

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. [332687]
2. Name of Operator [373910]		9. API Well No. 30-025-49854
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.

NGMP Rec 03/08/2022

SL

(Continued on page 2)



Approval Date: 11/17/2021

KZ
03/14/2022

*(Instructions on page 2)

INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

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

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

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

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

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

Additional Operator Remarks

Location of Well

0. SHL: TR A / 285 FNL / 1100 FEL / TWSP: 26S / RANGE: 35E / SECTION: 1 / LAT: 32.07879 / LONG: -103.316272 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 0 FNL / 1881 FEL / TWSP: 26S / RANGE: 35E / SECTION: 12 / LAT: 32.05778 / LONG: -103.318779 (TVD: 10418 feet, MD: 18100 feet)

PPP: TR B / 0 FNL / 1880 FEL / TWSP: 26S / RANGE: 35E / SECTION: 12 / LAT: 32.065042 / LONG: -103.318784 (TVD: 10418 feet, MD: 15500 feet)

PPP: TR B / 624 FNL / 1881 FEL / TWSP: 26S / RANGE: 35E / SECTION: 1 / LAT: 32.077859 / LONG: -103.318792 (TVD: 10418 feet, MD: 10813 feet)

BHL: TR B / 1170 FNL / 1880 FEL / TWSP: 26S / RANGE: 35E / SECTION: 13 / LAT: 32.047321 / LONG: -103.318773 (TVD: 10418 feet, MD: 21923 feet)

BLM Point of Contact

Name: TENILLE ORTIZ

Title: Legal Instruments Examiner

Phone: (575) 234-2224

Email: tortiz@blm.gov

CONFIDENTIAL

Review and Appeal Rights

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-49854		² Pool Code 97088		³ Pool Name WC-025 G-08 S253534O;BONE SPRING	
⁴ Property Code 332687		⁵ Property Name PF FED COM			⁶ Well Number 503H
⁷ OGRID No. 373910		⁸ Operator Name FRANKLIN MOUNTAIN ENERGY LLC			⁹ Elevation 3031.1'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	26S	35E		285	NORTH	1100	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no. B	Section 13	Township 26S	Range 35E	Lot Idn	Feet from the 1170	North/South line NORTH	Feet from the 1880	East/West line EAST	County LEA
¹² Dedicated Acres 360		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.

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°42'17"W	2642.13'
L2	N73°35'23"W	815.47'
L3	S00°19'47"E	573.04'

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°04'43.64" (32.078790°)
LONGITUDE = 103°18'58.58" (103.316272°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°04'43.19" (32.078663°)
LONGITUDE = 103°18'56.92" (103.315811°)
STATE PLANE NAD 83 (N.M. EAST)
N: 393885.88' E: 856351.83'
STATE PLANE NAD 27 (N.M. EAST)
N: 393827.93' E: 815164.11'

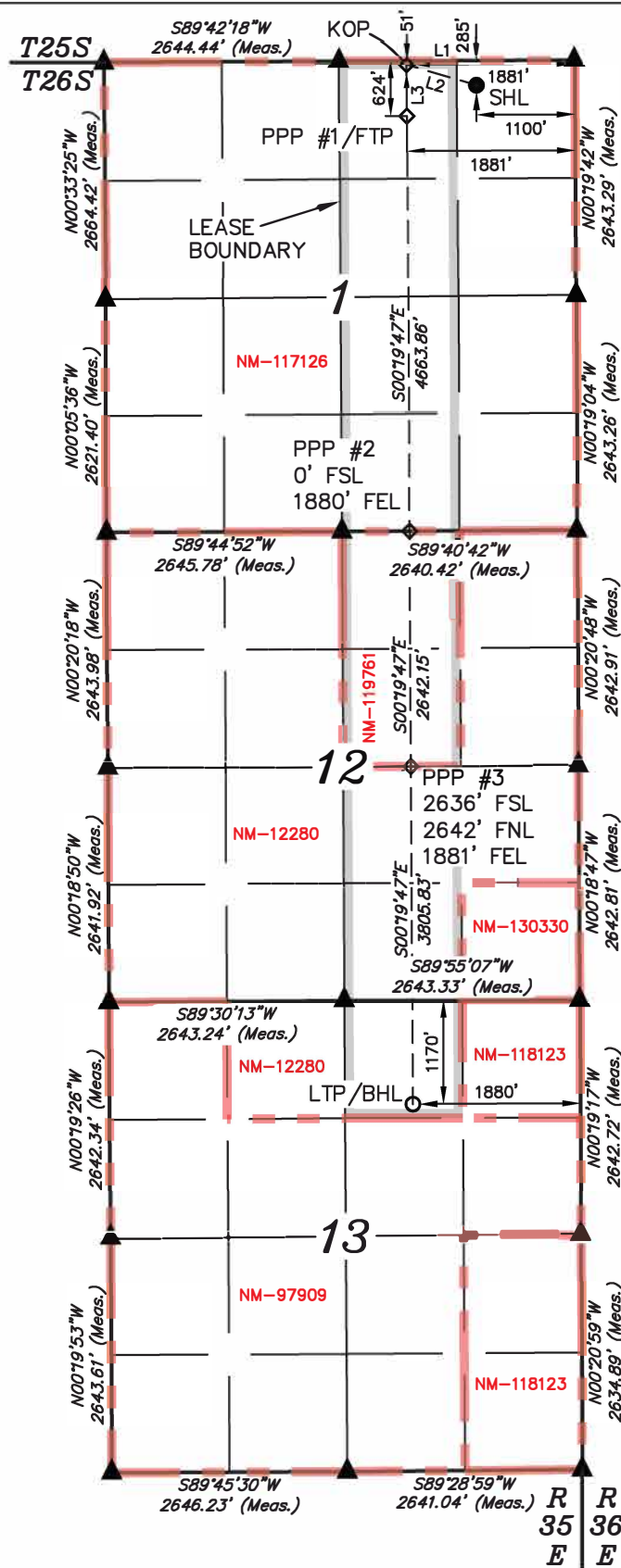
NAD 83 (KICK OFF POINT)
LATITUDE = 32°04'45.96" (32.079434°)
LONGITUDE = 103°19'07.65" (103.318793°)
NAD 27 (KICK OFF POINT)
LATITUDE = 32°04'45.51" (32.079307°)
LONGITUDE = 103°19'06.00" (103.318332°)
STATE PLANE NAD 83 (N.M. EAST)
N: 3941.12.96' E: 855568.74'
STATE PLANE NAD 27 (N.M. EAST)
N: 394055.01' E: 814381.04'

NAD 83 (PPP #1/FTP)
LATITUDE = 32°04'40.29" (32.077859°)
LONGITUDE = 103°19'07.65" (103.318792°)
NAD 27 (PPP #1/FTP)
LATITUDE = 32°04'39.84" (32.077732°)
LONGITUDE = 103°19'05.99" (103.318331°)
STATE PLANE NAD 83 (N.M. EAST)
N: 393540.03' E: 855574.43'
STATE PLANE NAD 27 (N.M. EAST)
N: 393482.10' E: 814386.70'

NAD 83 (PPP #2)
LATITUDE = 32°03'54.15" (32.065042°)
LONGITUDE = 103°19'07.62" (103.318784°)
NAD 27 (PPP #2)
LATITUDE = 32°03'53.69" (32.064915°)
LONGITUDE = 103°19'05.97" (103.318324°)
STATE PLANE NAD 83 (N.M. EAST)
N: 388877.08' E: 855620.71'
STATE PLANE NAD 27 (N.M. EAST)
N: 388819.27' E: 814432.80'

NAD 83 (PPP #3)
LATITUDE = 32°03'28.01" (32.057780°)
LONGITUDE = 103°19'07.61" (103.318779°)
NAD 27 (PPP #3)
LATITUDE = 32°03'27.55" (32.057653°)
LONGITUDE = 103°19'05.95" (103.318320°)
STATE PLANE NAD 83 (N.M. EAST)
N: 386235.44' E: 855646.93'
STATE PLANE NAD 27 (N.M. EAST)
N: 386177.71' E: 814458.92'

NAD 83 (LTP/BHL)
LATITUDE = 32°02'50.36" (32.047321°)
LONGITUDE = 103°19'07.58" (103.318773°)
NAD 27 (LTP/BHL)
LATITUDE = 32°02'49.00" (32.047194°)
LONGITUDE = 103°19'05.93" (103.318314°)
STATE PLANE NAD 83 (N.M. EAST)
N: 382430.35' E: 855684.70'
STATE PLANE NAD 27 (N.M. EAST)
N: 382372.71' E: 814496.54'



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 Julie M. Hunt Date 8/2/2021

Shelly Albrecht
Printed Name

salbrecht@fmellc.com
E-mail Address

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 28, 2021

Date of Survey _____
Signature and Seal of Professional Surveyor: _____



Certificate Number

NOTE:

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

● = SURFACE HOLE LOCATION
 ◇ = KICK OFF POINT/PPP/FTP
 ○ = LAST TAKE POINT/
 BOTTOM HOLE LOCATION
 ▲ = SECTION CORNER LOCATED



SCALE
DRAWN BY: C.C. 05-07-21
REV: 1 Z.T. 07-27-21
D KOP, PPP'S & LEASE INFO

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

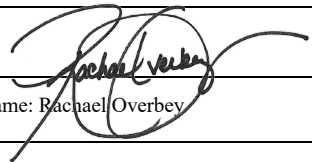
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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 503H

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	2,311'	750'			Carbonates
Salado	1,813'	1,248'			Salt, Carbonate & Clastics
Base Salt	-453'	3,514'			Shaley Carbonate & Shale
Lamar	-1,896'	4,957'			Carbonate & Clastics
Bell Canyon	-1,998'	5,059'			Sandstone - oil/gas/water
Cherry Canyon	-2,846'	5,907'			Sandstone - oil/gas/water
Brushy Canyon	-4,300'	7,361'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,501'	8,562'			Shale/Carbonates - oil/gas
Avalon	-5,528'	8,589'			Shale/Carbonates - oil/gas
Chert Zone	-5,694'	8,755'			Chert/Carbonate
First Bone Spring Sand	-6,758'	9,819'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,905'	9,966'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,276'	10,337'			Sandstone - oil/gas/water
HZ Target at Landing	-7,357'	10,418'			Overpressure shale/sand- Oil/Gas
Third Bone Spring Carbonates	-7,827'	10,888'			Shale/Carbonates - oil/gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,059'	Oil
Bone Spring Sand	9,819'	Oil
Bone Spring Carbonate	10,888'	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	5000	1.81	1.81	3.05	3.47
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	10813	1.23	1.41	1.96	1.34
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	21923 10418	1.32	1.42	1.21	1.00 1.78

7 5/8" casing will be set at 10,813' MD/10,418' TVD at 90° Inc. Stress calculations on 5 1/2" casing performed assuming 21,923' depth. Actual max vertical depth is 10,418'.



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 ft3/sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft3/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	5000	1453	Lead, 12.8 ppg, Class C 5% Salt,	1.79	9.74	0	154	Tail, 14.8 ppg, Class C,	1.33	6.37	4700	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	10813	312	Lite Fill, 9.5 ppg, Class C 3lb/sk	2.13	5.97	4000	94	NeoCem 14.8 ppg, Class C	1.33	6.29	9813	50%
					Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake					0.25 pps Cello-Flake, 2% CaCl ₂				
Prod	6.75	5.5	21923	903	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	9813						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' – 10,813'	Brine	8.8-10.2	28-34	N/c
10,813' – 21,923' 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 10,418' TVD (deepest point of the well) is 170F with an estimated maximum bottom-hole pressure (BHP) at the same point of 6,500 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 4:00:30 PM PST

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: PF Fed Com
Well: Paul Foster Fed Com 503H
Wellbore: OH
Design: Plan #1



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

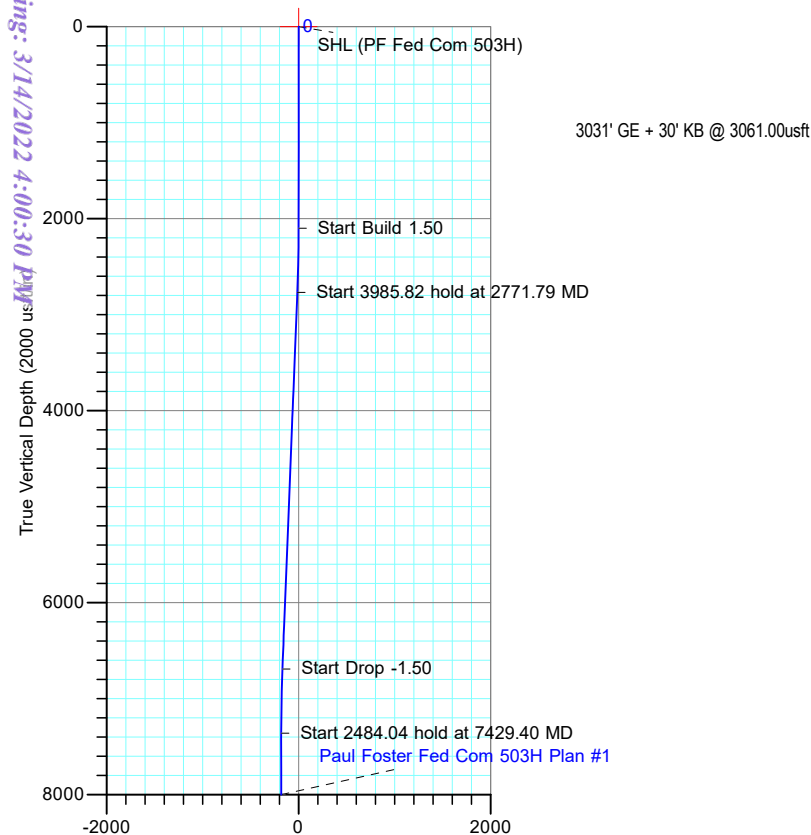
Magnetic Field
Strength: 47427.3nT
Dip Angle: 59.80°
Date: 7/16/2021
Model: IGRF2020

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 5:17:23 PM

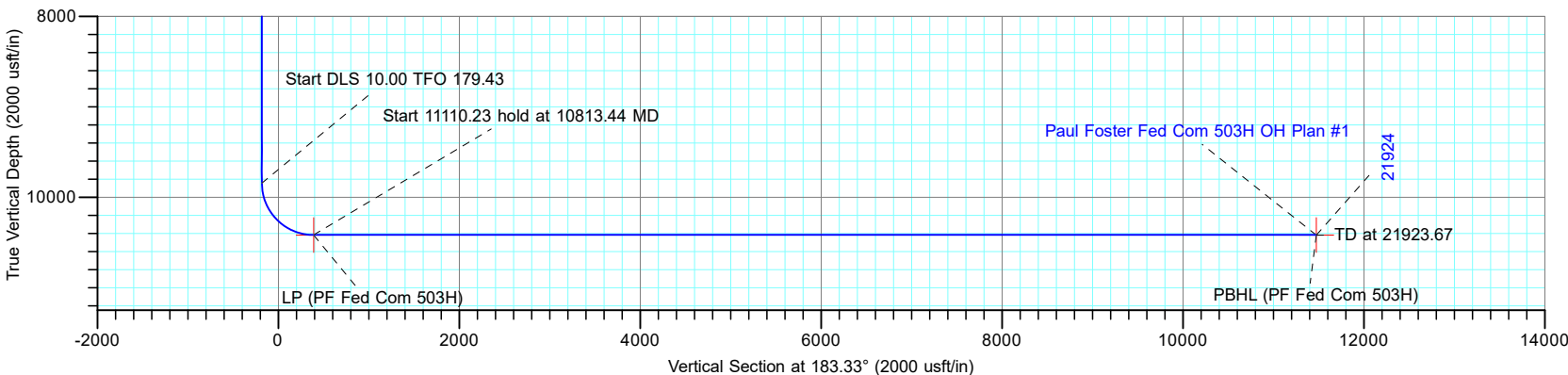
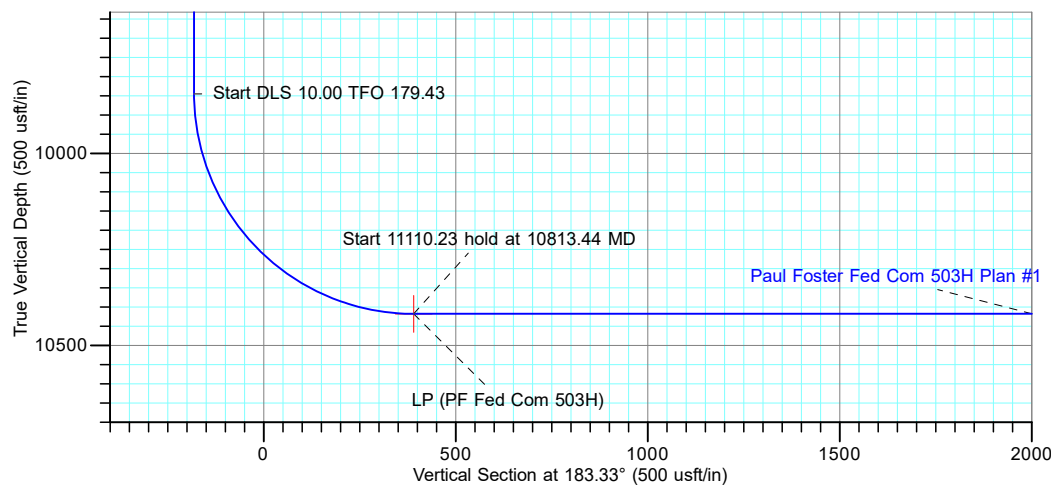


SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2771.79	10.08	286.17	2768.33	16.41	-56.59	1.50	286.17	-13.09	Start 3985.82 hold at 2771.79 MD
6757.61	10.08	286.17	6692.67	210.59	-726.41	0.00	0.00	-168.01	Start Drop -1.50
7429.40	0.00	0.00	7361.00	227.00	-783.00	1.50	180.00	-181.10	Start 2484.04 hold at 7429.40 MD
9913.44	0.00	0.00	9845.04	227.00	-783.00	0.00	0.00	-181.10	Start DLS 10.00 TFO 179.43
10813.44	90.00	179.43	10418.00	-345.93	-777.31	10.00	179.43	390.53	Start 11110.23 hold at 10813.44 MD
21923.67	90.00	179.43	10418.00	-11455.62	-667.04	0.00	0.00	11475.02	TD at 21923.67

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (PF Fed Com 503H)	10418.00	-345.93	-777.31	32.077859	-103.318792
PBHL (PF Fed Com 503H)	10418.00	-11455.62	-667.04	32.047321	-103.318773
SHL (PF Fed Com 503H)	0.00	0.00	0.00	32.078790	-103.316272



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

Plan: Plan #1 (Paul Foster Fed Com 503H/OH)
PF Fed Com
Created By: Dustin Ault
Date: 0:11, July 17 2021
Approved: _____
Date: _____

Page 18 of 175

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: PF Fed Com
Well: Paul Foster Fed Com 503H
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



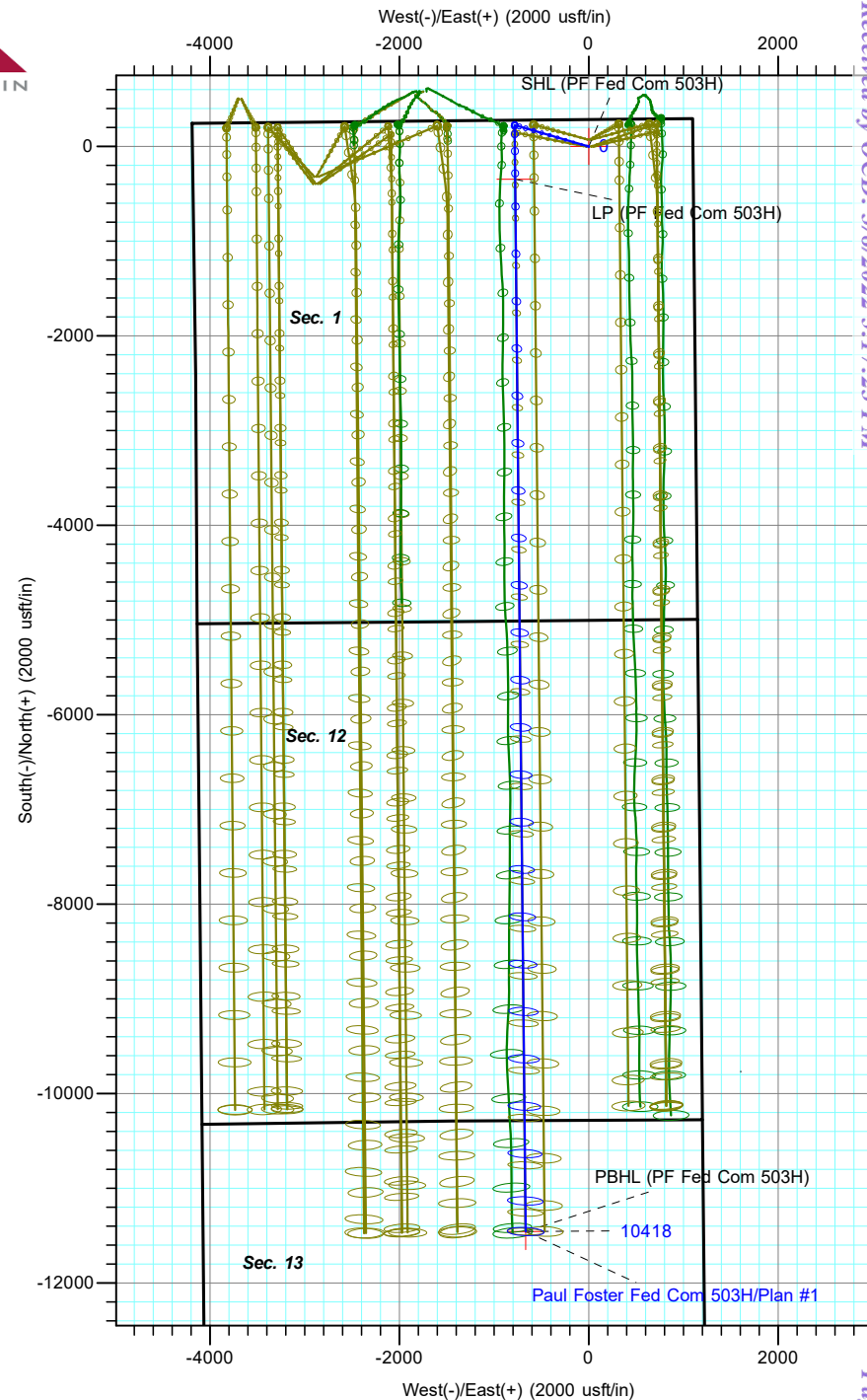
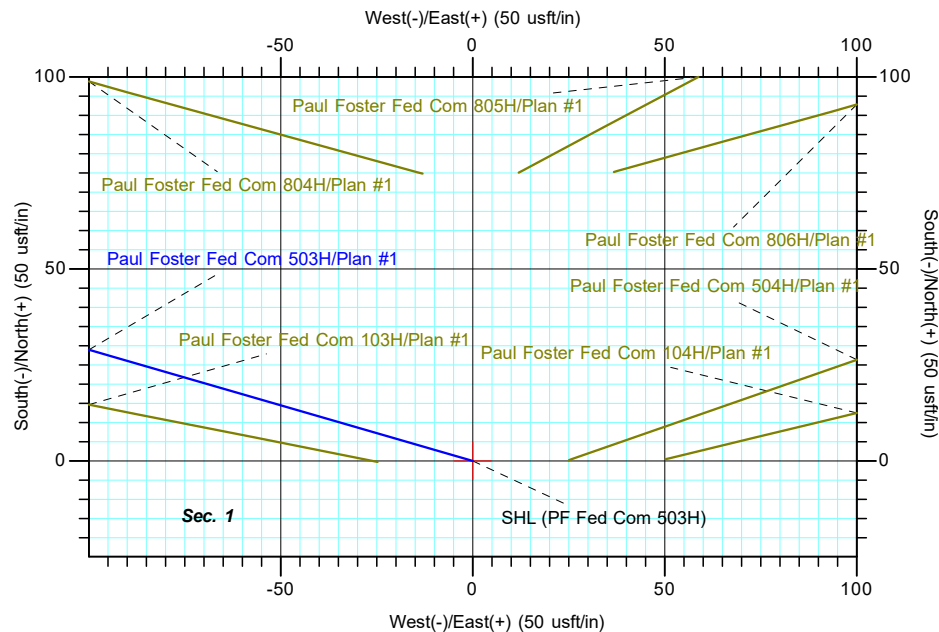
PROJECT DETAILS: Lea County, NM (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (PF Fed Com 503H)	10418.00	-345.93	-777.31	393540.03	855574.43	32.077859	-103.318792
PBHL (PF Fed Com 503H)	10418.00	-11455.62	-667.04	382430.35	855684.70	32.047321	-103.318773
SHL (PF Fed Com 503H)	0.00	0.00	0.00	393885.96	856351.74	32.078790	-103.316272

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	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2771.79	10.08	286.17	2768.33	16.41	-56.59	1.50	286.17	-13.09	Start 3985.82 hold at 2771.79 MD
6757.61	10.08	286.17	6692.67	210.59	-726.41	0.00	0.00	0.00	Start Drop -1.50
7429.40	0.00	0.00	7361.00	227.00	-783.00	1.50	180.00	-181.10	Start 2484.04 hold at 7429.40 MD
9913.44	0.00	0.00	9845.04	227.00	-783.00	0.00	0.00	-181.10	Start DLS 10.00 TFO 179.43
10813.44	90.00	179.43	10418.00	-345.93	-777.31	10.00	179.43	390.53	Start 11110.23 hold at 10813.44 MD
21923.67	90.00	179.43	10418.00	-11455.62	-667.04	0.00	0.00	11475.02	TD at 21923.67



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

Plan: Plan #1 (Paul Foster Fed Com 503H/OH)
PF Fed Com
Created By: Dustin Ault
Date: 0:12, July 17 2021
Approved: _____
Date: _____



Franklin Mountain Energy

Lea County, NM (NAD83)

PF Fed Com

Paul Foster Fed Com 503H

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 503H
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 503H	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 503H			
Well Position	+N/-S	392.25 usft	Northing:	393,885.96 usft
	+E/-W	2,911.59 usft	Easting:	856,351.74 usft
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	47,427.28501677

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	183.33

Plan Survey Tool Program	Date	7/17/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,923.68 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	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,771.79	10.08	286.17	2,768.33	16.41	-56.59	1.50	1.50	0.00	286.17	
6,757.61	10.08	286.17	6,692.67	210.59	-726.41	0.00	0.00	0.00	0.00	
7,429.40	0.00	0.00	7,361.00	227.00	-783.00	1.50	-1.50	0.00	180.00	
9,913.44	0.00	0.00	9,845.04	227.00	-783.00	0.00	0.00	0.00	0.00	
10,813.44	90.00	179.43	10,418.00	-345.93	-777.31	10.00	10.00	19.94	179.43	
21,923.68	90.00	179.43	10,418.00	-11,455.62	-667.04	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 503H
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 503H	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 503H)									
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
Start Build 1.50									
2,200.00	1.50	286.17	2,199.99	0.36	-1.26	-0.29	1.50	1.50	0.00
2,300.00	3.00	286.17	2,299.91	1.46	-5.03	-1.16	1.50	1.50	0.00
2,400.00	4.50	286.17	2,399.69	3.28	-11.31	-2.62	1.50	1.50	0.00
2,500.00	6.00	286.17	2,499.27	5.83	-20.10	-4.65	1.50	1.50	0.00
2,600.00	7.50	286.17	2,598.57	9.10	-31.39	-7.26	1.50	1.50	0.00
2,700.00	9.00	286.17	2,697.54	13.09	-45.17	-10.45	1.50	1.50	0.00
2,771.79	10.08	286.17	2,768.33	16.41	-56.59	-13.09	1.50	1.50	0.00
Start 3985.82 hold at 2771.79 MD									
2,800.00	10.08	286.17	2,796.11	17.78	-61.33	-14.19	0.00	0.00	0.00
2,900.00	10.08	286.17	2,894.56	22.65	-78.14	-18.07	0.00	0.00	0.00
3,000.00	10.08	286.17	2,993.02	27.53	-94.94	-21.96	0.00	0.00	0.00
3,100.00	10.08	286.17	3,091.48	32.40	-111.75	-25.85	0.00	0.00	0.00
3,200.00	10.08	286.17	3,189.94	37.27	-128.55	-29.73	0.00	0.00	0.00
3,300.00	10.08	286.17	3,288.39	42.14	-145.36	-33.62	0.00	0.00	0.00
3,400.00	10.08	286.17	3,386.85	47.01	-162.16	-37.51	0.00	0.00	0.00
3,500.00	10.08	286.17	3,485.31	51.88	-178.97	-41.39	0.00	0.00	0.00
3,600.00	10.08	286.17	3,583.77	56.76	-195.77	-45.28	0.00	0.00	0.00
3,700.00	10.08	286.17	3,682.22	61.63	-212.58	-49.17	0.00	0.00	0.00
3,800.00	10.08	286.17	3,780.68	66.50	-229.38	-53.05	0.00	0.00	0.00
3,900.00	10.08	286.17	3,879.14	71.37	-246.19	-56.94	0.00	0.00	0.00
4,000.00	10.08	286.17	3,977.60	76.24	-262.99	-60.83	0.00	0.00	0.00
4,100.00	10.08	286.17	4,076.05	81.12	-279.80	-64.71	0.00	0.00	0.00
4,200.00	10.08	286.17	4,174.51	85.99	-296.60	-68.60	0.00	0.00	0.00
4,300.00	10.08	286.17	4,272.97	90.86	-313.41	-72.49	0.00	0.00	0.00
4,400.00	10.08	286.17	4,371.43	95.73	-330.21	-76.37	0.00	0.00	0.00
4,500.00	10.08	286.17	4,469.88	100.60	-347.02	-80.26	0.00	0.00	0.00
4,600.00	10.08	286.17	4,568.34	105.48	-363.82	-84.15	0.00	0.00	0.00
4,700.00	10.08	286.17	4,666.80	110.35	-380.63	-88.04	0.00	0.00	0.00
4,800.00	10.08	286.17	4,765.25	115.22	-397.43	-91.92	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 503H
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 503H	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	10.08	286.17	4,863.71	120.09	-414.24	-95.81	0.00	0.00	0.00
5,000.00	10.08	286.17	4,962.17	124.96	-431.04	-99.70	0.00	0.00	0.00
5,100.00	10.08	286.17	5,060.63	129.84	-447.85	-103.58	0.00	0.00	0.00
5,200.00	10.08	286.17	5,159.08	134.71	-464.65	-107.47	0.00	0.00	0.00
5,300.00	10.08	286.17	5,257.54	139.58	-481.46	-111.36	0.00	0.00	0.00
5,400.00	10.08	286.17	5,356.00	144.45	-498.26	-115.24	0.00	0.00	0.00
5,500.00	10.08	286.17	5,454.46	149.32	-515.07	-119.13	0.00	0.00	0.00
5,600.00	10.08	286.17	5,552.91	154.20	-531.87	-123.02	0.00	0.00	0.00
5,700.00	10.08	286.17	5,651.37	159.07	-548.68	-126.90	0.00	0.00	0.00
5,800.00	10.08	286.17	5,749.83	163.94	-565.48	-130.79	0.00	0.00	0.00
5,900.00	10.08	286.17	5,848.29	168.81	-582.29	-134.68	0.00	0.00	0.00
6,000.00	10.08	286.17	5,946.74	173.68	-599.09	-138.56	0.00	0.00	0.00
6,100.00	10.08	286.17	6,045.20	178.55	-615.90	-142.45	0.00	0.00	0.00
6,200.00	10.08	286.17	6,143.66	183.43	-632.70	-146.34	0.00	0.00	0.00
6,300.00	10.08	286.17	6,242.12	188.30	-649.51	-150.22	0.00	0.00	0.00
6,400.00	10.08	286.17	6,340.57	193.17	-666.31	-154.11	0.00	0.00	0.00
6,500.00	10.08	286.17	6,439.03	198.04	-683.12	-158.00	0.00	0.00	0.00
6,600.00	10.08	286.17	6,537.49	202.91	-699.92	-161.88	0.00	0.00	0.00
6,700.00	10.08	286.17	6,635.95	207.79	-716.73	-165.77	0.00	0.00	0.00
6,757.61	10.08	286.17	6,692.67	210.59	-726.41	-168.01	0.00	0.00	0.00
Start Drop -1.50									
6,800.00	9.44	286.17	6,734.44	212.59	-733.31	-169.61	1.50	-1.50	0.00
6,900.00	7.94	286.17	6,833.29	216.80	-747.82	-172.96	1.50	-1.50	0.00
7,000.00	6.44	286.17	6,932.50	220.29	-759.84	-175.74	1.50	-1.50	0.00
7,100.00	4.94	286.17	7,032.01	223.05	-769.37	-177.95	1.50	-1.50	0.00
7,200.00	3.44	286.17	7,131.74	225.08	-776.39	-179.57	1.50	-1.50	0.00
7,300.00	1.94	286.17	7,231.62	226.39	-780.90	-180.61	1.50	-1.50	0.00
7,400.00	0.44	286.17	7,331.60	226.97	-782.89	-181.08	1.50	-1.50	0.00
7,429.40	0.00	0.00	7,361.00	227.00	-783.00	-181.10	1.50	-1.50	0.00
Start 2484.04 hold at 7429.40 MD									
7,500.00	0.00	0.00	7,431.60	227.00	-783.00	-181.10	0.00	0.00	0.00
7,600.00	0.00	0.00	7,531.60	227.00	-783.00	-181.10	0.00	0.00	0.00
7,700.00	0.00	0.00	7,631.60	227.00	-783.00	-181.10	0.00	0.00	0.00
7,800.00	0.00	0.00	7,731.60	227.00	-783.00	-181.10	0.00	0.00	0.00
7,900.00	0.00	0.00	7,831.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,000.00	0.00	0.00	7,931.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,100.00	0.00	0.00	8,031.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,200.00	0.00	0.00	8,131.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,300.00	0.00	0.00	8,231.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,400.00	0.00	0.00	8,331.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,500.00	0.00	0.00	8,431.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,600.00	0.00	0.00	8,531.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,700.00	0.00	0.00	8,631.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,800.00	0.00	0.00	8,731.60	227.00	-783.00	-181.10	0.00	0.00	0.00
8,900.00	0.00	0.00	8,831.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,000.00	0.00	0.00	8,931.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,100.00	0.00	0.00	9,031.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,200.00	0.00	0.00	9,131.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,300.00	0.00	0.00	9,231.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,400.00	0.00	0.00	9,331.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,500.00	0.00	0.00	9,431.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,600.00	0.00	0.00	9,531.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,700.00	0.00	0.00	9,631.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,800.00	0.00	0.00	9,731.60	227.00	-783.00	-181.10	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 503H
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 503H	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)
9,900.00	0.00	0.00	9,831.60	227.00	-783.00	-181.10	0.00	0.00	0.00
9,913.44	0.00	0.00	9,845.04	227.00	-783.00	-181.10	0.00	0.00	0.00
Start DLS 10.00 TFO 179.43									
9,950.00	3.66	179.43	9,881.57	225.83	-782.99	-179.94	10.00	10.00	0.00
10,000.00	8.66	179.43	9,931.27	220.47	-782.94	-174.59	10.00	10.00	0.00
10,050.00	13.66	179.43	9,980.31	210.80	-782.84	-164.94	10.00	10.00	0.00
10,100.00	18.66	179.43	10,028.32	196.90	-782.70	-151.07	10.00	10.00	0.00
10,150.00	23.66	179.43	10,074.94	178.86	-782.52	-133.07	10.00	10.00	0.00
10,200.00	28.66	179.43	10,119.80	156.83	-782.30	-111.08	10.00	10.00	0.00
10,250.00	33.66	179.43	10,162.58	130.97	-782.05	-85.28	10.00	10.00	0.00
10,300.00	38.66	179.43	10,202.93	101.48	-781.75	-55.86	10.00	10.00	0.00
10,350.00	43.66	179.43	10,240.57	68.58	-781.43	-23.04	10.00	10.00	0.00
10,400.00	48.66	179.43	10,275.19	32.54	-781.07	12.92	10.00	10.00	0.00
10,450.00	53.66	179.43	10,306.54	-6.39	-780.68	51.76	10.00	10.00	0.00
10,500.00	58.66	179.43	10,334.38	-47.90	-780.27	93.18	10.00	10.00	0.00
10,550.00	63.66	179.43	10,358.49	-91.69	-779.84	136.86	10.00	10.00	0.00
10,600.00	68.66	179.43	10,378.70	-137.40	-779.38	182.47	10.00	10.00	0.00
10,650.00	73.66	179.43	10,394.84	-184.70	-778.91	229.67	10.00	10.00	0.00
10,700.00	78.66	179.43	10,406.80	-233.23	-778.43	278.09	10.00	10.00	0.00
10,750.00	83.66	179.43	10,414.49	-282.62	-777.94	327.36	10.00	10.00	0.00
10,800.00	88.66	179.43	10,417.84	-332.49	-777.45	377.12	10.00	10.00	0.00
10,813.44	90.00	179.43	10,418.00	-345.93	-777.31	390.53	10.00	10.00	0.00
Start 11110.23 hold at 10813.44 MD - LP (PF Fed Com 503H)									
10,900.00	90.00	179.43	10,418.00	-432.48	-776.45	476.89	0.00	0.00	0.00
11,000.00	90.00	179.43	10,418.00	-532.48	-775.46	576.66	0.00	0.00	0.00
11,100.00	90.00	179.43	10,418.00	-632.47	-774.47	676.42	0.00	0.00	0.00
11,200.00	90.00	179.43	10,418.00	-732.47	-773.48	776.19	0.00	0.00	0.00
11,300.00	90.00	179.43	10,418.00	-832.46	-772.48	875.96	0.00	0.00	0.00
11,400.00	90.00	179.43	10,418.00	-932.46	-771.49	975.73	0.00	0.00	0.00
11,500.00	90.00	179.43	10,418.00	-1,032.45	-770.50	1,075.50	0.00	0.00	0.00
11,600.00	90.00	179.43	10,418.00	-1,132.45	-769.51	1,175.27	0.00	0.00	0.00
11,700.00	90.00	179.43	10,418.00	-1,232.44	-768.51	1,275.03	0.00	0.00	0.00
11,800.00	90.00	179.43	10,418.00	-1,332.44	-767.52	1,374.80	0.00	0.00	0.00
11,900.00	90.00	179.43	10,418.00	-1,432.43	-766.53	1,474.57	0.00	0.00	0.00
12,000.00	90.00	179.43	10,418.00	-1,532.43	-765.54	1,574.34	0.00	0.00	0.00
12,100.00	90.00	179.43	10,418.00	-1,632.42	-764.54	1,674.11	0.00	0.00	0.00
12,200.00	90.00	179.43	10,418.00	-1,732.42	-763.55	1,773.88	0.00	0.00	0.00
12,300.00	90.00	179.43	10,418.00	-1,832.42	-762.56	1,873.64	0.00	0.00	0.00
12,400.00	90.00	179.43	10,418.00	-1,932.41	-761.57	1,973.41	0.00	0.00	0.00
12,500.00	90.00	179.43	10,418.00	-2,032.41	-760.57	2,073.18	0.00	0.00	0.00
12,600.00	90.00	179.43	10,418.00	-2,132.40	-759.58	2,172.95	0.00	0.00	0.00
12,700.00	90.00	179.43	10,418.00	-2,232.40	-758.59	2,272.72	0.00	0.00	0.00
12,800.00	90.00	179.43	10,418.00	-2,332.39	-757.60	2,372.49	0.00	0.00	0.00
12,900.00	90.00	179.43	10,418.00	-2,432.39	-756.60	2,472.25	0.00	0.00	0.00
13,000.00	90.00	179.43	10,418.00	-2,532.38	-755.61	2,572.02	0.00	0.00	0.00
13,100.00	90.00	179.43	10,418.00	-2,632.38	-754.62	2,671.79	0.00	0.00	0.00
13,200.00	90.00	179.43	10,418.00	-2,732.37	-753.63	2,771.56	0.00	0.00	0.00
13,300.00	90.00	179.43	10,418.00	-2,832.37	-752.63	2,871.33	0.00	0.00	0.00
13,400.00	90.00	179.43	10,418.00	-2,932.36	-751.64	2,971.10	0.00	0.00	0.00
13,500.00	90.00	179.43	10,418.00	-3,032.36	-750.65	3,070.86	0.00	0.00	0.00
13,600.00	90.00	179.43	10,418.00	-3,132.35	-749.66	3,170.63	0.00	0.00	0.00
13,700.00	90.00	179.43	10,418.00	-3,232.35	-748.66	3,270.40	0.00	0.00	0.00
13,800.00	90.00	179.43	10,418.00	-3,332.34	-747.67	3,370.17	0.00	0.00	0.00
13,900.00	90.00	179.43	10,418.00	-3,432.34	-746.68	3,469.94	0.00	0.00	0.00



