736.86	63.42	59.920		
12,200.00	10,350.00	14,287.23	12,446.00	48.39	52.20	123.08	-1,829.71	-2,472.88	3,800.30	3,735.71	64.59	58.840		
12,300.00	10,350.00	14,387.23	12,446.00	49.45	53.08	123.08	-1,929.70	-2,471.90	3,800.31	3,734.52	65.79	57.762		
12,400.00	10,350.00	14,487.23	12,446.00	50.54	53.99	123.08	-2,029.70	-2,470.92	3,800.33	3,733.29	67.04	56.688		
12,500.00	10,350.00	14,587.23	12,446.00	51.66	54.94	123.08	-2,129.69	-2,469.93	3,800.34	3,732.02	68.32	55.622		
12,600.00	10,350.00	14,687.23	12,446.00	52.80	55.92	123.08	-2,229.69	-2,468.95	3,800.36	3,730.71	69.65	54.566		
12,700.00	10,350.00	14,787.23	12,446.00	53.97	56.93	123.07	-2,329.69	-2,467.97	3,800.37	3,729.37	71.00	53.525		
12,800.00	10,350.00	14,887.23	12,446.00	55.17	57.97	123.07	-2,429.68	-2,466.98	3,800.39	3,728.00	72.39	52.498		
12,900.00	10,350.00	14,987.23	12,446.00	56.39	59.04	123.07	-2,529.68	-2,466.00	3,800.40	3,726.59	73.81	51.489		
13,000.00	10,350.00	15,087.23	12,446.00	57.63	60.13	123.07	-2,629.67	-2,465.01	3,800.42	3,725.16	75.26	50.499		
13,100.00	10,350.00	15,187.23	12,446.00	58.89	61.25	123.07	-2,729.67	-2,464.03	3,800.43	3,723.70	76.73	49.529		
13,200.00	10,350.00	15,287.23	12,446.00	60.17	62.40	123.07	-2,829.66	-2,463.05	3,800.44	3,722.21	78.23	48.579		
13,300.00	10,350.00	15,387.23	12,446.00	61.47	63.56	123.07	-2,929.66	-2,462.06	3,800.46	3,720.70	79.76	47.651		
13,400.00	10,350.00	15,487.23	12,446.00	62.78	64.75	123.07	-3,029.65	-2,461.08	3,800.47	3,719.17	81.30	46.745		
13,500.00	10,350.00	15,587.23	12,446.00	64.11	65.95	123.07	-3,129.65	-2,460.10	3,800.49	3,717.62	82.87	45.860		
13,600.00	10,350.00	15,687.23	12,446.00	65.45	67.18	123.07	-3,229.64	-2,459.11	3,800.50	3,716.05	84.46	44.999		
13,700.00	10,350.00	15,787.23	12,446.00	66.81	68.42	123.07	-3,329.64	-2,458.13	3,800.52	3,714.45	86.06	44.160		
13,800.00	10,350.00	15,887.23	12,446.00	68.18	69.68	123.07	-3,429.63	-2,457.14	3,800.53	3,712.85	87.69	43.342		
13,900.00	10,350.00	15,987.23	12,446.00	69.56	70.96	123.07	-3,529.63	-2,456.16	3,800.55	3,711.22	89.33	42.545		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		PF Fed Com - PF Fed Com 802H - OH - Plan #1											Offset Site Error:		0.00 usft
Survey Program:		0-OWSG (Rev2) MWD											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
14,000.00	10,350.00	16,087.23	12,446.00	70.96	72.25	123.07	-3,629.62	-2,455.18	3,800.56	3,709.57	90.99	41.769			
14,100.00	10,350.00	16,187.23	12,446.00	72.36	73.55	123.07	-3,729.62	-2,454.19	3,800.58	3,707.91	92.66	41.015			
14,200.00	10,350.00	16,287.23	12,446.00	73.78	74.87	123.07	-3,829.61	-2,453.21	3,800.59	3,706.24	94.35	40.283			
14,300.00	10,350.00	16,387.23	12,446.00	75.20	76.20	123.07	-3,929.61	-2,452.23	3,800.61	3,704.56	96.05	39.570			
14,400.00	10,350.00	16,487.23	12,446.00	76.63	77.55	123.07	-4,029.60	-2,451.24	3,800.62	3,702.86	97.76	38.877			
14,500.00	10,350.00	16,587.23	12,446.00	78.08	78.90	123.07	-4,129.60	-2,450.26	3,800.64	3,701.15	99.49	38.203			
14,600.00	10,350.00	16,687.23	12,446.00	79.53	80.27	123.07	-4,229.59	-2,449.27	3,800.65	3,699.43	101.22	37.548			
14,700.00	10,350.00	16,787.23	12,446.00	80.99	81.65	123.07	-4,329.59	-2,448.29	3,800.66	3,697.69	102.97	36.910			
14,800.00	10,350.00	16,887.23	12,446.00	82.45	83.04	123.07	-4,429.58	-2,447.31	3,800.68	3,695.95	104.73	36.291			
14,900.00	10,350.00	16,987.23	12,446.00	83.92	84.43	123.07	-4,529.58	-2,446.32	3,800.69	3,694.20	106.50	35.688			
15,000.00	10,350.00	17,087.23	12,446.00	85.40	85.84	123.07	-4,629.57	-2,445.34	3,800.71	3,692.43	108.27	35.102			
15,100.00	10,350.00	17,187.23	12,446.00	86.89	87.25	123.07	-4,729.57	-2,444.36	3,800.72	3,690.66	110.06	34.533			
15,200.00	10,350.00	17,287.23	12,446.00	88.38	88.68	123.07	-4,829.56	-2,443.37	3,800.74	3,688.88	111.86	33.978			
15,300.00	10,350.00	17,387.23	12,446.00	89.87	90.11	123.07	-4,929.56	-2,442.39	3,800.75	3,687.09	113.66	33.439			
15,400.00	10,350.00	17,487.23	12,446.00	91.38	91.54	123.07	-5,029.55	-2,441.40	3,800.77	3,685.29	115.47	32.915			
15,500.00	10,350.00	17,587.23	12,446.00	92.88	92.99	123.07	-5,129.55	-2,440.42	3,800.78	3,683.49	117.29	32.404			
15,600.00	10,350.00	17,687.23	12,446.00	94.39	94.44	123.07	-5,229.54	-2,439.44	3,800.80	3,681.68	119.12	31.908			
15,700.00	10,350.00	17,787.23	12,446.00	95.91	95.90	123.07	-5,329.54	-2,438.45	3,800.81	3,679.86	120.95	31.425			
15,800.00	10,350.00	17,887.23	12,446.00	97.43	97.36	123.07	-5,429.54	-2,437.47	3,800.83	3,678.04	122.79	30.955			
15,900.00	10,350.00	17,987.23	12,446.00	98.96	98.83	123.07	-5,529.53	-2,436.49	3,800.84	3,676.21	124.63	30.497			
16,000.00	10,350.00	18,087.23	12,446.00	100.49	100.31	123.07	-5,629.53	-2,435.50	3,800.86	3,674.38	126.48	30.051			
16,100.00	10,350.00	18,187.23	12,446.00	102.02	101.79	123.07	-5,729.52	-2,434.52	3,800.87	3,672.54	128.33	29.617			
16,200.00	10,350.00	18,287.23	12,446.00	103.55	103.28	123.07	-5,829.52	-2,433.53	3,800.88	3,670.69	130.19	29.195			
16,300.00	10,350.00	18,387.23	12,446.00	105.09	104.77	123.07	-5,929.51	-2,432.55	3,800.90	3,668.84	132.06	28.783			
16,400.00	10,350.00	18,487.23	12,446.00	106.64	106.27	123.07	-6,029.51	-2,431.57	3,800.91	3,666.99	133.92	28.381			
16,500.00	10,350.00	18,587.23	12,446.00	108.18	107.77	123.07	-6,129.50	-2,430.58	3,800.93	3,665.13	135.80	27.989			
16,600.00	10,350.00	18,687.23	12,446.00	109.73	109.27	123.07	-6,229.50	-2,429.60	3,800.94	3,663.27	137.68	27.608			
16,700.00	10,350.00	18,787.23	12,446.00	111.29	110.78	123.07	-6,329.49	-2,428.62	3,800.96	3,661.40	139.56	27.235			
16,800.00	10,350.00	18,887.23	12,446.00	112.84	112.29	123.07	-6,429.49	-2,427.63	3,800.97	3,659.53	141.45	26.872			
16,900.00	10,350.00	18,987.23	12,446.00	114.40	113.81	123.07	-6,529.48	-2,426.65	3,800.99	3,657.65	143.34	26.518			
17,000.00	10,350.00	19,087.23	12,446.00	115.96	115.33	123.07	-6,629.48	-2,425.66	3,801.00	3,655.77	145.23	26.172			
17,100.00	10,350.00	19,187.23	12,446.00	117.52	116.86	123.07	-6,729.47	-2,424.68	3,801.02	3,653.88	147.13	25.834			
17,200.00	10,350.00	19,287.23	12,446.00	119.09	118.38	123.07	-6,829.47	-2,423.70	3,801.03	3,652.00	149.04	25.504			
17,300.00	10,350.00	19,387.23	12,446.00	120.66	119.91	123.07	-6,929.46	-2,422.71	3,801.05	3,650.10	150.94	25.182			
17,400.00	10,350.00	19,487.23	12,446.00	122.23	121.45	123.07	-7,029.46	-2,421.73	3,801.06	3,648.21	152.85	24.868			
17,500.00	10,350.00	19,587.23	12,446.00	123.80	122.99	123.07	-7,129.45	-2,420.75	3,801.08	3,646.32	154.76	24.561			
17,600.00	10,350.00	19,687.23	12,446.00	125.37	124.53	123.07	-7,229.45	-2,419.76	3,801.09	3,644.42	156.67	24.261			
17,700.00	10,350.00	19,787.23	12,446.00	126.95	126.07	123.07	-7,329.44	-2,418.78	3,801.11	3,642.52	158.59	23.968			
17,800.00	10,350.00	19,887.23	12,446.00	128.52	127.61	123.07	-7,429.44	-2,417.79	3,801.12	3,640.61	160.51	23.682			
17,900.00	10,350.00	19,987.23	12,446.00	130.10	129.16	123.07	-7,529.43	-2,416.81	3,801.13	3,638.71	162.43	23.402			
18,000.00	10,350.00	20,087.23	12,446.00	131.69	130.71	123.07	-7,629.43	-2,415.83	3,801.15	3,636.80	164.35	23.128			
18,100.00	10,350.00	20,187.23	12,446.00	133.27	132.27	123.07	-7,729.42	-2,414.84	3,801.16	3,634.89	166.28	22.861			
18,200.00	10,350.00	20,287.23	12,446.00	134.85	133.82	123.07	-7,829.42	-2,413.86	3,801.18	3,632.97	168.20	22.599			
18,300.00	10,350.00	20,387.23	12,446.00	136.44	135.38	123.07	-7,929.41	-2,412.88	3,801.19	3,631.06	170.13	22.342			
18,400.00	10,350.00	20,487.23	12,446.00	138.03	136.94	123.07	-8,029.41	-2,411.89	3,801.21	3,629.14	172.07	22.091			
18,500.00	10,350.00	20,587.23	12,446.00	139.62	138.50	123.07	-8,129.40	-2,410.91	3,801.22	3,627.22	174.00	21.846			
18,600.00	10,350.00	20,687.23	12,446.00	141.21	140.07	123.07	-8,229.40	-2,409.92	3,801.24	3,625.30	175.94	21.605			
18,700.00	10,350.00	20,787.23	12,446.00	142.80	141.63	123.07	-8,329.39	-2,408.94	3,801.25	3,623.37	177.88	21.370			
18,800.00	10,350.00	20,887.23	12,446.00	144.39	143.20	123.07	-8,429.39	-2,407.96	3,801.27	3,621.45	179.82	21.139			
18,900.00	10,350.00	20,987.23	12,446.00	145.99	144.77	123.07	-8,529.39	-2,406.97	3,801.28	3,619.52	181.76	20.913			
19,000.00	10,350.00	21,087.23	12,446.00	147.58	146.34	123.07	-8,629.38	-2,405.99	3,801.30	3,617.59	183.71	20.692			
19,100.00	10,350.00	21,187.23	12,446.00	149.18	147.92	123.07	-8,729.38	-2,405.01	3,801.31	3,615.66	185.65	20.475			