Total Directional Services

Planning Report



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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 503H	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	10,418.00	-3,532.33	-745.69	3,569.71	0.00	0.00	0.00	
14,100.00	90.00	179.43	10,418.00	-3,632.33	-744.69	3,669.47	0.00	0.00	0.00	
14,200.00	90.00	179.43	10,418.00	-3,732.32	-743.70	3,769.24	0.00	0.00	0.00	
14,300.00	90.00	179.43	10,418.00	-3,832.32	-742.71	3,869.01	0.00	0.00	0.00	
14,400.00	90.00	179.43	10,418.00	-3,932.31	-741.72	3,968.78	0.00	0.00	0.00	
14,500.00	90.00	179.43	10,418.00	-4,032.31	-740.72	4,068.55	0.00	0.00	0.00	
14,600.00	90.00	179.43	10,418.00	-4,132.30	-739.73	4,168.31	0.00	0.00	0.00	
14,700.00	90.00	179.43	10,418.00	-4,232.30	-738.74	4,268.08	0.00	0.00	0.00	
14,800.00	90.00	179.43	10,418.00	-4,332.29	-737.75	4,367.85	0.00	0.00	0.00	
14,900.00	90.00	179.43	10,418.00	-4,432.29	-736.75	4,467.62	0.00	0.00	0.00	
15,000.00	90.00	179.43	10,418.00	-4,532.28	-735.76	4,567.39	0.00	0.00	0.00	
15,100.00	90.00	179.43	10,418.00	-4,632.28	-734.77	4,667.16	0.00	0.00	0.00	
15,200.00	90.00	179.43	10,418.00	-4,732.27	-733.78	4,766.92	0.00	0.00	0.00	
15,300.00	90.00	179.43	10,418.00	-4,832.27	-732.78	4,866.69	0.00	0.00	0.00	
15,400.00	90.00	179.43	10,418.00	-4,932.26	-731.79	4,966.46	0.00	0.00	0.00	
15,500.00	90.00	179.43	10,418.00	-5,032.26	-730.80	5,066.23	0.00	0.00	0.00	
15,600.00	90.00	179.43	10,418.00	-5,132.25	-729.81	5,166.00	0.00	0.00	0.00	
15,700.00	90.00	179.43	10,418.00	-5,232.25	-728.81	5,265.77	0.00	0.00	0.00	
15,800.00	90.00	179.43	10,418.00	-5,332.24	-727.82	5,365.53	0.00	0.00	0.00	
15,900.00	90.00	179.43	10,418.00	-5,432.24	-726.83	5,465.30	0.00	0.00	0.00	
16,000.00	90.00	179.43	10,418.00	-5,532.23	-725.84	5,565.07	0.00	0.00	0.00	
16,100.00	90.00	179.43	10,418.00	-5,632.23	-724.84	5,664.84	0.00	0.00	0.00	
16,200.00	90.00	179.43	10,418.00	-5,732.22	-723.85	5,764.61	0.00	0.00	0.00	
16,300.00	90.00	179.43	10,418.00	-5,832.22	-722.86	5,864.38	0.00	0.00	0.00	
16,400.00	90.00	179.43	10,418.00	-5,932.21	-721.87	5,964.14	0.00	0.00	0.00	
16,500.00	90.00	179.43	10,418.00	-6,032.21	-720.87	6,063.91	0.00	0.00	0.00	
16,600.00	90.00	179.43	10,418.00	-6,132.20	-719.88	6,163.68	0.00	0.00	0.00	
16,700.00	90.00	179.43	10,418.00	-6,232.20	-718.89	6,263.45	0.00	0.00	0.00	
16,800.00	90.00	179.43	10,418.00	-6,332.19	-717.90	6,363.22	0.00	0.00	0.00	
16,900.00	90.00	179.43	10,418.00	-6,432.19	-716.90	6,462.99	0.00	0.00	0.00	
17,000.00	90.00	179.43	10,418.00	-6,532.18	-715.91	6,562.75	0.00	0.00	0.00	
17,100.00	90.00	179.43	10,418.00	-6,632.18	-714.92	6,662.52	0.00	0.00	0.00	
17,200.00	90.00	179.43	10,418.00	-6,732.17	-713.93	6,762.29	0.00	0.00	0.00	
17,300.00	90.00	179.43	10,418.00	-6,832.17	-712.93	6,862.06	0.00	0.00	0.00	
17,400.00	90.00	179.43	10,418.00	-6,932.16	-711.94	6,961.83	0.00	0.00	0.00	
17,500.00	90.00	179.43	10,418.00	-7,032.16	-710.95	7,061.60	0.00	0.00	0.00	
17,600.00	90.00	179.43	10,418.00	-7,132.15	-709.96	7,161.36	0.00	0.00	0.00	
17,700.00	90.00	179.43	10,418.00	-7,232.15	-708.96	7,261.13	0.00	0.00	0.00	
17,800.00	90.00	179.43	10,418.00	-7,332.14	-707.97	7,360.90	0.00	0.00	0.00	
17,900.00	90.00	179.43	10,418.00	-7,432.14	-706.98	7,460.67	0.00	0.00	0.00	
18,000.00	90.00	179.43	10,418.00	-7,532.13	-705.99	7,560.44	0.00	0.00	0.00	
18,100.00	90.00	179.43	10,418.00	-7,632.13	-704.99	7,660.21	0.00	0.00	0.00	
18,200.00	90.00	179.43	10,418.00	-7,732.12	-704.00	7,759.97	0.00	0.00	0.00	
18,300.00	90.00	179.43	10,418.00	-7,832.12	-703.01	7,859.74	0.00	0.00	0.00	
18,400.00	90.00	179.43	10,418.00	-7,932.11	-702.02	7,959.51	0.00	0.00	0.00	
18,500.00	90.00	179.43	10,418.00	-8,032.11	-701.02	8,059.28	0.00	0.00	0.00	
18,600.00	90.00	179.43	10,418.00	-8,132.10	-700.03	8,159.05	0.00	0.00	0.00	
18,700.00	90.00	179.43	10,418.00	-8,232.10	-699.04	8,258.81	0.00	0.00	0.00	
18,800.00	90.00	179.43	10,418.00	-8,332.10	-698.05	8,358.58	0.00	0.00	0.00	
18,900.00	90.00	179.43	10,418.00	-8,432.09	-697.05	8,458.35	0.00	0.00	0.00	
19,000.00	90.00	179.43	10,418.00	-8,532.09	-696.06	8,558.12	0.00	0.00	0.00	
19,100.00	90.00	179.43	10,418.00	-8,632.08	-695.07	8,657.89	0.00	0.00	0.00	
19,200.00	90.00	179.43	10,418.00	-8,732.08	-694.08	8,757.66	0.00	0.00	0.00	
19,300.00	90.00	179.43	10,418.00	-8,832.07	-693.08	8,857.42	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 503H
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 503H	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	10,418.00	-8,932.07	-692.09	8,957.19	0.00	0.00	0.00	
19,500.00	90.00	179.43	10,418.00	-9,032.06	-691.10	9,056.96	0.00	0.00	0.00	
19,600.00	90.00	179.43	10,418.00	-9,132.06	-690.11	9,156.73	0.00	0.00	0.00	
19,700.00	90.00	179.43	10,418.00	-9,232.05	-689.11	9,256.50	0.00	0.00	0.00	
19,800.00	90.00	179.43	10,418.00	-9,332.05	-688.12	9,356.27	0.00	0.00	0.00	
19,900.00	90.00	179.43	10,418.00	-9,432.04	-687.13	9,456.03	0.00	0.00	0.00	
20,000.00	90.00	179.43	10,418.00	-9,532.04	-686.14	9,555.80	0.00	0.00	0.00	
20,100.00	90.00	179.43	10,418.00	-9,632.03	-685.14	9,655.57	0.00	0.00	0.00	
20,200.00	90.00	179.43	10,418.00	-9,732.03	-684.15	9,755.34	0.00	0.00	0.00	
20,300.00	90.00	179.43	10,418.00	-9,832.02	-683.16	9,855.11	0.00	0.00	0.00	
20,400.00	90.00	179.43	10,418.00	-9,932.02	-682.17	9,954.88	0.00	0.00	0.00	
20,500.00	90.00	179.43	10,418.00	-10,032.01	-681.17	10,054.64	0.00	0.00	0.00	
20,600.00	90.00	179.43	10,418.00	-10,132.01	-680.18	10,154.41	0.00	0.00	0.00	
20,700.00	90.00	179.43	10,418.00	-10,232.00	-679.19	10,254.18	0.00	0.00	0.00	
20,800.00	90.00	179.43	10,418.00	-10,332.00	-678.20	10,353.95	0.00	0.00	0.00	
20,900.00	90.00	179.43	10,418.00	-10,431.99	-677.20	10,453.72	0.00	0.00	0.00	
21,000.00	90.00	179.43	10,418.00	-10,531.99	-676.21	10,553.49	0.00	0.00	0.00	
21,100.00	90.00	179.43	10,418.00	-10,631.98	-675.22	10,653.25	0.00	0.00	0.00	
21,200.00	90.00	179.43	10,418.00	-10,731.98	-674.23	10,753.02	0.00	0.00	0.00	
21,300.00	90.00	179.43	10,418.00	-10,831.97	-673.23	10,852.79	0.00	0.00	0.00	
21,400.00	90.00	179.43	10,418.00	-10,931.97	-672.24	10,952.56	0.00	0.00	0.00	
21,500.00	90.00	179.43	10,418.00	-11,031.96	-671.25	11,052.33	0.00	0.00	0.00	
21,600.00	90.00	179.43	10,418.00	-11,131.96	-670.26	11,152.10	0.00	0.00	0.00	
21,700.00	90.00	179.43	10,418.00	-11,231.95	-669.26	11,251.86	0.00	0.00	0.00	
21,800.00	90.00	179.43	10,418.00	-11,331.95	-668.27	11,351.63	0.00	0.00	0.00	
21,900.00	90.00	179.43	10,418.00	-11,431.94	-667.28	11,451.40	0.00	0.00	0.00	
21,923.68	90.00	179.43	10,418.00	-11,455.62	-667.04	11,475.02	0.00	0.00	0.00	
TD at 21923.67 - PBHL (PF Fed Com 503H)										

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 503H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	393,885.96	856,351.74	32.078790	-103.316272
PBHL (PF Fed Com 503) - plan hits target center - Point	0.00	0.00	10,418.00	-11,455.62	-667.04	382,430.35	855,684.69	32.047321	-103.318773
LP (PF Fed Com 503H) - plan hits target center - Point	0.00	0.00	10,418.00	-345.93	-777.31	393,540.03	855,574.43	32.077859	-103.318792



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
2,100.00	2,100.00	0.00	0.00	Start Build 1.50	
2,771.79	2,768.33	16.41	-56.59	Start 3985.82 hold at 2771.79 MD	
6,757.61	6,692.67	210.59	-726.41	Start Drop -1.50	
7,429.40	7,361.00	227.00	-783.00	Start 2484.04 hold at 7429.40 MD	
9,913.44	9,845.04	227.00	-783.00	Start DLS 10.00 TFO 179.43	
10,813.44	10,418.00	-345.93	-777.31	Start 11110.23 hold at 10813.44 MD	
21,923.68	10,418.00	-11,455.62	-667.04	TD at 21923.67	



Franklin Mountain Energy

Lea County, NM (NAD83)
PF Fed Com
Paul Foster Fed Com 503H

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 503H
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 503H	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	21,923.68	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	7,211.38	7,124.85	1,211.89	1,178.17	35.946	CC, ES
Bus Driver Fed Com 602H - OH - OH	15,500.00	16,643.00	1,968.44	1,872.92	20.608	SF
Bus Driver Fed Com 602H - OH - Plan #6	7,211.38	7,124.85	1,211.89	1,178.17	35.946	CC, ES
Bus Driver Fed Com 602H - OH - Plan #6	21,923.68	23,122.62	2,253.58	2,070.54	12.312	SF
Bus Driver Fed Com 702H - OH - OH	6,942.07	6,753.49	1,637.84	1,605.34	50.390	CC, ES
Bus Driver Fed Com 702H - OH - OH	10,450.00	10,370.81	1,704.09	1,654.84	34.601	SF
Bus Driver Fed Com 702H - OH - Plan #5	6,908.28	6,698.73	1,624.16	1,591.92	50.377	CC, ES
Bus Driver Fed Com 702H - OH - Plan #5	21,923.68	23,521.63	2,446.37	2,235.92	11.625	SF
Kaston Fed Com 603H - OH - OH	8,446.11	8,487.45	107.99	67.31	2.655	CC
Kaston Fed Com 603H - OH - OH	10,150.00	10,185.05	115.52	66.89	2.376	SF
Kaston Fed Com 603H - OH - OH	10,159.39	10,193.47	115.44	66.87	2.377	ES
Kaston Fed Com 703H - OH - OH	7,347.51	7,320.08	699.62	664.94	20.177	CC
Kaston Fed Com 703H - OH - OH	9,042.61	9,029.63	701.01	658.32	16.419	ES
Kaston Fed Com 703H - OH - OH	10,200.00	10,171.18	720.19	672.23	15.018	SF
Kaston Fed Com 703H - OH - Plan #9	7,347.54	7,320.10	699.50	664.76	20.135	CC
Kaston Fed Com 703H - OH - Plan #9	9,042.67	9,029.67	700.89	658.12	16.387	ES
Kaston Fed Com 703H - OH - Plan #9	21,923.68	23,504.65	1,759.46	1,598.10	10.904	SF
Judge Baylor Fed Com						
Judge Baylor Fed Com 601H - OH - Plan #5	7,298.95	7,182.35	3,032.46	2,996.03	83.228	CC
Judge Baylor Fed Com 601H - OH - Plan #5	10,100.00	10,081.09	3,043.47	2,993.18	60.524	ES
Judge Baylor Fed Com 601H - OH - Plan #5	20,900.00	22,101.01	3,467.15	3,239.03	15.199	SF
Judge Baylor Fed Com 701H - OH - Plan #5	9,913.44	9,895.51	2,733.35	2,683.90	55.268	CC
Judge Baylor Fed Com 701H - OH - Plan #5	10,100.00	10,078.79	2,733.54	2,683.26	54.360	ES
Judge Baylor Fed Com 701H - OH - Plan #5	20,900.00	22,390.61	3,354.80	3,138.87	15.537	SF
LHS Wildcat Fed Com						
LHS Wildcat Fed Com 604H - OH - OH	2,197.92	2,208.65	728.72	719.36	77.891	CC
LHS Wildcat Fed Com 604H - OH - OH	2,200.00	2,210.55	728.72	719.36	77.824	ES
LHS Wildcat Fed Com 604H - OH - OH	20,700.00	21,860.00	2,043.60	1,865.87	11.498	SF
LHS Wildcat Fed Com 705H - OH - OH	1,588.87	1,590.45	781.98	774.78	108.607	CC
LHS Wildcat Fed Com 705H - OH - OH	1,600.00	1,599.42	782.00	774.76	108.100	ES
LHS Wildcat Fed Com 705H - OH - OH	20,800.00	22,230.00	2,357.82	2,168.52	12.456	SF

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	24.78	14.97	2.526	CC, ES
Paul Foster Fed Com 103H - OH - Plan #1	4,800.00	4,794.34	42.53	17.17	1.677	SF
Paul Foster Fed Com 104H - OH - Plan #1	2,100.00	2,100.00	50.18	39.86	4.864	CC, ES, SF
Paul Foster Fed Com 504H - 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	3,508.81	3,502.94	66.20	48.49	3.737	CC
Paul Foster Fed Com 804H - OH - Plan #1	3,600.00	3,593.99	66.40	48.18	3.645	ES
Paul Foster Fed Com 804H - OH - Plan #1	3,900.00	3,893.52	69.71	49.88	3.515	SF
Paul Foster Fed Com 805H - OH - Plan #1	2,219.11	2,218.85	75.84	64.92	6.949	CC, ES
Paul Foster Fed Com 805H - OH - Plan #1	2,400.00	2,396.71	79.26	67.46	6.720	SF
Paul Foster Fed Com 806H - OH - Plan #1	2,100.00	2,100.00	83.80	73.48	8.122	CC, ES
Paul Foster Fed Com 806H - OH - Plan #1	2,300.00	2,296.64	88.56	77.27	7.844	SF
PF Fed Com 101H - OH - Plan #1	7,216.33	7,076.31	2,505.69	2,468.64	67.638	CC
PF Fed Com 101H - OH - Plan #1	8,100.00	8,084.08	2,506.25	2,464.70	60.306	ES
PF Fed Com 101H - OH - Plan #1	20,900.00	18,634.72	3,143.37	2,936.15	15.169	SF
PF Fed Com 102H - OH - Plan #1	8,100.00	8,138.99	1,307.35	1,265.69	31.383	CC
PF Fed Com 102H - OH - Plan #1	8,200.00	8,227.72	1,307.71	1,265.62	31.074	ES
PF Fed Com 102H - OH - Plan #1	21,923.68	20,078.25	2,221.50	2,034.80	11.899	SF
PF Fed Com 501H - OH - Plan #1	7,285.38	7,200.54	2,503.61	2,465.84	66.289	CC
PF Fed Com 501H - OH - Plan #1	20,600.00	20,786.05	2,512.08	2,272.69	10.494	ES
PF Fed Com 501H - OH - Plan #1	20,800.00	20,792.10	2,519.59	2,277.74	10.418	SF
PF Fed Com 502H - OH - Plan #1	10,949.32	11,073.75	1,306.16	1,252.58	24.380	CC
PF Fed Com 502H - OH - Plan #1	21,923.68	22,046.30	1,308.00	1,038.06	4.845	ES, SF
PF Fed Com 801H - OH - Plan #1	7,036.48	6,783.36	2,599.17	2,563.34	72.533	CC
PF Fed Com 801H - OH - Plan #1	10,100.00	10,100.62	2,604.21	2,552.97	50.830	ES
PF Fed Com 801H - OH - Plan #1	20,900.00	22,715.49	3,362.05	3,160.57	16.687	SF
PF Fed Com 802H - OH - Plan #1	9,913.44	9,904.36	1,794.87	1,744.49	35.626	CC
PF Fed Com 802H - OH - Plan #1	10,100.00	10,087.64	1,795.18	1,743.95	35.046	ES
PF Fed Com 802H - OH - Plan #1	21,923.68	23,929.64	2,620.41	2,421.92	13.202	SF
PF Fed Com 803H - OH - Plan #1	9,913.44	10,038.99	817.06	766.18	16.057	CC
PF Fed Com 803H - OH - Plan #1	10,050.00	10,174.26	817.25	765.71	15.856	ES
PF Fed Com 803H - OH - Plan #1	21,923.68	24,130.17	2,198.20	2,044.11	14.266	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							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	-71.97	580.13	-1,782.35	1,874.38				
100.00	100.00	125.35	125.35	0.13	0.19	-71.96	580.35	-1,782.33	1,874.44	1,874.21	0.23	8,140.595	
200.00	200.00	221.50	221.50	0.48	0.53	-71.96	580.46	-1,782.38	1,874.52	1,873.81	0.72	2,616.803	
300.00	300.00	300.03	300.03	0.84	0.81	-71.94	581.19	-1,782.85	1,875.38	1,874.21	1.17	1,606.272	
400.00	400.00	378.84	378.81	1.20	1.09	-71.92	582.55	-1,784.08	1,877.38	1,875.76	1.62	1,157.450	
500.00	500.00	478.78	478.71	1.56	1.45	-71.90	584.07	-1,786.51	1,880.17	1,878.04	2.13	884.120	
600.00	600.00	590.68	590.58	1.92	1.84	-71.92	584.02	-1,789.09	1,882.34	1,879.68	2.66	708.079	
700.00	700.00	686.95	686.79	2.28	2.18	-72.00	582.00	-1,791.54	1,884.12	1,880.97	3.15	598.162	
800.00	800.00	871.78	871.25	2.63	2.83	-72.33	571.14	-1,793.22	1,882.51	1,878.65	3.86	487.719	
900.00	900.00	959.29	958.49	2.99	3.14	-72.54	564.42	-1,794.14	1,881.10	1,876.77	4.33	434.062	
1,000.00	1,000.00	1,048.97	1,048.01	3.35	3.46	-72.70	558.94	-1,794.43	1,879.59	1,874.77	4.81	390.451	
1,100.00	1,100.00	1,155.66	1,154.52	3.71	3.84	-72.88	552.96	-1,794.96	1,878.41	1,873.07	5.34	351.827	
1,200.00	1,200.00	1,245.16	1,243.92	4.07	4.16	-73.00	548.69	-1,794.93	1,877.00	1,871.18	5.82	322.518	

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 503H
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 503H	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				
1,300.00	1,300.00	1,337.59	1,336.30	4.43	4.49	-73.10	545.36	-1,795.18	1,876.22	1,869.91	6.31	297.451				
1,400.00	1,400.00	1,425.00	1,423.68	4.79	4.68	-73.16	543.49	-1,795.53	1,875.98	1,869.29	6.69	280.322				
1,408.22	1,408.22	1,435.79	1,434.47	4.82	4.68	-73.17	543.29	-1,795.58	1,875.97	1,869.26	6.72	279.362				
1,500.00	1,500.00	1,506.88	1,505.55	5.14	4.70	-73.19	542.57	-1,796.22	1,876.49	1,869.52	6.97	269.361				
1,600.00	1,600.00	1,600.71	1,599.37	5.50	4.74	-73.19	543.10	-1,797.38	1,877.84	1,870.58	7.26	258.609				
1,700.00	1,700.00	1,698.13	1,696.77	5.86	4.80	-73.14	544.90	-1,798.38	1,879.35	1,871.78	7.58	248.055				
1,800.00	1,800.00	1,798.74	1,797.35	6.22	4.89	-73.09	547.18	-1,799.34	1,880.93	1,873.02	7.91	237.737				
1,900.00	1,900.00	1,902.02	1,900.61	6.58	5.01	-73.03	549.51	-1,800.23	1,882.41	1,874.14	8.27	227.685				
2,000.00	2,000.00	2,014.68	2,013.23	6.94	5.17	-72.95	552.08	-1,800.64	1,883.42	1,874.77	8.65	217.782				
2,100.00	2,100.00	2,121.69	2,120.21	7.29	5.34	-72.87	554.79	-1,800.37	1,883.92	1,874.88	9.04	208.446				
2,200.00	2,199.99	2,224.95	2,223.43	7.65	5.52	1.05	557.68	-1,799.72	1,882.84	1,873.41	9.43	199.650				
2,300.00	2,299.91	2,324.76	2,323.19	7.99	5.72	1.15	560.67	-1,798.94	1,879.06	1,869.23	9.83	191.241				
2,400.00	2,399.69	2,424.40	2,422.77	8.34	5.92	1.26	563.90	-1,798.14	1,872.72	1,862.49	10.23	183.062				
2,500.00	2,499.27	2,545.49	2,543.80	8.70	6.20	1.38	567.19	-1,796.81	1,863.38	1,852.71	10.67	174.635				
2,600.00	2,598.57	2,654.74	2,653.02	9.06	6.45	1.46	568.92	-1,794.79	1,850.34	1,839.24	11.10	166.661				
2,700.00	2,697.54	2,733.98	2,732.25	9.42	6.65	1.50	569.49	-1,793.82	1,835.06	1,823.56	11.50	159.594				
2,771.79	2,768.33	2,799.50	2,797.77	9.69	6.81	1.51	569.24	-1,793.73	1,822.98	1,811.19	11.80	154.552				
2,800.00	2,796.11	2,825.97	2,824.24	9.79	6.87	1.51	569.13	-1,793.72	1,818.01	1,806.10	11.91	152.605				
2,900.00	2,894.56	2,934.82	2,933.09	10.18	7.15	1.53	569.05	-1,793.38	1,800.21	1,787.85	12.36	145.685				
3,000.00	2,993.02	3,057.26	3,055.51	10.56	7.48	1.59	569.93	-1,791.28	1,781.31	1,768.48	12.83	138.848				
3,100.00	3,091.48	3,154.27	3,152.49	10.95	7.75	1.65	570.54	-1,788.83	1,761.64	1,748.37	13.27	132.753				
3,200.00	3,189.94	3,236.33	3,234.54	11.35	7.98	1.65	569.80	-1,787.88	1,742.78	1,729.09	13.69	127.279				
3,300.00	3,288.39	3,334.99	3,333.11	11.75	8.25	1.54	565.80	-1,787.99	1,724.18	1,710.04	14.14	121.927				
3,400.00	3,386.85	3,406.00	3,403.95	12.16	8.46	1.39	561.03	-1,788.90	1,706.04	1,691.49	14.55	117.223				
3,500.00	3,485.31	3,483.39	3,481.04	12.57	8.68	1.17	554.76	-1,791.37	1,689.28	1,674.30	14.98	112.774				
3,600.00	3,583.77	3,554.95	3,552.23	12.98	8.90	0.93	548.63	-1,795.29	1,674.44	1,659.05	15.40	108.748				
3,700.00	3,682.22	3,636.04	3,632.88	13.39	9.14	0.67	542.15	-1,800.77	1,661.03	1,645.20	15.83	104.906				
3,800.00	3,780.68	3,723.78	3,720.22	13.81	9.41	0.43	536.55	-1,806.91	1,648.37	1,632.08	16.28	101.229				
3,900.00	3,879.14	3,811.80	3,807.91	14.23	9.69	0.23	532.50	-1,813.33	1,636.49	1,619.76	16.74	97.780				
4,000.00	3,977.60	3,916.32	3,911.92	14.65	10.02	-0.06	526.31	-1,821.67	1,624.97	1,607.74	17.23	94.337				
4,100.00	4,076.05	4,030.29	4,024.94	15.07	10.40	-0.54	515.05	-1,830.86	1,612.48	1,594.74	17.74	90.905				
4,200.00	4,174.51	4,134.11	4,127.88	15.50	10.75	-1.01	504.14	-1,838.88	1,599.63	1,581.40	18.24	87.720				
4,300.00	4,272.97	4,226.09	4,219.30	15.93	11.06	-1.35	496.40	-1,845.41	1,586.80	1,568.09	18.71	84.800				
4,400.00	4,371.43	4,362.93	4,355.52	16.36	11.52	-1.80	486.66	-1,853.95	1,573.66	1,554.39	19.27	81.654				
4,500.00	4,469.88	4,475.03	4,467.35	16.79	11.90	-2.09	480.37	-1,858.29	1,558.53	1,538.75	19.78	78.777				
4,600.00	4,568.34	4,579.48	4,571.56	17.22	12.25	-2.37	474.17	-1,861.47	1,542.54	1,522.26	20.29	76.043				
4,700.00	4,666.80	4,670.10	4,661.85	17.65	12.56	-2.68	467.08	-1,864.82	1,526.79	1,506.02	20.77	73.517				
4,800.00	4,765.25	4,761.26	4,752.65	18.08	12.88	-3.01	460.07	-1,868.72	1,511.66	1,490.41	21.25	71.125				
4,900.00	4,863.71	4,857.66	4,848.68	18.52	13.22	-3.35	452.87	-1,873.02	1,496.83	1,475.08	21.75	68.821				
5,000.00	4,962.17	4,951.83	4,942.46	18.95	13.55	-3.71	445.58	-1,877.45	1,482.24	1,460.00	22.24	66.636				
5,100.00	5,060.63	5,044.03	5,034.23	19.39	13.88	-4.08	437.97	-1,882.28	1,468.11	1,445.37	22.74	64.569				
5,200.00	5,159.08	5,139.68	5,129.44	19.83	14.22	-4.46	430.53	-1,887.55	1,454.41	1,431.17	23.24	62.588				
5,300.00	5,257.54	5,251.13	5,240.23	20.27	14.63	-4.98	420.11	-1,893.79	1,440.59	1,416.82	23.77	60.604				
5,400.00	5,356.00	5,359.57	5,347.75	20.71	15.03	-5.61	407.09	-1,899.09	1,425.66	1,401.35	24.30	58.662				
5,500.00	5,454.46	5,462.30	5,449.61	21.15	15.41	-6.22	394.66	-1,903.80	1,410.59	1,385.76	24.83	56.816				
5,600.00	5,552.91	5,569.53	5,556.02	21.59	15.81	-6.85	382.14	-1,908.07	1,395.15	1,369.79	25.36	55.015				
5,700.00	5,651.37	5,648.77	5,634.69	22.03	16.11	-7.31	373.18	-1,911.35	1,380.07	1,354.23	25.85	53.393				
5,800.00	5,749.83	5,736.96	5,722.21	22.47	16.44	-7.83	363.49	-1,916.09	1,366.35	1,340.00	26.35	51.854				
5,900.00	5,848.29	5,844.08	5,828.61	22.91	16.84	-8.44	352.50	-1,921.79	1,352.83	1,325.94	26.89	50.317				
6,000.00	5,946.74	5,950.52	5,934.49	23.36	17.24	-9.00	342.66	-1,926.42	1,338.61	1,311.19	27.42	48.821				
6,100.00	6,045.20	6,049.45	6,032.95	23.80	17.61	-9.53	333.80	-1,930.39	1,324.20	1,296.26	27.94	47.396				
6,200.00	6,143.66	6,144.00	6,127.08	24.24	17.96	-10.02	325.65	-1,933.98	1,309.73	1,281.28	28.45	46.031				

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 503H
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 503H	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, 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		
6,300.00	6,242.12	6,238.00	6,220.63	24.69	18.31	-10.54	317.44	-1,938.06	1,295.90	1,266.93	28.97	44.736		
6,400.00	6,340.57	6,319.74	6,301.88	25.13	18.62	-11.02	309.71	-1,942.57	1,283.23	1,253.77	29.46	43.554		
6,500.00	6,439.03	6,418.49	6,399.98	25.58	18.99	-11.63	300.04	-1,948.52	1,271.19	1,241.20	29.99	42.386		
6,600.00	6,537.49	6,519.59	6,500.41	26.02	19.38	-12.27	290.06	-1,954.41	1,259.12	1,228.59	30.53	41.248		
6,700.00	6,635.95	6,621.01	6,601.16	26.47	19.77	-12.93	279.96	-1,960.10	1,246.97	1,215.91	31.06	40.145		
6,757.61	6,692.67	6,681.89	6,661.69	26.73	20.00	-13.31	274.24	-1,963.31	1,239.87	1,208.50	31.37	39.519		
6,800.00	6,734.44	6,725.76	6,705.33	26.91	20.17	-13.56	270.37	-1,965.49	1,234.79	1,203.19	31.60	39.073		
6,900.00	6,833.29	6,824.64	6,803.76	27.34	20.54	-14.09	262.10	-1,970.27	1,224.58	1,192.45	32.13	38.115		
7,000.00	6,932.50	6,917.70	6,896.43	27.75	20.89	-14.53	255.06	-1,974.97	1,217.24	1,184.60	32.64	37.294		
7,100.00	7,032.01	7,008.68	6,987.08	28.14	21.23	-14.90	249.44	-1,980.21	1,213.23	1,180.09	33.14	36.610		
7,200.00	7,131.74	7,112.91	7,090.99	28.51	21.61	-15.24	244.11	-1,986.27	1,211.90	1,178.24	33.66	36.009		
7,211.38	7,143.09	7,124.85	7,102.90	28.55	21.66	-15.28	243.53	-1,986.94	1,211.89	1,178.17	33.71	35.946	CC, ES	
7,300.00	7,231.62	7,217.45	7,195.25	28.86	21.99	-15.55	239.02	-1,991.93	1,212.73	1,178.56	34.17	35.494		
7,400.00	7,331.60	7,317.37	7,294.96	29.19	22.36	-15.80	234.68	-1,997.06	1,215.83	1,181.17	34.66	35.074		
7,429.40	7,361.00	7,345.34	7,322.86	29.28	22.46	-89.69	233.53	-1,998.53	1,217.27	1,182.46	34.81	34.972		
7,500.00	7,431.60	7,421.70	7,399.06	29.50	22.73	-89.84	230.50	-2,002.51	1,220.95	1,185.78	35.16	34.723		
7,600.00	7,531.60	7,536.04	7,513.22	29.82	23.14	-90.03	226.44	-2,007.35	1,225.17	1,189.50	35.67	34.345		
7,700.00	7,631.60	7,665.58	7,642.69	30.14	23.59	-90.13	224.30	-2,010.66	1,227.76	1,191.58	36.19	33.929		
7,800.00	7,731.60	7,781.22	7,758.32	30.45	23.96	-90.10	224.84	-2,011.22	1,228.22	1,191.56	36.66	33.501		
7,900.00	7,831.60	7,885.06	7,862.16	30.77	24.29	-90.08	225.26	-2,011.09	1,228.10	1,190.97	37.13	33.077		
8,000.00	7,931.60	7,992.71	7,969.82	31.09	24.63	-90.09	225.16	-2,010.41	1,227.47	1,189.87	37.60	32.646		
8,100.00	8,031.60	8,100.52	8,077.61	31.41	24.98	-90.11	224.75	-2,009.03	1,226.19	1,188.12	38.07	32.207		
8,200.00	8,131.60	8,203.20	8,180.28	31.73	25.31	-90.13	224.14	-2,007.24	1,224.44	1,185.90	38.55	31.767		
8,300.00	8,231.60	8,286.13	8,263.19	32.06	25.58	-90.16	223.65	-2,006.20	1,223.22	1,184.20	39.02	31.350		
8,318.82	8,250.42	8,301.15	8,278.21	32.12	25.63	-90.16	223.56	-2,006.16	1,223.17	1,184.06	39.11	31.278		
8,400.00	8,331.60	8,364.74	8,341.80	32.38	25.84	-90.17	223.27	-2,006.55	1,223.66	1,184.18	39.48	30.991		
8,500.00	8,431.60	8,459.69	8,436.74	32.70	26.17	-90.18	223.22	-2,008.38	1,225.57	1,185.61	39.96	30.670		
8,600.00	8,531.60	8,571.83	8,548.87	33.03	26.54	-90.17	223.41	-2,009.74	1,226.78	1,186.33	40.45	30.329		
8,700.00	8,631.60	8,674.03	8,651.06	33.35	26.88	-90.15	223.81	-2,010.35	1,227.37	1,186.44	40.93	29.989		
8,800.00	8,731.60	8,775.19	8,752.22	33.68	27.21	-90.13	224.21	-2,010.89	1,227.90	1,186.50	41.40	29.657		
8,900.00	8,831.60	8,870.68	8,847.71	34.00	27.53	-90.11	224.54	-2,011.51	1,228.55	1,186.67	41.88	29.336		
9,000.00	8,931.60	8,965.24	8,942.27	34.33	27.85	-90.10	224.86	-2,012.51	1,229.61	1,187.26	42.35	29.031		
9,100.00	9,031.60	9,062.65	9,039.66	34.66	28.17	-90.07	225.41	-2,013.87	1,231.01	1,188.18	42.83	28.741		
9,200.00	9,131.60	9,163.16	9,140.16	34.98	28.51	-90.03	226.36	-2,015.36	1,232.49	1,189.18	43.31	28.457		
9,300.00	9,231.60	9,262.53	9,239.51	35.31	28.84	-89.97	227.58	-2,016.83	1,233.97	1,190.18	43.79	28.180		
9,400.00	9,331.60	9,360.29	9,337.24	35.64	29.16	-89.91	228.89	-2,018.38	1,235.56	1,191.30	44.26	27.913		
9,500.00	9,431.60	9,457.42	9,434.36	35.97	29.49	-89.85	230.27	-2,020.13	1,237.37	1,192.62	44.74	27.656		
9,600.00	9,531.60	9,555.43	9,532.33	36.30	29.82	-89.78	231.73	-2,022.12	1,239.40	1,194.18	45.22	27.409		
9,700.00	9,631.60	9,657.05	9,633.92	36.63	30.16	-89.72	233.10	-2,024.13	1,241.38	1,195.68	45.70	27.163		
9,800.00	9,731.60	9,753.20	9,730.05	36.96	30.48	-89.67	234.22	-2,026.07	1,243.41	1,197.23	46.18	26.926		
9,900.00	9,831.60	9,882.06	9,858.87	37.30	30.92	-89.61	235.46	-2,028.64	1,245.67	1,198.98	46.69	26.681		
9,913.44	9,845.04	9,914.98	9,891.78	37.34	31.03	-89.62	235.28	-2,028.36	1,245.56	1,198.80	46.76	26.637		
9,950.00	9,881.57	9,961.53	9,938.32	37.46	31.18	91.07	234.84	-2,027.42	1,244.83	1,197.90	46.93	26.524		
10,000.00	9,931.27	10,021.10	9,997.87	37.60	31.37	91.47	234.27	-2,025.69	1,243.48	1,196.32	47.15	26.371		
10,050.00	9,980.31	10,069.44	10,046.18	37.74	31.53	92.02	233.91	-2,024.15	1,242.15	1,194.78	47.37	26.223		
10,100.00	10,028.32	10,117.09	10,093.80	37.87	31.69	92.72	233.70	-2,022.65	1,241.11	1,193.54	47.58	26.087		
10,150.00	10,074.94	10,164.31	10,141.01	37.99	31.84	93.57	233.59	-2,021.16	1,240.48	1,192.71	47.77	25.966		
10,179.59	10,101.72	10,191.42	10,168.10	38.05	31.93	94.11	233.57	-2,020.29	1,240.36	1,192.48	47.89	25.902		
10,200.00	10,119.80	10,209.08	10,185.75	38.10	31.98	94.49	233.58	-2,019.73	1,240.43	1,192.46	47.96	25.861		
10,250.00	10,162.58	10,249.84	10,226.49	38.19	32.11	95.38	233.56	-2,018.46	1,241.23	1,193.08	48.15	25.777		
10,300.00	10,202.93	10,288.35	10,264.98	38.28	32.24	96.24	233.51	-2,017.33	1,243.12	1,194.78	48.34	25.718		
10,350.00	10,240.57	10,320.72	10,297.34	38.35	32.35	96.89	233.46	-2,016.47	1,246.36	1,197.85	48.52	25.688		

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 503H
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 503H	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, 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		
10,400.00	10,275.19	10,350.00	10,326.61	38.42	32.44	97.37	233.43	-2,015.82	1,251.23	1,202.53	48.70	25.692		
10,450.00	10,306.54	10,376.49	10,353.10	38.47	32.53	97.65	233.42	-2,015.34	1,257.89	1,209.00	48.89	25.731		
10,500.00	10,334.38	10,403.40	10,380.00	38.52	32.62	97.81	233.40	-2,014.93	1,266.45	1,217.37	49.08	25.806		
10,550.00	10,358.49	10,429.64	10,406.24	38.56	32.70	97.80	233.35	-2,014.52	1,276.92	1,227.66	49.27	25.918		
10,600.00	10,378.70	10,451.78	10,428.38	38.60	32.77	97.45	233.28	-2,014.14	1,289.40	1,239.94	49.46	26.067		
10,650.00	10,394.84	10,469.62	10,446.21	38.64	32.83	96.72	233.21	-2,013.82	1,303.94	1,254.27	49.66	26.256		
10,700.00	10,406.80	10,482.99	10,459.58	38.68	32.88	95.57	233.14	-2,013.56	1,320.51	1,270.65	49.86	26.483		
10,750.00	10,414.49	10,490.79	10,467.38	38.74	32.90	93.93	233.09	-2,013.42	1,339.05	1,288.99	50.06	26.748		
10,800.00	10,417.84	10,494.41	10,471.01	38.82	32.91	91.87	233.07	-2,013.35	1,359.42	1,309.16	50.26	27.050		
10,813.44	10,418.00	10,494.65	10,471.25	38.85	32.92	91.25	233.07	-2,013.34	1,365.18	1,314.88	50.31	27.137		
10,900.00	10,418.00	10,495.18	10,471.77	39.04	32.92	91.27	233.07	-2,013.33	1,404.84	1,354.19	50.65	27.737		
11,000.00	10,418.00	10,495.80	10,472.39	39.34	32.92	91.30	233.06	-2,013.32	1,455.72	1,404.66	51.06	28.508		
11,100.00	10,418.00	10,496.42	10,473.01	39.72	32.92	91.33	233.06	-2,013.31	1,511.52	1,460.03	51.48	29.359		
11,200.00	10,418.00	10,497.04	10,473.63	40.19	32.92	91.36	233.06	-2,013.30	1,571.70	1,519.80	51.90	30.284		
11,300.00	10,418.00	10,497.67	10,474.26	40.72	32.93	91.39	233.05	-2,013.29	1,635.79	1,583.49	52.30	31.277		
11,400.00	10,418.00	10,498.30	10,474.89	41.32	32.93	91.42	233.05	-2,013.27	1,703.34	1,650.66	52.68	32.333		
11,500.00	10,418.00	10,498.94	10,475.53	41.98	32.93	91.45	233.04	-2,013.26	1,773.95	1,720.91	53.04	33.446		
11,600.00	10,418.00	10,499.58	10,476.17	42.70	32.93	91.47	233.04	-2,013.25	1,847.28	1,793.91	53.37	34.611		
11,700.00	10,418.00	12,996.12	11,836.64	43.47	47.10	138.23	-1,173.96	-2,011.60	1,866.53	1,818.46	48.07	38.829		
11,800.00	10,418.00	13,084.52	11,839.56	44.29	48.02	138.28	-1,262.27	-2,012.26	1,870.96	1,822.03	48.93	38.238		
11,900.00	10,418.00	13,203.07	11,844.64	45.15	49.29	138.35	-1,380.71	-2,012.23	1,874.79	1,824.88	49.91	37.564		
12,000.00	10,418.00	13,319.10	11,848.73	46.06	50.58	138.42	-1,496.67	-2,011.73	1,877.80	1,826.87	50.93	36.871		
12,100.00	10,418.00	13,417.05	11,851.52	47.01	51.69	138.46	-1,594.58	-2,011.40	1,880.37	1,828.44	51.94	36.205		
12,200.00	10,418.00	13,535.71	11,855.94	47.99	53.08	138.57	-1,713.13	-2,009.60	1,882.86	1,829.84	53.02	35.510		
12,300.00	10,418.00	13,710.84	11,857.50	49.02	55.18	138.69	-1,888.12	-2,003.87	1,881.63	1,827.27	54.35	34.619		
12,400.00	10,418.00	13,769.27	11,856.83	50.07	55.90	138.68	-1,946.55	-2,003.07	1,880.48	1,825.15	55.33	33.984		
12,404.59	10,418.00	13,772.05	11,856.84	50.12	55.94	138.68	-1,949.32	-2,003.03	1,880.48	1,825.10	55.38	33.956		
12,500.00	10,418.00	13,857.96	11,858.16	51.16	57.01	138.72	-2,035.21	-2,001.56	1,881.09	1,824.66	56.43	33.334		
12,600.00	10,418.00	13,970.00	11,861.04	52.28	58.42	138.85	-2,147.12	-1,997.36	1,881.20	1,823.60	57.59	32.663		
12,691.68	10,418.00	14,059.27	11,862.41	53.32	59.57	138.92	-2,236.35	-1,994.73	1,881.09	1,822.43	58.66	32.068		
12,700.00	10,418.00	14,067.13	11,862.53	53.42	59.67	138.92	-2,244.20	-1,994.53	1,881.09	1,822.33	58.76	32.015		
12,800.00	10,418.00	14,171.29	11,862.96	54.59	61.03	138.94	-2,348.34	-1,992.94	1,881.06	1,821.05	60.00	31.350		
12,827.76	10,418.00	14,194.94	11,862.68	54.92	61.34	138.93	-2,371.99	-1,992.97	1,881.02	1,820.67	60.34	31.173		
12,900.00	10,418.00	14,247.66	11,862.42	55.78	62.03	138.91	-2,424.71	-1,993.19	1,881.41	1,820.22	61.19	30.747		
13,000.00	10,418.00	14,330.36	11,863.45	57.00	63.13	138.91	-2,507.40	-1,993.25	1,883.03	1,820.63	62.40	30.177		
13,100.00	10,418.00	14,430.68	11,867.53	58.24	64.48	139.03	-2,607.61	-1,990.79	1,885.14	1,821.51	63.63	29.628		
13,200.00	10,418.00	14,538.18	11,871.47	59.50	65.94	139.14	-2,715.00	-1,988.05	1,886.88	1,821.98	64.90	29.074		
13,300.00	10,418.00	14,640.61	11,874.51	60.77	67.35	139.23	-2,817.36	-1,985.83	1,888.37	1,822.18	66.18	28.532		
13,400.00	10,418.00	14,746.71	11,877.77	62.07	68.82	139.33	-2,923.38	-1,983.10	1,889.67	1,822.18	67.49	28.000		
13,500.00	10,418.00	14,844.00	11,879.83	63.38	70.18	139.39	-3,020.63	-1,981.52	1,890.86	1,822.06	68.80	27.484		
13,600.00	10,418.00	14,939.00	11,880.67	64.71	71.52	139.40	-3,115.62	-1,980.80	1,891.71	1,821.57	70.15	26.968		
13,700.00	10,418.00	15,033.00	11,882.40	66.05	72.85	139.43	-3,209.60	-1,980.08	1,893.27	1,821.78	71.49	26.483		
13,800.00	10,418.00	15,118.13	11,885.02	67.40	74.06	139.47	-3,294.69	-1,979.70	1,895.89	1,823.10	72.79	26.047		
13,900.00	10,418.00	15,223.00	11,887.09	68.77	75.57	139.50	-3,399.53	-1,979.29	1,897.76	1,823.56	74.21	25.574		
14,000.00	10,418.00	15,293.50	11,888.39	70.15	76.58	139.50	-3,470.01	-1,979.77	1,900.44	1,824.96	75.48	25.177		
14,100.00	10,418.00	15,365.55	11,891.11	71.54	77.62	139.50	-3,541.99	-1,981.30	1,905.27	1,828.50	76.77	24.819		
14,200.00	10,418.00	15,452.55	11,895.48	72.95	78.89	139.52	-3,628.88	-1,983.06	1,911.04	1,832.92	78.12	24.464		
14,300.00	10,418.00	15,566.88	11,901.11	74.36	80.56	139.54	-3,743.03	-1,985.88	1,917.07	1,837.42	79.64	24.071		
14,400.00	10,418.00	15,682.43	11,907.05	75.78	82.26	139.62	-3,858.42	-1,986.19	1,921.77	1,840.65	81.12	23.691		
14,500.00	10,418.00	15,797.69	11,912.39	77.21	83.97	139.71	-3,973.56	-1,986.00	1,925.84	1,843.24	82.60	23.316		
14,600.00	10,418.00	15,888.92	11,916.14	78.65	85.32	139.75	-4,064.71	-1,986.21	1,929.77	1,845.79	83.98	22.978		
14,700.00	10,418.00	15,980.00	11,920.45	80.10	86.68	139.82	-4,155.68	-1,986.13	1,933.98	1,848.63	85.35	22.659		

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 503H
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 503H	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, 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	10,418.00	16,074.00	11,925.75	81.55	88.09	139.90	-4,249.53	-1,986.00	1,938.83	1,852.11	86.72	22.357		
14,900.00	10,418.00	16,161.93	11,931.67	83.02	89.41	140.00	-4,337.27	-1,985.56	1,944.28	1,856.24	88.04	22.084		
15,000.00	10,418.00	16,277.49	11,939.13	84.49	91.15	140.13	-4,452.58	-1,984.81	1,949.46	1,859.97	89.49	21.783		
15,100.00	10,418.00	16,397.89	11,945.09	85.96	92.98	140.23	-4,572.83	-1,984.23	1,953.58	1,862.56	91.01	21.465		
15,200.00	10,418.00	16,577.71	11,954.78	87.45	95.71	140.57	-4,752.14	-1,975.72	1,955.45	1,862.88	92.56	21.126		
15,272.82	10,418.00	16,643.00	11,955.45	88.53	96.71	140.60	-4,817.40	-1,974.03	1,955.28	1,861.70	93.58	20.894		
15,300.00	10,418.00	16,643.00	11,955.45	88.94	96.71	140.60	-4,817.40	-1,974.03	1,955.47	1,861.61	93.86	20.834		
15,400.00	10,418.00	16,643.00	11,955.45	90.43	96.71	140.60	-4,817.40	-1,974.03	1,959.42	1,864.65	94.77	20.676		
15,500.00	10,418.00	16,643.00	11,955.45	91.93	96.71	140.60	-4,817.40	-1,974.03	1,968.44	1,872.92	95.52	20.608 SF		
15,600.00	10,418.00	16,643.00	11,955.45	93.43	96.71	140.60	-4,817.40	-1,974.03	1,982.47	1,886.36	96.11	20.628		
15,700.00	10,418.00	16,643.00	11,955.45	94.94	96.71	140.60	-4,817.40	-1,974.03	2,001.41	1,904.88	96.53	20.734		
15,800.00	10,418.00	16,643.00	11,955.45	96.46	96.71	140.60	-4,817.40	-1,974.03	2,025.11	1,928.32	96.79	20.923		
15,900.00	10,418.00	16,643.00	11,955.45	97.98	96.71	140.60	-4,817.40	-1,974.03	2,053.41	1,956.51	96.90	21.191		
16,000.00	10,418.00	16,643.00	11,955.45	99.50	96.71	140.60	-4,817.40	-1,974.03	2,086.13	1,989.25	96.88	21.534		
16,100.00	10,418.00	16,643.00	11,955.45	101.03	96.71	140.60	-4,817.40	-1,974.03	2,123.06	2,026.33	96.72	21.949		
16,200.00	10,418.00	16,643.00	11,955.45	102.56	96.71	140.60	-4,817.40	-1,974.03	2,163.98	2,067.52	96.46	22.434		
16,300.00	10,418.00	16,643.00	11,955.45	104.09	96.71	140.60	-4,817.40	-1,974.03	2,208.67	2,112.57	96.11	22.982		
16,400.00	10,418.00	16,643.00	11,955.45	105.63	96.71	140.60	-4,817.40	-1,974.03	2,256.92	2,161.25	95.67	23.591		
16,500.00	10,418.00	16,643.00	11,955.45	107.17	96.71	140.60	-4,817.40	-1,974.03	2,308.49	2,213.33	95.16	24.259		
16,600.00	10,418.00	16,643.00	11,955.45	108.72	96.71	140.60	-4,817.40	-1,974.03	2,363.17	2,268.57	94.60	24.981		
16,700.00	10,418.00	16,643.00	11,955.45	110.26	96.71	140.60	-4,817.40	-1,974.03	2,420.74	2,326.74	94.00	25.752		
16,800.00	10,418.00	16,643.00	11,955.45	111.81	96.71	140.60	-4,817.40	-1,974.03	2,481.01	2,387.65	93.37	26.573		
16,900.00	10,418.00	16,643.00	11,955.45	113.37	96.71	140.60	-4,817.40	-1,974.03	2,543.79	2,451.07	92.72	27.437		
17,000.00	10,418.00	16,643.00	11,955.45	114.92	96.71	140.60	-4,817.40	-1,974.03	2,608.89	2,516.84	92.05	28.342		
17,100.00	10,418.00	16,643.00	11,955.45	116.48	96.71	140.60	-4,817.40	-1,974.03	2,676.14	2,584.76	91.38	29.286		
17,200.00	10,418.00	16,643.00	11,955.45	118.04	96.71	140.60	-4,817.40	-1,974.03	2,745.39	2,654.68	90.71	30.266		
17,300.00	10,418.00	16,643.00	11,955.45	119.61	96.71	140.60	-4,817.40	-1,974.03	2,816.49	2,726.45	90.04	31.280		
17,400.00	10,418.00	16,643.00	11,955.45	121.17	96.71	140.60	-4,817.40	-1,974.03	2,889.30	2,799.92	89.38	32.325		
17,500.00	10,418.00	16,643.00	11,955.45	122.74	96.71	140.60	-4,817.40	-1,974.03	2,963.70	2,874.96	88.74	33.398		
17,600.00	10,418.00	16,643.00	11,955.45	124.31	96.71	140.60	-4,817.40	-1,974.03	3,039.56	2,951.46	88.10	34.500		
17,700.00	10,418.00	16,643.00	11,955.45	125.88	96.71	140.60	-4,817.40	-1,974.03	3,116.79	3,029.30	87.48	35.627		
17,800.00	10,418.00	16,643.00	11,955.45	127.46	96.71	140.60	-4,817.40	-1,974.03	3,195.28	3,108.39	86.89	36.776		
17,900.00	10,418.00	16,643.00	11,955.45	129.04	96.71	140.60	-4,817.40	-1,974.03	3,274.94	3,188.63	86.31	37.945		
18,000.00	10,418.00	16,643.00	11,955.45	130.61	96.71	140.60	-4,817.40	-1,974.03	3,355.69	3,269.95	85.75	39.134		
18,100.00	10,418.00	16,643.00	11,955.45	132.19	96.71	140.60	-4,817.40	-1,974.03	3,437.46	3,352.25	85.21	40.342		
18,200.00	10,418.00	16,643.00	11,955.45	133.78	96.71	140.60	-4,817.40	-1,974.03	3,520.16	3,435.48	84.68	41.570		
18,300.00	10,418.00	16,643.00	11,955.45	135.36	96.71	140.60	-4,817.40	-1,974.03	3,603.75	3,519.57	84.18	42.812		
18,400.00	10,418.00	16,643.00	11,955.45	136.94	96.71	140.60	-4,817.40	-1,974.03	3,688.15	3,604.46	83.69	44.069		
18,500.00	10,418.00	16,643.00	11,955.45	138.53	96.71	140.60	-4,817.40	-1,974.03	3,773.31	3,690.09	83.22	45.339		
18,600.00	10,418.00	16,643.00	11,955.45	140.12	96.71	140.60	-4,817.40	-1,974.03	3,859.18	3,776.41	82.78	46.621		
18,700.00	10,418.00	16,643.00	11,955.45	141.71	96.71	140.60	-4,817.40	-1,974.03	3,945.72	3,863.37	82.35	47.914		
18,800.00	10,418.00	16,643.00	11,955.45	143.30	96.71	140.60	-4,817.40	-1,974.03	4,032.89	3,950.95	81.94	49.217		
18,900.00	10,418.00	16,643.00	11,955.45	144.89	96.71	140.60	-4,817.40	-1,974.03	4,120.63	4,039.08	81.55	50.530		
19,000.00	10,418.00	16,643.00	11,955.45	146.49	96.71	140.60	-4,817.40	-1,974.03	4,208.92	4,127.75	81.17	51.853		
19,100.00	10,418.00	16,643.00	11,955.45	148.08	96.71	140.60	-4,817.40	-1,974.03	4,297.73	4,216.92	80.81	53.185		
19,200.00	10,418.00	16,643.00	11,955.45	149.68	96.71	140.60	-4,817.40	-1,974.03	4,387.02	4,306.56	80.46	54.525		
19,300.00	10,418.00	16,643.00	11,955.45	151.27	96.71	140.60	-4,817.40	-1,974.03	4,476.76	4,396.63	80.13	55.872		
19,400.00	10,418.00	16,643.00	11,955.45	152.87	96.71	140.60	-4,817.40	-1,974.03	4,566.92	4,487.12	79.81	57.225		
19,500.00	10,418.00	16,643.00	11,955.45	154.47	96.71	140.60	-4,817.40	-1,974.03	4,657.49	4,577.99	79.50	58.584		
19,600.00	10,418.00	16,643.00	11,955.45	156.07	96.71	140.60	-4,817.40	-1,974.03	4,748.44	4,669.23	79.21	59.947		
19,700.00	10,418.00	16,643.00	11,955.45	157.67	96.71	140.60	-4,817.40	-1,974.03	4,839.74	4,760.81	78.93	61.315		
19,800.00	10,418.00	16,643.00	11,955.45	159.28	96.71	140.60	-4,817.40	-1,974.03	4,931.38	4,852.72	78.67	62.686		

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 503H
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 503H	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 503H
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 503H	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	-71.97	580.13	-1,782.35	1,874.38					
100.00	100.00	125.35	125.35	0.13	0.19	-71.96	580.35	-1,782.33	1,874.44	1,874.21	0.23	8,140.595		
200.00	200.00	221.50	221.50	0.48	0.53	-71.96	580.46	-1,782.38	1,874.52	1,873.81	0.72	2,616.803		
300.00	300.00	300.03	300.03	0.84	0.81	-71.94	581.19	-1,782.85	1,875.38	1,874.21	1.17	1,606.272		
400.00	400.00	378.84	378.81	1.20	1.09	-71.92	582.55	-1,784.08	1,877.38	1,875.76	1.62	1,157.450		
500.00	500.00	478.78	478.71	1.56	1.45	-71.90	584.07	-1,786.51	1,880.17	1,878.04	2.13	884.120		
600.00	600.00	590.68	590.58	1.92	1.84	-71.92	584.02	-1,789.09	1,882.34	1,879.68	2.66	708.079		
700.00	700.00	686.95	686.79	2.28	2.18	-72.00	582.00	-1,791.54	1,884.12	1,880.97	3.15	598.162		
800.00	800.00	871.78	871.25	2.63	2.83	-72.33	571.14	-1,793.22	1,882.51	1,878.65	3.86	487.719		
900.00	900.00	959.29	958.49	2.99	3.14	-72.54	564.42	-1,794.14	1,881.10	1,876.77	4.33	434.062		
1,000.00	1,000.00	1,048.97	1,048.01	3.35	3.46	-72.70	558.94	-1,794.43	1,879.59	1,874.77	4.81	390.451		
1,100.00	1,100.00	1,155.66	1,154.52	3.71	3.84	-72.88	552.96	-1,794.96	1,878.41	1,873.07	5.34	351.827		
1,200.00	1,200.00	1,245.16	1,243.92	4.07	4.16	-73.00	548.69	-1,794.93	1,877.00	1,871.18	5.82	322.518		
1,300.00	1,300.00	1,337.59	1,336.30	4.43	4.49	-73.10	545.36	-1,795.18	1,876.22	1,869.91	6.31	297.451		
1,400.00	1,400.00	1,425.00	1,423.68	4.79	4.68	-73.16	543.49	-1,795.53	1,875.98	1,869.29	6.69	280.322		
1,408.22	1,408.22	1,435.79	1,434.47	4.82	4.68	-73.17	543.29	-1,795.58	1,875.97	1,869.26	6.72	279.362		
1,500.00	1,500.00	1,506.88	1,505.55	5.14	4.70	-73.19	542.57	-1,796.22	1,876.49	1,869.52	6.97	269.361		
1,600.00	1,600.00	1,600.71	1,599.37	5.50	4.74	-73.19	543.10	-1,797.38	1,877.84	1,870.58	7.26	258.609		
1,700.00	1,700.00	1,698.13	1,696.77	5.86	4.80	-73.14	544.90	-1,798.38	1,879.35	1,871.78	7.58	248.055		
1,800.00	1,800.00	1,798.74	1,797.35	6.22	4.89	-73.09	547.18	-1,799.34	1,880.93	1,873.02	7.91	237.737		
1,900.00	1,900.00	1,902.02	1,900.61	6.58	5.01	-73.03	549.51	-1,800.23	1,882.41	1,874.14	8.27	227.685		
2,000.00	2,000.00	2,014.68	2,013.23	6.94	5.17	-72.95	552.08	-1,800.64	1,883.42	1,874.77	8.65	217.782		
2,100.00	2,100.00	2,121.69	2,120.21	7.29	5.34	-72.87	554.79	-1,800.37	1,883.92	1,874.88	9.04	208.446		
2,200.00	2,199.99	2,224.95	2,223.43	7.65	5.52	1.05	557.68	-1,799.72	1,882.84	1,873.41	9.43	199.650		
2,300.00	2,299.91	2,324.76	2,323.19	7.99	5.72	1.15	560.67	-1,798.94	1,879.06	1,869.23	9.83	191.241		
2,400.00	2,399.69	2,424.40	2,422.77	8.34	5.92	1.26	563.90	-1,798.14	1,872.72	1,862.49	10.23	183.062		
2,500.00	2,499.27	2,545.49	2,543.80	8.70	6.20	1.38	567.19	-1,796.81	1,863.38	1,852.71	10.67	174.635		
2,600.00	2,598.57	2,654.74	2,653.02	9.06	6.45	1.46	568.92	-1,794.79	1,850.34	1,839.24	11.10	166.661		
2,700.00	2,697.54	2,733.98	2,732.25	9.42	6.65	1.50	569.49	-1,793.82	1,835.06	1,823.56	11.50	159.594		
2,771.79	2,768.33	2,799.50	2,797.77	9.69	6.81	1.51	569.24	-1,793.73	1,822.98	1,811.19	11.80	154.552		
2,800.00	2,796.11	2,825.97	2,824.24	9.79	6.87	1.51	569.13	-1,793.72	1,818.01	1,806.10	11.91	152.605		
2,900.00	2,894.56	2,934.82	2,933.09	10.18	7.15	1.53	569.05	-1,793.38	1,800.21	1,787.85	12.36	145.685		
3,000.00	2,993.02	3,057.26	3,055.51	10.56	7.48	1.59	569.93	-1,791.28	1,781.31	1,768.48	12.83	138.848		
3,100.00	3,091.48	3,154.27	3,152.49	10.95	7.75	1.65	570.54	-1,788.83	1,761.64	1,748.37	13.27	132.753		
3,200.00	3,189.94	3,236.33	3,234.54	11.35	7.98	1.65	569.80	-1,787.88	1,742.78	1,729.09	13.69	127.279		
3,300.00	3,288.39	3,334.99	3,333.11	11.75	8.25	1.54	565.80	-1,787.99	1,724.18	1,710.04	14.14	121.927		
3,400.00	3,386.85	3,406.00	3,403.95	12.16	8.46	1.39	561.03	-1,788.90	1,706.04	1,691.49	14.55	117.223		
3,500.00	3,485.31	3,483.39	3,481.04	12.57	8.68	1.17	554.76	-1,791.37	1,689.28	1,674.30	14.98	112.774		
3,600.00	3,583.77	3,554.95	3,552.23	12.98	8.90	0.93	548.63	-1,795.29	1,674.44	1,659.05	15.40	108.748		
3,700.00	3,682.22	3,636.04	3,632.88	13.39	9.14	0.67	542.15	-1,800.77	1,661.03	1,645.20	15.83	104.906		
3,800.00	3,780.68	3,723.78	3,720.22	13.81	9.41	0.43	536.55	-1,806.91	1,648.37	1,632.08	16.28	101.229		
3,900.00	3,879.14	3,811.80	3,807.91	14.23	9.69	0.23	532.50	-1,813.33	1,636.49	1,619.76	16.74	97.780		
4,000.00	3,977.60	3,916.32	3,911.92	14.65	10.02	-0.06	526.31	-1,821.67	1,624.97	1,607.74	17.23	94.337		
4,100.00	4,076.05	4,030.29	4,024.94	15.07	10.40	-0.54	515.05	-1,830.86	1,612.48	1,594.74	17.74	90.905		
4,200.00	4,174.51	4,134.11	4,127.88	15.50	10.75	-1.01	504.14	-1,838.88	1,599.63	1,581.40	18.24	87.720		
4,300.00	4,272.97	4,226.09	4,219.30	15.93	11.06	-1.35	496.40	-1,845.41	1,586.80	1,568.09	18.71	84.800		
4,400.00	4,371.43	4,362.93	4,355.52	16.36	11.52	-1.80	486.66	-1,853.95	1,573.66	1,554.39	19.27	81.654		
4,500.00	4,469.88	4,475.03	4,467.35	16.79	11.90	-2.09	480.37	-1,858.29	1,558.53	1,538.75	19.78	78.777		
4,600.00	4,568.34	4,579.48	4,571.56	17.22	12.25	-2.37	474.17	-1,861.47	1,542.54	1,522.26	20.29	76.043		
4,700.00	4,666.80	4,670.10	4,661.85	17.65	12.56	-2.68	467.08	-1,864.82	1,526.79	1,506.02	20.77	73.517		
4,800.00	4,765.25	4,761.26	4,752.65	18.08	12.88	-3.01	460.07	-1,868.72	1,511.66	1,490.41	21.25	71.125		
4,900.00	4,863.71	4,857.66	4,848.68	18.52	13.22	-3.35	452.87	-1,873.02	1,496.83	1,475.08	21.75	68.821		

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 503H
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 503H	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	4,962.17	4,951.83	4,942.46	18.95	13.55	-3.71	445.58	-1,877.45	1,482.24	1,460.00	22.24	66.636				
5,100.00	5,060.63	5,044.03	5,034.23	19.39	13.88	-4.08	437.97	-1,882.28	1,468.11	1,445.37	22.74	64.569				
5,200.00	5,159.08	5,139.68	5,129.44	19.83	14.22	-4.46	430.53	-1,887.55	1,454.41	1,431.17	23.24	62.588				
5,300.00	5,257.54	5,251.13	5,240.23	20.27	14.63	-4.98	420.11	-1,893.79	1,440.59	1,416.82	23.77	60.604				
5,400.00	5,356.00	5,359.57	5,347.75	20.71	15.03	-5.61	407.09	-1,899.09	1,425.66	1,401.35	24.30	58.662				
5,500.00	5,454.46	5,462.30	5,449.61	21.15	15.41	-6.22	394.66	-1,903.80	1,410.59	1,385.76	24.83	56.816				
5,600.00	5,552.91	5,569.53	5,556.02	21.59	15.81	-6.85	382.14	-1,908.07	1,395.15	1,369.79	25.36	55.015				
5,700.00	5,651.37	5,648.77	5,634.69	22.03	16.11	-7.31	373.18	-1,911.35	1,380.07	1,354.23	25.85	53.393				
5,800.00	5,749.83	5,736.96	5,722.21	22.47	16.44	-7.83	363.49	-1,916.09	1,366.35	1,340.00	26.35	51.854				
5,900.00	5,848.29	5,844.08	5,828.61	22.91	16.84	-8.44	352.50	-1,921.79	1,352.83	1,325.94	26.89	50.317				
6,000.00	5,946.74	5,950.52	5,934.49	23.36	17.24	-9.00	342.66	-1,926.42	1,338.61	1,311.19	27.42	48.821				
6,100.00	6,045.20	6,049.45	6,032.95	23.80	17.61	-9.53	333.80	-1,930.39	1,324.20	1,296.26	27.94	47.396				
6,200.00	6,143.66	6,144.00	6,127.08	24.24	17.96	-10.02	325.65	-1,933.98	1,309.73	1,281.28	28.45	46.031				
6,300.00	6,242.12	6,238.00	6,220.63	24.69	18.31	-10.54	317.44	-1,938.06	1,295.90	1,266.93	28.97	44.736				
6,400.00	6,340.57	6,319.74	6,301.88	25.13	18.62	-11.02	309.71	-1,942.57	1,283.23	1,253.77	29.46	43.554				
6,500.00	6,439.03	6,418.49	6,399.98	25.58	18.99	-11.63	300.04	-1,948.52	1,271.19	1,241.20	29.99	42.386				
6,600.00	6,537.49	6,519.59	6,500.41	26.02	19.38	-12.27	290.06	-1,954.41	1,259.12	1,228.59	30.53	41.248				
6,700.00	6,635.95	6,621.01	6,601.16	26.47	19.77	-12.93	279.96	-1,960.10	1,246.97	1,215.91	31.06	40.145				
6,757.61	6,692.67	6,681.89	6,661.69	26.73	20.00	-13.31	274.24	-1,963.31	1,239.87	1,208.50	31.37	39.519				
6,800.00	6,734.44	6,725.76	6,705.33	26.91	20.17	-13.56	270.37	-1,965.49	1,234.79	1,203.19	31.60	39.073				
6,900.00	6,833.29	6,824.64	6,803.76	27.34	20.54	-14.09	262.10	-1,970.27	1,224.58	1,192.45	32.13	38.115				
7,000.00	6,932.50	6,917.70	6,896.43	27.75	20.89	-14.53	255.06	-1,974.97	1,217.24	1,184.60	32.64	37.294				
7,100.00	7,032.01	7,008.68	6,987.08	28.14	21.23	-14.90	249.44	-1,980.21	1,213.23	1,180.09	33.14	36.610				
7,200.00	7,131.74	7,112.91	7,090.99	28.51	21.61	-15.24	244.11	-1,986.27	1,211.90	1,178.24	33.66	36.009				
7,211.38	7,143.09	7,124.85	7,102.90	28.55	21.66	-15.28	243.53	-1,986.94	1,211.89	1,178.17	33.71	35.946	CC, ES			
7,300.00	7,231.62	7,217.45	7,195.25	28.86	21.99	-15.55	239.02	-1,991.93	1,212.73	1,178.56	34.17	35.494				
7,400.00	7,331.60	7,317.37	7,294.96	29.19	22.36	-15.80	234.68	-1,997.06	1,215.83	1,181.17	34.66	35.074				
7,429.40	7,361.00	7,345.34	7,322.86	29.28	22.46	-89.69	233.53	-1,998.53	1,217.27	1,182.46	34.81	34.972				
7,500.00	7,431.60	7,421.70	7,399.06	29.50	22.73	-89.84	230.50	-2,002.51	1,220.95	1,185.78	35.16	34.723				
7,600.00	7,531.60	7,536.04	7,513.22	29.82	23.14	-90.03	226.44	-2,007.35	1,225.17	1,189.50	35.67	34.345				
7,700.00	7,631.60	7,665.58	7,642.69	30.14	23.59	-90.13	224.30	-2,010.66	1,227.76	1,191.58	36.19	33.929				
7,800.00	7,731.60	7,781.22	7,758.32	30.45	23.96	-90.10	224.84	-2,011.22	1,228.22	1,191.56	36.66	33.501				
7,900.00	7,831.60	7,885.06	7,862.16	30.77	24.29	-90.08	225.26	-2,011.09	1,228.10	1,190.97	37.13	33.077				
8,000.00	7,931.60	7,992.71	7,969.82	31.09	24.63	-90.09	225.16	-2,010.41	1,227.47	1,189.87	37.60	32.646				
8,100.00	8,031.60	8,100.52	8,077.61	31.41	24.98	-90.11	224.75	-2,009.03	1,226.19	1,188.12	38.07	32.207				
8,200.00	8,131.60	8,203.20	8,180.28	31.73	25.31	-90.13	224.14	-2,007.24	1,224.44	1,185.90	38.55	31.767				
8,300.00	8,231.60	8,286.13	8,263.19	32.06	25.58	-90.16	223.65	-2,006.20	1,223.22	1,184.20	39.02	31.350				
8,318.82	8,250.42	8,301.15	8,278.21	32.12	25.63	-90.16	223.56	-2,006.16	1,223.17	1,184.06	39.11	31.278				
8,400.00	8,331.60	8,364.74	8,341.80	32.38	25.84	-90.17	223.27	-2,006.55	1,223.66	1,184.18	39.48	30.991				
8,500.00	8,431.60	8,459.69	8,436.74	32.70	26.17	-90.18	223.22	-2,008.38	1,225.57	1,185.61	39.96	30.670				
8,600.00	8,531.60	8,571.83	8,548.87	33.03	26.54	-90.17	223.41	-2,009.74	1,226.78	1,186.33	40.45	30.329				
8,700.00	8,631.60	8,674.03	8,651.06	33.35	26.88	-90.15	223.81	-2,010.35	1,227.37	1,186.44	40.93	29.989				
8,800.00	8,731.60	8,775.19	8,752.22	33.68	27.21	-90.13	224.21	-2,010.89	1,227.90	1,186.50	41.40	29.657				
8,900.00	8,831.60	8,870.68	8,847.71	34.00	27.53	-90.11	224.54	-2,011.50	1,228.55	1,186.67	41.88	29.336				
9,000.00	8,931.60	8,965.24	8,942.27	34.33	27.85	-90.10	224.86	-2,012.51	1,229.61	1,187.26	42.35	29.031				
9,100.00	9,031.60	9,062.65	9,039.66	34.66	28.17	-90.07	225.41	-2,013.87	1,231.01	1,188.18	42.83	28.741				
9,200.00	9,131.60	9,163.16	9,140.16	34.98	28.51	-90.03	226.36	-2,015.36	1,232.49	1,189.18	43.31	28.457				
9,300.00	9,231.60	9,262.53	9,239.51	35.31	28.84	-89.97	227.58	-2,016.83	1,233.97	1,190.18	43.79	28.180				
9,400.00	9,331.60	9,360.29	9,337.24	35.64	29.16	-89.91	228.89	-2,018.38	1,235.56	1,191.30	44.26	27.913				
9,500.00	9,431.60	9,457.42	9,434.36	35.97	29.49	-89.85	230.27	-2,020.13	1,237.37	1,192.62	44.74	27.656				
9,600.00	9,531.60	9,555.43	9,532.33	36.30	29.82	-89.78	231.73	-2,022.12	1,239.40	1,194.18	45.22	27.409				
9,700.00	9,631.60	9,657.05	9,633.92	36.63	30.16	-89.72	233.10	-2,024.13	1,241.38	1,195.68	45.70	27.163				

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 503H
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 503H	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				
9,800.00	9,731.60	9,753.20	9,730.05	36.96	30.48	-89.67	234.22	-2,026.07	1,243.41	1,197.23	46.18	26.926				
9,900.00	9,831.60	9,882.06	9,858.87	37.30	30.92	-89.61	235.46	-2,028.64	1,245.67	1,198.98	46.69	26.681				
9,913.44	9,845.04	9,914.98	9,891.78	37.34	31.03	-89.62	235.28	-2,028.36	1,245.56	1,198.80	46.76	26.637				
9,950.00	9,881.57	9,961.53	9,938.32	37.46	31.18	91.07	234.84	-2,027.42	1,244.83	1,197.90	46.93	26.524				
10,000.00	9,931.27	10,021.10	9,997.87	37.60	31.37	91.47	234.27	-2,025.69	1,243.48	1,196.32	47.15	26.371				
10,050.00	9,980.31	10,069.44	10,046.18	37.74	31.53	92.02	233.91	-2,024.15	1,242.15	1,194.78	47.37	26.223				
10,100.00	10,028.32	10,117.09	10,093.80	37.87	31.69	92.72	233.70	-2,022.65	1,241.11	1,193.54	47.58	26.087				
10,150.00	10,074.94	10,164.31	10,141.01	37.99	31.84	93.57	233.59	-2,021.16	1,240.48	1,192.71	47.77	25.966				
10,179.59	10,101.72	10,191.42	10,168.10	38.05	31.93	94.11	233.57	-2,020.29	1,240.36	1,192.48	47.89	25.902				
10,200.00	10,119.80	10,209.08	10,185.75	38.10	31.98	94.49	233.58	-2,019.73	1,240.43	1,192.46	47.96	25.861				
10,250.00	10,162.58	10,249.84	10,226.49	38.19	32.11	95.38	233.56	-2,018.46	1,241.23	1,193.08	48.15	25.777				
10,300.00	10,202.93	10,288.35	10,264.98	38.28	32.24	96.24	233.51	-2,017.33	1,243.12	1,194.78	48.34	25.718				
10,350.00	10,240.57	10,320.72	10,297.34	38.35	32.35	96.89	233.46	-2,016.47	1,246.36	1,197.85	48.52	25.688				
10,400.00	10,275.19	10,350.00	10,326.61	38.42	32.44	97.37	233.43	-2,015.82	1,251.23	1,202.53	48.70	25.692				
10,450.00	10,306.54	10,376.49	10,353.10	38.47	32.53	97.65	233.42	-2,015.34	1,257.89	1,209.00	48.89	25.731				
10,500.00	10,334.38	10,403.40	10,380.00	38.52	32.62	97.81	233.40	-2,014.93	1,266.45	1,217.37	49.08	25.806				
10,550.00	10,358.49	10,429.64	10,406.24	38.56	32.70	97.80	233.35	-2,014.52	1,276.92	1,227.66	49.27	25.918				
10,600.00	10,378.70	10,451.78	10,428.38	38.60	32.77	97.45	233.28	-2,014.14	1,289.40	1,239.94	49.46	26.067				
10,650.00	10,394.84	10,469.62	10,446.21	38.64	32.83	96.72	233.21	-2,013.82	1,303.94	1,254.27	49.66	26.256				
10,700.00	10,406.80	10,482.99	10,459.58	38.68	32.88	95.57	233.14	-2,013.56	1,320.51	1,270.65	49.86	26.483				
10,750.00	10,414.49	10,490.79	10,467.38	38.74	32.90	93.93	233.09	-2,013.42	1,339.05	1,288.99	50.06	26.748				
10,800.00	10,417.84	10,494.41	10,471.01	38.82	32.91	91.87	233.07	-2,013.35	1,359.42	1,309.16	50.26	27.050				
10,813.44	10,418.00	10,494.65	10,471.25	38.85	32.92	91.25	233.07	-2,013.34	1,365.18	1,314.88	50.31	27.137				
10,900.00	10,418.00	10,495.18	10,471.77	39.04	32.92	91.27	233.07	-2,013.33	1,404.84	1,354.19	50.65	27.737				
11,000.00	10,418.00	10,495.80	10,472.39	39.34	32.92	91.30	233.06	-2,013.32	1,455.72	1,404.66	51.06	28.508				
11,100.00	10,418.00	10,496.42	10,473.01	39.72	32.92	91.33	233.06	-2,013.31	1,511.52	1,460.03	51.48	29.359				
11,200.00	10,418.00	10,497.04	10,473.63	40.19	32.92	91.36	233.06	-2,013.30	1,571.70	1,519.80	51.90	30.284				
11,300.00	10,418.00	10,497.67	10,474.26	40.72	32.93	91.39	233.05	-2,013.29	1,635.79	1,583.49	52.30	31.277				
11,400.00	10,418.00	10,498.30	10,474.89	41.32	32.93	91.42	233.05	-2,013.27	1,703.34	1,650.66	52.68	32.333				
11,500.00	10,418.00	10,498.94	10,475.53	41.98	32.93	91.45	233.04	-2,013.26	1,773.95	1,720.91	53.04	33.446				
11,600.00	10,418.00	10,499.58	10,476.17	42.70	32.93	91.47	233.04	-2,013.25	1,847.28	1,793.91	53.37	34.611				
11,700.00	10,418.00	13,038.22	11,844.70	43.47	47.51	138.60	-1,216.52	-2,003.27	1,866.93	1,818.92	48.02	38.882				
11,800.00	10,418.00	13,138.20	11,846.61	44.29	48.57	138.63	-1,316.48	-2,002.39	1,868.44	1,819.53	48.91	38.200				
11,900.00	10,418.00	13,238.18	11,848.52	45.15	49.65	138.67	-1,416.44	-2,001.51	1,869.95	1,820.10	49.85	37.511				
12,000.00	10,418.00	13,338.16	11,850.44	46.06	50.76	138.71	-1,516.40	-2,000.63	1,871.46	1,820.63	50.83	36.818				
12,100.00	10,418.00	13,438.14	11,852.35	47.01	51.91	138.74	-1,616.36	-1,999.75	1,872.98	1,821.13	51.85	36.126				
12,200.00	10,418.00	13,538.13	11,854.26	47.99	53.08	138.78	-1,716.32	-1,998.88	1,874.49	1,821.59	52.90	35.438				
12,300.00	10,418.00	13,638.11	11,856.17	49.02	54.27	138.81	-1,816.28	-1,998.00	1,876.00	1,822.02	53.98	34.754				
12,400.00	10,418.00	13,738.09	11,858.08	50.07	55.49	138.85	-1,916.24	-1,997.12	1,877.52	1,822.42	55.09	34.078				
12,500.00	10,418.00	13,838.07	11,859.99	51.16	56.73	138.89	-2,016.20	-1,996.24	1,879.03	1,822.79	56.24	33.412				
12,600.00	10,418.00	13,938.05	11,861.91	52.28	57.99	138.92	-2,116.16	-1,995.36	1,880.55	1,823.14	57.41	32.758				
12,700.00	10,418.00	14,038.03	11,863.82	53.42	59.27	138.96	-2,216.12	-1,994.48	1,882.06	1,823.46	58.60	32.116				
12,800.00	10,418.00	14,138.02	11,865.73	54.59	60.57	138.99	-2,316.08	-1,993.60	1,883.58	1,823.76	59.82	31.487				
12,900.00	10,418.00	14,238.00	11,867.64	55.78	61.89	139.03	-2,416.04	-1,992.72	1,885.10	1,824.04	61.06	30.872				
13,000.00	10,418.00	14,337.98	11,869.55	57.00	63.22	139.06	-2,516.00	-1,991.84	1,886.61	1,824.29	62.32	30.273				
13,100.00	10,418.00	14,437.96	11,871.47	58.24	64.56	139.10	-2,615.96	-1,990.96	1,888.13	1,824.53	63.60	29.688				
13,200.00	10,418.00	14,537.94	11,873.38	59.50	65.92	139.13	-2,715.92	-1,990.08	1,889.65	1,824.76	64.90	29.118				
13,300.00	10,418.00	14,637.92	11,875.29	60.77	67.29	139.17	-2,815.88	-1,989.20	1,891.17	1,824.96	66.21	28.563				
13,400.00	10,418.00	14,737.91	11,877.20	62.07	68.68	139.20	-2,915.84	-1,988.33	1,892.70	1,825.16	67.54	28.024				
13,500.00	10,418.00	14,837.89	11,879.11	63.38	70.07	139.24	-3,015.80	-1,987.45	1,894.22	1,825.34	68.88	27.500				
13,600.00	10,418.00	14,937.87	11,881.02	64.71	71.48	139.28	-3,115.75	-1,986.57	1,895.74	1,825.50	70.24	26.991				
13,700.00	10,418.00	15,037.85	11,882.94	66.05	72.90	139.31	-3,215.71	-1,985.69	1,897.26	1,825.66	71.61	26.496				