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 802H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,200.00	10,350.00	21,287.23	12,446.00	150.78	149.49	123.07	-8,829.37	-2,404.02	3,801.33	3,613.72	187.60	20.263	
19,300.00	10,350.00	21,387.23	12,446.00	152.38	151.07	123.07	-8,929.37	-2,403.04	3,801.34	3,611.79	189.55	20.055	
19,400.00	10,350.00	21,487.23	12,446.00	153.98	152.65	123.07	-9,029.36	-2,402.05	3,801.35	3,609.86	191.50	19.851	
19,500.00	10,350.00	21,587.23	12,446.00	155.58	154.23	123.07	-9,129.36	-2,401.07	3,801.37	3,607.92	193.45	19.651	
19,600.00	10,350.00	21,687.23	12,446.00	157.18	155.81	123.07	-9,229.35	-2,400.09	3,801.38	3,605.98	195.40	19.454	
19,700.00	10,350.00	21,787.23	12,446.00	158.79	157.39	123.06	-9,329.35	-2,399.10	3,801.40	3,604.05	197.35	19.262	
19,800.00	10,350.00	21,887.23	12,446.00	160.39	158.97	123.06	-9,429.34	-2,398.12	3,801.41	3,602.11	199.31	19.073	
19,900.00	10,350.00	21,987.23	12,446.00	162.00	160.56	123.06	-9,529.34	-2,397.14	3,801.43	3,600.17	201.26	18.888	
20,000.00	10,350.00	22,087.23	12,446.00	163.61	162.15	123.06	-9,629.33	-2,396.15	3,801.44	3,598.22	203.22	18.706	
20,100.00	10,350.00	22,187.23	12,446.00	165.21	163.73	123.06	-9,729.33	-2,395.17	3,801.46	3,596.28	205.18	18.528	
20,200.00	10,350.00	22,287.23	12,446.00	166.82	165.32	123.06	-9,829.32	-2,394.18	3,801.47	3,594.33	207.14	18.352	
20,300.00	10,350.00	22,387.23	12,446.00	168.43	166.91	123.06	-9,929.32	-2,393.20	3,801.49	3,592.39	209.10	18.180	
20,400.00	10,350.00	22,487.23	12,446.00	170.04	168.51	123.06	-10,029.31	-2,392.22	3,801.50	3,590.44	211.06	18.011	
20,500.00	10,350.00	22,587.23	12,446.00	171.65	170.10	123.06	-10,129.31	-2,391.23	3,801.52	3,588.49	213.02	17.845	
20,529.73	10,350.00	22,616.97	12,446.00	172.13	170.57	123.06	-10,159.04	-2,390.94	3,801.52	3,587.91	213.61	17.797 SF	