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 503H
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 503H	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		
13,800.00	10,418.00	15,137.83	11,884.85	67.40	74.32	139.35	-3,315.67	-1,984.81	1,898.79	1,825.80	72.98	26.017		
13,900.00	10,418.00	15,237.81	11,886.76	68.77	75.76	139.38	-3,415.63	-1,983.93	1,900.31	1,825.94	74.37	25.551		
14,000.00	10,418.00	15,321.82	11,888.54	70.15	76.97	139.41	-3,499.61	-1,983.19	1,902.04	1,826.34	75.70	25.127		
14,100.00	10,418.00	15,407.14	11,891.83	71.54	78.21	139.48	-3,584.87	-1,982.44	1,905.00	1,828.00	77.01	24.738		
14,200.00	10,418.00	15,507.06	11,895.86	72.95	79.67	139.55	-3,684.70	-1,981.56	1,908.14	1,829.76	78.39	24.343		
14,300.00	10,418.00	15,606.98	11,899.88	74.36	81.14	139.63	-3,784.54	-1,980.69	1,911.28	1,831.51	79.77	23.959		
14,400.00	10,418.00	15,706.90	11,903.90	75.78	82.61	139.70	-3,884.37	-1,979.81	1,914.43	1,833.26	81.17	23.586		
14,500.00	10,418.00	15,806.82	11,907.93	77.21	84.10	139.78	-3,984.20	-1,978.93	1,917.58	1,835.01	82.57	23.225		
14,600.00	10,418.00	15,906.73	11,911.95	78.65	85.58	139.85	-4,084.04	-1,978.06	1,920.73	1,836.76	83.97	22.874		
14,700.00	10,418.00	16,006.65	11,915.97	80.10	87.08	139.93	-4,183.87	-1,977.18	1,923.88	1,838.50	85.38	22.534		
14,800.00	10,418.00	16,106.57	11,920.00	81.55	88.57	140.00	-4,283.71	-1,976.30	1,927.04	1,840.25	86.79	22.203		
14,900.00	10,418.00	16,206.49	11,924.02	83.02	90.08	140.08	-4,383.54	-1,975.42	1,930.20	1,841.99	88.21	21.882		
15,000.00	10,418.00	16,306.41	11,928.05	84.49	91.59	140.15	-4,483.37	-1,974.55	1,933.36	1,843.73	89.63	21.571		
15,100.00	10,418.00	16,406.33	11,932.07	85.96	93.10	140.22	-4,583.21	-1,973.67	1,936.53	1,845.48	91.05	21.268		
15,200.00	10,418.00	16,506.25	11,936.09	87.45	94.62	140.30	-4,683.04	-1,972.79	1,939.70	1,847.22	92.48	20.975		
15,300.00	10,418.00	16,606.17	11,940.12	88.94	96.14	140.37	-4,782.88	-1,971.91	1,942.87	1,848.97	93.91	20.689		
15,400.00	10,418.00	16,706.08	11,944.14	90.43	97.67	140.44	-4,882.71	-1,971.04	1,946.05	1,850.71	95.34	20.412		
15,500.00	10,418.00	16,806.00	11,948.16	91.93	99.20	140.52	-4,982.54	-1,970.16	1,949.23	1,852.46	96.77	20.142		
15,600.00	10,418.00	16,905.92	11,952.19	93.43	100.73	140.59	-5,082.38	-1,969.28	1,952.41	1,854.21	98.21	19.881		
15,700.00	10,418.00	17,005.84	11,956.21	94.94	102.27	140.66	-5,182.21	-1,968.40	1,955.60	1,855.96	99.64	19.626		
15,800.00	10,418.00	17,105.76	11,960.24	96.46	103.81	140.73	-5,282.05	-1,967.53	1,958.79	1,857.71	101.08	19.378		
15,900.00	10,418.00	17,205.68	11,964.26	97.98	105.36	140.81	-5,381.88	-1,966.65	1,961.98	1,859.46	102.52	19.137		
16,000.00	10,418.00	17,305.60	11,968.28	99.50	106.91	140.88	-5,481.71	-1,965.77	1,965.18	1,861.22	103.96	18.903		
16,100.00	10,418.00	17,405.52	11,972.31	101.03	108.46	140.95	-5,581.55	-1,964.90	1,968.37	1,862.98	105.40	18.676		
16,200.00	10,418.00	17,505.43	11,976.33	102.56	110.01	141.02	-5,681.38	-1,964.02	1,971.58	1,864.74	106.84	18.454		
16,300.00	10,418.00	17,605.35	11,980.36	104.09	111.57	141.09	-5,781.21	-1,963.14	1,974.78	1,866.50	108.28	18.238		
16,400.00	10,418.00	17,705.27	11,984.38	105.63	113.13	141.16	-5,881.05	-1,962.26	1,977.99	1,868.26	109.72	18.027		
16,500.00	10,418.00	17,805.19	11,988.40	107.17	114.69	141.23	-5,980.88	-1,961.39	1,981.20	1,870.03	111.17	17.822		
16,600.00	10,418.00	17,905.11	11,992.43	108.72	116.25	141.30	-6,080.72	-1,960.51	1,984.41	1,871.80	112.61	17.622		
16,700.00	10,418.00	18,005.03	11,996.45	110.26	117.82	141.37	-6,180.55	-1,959.63	1,987.63	1,873.58	114.05	17.427		
16,800.00	10,418.00	18,104.95	12,000.47	111.81	119.39	141.44	-6,280.38	-1,958.75	1,990.85	1,875.35	115.49	17.238		
16,900.00	10,418.00	18,204.87	12,004.50	113.37	120.96	141.51	-6,380.22	-1,957.88	1,994.07	1,877.13	116.93	17.053		
17,000.00	10,418.00	18,304.79	12,008.52	114.92	122.53	141.58	-6,480.05	-1,957.00	1,997.29	1,878.92	118.38	16.873		
17,100.00	10,418.00	18,404.70	12,012.55	116.48	124.10	141.65	-6,579.89	-1,956.12	2,000.52	1,880.71	119.82	16.697		
17,200.00	10,418.00	18,504.62	12,016.57	118.04	125.68	141.72	-6,679.72	-1,955.25	2,003.75	1,882.50	121.26	16.525		
17,300.00	10,418.00	18,604.54	12,020.59	119.61	127.26	141.79	-6,779.55	-1,954.37	2,006.99	1,884.29	122.69	16.358		
17,400.00	10,418.00	18,704.46	12,024.62	121.17	128.84	141.86	-6,879.39	-1,953.49	2,010.22	1,886.09	124.13	16.194		
17,500.00	10,418.00	18,804.38	12,028.64	122.74	130.42	141.92	-6,979.22	-1,952.61	2,013.46	1,887.89	125.57	16.034		
17,600.00	10,418.00	18,904.30	12,032.66	124.31	132.01	141.99	-7,079.06	-1,951.74	2,016.71	1,889.70	127.01	15.879		
17,700.00	10,418.00	19,000.00	12,036.63	125.88	133.53	142.06	-7,174.68	-1,950.90	2,019.96	1,891.54	128.42	15.729		
17,800.00	10,418.00	19,082.22	12,040.77	127.46	134.83	142.13	-7,256.78	-1,950.17	2,024.06	1,894.33	129.73	15.602		
17,900.00	10,418.00	19,182.07	12,046.16	129.04	136.42	142.22	-7,356.49	-1,949.30	2,028.40	1,897.28	131.12	15.470		
18,000.00	10,418.00	19,281.93	12,051.55	130.61	138.01	142.31	-7,456.19	-1,948.42	2,032.74	1,900.22	132.51	15.340		
18,100.00	10,418.00	19,381.78	12,056.94	132.19	139.60	142.40	-7,555.90	-1,947.55	2,037.08	1,903.18	133.90	15.213		
18,200.00	10,418.00	19,481.64	12,062.33	133.78	141.19	142.49	-7,655.60	-1,946.67	2,041.43	1,906.14	135.29	15.089		
18,300.00	10,418.00	19,581.49	12,067.72	135.36	142.78	142.58	-7,755.31	-1,945.79	2,045.79	1,909.11	136.68	14.968		
18,400.00	10,418.00	19,681.35	12,073.11	136.94	144.38	142.67	-7,855.01	-1,944.92	2,050.15	1,912.08	138.06	14.849		
18,500.00	10,418.00	19,781.20	12,078.49	138.53	145.97	142.76	-7,954.72	-1,944.04	2,054.51	1,915.07	139.45	14.733		
18,600.00	10,418.00	19,881.05	12,083.88	140.12	147.57	142.85	-8,054.42	-1,943.16	2,058.88	1,918.05	140.83	14.620		
18,700.00	10,418.00	19,980.91	12,089.27	141.71	149.17	142.93	-8,154.13	-1,942.29	2,063.26	1,921.05	142.21	14.509		
18,800.00	10,418.00	20,080.76	12,094.66	143.30	150.77	143.02	-8,253.83	-1,941.41	2,067.64	1,924.05	143.58	14.400		
18,900.00	10,418.00	20,180.62	12,100.05	144.89	152.37	143.11	-8,353.54	-1,940.54	2,072.02	1,927.06	144.96	14.294		

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 503H
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 503H	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				
19,000.00	10,418.00	20,280.47	12,105.44	146.49	153.97	143.20	-8,453.24	-1,939.66	2,076.41	1,930.08	146.33	14.190				
19,100.00	10,418.00	20,380.32	12,110.83	148.08	155.57	143.28	-8,552.94	-1,938.78	2,080.80	1,933.10	147.70	14.088				
19,200.00	10,418.00	20,480.18	12,116.22	149.68	157.17	143.37	-8,652.65	-1,937.91	2,085.20	1,936.13	149.07	13.988				
19,300.00	10,418.00	20,580.03	12,121.61	151.27	158.78	143.45	-8,752.35	-1,937.03	2,089.60	1,939.17	150.43	13.890				
19,400.00	10,418.00	20,679.89	12,127.00	152.87	160.38	143.54	-8,852.06	-1,936.16	2,094.01	1,942.21	151.80	13.795				
19,500.00	10,418.00	20,779.74	12,132.38	154.47	161.99	143.62	-8,951.76	-1,935.28	2,098.43	1,945.26	153.16	13.701				
19,600.00	10,418.00	20,879.60	12,137.77	156.07	163.60	143.71	-9,051.47	-1,934.40	2,102.84	1,948.32	154.52	13.609				
19,700.00	10,418.00	20,979.45	12,143.16	157.67	165.20	143.79	-9,151.17	-1,933.53	2,107.26	1,951.38	155.88	13.519				
19,800.00	10,418.00	21,079.30	12,148.55	159.28	166.81	143.88	-9,250.88	-1,932.65	2,111.69	1,954.45	157.24	13.430				
19,900.00	10,418.00	21,179.16	12,153.94	160.88	168.42	143.96	-9,350.58	-1,931.77	2,116.12	1,957.53	158.59	13.343				
20,000.00	10,418.00	21,279.01	12,159.33	162.48	170.03	144.04	-9,450.29	-1,930.90	2,120.56	1,960.62	159.94	13.258				
20,100.00	10,418.00	21,378.87	12,164.72	164.09	171.64	144.13	-9,549.99	-1,930.02	2,125.00	1,963.71	161.29	13.175				
20,200.00	10,418.00	21,478.72	12,170.11	165.70	173.25	144.21	-9,649.70	-1,929.15	2,129.44	1,966.81	162.63	13.093				
20,300.00	10,418.00	21,578.58	12,175.50	167.30	174.86	144.29	-9,749.40	-1,928.27	2,133.89	1,969.91	163.98	13.013				
20,400.00	10,418.00	21,678.43	12,180.89	168.91	176.48	144.37	-9,849.11	-1,927.39	2,138.34	1,973.02	165.32	12.935				
20,500.00	10,418.00	21,766.96	12,185.72	170.52	177.90	144.45	-9,937.50	-1,926.62	2,142.88	1,976.29	166.59	12.863				
20,600.00	10,418.00	21,828.91	12,190.14	172.13	178.91	144.51	-9,999.29	-1,926.07	2,148.75	1,981.12	167.63	12.819				
20,700.00	10,418.00	21,904.55	12,197.10	173.74	180.13	144.62	-10,074.61	-1,925.41	2,156.26	1,987.59	168.67	12.784				
20,800.00	10,418.00	22,004.09	12,206.62	175.35	181.74	144.76	-10,173.69	-1,924.54	2,164.14	1,994.28	169.86	12.741				
20,900.00	10,418.00	22,103.64	12,216.14	176.97	183.35	144.91	-10,272.77	-1,923.67	2,172.03	2,000.99	171.05	12.699				
21,000.00	10,418.00	22,203.18	12,225.66	178.58	184.96	145.05	-10,371.85	-1,922.80	2,179.94	2,007.71	172.23	12.657				
21,100.00	10,418.00	22,302.72	12,235.17	180.19	186.57	145.19	-10,470.94	-1,921.93	2,187.86	2,014.45	173.41	12.617				
21,200.00	10,418.00	22,402.26	12,244.69	181.81	188.18	145.33	-10,570.02	-1,921.06	2,195.79	2,021.20	174.59	12.577				
21,300.00	10,418.00	22,501.80	12,254.21	183.42	189.79	145.47	-10,669.10	-1,920.19	2,203.74	2,027.97	175.76	12.538				
21,400.00	10,418.00	22,601.34	12,263.73	185.04	191.40	145.61	-10,768.18	-1,919.31	2,211.70	2,034.76	176.94	12.500				
21,500.00	10,418.00	22,700.89	12,273.24	186.65	193.01	145.74	-10,867.26	-1,918.44	2,219.67	2,041.56	178.11	12.462				
21,600.00	10,418.00	22,800.43	12,282.76	188.27	194.62	145.88	-10,966.35	-1,917.57	2,227.65	2,048.37	179.28	12.426				
21,700.00	10,418.00	22,899.97	12,292.28	189.89	196.24	146.01	-11,065.43	-1,916.70	2,235.65	2,055.21	180.44	12.390				
21,800.00	10,418.00	22,999.51	12,301.80	191.50	197.85	146.15	-11,164.51	-1,915.83	2,243.65	2,062.05	181.60	12.355				
21,900.00	10,418.00	23,099.05	12,311.31	193.12	199.46	146.28	-11,263.59	-1,914.96	2,251.67	2,068.91	182.76	12.320				
21,923.68	10,418.00	23,122.62	12,313.57	193.51	199.85	146.31	-11,287.05	-1,914.75	2,253.58	2,070.54	183.04	12.312 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 503H
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 503H	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				
0.00	0.00	16.00	16.00	0.00	0.00	-72.30	579.80	-1,817.21	1,907.50							
100.00	100.00	100.00	99.98	0.13	0.16	-72.29	580.66	-1,818.05	1,908.71	1,908.52	0.19	N/A				
200.00	200.00	202.63	202.59	0.48	0.50	-72.27	581.81	-1,819.44	1,910.34	1,909.65	0.69	2,758.477				
300.00	300.00	300.00	299.95	0.84	0.84	-72.26	582.34	-1,820.76	1,911.80	1,910.61	1.19	1,606.149				
400.00	400.00	383.62	383.55	1.20	1.14	-72.28	582.13	-1,822.40	1,913.59	1,911.94	1.65	1,156.404				
500.00	500.00	473.98	473.88	1.56	1.46	-72.31	582.11	-1,824.70	1,916.03	1,913.89	2.14	896.510				
600.00	600.00	551.00	550.84	1.92	1.74	-72.34	581.79	-1,827.63	1,919.48	1,916.90	2.59	741.715				
700.00	700.00	648.13	647.89	2.28	2.10	-72.39	581.46	-1,831.68	1,923.37	1,920.28	3.09	622.951				
800.00	800.00	783.54	783.20	2.63	2.59	-72.45	580.90	-1,836.62	1,926.78	1,923.10	3.68	523.244				
900.00	900.00	885.70	885.32	2.99	2.95	-72.50	580.08	-1,839.42	1,929.15	1,924.96	4.19	459.900				
1,000.00	1,000.00	996.30	995.89	3.35	3.35	-72.56	578.74	-1,841.92	1,930.94	1,926.21	4.73	408.435				
1,100.00	1,100.00	1,093.44	1,093.00	3.71	3.70	-72.62	577.30	-1,843.95	1,932.50	1,927.28	5.23	369.748				
1,200.00	1,200.00	1,195.43	1,194.93	4.07	4.06	-72.68	575.66	-1,846.46	1,934.37	1,928.63	5.74	337.087				
1,300.00	1,300.00	1,301.38	1,300.87	4.43	4.44	-72.73	574.76	-1,848.37	1,935.84	1,929.58	6.26	309.210				
1,400.00	1,400.00	1,407.04	1,406.51	4.79	4.65	-72.75	574.25	-1,849.86	1,937.05	1,930.39	6.66	290.896				
1,500.00	1,500.00	1,513.24	1,512.71	5.14	4.71	-72.76	574.25	-1,850.83	1,937.92	1,930.96	6.96	278.461				
1,600.00	1,600.00	1,617.02	1,616.48	5.50	4.76	-72.77	574.13	-1,851.53	1,938.53	1,931.27	7.27	266.830				
1,700.00	1,700.00	1,721.94	1,721.40	5.86	4.85	-72.78	574.02	-1,851.98	1,938.90	1,931.31	7.59	255.290				
1,800.00	1,800.00	1,822.30	1,821.77	6.22	4.96	-72.78	574.04	-1,852.23	1,939.15	1,931.21	7.94	244.189				
1,900.00	1,900.00	1,921.91	1,921.37	6.58	5.09	-72.78	574.15	-1,852.48	1,939.43	1,931.12	8.30	233.578				
2,000.00	2,000.00	2,023.64	2,023.11	6.94	5.24	-72.78	574.21	-1,852.67	1,939.62	1,930.94	8.68	223.433				
2,100.00	2,100.00	2,122.99	2,122.46	7.29	5.40	-72.77	574.57	-1,852.77	1,939.82	1,930.76	9.07	213.937				
2,200.00	2,199.99	2,224.44	2,223.90	7.65	5.59	1.08	575.10	-1,852.80	1,938.70	1,929.24	9.46	204.935				
2,300.00	2,299.91	2,326.04	2,325.50	7.99	5.79	1.10	575.70	-1,852.70	1,934.85	1,924.99	9.86	196.274				
2,400.00	2,399.69	2,426.85	2,426.31	8.34	6.00	1.13	576.56	-1,852.45	1,928.33	1,918.07	10.26	187.875				
2,500.00	2,499.27	2,528.09	2,527.54	8.70	6.23	1.17	577.49	-1,852.12	1,919.14	1,908.46	10.68	179.720				
2,600.00	2,598.57	2,614.11	2,613.56	9.06	6.43	1.20	578.07	-1,852.05	1,907.54	1,896.46	11.08	172.164				
2,700.00	2,697.54	2,691.78	2,691.22	9.42	6.62	1.18	577.51	-1,853.15	1,894.32	1,882.84	11.47	165.100				
2,771.79	2,768.33	2,746.45	2,745.86	9.69	6.76	1.15	576.68	-1,854.66	1,883.97	1,872.21	11.76	160.245				
2,800.00	2,796.11	2,774.75	2,774.14	9.79	6.83	1.13	576.19	-1,855.57	1,879.75	1,867.87	11.88	158.230				
2,900.00	2,894.56	2,882.12	2,881.45	10.18	7.11	1.07	574.70	-1,858.81	1,864.70	1,852.37	12.33	151.262				
3,000.00	2,993.02	2,978.63	2,977.92	10.56	7.38	1.01	573.25	-1,861.19	1,849.10	1,836.33	12.76	144.862				
3,100.00	3,091.48	3,053.00	3,052.21	10.95	7.59	0.94	571.26	-1,863.98	1,834.40	1,821.23	13.17	139.278				
3,200.00	3,189.94	3,122.00	3,121.03	11.35	7.78	0.82	568.48	-1,868.09	1,821.34	1,807.77	13.57	134.213				
3,300.00	3,288.39	3,182.10	3,180.84	11.75	7.97	0.68	565.26	-1,873.10	1,810.18	1,796.22	13.96	129.702				
3,400.00	3,386.85	3,248.41	3,246.62	12.16	8.17	0.48	560.87	-1,880.22	1,801.00	1,786.64	14.35	125.475				
3,500.00	3,485.31	3,321.14	3,318.52	12.57	8.40	0.23	555.16	-1,889.52	1,793.50	1,778.74	14.76	121.473				
3,600.00	3,583.77	3,412.09	3,408.22	12.98	8.70	-0.13	547.27	-1,902.24	1,787.03	1,771.81	15.22	117.419				
3,700.00	3,682.22	3,523.30	3,518.05	13.39	9.08	-0.54	538.32	-1,917.28	1,780.33	1,764.61	15.72	113.218				
3,800.00	3,780.68	3,594.00	3,587.91	13.81	9.32	-0.80	532.94	-1,926.72	1,773.87	1,757.73	16.14	109.904				
3,900.00	3,879.14	3,666.47	3,659.30	14.23	9.58	-1.08	527.05	-1,937.65	1,769.01	1,752.44	16.56	106.820				
4,000.00	3,977.60	3,728.77	3,720.36	14.65	9.82	-1.35	521.58	-1,948.73	1,766.51	1,749.55	16.95	104.197				
4,079.32	4,055.70	3,783.00	3,773.32	14.99	10.02	-1.60	516.79	-1,959.38	1,766.01	1,748.73	17.28	102.224				
4,100.00	4,076.05	3,795.33	3,785.34	15.07	10.07	-1.65	515.71	-1,961.92	1,766.08	1,748.72	17.35	101.764				
4,200.00	4,174.51	3,877.00	3,864.87	15.50	10.40	-2.02	508.87	-1,979.19	1,767.17	1,749.37	17.80	99.284				
4,300.00	4,272.97	3,963.50	3,949.00	15.93	10.75	-2.40	502.07	-1,998.11	1,769.22	1,750.96	18.26	96.891				
4,400.00	4,371.43	4,074.81	4,057.28	16.36	11.21	-2.88	493.54	-2,022.46	1,771.43	1,752.63	18.80	94.219				
4,500.00	4,469.88	4,264.20	4,242.22	16.79	12.01	-3.77	475.81	-2,059.12	1,771.07	1,751.49	19.58	90.454				
4,600.00	4,568.34	4,474.42	4,450.09	17.22	12.83	-4.57	458.96	-2,084.97	1,763.02	1,742.66	20.36	86.572				
4,700.00	4,666.80	4,570.35	4,545.41	17.65	13.19	-4.85	453.34	-2,094.21	1,753.82	1,732.95	20.86	84.069				
4,800.00	4,765.25	4,680.18	4,654.61	18.08	13.59	-5.15	447.98	-2,104.67	1,744.77	1,723.38	21.39	81.576				
4,900.00	4,863.71	4,790.32	4,764.28	18.52	14.00	-5.41	443.32	-2,113.75	1,734.55	1,712.64	21.91	79.152				

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 503H
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 503H	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				
5,000.00	4,962.17	4,878.87	4,852.41	18.95	14.32	-5.64	439.18	-2,121.28	1,724.59	1,702.19	22.40	77.002				
5,100.00	5,060.63	4,989.74	4,962.70	19.39	14.74	-5.95	433.62	-2,131.14	1,715.00	1,692.08	22.93	74.800				
5,200.00	5,159.08	5,072.00	5,044.51	19.83	15.05	-6.19	429.16	-2,138.40	1,705.30	1,681.90	23.40	72.873				
5,300.00	5,257.54	5,142.77	5,114.74	20.27	15.32	-6.45	424.25	-2,145.65	1,696.83	1,672.98	23.85	71.150				
5,400.00	5,356.00	5,199.00	5,170.33	20.71	15.55	-6.68	419.50	-2,152.65	1,690.47	1,666.21	24.25	69.696				
5,500.00	5,454.46	5,272.48	5,242.67	21.15	15.86	-7.03	412.44	-2,163.43	1,686.15	1,661.45	24.71	68.251				
5,600.00	5,552.91	5,355.03	5,323.63	21.59	16.22	-7.45	403.87	-2,177.07	1,683.58	1,658.40	25.18	66.860				
5,700.00	5,651.37	5,450.28	5,416.93	22.03	16.64	-7.95	393.68	-2,193.28	1,681.62	1,655.92	25.70	65.441				
5,800.00	5,749.83	5,554.95	5,519.46	22.47	17.10	-8.51	382.31	-2,211.04	1,679.74	1,653.50	26.24	64.004				
5,900.00	5,848.29	5,650.39	5,612.97	22.91	17.53	-9.02	371.86	-2,227.05	1,677.80	1,651.04	26.76	62.690				
6,000.00	5,946.74	5,747.71	5,708.25	23.36	17.96	-9.55	361.07	-2,243.62	1,676.25	1,648.96	27.29	61.424				
6,100.00	6,045.20	5,874.43	5,832.53	23.80	18.53	-10.22	347.42	-2,264.28	1,674.18	1,646.27	27.91	59.986				
6,200.00	6,143.66	5,996.40	5,952.56	24.24	19.06	-10.83	335.12	-2,282.09	1,670.58	1,642.07	28.51	58.600				
6,300.00	6,242.12	6,107.79	6,062.30	24.69	19.54	-11.41	323.36	-2,297.12	1,665.97	1,636.89	29.07	57.300				
6,400.00	6,340.57	6,216.14	6,169.07	25.13	20.00	-11.99	311.41	-2,311.18	1,660.96	1,631.32	29.63	56.052				
6,500.00	6,439.03	6,315.31	6,266.85	25.58	20.43	-12.52	300.48	-2,323.66	1,655.70	1,625.54	30.17	54.887				
6,600.00	6,537.49	6,412.23	6,362.37	26.02	20.84	-13.05	289.67	-2,335.96	1,650.69	1,620.00	30.69	53.779				
6,700.00	6,635.95	6,525.62	6,474.28	26.47	21.33	-13.64	277.96	-2,349.93	1,645.50	1,614.24	31.27	52.630				
6,757.61	6,692.67	6,577.67	6,525.76	26.73	21.54	-13.88	273.44	-2,356.16	1,642.39	1,610.84	31.56	52.046				
6,800.00	6,734.44	6,614.00	6,561.71	26.91	21.70	-14.03	270.63	-2,360.56	1,640.43	1,608.67	31.77	51.643				
6,900.00	6,833.29	6,708.00	6,654.75	27.34	22.09	-14.38	264.12	-2,372.27	1,638.02	1,605.74	32.27	50.753				
6,942.07	6,874.99	6,753.49	6,699.78	27.51	22.27	-14.54	261.15	-2,377.99	1,637.84	1,605.34	32.50	50.390	CC, ES			
7,000.00	6,932.50	6,818.93	6,764.59	27.75	22.55	-14.77	256.88	-2,386.02	1,638.16	1,605.34	32.83	49.905				
7,100.00	7,032.01	6,940.31	6,884.93	28.14	23.04	-15.17	249.03	-2,399.73	1,639.78	1,606.39	33.40	49.099				
7,200.00	7,131.74	7,058.87	7,002.68	28.51	23.51	-15.52	241.91	-2,411.70	1,642.78	1,608.83	33.95	48.385				
7,300.00	7,231.62	7,153.95	7,097.20	28.86	23.88	-15.75	236.96	-2,420.71	1,647.73	1,613.28	34.45	47.835				
7,400.00	7,331.60	7,249.14	7,191.83	29.19	24.25	-15.95	232.95	-2,430.21	1,655.70	1,620.77	34.93	47.395				
7,429.40	7,361.00	7,278.80	7,221.31	29.28	24.37	-89.84	231.69	-2,433.20	1,658.55	1,623.47	35.08	47.279				
7,500.00	7,431.60	7,364.01	7,306.05	29.50	24.70	-89.97	227.91	-2,441.35	1,665.31	1,629.85	35.46	46.963				
7,600.00	7,531.60	7,489.34	7,430.85	29.82	25.18	-90.13	223.14	-2,451.71	1,673.56	1,637.56	36.00	46.487				
7,700.00	7,631.60	7,600.44	7,541.62	30.14	25.58	-90.22	220.49	-2,459.81	1,680.86	1,644.36	36.51	46.042				
7,800.00	7,731.60	7,722.40	7,663.32	30.45	26.02	-90.27	218.96	-2,467.56	1,687.24	1,650.21	37.03	45.568				
7,900.00	7,831.60	7,855.87	7,796.64	30.77	26.48	-90.32	217.61	-2,473.70	1,691.84	1,654.29	37.56	45.049				
8,000.00	7,931.60	7,979.87	7,920.58	31.09	26.89	-90.36	216.22	-2,477.39	1,694.84	1,656.78	38.06	44.527				
8,100.00	8,031.60	8,093.65	8,034.34	31.41	27.26	-90.35	216.75	-2,479.26	1,696.46	1,657.91	38.55	44.007				
8,200.00	8,131.60	8,196.04	8,136.72	31.73	27.57	-90.30	218.11	-2,480.62	1,697.78	1,658.76	39.02	43.507				
8,300.00	8,231.60	8,303.07	8,243.73	32.06	27.91	-90.26	219.18	-2,481.78	1,698.86	1,659.36	39.50	43.010				
8,400.00	8,331.60	8,414.61	8,355.27	32.38	28.25	-90.24	219.79	-2,482.35	1,699.37	1,659.39	39.98	42.508				
8,500.00	8,431.60	8,523.48	8,464.14	32.70	28.57	-90.23	220.18	-2,482.22	1,699.24	1,658.80	40.45	42.013				
8,600.00	8,531.60	8,627.60	8,568.26	33.03	28.87	-90.22	220.52	-2,481.73	1,698.77	1,657.87	40.91	41.527				
8,700.00	8,631.60	8,736.58	8,677.23	33.35	29.18	-90.22	220.55	-2,480.86	1,697.98	1,656.61	41.37	41.042				
8,800.00	8,731.60	8,846.52	8,787.16	33.68	29.50	-90.23	220.16	-2,479.24	1,696.51	1,654.67	41.84	40.551				
8,900.00	8,831.60	8,951.06	8,891.68	34.00	29.80	-90.23	220.27	-2,477.29	1,694.64	1,652.34	42.30	40.063				
9,000.00	8,931.60	9,050.30	8,990.89	34.33	30.08	-90.20	221.06	-2,475.33	1,692.66	1,649.89	42.76	39.584				
9,100.00	9,031.60	9,150.50	9,091.07	34.66	30.37	-90.16	222.17	-2,473.39	1,690.72	1,647.50	43.22	39.115				
9,200.00	9,131.60	9,253.50	9,194.04	34.98	30.66	-90.11	223.64	-2,471.30	1,688.69	1,645.00	43.69	38.654				
9,300.00	9,231.60	9,358.29	9,298.80	35.31	30.96	-90.07	225.01	-2,468.90	1,686.40	1,642.24	44.15	38.195				
9,400.00	9,331.60	9,456.42	9,396.89	35.64	31.25	-90.02	226.36	-2,466.60	1,684.04	1,639.43	44.62	37.744				
9,500.00	9,431.60	9,536.00	9,476.44	35.97	31.48	-89.98	227.53	-2,464.78	1,681.88	1,636.80	45.08	37.310				
9,588.21	9,519.81	9,606.21	9,546.64	36.26	31.69	-89.95	228.54	-2,463.97	1,680.98	1,635.49	45.49	36.955				
9,600.00	9,531.60	9,613.88	9,554.30	36.30	31.72	-89.94	228.65	-2,463.98	1,680.99	1,635.45	45.54	36.912				
9,700.00	9,631.60	9,697.54	9,637.95	36.63	31.98	-89.90	229.88	-2,464.72	1,681.85	1,635.84	46.01	36.557				

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 503H
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 503H	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		
9,800.00	9,731.60	9,803.44	9,743.83	36.96	32.32	-89.85	231.55	-2,465.94	1,683.01	1,636.52	46.49	36.202		
9,900.00	9,831.60	9,924.05	9,864.43	37.30	32.70	-89.79	233.12	-2,466.17	1,683.20	1,636.22	46.98	35.828		
9,913.44	9,845.04	9,936.48	9,876.86	37.34	32.74	-89.79	233.27	-2,466.13	1,683.15	1,636.11	47.04	35.779		
9,950.00	9,881.57	9,970.23	9,910.61	37.46	32.85	90.84	233.71	-2,466.05	1,683.08	1,635.87	47.21	35.650		
9,957.66	9,889.21	9,977.29	9,917.66	37.48	32.87	90.86	233.81	-2,466.04	1,683.08	1,635.84	47.24	35.625		
10,000.00	9,931.27	10,016.89	9,957.26	37.60	32.99	91.03	234.39	-2,466.03	1,683.15	1,635.72	47.43	35.486		
10,050.00	9,980.31	10,066.57	10,006.93	37.74	33.15	91.36	235.09	-2,466.03	1,683.36	1,635.71	47.65	35.327		
10,100.00	10,028.32	10,114.58	10,054.94	37.87	33.30	91.79	235.65	-2,466.01	1,683.75	1,635.89	47.86	35.179		
10,150.00	10,074.94	10,159.69	10,100.06	37.99	33.44	92.27	235.69	-2,466.02	1,684.46	1,636.39	48.07	35.042		
10,200.00	10,119.80	10,197.00	10,137.36	38.10	33.56	92.69	235.25	-2,466.08	1,685.63	1,637.36	48.27	34.923		
10,250.00	10,162.58	10,239.30	10,179.65	38.19	33.70	93.23	234.48	-2,466.27	1,687.43	1,638.96	48.47	34.815		
10,300.00	10,202.93	10,273.91	10,214.26	38.28	33.82	93.63	233.79	-2,466.57	1,690.07	1,641.41	48.66	34.731		
10,350.00	10,240.57	10,307.75	10,248.09	38.35	33.93	94.01	233.08	-2,466.98	1,693.67	1,644.81	48.86	34.667		
10,400.00	10,275.19	10,340.73	10,281.05	38.42	34.04	94.33	232.33	-2,467.45	1,698.30	1,649.25	49.05	34.623		
10,450.00	10,306.54	10,370.81	10,311.12	38.47	34.15	94.52	231.61	-2,467.93	1,704.09	1,654.84	49.25	34.601 SF		
10,500.00	10,334.38	10,399.88	10,340.17	38.52	34.24	94.62	230.88	-2,468.41	1,711.13	1,661.68	49.45	34.602		
10,550.00	10,358.49	10,427.64	10,367.92	38.56	34.34	94.58	230.18	-2,468.85	1,719.49	1,669.83	49.66	34.626		
10,600.00	10,378.70	10,451.14	10,391.41	38.60	34.42	94.30	229.59	-2,469.18	1,729.25	1,679.38	49.87	34.677		
10,650.00	10,394.84	10,470.20	10,410.47	38.64	34.48	93.76	229.11	-2,469.43	1,740.46	1,690.38	50.08	34.754		
10,700.00	10,406.80	10,484.68	10,424.94	38.68	34.53	92.92	228.75	-2,469.61	1,753.16	1,702.87	50.29	34.860		
10,750.00	10,414.49	10,493.81	10,434.07	38.74	34.56	91.75	228.52	-2,469.72	1,767.32	1,716.82	50.50	34.994		
10,800.00	10,417.84	10,498.61	10,438.87	38.82	34.58	90.27	228.41	-2,469.77	1,782.86	1,732.15	50.71	35.156		
10,813.44	10,418.00	10,499.13	10,439.38	38.85	34.58	89.83	228.39	-2,469.78	1,787.26	1,736.49	50.77	35.204		
10,900.00	10,418.00	10,501.36	10,441.62	39.04	34.59	89.90	228.34	-2,469.80	1,817.72	1,766.58	51.15	35.541		
11,000.00	10,418.00	10,503.94	10,444.20	39.34	34.60	89.99	228.27	-2,469.83	1,857.32	1,805.70	51.62	35.982		
11,100.00	10,418.00	10,506.52	10,446.77	39.72	34.61	90.08	228.21	-2,469.86	1,901.35	1,849.23	52.12	36.481		
11,200.00	10,418.00	10,509.09	10,449.34	40.19	34.62	90.16	228.15	-2,469.89	1,949.52	1,896.89	52.63	37.040		
11,300.00	10,418.00	10,511.66	10,451.91	40.72	34.62	90.25	228.08	-2,469.92	2,001.52	1,948.37	53.15	37.658		
11,400.00	10,418.00	10,514.23	10,454.48	41.32	34.63	90.34	228.02	-2,469.95	2,057.08	2,003.41	53.66	38.333		
11,500.00	10,418.00	10,516.80	10,457.05	41.98	34.64	90.43	227.96	-2,469.97	2,115.89	2,061.73	54.17	39.063		
11,600.00	10,418.00	10,519.36	10,459.61	42.70	34.65	90.51	227.89	-2,470.00	2,177.72	2,123.06	54.65	39.846		
11,700.00	10,418.00	10,521.92	10,462.17	43.47	34.66	90.60	227.83	-2,470.03	2,242.29	2,187.17	55.12	40.679		
11,800.00	10,418.00	10,524.48	10,464.73	44.29	34.67	90.69	227.77	-2,470.06	2,309.39	2,253.82	55.57	41.559		
11,900.00	10,418.00	10,527.03	10,467.28	45.15	34.68	90.77	227.70	-2,470.08	2,378.80	2,322.81	55.99	42.484		
12,000.00	10,418.00	10,529.59	10,469.83	46.06	34.68	90.86	227.64	-2,470.11	2,450.32	2,393.93	56.39	43.450		
12,100.00	10,418.00	10,532.14	10,472.38	47.01	34.69	90.95	227.58	-2,470.14	2,523.78	2,467.00	56.77	44.455		
12,200.00	10,418.00	10,534.68	10,474.93	47.99	34.70	91.03	227.52	-2,470.16	2,599.00	2,541.88	57.12	45.497		
12,300.00	10,418.00	10,537.23	10,477.47	49.02	34.71	91.12	227.45	-2,470.19	2,675.85	2,618.39	57.46	46.571		
12,400.00	10,418.00	10,539.77	10,480.01	50.07	34.72	91.21	227.39	-2,470.22	2,754.18	2,696.41	57.77	47.675		
12,500.00	10,418.00	10,542.31	10,482.55	51.16	34.73	91.29	227.33	-2,470.24	2,833.87	2,775.81	58.06	48.806		
12,600.00	10,418.00	10,544.85	10,485.08	52.28	34.74	91.38	227.27	-2,470.27	2,914.81	2,856.47	58.34	49.963		
12,700.00	10,418.00	10,547.38	10,487.62	53.42	34.74	91.46	227.21	-2,470.29	2,996.90	2,938.30	58.60	51.143		
12,800.00	10,418.00	10,549.91	10,490.15	54.59	34.75	91.55	227.14	-2,470.32	3,080.05	3,021.21	58.84	52.345		
12,900.00	10,418.00	10,552.44	10,492.68	55.78	34.76	91.64	227.08	-2,470.34	3,164.17	3,105.10	59.07	53.567		
13,000.00	10,418.00	10,554.96	10,495.20	57.00	34.77	91.72	227.02	-2,470.37	3,249.19	3,189.91	59.28	54.806		
13,100.00	10,418.00	10,557.49	10,497.72	58.24	34.78	91.81	226.96	-2,470.39	3,335.04	3,275.55	59.49	56.063		
13,200.00	10,418.00	10,560.01	10,500.24	59.50	34.79	91.89	226.90	-2,470.42	3,421.66	3,361.98	59.68	57.334		
13,300.00	10,418.00	10,562.53	10,502.76	60.77	34.80	91.98	226.84	-2,470.44	3,508.98	3,449.12	59.86	58.620		
13,400.00	10,418.00	10,565.04	10,505.27	62.07	34.80	92.06	226.77	-2,470.47	3,596.97	3,536.94	60.03	59.918		
13,500.00	10,418.00	10,567.56	10,507.79	63.38	34.81	92.15	226.71	-2,470.49	3,685.56	3,625.37	60.19	61.229		
13,600.00	10,418.00	10,570.07	10,510.30	64.71	34.82	92.23	226.65	-2,470.51	3,774.73	3,714.38	60.35	62.552		
13,700.00	10,418.00	10,572.57	10,512.80	66.05	34.83	92.32	226.59	-2,470.54	3,864.42	3,803.93	60.49	63.886		

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 503H
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 503H	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 702H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-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	
13,800.00	10,418.00	10,575.08	10,515.31	67.40	34.84	92.40	226.53	-2,470.56	3,954.61	3,893.98	60.63	65.229	
13,900.00	10,418.00	10,575.00	10,515.23	68.77	34.84	92.40	226.53	-2,470.56	4,045.25	3,984.50	60.75	66.584	
14,000.00	10,418.00	10,575.00	10,515.23	70.15	34.84	92.40	226.53	-2,470.56	4,136.33	4,075.45	60.88	67.947	
14,100.00	10,418.00	10,575.00	10,515.23	71.54	34.84	92.40	226.53	-2,470.56	4,227.81	4,166.82	60.99	69.317	
14,200.00	10,418.00	10,575.00	10,515.23	72.95	34.84	92.40	226.53	-2,470.56	4,319.67	4,258.57	61.10	70.693	
14,300.00	10,418.00	10,575.00	10,515.23	74.36	34.84	92.40	226.53	-2,470.56	4,411.88	4,350.67	61.21	72.076	
14,400.00	10,418.00	10,575.00	10,515.23	75.78	34.84	92.40	226.53	-2,470.56	4,504.43	4,443.11	61.31	73.465	
14,500.00	10,418.00	10,575.00	10,515.23	77.21	34.84	92.40	226.53	-2,470.56	4,597.28	4,535.87	61.41	74.859	
14,600.00	10,418.00	10,575.00	10,515.23	78.65	34.84	92.40	226.53	-2,470.56	4,690.44	4,628.93	61.51	76.257	
14,700.00	10,418.00	10,575.00	10,515.23	80.10	34.84	92.40	226.53	-2,470.56	4,783.86	4,722.26	61.60	77.660	
14,800.00	10,418.00	10,575.00	10,515.23	81.55	34.84	92.40	226.53	-2,470.56	4,877.55	4,815.86	61.69	79.067	
14,900.00	10,418.00	10,575.00	10,515.23	83.02	34.84	92.40	226.53	-2,470.56	4,971.49	4,909.71	61.77	80.478	

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 503H
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 503H	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	-72.30	579.80	-1,817.21	1,907.50							
100.00	100.00	100.00	99.98	0.13	0.16	-72.29	580.66	-1,818.05	1,908.71	1,908.52	0.19	N/A				
200.00	200.00	202.63	202.59	0.48	0.50	-72.27	581.81	-1,819.44	1,910.34	1,909.65	0.69	2,758.477				
300.00	300.00	300.00	299.95	0.84	0.84	-72.26	582.34	-1,820.76	1,911.80	1,910.61	1.19	1,606.149				
400.00	400.00	383.62	383.55	1.20	1.14	-72.28	582.13	-1,822.40	1,913.59	1,911.94	1.65	1,156.404				
500.00	500.00	473.98	473.88	1.56	1.46	-72.31	582.11	-1,824.70	1,916.03	1,913.89	2.14	896.510				
600.00	600.00	551.00	550.84	1.92	1.74	-72.34	581.79	-1,827.63	1,919.48	1,916.90	2.59	741.715				
700.00	700.00	648.13	647.89	2.28	2.10	-72.39	581.46	-1,831.68	1,923.37	1,920.28	3.09	622.951				
800.00	800.00	783.54	783.20	2.63	2.59	-72.45	580.90	-1,836.62	1,926.78	1,923.10	3.68	523.244				
900.00	900.00	885.70	885.32	2.99	2.95	-72.50	580.08	-1,839.42	1,929.15	1,924.96	4.19	459.900				
1,000.00	1,000.00	996.30	995.89	3.35	3.35	-72.56	578.74	-1,841.92	1,930.94	1,926.21	4.73	408.435				
1,100.00	1,100.00	1,093.44	1,093.00	3.71	3.70	-72.62	577.30	-1,843.95	1,932.50	1,927.28	5.23	369.748				
1,200.00	1,200.00	1,195.43	1,194.93	4.07	4.06	-72.68	575.66	-1,846.46	1,934.37	1,928.63	5.74	337.087				
1,300.00	1,300.00	1,301.38	1,300.87	4.43	4.44	-72.73	574.76	-1,848.37	1,935.84	1,929.58	6.26	309.210				
1,400.00	1,400.00	1,407.04	1,406.51	4.79	4.65	-72.75	574.25	-1,849.86	1,937.05	1,930.39	6.66	290.896				
1,500.00	1,500.00	1,513.24	1,512.71	5.14	4.71	-72.76	574.25	-1,850.83	1,937.92	1,930.96	6.96	278.461				
1,600.00	1,600.00	1,617.02	1,616.48	5.50	4.76	-72.77	574.13	-1,851.53	1,938.53	1,931.27	7.27	266.830				
1,700.00	1,700.00	1,721.94	1,721.40	5.86	4.85	-72.78	574.02	-1,851.98	1,938.90	1,931.31	7.59	255.290				
1,800.00	1,800.00	1,822.30	1,821.77	6.22	4.96	-72.78	574.04	-1,852.23	1,939.15	1,931.21	7.94	244.189				
1,900.00	1,900.00	1,921.91	1,921.37	6.58	5.09	-72.78	574.15	-1,852.48	1,939.43	1,931.12	8.30	233.578				
2,000.00	2,000.00	2,023.64	2,023.11	6.94	5.24	-72.78	574.21	-1,852.67	1,939.62	1,930.94	8.68	223.433				
2,100.00	2,100.00	2,122.99	2,122.46	7.29	5.40	-72.77	574.57	-1,852.77	1,939.82	1,930.76	9.07	213.937				
2,200.00	2,199.99	2,224.44	2,223.90	7.65	5.59	1.08	575.10	-1,852.80	1,938.70	1,929.24	9.46	204.935				
2,300.00	2,299.91	2,326.04	2,325.50	7.99	5.79	1.10	575.70	-1,852.70	1,934.85	1,924.99	9.86	196.274				
2,400.00	2,399.69	2,426.85	2,426.31	8.34	6.00	1.13	576.56	-1,852.45	1,928.33	1,918.07	10.26	187.875				
2,500.00	2,499.27	2,528.09	2,527.54	8.70	6.23	1.17	577.49	-1,852.12	1,919.14	1,908.46	10.68	179.720				
2,600.00	2,598.57	2,614.11	2,613.56	9.06	6.43	1.20	578.07	-1,852.05	1,907.54	1,896.46	11.08	172.164				
2,700.00	2,697.54	2,691.78	2,691.22	9.42	6.62	1.18	577.51	-1,853.15	1,894.32	1,882.84	11.47	165.100				
2,771.79	2,768.33	2,746.43	2,745.84	9.69	6.76	1.15	576.68	-1,854.65	1,883.97	1,872.21	11.76	160.245				
2,800.00	2,796.11	2,774.31	2,773.71	9.79	6.83	1.13	576.17	-1,855.57	1,879.76	1,867.88	11.88	158.244				
2,900.00	2,894.56	2,858.88	2,858.20	10.18	7.05	1.06	574.52	-1,858.57	1,865.05	1,852.76	12.29	151.743				
3,000.00	2,993.02	2,933.60	2,932.79	10.56	7.26	0.97	572.35	-1,862.38	1,851.54	1,838.85	12.69	145.885				
3,100.00	3,091.48	3,000.00	2,998.99	10.95	7.44	0.86	569.79	-1,866.82	1,839.36	1,826.28	13.08	140.618				
3,200.00	3,189.94	3,083.45	3,082.05	11.35	7.69	0.68	565.74	-1,873.80	1,828.45	1,814.95	13.50	135.398				
3,300.00	3,288.39	3,158.46	3,156.54	11.75	7.92	0.48	561.30	-1,881.40	1,818.92	1,805.00	13.92	130.710				
3,400.00	3,386.85	3,233.45	3,230.82	12.16	8.15	0.25	556.11	-1,890.25	1,810.74	1,796.41	14.33	126.366				
3,500.00	3,485.31	3,320.13	3,316.46	12.57	8.43	-0.06	549.33	-1,901.78	1,803.80	1,789.03	14.77	122.114				
3,600.00	3,583.77	3,419.25	3,414.36	12.98	8.76	-0.42	541.47	-1,915.15	1,797.11	1,781.86	15.25	117.875				
3,700.00	3,682.22	3,518.37	3,512.27	13.39	9.11	-0.79	533.60	-1,928.52	1,790.48	1,774.76	15.73	113.860				
3,800.00	3,780.68	3,617.50	3,610.17	13.81	9.45	-1.15	525.74	-1,941.90	1,783.93	1,767.72	16.21	110.056				
3,900.00	3,879.14	3,716.62	3,708.07	14.23	9.81	-1.52	517.87	-1,955.27	1,777.46	1,760.76	16.70	106.451				
4,000.00	3,977.60	3,815.75	3,805.98	14.65	10.17	-1.89	510.01	-1,968.64	1,771.06	1,753.87	17.19	103.033				
4,100.00	4,076.05	3,914.87	3,903.88	15.07	10.54	-2.26	502.14	-1,982.01	1,764.73	1,747.04	17.68	99.790				
4,200.00	4,174.51	4,014.00	4,001.78	15.50	10.91	-2.64	494.28	-1,995.38	1,758.48	1,740.30	18.18	96.712				
4,300.00	4,272.97	4,113.12	4,099.69	15.93	11.29	-3.02	486.42	-2,008.76	1,752.31	1,733.62	18.68	93.789				
4,400.00	4,371.43	4,212.25	4,197.59	16.36	11.67	-3.40	478.55	-2,022.13	1,746.21	1,727.03	19.19	91.010				
4,500.00	4,469.88	4,311.37	4,295.49	16.79	12.05	-3.79	470.69	-2,035.50	1,740.20	1,720.51	19.69	88.367				
4,600.00	4,568.34	4,410.50	4,393.40	17.22	12.44	-4.17	462.82	-2,048.87	1,734.26	1,714.06	20.20	85.852				
4,700.00	4,666.80	4,509.62	4,491.30	17.65	12.83	-4.56	454.96	-2,062.24	1,728.41	1,707.70	20.71	83.456				
4,800.00	4,765.25	4,608.75	4,589.20	18.08	13.23	-4.95	447.09	-2,075.62	1,722.63	1,701.41	21.22	81.173				
4,900.00	4,863.71	4,707.87	4,687.11	18.52	13.63	-5.35	439.23	-2,088.99	1,716.94	1,695.21	21.73	78.995				
5,000.00	4,962.17	4,806.99	4,785.01	18.95	14.02	-5.75	431.36	-2,102.36	1,711.33	1,689.08	22.25	76.916				

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 503H
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 503H	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 702H - OH - Plan #5													Offset Well Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 2745-OWSG (Rev2) MWD														
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,060.63	4,906.12	4,882.91	19.39	14.43	-6.15	423.50	-2,115.73	1,705.81	1,683.04	22.77	74.930		
5,200.00	5,159.08	5,005.24	4,980.82	19.83	14.83	-6.55	415.64	-2,129.10	1,700.37	1,677.08	23.28	73.032		
5,300.00	5,257.54	5,104.37	5,078.72	20.27	15.23	-6.95	407.77	-2,142.47	1,695.01	1,671.21	23.80	71.217		
5,400.00	5,356.00	5,203.49	5,176.62	20.71	15.64	-7.36	399.91	-2,155.85	1,689.74	1,665.42	24.32	69.480		
5,500.00	5,454.46	5,302.62	5,274.53	21.15	16.05	-7.77	392.04	-2,169.22	1,684.56	1,659.72	24.84	67.816		
5,600.00	5,552.91	5,401.74	5,372.43	21.59	16.46	-8.18	384.18	-2,182.59	1,679.47	1,654.11	25.36	66.222		
5,700.00	5,651.37	5,500.87	5,470.33	22.03	16.87	-8.60	376.31	-2,195.96	1,674.46	1,648.58	25.88	64.693		
5,800.00	5,749.83	5,599.99	5,568.23	22.47	17.28	-9.02	368.45	-2,209.33	1,669.54	1,643.14	26.41	63.226		
5,900.00	5,848.29	5,699.12	5,666.14	22.91	17.70	-9.43	360.59	-2,222.71	1,664.72	1,637.79	26.93	61.818		
6,000.00	5,946.74	5,798.24	5,764.04	23.36	18.11	-9.86	352.72	-2,236.08	1,659.98	1,632.53	27.45	60.465		
6,100.00	6,045.20	5,897.37	5,861.94	23.80	18.53	-10.28	344.86	-2,249.45	1,655.34	1,627.36	27.98	59.164		
6,200.00	6,143.66	5,996.49	5,959.85	24.24	18.94	-10.71	336.99	-2,262.82	1,650.79	1,622.29	28.50	57.914		
6,300.00	6,242.12	6,095.61	6,057.75	24.69	19.36	-11.14	329.13	-2,276.19	1,646.33	1,617.30	29.03	56.710		
6,400.00	6,340.57	6,194.74	6,155.65	25.13	19.78	-11.57	321.26	-2,289.57	1,641.97	1,612.41	29.56	55.552		
6,500.00	6,439.03	6,293.86	6,253.56	25.58	20.20	-12.00	313.40	-2,302.94	1,637.70	1,607.62	30.08	54.436		
6,600.00	6,537.49	6,392.99	6,351.46	26.02	20.62	-12.44	305.53	-2,316.31	1,633.53	1,602.91	30.61	53.361		
6,700.00	6,635.95	6,492.11	6,449.36	26.47	21.04	-12.88	297.67	-2,329.68	1,629.45	1,598.31	31.14	52.325		
6,757.61	6,692.67	6,549.22	6,505.77	26.73	21.28	-13.13	293.14	-2,337.39	1,627.15	1,595.70	31.45	51.744		
6,800.00	6,734.44	6,591.25	6,547.28	26.91	21.46	-13.31	289.80	-2,343.06	1,625.70	1,594.03	31.67	51.333		
6,900.00	6,833.29	6,690.51	6,645.31	27.34	21.88	-13.73	281.93	-2,356.44	1,624.17	1,591.97	32.20	50.445		
6,908.28	6,841.49	6,698.73	6,653.43	27.38	21.91	-13.76	281.28	-2,357.55	1,624.16	1,591.92	32.24	50.377 CC, ES		
7,000.00	6,932.50	6,789.84	6,743.42	27.75	22.30	-14.13	274.05	-2,369.84	1,625.26	1,592.54	32.72	49.670		
7,100.00	7,032.01	6,889.19	6,841.54	28.14	22.72	-14.52	266.17	-2,383.25	1,628.97	1,595.73	33.24	49.004		
7,200.00	7,131.74	6,988.47	6,939.61	28.51	23.15	-14.90	258.29	-2,396.64	1,635.28	1,601.52	33.76	48.441		
7,300.00	7,231.62	7,087.63	7,037.54	28.86	23.57	-15.26	250.42	-2,410.02	1,644.16	1,609.89	34.27	47.977		
7,400.00	7,331.60	7,186.60	7,135.29	29.19	24.00	-15.61	242.57	-2,423.37	1,655.61	1,620.83	34.78	47.607		
7,429.40	7,361.00	7,215.65	7,163.98	29.28	24.12	-89.54	240.27	-2,427.29	1,659.46	1,624.54	34.92	47.516		
7,500.00	7,431.60	7,291.89	7,239.30	29.50	24.45	-89.75	234.24	-2,437.54	1,668.96	1,633.66	35.30	47.285		
7,600.00	7,531.60	7,451.41	7,397.42	29.82	25.10	-90.12	223.61	-2,455.60	1,680.30	1,644.35	35.95	46.740		
7,700.00	7,631.60	7,612.43	7,557.78	30.14	25.71	-90.36	216.30	-2,468.04	1,688.06	1,651.50	36.56	46.168		
7,800.00	7,731.60	7,774.39	7,719.54	30.45	26.27	-90.49	212.40	-2,474.67	1,692.17	1,655.04	37.13	45.575		
7,900.00	7,831.60	7,912.96	7,858.10	30.77	26.69	-90.52	211.73	-2,475.81	1,692.88	1,655.25	37.63	44.992		
8,000.00	7,931.60	8,012.96	7,958.10	31.09	26.99	-90.52	211.73	-2,475.81	1,692.88	1,654.79	38.09	44.447		
8,100.00	8,031.60	8,112.96	8,058.10	31.41	27.28	-90.52	211.73	-2,475.81	1,692.88	1,654.33	38.55	43.913		
8,200.00	8,131.60	8,212.96	8,158.10	31.73	27.58	-90.52	211.73	-2,475.81	1,692.88	1,653.86	39.01	43.391		
8,300.00	8,231.60	8,312.96	8,258.10	32.06	27.88	-90.52	211.73	-2,475.81	1,692.88	1,653.40	39.48	42.879		
8,400.00	8,331.60	8,412.96	8,358.10	32.38	28.18	-90.52	211.73	-2,475.81	1,692.88	1,652.93	39.95	42.379		
8,500.00	8,431.60	8,512.96	8,458.10	32.70	28.48	-90.52	211.73	-2,475.81	1,692.88	1,652.47	40.41	41.889		
8,600.00	8,531.60	8,612.96	8,558.10	33.03	28.78	-90.52	211.73	-2,475.81	1,692.88	1,652.00	40.88	41.410		
8,700.00	8,631.60	8,712.96	8,658.10	33.35	29.08	-90.52	211.73	-2,475.81	1,692.88	1,651.53	41.35	40.940		
8,800.00	8,731.60	8,812.96	8,758.10	33.68	29.39	-90.52	211.73	-2,475.81	1,692.88	1,651.06	41.82	40.480		
8,900.00	8,831.60	8,912.96	8,858.10	34.00	29.69	-90.52	211.73	-2,475.81	1,692.88	1,650.59	42.29	40.029		
9,000.00	8,931.60	9,012.96	8,958.10	34.33	30.00	-90.52	211.73	-2,475.81	1,692.88	1,650.12	42.76	39.588		
9,100.00	9,031.60	9,112.96	9,058.10	34.66	30.31	-90.52	211.73	-2,475.81	1,692.88	1,649.64	43.23	39.155		
9,200.00	9,131.60	9,212.96	9,158.10	34.98	30.62	-90.52	211.73	-2,475.81	1,692.88	1,649.17	43.71	38.731		
9,300.00	9,231.60	9,312.96	9,258.10	35.31	30.93	-90.52	211.73	-2,475.81	1,692.88	1,648.70	44.18	38.316		
9,400.00	9,331.60	9,412.96	9,358.10	35.64	31.24	-90.52	211.73	-2,475.81	1,692.88	1,648.22	44.66	37.909		
9,500.00	9,431.60	9,512.96	9,458.10	35.97	31.55	-90.52	211.73	-2,475.81	1,692.88	1,647.75	45.13	37.510		
9,600.00	9,531.60	9,612.96	9,558.10	36.30	31.86	-90.52	211.73	-2,475.81	1,692.88	1,647.27	45.61	37.118		
9,700.00	9,631.60	9,712.96	9,658.10	36.63	32.18	-90.52	211.73	-2,475.81	1,692.88	1,646.79	46.08	36.734		
9,800.00	9,731.60	9,812.96	9,758.10	36.96	32.49	-90.52	211.73	-2,475.81	1,692.88	1,646.32	46.56	36.358		
9,900.00	9,831.60	9,912.96	9,858.10	37.30	32.81	-90.52	211.73	-2,475.81	1,692.88	1,645.84	47.04	35.988		

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 503H
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 503H	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, 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		
9,913.44	9,845.04	9,926.40	9,871.54	37.34	32.85	-90.52	211.73	-2,475.81	1,692.88	1,645.77	47.10	35.939		
9,950.00	9,881.57	9,962.93	9,908.07	37.46	32.97	90.09	211.73	-2,475.81	1,692.88	1,645.61	47.27	35.809		
10,000.00	9,931.27	10,012.63	9,957.77	37.60	33.13	90.27	211.73	-2,475.81	1,692.90	1,645.40	47.50	35.640		
10,050.00	9,980.31	10,061.67	10,006.81	37.74	33.28	90.58	211.73	-2,475.81	1,692.97	1,645.25	47.72	35.479		
10,100.00	10,028.32	10,109.68	10,054.82	37.87	33.43	91.01	211.73	-2,475.81	1,693.17	1,645.24	47.93	35.325		
10,150.00	10,074.94	10,156.29	10,101.44	37.99	33.58	91.54	211.73	-2,475.81	1,693.61	1,645.47	48.14	35.183		
10,200.00	10,119.80	10,201.16	10,146.30	38.10	33.72	92.13	211.73	-2,475.81	1,694.40	1,646.06	48.34	35.053		
10,250.00	10,162.58	10,243.93	10,189.08	38.19	33.86	92.75	211.73	-2,475.81	1,695.69	1,647.15	48.54	34.937		
10,300.00	10,202.93	10,284.29	10,229.43	38.28	33.99	93.35	211.73	-2,475.81	1,697.64	1,648.91	48.73	34.838		
10,350.00	10,240.57	10,321.93	10,267.07	38.35	34.11	93.91	211.73	-2,475.81	1,700.42	1,651.50	48.92	34.758		
10,400.00	10,275.19	10,356.55	10,301.69	38.42	34.22	94.37	211.73	-2,475.81	1,704.19	1,655.07	49.11	34.698		
10,450.00	10,306.54	10,387.90	10,333.04	38.47	34.32	94.70	211.73	-2,475.81	1,709.10	1,659.79	49.31	34.662		
10,500.00	10,334.38	10,415.74	10,360.88	38.52	34.41	94.86	211.73	-2,475.81	1,715.30	1,665.80	49.50	34.649		
10,550.00	10,358.49	10,439.85	10,384.99	38.56	34.49	94.80	211.73	-2,475.81	1,722.90	1,673.20	49.70	34.663		
10,600.00	10,378.70	10,460.06	10,405.20	38.60	34.55	94.50	211.73	-2,475.81	1,731.98	1,682.07	49.91	34.704		
10,650.00	10,394.84	10,476.20	10,421.34	38.64	34.60	93.93	211.73	-2,475.81	1,742.59	1,692.48	50.11	34.773		
10,700.00	10,406.80	10,488.16	10,433.30	38.68	34.64	93.07	211.73	-2,475.81	1,754.73	1,704.41	50.32	34.870		
10,750.00	10,414.49	10,495.85	10,440.99	38.74	34.67	91.91	211.73	-2,475.81	1,768.37	1,717.84	50.53	34.996		
10,800.00	10,417.84	10,499.20	10,444.34	38.82	34.68	90.45	211.73	-2,475.81	1,783.43	1,732.69	50.74	35.149		
10,813.44	10,418.00	10,499.36	10,444.50	38.85	34.68	90.00	211.73	-2,475.81	1,787.70	1,736.91	50.79	35.195		
10,900.00	10,418.00	10,499.36	10,444.50	39.04	34.68	90.00	211.73	-2,475.81	1,817.37	1,766.20	51.17	35.517		
11,000.00	10,418.00	10,499.36	10,444.50	39.34	34.68	90.00	211.73	-2,475.81	1,856.08	1,804.44	51.64	35.941		
11,100.00	10,418.00	10,499.36	10,444.50	39.72	34.68	90.00	211.73	-2,475.81	1,899.27	1,847.13	52.14	36.424		
11,200.00	10,418.00	10,499.36	10,444.50	40.19	34.68	90.00	211.73	-2,475.81	1,946.65	1,893.99	52.66	36.966		
11,300.00	10,418.00	10,499.36	10,444.50	40.72	34.68	90.00	211.73	-2,475.81	1,997.91	1,944.73	53.18	37.568		
11,400.00	10,418.00	10,499.36	10,444.50	41.32	34.68	90.00	211.73	-2,475.81	2,052.77	1,999.07	53.70	38.228		
11,500.00	10,418.00	10,499.36	10,444.50	41.98	34.68	90.00	211.73	-2,475.81	2,110.94	2,056.74	54.20	38.944		
11,600.00	10,418.00	10,499.36	10,444.50	42.70	34.68	90.00	211.73	-2,475.81	2,172.16	2,117.47	54.70	39.714		
11,700.00	10,418.00	10,499.36	10,444.50	43.47	34.68	90.00	211.73	-2,475.81	2,236.18	2,181.01	55.17	40.535		
11,800.00	10,418.00	10,499.36	10,444.50	44.29	34.68	90.00	211.73	-2,475.81	2,302.76	2,247.14	55.62	41.404		
11,900.00	10,418.00	13,498.83	12,065.99	45.15	50.95	133.73	-1,426.04	-2,461.41	2,345.61	2,293.41	52.20	44.931		
12,000.00	10,418.00	13,598.82	12,067.31	46.06	52.02	133.76	-1,526.02	-2,460.53	2,346.60	2,293.36	53.24	44.073		
12,100.00	10,418.00	13,698.81	12,068.62	47.01	53.12	133.78	-1,626.00	-2,459.65	2,347.59	2,293.27	54.32	43.216		
12,200.00	10,418.00	13,798.80	12,069.93	47.99	54.24	133.80	-1,725.98	-2,458.77	2,348.58	2,293.14	55.44	42.361		
12,300.00	10,418.00	13,898.79	12,071.24	49.02	55.39	133.82	-1,825.96	-2,457.89	2,349.57	2,292.98	56.60	41.515		
12,400.00	10,418.00	13,998.78	12,072.56	50.07	56.57	133.84	-1,925.94	-2,457.01	2,350.56	2,292.78	57.78	40.679		
12,500.00	10,418.00	14,098.78	12,073.87	51.16	57.77	133.86	-2,025.92	-2,456.13	2,351.56	2,292.55	59.00	39.855		
12,600.00	10,418.00	14,198.77	12,075.18	52.28	58.99	133.88	-2,125.89	-2,455.25	2,352.55	2,292.29	60.25	39.044		
12,700.00	10,418.00	14,298.76	12,076.50	53.42	60.23	133.90	-2,225.87	-2,454.37	2,353.54	2,292.01	61.53	38.250		
12,800.00	10,418.00	14,398.75	12,077.81	54.59	61.49	133.93	-2,325.85	-2,453.50	2,354.53	2,291.70	62.84	37.471		
12,900.00	10,418.00	14,498.74	12,079.12	55.78	62.77	133.95	-2,425.83	-2,452.62	2,355.53	2,291.36	64.16	36.711		
13,000.00	10,418.00	14,598.73	12,080.44	57.00	64.06	133.97	-2,525.81	-2,451.74	2,356.52	2,291.00	65.52	35.968		
13,100.00	10,418.00	14,698.72	12,081.75	58.24	65.37	133.99	-2,625.79	-2,450.86	2,357.51	2,290.62	66.89	35.244		
13,200.00	10,418.00	14,798.71	12,083.06	59.50	66.70	134.01	-2,725.77	-2,449.98	2,358.51	2,290.22	68.28	34.540		
13,300.00	10,418.00	14,898.71	12,084.38	60.77	68.04	134.03	-2,825.75	-2,449.10	2,359.50	2,289.81	69.69	33.856		
13,400.00	10,418.00	14,998.70	12,085.69	62.07	69.40	134.05	-2,925.73	-2,448.22	2,360.49	2,289.37	71.12	33.190		
13,500.00	10,418.00	15,098.69	12,087.00	63.38	70.76	134.07	-3,025.70	-2,447.34	2,361.49	2,288.93	72.56	32.544		
13,600.00	10,418.00	15,198.68	12,088.32	64.71	72.14	134.09	-3,125.68	-2,446.46	2,362.48	2,288.46	74.02	31.916		
13,700.00	10,418.00	15,298.67	12,089.63	66.05	73.53	134.11	-3,225.66	-2,445.58	2,363.48	2,287.98	75.49	31.307		
13,800.00	10,418.00	15,398.66	12,090.94	67.40	74.93	134.14	-3,325.64	-2,444.70	2,364.47	2,287.49	76.98	30.715		
13,900.00	10,418.00	15,498.65	12,092.25	68.77	76.34	134.16	-3,425.62	-2,443.82	2,365.47	2,286.99	78.48	30.140		
14,000.00	10,418.00	15,598.65	12,093.57	70.15	77.76	134.18	-3,525.60	-2,442.95	2,366.47	2,286.47	79.99	29.583		

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 503H
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 503H	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, 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		
14,100.00	10,418.00	15,698.64	12,094.88	71.54	79.19	134.20	-3,625.58	-2,442.07	2,367.46	2,285.95	81.52	29.043		
14,200.00	10,418.00	15,798.63	12,096.19	72.95	80.63	134.22	-3,725.56	-2,441.19	2,368.46	2,285.41	83.05	28.518		
14,300.00	10,418.00	15,898.62	12,097.51	74.36	82.08	134.24	-3,825.53	-2,440.31	2,369.46	2,284.87	84.59	28.011		
14,400.00	10,418.00	15,998.61	12,098.82	75.78	83.53	134.26	-3,925.51	-2,439.43	2,370.45	2,284.32	86.14	27.519		
14,500.00	10,418.00	16,098.60	12,100.13	77.21	84.99	134.28	-4,025.49	-2,438.55	2,371.45	2,283.76	87.70	27.042		
14,600.00	10,418.00	16,198.59	12,101.45	78.65	86.46	134.30	-4,125.47	-2,437.67	2,372.45	2,283.19	89.26	26.578		
14,700.00	10,418.00	16,298.58	12,102.76	80.10	87.93	134.32	-4,225.45	-2,436.79	2,373.45	2,282.61	90.84	26.129		
14,800.00	10,418.00	16,398.58	12,104.07	81.55	89.41	134.34	-4,325.43	-2,435.91	2,374.45	2,282.03	92.42	25.693		
14,900.00	10,418.00	16,498.57	12,105.39	83.02	90.90	134.36	-4,425.41	-2,435.03	2,375.45	2,281.44	94.01	25.269		
15,000.00	10,418.00	16,598.56	12,106.70	84.49	92.39	134.39	-4,525.39	-2,434.15	2,376.44	2,280.84	95.60	24.858		
15,100.00	10,418.00	16,698.55	12,108.01	85.96	93.88	134.41	-4,625.37	-2,433.27	2,377.44	2,280.24	97.20	24.459		
15,200.00	10,418.00	16,798.54	12,109.32	87.45	95.39	134.43	-4,725.34	-2,432.40	2,378.44	2,279.64	98.81	24.072		
15,300.00	10,418.00	16,898.53	12,110.64	88.94	96.89	134.45	-4,825.32	-2,431.52	2,379.44	2,279.03	100.41	23.696		
15,400.00	10,418.00	16,998.52	12,111.95	90.43	98.40	134.47	-4,925.30	-2,430.64	2,380.45	2,278.42	102.03	23.332		
15,500.00	10,418.00	17,098.51	12,113.26	91.93	99.92	134.49	-5,025.28	-2,429.76	2,381.45	2,277.80	103.64	22.977		
15,600.00	10,418.00	17,198.51	12,114.58	93.43	101.44	134.51	-5,125.26	-2,428.88	2,382.45	2,277.18	105.27	22.632		
15,700.00	10,418.00	17,298.50	12,115.89	94.94	102.97	134.53	-5,225.24	-2,428.00	2,383.45	2,276.55	106.89	22.297		
15,800.00	10,418.00	17,398.49	12,117.20	96.46	104.49	134.55	-5,325.22	-2,427.12	2,384.45	2,275.92	108.53	21.971		
15,900.00	10,418.00	17,498.48	12,118.52	97.98	106.02	134.57	-5,425.20	-2,426.24	2,385.45	2,275.29	110.16	21.654		
16,000.00	10,418.00	17,598.47	12,119.83	99.50	107.56	134.59	-5,525.17	-2,425.36	2,386.45	2,274.66	111.80	21.346		
16,100.00	10,418.00	17,698.46	12,121.14	101.03	109.10	134.61	-5,625.15	-2,424.48	2,387.46	2,274.02	113.44	21.046		
16,200.00	10,418.00	17,798.45	12,122.46	102.56	110.64	134.63	-5,725.13	-2,423.60	2,388.46	2,273.38	115.08	20.755		
16,300.00	10,418.00	17,898.45	12,123.77	104.09	112.19	134.65	-5,825.11	-2,422.72	2,389.46	2,272.74	116.73	20.471		
16,400.00	10,418.00	17,998.44	12,125.08	105.63	113.73	134.67	-5,925.09	-2,421.85	2,390.47	2,272.10	118.37	20.194		
16,500.00	10,418.00	18,098.43	12,126.39	107.17	115.28	134.69	-6,025.07	-2,420.97	2,391.47	2,271.45	120.02	19.925		
16,600.00	10,418.00	18,198.42	12,127.71	108.72	116.84	134.71	-6,125.05	-2,420.09	2,392.48	2,270.80	121.67	19.663		
16,700.00	10,418.00	18,298.41	12,129.02	110.26	118.39	134.74	-6,225.03	-2,419.21	2,393.48	2,270.15	123.33	19.407		
16,800.00	10,418.00	18,398.40	12,130.33	111.81	119.95	134.76	-6,325.01	-2,418.33	2,394.49	2,269.50	124.99	19.158		
16,900.00	10,418.00	18,498.39	12,131.65	113.37	121.51	134.78	-6,424.98	-2,417.45	2,395.49	2,268.84	126.65	18.915		
17,000.00	10,418.00	18,598.38	12,132.96	114.92	123.08	134.80	-6,524.96	-2,416.57	2,396.50	2,268.19	128.31	18.678		
17,100.00	10,418.00	18,698.38	12,134.27	116.48	124.64	134.82	-6,624.94	-2,415.69	2,397.50	2,267.53	129.97	18.447		
17,200.00	10,418.00	18,798.37	12,135.59	118.04	126.21	134.84	-6,724.92	-2,414.81	2,398.51	2,266.88	131.63	18.222		
17,300.00	10,418.00	18,898.36	12,136.90	119.61	127.78	134.86	-6,824.90	-2,413.93	2,399.51	2,266.22	133.29	18.002		
17,400.00	10,418.00	18,998.35	12,138.21	121.17	129.35	134.88	-6,924.88	-2,413.05	2,400.52	2,265.57	134.96	17.788		
17,500.00	10,418.00	19,098.34	12,139.53	122.74	130.93	134.90	-7,024.86	-2,412.17	2,401.53	2,264.91	136.62	17.578		
17,600.00	10,418.00	19,198.33	12,140.84	124.31	132.50	134.92	-7,124.84	-2,411.30	2,402.53	2,264.25	138.29	17.373		
17,700.00	10,418.00	19,298.32	12,142.15	125.88	134.08	134.94	-7,224.81	-2,410.42	2,403.54	2,263.58	139.96	17.173		
17,800.00	10,418.00	19,398.32	12,143.46	127.46	135.66	134.96	-7,324.79	-2,409.54	2,404.55	2,262.92	141.63	16.978		
17,900.00	10,418.00	19,498.31	12,144.78	129.04	137.24	134.98	-7,424.77	-2,408.66	2,405.56	2,262.26	143.30	16.787		
18,000.00	10,418.00	19,598.30	12,146.09	130.61	138.83	135.00	-7,524.75	-2,407.78	2,406.57	2,261.60	144.97	16.601		
18,100.00	10,418.00	19,698.29	12,147.40	132.19	140.41	135.02	-7,624.73	-2,406.90	2,407.58	2,260.94	146.64	16.419		
18,200.00	10,418.00	19,798.28	12,148.72	133.78	142.00	135.04	-7,724.71	-2,406.02	2,408.58	2,260.28	148.31	16.240		
18,300.00	10,418.00	19,898.27	12,150.03	135.36	143.58	135.06	-7,824.69	-2,405.14	2,409.59	2,259.62	149.98	16.066		
18,400.00	10,418.00	19,998.26	12,151.34	136.94	145.17	135.08	-7,924.67	-2,404.26	2,410.60	2,258.95	151.65	15.896		
18,500.00	10,418.00	20,098.25	12,152.66	138.53	146.76	135.10	-8,024.65	-2,403.38	2,411.61	2,258.29	153.32	15.729		
18,600.00	10,418.00	20,198.25	12,153.97	140.12	148.35	135.12	-8,124.62	-2,402.50	2,412.62	2,257.63	155.00	15.566		
18,700.00	10,418.00	20,298.24	12,155.28	141.71	149.95	135.14	-8,224.60	-2,401.62	2,413.63	2,256.96	156.67	15.406		
18,800.00	10,418.00	20,398.23	12,156.60	143.30	151.54	135.16	-8,324.58	-2,400.75	2,414.65	2,256.30	158.35	15.249		
18,900.00	10,418.00	20,498.22	12,157.91	144.89	153.14	135.18	-8,424.56	-2,399.87	2,415.66	2,255.64	160.02	15.096		
19,000.00	10,418.00	20,598.21	12,159.22	146.49	154.73	135.20	-8,524.54	-2,398.99	2,416.67	2,254.98	161.69	14.946		
19,100.00	10,418.00	20,698.20	12,160.53	148.08	156.33	135.22	-8,624.52	-2,398.11	2,417.68	2,254.32	163.36	14.799		
19,200.00	10,418.00	20,798.19	12,161.85	149.68	157.93	135.24	-8,724.50	-2,397.23	2,418.69	2,253.66	165.04	14.656		