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	22.00	22.00	0.00	0.03	-96.29	-316.96	-2,875.12	2,892.54					
100.00	100.00	122.00	122.00	0.13	0.20	-96.29	-316.96	-2,875.12	2,892.54	2,892.30	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.29	-316.96	-2,875.12	2,892.54	2,891.80	0.74	3,896.974		
300.00	300.00	322.00	322.00	0.84	0.92	-96.29	-316.96	-2,875.12	2,892.54	2,891.29	1.25	2,317.079		
400.00	400.00	422.00	422.00	1.20	1.28	-96.29	-316.96	-2,875.12	2,892.54	2,890.79	1.75	1,648.216		
500.00	500.00	522.00	522.00	1.56	1.64	-96.29	-316.96	-2,875.12	2,892.54	2,890.28	2.26	1,278.918		
600.00	600.00	622.00	622.00	1.92	2.00	-96.29	-316.96	-2,875.12	2,892.54	2,889.77	2.77	1,044.790		
700.00	700.00	722.00	722.00	2.28	2.36	-96.29	-316.96	-2,875.12	2,892.54	2,889.26	3.28	883.109		
800.00	800.00	822.00	822.00	2.63	2.71	-96.29	-316.96	-2,875.12	2,892.54	2,888.76	3.78	764.757		
900.00	900.00	922.00	922.00	2.99	3.07	-96.29	-316.96	-2,875.12	2,892.54	2,888.25	4.29	674.377		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.29	-316.96	-2,875.12	2,892.54	2,887.74	4.80	603.100		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.29	-316.96	-2,875.12	2,892.54	2,887.24	5.30	545.449		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.29	-316.96	-2,875.12	2,892.54	2,886.73	5.81	497.858		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.29	-316.96	-2,875.12	2,892.54	2,886.22	6.32	457.904		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.29	-316.96	-2,875.12	2,892.54	2,885.72	6.82	423.887		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.29	-316.96	-2,875.12	2,892.54	2,885.21	7.33	394.574		
1,600.00	1,600.00	2,232.56	2,227.43	5.50	7.80	-95.88	-289.50	-2,811.22	2,890.21	2,880.87	9.33	309.628		
1,700.00	1,700.00	2,449.26	2,437.28	5.86	8.70	-95.55	-268.20	-2,761.62	2,865.32	2,855.22	10.11	283.468		
1,800.00	1,800.00	2,545.79	2,530.46	6.22	9.13	-95.39	-258.24	-2,738.45	2,840.37	2,829.77	10.60	267.981		
1,900.00	1,900.00	2,642.32	2,623.63	6.58	9.57	-95.22	-248.29	-2,715.28	2,815.44	2,804.35	11.09	253.774		
2,000.00	2,000.00	2,738.85	2,716.81	6.94	10.02	-95.06	-238.34	-2,692.12	2,790.53	2,778.94	11.59	240.707		
2,100.00	2,100.00	2,835.37	2,809.99	7.29	10.47	-94.89	-228.39	-2,668.95	2,765.64	2,753.55	12.10	228.658		
2,200.00	2,200.00	2,931.90	2,903.16	7.65	10.94	-94.72	-218.43	-2,645.78	2,740.78	2,728.18	12.60	217.520		
2,300.00	2,299.99	3,028.76	2,996.66	8.01	11.41	-165.42	-208.45	-2,622.54	2,717.17	2,704.06	13.10	207.345		
2,400.00	2,399.91	3,126.23	3,090.75	8.35	11.89	-165.34	-198.40	-2,599.14	2,696.04	2,682.43	13.61	198.089		
2,500.00	2,499.69	3,224.26	3,185.37	8.70	12.38	-165.27	-188.29	-2,575.62	2,677.42	2,663.30	14.12	189.602		
2,600.00	2,599.27	3,322.76	3,280.45	9.06	12.87	-165.20	-178.13	-2,551.98	2,661.31	2,646.67	14.64	181.818		
2,700.00	2,698.57	3,421.68	3,375.94	9.42	13.37	-165.14	-167.94	-2,528.23	2,647.71	2,632.55	15.16	174.679		
2,800.00	2,797.54	3,520.95	3,471.76	9.78	13.88	-165.07	-157.70	-2,504.41	2,636.64	2,620.95	15.68	168.132		
2,815.66	2,813.00	3,536.52	3,486.79	9.84	13.96	-165.06	-156.09	-2,500.67	2,635.13	2,619.36	15.76	167.159		
2,900.00	2,896.24	3,620.40	3,567.76	10.15	14.39	-164.98	-147.45	-2,480.54	2,627.19	2,610.98	16.21	162.071		
3,000.00	2,994.95	3,719.86	3,663.77	10.53	14.91	-164.89	-137.19	-2,456.67	2,617.78	2,601.04	16.74	156.366		
3,100.00	3,093.65	3,819.32	3,759.77	10.91	15.42	-164.79	-126.94	-2,432.80	2,608.38	2,591.10	17.27	150.992		
3,200.00	3,192.36	3,918.78	3,855.78	11.29	15.94	-164.69	-116.68	-2,408.93	2,598.98	2,581.17	17.81	145.921		
3,300.00	3,291.06	4,018.24	3,951.78	11.68	16.46	-164.59	-106.43	-2,385.06	2,589.59	2,571.24	18.35	141.132		
3,400.00	3,389.76	4,117.70	4,047.79	12.07	16.99	-164.49	-96.17	-2,361.19	2,580.21	2,561.33	18.89	136.602		
3,500.00	3,488.47	4,217.15	4,143.79	12.47	17.51	-164.39	-85.92	-2,337.32	2,570.84	2,551.41	19.43	132.311		
3,600.00	3,587.17	4,316.61	4,239.80	12.87	18.04	-164.29	-75.66	-2,313.45	2,561.48	2,541.51	19.97	128.243		
3,700.00	3,685.88	4,416.07	4,335.80	13.27	18.57	-164.19	-65.41	-2,289.58	2,552.12	2,531.60	20.52	124.382		
3,800.00	3,784.58	4,515.53	4,431.81	13.67	19.10	-164.09	-55.15	-2,265.71	2,542.78	2,521.71	21.06	120.711		
3,900.00	3,883.28	4,614.99	4,527.82	14.08	19.63	-163.99	-44.90	-2,241.84	2,533.44	2,511.82	21.61	117.219		
4,000.00	3,981.99	4,714.45	4,623.82	14.49	20.17	-163.88	-34.64	-2,217.97	2,524.10	2,501.94	22.16	113.893		
4,100.00	4,080.69	4,813.91	4,719.83	14.90	20.70	-163.78	-24.39	-2,194.10	2,514.78	2,492.07	22.71	110.722		
4,200.00	4,179.39	4,913.37	4,815.83	15.31	21.23	-163.67	-14.14	-2,170.23	2,505.47	2,482.20	23.26	107.696		
4,300.00	4,278.10	5,012.82	4,911.84	15.72	21.77	-163.57	-3.88	-2,146.36	2,496.16	2,472.34	23.82	104.805		
4,400.00	4,376.80	5,112.28	5,007.84	16.13	22.31	-163.46	6.37	-2,122.49	2,486.86	2,462.49	24.37	102.040		
4,500.00	4,475.51	5,211.74	5,103.85	16.55	22.84	-163.35	16.63	-2,098.62	2,477.57	2,452.65	24.93	99.395		
4,600.00	4,574.21	5,311.20	5,199.86	16.97	23.38	-163.24	26.88	-2,074.75	2,468.29	2,442.81	25.48	96.861		
4,700.00	4,672.91	5,410.66	5,295.86	17.38	23.92	-163.13	37.14	-2,050.88	2,459.02	2,432.98	26.04	94.432		
4,800.00	4,771.62	5,510.12	5,391.87	17.80	24.46	-163.02	47.39	-2,027.01	2,449.76	2,423.16	26.60	92.101		
4,900.00	4,870.32	5,609.58	5,487.87	18.22	25.00	-162.91	57.65	-2,003.14	2,440.51	2,413.35	27.16	89.864		
5,000.00	4,969.03	5,709.03	5,583.88	18.64	25.54	-162.80	67.90	-1,979.27	2,431.26	2,403.54	27.72	87.714		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	5,067.73	5,808.49	5,679.88	19.07	26.08	-162.69	78.16	-1,955.39	2,422.03	2,393.75	28.28	85.647		
5,200.00	5,166.43	5,907.95	5,775.89	19.49	26.62	-162.57	88.41	-1,931.52	2,412.80	2,383.96	28.84	83.657		
5,300.00	5,265.14	6,007.41	5,871.90	19.91	27.17	-162.46	98.67	-1,907.65	2,403.59	2,374.18	29.40	81.742		
5,400.00	5,363.84	6,106.87	5,967.90	20.33	27.71	-162.34	108.92	-1,883.78	2,394.38	2,364.41	29.97	79.897		
5,500.00	5,462.54	6,206.33	6,063.91	20.76	28.25	-162.23	119.18	-1,859.91	2,385.18	2,354.65	30.53	78.118		
5,600.00	5,561.25	6,305.79	6,159.91	21.18	28.80	-162.11	129.43	-1,836.04	2,376.00	2,344.90	31.10	76.401		
5,700.00	5,659.95	6,405.25	6,255.92	21.61	29.34	-161.99	139.69	-1,812.17	2,366.82	2,335.16	31.67	74.744		
5,800.00	5,758.66	6,504.70	6,351.92	22.04	29.88	-161.87	149.94	-1,788.30	2,357.65	2,325.42	32.23	73.144		
5,900.00	5,857.36	6,604.16	6,447.93	22.46	30.43	-161.75	160.19	-1,764.43	2,348.50	2,315.70	32.80	71.598		
6,000.00	5,956.06	6,703.62	6,543.93	22.89	30.97	-161.63	170.45	-1,740.56	2,339.35	2,305.98	33.37	70.103		
6,100.00	6,054.77	6,803.08	6,639.94	23.32	31.52	-161.51	180.70	-1,716.69	2,330.22	2,296.28	33.94	68.658		
6,200.00	6,153.47	6,860.27	6,695.29	23.75	31.82	-161.44	186.39	-1,703.46	2,321.99	2,287.57	34.42	67.468		
6,300.00	6,252.18	6,900.00	6,733.90	24.18	32.03	-161.40	190.08	-1,694.87	2,315.72	2,280.88	34.84	66.467		
6,400.00	6,350.88	6,974.51	6,806.65	24.60	32.40	-161.34	196.43	-1,680.08	2,311.06	2,275.73	35.33	65.407		
6,500.00	6,449.58	7,031.81	6,862.86	25.03	32.67	-161.31	200.81	-1,669.89	2,308.36	2,272.59	35.77	64.528		
6,600.00	6,548.29	7,100.00	6,930.04	25.46	32.98	-161.29	205.44	-1,659.12	2,307.56	2,271.33	36.23	63.690		
6,609.12	6,557.29	7,100.00	6,930.04	25.50	32.98	-161.29	205.44	-1,659.12	2,307.54	2,271.28	36.25	63.648 CC		
6,700.00	6,646.99	7,146.52	6,976.01	25.89	33.17	-161.28	208.23	-1,652.62	2,308.51	2,271.90	36.61	63.052		
6,758.77	6,705.00	7,200.00	7,029.01	26.15	33.40	-161.28	211.08	-1,645.99	2,310.11	2,273.20	36.91	62.589		
6,800.00	6,745.73	7,200.00	7,029.01	26.32	33.40	-161.28	211.08	-1,645.99	2,311.15	2,274.15	37.00	62.462		