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 503H
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 503H	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				
19,300.00	10,418.00	20,898.18	12,163.16	151.27	159.53	135.26	-8,824.48	-2,396.35	2,419.70	2,253.00	166.71	14.515				
19,400.00	10,418.00	20,998.18	12,164.47	152.87	161.13	135.28	-8,924.45	-2,395.47	2,420.72	2,252.33	168.38	14.376				
19,500.00	10,418.00	21,098.17	12,165.79	154.47	162.73	135.30	-9,024.43	-2,394.59	2,421.73	2,251.67	170.06	14.241				
19,600.00	10,418.00	21,198.16	12,167.10	156.07	164.34	135.32	-9,124.41	-2,393.71	2,422.74	2,251.01	171.73	14.108				
19,700.00	10,418.00	21,298.15	12,168.41	157.67	165.94	135.34	-9,224.39	-2,392.83	2,423.76	2,250.35	173.41	13.977				
19,800.00	10,418.00	21,398.14	12,169.73	159.28	167.54	135.36	-9,324.37	-2,391.95	2,424.77	2,249.69	175.08	13.850				
19,900.00	10,418.00	21,498.13	12,171.04	160.88	169.15	135.38	-9,424.35	-2,391.07	2,425.78	2,249.04	176.75	13.725				
20,000.00	10,418.00	21,598.12	12,172.35	162.48	170.76	135.40	-9,524.33	-2,390.20	2,426.80	2,248.38	178.42	13.602				
20,100.00	10,418.00	21,698.12	12,173.67	164.09	172.36	135.42	-9,624.31	-2,389.32	2,427.81	2,247.72	180.09	13.481				
20,200.00	10,418.00	21,798.11	12,174.98	165.70	173.97	135.44	-9,724.29	-2,388.44	2,428.83	2,247.07	181.76	13.363				
20,300.00	10,418.00	21,898.10	12,176.29	167.30	175.58	135.46	-9,824.26	-2,387.56	2,429.84	2,246.41	183.43	13.247				
20,400.00	10,418.00	21,998.09	12,177.60	168.91	177.19	135.48	-9,924.24	-2,386.68	2,430.86	2,245.76	185.10	13.132				
20,500.00	10,418.00	22,098.08	12,178.92	170.52	178.80	135.50	-10,024.22	-2,385.80	2,431.87	2,245.10	186.77	13.020				
20,600.00	10,418.00	22,198.07	12,180.23	172.13	180.41	135.52	-10,124.20	-2,384.92	2,432.89	2,244.45	188.45	12.910				
20,700.00	10,418.00	22,298.06	12,181.54	173.74	182.02	135.54	-10,224.18	-2,384.04	2,433.91	2,243.79	190.11	12.802				
20,800.00	10,418.00	22,398.05	12,182.86	175.35	183.64	135.56	-10,324.16	-2,383.16	2,434.92	2,243.14	191.78	12.696				
20,900.00	10,418.00	22,498.05	12,184.17	176.97	185.25	135.58	-10,424.14	-2,382.28	2,435.94	2,242.49	193.45	12.592				
21,000.00	10,418.00	22,598.04	12,185.48	178.58	186.86	135.60	-10,524.12	-2,381.40	2,436.96	2,241.84	195.11	12.490				
21,100.00	10,418.00	22,698.03	12,186.80	180.19	188.48	135.62	-10,624.09	-2,380.52	2,437.98	2,241.19	196.78	12.389				
21,200.00	10,418.00	22,798.02	12,188.11	181.81	190.09	135.64	-10,724.07	-2,379.65	2,438.99	2,240.55	198.45	12.290				
21,300.00	10,418.00	22,898.01	12,189.42	183.42	191.71	135.66	-10,824.05	-2,378.77	2,440.01	2,239.90	200.11	12.193				
21,400.00	10,418.00	22,998.00	12,190.74	185.04	193.33	135.68	-10,924.03	-2,377.89	2,441.03	2,239.25	201.78	12.097				
21,500.00	10,418.00	23,097.99	12,192.05	186.65	194.94	135.70	-11,024.01	-2,377.01	2,442.05	2,238.60	203.45	12.003				
21,600.00	10,418.00	23,197.99	12,193.36	188.27	196.56	135.72	-11,123.99	-2,376.13	2,443.07	2,237.96	205.11	11.911				
21,700.00	10,418.00	23,297.98	12,194.67	189.89	198.18	135.74	-11,223.97	-2,375.25	2,444.09	2,237.31	206.77	11.820				
21,800.00	10,418.00	23,397.97	12,195.99	191.50	199.80	135.75	-11,323.95	-2,374.37	2,445.11	2,236.67	208.43	11.731				
21,900.00	10,418.00	23,497.96	12,197.30	193.12	201.42	135.77	-11,423.93	-2,373.49	2,446.13	2,236.03	210.09	11.643				
21,923.68	10,418.00	23,521.63	12,197.61	193.51	201.77	135.78	-11,447.59	-2,373.28	2,446.37	2,235.92	210.45	11.625 SF				

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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		
0.00	0.00	23.09	23.09	0.00	0.03	-71.26	580.85	-1,712.36	1,808.19					
100.00	100.00	116.51	116.49	0.13	0.17	-71.21	582.61	-1,712.32	1,808.75	1,808.55	0.20	9,000.524		
200.00	200.00	206.76	206.69	0.48	0.49	-71.12	585.67	-1,712.26	1,809.76	1,809.07	0.68	2,645.748		
300.00	300.00	294.57	294.43	0.84	0.80	-71.01	589.16	-1,712.29	1,811.09	1,809.93	1.16	1,557.494		
400.00	400.00	390.95	390.70	1.20	1.15	-70.88	593.76	-1,712.66	1,813.02	1,811.35	1.66	1,089.551		
500.00	500.00	483.41	483.02	1.56	1.49	-70.73	598.82	-1,713.02	1,815.19	1,813.03	2.16	841.667		
600.00	600.00	560.64	560.09	1.92	1.78	-70.59	603.70	-1,713.80	1,818.23	1,815.62	2.61	696.129		
700.00	700.00	740.36	739.66	2.28	2.42	-70.42	610.00	-1,714.56	1,819.89	1,816.57	3.32	547.920		
800.00	800.00	855.85	855.13	2.63	2.82	-70.38	610.68	-1,712.93	1,818.76	1,814.90	3.86	471.445		
900.00	900.00	955.82	955.09	2.99	3.17	-70.35	611.08	-1,711.16	1,817.23	1,812.87	4.36	417.267		
1,000.00	1,000.00	1,066.62	1,065.86	3.35	3.55	-70.33	610.98	-1,708.95	1,815.32	1,810.44	4.88	372.107		
1,100.00	1,100.00	1,172.99	1,172.20	3.71	3.92	-70.30	611.00	-1,706.30	1,812.97	1,807.58	5.39	336.137		
1,200.00	1,200.00	1,272.73	1,271.89	4.07	4.27	-70.25	611.55	-1,703.19	1,810.22	1,804.33	5.90	307.065		
1,300.00	1,300.00	1,352.51	1,351.65	4.43	4.55	-70.21	612.05	-1,701.34	1,808.26	1,801.91	6.35	284.838		
1,400.00	1,400.00	1,439.59	1,438.72	4.79	4.68	-70.20	612.34	-1,700.46	1,807.39	1,800.70	6.69	270.125		
1,500.00	1,500.00	1,540.41	1,539.54	5.14	4.71	-70.18	612.53	-1,699.64	1,806.69	1,799.72	6.97	259.144		
1,600.00	1,600.00	1,640.35	1,639.48	5.50	4.76	-70.17	612.71	-1,698.80	1,805.96	1,798.68	7.28	248.186		
1,700.00	1,700.00	1,738.83	1,737.95	5.86	4.84	-70.17	612.52	-1,698.15	1,805.28	1,797.68	7.60	237.488		
1,800.00	1,800.00	1,835.76	1,834.88	6.22	4.94	-70.17	612.25	-1,697.67	1,804.72	1,796.78	7.94	227.192		
1,900.00	1,900.00	1,929.84	1,928.96	6.58	5.06	-70.17	612.08	-1,697.42	1,804.41	1,796.11	8.30	217.432		
2,000.00	2,000.00	2,028.35	2,027.47	6.94	5.20	-70.17	612.14	-1,697.33	1,804.34	1,795.67	8.67	208.104		
2,100.00	2,100.00	2,152.87	2,151.99	7.29	5.41	-70.17	611.94	-1,696.62	1,803.79	1,794.70	9.08	198.617		
2,200.00	2,199.99	2,324.24	2,323.25	7.65	5.75	3.70	610.62	-1,691.08	1,799.24	1,789.68	9.55	188.319		
2,300.00	2,299.91	2,557.46	2,555.27	7.99	6.29	3.64	600.37	-1,670.58	1,784.70	1,774.60	10.10	176.776		
2,400.00	2,399.69	2,659.39	2,656.31	8.34	6.56	3.61	594.04	-1,658.81	1,765.29	1,754.77	10.52	167.842		
2,500.00	2,499.27	2,778.10	2,773.94	8.70	6.89	3.59	586.91	-1,644.46	1,742.92	1,731.96	10.96	158.967		
2,600.00	2,598.57	2,922.80	2,916.85	9.06	7.33	3.58	577.26	-1,623.98	1,715.89	1,704.46	11.44	150.016		
2,700.00	2,697.54	3,040.01	3,032.12	9.42	7.71	3.54	567.31	-1,605.15	1,683.93	1,672.04	11.89	141.632		
2,771.79	2,768.33	3,103.53	3,094.54	9.69	7.93	3.51	561.42	-1,594.98	1,659.36	1,647.16	12.20	136.035		
2,800.00	2,796.11	3,127.21	3,117.81	9.79	8.01	3.49	559.25	-1,591.23	1,649.52	1,637.20	12.32	133.901		
2,900.00	2,894.56	3,209.18	3,198.47	10.18	8.30	3.43	552.16	-1,578.46	1,615.02	1,602.27	12.74	126.728		
3,000.00	2,993.02	3,293.36	3,281.44	10.56	8.60	3.39	545.61	-1,565.83	1,581.31	1,568.13	13.18	120.008		
3,100.00	3,091.48	3,432.60	3,418.48	10.95	9.11	3.29	533.93	-1,544.18	1,547.16	1,533.51	13.66	113.296		
3,200.00	3,189.94	3,566.82	3,549.60	11.35	9.65	3.12	519.39	-1,519.45	1,509.31	1,495.19	14.13	106.845		
3,300.00	3,288.39	3,649.00	3,629.75	11.75	9.99	3.02	510.51	-1,503.64	1,470.86	1,456.29	14.57	100.928		
3,400.00	3,386.85	3,730.64	3,709.51	12.16	10.33	2.94	502.32	-1,488.21	1,432.98	1,417.95	15.02	95.375		
3,500.00	3,485.31	3,805.47	3,782.78	12.57	10.64	2.88	495.48	-1,474.69	1,396.10	1,380.62	15.48	90.204		
3,600.00	3,583.77	3,898.06	3,873.63	12.98	11.02	2.80	487.41	-1,458.76	1,360.13	1,344.19	15.94	85.329		
3,700.00	3,682.22	4,006.39	3,979.72	13.39	11.48	2.66	476.63	-1,439.67	1,323.41	1,307.01	16.41	80.650		
3,800.00	3,780.68	4,098.30	4,069.56	13.81	11.88	2.48	466.41	-1,423.20	1,286.07	1,269.19	16.88	76.199		
3,900.00	3,879.14	4,194.29	4,163.42	14.23	12.30	2.30	455.93	-1,406.03	1,248.82	1,231.48	17.35	71.986		
4,000.00	3,977.60	4,288.27	4,255.28	14.65	12.72	2.14	446.18	-1,388.75	1,211.31	1,193.49	17.82	67.974		
4,100.00	4,076.05	4,381.76	4,346.70	15.07	13.14	2.03	437.60	-1,371.14	1,173.76	1,155.47	18.29	64.163		
4,200.00	4,174.51	4,470.86	4,433.86	15.50	13.54	2.03	431.38	-1,353.78	1,136.28	1,117.51	18.77	60.541		
4,300.00	4,272.97	4,550.40	4,511.78	15.93	13.89	2.11	427.33	-1,338.33	1,099.44	1,080.19	19.25	57.110		
4,400.00	4,371.43	4,624.61	4,584.70	16.36	14.21	2.14	423.02	-1,325.30	1,064.05	1,044.31	19.74	53.904		
4,500.00	4,469.88	4,697.55	4,656.61	16.79	14.52	2.05	417.39	-1,314.46	1,030.52	1,010.29	20.23	50.939		
4,600.00	4,568.34	4,782.00	4,740.09	17.22	14.87	1.88	410.30	-1,303.78	998.77	978.05	20.72	48.205		
4,700.00	4,666.80	4,871.19	4,828.36	17.65	15.23	1.71	403.37	-1,293.05	967.79	946.58	21.21	45.633		
4,800.00	4,765.25	4,975.47	4,931.51	18.08	15.65	1.58	396.44	-1,279.43	936.24	914.55	21.69	43.164		
4,900.00	4,863.71	5,062.25	5,017.37	18.52	16.01	1.55	391.68	-1,267.75	904.67	882.48	22.18	40.782		
5,000.00	4,962.17	5,162.36	5,116.45	18.95	16.42	1.46	385.70	-1,254.76	873.40	850.73	22.67	38.531		

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 503H
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 503H	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		
5,100.00	5,060.63	5,321.66	5,272.59	19.39	17.14	1.01	370.08	-1,227.57	836.71	813.67	23.04	36.316		
5,200.00	5,159.08	5,418.32	5,366.61	19.83	17.61	0.66	359.06	-1,208.07	797.36	773.84	23.52	33.906		
5,300.00	5,257.54	5,510.00	5,455.81	20.27	18.06	0.33	349.01	-1,189.39	757.98	733.98	24.01	31.572		
5,400.00	5,356.00	5,600.78	5,544.16	20.71	18.50	0.01	339.58	-1,170.80	718.70	694.19	24.50	29.330		
5,500.00	5,454.46	5,692.96	5,633.92	21.15	18.95	-0.30	330.56	-1,151.86	679.52	654.53	24.99	27.186		
5,600.00	5,552.91	5,781.06	5,719.74	21.59	19.38	-0.59	322.40	-1,133.74	640.49	614.99	25.51	25.111		
5,700.00	5,651.37	5,865.95	5,802.65	22.03	19.78	-0.84	315.28	-1,116.89	602.36	576.32	26.04	23.134		
5,800.00	5,749.83	5,955.40	5,890.21	22.47	20.21	-1.15	308.00	-1,100.16	565.33	538.78	26.55	21.292		
5,900.00	5,848.29	6,049.72	5,982.54	22.91	20.65	-1.45	300.82	-1,082.26	528.21	501.17	27.04	19.536		
6,000.00	5,946.74	6,143.37	6,074.19	23.36	21.09	-1.76	293.97	-1,064.24	490.94	463.41	27.53	17.834		
6,100.00	6,045.20	6,231.82	6,160.75	23.80	21.51	-2.09	287.53	-1,047.24	453.73	425.67	28.06	16.170		
6,200.00	6,143.66	6,317.48	6,244.87	24.24	21.90	-2.58	280.97	-1,032.53	418.28	389.66	28.62	14.613		
6,300.00	6,242.12	6,410.43	6,336.31	24.69	22.32	-3.23	273.81	-1,017.40	383.72	354.58	29.14	13.169		
6,400.00	6,340.57	6,506.05	6,430.30	25.13	22.76	-4.06	266.25	-1,001.54	348.88	319.25	29.63	11.774		
6,500.00	6,439.03	6,600.39	6,522.98	25.58	23.19	-5.04	258.88	-985.56	313.80	283.66	30.14	10.411		
6,600.00	6,537.49	6,691.41	6,612.38	26.02	23.61	-6.20	251.77	-970.02	278.72	248.01	30.70	9.078		
6,700.00	6,635.95	6,777.22	6,697.00	26.47	23.99	-7.77	244.69	-957.68	246.20	214.83	31.37	7.848		
6,757.61	6,692.67	6,829.22	6,748.44	26.73	24.20	-8.88	240.68	-951.22	228.69	196.96	31.73	7.207		
6,800.00	6,734.44	6,867.14	6,786.02	26.91	24.36	-9.68	238.05	-946.86	216.52	184.50	32.01	6.763		
6,900.00	6,833.29	6,955.87	6,874.20	27.34	24.70	-11.81	232.15	-939.06	192.39	159.69	32.70	5.883		
7,000.00	6,932.50	7,051.46	6,969.41	27.75	25.05	-14.42	226.13	-933.01	173.58	140.23	33.35	5.205		
7,100.00	7,032.01	7,150.30	7,067.98	28.14	25.40	-16.75	221.85	-927.15	158.07	124.11	33.96	4.654		
7,200.00	7,131.74	7,249.08	7,166.55	28.51	25.74	-18.49	219.45	-921.30	145.26	110.71	34.56	4.204		
7,300.00	7,231.62	7,348.12	7,265.41	28.86	26.08	-20.12	217.18	-915.71	135.32	100.18	35.14	3.850		
7,400.00	7,331.60	7,447.71	7,364.82	29.19	26.42	-21.60	214.88	-910.16	128.02	92.30	35.72	3.584		
7,429.40	7,361.00	7,476.92	7,393.98	29.28	26.52	-95.78	214.30	-908.58	126.39	90.50	35.89	3.522		
7,500.00	7,431.60	7,546.13	7,463.10	29.50	26.76	-96.46	213.18	-905.12	123.00	86.72	36.28	3.390		
7,600.00	7,531.60	7,643.51	7,560.44	29.82	27.06	-96.76	212.86	-902.33	120.18	83.39	36.79	3.266		
7,700.00	7,631.60	7,742.82	7,659.71	30.14	27.35	-96.09	214.42	-901.00	118.68	81.47	37.22	3.189		
7,800.00	7,731.60	7,843.04	7,759.91	30.45	27.64	-95.18	216.41	-899.74	117.24	79.62	37.62	3.117		
7,900.00	7,831.60	7,943.17	7,860.02	30.77	27.94	-94.62	217.69	-898.22	115.61	77.56	38.05	3.039		
8,000.00	7,931.60	8,043.81	7,960.64	31.09	28.25	-94.33	218.41	-896.42	113.78	75.28	38.50	2.956		
8,100.00	8,031.60	8,144.34	8,061.14	31.41	28.57	-94.25	218.76	-893.86	111.21	72.25	38.96	2.855		
8,200.00	8,131.60	8,242.79	8,159.56	31.73	28.88	-94.44	218.57	-891.59	108.93	69.47	39.46	2.761		
8,300.00	8,231.60	8,341.39	8,258.16	32.06	29.18	-94.64	218.23	-890.97	108.33	68.39	39.94	2.712		
8,400.00	8,331.60	8,441.94	8,358.70	32.38	29.48	-95.16	217.27	-890.75	108.19	67.74	40.44	2.675		
8,446.11	8,377.71	8,487.45	8,404.21	32.53	29.61	-95.46	216.73	-890.50	107.99	67.31	40.68	2.655 CC		
8,500.00	8,431.60	8,540.06	8,456.82	32.70	29.77	-95.58	216.47	-890.79	108.31	67.38	40.93	2.646		
8,600.00	8,531.60	8,640.86	8,557.60	33.03	30.05	-96.03	215.51	-891.68	109.29	67.86	41.42	2.638		
8,700.00	8,631.60	8,740.00	8,656.72	33.35	30.34	-97.09	213.38	-892.49	110.34	68.40	41.95	2.631		
8,800.00	8,731.60	8,839.50	8,756.18	33.68	30.62	-98.28	210.87	-893.88	112.06	69.59	42.48	2.638		
8,900.00	8,831.60	8,939.15	8,855.73	34.00	30.92	-100.18	206.86	-895.16	113.98	70.92	43.06	2.647		
9,000.00	8,931.60	9,039.14	8,955.58	34.33	31.22	-102.63	201.62	-896.21	116.05	72.36	43.69	2.656		
9,100.00	9,031.60	9,138.66	9,054.94	34.66	31.53	-105.11	196.12	-897.38	118.51	74.20	44.31	2.674		
9,200.00	9,131.60	9,238.81	9,154.92	34.98	31.84	-107.56	190.45	-898.50	121.18	76.23	44.95	2.696		
9,300.00	9,231.60	9,339.13	9,255.08	35.31	32.15	-109.96	184.79	-899.23	123.69	78.11	45.59	2.713		
9,400.00	9,331.60	9,439.41	9,355.21	35.64	32.47	-112.25	179.27	-899.66	126.09	79.87	46.22	2.728		
9,500.00	9,431.60	9,539.72	9,455.37	35.97	32.79	-114.48	173.87	-899.71	128.27	81.42	46.84	2.738		
9,600.00	9,531.60	9,639.55	9,555.04	36.30	33.11	-116.87	168.05	-899.32	130.44	82.96	47.48	2.747		
9,700.00	9,631.60	9,740.83	9,656.14	36.63	33.45	-119.19	162.31	-898.79	132.65	84.54	48.11	2.757		
9,800.00	9,731.60	9,843.89	9,759.17	36.96	33.78	-120.12	160.25	-898.06	133.02	84.38	48.65	2.734		
9,900.00	9,831.60	9,945.74	9,861.01	37.30	34.10	-120.03	161.27	-896.72	131.38	82.28	49.10	2.676		

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 503H
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 503H	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		
9,913.44	9,845.04	9,959.36	9,874.63	37.34	34.14	-120.00	161.48	-896.48	131.07	81.92	49.16	2.666		
9,950.00	9,881.57	9,995.53	9,910.79	37.46	34.25	61.31	162.23	-895.96	129.67	80.39	49.28	2.631		
10,000.00	9,931.27	10,044.28	9,959.51	37.60	34.39	64.37	163.98	-895.92	126.33	77.01	49.32	2.561		
10,050.00	9,980.31	10,092.33	10,007.50	37.74	34.53	69.79	166.30	-896.46	122.02	72.82	49.20	2.480		
10,100.00	10,028.32	10,139.39	10,054.50	37.87	34.66	77.24	168.45	-897.07	117.86	68.91	48.95	2.408		
10,150.00	10,074.94	10,185.05	10,100.12	37.99	34.79	86.38	170.34	-897.72	115.52	66.89	48.63	2.376 SF		
10,159.39	10,083.51	10,193.47	10,108.53	38.01	34.81	88.24	170.65	-897.83	115.44	66.87	48.57	2.377 ES		
10,200.00	10,119.80	10,229.14	10,144.18	38.10	34.91	96.48	171.83	-898.34	117.03	68.64	48.39	2.419		
10,250.00	10,162.58	10,270.86	10,185.88	38.19	35.03	106.36	173.02	-898.97	124.30	75.90	48.40	2.568		
10,300.00	10,202.93	10,309.56	10,224.55	38.28	35.14	115.02	174.26	-899.69	138.67	89.96	48.71	2.847		
10,350.00	10,240.57	10,345.21	10,260.16	38.35	35.24	121.91	175.55	-900.47	160.19	110.98	49.21	3.255		
10,400.00	10,275.19	10,377.39	10,292.31	38.42	35.33	126.92	176.96	-901.15	188.06	138.31	49.74	3.780		
10,450.00	10,306.54	10,405.55	10,320.43	38.47	35.41	130.05	178.47	-901.63	221.27	171.05	50.23	4.406		
10,500.00	10,334.38	10,429.54	10,344.37	38.52	35.47	131.34	179.96	-901.96	258.85	208.23	50.62	5.114		
10,550.00	10,358.49	10,450.24	10,365.02	38.56	35.53	130.95	181.36	-902.19	299.87	248.93	50.94	5.887		
10,600.00	10,378.70	10,467.32	10,382.06	38.60	35.58	128.51	182.53	-902.35	343.53	292.33	51.20	6.710		
10,650.00	10,394.84	10,480.19	10,394.90	38.64	35.62	123.24	183.42	-902.45	389.20	337.80	51.40	7.572		
10,700.00	10,406.80	10,488.77	10,403.46	38.68	35.64	113.86	184.02	-902.51	436.33	384.78	51.55	8.464		
10,750.00	10,414.49	10,493.01	10,407.68	38.74	35.65	98.83	184.31	-902.54	484.41	432.75	51.67	9.376		
10,800.00	10,417.84	10,492.88	10,407.56	38.82	35.65	78.40	184.30	-902.54	532.99	481.23	51.75	10.299		
10,813.44	10,418.00	10,492.11	10,406.78	38.85	35.65	72.55	184.25	-902.53	546.07	494.29	51.77	10.547		
10,900.00	10,418.00	10,486.11	10,400.80	39.04	35.63	69.98	183.83	-902.49	630.59	578.71	51.87	12.157		
11,000.00	10,418.00	10,479.21	10,393.92	39.34	35.61	67.12	183.35	-902.44	728.76	676.81	51.96	14.027		
11,100.00	10,418.00	10,472.35	10,387.07	39.72	35.59	64.39	182.88	-902.39	827.32	775.30	52.02	15.905		
11,200.00	10,418.00	10,465.52	10,380.26	40.19	35.57	61.79	182.41	-902.33	926.14	874.07	52.07	17.788		
11,300.00	10,418.00	10,458.71	10,373.47	40.72	35.55	59.32	181.94	-902.27	1,025.14	973.03	52.11	19.674		
11,400.00	10,418.00	10,451.94	10,366.72	41.32	35.54	56.97	181.48	-902.21	1,124.27	1,072.14	52.14	21.564		
11,500.00	10,418.00	10,445.20	10,359.99	41.98	35.52	54.75	181.02	-902.14	1,223.51	1,171.35	52.16	23.455		
11,600.00	10,418.00	10,438.49	10,353.30	42.70	35.50	52.65	180.56	-902.06	1,322.83	1,270.64	52.19	25.348		
11,700.00	10,418.00	13,128.44	11,809.15	43.47	49.75	173.53	-1,276.84	-922.92	1,374.07	1,337.20	36.88	37.259		
11,800.00	10,418.00	13,207.00	11,808.22	44.29	50.58	173.69	-1,355.24	-918.04	1,372.19	1,334.89	37.30	36.785		
11,900.00	10,418.00	13,315.05	11,807.55	45.15	51.76	173.96	-1,463.02	-910.51	1,370.98	1,333.12	37.86	36.214		
12,000.00	10,418.00	13,437.66	11,804.11	46.06	53.13	174.06	-1,585.51	-906.55	1,367.93	1,329.40	38.53	35.504		
12,100.00	10,418.00	13,540.42	11,799.97	47.01	54.30	174.07	-1,688.17	-904.71	1,363.84	1,324.69	39.15	34.838		
12,200.00	10,418.00	13,626.40	11,796.82	47.99	55.30	174.05	-1,774.09	-904.18	1,360.25	1,320.54	39.71	34.252		
12,300.00	10,418.00	13,720.59	11,794.39	49.02	56.40	173.97	-1,868.24	-904.90	1,357.85	1,317.50	40.35	33.653		
12,400.00	10,418.00	13,809.78	11,791.76	50.07	57.47	173.89	-1,957.38	-905.60	1,355.17	1,314.19	40.98	33.066		
12,462.96	10,418.00	13,849.23	11,791.32	50.76	57.94	173.85	-1,996.83	-906.12	1,354.62	1,313.31	41.31	32.788		
12,500.00	10,418.00	13,874.41	11,791.38	51.16	58.24	173.82	-2,022.01	-906.56	1,354.81	1,313.29	41.52	32.627		
12,600.00	10,418.00	14,001.82	11,791.28	52.28	59.80	173.69	-2,149.40	-908.32	1,355.08	1,312.69	42.38	31.972		
12,700.00	10,418.00	14,105.75	11,788.73	53.42	61.10	173.56	-2,253.29	-910.00	1,352.89	1,309.73	43.16	31.348		
12,767.63	10,418.00	14,154.00	11,788.31	54.21	61.70	173.52	-2,301.53	-910.56	1,352.46	1,308.89	43.57	31.040		
12,800.00	10,418.00	14,185.46	11,788.30	54.59	62.10	173.50	-2,332.99	-910.79	1,352.50	1,308.69	43.81	30.870		
12,900.00	10,418.00	14,288.75	11,788.07	55.78	63.43	173.46	-2,436.28	-910.61	1,352.37	1,307.77	44.60	30.323		
13,000.00	10,418.00	14,388.24	11,788.02	57.00	64.73	173.49	-2,535.75	-908.95	1,352.24	1,306.88	45.37	29.806		
13,064.30	10,418.00	14,449.46	11,788.03	57.80	65.54	173.53	-2,596.95	-907.44	1,352.16	1,306.31	45.85	29.489		
13,100.00	10,418.00	14,476.45	11,788.22	58.24	65.91	173.55	-2,623.93	-906.51	1,352.31	1,306.22	46.08	29.344		
13,200.00	10,418.00	14,556.05	11,789.88	59.50	66.98	173.70	-2,703.41	-902.55	1,353.91	1,307.16	46.75	28.959		
13,300.00	10,418.00	14,681.24	11,792.98	60.77	68.69	173.88	-2,828.44	-897.19	1,356.21	1,308.55	47.67	28.451		
13,400.00	10,418.00	14,838.32	11,789.93	62.07	70.85	173.92	-2,985.46	-894.40	1,354.03	1,305.21	48.82	27.734		
13,500.00	10,418.00	14,971.36	11,782.89	63.38	72.69	173.93	-3,118.29	-892.22	1,348.59	1,298.73	49.87	27.043		
13,600.00	10,418.00	15,063.22	11,777.11	64.71	73.98	173.89	-3,209.97	-891.52	1,342.38	1,291.71	50.68	26.489		

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 503H
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 503H	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		
13,700.00	10,418.00	15,132.15	11,773.76	66.05	74.95	173.88	-3,278.81	-890.62	1,337.63	1,286.28	51.34	26.053		
13,800.00	10,418.00	15,195.00	11,772.69	67.40	75.83	173.87	-3,341.64	-890.30	1,335.86	1,283.88	51.99	25.696		
13,807.89	10,418.00	15,195.00	11,772.69	67.51	75.83	173.87	-3,341.64	-890.30	1,335.84	1,283.83	52.01	25.684		
13,900.00	10,418.00	15,259.48	11,773.30	68.77	76.74	173.83	-3,406.11	-890.60	1,336.83	1,284.17	52.66	25.385		
14,000.00	10,418.00	15,350.12	11,775.59	70.15	78.03	173.75	-3,496.72	-891.81	1,339.56	1,286.04	53.52	25.030		
14,100.00	10,418.00	15,439.12	11,777.98	71.54	79.29	173.67	-3,585.68	-893.20	1,342.54	1,288.17	54.37	24.691		
14,200.00	10,418.00	15,524.51	11,781.35	72.95	80.51	173.59	-3,670.98	-894.61	1,346.74	1,291.53	55.21	24.392		
14,300.00	10,418.00	15,608.60	11,785.45	74.36	81.72	173.52	-3,754.96	-895.84	1,351.89	1,295.84	56.05	24.121		
14,400.00	10,418.00	15,702.05	11,791.46	75.78	83.08	173.49	-3,848.22	-896.22	1,358.40	1,301.46	56.94	23.857		
14,500.00	10,418.00	15,857.74	11,798.47	77.21	85.37	173.59	-4,003.71	-893.13	1,362.82	1,304.61	58.21	23.413		
14,600.00	10,418.00	15,988.78	11,799.33	78.65	87.30	173.67	-4,134.70	-889.93	1,363.13	1,303.80	59.33	22.977		
14,605.54	10,418.00	15,993.41	11,799.33	78.73	87.37	173.67	-4,139.33	-889.85	1,363.13	1,303.76	59.37	22.959		
14,700.00	10,418.00	16,074.89	11,799.78	80.10	88.57	173.68	-4,220.80	-888.97	1,363.64	1,303.46	60.18	22.661		
14,800.00	10,418.00	16,160.74	11,800.74	81.55	89.84	173.63	-4,306.64	-889.50	1,364.95	1,303.90	61.05	22.359		
14,900.00	10,418.00	16,236.00	11,802.99	83.02	90.96	173.58	-4,381.87	-890.22	1,368.06	1,306.21	61.85	22.119		
15,000.00	10,418.00	16,328.90	11,806.88	84.49	92.34	173.53	-4,474.68	-890.93	1,372.39	1,309.61	62.78	21.860		
15,100.00	10,418.00	16,426.00	11,810.75	85.96	93.79	173.47	-4,571.70	-891.67	1,376.57	1,312.82	63.74	21.595		
15,200.00	10,418.00	16,499.60	11,814.53	87.45	94.90	173.46	-4,645.20	-891.63	1,381.85	1,317.32	64.53	21.414		
15,300.00	10,418.00	16,604.46	11,821.62	88.94	96.48	173.53	-4,749.81	-889.73	1,388.48	1,322.96	65.52	21.191		
15,400.00	10,418.00	16,704.13	11,827.90	90.43	98.00	173.67	-4,849.21	-886.18	1,394.47	1,328.01	66.46	20.983		
15,500.00	10,418.00	16,782.57	11,833.65	91.93	99.21	173.84	-4,927.30	-881.67	1,401.26	1,334.04	67.22	20.846		
15,600.00	10,418.00	16,902.34	11,843.19	93.43	101.06	174.20	-5,046.36	-872.75	1,408.60	1,340.35	68.25	20.639		
15,700.00	10,418.00	17,014.05	11,850.49	94.94	102.79	174.47	-5,157.60	-865.59	1,414.60	1,345.36	69.24	20.429		
15,800.00	10,418.00	17,133.13	11,855.84	96.46	104.63	174.67	-5,276.43	-860.05	1,418.62	1,348.30	70.33	20.172		
15,900.00	10,418.00	17,226.32	11,860.09	97.98	106.06	174.70	-5,369.50	-858.78	1,423.11	1,351.85	71.26	19.970		
16,000.00	10,418.00	17,323.56	11,864.46	99.50	107.56	174.76	-5,466.63	-856.84	1,427.50	1,355.27	72.23	19.764		
16,100.00	10,418.00	17,411.83	11,869.19	101.03	108.93	174.85	-5,554.72	-853.99	1,432.63	1,359.53	73.11	19.596		
16,200.00	10,418.00	17,509.80	11,874.82	102.56	110.44	174.87	-5,652.53	-852.97	1,438.35	1,364.25	74.09	19.412		
16,300.00	10,418.00	17,611.49	11,880.48	104.09	112.02	174.94	-5,754.03	-850.79	1,443.79	1,368.69	75.10	19.226		
16,400.00	10,418.00	17,755.08	11,886.85	105.63	114.24	174.88	-5,897.47	-851.44	1,448.57	1,372.11	76.47	18.943		
16,500.00	10,418.00	17,814.58	11,889.11	107.17	115.16	174.82	-5,956.91	-852.50	1,452.55	1,375.36	77.19	18.818		
16,600.00	10,418.00	17,884.16	11,893.50	108.72	116.23	174.77	-6,026.35	-853.49	1,458.99	1,381.02	77.97	18.712		
16,700.00	10,418.00	17,967.12	11,900.20	110.26	117.52	174.78	-6,109.03	-853.15	1,467.06	1,388.22	78.84	18.608		
16,800.00	10,418.00	18,076.96	11,909.46	111.81	119.24	174.83	-6,218.46	-851.67	1,475.44	1,395.51	79.94	18.458		
16,900.00	10,418.00	18,180.03	11,917.14	113.37	120.85	174.91	-6,321.21	-849.15	1,482.72	1,401.76	80.96	18.314		
17,000.00	10,418.00	18,341.15	11,927.51	114.92	123.40	175.19	-6,481.78	-841.17	1,489.14	1,406.73	82.41	18.070		
17,100.00	10,418.00	18,450.07	11,931.59	116.48	125.12	175.40	-6,590.44	-834.95	1,492.52	1,409.08	83.44	17.887		
17,200.00	10,418.00	18,560.81	11,934.31	118.04	126.87	175.52	-6,701.07	-831.04	1,494.73	1,410.22	84.52	17.685		
17,300.00	10,418.00	18,642.45	11,936.44	119.61	128.16	175.55	-6,782.67	-829.55	1,497.31	1,411.91	85.40	17.533		
17,400.00	10,418.00	18,716.03	11,939.71	121.17	129.32	175.59	-6,856.17	-828.03	1,501.64	1,415.43	86.21	17.419		
17,500.00	10,418.00	18,798.80	11,944.43	122.74	130.62	175.58	-6,938.80	-827.71	1,507.37	1,420.27	87.10	17.307		
17,600.00	10,418.00	18,896.13	11,950.45	124.31	132.14	175.50	-7,035.93	-829.49	1,513.75	1,425.61	88.14	17.174		
17,700.00	10,418.00	18,982.00	11,955.57	125.88	133.48	175.39	-7,121.61	-831.94	1,520.09	1,431.00	89.09	17.063		
17,800.00	10,418.00	19,052.71	11,960.80	127.46	134.59	175.31	-7,192.10	-833.66	1,527.93	1,438.06	89.87	17.001		
17,900.00	10,418.00	19,148.87	11,970.12	129.04	136.10	175.25	-7,287.79	-835.24	1,537.79	1,446.89	90.90	16.917		
18,000.00	10,418.00	19,305.11	11,981.48	130.61	138.57	175.26	-7,443.58	-834.30	1,544.87	1,452.38	92.48	16.705		
18,100.00	10,418.00	19,402.12	11,987.36	132.19	140.11	175.31	-7,540.40	-832.55	1,550.84	1,457.35	93.49	16.588		
18,200.00	10,418.00	19,509.62	11,993.55	133.78	141.82	175.28	-7,647.71	-832.73	1,556.68	1,462.06	94.62	16.452		
18,300.00	10,418.00	19,618.65	11,998.98	135.36	143.54	175.20	-7,756.59	-834.23	1,561.84	1,466.06	95.77	16.307		
18,400.00	10,418.00	19,717.65	12,003.49	136.94	145.10	175.07	-7,855.44	-837.32	1,566.73	1,469.86	96.87	16.173		
18,500.00	10,418.00	19,798.14	12,007.67	138.53	146.37	174.99	-7,935.80	-839.05	1,572.21	1,474.42	97.78	16.078		
18,600.00	10,418.00	19,895.14	12,013.96	140.12	147.90	174.94	-8,032.59	-840.11	1,578.84	1,480.00	98.84	15.974		