6,900.00	6,844.79	7,261.14	7,097.74	26.74	33.63	-161.29	213.86	-1,639.52	2,313.57	2,276.18	37.40	61.868		
7,000.00	6,944.17	7,300.00	7,128.41	27.13	33.78	-161.30	215.35	-1,636.03	2,315.49	2,277.79	37.70	61.420		
7,100.00	7,043.80	7,375.71	7,203.89	27.51	34.04	-161.30	217.68	-1,630.62	2,316.52	2,278.41	38.11	60.778		
7,200.00	7,143.63	7,432.98	7,261.07	27.88	34.22	-161.30	218.91	-1,627.75	2,317.05	2,278.60	38.45	60.263		
7,300.00	7,243.57	7,500.00	7,328.06	28.22	34.43	-161.30	219.79	-1,625.72	2,316.97	2,278.16	38.81	59.707		
7,374.43	7,318.00	7,532.88	7,360.93	28.46	34.52	-90.52	219.99	-1,625.25	2,316.44	2,277.45	38.99	59.409		
7,400.00	7,343.57	7,547.53	7,375.58	28.55	34.56	-90.52	220.03	-1,625.15	2,316.27	2,277.20	39.07	59.291		
7,443.54	7,387.10	7,581.05	7,409.10	28.69	34.65	-90.52	220.04	-1,625.12	2,316.22	2,276.99	39.23	59.047		
7,500.00	7,443.57	7,637.52	7,465.57	28.87	34.80	-90.52	220.04	-1,625.12	2,316.22	2,276.73	39.49	58.656		
7,600.00	7,543.57	7,737.52	7,565.57	29.19	35.07	-90.52	220.04	-1,625.12	2,316.22	2,276.27	39.95	57.976		
7,700.00	7,643.57	7,837.52	7,665.57	29.52	35.34	-90.52	220.04	-1,625.12	2,316.22	2,275.80	40.42	57.310		
7,800.00	7,743.57	7,937.52	7,765.57	29.84	35.62	-90.52	220.04	-1,625.12	2,316.22	2,275.34	40.88	56.658		
7,900.00	7,843.57	8,037.52	7,865.57	30.17	35.89	-90.52	220.04	-1,625.12	2,316.22	2,274.87	41.35	56.020		
8,000.00	7,943.57	8,137.52	7,965.57	30.49	36.17	-90.52	220.04	-1,625.12	2,316.22	2,274.40	41.81	55.394		
8,100.00	8,043.57	8,237.52	8,065.57	30.82	36.44	-90.52	220.04	-1,625.12	2,316.22	2,273.94	42.28	54.781		
8,200.00	8,143.57	8,337.52	8,165.57	31.15	36.72	-90.52	220.04	-1,625.12	2,316.22	2,273.47	42.75	54.180		
8,300.00	8,243.57	8,437.52	8,265.57	31.48	37.00	-90.52	220.04	-1,625.12	2,316.22	2,273.00	43.22	53.591		
8,400.00	8,343.57	8,537.52	8,365.57	31.80	37.29	-90.52	220.04	-1,625.12	2,316.22	2,272.53	43.69	53.014		
8,500.00	8,443.57	8,637.52	8,465.57	32.13	37.57	-90.52	220.04	-1,625.12	2,316.22	2,272.06	44.16	52.449		
8,600.00	8,543.57	8,737.52	8,565.57	32.46	37.85	-90.52	220.04	-1,625.12	2,316.22	2,271.58	44.63	51.894		
8,700.00	8,643.57	8,837.52	8,665.57	32.80	38.14	-90.52	220.04	-1,625.12	2,316.22	2,271.11	45.11	51.350		
8,800.00	8,743.57	8,937.52	8,765.57	33.13	38.43	-90.52	220.04	-1,625.12	2,316.22	2,270.64	45.58	50.816		
8,900.00	8,843.57	9,037.52	8,865.57	33.46	38.71	-90.52	220.04	-1,625.12	2,316.22	2,270.16	46.05	50.293		
9,000.00	8,943.57	9,137.52	8,965.57	33.79	39.00	-90.52	220.04	-1,625.12	2,316.22	2,269.69	46.53	49.780		
9,100.00	9,043.57	9,237.52	9,065.57	34.12	39.29	-90.52	220.04	-1,625.12	2,316.22	2,269.21	47.01	49.276		
9,200.00	9,143.57	9,337.52	9,165.57	34.46	39.58	-90.52	220.04	-1,625.12	2,316.22	2,268.74	47.48	48.781		
9,300.00	9,243.57	9,437.52	9,265.57	34.79	39.88	-90.52	220.04	-1,625.12	2,316.22	2,268.26	47.96	48.296		
9,400.00	9,343.57	9,537.52	9,365.57	35.13	40.17	-90.52	220.04	-1,625.12	2,316.22	2,267.78	48.44	47.820		
9,500.00	9,443.57	9,637.52	9,465.57	35.46	40.47	-90.52	220.04	-1,625.12	2,316.22	2,267.30	48.91	47.353		
9,600.00	9,543.57	9,737.52	9,565.57	35.80	40.76	-90.52	220.04	-1,625.12	2,316.22	2,266.82	49.39	46.894		
9,700.00	9,643.57	9,837.52	9,665.57	36.13	41.06	-90.52	220.04	-1,625.12	2,316.22	2,266.34	49.87	46.443		
9,800.00	9,743.57	9,937.52	9,765.57	36.47	41.36	-90.52	220.04	-1,625.12	2,316.22	2,265.86	50.35	46.001		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,833.47	9,777.04	9,970.99	9,799.04	36.58	41.45	-90.52	220.04	-1,625.12	2,316.22	2,265.70	50.51	45.854		
9,850.00	9,793.56	9,987.51	9,815.56	36.64	41.50	90.06	220.04	-1,625.12	2,316.22	2,265.63	50.59	45.784		
9,900.00	9,843.42	10,037.37	9,865.42	36.79	41.65	90.15	220.04	-1,625.12	2,316.22	2,265.40	50.82	45.574		
9,950.00	9,892.77	10,086.71	9,914.77	36.93	41.80	90.34	220.04	-1,625.12	2,316.26	2,265.20	51.06	45.366		
10,000.00	9,941.23	10,135.18	9,963.23	37.06	41.95	90.62	220.04	-1,625.12	2,316.36	2,265.08	51.29	45.163 ES		
10,050.00	9,988.45	10,182.40	10,010.45	37.19	42.09	90.98	220.04	-1,625.12	2,316.61	2,265.09	51.52	44.966		
10,100.00	10,034.06	10,228.01	10,056.06	37.30	42.23	91.40	220.04	-1,625.12	2,317.08	2,265.33	51.75	44.778		
10,150.00	10,077.71	10,271.66	10,099.71	37.41	42.36	91.84	220.04	-1,625.12	2,317.87	2,265.90	51.97	44.601		
10,200.00	10,119.07	10,313.02	10,141.07	37.50	42.48	92.29	220.04	-1,625.12	2,319.10	2,266.91	52.19	44.438		
10,250.00	10,157.84	10,351.78	10,179.84	37.58	42.60	92.72	220.04	-1,625.12	2,320.88	2,268.48	52.40	44.290		
10,300.00	10,193.70	10,387.65	10,215.70	37.65	42.71	93.09	220.04	-1,625.12	2,323.35	2,270.74	52.61	44.161		
10,350.00	10,226.39	10,420.34	10,248.39	37.71	42.81	93.37	220.04	-1,625.12	2,326.61	2,273.80	52.82	44.052		
10,400.00	10,255.66	10,449.61	10,277.66	37.76	42.89	93.53	220.04	-1,625.12	2,330.79	2,277.78	53.01	43.966		
10,450.00	10,281.29	10,475.24	10,303.29	37.81	42.97	93.56	220.04	-1,625.12	2,335.97	2,282.76	53.20	43.906		
10,500.00	10,303.08	10,497.03	10,325.08	37.85	43.04	93.41	220.04	-1,625.12	2,342.23	2,288.84	53.39	43.872		
10,550.00	10,320.87	10,514.82	10,342.87	37.90	43.09	93.07	220.04	-1,625.12	2,349.63	2,296.06	53.56	43.866		
10,600.00	10,334.52	10,528.47	10,356.52	37.96	43.13	92.53	220.04	-1,625.12	2,358.18	2,304.46	53.73	43.890		
10,650.00	10,343.93	10,537.88	10,365.93	38.03	43.16	91.77	220.04	-1,625.12	2,367.90	2,314.01	53.88	43.944		
10,700.00	10,349.02	10,542.97	10,371.02	38.12	43.18	90.78	220.04	-1,625.12	2,378.73	2,324.70	54.03	44.029		
10,733.47	10,350.00	10,543.95	10,372.00	38.19	43.18	90.00	220.04	-1,625.12	2,386.57	2,332.45	54.11	44.102		
10,800.00	10,350.00	10,543.95	10,372.00	38.36	43.18	90.00	220.04	-1,625.12	2,403.47	2,349.18	54.29	44.273		
10,900.00	10,350.00	10,543.95	10,372.00	38.68	43.18	90.00	220.04	-1,625.12	2,432.08	2,377.51	54.57	44.570		
11,000.00	10,350.00	10,543.95	10,372.00	39.08	43.18	90.00	220.04	-1,625.12	2,464.42	2,409.55	54.86	44.920		
11,100.00	10,350.00	10,543.95	10,372.00	39.56	43.18	90.00	220.04	-1,625.12	2,500.34	2,445.17	55.17	45.321		
11,200.00	10,350.00	10,543.95	10,372.00	40.10	43.18	90.00	220.04	-1,625.12	2,539.69	2,484.21	55.49	45.772		
11,300.00	10,350.00	10,543.95	10,372.00	40.70	43.18	90.00	220.04	-1,625.12	2,582.32	2,526.51	55.81	46.274		
11,400.00	10,350.00	10,543.95	10,372.00	41.37	43.18	90.00	220.04	-1,625.12	2,628.06	2,571.94	56.13	46.824		
11,500.00	10,350.00	10,543.95	10,372.00	42.08	43.18	90.00	220.04	-1,625.12	2,676.76	2,620.32	56.45	47.422		
11,600.00	10,350.00	10,543.95	10,372.00	42.85	43.18	90.00	220.04	-1,625.12	2,728.26	2,671.50	56.76	48.065		
11,700.00	10,350.00	10,543.95	10,372.00	43.67	43.18	90.00	220.04	-1,625.12	2,782.40	2,725.33	57.07	48.753		
11,800.00	10,350.00	10,543.95	10,372.00	44.53	43.18	90.00	220.04	-1,625.12	2,839.03	2,781.66	57.37	49.484		
11,900.00	10,350.00	10,543.95	10,372.00	45.44	43.18	90.00	220.04	-1,625.12	2,898.01	2,840.34	57.67	50.255		
12,000.00	10,350.00	10,543.95	10,372.00	46.39	43.18	90.00	220.04	-1,625.12	2,959.19	2,901.24	57.95	51.065		
12,100.00	10,350.00	10,543.95	10,372.00	47.37	43.18	90.00	220.04	-1,625.12	3,022.44	2,964.22	58.22	51.912		
12,200.00	10,350.00	14,490.21	12,517.00	48.39	55.15	134.04	-1,820.21	-1,506.79	3,085.77	3,023.59	62.18	49.629		
12,300.00	10,350.00	14,590.21	12,517.00	49.45	55.96	134.04	-1,920.20	-1,505.81	3,085.78	3,022.51	63.27	48.771		
12,400.00	10,350.00	14,690.21	12,517.00	50.54	56.80	134.04	-2,020.20	-1,504.83	3,085.79	3,021.39	64.40	47.916		
12,500.00	10,350.00	14,790.21	12,517.00	51.66	57.68	134.04	-2,120.19	-1,503.84	3,085.81	3,020.25	65.56	47.070		
12,600.00	10,350.00	14,890.21	12,517.00	52.80	58.60	134.04	-2,220.19	-1,502.86	3,085.82	3,019.07	66.75	46.232		
12,700.00	10,350.00	14,990.21	12,517.00	53.97	59.55	134.04	-2,320.18	-1,501.87	3,085.83	3,017.87	67.96	45.403		
12,800.00	10,350.00	15,090.21	12,517.00	55.17	60.53	134.04	-2,420.18	-1,500.89	3,085.84	3,016.64	69.21	44.587		
12,900.00	10,350.00	15,190.21	12,517.00	56.39	61.54	134.04	-2,520.18	-1,499.91	3,085.86	3,015.38	70.48	43.783		
13,000.00	10,350.00	15,290.21	12,517.00	57.63	62.58	134.04	-2,620.17	-1,498.92	3,085.87	3,014.09	71.78	42.993		
13,100.00	10,350.00	15,390.21	12,517.00	58.89	63.65	134.04	-2,720.17	-1,497.94	3,085.88	3,012.79	73.09	42.217		
13,200.00	10,350.00	15,490.21	12,517.00	60.17	64.74	134.04	-2,820.16	-1,496.95	3,085.89	3,011.46	74.44	41.457		
13,300.00	10,350.00	15,590.21	12,517.00	61.47	65.85	134.03	-2,920.16	-1,495.97	3,085.91	3,010.11	75.80	40.713		
13,400.00	10,350.00	15,690.21	12,517.00	62.78	66.99	134.03	-3,020.15	-1,494.99	3,085.92	3,008.74	77.18	39.984		
13,500.00	10,350.00	15,790.21	12,517.00	64.11	68.14	134.03	-3,120.15	-1,494.00	3,085.93	3,007.35	78.58	39.272		
13,600.00	10,350.00	15,890.21	12,517.00	65.45	69.32	134.03	-3,220.14	-1,493.02	3,085.94	3,005.95	80.00	38.576		
13,700.00	10,350.00	15,990.21	12,517.00	66.81	70.52	134.03	-3,320.14	-1,492.03	3,085.96	3,004.53	81.43	37.897		
13,800.00	10,350.00	16,090.21	12,517.00	68.18	71.73	134.03	-3,420.13	-1,491.05	3,085.97	3,003.09	82.88	37.235		
13,900.00	10,350.00	16,190.21	12,517.00	69.56	72.97	134.03	-3,520.13	-1,490.07	3,085.98	3,001.64	84.34	36.590		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	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	10,350.00	16,290.21	12,517.00	70.96	74.22	134.03	-3,620.12	-1,489.08	3,085.99	3,000.18	85.82	35.960		
14,100.00	10,350.00	16,390.21	12,517.00	72.36	75.48	134.03	-3,720.12	-1,488.10	3,086.01	2,998.70	87.31	35.346		
14,200.00	10,350.00	16,490.21	12,517.00	73.78	76.76	134.03	-3,820.11	-1,487.11	3,086.02	2,997.21	88.81	34.747		
14,300.00	10,350.00	16,590.21	12,517.00	75.20	78.05	134.03	-3,920.11	-1,486.13	3,086.03	2,995.70	90.33	34.164		
14,400.00	10,350.00	16,690.21	12,517.00	76.63	79.36	134.03	-4,020.10	-1,485.15	3,086.04	2,994.19	91.85	33.597		
14,500.00	10,350.00	16,790.21	12,517.00	78.08	80.68	134.03	-4,120.10	-1,484.16	3,086.06	2,992.67	93.39	33.044		
14,600.00	10,350.00	16,890.21	12,517.00	79.53	82.01	134.03	-4,220.09	-1,483.18	3,086.07	2,991.13	94.94	32.506		
14,700.00	10,350.00	16,990.21	12,517.00	80.99	83.35	134.03	-4,320.09	-1,482.20	3,086.08	2,989.59	96.50	31.982		
14,800.00	10,350.00	17,090.21	12,517.00	82.45	84.70	134.03	-4,420.08	-1,481.21	3,086.09	2,988.03	98.06	31.471		
14,900.00	10,350.00	17,190.21	12,517.00	83.92	86.07	134.03	-4,520.08	-1,480.23	3,086.11	2,986.47	99.64	30.974		
15,000.00	10,350.00	17,290.21	12,517.00	85.40	87.44	134.03	-4,620.07	-1,479.24	3,086.12	2,984.90	101.22	30.489		
15,100.00	10,350.00	17,390.21	12,517.00	86.89	88.82	134.03	-4,720.07	-1,478.26	3,086.13	2,983.32	102.81	30.018		
15,200.00	10,350.00	17,490.21	12,517.00	88.38	90.22	134.03	-4,820.06	-1,477.28	3,086.14	2,981.74	104.41	29.559		
15,300.00	10,350.00	17,590.21	12,517.00	89.87	91.62	134.03	-4,920.06	-1,476.29	3,086.16	2,980.14	106.01	29.111		
15,400.00	10,350.00	17,690.21	12,517.00	91.38	93.03	134.03	-5,020.05	-1,475.31	3,086.17	2,978.54	107.62	28.675		
15,500.00	10,350.00	17,790.21	12,517.00	92.88	94.44	134.03	-5,120.05	-1,474.32	3,086.18	2,976.94	109.24	28.250		
15,600.00	10,350.00	17,890.21	12,517.00	94.39	95.87	134.03	-5,220.04	-1,473.34	3,086.19	2,975.32	110.87	27.836		
15,700.00	10,350.00	17,990.21	12,517.00	95.91	97.30	134.03	-5,320.04	-1,472.36	3,086.21	2,973.71	112.50	27.433		
15,800.00	10,350.00	18,090.21	12,517.00	97.43	98.74	134.03	-5,420.03	-1,471.37	3,086.22	2,972.08	114.14	27.040		
15,900.00	10,350.00	18,190.21	12,517.00	98.96	100.18	134.03	-5,520.03	-1,470.39	3,086.23	2,970.45	115.78	26.657		
16,000.00	10,350.00	18,290.21	12,517.00	100.49	101.63	134.03	-5,620.03	-1,469.40	3,086.24	2,968.82	117.42	26.283		
16,100.00	10,350.00	18,390.21	12,517.00	102.02	103.09	134.03	-5,720.02	-1,468.42	3,086.26	2,967.18	119.08	25.918		
16,200.00	10,350.00	18,490.21	12,517.00	103.55	104.55	134.03	-5,820.02	-1,467.44	3,086.27	2,965.54	120.73	25.563		
16,300.00	10,350.00	18,590.21	12,517.00	105.09	106.02	134.03	-5,920.01	-1,466.45	3,086.28	2,963.89	122.39	25.216		
16,400.00	10,350.00	18,690.21	12,517.00	106.64	107.50	134.03	-6,020.01	-1,465.47	3,086.29	2,962.23	124.06	24.878		
16,500.00	10,350.00	18,790.21	12,517.00	108.18	108.97	134.03	-6,120.00	-1,464.48	3,086.31	2,960.58	125.73	24.548		
16,600.00	10,350.00	18,890.21	12,517.00	109.73	110.46	134.03	-6,220.00	-1,463.50	3,086.32	2,958.92	127.40	24.225		
16,700.00	10,350.00	18,990.21	12,517.00	111.29	111.95	134.03	-6,319.99	-1,462.52	3,086.33	2,957.25	129.08	23.910		
16,800.00	10,350.00	19,090.21	12,517.00	112.84	113.44	134.03	-6,419.99	-1,461.53	3,086.34	2,955.59	130.76	23.603		
16,900.00	10,350.00	19,190.21	12,517.00	114.40	114.94	134.03	-6,519.98	-1,460.55	3,086.36	2,953.92	132.44	23.304		
17,000.00	10,350.00	19,290.21	12,517.00	115.96	116.44	134.03	-6,619.98	-1,459.56	3,086.37	2,952.24	134.13	23.011		
17,100.00	10,350.00	19,390.21	12,517.00	117.52	117.94	134.03	-6,719.97	-1,458.58	3,086.38	2,950.56	135.82	22.725		
17,200.00	10,350.00	19,490.21	12,517.00	119.09	119.45	134.03	-6,819.97	-1,457.60	3,086.39	2,948.88	137.51	22.445		
17,300.00	10,350.00	19,590.21	12,517.00	120.66	120.97	134.03	-6,919.96	-1,456.61	3,086.41	2,947.20	139.21	22.171		
17,400.00	10,350.00	19,690.21	12,517.00	122.23	122.48	134.03	-7,019.96	-1,455.63	3,086.42	2,945.51	140.91	21.904		
17,500.00	10,350.00	19,790.21	12,517.00	123.80	124.00	134.03	-7,119.95	-1,454.64	3,086.43	2,943.82	142.61	21.643		
17,600.00	10,350.00	19,890.21	12,517.00	125.37	125.53	134.03	-7,219.95	-1,453.66	3,086.44	2,942.13	144.31	21.388		
17,700.00	10,350.00	19,990.21	12,517.00	126.95	127.05	134.02	-7,319.94	-1,452.68	3,086.46	2,940.44	146.01	21.138		
17,800.00	10,350.00	20,090.21	12,517.00	128.52	128.58	134.02	-7,419.94	-1,451.69	3,086.47	2,938.74	147.72	20.894		
17,900.00	10,350.00	20,190.21	12,517.00	130.10	130.11	134.02	-7,519.93	-1,450.71	3,086.48	2,937.05	149.43	20.654		
18,000.00	10,350.00	20,290.21	12,517.00	131.69	131.65	134.02	-7,619.93	-1,449.73	3,086.49	2,935.34	151.15	20.420		
18,100.00	10,350.00	20,390.21	12,517.00	133.27	133.19	134.02	-7,719.92	-1,448.74	3,086.51	2,933.64	152.86	20.191		
18,200.00	10,350.00	20,490.21	12,517.00	134.85	134.73	134.02	-7,819.92	-1,447.76	3,086.52	2,931.94	154.58	19.967		
18,300.00	10,350.00	20,590.21	12,517.00	136.44	136.27	134.02	-7,919.91	-1,446.77	3,086.53	2,930.23	156.30	19.748		
18,400.00	10,350.00	20,690.21	12,517.00	138.03	137.82	134.02	-8,019.91	-1,445.79	3,086.54	2,928.52	158.02	19.533		
18,500.00	10,350.00	20,790.21	12,517.00	139.62	139.37	134.02	-8,119.90	-1,444.81	3,086.56	2,926.82	159.74	19.322		
18,600.00	10,350.00	20,890.21	12,517.00	141.21	140.92	134.02	-8,219.90	-1,443.82	3,086.57	2,925.10	161.47	19.116		
18,700.00	10,350.00	20,990.21	12,517.00	142.80	142.47	134.02	-8,319.89	-1,442.84	3,086.58	2,923.39	163.19	18.914		
18,800.00	10,350.00	21,090.21	12,517.00	144.39	144.02	134.02	-8,419.89	-1,441.85	3,086.59	2,921.67	164.92	18.716		
18,900.00	10,350.00	21,190.21	12,517.00	145.99	145.58	134.02	-8,519.88	-1,440.87	3,086.61	2,919.96	166.65	18.522		
19,000.00	10,350.00	21,290.21	12,517.00	147.58	147.14	134.02	-8,619.88	-1,439.89	3,086.62	2,918.24	168.38	18.331		
19,100.00	10,350.00	21,390.21	12,517.00	149.18	148.70	134.02	-8,719.88	-1,438.90	3,086.63	2,916.52	170.11	18.145		