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 503H
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 503H	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 - Kaston Fed Com 603H - OH - OH													Offset Well Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND														
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		
18,700.00	10,418.00	20,073.26	12,020.06	141.71	150.73	174.87	-8,210.57	-840.81	1,582.07	1,481.49	100.58	15.730		
18,800.00	10,418.00	20,160.25	12,021.61	143.30	152.12	174.89	-8,297.54	-839.31	1,583.80	1,482.27	101.53	15.600		
18,900.00	10,418.00	20,233.93	12,023.79	144.89	153.30	174.90	-8,371.17	-838.58	1,586.78	1,484.41	102.37	15.500		
19,000.00	10,418.00	20,308.00	12,027.64	146.49	154.48	174.88	-8,445.14	-838.85	1,591.94	1,488.73	103.22	15.423		
19,100.00	10,418.00	20,481.98	12,033.87	148.08	157.24	174.74	-8,618.97	-841.41	1,596.15	1,491.20	104.95	15.209		
19,200.00	10,418.00	20,592.00	12,033.97	149.68	158.99	174.67	-8,728.98	-842.34	1,596.38	1,490.26	106.12	15.044		
19,300.00	10,418.00	20,667.49	12,034.59	151.27	160.19	174.65	-8,804.46	-842.27	1,597.31	1,490.30	107.01	14.927		
19,400.00	10,418.00	20,743.95	12,036.52	152.87	161.42	174.63	-8,880.90	-842.28	1,599.91	1,492.00	107.90	14.827		
19,500.00	10,418.00	20,824.84	12,039.69	154.47	162.71	174.63	-8,961.72	-841.74	1,603.84	1,495.03	108.81	14.740		
19,600.00	10,418.00	20,970.00	12,043.47	156.07	165.01	174.39	-9,106.67	-847.36	1,606.88	1,496.52	110.36	14.560		
19,700.00	10,418.00	21,065.00	12,044.67	157.67	166.51	174.18	-9,201.50	-852.60	1,608.79	1,497.28	111.51	14.427		
19,800.00	10,418.00	21,121.23	12,046.98	159.28	167.40	174.07	-9,257.63	-855.18	1,612.89	1,500.62	112.27	14.366		
19,900.00	10,418.00	21,194.78	12,050.28	160.88	168.56	173.92	-9,330.98	-859.25	1,618.14	1,504.96	113.17	14.298		
20,000.00	10,418.00	21,254.00	12,054.50	162.48	169.50	173.83	-9,390.00	-861.72	1,625.76	1,511.89	113.87	14.277		
20,100.00	10,418.00	21,382.68	12,062.92	164.09	171.55	173.65	-9,518.31	-866.43	1,632.51	1,517.15	115.36	14.151		
20,200.00	10,418.00	21,443.00	12,067.90	165.70	172.52	173.64	-9,578.42	-866.62	1,640.83	1,524.82	116.01	14.144		
20,300.00	10,418.00	21,526.81	12,076.45	167.30	173.87	173.71	-9,661.77	-864.84	1,650.83	1,533.97	116.86	14.127		
20,400.00	10,418.00	21,727.39	12,093.84	168.91	177.12	174.03	-9,861.33	-855.33	1,659.91	1,541.08	118.82	13.970		
20,500.00	10,418.00	21,866.84	12,098.40	170.52	179.38	174.25	-10,000.51	-848.02	1,662.59	1,542.48	120.11	13.842		
20,600.00	10,418.00	22,029.00	12,100.06	172.13	182.01	174.46	-10,162.46	-840.33	1,663.57	1,542.08	121.49	13.693		
20,633.83	10,418.00	22,033.97	12,100.21	172.68	182.09	174.47	-10,167.43	-840.14	1,663.45	1,541.78	121.67	13.671		
20,700.00	10,418.00	22,071.16	12,100.63	173.74	182.70	174.50	-10,204.59	-838.84	1,664.03	1,541.87	122.16	13.621		
20,800.00	10,418.00	22,140.70	12,102.90	175.35	183.83	174.58	-10,274.04	-836.26	1,666.93	1,543.97	122.96	13.557		
20,900.00	10,418.00	22,220.01	12,106.58	176.97	185.12	174.79	-10,352.99	-829.66	1,670.92	1,547.18	123.74	13.504		
21,000.00	10,418.00	22,294.00	12,111.64	178.58	186.33	174.96	-10,426.60	-824.19	1,677.01	1,552.54	124.47	13.473		
21,100.00	10,418.00	22,358.38	12,117.07	180.19	187.37	175.06	-10,490.67	-821.12	1,684.86	1,559.75	125.12	13.466		
21,200.00	10,418.00	22,447.63	12,125.14	181.81	188.82	175.14	-10,579.52	-818.63	1,693.71	1,567.68	126.03	13.439		
21,300.00	10,418.00	22,568.84	12,135.73	183.42	190.78	175.17	-10,700.26	-817.51	1,702.48	1,575.13	127.35	13.369		
21,400.00	10,418.00	22,660.64	12,143.00	185.04	192.26	175.16	-10,791.77	-817.46	1,710.45	1,582.11	128.34	13.327		
21,500.00	10,418.00	22,752.20	12,150.75	186.65	193.74	175.15	-10,883.00	-817.48	1,718.97	1,589.64	129.33	13.291		
21,600.00	10,418.00	22,849.29	12,159.29	188.27	195.30	175.14	-10,979.72	-817.44	1,727.82	1,597.43	130.39	13.252		
21,700.00	10,418.00	22,922.97	12,166.28	189.89	196.49	175.14	-11,053.06	-817.38	1,737.37	1,606.22	131.15	13.247		
21,800.00	10,418.00	22,984.36	12,173.26	191.50	197.48	175.17	-11,114.04	-816.38	1,748.72	1,617.02	131.70	13.278		
21,900.00	10,418.00	23,050.00	12,182.61	193.12	198.55	175.22	-11,179.00	-815.06	1,762.62	1,630.36	132.27	13.326		
21,923.68	10,418.00	23,050.00	12,182.61	193.51	198.55	175.22	-11,179.00	-815.06	1,766.20	1,634.04	132.16	13.364		

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 503H
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 503H	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									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
0.00	0.00	25.07	25.07	0.00	0.03	-71.62	580.45	-1,747.37	1,841.26							
100.00	100.00	119.91	119.91	0.13	0.18	-71.63	580.49	-1,747.58	1,841.48	1,841.26	0.22	8,545.352				
200.00	200.00	197.36	197.35	0.48	0.45	-71.63	580.45	-1,748.29	1,842.36	1,841.70	0.66	2,786.258				
300.00	300.00	289.60	289.57	0.84	0.78	-71.68	579.66	-1,750.47	1,844.32	1,843.17	1.15	1,605.685				
400.00	400.00	373.12	373.05	1.20	1.08	-71.72	578.97	-1,752.88	1,846.80	1,845.18	1.62	1,142.761				
500.00	500.00	465.76	465.63	1.56	1.42	-71.77	578.38	-1,756.08	1,849.88	1,847.78	2.11	878.582				
600.00	600.00	565.43	565.23	1.92	1.78	-71.84	577.38	-1,759.83	1,853.14	1,850.53	2.61	709.353				
700.00	700.00	658.00	657.72	2.28	2.12	-71.90	576.46	-1,763.52	1,856.62	1,853.52	3.10	598.462				
800.00	800.00	816.00	815.57	2.63	2.68	-71.98	575.09	-1,767.78	1,859.00	1,855.25	3.75	495.967				
900.00	900.00	856.04	855.58	2.99	2.82	-72.01	574.69	-1,769.48	1,861.82	1,857.71	4.11	453.406				
1,000.00	1,000.00	950.38	949.82	3.35	3.17	-72.07	573.86	-1,773.73	1,865.83	1,861.23	4.60	405.580				
1,100.00	1,100.00	1,068.28	1,067.56	3.71	3.60	-72.20	571.26	-1,779.17	1,869.56	1,864.41	5.16	362.662				
1,200.00	1,200.00	1,154.22	1,153.37	4.07	3.92	-72.31	568.77	-1,783.15	1,873.09	1,867.46	5.63	332.738				
1,300.00	1,300.00	1,257.86	1,256.88	4.43	4.30	-72.41	566.71	-1,787.99	1,876.94	1,870.79	6.15	305.262				
1,400.00	1,400.00	1,320.00	1,318.93	4.79	4.52	-72.48	565.36	-1,790.95	1,881.14	1,874.58	6.56	286.720				
1,500.00	1,500.00	1,407.08	1,405.78	5.14	4.70	-72.61	562.66	-1,796.56	1,886.47	1,879.53	6.94	271.935				
1,600.00	1,600.00	1,499.00	1,497.21	5.50	4.89	-72.81	558.58	-1,805.17	1,894.03	1,886.71	7.32	258.685				
1,700.00	1,700.00	1,555.68	1,553.46	5.86	4.93	-72.95	555.58	-1,811.41	1,902.58	1,894.98	7.60	250.221				
1,800.00	1,800.00	1,756.04	1,752.62	6.22	5.14	-73.45	543.75	-1,829.48	1,910.01	1,902.00	8.00	238.623				
1,900.00	1,900.00	2,083.96	2,079.73	6.58	5.55	-73.92	526.08	-1,824.63	1,905.13	1,896.59	8.53	223.274				
2,000.00	2,000.00	2,196.11	2,191.49	6.94	5.71	-73.96	521.99	-1,816.09	1,896.81	1,887.89	8.92	212.660				
2,100.00	2,100.00	2,318.61	2,313.43	7.29	5.92	-74.04	516.48	-1,805.88	1,887.56	1,878.23	9.33	202.322				
2,200.00	2,199.99	2,411.22	2,405.56	7.65	6.09	-0.29	511.31	-1,797.92	1,876.47	1,866.75	9.73	192.953				
2,300.00	2,299.91	2,507.82	2,501.67	7.99	6.30	-0.39	505.95	-1,789.96	1,863.12	1,852.99	10.13	183.940				
2,400.00	2,399.69	2,608.97	2,602.28	8.34	6.53	-0.52	499.25	-1,781.91	1,847.17	1,836.62	10.55	175.127				
2,500.00	2,499.27	2,706.00	2,698.72	8.70	6.77	-0.70	491.58	-1,774.43	1,828.54	1,817.56	10.97	166.659				
2,600.00	2,598.57	2,780.81	2,773.11	9.06	6.96	-0.84	485.81	-1,769.13	1,808.01	1,796.64	11.38	158.941				
2,700.00	2,697.54	2,862.13	2,854.11	9.42	7.18	-0.98	480.56	-1,764.11	1,786.12	1,774.33	11.79	151.518				
2,771.79	2,768.33	2,961.75	2,953.31	9.69	7.45	-1.11	475.02	-1,756.99	1,768.27	1,756.13	12.14	145.703				
2,800.00	2,796.11	3,059.46	3,050.27	9.79	7.74	-1.22	469.04	-1,746.63	1,759.46	1,747.12	12.34	142.611				
2,900.00	2,894.56	3,163.28	3,153.01	10.18	8.05	-1.37	461.77	-1,733.64	1,728.38	1,715.60	12.78	135.232				
3,000.00	2,993.02	3,238.55	3,227.57	10.56	8.29	-1.51	455.73	-1,725.27	1,698.42	1,685.21	13.20	128.630				
3,100.00	3,091.48	3,336.06	3,324.14	10.95	8.61	-1.76	446.43	-1,715.60	1,669.21	1,655.55	13.66	122.205				
3,200.00	3,189.94	3,427.45	3,414.57	11.35	8.91	-2.03	436.93	-1,706.36	1,639.65	1,625.54	14.11	116.174				
3,300.00	3,288.39	3,503.20	3,489.63	11.75	9.17	-2.24	429.72	-1,699.14	1,610.90	1,596.34	14.55	110.680				
3,400.00	3,386.85	3,574.90	3,560.80	12.16	9.42	-2.44	423.29	-1,693.33	1,583.60	1,568.60	14.99	105.622				
3,500.00	3,485.31	3,649.00	3,634.46	12.57	9.67	-2.65	417.00	-1,688.31	1,557.71	1,542.27	15.44	100.912				
3,600.00	3,583.77	3,714.60	3,699.77	12.98	9.89	-2.83	411.82	-1,684.92	1,533.51	1,517.64	15.87	96.633				
3,700.00	3,682.22	3,812.26	3,797.14	13.39	10.22	-3.07	405.38	-1,681.06	1,510.77	1,494.42	16.34	92.434				
3,800.00	3,780.68	3,962.42	3,946.71	13.81	10.73	-3.38	396.62	-1,671.27	1,485.76	1,468.88	16.88	88.013				
3,900.00	3,879.14	4,063.35	4,046.92	14.23	11.09	-3.70	387.75	-1,663.15	1,458.71	1,441.34	17.37	83.989				
4,000.00	3,977.60	4,160.42	4,143.33	14.65	11.44	-4.02	379.35	-1,655.69	1,432.08	1,414.23	17.85	80.219				
4,100.00	4,076.05	4,265.53	4,247.83	15.07	11.81	-4.23	373.57	-1,645.90	1,404.59	1,386.26	18.34	76.597				
4,200.00	4,174.51	4,365.52	4,347.26	15.50	12.16	-4.34	370.00	-1,636.06	1,377.03	1,358.22	18.81	73.194				
4,300.00	4,272.97	4,483.89	4,464.86	15.93	12.58	-4.48	365.71	-1,623.28	1,348.58	1,329.28	19.30	69.878				
4,400.00	4,371.43	4,572.74	4,552.99	16.36	12.91	-4.68	360.42	-1,613.38	1,319.32	1,299.54	19.78	66.705				
4,500.00	4,469.88	4,651.52	4,631.15	16.79	13.20	-4.94	354.28	-1,605.67	1,291.02	1,270.76	20.26	63.723				
4,600.00	4,568.34	4,728.03	4,707.17	17.22	13.49	-5.21	348.37	-1,599.30	1,264.13	1,243.39	20.74	60.950				
4,700.00	4,666.80	4,810.11	4,788.88	17.65	13.79	-5.45	343.29	-1,593.50	1,238.74	1,217.51	21.22	58.364				
4,800.00	4,765.25	4,901.37	4,879.77	18.08	14.12	-5.75	337.59	-1,587.59	1,213.95	1,192.23	21.72	55.903				
4,900.00	4,863.71	4,988.44	4,966.51	18.52	14.43	-6.05	331.88	-1,582.58	1,189.84	1,167.63	22.21	53.581				
5,000.00	4,962.17	5,075.56	5,053.37	18.95	14.75	-6.36	326.57	-1,578.30	1,166.63	1,143.94	22.70	51.399				

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 503H
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 503H	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			
5,100.00	5,060.63	5,172.78	5,150.33	19.39	15.09	-6.69	321.18	-1,573.77	1,143.82	1,120.62	23.20	49.309			
5,200.00	5,159.08	5,270.83	5,248.12	19.83	15.44	-7.03	315.82	-1,569.20	1,121.04	1,097.35	23.70	47.304			
5,300.00	5,257.54	5,374.01	5,351.01	20.27	15.82	-7.41	310.09	-1,564.03	1,097.96	1,073.76	24.20	45.362			
5,400.00	5,356.00	5,493.34	5,469.94	20.71	16.25	-7.86	303.35	-1,556.94	1,074.11	1,049.39	24.71	43.460			
5,500.00	5,454.46	5,597.56	5,573.56	21.15	16.65	-8.35	295.86	-1,548.59	1,047.96	1,022.73	25.22	41.548			
5,600.00	5,552.91	5,688.29	5,663.74	21.59	16.99	-8.85	288.63	-1,541.81	1,022.33	996.60	25.74	39.725			
5,700.00	5,651.37	5,782.05	5,756.94	22.03	17.35	-9.41	280.71	-1,535.23	997.17	970.92	26.25	37.984			
5,800.00	5,749.83	5,877.85	5,852.19	22.47	17.72	-9.99	273.04	-1,528.59	972.23	945.46	26.77	36.318			
5,900.00	5,848.29	5,976.31	5,950.13	22.91	18.09	-10.59	265.65	-1,521.64	947.33	920.05	27.29	34.717			
6,000.00	5,946.74	6,074.76	6,048.05	23.36	18.47	-11.20	258.46	-1,514.40	922.27	894.46	27.81	33.167			
6,100.00	6,045.20	6,173.77	6,146.51	23.80	18.85	-11.85	251.23	-1,506.89	897.08	868.75	28.33	31.669			
6,200.00	6,143.66	6,264.67	6,236.91	24.24	19.19	-12.49	244.61	-1,500.02	872.04	843.18	28.85	30.222			
6,300.00	6,242.12	6,350.00	6,321.82	24.69	19.52	-13.12	238.30	-1,494.44	848.08	818.69	29.39	28.857			
6,400.00	6,340.57	6,434.27	6,405.78	25.13	19.83	-13.75	232.47	-1,490.13	825.66	795.74	29.92	27.594			
6,500.00	6,439.03	6,519.12	6,490.44	25.58	20.14	-14.34	227.80	-1,487.03	804.85	774.40	30.45	26.434			
6,600.00	6,537.49	6,606.85	6,578.09	26.02	20.44	-14.84	224.81	-1,485.06	785.58	754.61	30.96	25.370			
6,700.00	6,635.95	6,700.81	6,672.04	26.47	20.76	-15.22	223.88	-1,483.76	767.26	735.79	31.47	24.379			
6,757.61	6,692.67	6,757.48	6,728.70	26.73	20.95	-15.44	223.58	-1,483.05	756.82	725.05	31.76	23.826			
6,800.00	6,734.44	6,799.26	6,770.47	26.91	21.08	-15.58	223.34	-1,482.53	749.36	717.38	31.98	23.432			
6,900.00	6,833.29	6,897.73	6,868.94	27.34	21.41	-15.87	222.83	-1,481.28	733.54	701.05	32.49	22.580			
7,000.00	6,932.50	6,996.53	6,967.73	27.75	21.74	-16.13	222.30	-1,480.08	720.29	687.30	32.99	21.834			
7,100.00	7,032.01	7,090.73	7,061.93	28.14	22.05	-16.34	221.70	-1,479.11	709.75	676.26	33.49	21.194			
7,200.00	7,131.74	7,180.70	7,151.89	28.51	22.34	-16.52	221.05	-1,479.30	702.95	668.98	33.98	20.690			
7,300.00	7,231.62	7,273.97	7,245.15	28.86	22.63	-16.66	220.31	-1,480.70	699.95	665.50	34.45	20.317			
7,347.51	7,279.11	7,320.08	7,291.25	29.02	22.77	-16.73	219.88	-1,481.59	699.62	664.94	34.67	20.177 CC			
7,400.00	7,331.60	7,374.71	7,345.86	29.19	22.94	-16.79	219.31	-1,482.64	699.90	664.97	34.93	20.040			
7,429.40	7,361.00	7,405.58	7,376.73	29.28	23.04	-90.66	218.97	-1,483.14	700.27	665.21	35.06	19.971			
7,500.00	7,431.60	7,480.06	7,451.20	29.50	23.27	-90.72	218.14	-1,484.08	701.17	665.77	35.40	19.807			
7,600.00	7,531.60	7,582.63	7,553.76	29.82	23.59	-90.78	217.46	-1,484.82	701.90	666.03	35.87	19.569			
7,700.00	7,631.60	7,685.87	7,657.00	30.14	23.91	-90.76	217.69	-1,485.26	702.32	665.99	36.33	19.332			
7,800.00	7,731.60	7,786.60	7,757.73	30.45	24.22	-90.76	217.68	-1,485.33	702.39	665.60	36.79	19.090			
7,900.00	7,831.60	7,887.97	7,859.10	30.77	24.55	-90.76	217.67	-1,485.29	702.35	665.09	37.26	18.848			
8,000.00	7,931.60	7,989.52	7,960.65	31.09	24.88	-90.77	217.52	-1,485.00	702.07	664.33	37.74	18.602			
8,036.26	7,967.86	8,023.23	7,994.36	31.21	24.99	-90.78	217.43	-1,484.94	702.01	664.09	37.91	18.517			
8,100.00	8,031.60	8,082.59	8,053.71	31.41	25.18	-90.79	217.37	-1,485.13	702.21	664.00	38.21	18.377			
8,200.00	8,131.60	8,179.52	8,150.65	31.73	25.48	-90.75	217.85	-1,485.99	703.09	664.42	38.67	18.182			
8,300.00	8,231.60	8,285.51	8,256.63	32.06	25.81	-90.68	218.64	-1,486.64	703.69	664.56	39.13	17.982			
8,400.00	8,331.60	8,387.84	8,358.96	32.38	26.13	-90.65	218.96	-1,486.64	703.68	664.08	39.60	17.768			
8,500.00	8,431.60	8,493.37	8,464.49	32.70	26.48	-90.66	218.95	-1,486.39	703.47	663.39	40.08	17.550			
8,600.00	8,531.60	8,597.73	8,568.83	33.03	26.84	-90.70	218.39	-1,484.59	701.73	661.16	40.57	17.298			
8,700.00	8,631.60	8,688.98	8,660.07	33.35	27.15	-90.73	218.12	-1,483.81	700.87	659.83	41.05	17.075			
8,727.41	8,659.01	8,714.42	8,685.51	33.44	27.23	-90.72	218.14	-1,483.78	700.83	659.66	41.18	17.020			
8,800.00	8,731.60	8,785.39	8,756.49	33.68	27.46	-90.71	218.30	-1,483.93	700.99	659.47	41.52	16.884			
8,900.00	8,831.60	8,886.80	8,857.90	34.00	27.79	-90.74	217.96	-1,484.08	701.14	659.14	42.00	16.695			
9,000.00	8,931.60	8,987.87	8,958.96	34.33	28.13	-90.85	216.65	-1,483.99	701.07	658.58	42.49	16.501			
9,042.61	8,974.21	9,029.63	9,000.71	34.47	28.27	-90.90	215.95	-1,483.93	701.01	658.32	42.69	16.419 ES			
9,100.00	9,031.60	9,079.39	9,050.46	34.66	28.44	-90.95	215.33	-1,484.19	701.33	658.36	42.97	16.323			
9,200.00	9,131.60	9,172.65	9,143.71	34.98	28.74	-90.98	215.02	-1,485.85	703.10	659.66	43.43	16.188			
9,300.00	9,231.60	9,272.88	9,243.92	35.31	29.06	-91.01	214.58	-1,487.93	705.18	661.27	43.91	16.060			
9,400.00	9,331.60	9,374.09	9,345.10	35.64	29.39	-91.10	213.40	-1,489.85	707.10	662.71	44.39	15.929			
9,500.00	9,431.60	9,473.78	9,444.77	35.97	29.71	-91.18	212.45	-1,491.66	708.93	664.06	44.87	15.800			
9,600.00	9,531.60	9,572.97	9,543.93	36.30	30.04	-91.31	210.72	-1,493.54	710.87	665.52	45.35	15.674			

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 503H
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 503H	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				
9,700.00	9,631.60	9,671.57	9,642.49	36.63	30.36	-91.42	209.29	-1,495.56	712.95	667.12	45.83	15.555				
9,800.00	9,731.60	9,779.28	9,750.18	36.96	30.71	-91.38	209.81	-1,497.43	714.68	668.36	46.32	15.430				
9,900.00	9,831.60	9,878.65	9,849.54	37.30	31.02	-91.29	210.86	-1,498.65	715.88	669.10	46.79	15.301				
9,913.44	9,845.04	9,893.06	9,863.95	37.34	31.06	-91.28	211.00	-1,498.81	716.03	669.18	46.85	15.284				
9,950.00	9,881.57	9,932.22	9,903.11	37.46	31.19	89.38	211.32	-1,499.16	716.34	669.32	47.02	15.236				
10,000.00	9,931.27	9,984.01	9,954.89	37.60	31.35	89.83	211.59	-1,499.42	716.55	669.32	47.23	15.172				
10,050.00	9,980.31	10,032.79	10,003.68	37.74	31.51	90.56	211.72	-1,499.63	716.79	669.37	47.43	15.114				
10,100.00	10,028.32	10,080.22	10,051.10	37.87	31.67	91.56	211.70	-1,499.85	717.31	669.70	47.61	15.066				
10,150.00	10,074.94	10,126.00	10,096.88	37.99	31.82	92.76	211.42	-1,500.12	718.35	670.57	47.79	15.032				
10,200.00	10,119.80	10,171.18	10,142.05	38.10	31.97	94.12	210.86	-1,500.45	720.19	672.23	47.96	15.018 SF				
10,250.00	10,162.58	10,215.74	10,186.61	38.19	32.12	95.61	210.13	-1,500.73	723.03	674.91	48.12	15.024				
10,300.00	10,202.93	10,258.49	10,229.35	38.28	32.27	97.12	209.31	-1,500.92	727.21	678.92	48.29	15.059				
10,350.00	10,240.57	10,299.62	10,270.48	38.35	32.41	98.62	208.61	-1,500.94	733.02	684.56	48.46	15.127				
10,400.00	10,275.19	10,337.26	10,308.11	38.42	32.54	99.92	208.13	-1,500.79	740.86	692.23	48.63	15.234				
10,450.00	10,306.54	10,368.74	10,339.59	38.47	32.65	100.77	207.85	-1,500.57	751.12	702.31	48.81	15.388				
10,500.00	10,334.38	10,396.17	10,367.02	38.52	32.75	101.19	207.69	-1,500.38	764.15	715.15	49.00	15.594				
10,550.00	10,358.49	10,419.77	10,390.62	38.56	32.83	101.12	207.61	-1,500.22	780.10	730.90	49.20	15.856				
10,600.00	10,378.70	10,439.27	10,410.12	38.60	32.89	100.49	207.59	-1,500.08	799.03	749.63	49.40	16.174				
10,650.00	10,394.84	10,454.32	10,425.17	38.64	32.94	99.19	207.60	-1,499.99	820.89	771.29	49.61	16.548				
10,700.00	10,406.80	10,465.40	10,436.25	38.68	32.98	97.23	207.61	-1,499.93	845.52	795.71	49.81	16.975				
10,750.00	10,414.49	10,472.46	10,443.31	38.74	33.00	94.57	207.62	-1,499.90	872.67	822.67	50.01	17.451				
10,800.00	10,417.84	10,475.47	10,446.32	38.82	33.01	91.18	207.62	-1,499.89	902.02	851.83	50.19	17.971				
10,813.44	10,418.00	10,475.59	10,446.44	38.85	33.01	90.16	207.62	-1,499.88	910.24	860.00	50.24	18.118				
10,900.00	10,418.00	10,475.43	10,446.28	39.04	33.01	90.14	207.62	-1,499.89	965.97	915.43	50.54	19.112				
11,000.00	10,418.00	10,475.25	10,446.10	39.34	33.01	90.13	207.62	-1,499.89	1,035.64	984.76	50.88	20.356				
11,100.00	10,418.00	10,475.07	10,445.92	39.72	33.01	90.11	207.62	-1,499.89	1,109.95	1,058.77	51.18	21.686				
11,200.00	10,418.00	10,474.90	10,445.74	40.19	33.01	90.10	207.62	-1,499.89	1,188.04	1,136.58	51.46	23.087				
11,300.00	10,418.00	10,474.72	10,445.57	40.72	33.01	90.09	207.62	-1,499.89	1,269.21	1,217.51	51.71	24.547				
11,400.00	10,418.00	10,474.55	10,445.39	41.32	33.01	90.07	207.62	-1,499.89	1,352.90	1,300.98	51.92	26.056				
11,500.00	10,418.00	10,474.38	10,445.22	41.98	33.01	90.06	207.62	-1,499.89	1,438.68	1,386.57	52.11	27.606				
11,600.00	10,418.00	10,474.21	10,445.05	42.70	33.01	90.04	207.62	-1,499.89	1,526.19	1,473.90	52.28	29.190				
11,700.00	10,418.00	10,474.04	10,444.89	43.47	33.01	90.03	207.62	-1,499.89	1,615.15	1,562.71	52.43	30.803				
11,800.00	10,418.00	10,473.87	10,444.72	44.29	33.01	90.02	207.62	-1,499.89	1,705.33	1,652.76	52.57	32.441				
11,900.00	10,418.00	10,473.71	10,444.56	45.15	33.01	90.00	207.62	-1,499.89	1,796.55	1,743.87	52.69	34.098				
12,000.00	10,418.00	10,473.55	10,444.39	46.06	33.01	89.99	207.62	-1,499.89	1,888.66	1,835.87	52.80	35.773				
12,100.00	10,418.00	10,473.39	10,444.23	47.01	33.01	89.98	207.62	-1,499.89	1,981.54	1,928.65	52.89	37.462				
12,200.00	10,418.00	10,473.23	10,444.07	47.99	33.01	89.97	207.62	-1,499.89	2,075.08	2,022.10	52.98	39.164				
12,300.00	10,418.00	10,473.07	10,443.92	49.02	33.01	89.95	207.62	-1,499.90	2,169.20	2,116.13	53.07	40.876				
12,400.00	10,418.00	10,472.91	10,443.76	50.07	33.01	89.94	207.62	-1,499.90	2,263.81	2,210.67	53.14	42.598				
12,500.00	10,418.00	10,472.76	10,443.61	51.16	33.01	89.93	207.62	-1,499.90	2,358.88	2,305.66	53.21	44.328				
12,600.00	10,418.00	10,472.61	10,443.45	52.28	33.00	89.92	207.62	-1,499.90	2,454.33	2,401.05	53.28	46.064				
12,700.00	10,418.00	10,472.46	10,443.30	53.42	33.00	89.90	207.62	-1,499.90	2,550.14	2,496.80	53.34	47.807				
12,800.00	10,418.00	10,472.31	10,443.15	54.59	33.00	89.89	207.62	-1,499.90	2,646.25	2,592.85	53.40	49.554				
12,900.00	10,418.00	10,472.16	10,443.01	55.78	33.00	89.88	207.62	-1,499.90	2,742.65	2,689.19	53.46	51.305				
13,000.00	10,418.00	10,472.01	10,442.86	57.00	33.00	89.87	207.62	-1,499.90	2,839.29	2,785.78	53.51	53.060				
13,100.00	10,418.00	10,471.87	10,442.71	58.24	33.00	89.86	207.62	-1,499.90	2,936.16	2,882.59	53.56	54.817				
13,200.00	10,418.00	10,471.72	10,442.57	59.50	33.00	89.85	207.62	-1,499.90	3,033.23	2,979.61	53.61	56.578				
13,300.00	10,418.00	10,471.58	10,442.43	60.77	33.00	89.83	207.62	-1,499.90	3,130.48	3,076.82	53.66	58.340				
13,400.00	10,418.00	10,471.44	10,442.29	62.07	33.00	89.82	207.62	-1,499.90	3,227.90	3,174.20	53.71	60.104				
13,500.00	10,418.00	10,471.30	10,442.15	63.38	33.00	89.81	207.62	-1,499.90	3,325.48	3,271.73	53.75	61.869				
13,600.00	10,418.00	10,471.16	10,442.01	64.71	33.00	89.80	207.62	-1,499.90	3,423.19	3,369.40	53.79	63.635				
13,700.00	10,418.00	10,471.03	10,441.87	66.05	33.00	89.79	207.62	-1,499.90	3,521.04	3,467.20	53.84	65.402				

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 503H
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 503H	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 - Kaston Fed Com 703H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1431-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
13,800.00	10,418.00	10,470.89	10,441.74	67.40	33.00	89.78	207.62	-1,499.91	3,619.00	3,565.12	53.88	67.169	
13,900.00	10,418.00	10,470.76	10,441.61	68.77	33.00	89.77	207.62	-1,499.91	3,717.07	3,663.15	53.92	68.935	
14,000.00	10,418.00	10,470.63	10,441.47	70.15	33.00	89.76	207.62	-1,499.91	3,815.24	3,761.28	53.96	70.702	
14,100.00	10,418.00	10,470.49	10,441.34	71.54	33.00	89.75	207.62	-1,499.91	3,913.50	3,859.50	54.00	72.468	
14,200.00	10,418.00	10,470.36	10,441.21	72.95	33.00	89.74	207.61	-1,499.91	4,011.85	3,957.81	54.04	74.233	
14,300.00	10,418.00	10,470.24	10,441.08	74.36	33.00	89.73	207.61	-1,499.91	4,110.28	4,056.20	54.08	75.998	
14,400.00	10,418.00	10,470.11	10,440.95	75.78	33.00	89.72	207.61	-1,499.91	4,208.78	4,154.66	54.12	77.761	
14,500.00	10,418.00	10,469.98	10,440.83	77.21	33.00	89.71	207.61	-1,499.91	4,307.35	4,253.19	54.17	79.523	
14,600.00	10,418.00	10,469.86	10,440.70	78.65	33.00	89.70	207.61	-1,499.91	4,405.99	4,351.79	54.21	81.283	
14,700.00	10,418.00	10,469.73	10,440.58	80.10	33.00	89.69	207.61	-1,499.91	4,504.69	4,450.44	54.25	83.042	
14,800.00	10,418.00	10,469.61	10,440.46	81.55	32.99	89.68	207.61	-1,499.91	4,603.44	4,549.15	54.29	84.799	
14,900.00	10,418.00	10,469.49	10,440.33	83.02	32.99	89.67	207.61	-1,499.91	4,702.24	4,647.92	54.33	86.554	
15,000.00	10,418.00	10,469.37	10,440.21	84.49	32.99	89.66	207.61	-1,499.91	4,801.10	4,746.73	54.37	88.308	
15,100.00	10,418.00	10,469.25	10,440.09	85.96	32.99	89.65	207.61	-1,499.91	4,900.00	4,845.59	54.41	90.059	
15,200.00	10,418.00	10,469.13	10,439.97	87.45	32.99	89.64	207.61	-1,499.91	4,998.94	4,944.50	54.45	91.808	

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 503H
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 503H	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)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	25.07	25.07	0.00	0.03	-71.62	580.45	-1,747.37	1,841.26							
100.00	100.00	119.91	119.91	0.13	0.18	-71.63	580.49	-1,747.58	1,841.48	1,841.26	0.22	8,545.352				
200.00	200.00	197.36	197.35	0.48	0.45	-71.63	580.45	-1,748.29	1,842.36	1,841.70	0.66	2,786.258				
300.00	300.00	289.60	289.57	0.84	0.78	-71.68	579.66	-1,750.47	1,844.32	1,843.17	1.15	1,605.685				
400.00	400.00	373.12	373.05	1.20	1.08	-71.72	578.97	-1,752.88	1,846.80	1,845.18	1.62	1,142.761				
500.00	500.00	465.76	465.63	1.56	1.42	-71.77	578.38	-1,756.08	1,849.88	1,847.78	2.11	878.582				
600.00	600.00	565.43	565.23	1.92	1.78	-71.84	577.38	-1,759.83	1,853.14	1,850.53	2.61	709.353				
700.00	700.00	658.00	657.72	2.28	2.12	-71.90	576.46	-1,763.52	1,856.62	1,853.52	3.10	598.462				
800.00	800.00	746.00	745.57	2.63	2.68	-71.98	575.09	-1,767.78	1,859.00	1,855.25	3.75	495.967				
900.00	900.00	836.04	835.58	2.99	2.82	-72.01	574.69	-1,769.48	1,861.82	1,857.71	4.11	453.406				
1,000.00	1,000.00	950.38	949.82	3.35	3.17	-72.07	573.86	-1,773.73	1,865.83	1,861.23	4.60	405.580				
1,100.00	1,100.00	1,068.28	1,067.56	3.71	3.60	-72.20	571.26	-1,779.17	1,869.56	1,864.41	5.16	362.662				
1,200.00	1,200.00	1,154.22	1,153.37	4.07	3.92	-72.31	568.77	-1,783.15	1,873.09	1,867.46	5.63	332.738				
1,300.00	1,300.00	1,257.86	1,256.88	4.43	4.30	-72.41	566.71	-1,787.99	1,876.94	1,870.79	6.15	305.262				
1,400.00	1,400.00	1,340.87	1,339.77	4.79	4.57	-72.51	564.82	-1,792.06	1,880.97	1,874.38	6.59	285.433				
1,500.00	1,500.00	1,409.00	1,407.71	5.14	4.70	-72.61	562.76	-1,796.65	1,886.47	1,879.53	6.94	271.964				
1,600.00	1,600.00	1,473.05	1,471.45	5.50	4.73	-72.73	560.20	-1,802.35	1,893.76	1,886.54	7.21	262.507				
1,700.00	1,700.00	1,555.69	1,553.49	5.86	4.80	-72.94	555.93	-1,811.30	1,902.57	1,895.06	7.52	253.162				
1,800.00	1,800.00	1,756.06	1,752.66	6.22	5.03	-73.44	544.10	-1,829.37	1,910.00	1,902.06	7.93	240.717				
1,900.00	1,900.00	2,083.94	2,079.74	6.58	5.48	-73.91	526.43	-1,824.52	1,905.12	1,896.63	8.49	224.437				
2,000.00	2,000.00	2,196.09	2,191.49	6.94	5.65	-73.95	522.34	-1,815.98	1,896.80	1,887.91	8.88	213.518				
2,100.00	2,100.00	2,318.59	2,313.44	7.29	5.87	-74.03	516.83	-1,805.76	1,887.55	1,878.25	9.30	202.920				
2,200.00	2,199.99	2,411.21	2,405.57	7.65	6.06	-0.28	511.66	-1,797.81	1,876.46	1,866.76	9.70	193.381				
2,300.00	2,299.91	2,507.81	2,501.68	7.99	6.27	-0.38	506.30	-1,789.85	1,863.11	1,853.00	10.11	184.228				
2,400.00	2,399.69	2,608.96	2,602.29	8.34	6.51	-0.51	499.60	-1,781.80	1,847.16	1,836.62	10.54	175.297				
2,500.00	2,499.27	2,706.00	2,698.74	8.70	6.76	-0.69	491.93	-1,774.31	1,828.52	1,817.55	10.97	166.740				
2,600.00	2,598.57	2,780.80	2,773.13	9.06	6.96	-0.83	486.16	-1,769.01	1,808.00	1,796.62	11.37	158.965				
2,700.00	2,697.54	2,862.13	2,854.13	9.42	7.18	-0.96	480.91	-1,764.00	1,786.10	1,774.31	11.79	151.494				
2,771.79	2,768.33	2,961.74	2,953.32	9.69	7.46	-1.10	475.37	-1,756.88	1,768.25	1,756.11	12.14	145.631				
2,800.00	2,796.11	3,059.45	3,050.28	9.79	7.75	-1.21	469.39	-1,746.52	1,759.44	1,747.09	12.35	142.498				
2,900.00	2,894.56	3,163.27	3,153.02	10.18	8.07	-1.35	462.12	-1,733.53	1,728.36	1,715.57	12.79	135.089				
3,000.00	2,993.02	3,238.55	3,227.59	10.56	8.31	-1.49	456.08	-1,725.16	1,698.40	1,685.18	13.22	128.476				
3,100.00	3,091.48	3,336.06	3,324.17	10.95	8.64	-1.74	446.78	-1,715.48	1,669.19	1,655.51	13.68	122.036				
3,200.00	3,189.94	3,427.46	3,414.60	11.35	8.95	-2.01	437.28	-1,706.25	1,639.63	1,625.50	14.14	115.997				
3,300.00	3,288.39	3,503.20	3,489.65	11.75	9.21	-2.22	430.07	-1,699.03	1,610.88	1,596.30	14.58	110.500				
3,400.00	3,386.85	3,574.90	3,560.82	12.16	9.46	-2.42	423.64	-1,693.21	1,583.57	1,568.55	15.02	105.443				
3,500.00	3,485.31	3,649.00	3,634.48	12.57	9.72	-2.63	417.35	-1,688.19	1,557.68	1,542.22	15.46	100.733				
3,600.00	3,583.77	3,714.60	3,699.79	12.98	9.94	-2.81	412.17	-1,684.81	1,533.48	1,517.58	15.90	96.458				
3,700.00	3,682.22	3,812.25	3,797.15	13.39	10.27	-3.06	405.73	-1,680.95	1,510.74	1,494.36	16.38	92.258				
3,800.00	3,780.68	3,962.42	3,946.73	13.81	10.79	-3.36	396.97	-1,671.16	1,485.73	1,468.82	16.92	87.833				
3,900.00	3,879.14	4,063.35	4,046.94	14.23	11.15	-3.69	388.10	-1,663.04	1,458.68	1,441.27	17.40	83.812				
4,000.00	3,977.60	4,160.41	4,143.35	14.65	11.50	-4.00	379.70	-1,655.57	1,432.05	1,414.16	17.89	80.046				
4,100.00	4,076.05	4,265.52	4,247.83	15.07	11.88	-4.21	373.92	-1,645.79	1,404.56	1,386.18	18.38	76.429				
4,200.00	4,174.51	4,365.49	4,347.25	15.50	12.23	-4.33	370.35	-1,635.95	1,376.99	1,358.14	18.85	73.031				
4,300.00	4,272.97	4,483.87	4,464.86	15.93	12.65	-4.47	366.07	-1,623.17	1,348.54	1,329.20	19.34	69.720				
4,400.00	4,371.43	4,572.73	4,553.01	16.36	12.98	-4.66	360.77	-1,613.26	1,319.28	1,299.46	19.82	66.554				
4,500.00	4,469.88	4,651.52	4,631.17	16.79	13.27	-4.92	354.63	-1,605.56	1,290.98	1,270.67	20.31	63.579				
4,600.00	4,568.34	4,728.03	4,707.19	17.22	13.56	-5.19	348.72	-1,599.19	1,264.09	1,243.30	20.79	60.812				
4,700.00	4,666.80	4,810.10	4,788.90	17.65	13.86	-5.44	343.64	-1,593.39	1,238.69	1,217.42	21.27	58.232				
4,800.00	4,765.25	4,901.36	4,879.79	18.08	14.19	-5.73	337.94	-1,587.48	1,213.90	1,192.14	21.76	55.776				
4,900.00	4,863.71	4,988.44	4,966.53	18.52	14.51	-6.04	332.23	-1,582.47	1,189.79	1,167.53	22.26	53.460				
5,000.00	4,962.17	5,075.56	5,053.38	18.95	14.83	-6.34	326.92	-1,578.19	1,166.58	1,143.84	22.75	51.283				