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	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 803H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,200.00	10,350.00	21,490.21	12,517.00	150.78	150.27	134.02	-8,819.87	-1,437.92	3,086.64	2,914.80	171.84	17.962		
19,300.00	10,350.00	21,590.21	12,517.00	152.38	151.83	134.02	-8,919.87	-1,436.93	3,086.66	2,913.08	173.57	17.783		
19,400.00	10,350.00	21,690.21	12,517.00	153.98	153.40	134.02	-9,019.86	-1,435.95	3,086.67	2,911.36	175.31	17.607		
19,500.00	10,350.00	21,790.21	12,517.00	155.58	154.97	134.02	-9,119.86	-1,434.97	3,086.68	2,909.64	177.05	17.434		
19,600.00	10,350.00	21,890.21	12,517.00	157.18	156.54	134.02	-9,219.85	-1,433.98	3,086.69	2,907.91	178.78	17.265		
19,700.00	10,350.00	21,990.21	12,517.00	158.79	158.11	134.02	-9,319.85	-1,433.00	3,086.70	2,906.19	180.52	17.099		
19,800.00	10,350.00	22,090.21	12,517.00	160.39	159.68	134.02	-9,419.84	-1,432.01	3,086.72	2,904.46	182.26	16.936		
19,900.00	10,350.00	22,190.21	12,517.00	162.00	161.26	134.02	-9,519.84	-1,431.03	3,086.73	2,902.73	184.00	16.776		
20,000.00	10,350.00	22,290.21	12,517.00	163.61	162.83	134.02	-9,619.83	-1,430.05	3,086.74	2,901.01	185.74	16.619		
20,100.00	10,350.00	22,390.21	12,517.00	165.21	164.41	134.02	-9,719.83	-1,429.06	3,086.75	2,899.28	187.48	16.465		
20,200.00	10,350.00	22,490.21	12,517.00	166.82	165.99	134.02	-9,819.82	-1,428.08	3,086.77	2,897.55	189.22	16.313		
20,300.00	10,350.00	22,590.21	12,517.00	168.43	167.57	134.02	-9,919.82	-1,427.09	3,086.78	2,895.81	190.97	16.164		
20,400.00	10,350.00	22,690.21	12,517.00	170.04	169.15	134.02	-10,019.81	-1,426.11	3,086.79	2,894.08	192.71	16.018		
20,500.00	10,350.00	22,790.21	12,517.00	171.65	170.74	134.02	-10,119.81	-1,425.13	3,086.80	2,892.35	194.46	15.874		
20,529.73	10,350.00	22,819.94	12,517.00	172.13	171.21	134.02	-10,149.54	-1,424.83	3,086.81	2,891.83	194.98	15.832 SF		

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



Total Directional Services

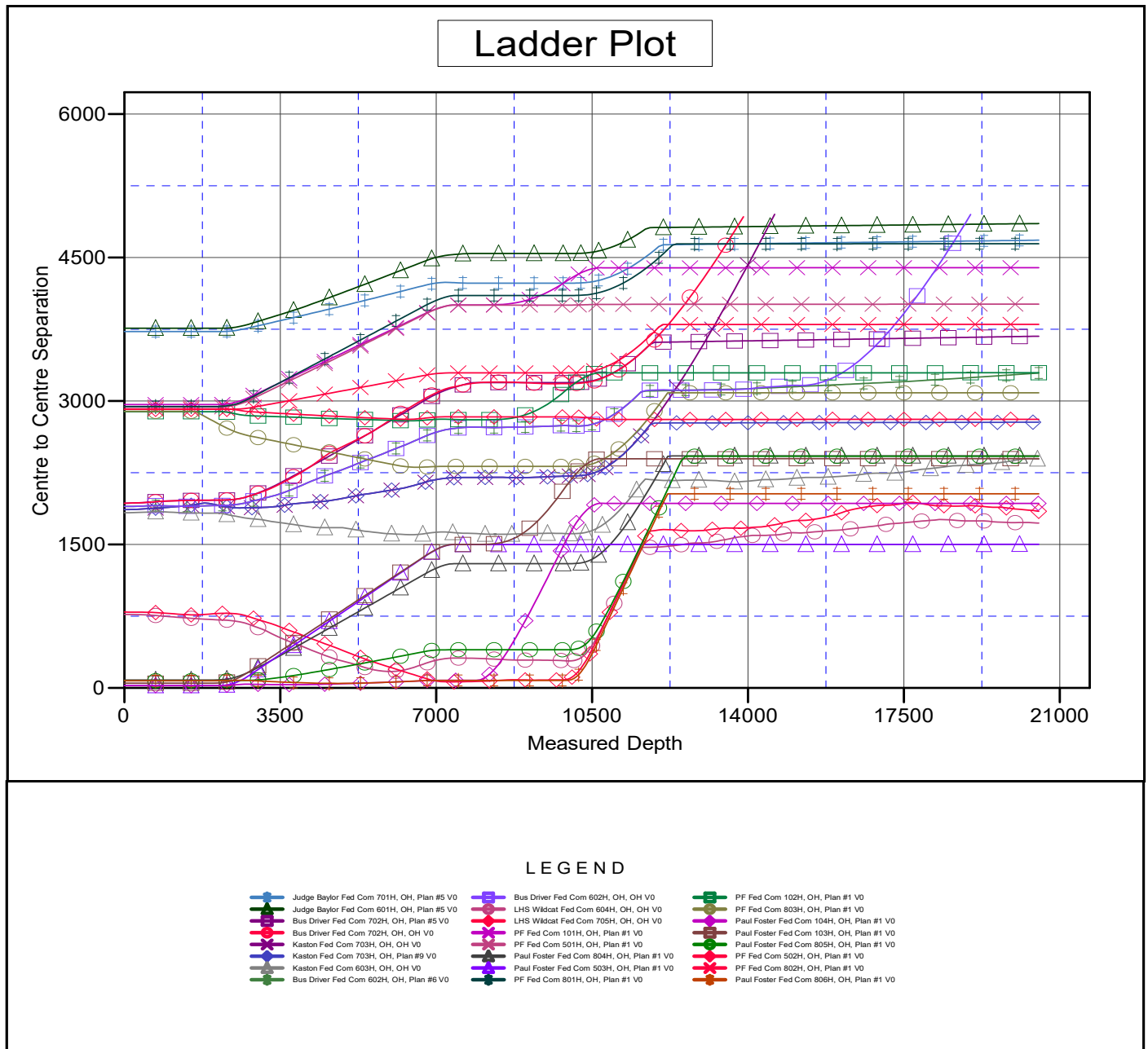
Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3031' GE + 30' KB @ 3061.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Paul Foster Fed Com 504H
 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



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 504H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Paul Foster Fed Com 504H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3031' GE + 30' KB @ 3061.00usft

Offset Depths are relative to Offset Datum

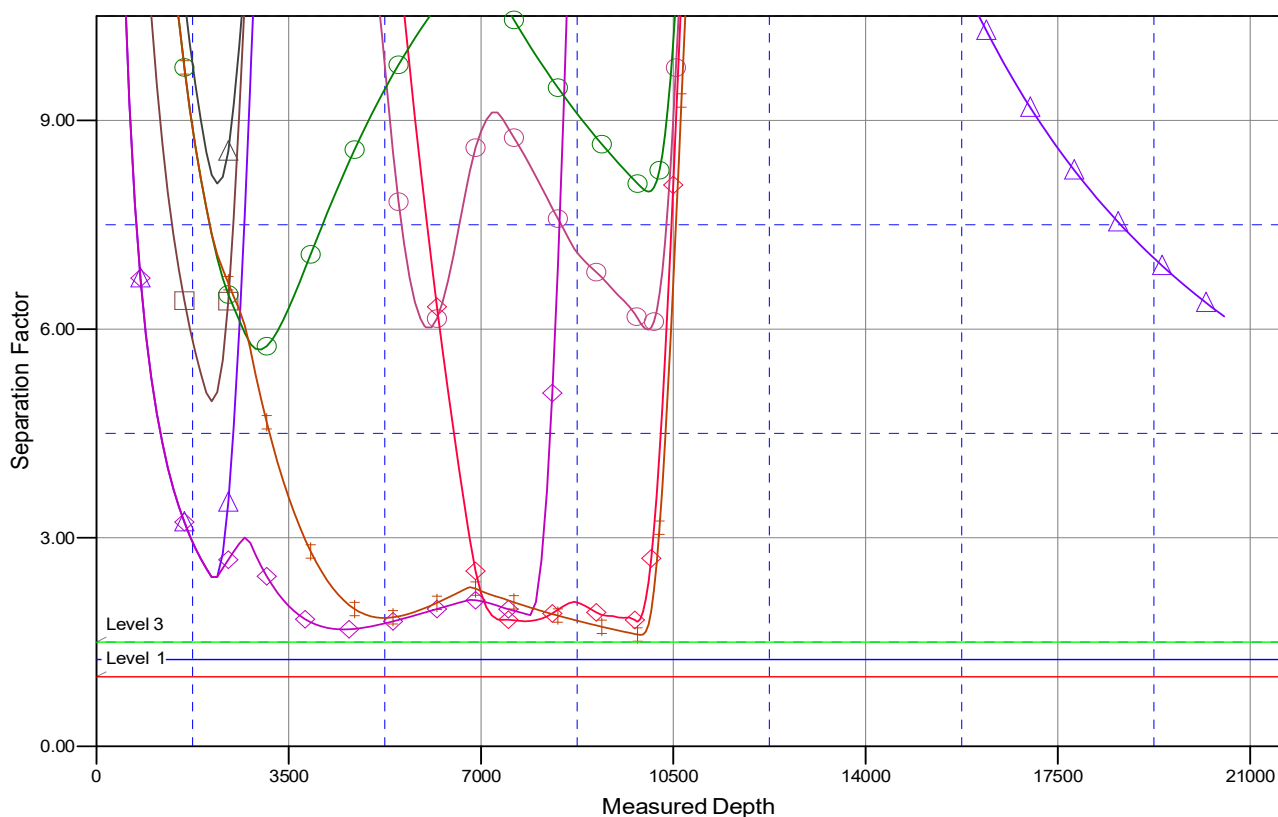
Central Meridian is -104.333334

Coordinates are relative to: Paul Foster Fed Com 504H

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

Grid Convergence at Surface is: 0.54°

Separation Factor Plot



LEGEND

Judge Baylor Fed Com 701H, OH, Plan #5 V0	Bus Driver Fed Com 602H, OH, OH V0	PF Fed Com 102H, OH, Plan #1 V0
Judge Baylor Fed Com 601H, OH, Plan #5 V0	LHS Wildcat Fed Com 604H, OH, OH V0	PF Fed Com 803H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, Plan #5 V0	LHS Wildcat Fed Com 705H, OH, OH V0	Paul Foster Fed Com 104H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, OH V0	PF Fed Com 101H, OH, Plan #1 V0	Paul Foster Fed Com 103H, OH, Plan #1 V0
Kastoni Fed Com 703H, OH, OH V0	PF Fed Com 501H, OH, Plan #1 V0	Paul Foster Fed Com 805H, OH, Plan #1 V0
Kastoni Fed Com 703H, OH, Plan #9 V0	Paul Foster Fed Com 804H, OH, Plan #1 V0	PF Fed Com 502H, OH, Plan #1 V0
Kastoni Fed Com 603H, OH, OH V0	Paul Foster Fed Com 503H, OH, Plan #1 V0	PF Fed Com 802H, OH, Plan #1 V0
Bus Driver Fed Com 602H, OH, Plan #6 V0	PF Fed Com 801H, OH, Plan #1 V0	Paul Foster Fed Com 806H, OH, Plan #1 V0

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

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Franklin Mountain Energy, LLC
LEASE NO.:	NMNM117126, NMNM12280, NMNM119761, NMNM130330
COUNTY:	Lea County

Wells:

Paul Foster MH West Pad 1	
Paul Foster Fed Com 101H	650 FNL, 1,268 FWL
Paul Foster Fed Com 102H	650 FNL, 1,343 FWL
Paul Foster Fed Com 501H	650 FNL, 1,293 FWL
Paul Foster Fed Com 502H	650 FNL, 1,318 FWL
Paul Foster Fed Com 801H	575 FNL, 1,281 FWL
Paul Foster Fed Com 802H	575 FNL, 1,306 FWL
Paul Foster Fed Com 803H	575 FNL, 1,331 FWL
Paul Foster MH East Pad 2	
Paul Foster Fed Com 103H	285 FNL, 1,125 FEL
Paul Foster Fed Com 104H	285 FNL, 1,050 FEL
Paul Foster Fed Com 503H	285 FNL, 1,100 FEL
Paul Foster Fed Com 504H	285 FNL, 1,075 FEL
Paul Foster Fed Com 804H	210 FNL, 1,112 FEL
Paul Foster Fed Com 805H	210 FNL, 1,087 FEL
Paul Foster Fed Com 806H	210 FNL, 1,062 FEL

TABLE OF CONTENTS

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

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

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

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

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

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Watershed:

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

BURIED/SURFACE LINE(S):

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

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

ELECTRIC LINE(S):

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

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

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

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

Timing Limitation Exceptions:

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Ground-level Abandoned Well Marker to avoid raptor perching:

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

VRM IV:

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

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

VI. CONSTRUCTION**A. NOTIFICATION**

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

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

G. ON LEASE ACCESS ROADS

Road Width

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

Surfacing

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

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

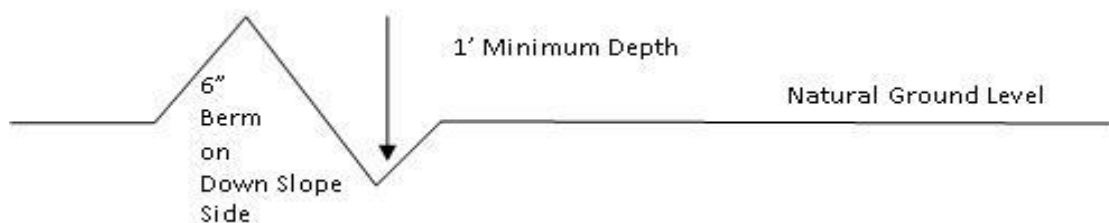
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

Fence Requirement

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

Public Access

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

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

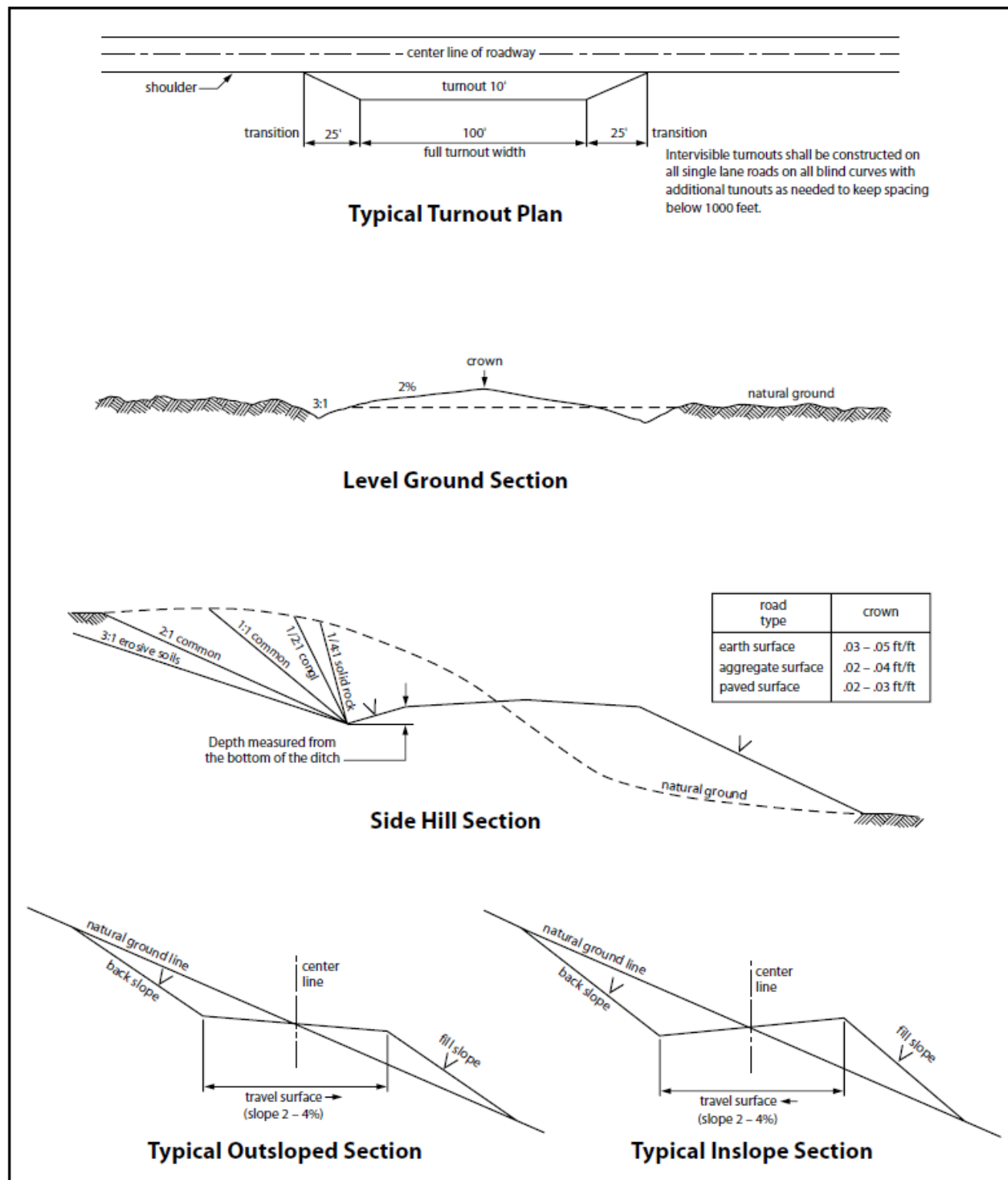


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Exclosure Netting (Open-top Tanks)

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

Chemical and Fuel Secondary Containment and Exclosure Screening

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

Open-Vent Exhaust Stack Exclosures

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

Containment Structures

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

Painting Requirement

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

B. PIPELINES

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

BURIED PIPELINE STIPULATIONS

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

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

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the

Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

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

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

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

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

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

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

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

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

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

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

☐Seed Mixture 1

☐Seed Mixture 2

☐Seed Mixture 2/LPC

☐Seed Mixture 3

☐Seed Mixture 4

☐Seed Mixture Aplomado Falcon Mixture

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

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

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

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

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

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

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

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

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

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

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

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

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

Seed Mixture 2, for Sandy Sites

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

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

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

Species

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

*Pounds of pure live seed:

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Franklin Mountain Energy LLC
LEASE NO.:	NMNM117126
LOCATION:	Section 1, T.26 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico
Sundry ID:	N/A

WELL NAME & NO.:	PF Fed Com 101H
SURFACE HOLE FOOTAGE:	650'/N & 1268'/W
BOTTOM HOLE FOOTAGE:	150'/S & 900'/W

WELL NAME & NO.:	PF Fed Com 102H
SURFACE HOLE FOOTAGE:	650'/N & 1343'/W
BOTTOM HOLE FOOTAGE:	1170'/N & 2100'/W

WELL NAME & NO.:	PF Fed Com 103H
SURFACE HOLE FOOTAGE:	285'/N & 1125'/E
BOTTOM HOLE FOOTAGE:	1170'/N & 1880'/E

WELL NAME & NO.:	PF Fed Com 501H
SURFACE HOLE FOOTAGE:	650'/N & 1293'/W
BOTTOM HOLE FOOTAGE:	150'/S & 900'/W

WELL NAME & NO.:	PF Fed Com 502H
SURFACE HOLE FOOTAGE:	650'/N & 1318'/W
BOTTOM HOLE FOOTAGE:	1170'/N & 2100'/W

WELL NAME & NO.:	PF Fed Com 504H
SURFACE HOLE FOOTAGE:	285'/N & 1075'/E
BOTTOM HOLE FOOTAGE:	150'/S & 380'/E

WELL NAME & NO.:	PF Fed Com 801H
SURFACE HOLE FOOTAGE:	575'/N & 1281'/W
BOTTOM HOLE FOOTAGE:	150'/S & 800'/W

WELL NAME & NO.:	PF Fed Com 802H
SURFACE HOLE FOOTAGE:	575'/N & 1306'/W
BOTTOM HOLE FOOTAGE:	1170'/N & 1720'/W

WELL NAME & NO.:	PF Fed Com 803H
SURFACE HOLE FOOTAGE:	575'/N & 1331'/W
BOTTOM HOLE FOOTAGE:	1170'/N & 2600'/E

WELL NAME & NO.:	PF Fed Com 804H
SURFACE HOLE FOOTAGE:	210'/N & 1112'/E
BOTTOM HOLE FOOTAGE:	1170'/N & 1680'/E

WELL NAME & NO.:	PF Fed Com 805H
SURFACE HOLE FOOTAGE:	210'/N & 1087'/E
BOTTOM HOLE FOOTAGE:	150'/S & 780'/E

WELL NAME & NO.:	PF Fed Com 806H
SURFACE HOLE FOOTAGE:	210'/N & 1062'/E
BOTTOM HOLE FOOTAGE:	150'/S & 380'/E

COA

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

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 **970 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature

survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

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

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

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

C. PRESSURE CONTROL

1.

Option 1:

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

Option 2:

- a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - v. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 88436

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 88436
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	3/14/2022
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	3/14/2022
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	3/14/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	3/14/2022