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 503H
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 503H	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, 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		
5,100.00	5,060.63	5,172.78	5,150.35	19.39	15.17	-6.67	321.53	-1,573.66	1,143.77	1,120.52	23.25	49.197		
5,200.00	5,159.08	5,270.82	5,248.14	19.83	15.53	-7.01	316.17	-1,569.09	1,120.99	1,097.24	23.75	47.197		
5,300.00	5,257.54	5,374.00	5,351.03	20.27	15.90	-7.39	310.44	-1,563.91	1,097.90	1,073.65	24.26	45.259		
5,400.00	5,356.00	5,493.33	5,469.95	20.71	16.34	-7.84	303.70	-1,556.83	1,074.05	1,049.28	24.77	43.362		
5,500.00	5,454.46	5,597.56	5,573.58	21.15	16.73	-8.33	296.21	-1,548.47	1,047.90	1,022.62	25.28	41.454		
5,600.00	5,552.91	5,688.29	5,663.76	21.59	17.08	-8.83	288.98	-1,541.70	1,022.27	996.48	25.79	39.635		
5,700.00	5,651.37	5,782.05	5,756.96	22.03	17.44	-9.39	281.06	-1,535.12	997.10	970.79	26.31	37.899		
5,800.00	5,749.83	5,877.85	5,852.21	22.47	17.81	-9.97	273.39	-1,528.48	972.16	945.33	26.83	36.237		
5,900.00	5,848.29	5,976.31	5,950.15	22.91	18.18	-10.57	266.00	-1,521.53	947.26	919.91	27.35	34.640		
6,000.00	5,946.74	6,074.75	6,048.06	23.36	18.56	-11.18	258.81	-1,514.29	922.19	894.32	27.87	33.094		
6,100.00	6,045.20	6,173.77	6,146.53	23.80	18.94	-11.83	251.58	-1,506.78	896.99	868.61	28.39	31.600		
6,200.00	6,143.66	6,264.67	6,236.93	24.24	19.29	-12.46	244.96	-1,499.91	871.95	843.04	28.91	30.156		
6,300.00	6,242.12	6,350.00	6,321.84	24.69	19.61	-13.09	238.65	-1,494.32	847.99	818.54	29.45	28.795		
6,400.00	6,340.57	6,434.26	6,405.79	25.13	19.93	-13.73	232.82	-1,490.01	825.57	795.58	29.98	27.535		
6,500.00	6,439.03	6,519.11	6,490.45	25.58	20.23	-14.31	228.15	-1,486.92	804.75	774.24	30.51	26.377		
6,600.00	6,537.49	6,606.83	6,578.10	26.02	20.54	-14.81	225.16	-1,484.95	785.47	754.45	31.03	25.316		
6,700.00	6,635.95	6,700.79	6,672.04	26.47	20.86	-15.20	224.23	-1,483.64	767.16	735.62	31.54	24.327		
6,757.61	6,692.67	6,757.45	6,728.70	26.73	21.04	-15.42	223.93	-1,482.94	756.71	724.88	31.83	23.775		
6,800.00	6,734.44	6,799.23	6,770.48	26.91	21.18	-15.55	223.69	-1,482.41	749.25	717.21	32.04	23.382		
6,900.00	6,833.29	6,897.71	6,868.94	27.34	21.51	-15.84	223.18	-1,481.16	733.43	700.88	32.55	22.532		
7,000.00	6,932.50	6,996.51	6,967.73	27.75	21.84	-16.10	222.65	-1,479.97	720.18	687.13	33.05	21.788		
7,100.00	7,032.01	7,090.71	7,061.93	28.14	22.15	-16.31	222.05	-1,478.99	709.64	676.08	33.55	21.149		
7,200.00	7,131.74	7,180.68	7,151.90	28.51	22.44	-16.49	221.40	-1,479.18	702.84	668.80	34.04	20.647		
7,300.00	7,231.62	7,273.96	7,245.16	28.86	22.73	-16.64	220.66	-1,480.58	699.83	665.31	34.52	20.275		
7,347.54	7,279.14	7,320.10	7,291.28	29.02	22.88	-16.70	220.23	-1,481.48	699.50	664.76	34.74	20.135 CC		
7,400.00	7,331.60	7,374.69	7,345.87	29.19	23.04	-16.76	219.66	-1,482.53	699.78	664.79	34.99	19.998		
7,429.40	7,361.00	7,405.56	7,376.73	29.28	23.14	-90.63	219.32	-1,483.03	700.15	665.02	35.13	19.929		
7,500.00	7,431.60	7,480.05	7,451.20	29.50	23.38	-90.70	218.49	-1,483.96	701.05	665.58	35.47	19.766		
7,600.00	7,531.60	7,582.61	7,553.76	29.82	23.70	-90.75	217.81	-1,484.70	701.78	665.84	35.94	19.528		
7,700.00	7,631.60	7,685.85	7,657.00	30.14	24.01	-90.73	218.04	-1,485.15	702.20	665.81	36.40	19.292		
7,800.00	7,731.60	7,786.58	7,757.73	30.45	24.33	-90.73	218.03	-1,485.22	702.27	665.41	36.86	19.051		
7,900.00	7,831.60	7,887.95	7,859.10	30.77	24.66	-90.73	218.02	-1,485.18	702.24	664.90	37.33	18.809		
8,000.00	7,931.60	7,989.50	7,960.65	31.09	24.99	-90.75	217.87	-1,484.89	701.95	664.14	37.81	18.564		
8,036.29	7,967.89	8,023.24	7,994.39	31.21	25.10	-90.75	217.78	-1,484.83	701.89	663.91	37.98	18.479		
8,100.00	8,031.60	8,082.56	8,053.72	31.41	25.29	-90.76	217.72	-1,485.02	702.09	663.81	38.28	18.340		
8,200.00	8,131.60	8,179.50	8,150.64	31.73	25.59	-90.72	218.20	-1,485.87	702.97	664.23	38.74	18.145		
8,300.00	8,231.60	8,285.48	8,256.62	32.06	25.92	-90.65	218.99	-1,486.53	703.57	664.37	39.21	17.945		
8,400.00	8,331.60	8,387.82	8,358.96	32.38	26.25	-90.63	219.31	-1,486.52	703.57	663.89	39.68	17.733		
8,500.00	8,431.60	8,493.35	8,464.49	32.70	26.60	-90.63	219.30	-1,486.28	703.35	663.20	40.16	17.515		
8,600.00	8,531.60	8,597.71	8,568.83	33.03	26.95	-90.67	218.74	-1,484.48	701.61	660.97	40.64	17.263		
8,700.00	8,631.60	8,688.96	8,660.07	33.35	27.26	-90.70	218.47	-1,483.70	700.75	659.63	41.12	17.041		
8,727.42	8,659.02	8,714.40	8,685.52	33.44	27.34	-90.70	218.49	-1,483.66	700.72	659.46	41.25	16.987		
8,800.00	8,731.60	8,785.37	8,756.49	33.68	27.57	-90.68	218.65	-1,483.82	700.87	659.28	41.59	16.851		
8,900.00	8,831.60	8,886.78	8,857.90	34.00	27.91	-90.71	218.31	-1,483.97	701.02	658.95	42.07	16.662		
9,000.00	8,931.60	8,987.86	8,958.96	34.33	28.25	-90.82	217.00	-1,483.87	700.95	658.38	42.56	16.469		
9,042.67	8,974.27	9,029.67	9,000.77	34.47	28.39	-90.88	216.30	-1,483.81	700.89	658.12	42.77	16.387 ES		
9,100.00	9,031.60	9,079.37	9,050.47	34.66	28.56	-90.93	215.68	-1,484.07	701.21	658.16	43.04	16.291		
9,200.00	9,131.60	9,172.63	9,143.71	34.98	28.86	-90.95	215.37	-1,485.73	702.98	659.47	43.51	16.157		
9,300.00	9,231.60	9,272.87	9,243.92	35.31	29.18	-90.98	214.93	-1,487.81	705.06	661.07	43.99	16.029		
9,400.00	9,331.60	9,374.07	9,345.11	35.64	29.51	-91.07	213.75	-1,489.73	706.98	662.51	44.47	15.899		
9,500.00	9,431.60	9,473.76	9,444.77	35.97	29.83	-91.15	212.80	-1,491.54	708.81	663.86	44.95	15.770		
9,600.00	9,531.60	9,572.96	9,543.94	36.30	30.16	-91.28	211.07	-1,493.43	710.75	665.31	45.43	15.644		

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 503H
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 503H	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, 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		
9,700.00	9,631.60	9,671.55	9,642.50	36.63	30.48	-91.40	209.64	-1,495.45	712.83	666.92	45.91	15.526		
9,800.00	9,731.60	9,779.25	9,750.18	36.96	30.83	-91.35	210.16	-1,497.31	714.56	668.16	46.40	15.401		
9,900.00	9,831.60	9,878.63	9,849.54	37.30	31.14	-91.26	211.21	-1,498.53	715.76	668.90	46.87	15.273		
9,913.44	9,845.04	9,893.04	9,863.95	37.34	31.19	-91.25	211.35	-1,498.70	715.91	668.98	46.93	15.255		
9,950.00	9,881.57	9,932.20	9,903.11	37.46	31.31	89.41	211.67	-1,499.05	716.22	669.12	47.10	15.207		
10,000.00	9,931.27	9,983.99	9,954.89	37.60	31.48	89.85	211.94	-1,499.31	716.43	669.12	47.31	15.144		
10,050.00	9,980.31	10,032.77	10,003.68	37.74	31.63	90.59	212.07	-1,499.51	716.68	669.18	47.51	15.086		
10,100.00	10,028.32	10,080.20	10,051.10	37.87	31.79	91.59	212.05	-1,499.73	717.20	669.51	47.69	15.038		
10,150.00	10,074.94	10,125.99	10,096.89	37.99	31.94	92.78	211.77	-1,500.01	718.26	670.39	47.87	15.005		
10,200.00	10,119.80	10,171.16	10,142.06	38.10	32.09	94.14	211.21	-1,500.34	720.10	672.06	48.04	14.990		
10,250.00	10,162.58	10,215.73	10,186.62	38.19	32.25	95.63	210.48	-1,500.61	722.96	674.75	48.21	14.997		
10,300.00	10,202.93	10,258.47	10,229.35	38.28	32.39	97.14	209.66	-1,500.81	727.15	678.77	48.37	15.032		
10,350.00	10,240.57	10,299.60	10,270.48	38.35	32.54	98.64	208.96	-1,500.83	732.98	684.44	48.54	15.100		
10,400.00	10,275.19	10,337.24	10,308.11	38.42	32.67	99.94	208.48	-1,500.68	740.83	692.12	48.72	15.207		
10,450.00	10,306.54	10,368.72	10,339.59	38.47	32.78	100.78	208.20	-1,500.46	751.11	702.22	48.90	15.362		
10,500.00	10,334.38	10,396.15	10,367.02	38.52	32.87	101.20	208.04	-1,500.27	764.16	715.08	49.08	15.568		
10,550.00	10,358.49	10,419.75	10,390.62	38.56	32.95	101.14	207.96	-1,500.11	780.13	730.85	49.28	15.830		
10,600.00	10,378.70	10,439.25	10,410.12	38.60	33.02	100.50	207.94	-1,499.97	799.08	749.60	49.49	16.148		
10,650.00	10,394.84	10,454.30	10,425.17	38.64	33.07	99.20	207.94	-1,499.88	820.96	771.27	49.69	16.522		
10,700.00	10,406.80	10,465.38	10,436.25	38.68	33.11	97.24	207.96	-1,499.82	845.61	795.72	49.89	16.949		
10,750.00	10,414.49	10,472.44	10,443.31	38.74	33.13	94.57	207.97	-1,499.78	872.78	822.69	50.09	17.425		
10,800.00	10,417.84	10,475.45	10,446.32	38.82	33.14	91.18	207.97	-1,499.77	902.14	851.87	50.27	17.944		
10,813.44	10,418.00	10,475.57	10,446.44	38.85	33.14	90.16	207.97	-1,499.77	910.36	860.04	50.32	18.091		
10,900.00	10,418.00	10,475.41	10,446.28	39.04	33.14	90.14	207.97	-1,499.77	966.11	915.49	50.62	19.084		
11,000.00	10,418.00	10,475.23	10,446.10	39.34	33.14	90.13	207.97	-1,499.77	1,035.81	984.85	50.96	20.327		
11,100.00	10,418.00	10,475.05	10,445.92	39.72	33.14	90.11	207.97	-1,499.77	1,110.14	1,058.88	51.26	21.655		
11,200.00	10,418.00	10,474.88	10,445.74	40.19	33.14	90.10	207.97	-1,499.77	1,188.25	1,136.71	51.54	23.055		
11,300.00	10,418.00	10,474.70	10,445.57	40.72	33.14	90.09	207.97	-1,499.77	1,269.43	1,217.65	51.78	24.514		
11,400.00	10,418.00	10,474.53	10,445.40	41.32	33.14	90.07	207.97	-1,499.78	1,353.14	1,301.14	52.00	26.021		
11,500.00	10,418.00	10,474.36	10,445.22	41.98	33.14	90.06	207.97	-1,499.78	1,438.92	1,386.73	52.19	27.569		
11,600.00	10,418.00	10,474.19	10,445.06	42.70	33.13	90.04	207.97	-1,499.78	1,526.44	1,474.08	52.36	29.151		
11,700.00	10,418.00	10,474.02	10,444.89	43.47	33.13	90.03	207.97	-1,499.78	1,615.41	1,562.90	52.51	30.762		
11,800.00	10,418.00	10,473.85	10,444.72	44.29	33.13	90.02	207.97	-1,499.78	1,705.60	1,652.95	52.65	32.397		
11,900.00	10,418.00	13,483.41	12,050.00	45.15	50.57	156.20	-1,438.64	-1,474.60	1,754.72	1,711.99	42.74	41.056		
12,000.00	10,418.00	13,583.41	12,050.00	46.06	51.67	156.20	-1,538.63	-1,473.73	1,754.77	1,711.30	43.47	40.365		
12,100.00	10,418.00	13,683.41	12,050.00	47.01	52.80	156.19	-1,638.63	-1,472.85	1,754.82	1,710.58	44.24	39.670		
12,200.00	10,418.00	13,783.41	12,050.00	47.99	53.96	156.19	-1,738.63	-1,471.98	1,754.87	1,709.84	45.03	38.972		
12,300.00	10,418.00	13,883.41	12,050.00	49.02	55.14	156.19	-1,838.62	-1,471.10	1,754.91	1,709.07	45.85	38.278		
12,400.00	10,418.00	13,983.41	12,050.00	50.07	56.35	156.18	-1,938.62	-1,470.22	1,754.96	1,708.27	46.69	37.588		
12,500.00	10,418.00	14,083.41	12,050.00	51.16	57.57	156.18	-2,038.62	-1,469.35	1,755.01	1,707.45	47.56	36.904		
12,600.00	10,418.00	14,183.41	12,050.00	52.28	58.82	156.18	-2,138.61	-1,468.47	1,755.05	1,706.61	48.45	36.226		
12,700.00	10,418.00	14,283.41	12,050.00	53.42	60.09	156.17	-2,238.61	-1,467.60	1,755.10	1,705.74	49.36	35.558		
12,800.00	10,418.00	14,383.41	12,050.00	54.59	61.38	156.17	-2,338.60	-1,466.72	1,755.15	1,704.85	50.29	34.899		
12,900.00	10,418.00	14,483.41	12,050.00	55.78	62.68	156.17	-2,438.60	-1,465.84	1,755.19	1,703.95	51.25	34.250		
13,000.00	10,418.00	14,583.41	12,050.00	57.00	64.00	156.16	-2,538.60	-1,464.97	1,755.24	1,703.02	52.22	33.614		
13,100.00	10,418.00	14,683.41	12,050.00	58.24	65.33	156.16	-2,638.59	-1,464.09	1,755.29	1,702.08	53.21	32.990		
13,200.00	10,418.00	14,783.41	12,050.00	59.50	66.68	156.16	-2,738.59	-1,463.22	1,755.33	1,701.13	54.21	32.381		
13,300.00	10,418.00	14,883.41	12,050.00	60.77	68.04	156.15	-2,838.58	-1,462.34	1,755.38	1,700.16	55.23	31.785		
13,400.00	10,418.00	14,983.41	12,050.00	62.07	69.42	156.15	-2,938.58	-1,461.46	1,755.43	1,699.17	56.26	31.203		
13,500.00	10,418.00	15,083.41	12,050.00	63.38	70.80	156.14	-3,038.58	-1,460.59	1,755.48	1,698.17	57.31	30.634		
13,600.00	10,418.00	15,183.41	12,050.00	64.71	72.20	156.14	-3,138.57	-1,459.71	1,755.52	1,697.16	58.37	30.078		
13,700.00	10,418.00	15,283.41	12,050.00	66.05	73.61	156.14	-3,238.57	-1,458.83	1,755.57	1,696.13	59.44	29.536		

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 503H
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 503H	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, 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		
13,800.00	10,418.00	15,383.41	12,050.00	67.40	75.03	156.13	-3,338.56	-1,457.96	1,755.62	1,695.10	60.52	29.008		
13,900.00	10,418.00	15,483.41	12,050.00	68.77	76.45	156.13	-3,438.56	-1,457.08	1,755.66	1,694.05	61.62	28.494		
14,000.00	10,418.00	15,583.41	12,050.00	70.15	77.89	156.13	-3,538.56	-1,456.21	1,755.71	1,692.99	62.72	27.993		
14,100.00	10,418.00	15,683.41	12,050.00	71.54	79.33	156.12	-3,638.55	-1,455.33	1,755.76	1,691.93	63.83	27.506		
14,200.00	10,418.00	15,783.41	12,050.00	72.95	80.79	156.12	-3,738.55	-1,454.45	1,755.81	1,690.85	64.96	27.031		
14,300.00	10,418.00	15,883.41	12,050.00	74.36	82.24	156.12	-3,838.55	-1,453.58	1,755.85	1,689.77	66.09	26.569		
14,400.00	10,418.00	15,983.41	12,050.00	75.78	83.71	156.11	-3,938.54	-1,452.70	1,755.90	1,688.67	67.23	26.120		
14,500.00	10,418.00	16,083.41	12,050.00	77.21	85.19	156.11	-4,038.54	-1,451.83	1,755.95	1,687.57	68.37	25.682		
14,600.00	10,418.00	16,183.41	12,050.00	78.65	86.67	156.11	-4,138.53	-1,450.95	1,755.99	1,686.47	69.53	25.256		
14,700.00	10,418.00	16,283.41	12,050.00	80.10	88.15	156.10	-4,238.53	-1,450.07	1,756.04	1,685.35	70.69	24.842		
14,800.00	10,418.00	16,383.40	12,050.00	81.55	89.64	156.10	-4,338.53	-1,449.20	1,756.09	1,684.23	71.85	24.440		
14,900.00	10,418.00	16,483.40	12,050.00	83.02	91.14	156.10	-4,438.52	-1,448.32	1,756.14	1,683.11	73.03	24.048		
15,000.00	10,418.00	16,583.40	12,050.00	84.49	92.64	156.09	-4,538.52	-1,447.45	1,756.18	1,681.98	74.21	23.666		
15,100.00	10,418.00	16,683.40	12,050.00	85.96	94.15	156.09	-4,638.51	-1,446.57	1,756.23	1,680.84	75.39	23.295		
15,200.00	10,418.00	16,783.40	12,050.00	87.45	95.66	156.09	-4,738.51	-1,445.69	1,756.28	1,679.69	76.58	22.933		
15,300.00	10,418.00	16,883.40	12,050.00	88.94	97.18	156.08	-4,838.51	-1,444.82	1,756.32	1,678.54	77.78	22.581		
15,400.00	10,418.00	16,983.40	12,050.00	90.43	98.70	156.08	-4,938.50	-1,443.94	1,756.37	1,677.39	78.98	22.238		
15,500.00	10,418.00	17,083.40	12,050.00	91.93	100.23	156.08	-5,038.50	-1,443.07	1,756.42	1,676.23	80.18	21.905		
15,600.00	10,418.00	17,183.40	12,050.00	93.43	101.75	156.07	-5,138.49	-1,442.19	1,756.47	1,675.07	81.39	21.580		
15,700.00	10,418.00	17,283.40	12,050.00	94.94	103.29	156.07	-5,238.49	-1,441.31	1,756.51	1,673.91	82.61	21.264		
15,800.00	10,418.00	17,383.40	12,050.00	96.46	104.82	156.06	-5,338.49	-1,440.44	1,756.56	1,672.74	83.82	20.956		
15,900.00	10,418.00	17,483.40	12,050.00	97.98	106.36	156.06	-5,438.48	-1,439.56	1,756.61	1,671.56	85.04	20.656		
16,000.00	10,418.00	17,583.40	12,050.00	99.50	107.91	156.06	-5,538.48	-1,438.68	1,756.65	1,670.39	86.27	20.363		
16,100.00	10,418.00	17,683.40	12,050.00	101.03	109.45	156.05	-5,638.47	-1,437.81	1,756.70	1,669.21	87.49	20.078		
16,200.00	10,418.00	17,783.40	12,050.00	102.56	111.00	156.05	-5,738.47	-1,436.93	1,756.75	1,668.02	88.73	19.800		
16,300.00	10,418.00	17,883.40	12,050.00	104.09	112.56	156.05	-5,838.47	-1,436.06	1,756.80	1,666.84	89.96	19.529		
16,400.00	10,418.00	17,983.40	12,050.00	105.63	114.11	156.04	-5,938.46	-1,435.18	1,756.84	1,665.65	91.19	19.265		
16,500.00	10,418.00	18,083.40	12,050.00	107.17	115.67	156.04	-6,038.46	-1,434.30	1,756.89	1,664.46	92.43	19.008		
16,600.00	10,418.00	18,183.40	12,050.00	108.72	117.23	156.04	-6,138.46	-1,433.43	1,756.94	1,663.26	93.67	18.756		
16,700.00	10,418.00	18,283.40	12,050.00	110.26	118.79	156.03	-6,238.45	-1,432.55	1,756.98	1,662.07	94.92	18.511		
16,800.00	10,418.00	18,383.40	12,050.00	111.81	120.36	156.03	-6,338.45	-1,431.68	1,757.03	1,660.87	96.17	18.271		
16,900.00	10,418.00	18,483.40	12,050.00	113.37	121.92	156.03	-6,438.44	-1,430.80	1,757.08	1,659.66	97.42	18.037		
17,000.00	10,418.00	18,583.40	12,050.00	114.92	123.49	156.02	-6,538.44	-1,429.92	1,757.13	1,658.46	98.67	17.809		
17,100.00	10,418.00	18,683.40	12,050.00	116.48	125.06	156.02	-6,638.44	-1,429.05	1,757.17	1,657.25	99.92	17.586		
17,200.00	10,418.00	18,783.40	12,050.00	118.04	126.64	156.02	-6,738.43	-1,428.17	1,757.22	1,656.05	101.17	17.368		
17,300.00	10,418.00	18,883.40	12,050.00	119.61	128.21	156.01	-6,838.43	-1,427.30	1,757.27	1,654.84	102.43	17.155		
17,400.00	10,418.00	18,983.40	12,050.00	121.17	129.79	156.01	-6,938.42	-1,426.42	1,757.32	1,653.62	103.69	16.948		
17,500.00	10,418.00	19,083.40	12,050.00	122.74	131.37	156.01	-7,038.42	-1,425.54	1,757.36	1,652.41	104.95	16.745		
17,600.00	10,418.00	19,183.40	12,050.00	124.31	132.95	156.00	-7,138.42	-1,424.67	1,757.41	1,651.20	106.21	16.546		
17,700.00	10,418.00	19,283.40	12,050.00	125.88	134.53	156.00	-7,238.41	-1,423.79	1,757.46	1,649.98	107.48	16.352		
17,800.00	10,418.00	19,383.40	12,050.00	127.46	136.12	156.00	-7,338.41	-1,422.92	1,757.50	1,648.76	108.74	16.162		
17,900.00	10,418.00	19,483.40	12,050.00	129.04	137.70	155.99	-7,438.40	-1,422.04	1,757.55	1,647.55	110.01	15.977		
18,000.00	10,418.00	19,583.40	12,050.00	130.61	139.29	155.99	-7,538.40	-1,421.16	1,757.60	1,646.33	111.27	15.795		
18,100.00	10,418.00	19,683.40	12,050.00	132.19	140.88	155.98	-7,638.40	-1,420.29	1,757.65	1,645.10	112.54	15.618		
18,200.00	10,418.00	19,783.40	12,050.00	133.78	142.47	155.98	-7,738.39	-1,419.41	1,757.69	1,643.88	113.81	15.444		
18,300.00	10,418.00	19,883.40	12,050.00	135.36	144.06	155.98	-7,838.39	-1,418.53	1,757.74	1,642.66	115.09	15.273		
18,400.00	10,418.00	19,983.40	12,050.00	136.94	145.66	155.97	-7,938.39	-1,417.66	1,757.79	1,641.43	116.36	15.106		
18,500.00	10,418.00	20,083.40	12,050.00	138.53	147.25	155.97	-8,038.38	-1,416.78	1,757.84	1,640.20	117.63	14.943		
18,600.00	10,418.00	20,183.40	12,050.00	140.12	148.85	155.97	-8,138.38	-1,415.91	1,757.88	1,638.98	118.91	14.784		
18,700.00	10,418.00	20,283.40	12,050.00	141.71	150.44	155.96	-8,238.37	-1,415.03	1,757.93	1,637.75	120.18	14.627		
18,800.00	10,418.00	20,383.40	12,050.00	143.30	152.04	155.96	-8,338.37	-1,414.15	1,757.98	1,636.52	121.46	14.474		
18,900.00	10,418.00	20,483.40	12,050.00	144.89	153.64	155.96	-8,438.37	-1,413.28	1,758.03	1,635.29	122.74	14.324		

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 503H
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 503H	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				
19,000.00	10,418.00	20,583.40	12,050.00	146.49	155.24	155.95	-8,538.36	-1,412.40	1,758.07	1,634.06	124.01	14.176				
19,100.00	10,418.00	20,683.40	12,050.00	148.08	156.84	155.95	-8,638.36	-1,411.53	1,758.12	1,632.83	125.29	14.032				
19,200.00	10,418.00	20,783.40	12,050.00	149.68	158.44	155.95	-8,738.35	-1,410.65	1,758.17	1,631.59	126.58	13.890				
19,300.00	10,418.00	20,883.40	12,050.00	151.27	160.05	155.94	-8,838.35	-1,409.77	1,758.21	1,630.36	127.86	13.751				
19,400.00	10,418.00	20,983.40	12,050.00	152.87	161.65	155.94	-8,938.35	-1,408.90	1,758.26	1,629.13	129.14	13.616				
19,500.00	10,418.00	21,083.40	12,050.00	154.47	163.26	155.94	-9,038.34	-1,408.02	1,758.31	1,627.89	130.42	13.482				
19,600.00	10,418.00	21,183.40	12,050.00	156.07	164.86	155.93	-9,138.34	-1,407.15	1,758.36	1,626.66	131.70	13.351				
19,700.00	10,418.00	21,283.40	12,050.00	157.67	166.47	155.93	-9,238.33	-1,406.27	1,758.40	1,625.42	132.98	13.223				
19,800.00	10,418.00	21,383.40	12,050.00	159.28	168.08	155.93	-9,338.33	-1,405.39	1,758.45	1,624.18	134.27	13.097				
19,900.00	10,418.00	21,483.40	12,050.00	160.88	169.68	155.92	-9,438.33	-1,404.52	1,758.50	1,622.95	135.55	12.973				
20,000.00	10,418.00	21,583.40	12,050.00	162.48	171.29	155.92	-9,538.32	-1,403.64	1,758.55	1,621.71	136.84	12.851				
20,100.00	10,418.00	21,683.40	12,050.00	164.09	172.90	155.92	-9,638.32	-1,402.77	1,758.59	1,620.47	138.12	12.732				
20,200.00	10,418.00	21,783.40	12,050.00	165.70	174.52	155.91	-9,738.31	-1,401.89	1,758.64	1,619.23	139.41	12.615				
20,300.00	10,418.00	21,883.40	12,050.00	167.30	176.13	155.91	-9,838.31	-1,401.01	1,758.69	1,617.99	140.69	12.500				
20,400.00	10,418.00	21,983.40	12,050.00	168.91	177.74	155.91	-9,938.31	-1,400.14	1,758.74	1,616.75	141.98	12.387				
20,500.00	10,418.00	22,083.40	12,050.00	170.52	179.35	155.90	-10,038.30	-1,399.26	1,758.78	1,615.52	143.27	12.276				
20,600.00	10,418.00	22,183.40	12,050.00	172.13	180.97	155.90	-10,138.30	-1,398.38	1,758.83	1,614.28	144.56	12.167				
20,700.00	10,418.00	22,283.40	12,050.00	173.74	182.58	155.89	-10,238.30	-1,397.51	1,758.88	1,613.04	145.84	12.060				
20,800.00	10,418.00	22,383.40	12,050.00	175.35	184.20	155.89	-10,338.29	-1,396.63	1,758.93	1,611.80	147.13	11.955				
20,900.00	10,418.00	22,483.40	12,050.00	176.97	185.81	155.89	-10,438.29	-1,395.76	1,758.97	1,610.55	148.42	11.851				
21,000.00	10,418.00	22,583.40	12,050.00	178.58	187.43	155.88	-10,538.28	-1,394.88	1,759.02	1,609.31	149.71	11.750				
21,100.00	10,418.00	22,683.40	12,050.00	180.19	189.05	155.88	-10,638.28	-1,394.00	1,759.07	1,608.07	151.00	11.650				
21,200.00	10,418.00	22,783.40	12,050.00	181.81	190.66	155.88	-10,738.28	-1,393.13	1,759.12	1,606.83	152.28	11.552				
21,300.00	10,418.00	22,883.40	12,050.00	183.42	192.28	155.87	-10,838.27	-1,392.25	1,759.16	1,605.59	153.57	11.455				
21,400.00	10,418.00	22,983.40	12,050.00	185.04	193.90	155.87	-10,938.27	-1,391.38	1,759.21	1,604.35	154.86	11.360				
21,500.00	10,418.00	23,083.40	12,050.00	186.65	195.52	155.87	-11,038.26	-1,390.50	1,759.26	1,603.11	156.15	11.266				
21,600.00	10,418.00	23,183.40	12,050.00	188.27	197.14	155.86	-11,138.26	-1,389.62	1,759.31	1,601.86	157.45	11.174				
21,700.00	10,418.00	23,283.40	12,050.00	189.89	198.76	155.86	-11,238.26	-1,388.75	1,759.35	1,600.62	158.74	11.084				
21,800.00	10,418.00	23,383.40	12,050.00	191.50	200.38	155.86	-11,338.25	-1,387.87	1,759.40	1,599.38	160.03	10.995				
21,900.00	10,418.00	23,483.40	12,050.00	193.12	201.85	155.85	-11,438.25	-1,387.00	1,759.45	1,598.33	161.12	10.920				
21,923.68	10,418.00	23,504.65	12,050.00	193.51	202.16	155.85	-11,459.49	-1,386.81	1,759.46	1,598.10	161.36	10.904 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 503H
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 503H	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	-82.31	500.27	-3,703.13	3,736.77					
100.00	100.00	139.00	139.00	0.13	0.27	-82.31	500.27	-3,703.13	3,736.77	3,736.47	0.29	N/A		
200.00	200.00	239.00	239.00	0.48	0.62	-82.31	500.27	-3,703.13	3,736.77	3,735.98	0.79	4,733.321		
300.00	300.00	339.00	339.00	0.84	0.98	-82.31	500.27	-3,703.13	3,736.77	3,735.47	1.29	2,887.803		
400.00	400.00	439.00	439.00	1.20	1.34	-82.31	500.27	-3,703.13	3,736.77	3,734.97	1.80	2,076.128		
500.00	500.00	539.00	539.00	1.56	1.70	-82.31	500.27	-3,703.13	3,736.77	3,734.46	2.31	1,620.292		
600.00	600.00	639.00	639.00	1.92	2.06	-82.31	500.27	-3,703.13	3,736.77	3,733.96	2.81	1,328.485		
700.00	700.00	739.00	739.00	2.28	2.42	-82.31	500.27	-3,703.13	3,736.77	3,733.45	3.32	1,125.704		
800.00	800.00	839.00	839.00	2.63	2.77	-82.31	500.27	-3,703.13	3,736.77	3,732.94	3.83	976.612		
900.00	900.00	939.00	939.00	2.99	3.13	-82.31	500.27	-3,703.13	3,736.77	3,732.44	4.33	862.385		
1,000.00	1,000.00	1,039.00	1,039.00	3.35	3.49	-82.31	500.27	-3,703.13	3,736.77	3,731.93	4.84	772.076		
1,100.00	1,100.00	1,139.00	1,139.00	3.71	3.85	-82.31	500.27	-3,703.13	3,736.77	3,731.42	5.35	698.885		
1,200.00	1,200.00	1,239.00	1,239.00	4.07	4.21	-82.31	500.27	-3,703.13	3,736.77	3,730.91	5.85	638.367		
1,300.00	1,300.00	1,339.00	1,339.00	4.43	4.57	-82.31	500.27	-3,703.13	3,736.77	3,730.41	6.36	587.494		
1,400.00	1,400.00	1,439.00	1,439.00	4.79	4.93	-82.31	500.27	-3,703.13	3,736.77	3,729.90	6.87	544.130		
1,500.00	1,500.00	1,539.00	1,539.00	5.14	5.28	-82.31	500.27	-3,703.13	3,736.77	3,729.39	7.37	506.727		
1,600.00	1,600.00	1,639.00	1,639.00	5.50	5.64	-82.31	500.27	-3,703.13	3,736.77	3,728.89	7.88	474.135		
1,700.00	1,700.00	1,739.00	1,739.00	5.86	6.00	-82.31	500.27	-3,703.13	3,736.77	3,728.38	8.39	445.481		
1,800.00	1,800.00	1,839.00	1,839.00	6.22	6.36	-82.31	500.27	-3,703.13	3,736.77	3,727.87	8.90	420.094		
1,900.00	1,900.00	1,939.00	1,939.00	6.58	6.72	-82.31	500.27	-3,703.13	3,736.77	3,727.37	9.40	397.444		
2,000.00	2,000.00	2,039.00	2,039.00	6.94	7.08	-82.31	500.27	-3,703.13	3,736.77	3,726.86	9.91	377.111		
2,100.00	2,100.00	2,139.00	2,139.00	7.29	7.43	-82.31	500.27	-3,703.13	3,736.77	3,726.35	10.42	358.757		
2,200.00	2,199.99	2,238.99	2,238.99	7.65	7.79	-8.48	500.27	-3,703.13	3,735.47	3,724.56	10.92	342.133		
2,300.00	2,299.91	2,338.91	2,338.91	7.99	8.15	-8.50	500.27	-3,703.13	3,731.59	3,720.17	11.42	326.862		
2,400.00	2,399.69	2,438.69	2,438.69	8.34	8.51	-8.53	500.27	-3,703.13	3,725.12	3,713.21	11.91	312.645		
2,500.00	2,499.27	2,538.27	2,538.27	8.70	8.87	-8.57	500.27	-3,703.13	3,716.07	3,703.66	12.41	299.368		
2,600.00	2,598.57	2,637.57	2,637.57	9.06	9.22	-8.62	500.27	-3,703.13	3,704.45	3,691.54	12.91	286.927		
2,700.00	2,697.54	2,736.54	2,736.54	9.42	9.58	-8.69	500.27	-3,703.13	3,690.26	3,676.85	13.41	275.232		
2,771.79	2,768.33	2,807.33	2,807.33	9.69	9.83	-8.74	500.27	-3,703.13	3,678.50	3,664.73	13.76	267.249		
2,800.00	2,796.11	2,835.11	2,835.11	9.79	9.93	-8.75	500.27	-3,703.13	3,673.62	3,659.71	13.90	264.206		
2,900.00	2,894.56	2,933.56	2,933.56	10.18	10.28	-8.80	500.27	-3,703.13	3,656.32	3,641.92	14.40	253.915		
3,000.00	2,993.02	3,032.02	3,032.02	10.56	10.64	-8.84	500.27	-3,703.13	3,639.02	3,624.13	14.90	244.287		
3,100.00	3,091.48	3,130.48	3,130.48	10.95	10.99	-8.88	500.27	-3,703.13	3,621.73	3,606.33	15.39	235.261		
3,200.00	3,189.94	3,228.94	3,228.94	11.35	11.34	-8.92	500.27	-3,703.13	3,604.44	3,588.54	15.89	226.785		
3,300.00	3,288.39	3,327.39	3,327.39	11.75	11.69	-8.97	500.27	-3,703.13	3,587.15	3,570.75	16.39	218.811		
3,400.00	3,386.85	3,425.85	3,425.85	12.16	12.05	-9.01	500.27	-3,703.13	3,569.86	3,552.96	16.89	211.298		
3,500.00	3,485.31	3,524.31	3,524.31	12.57	12.40	-9.05	500.27	-3,703.13	3,552.57	3,535.17	17.40	204.208		
3,600.00	3,583.77	3,622.77	3,622.77	12.98	12.75	-9.10	500.27	-3,703.13	3,535.29	3,517.39	17.90	197.506		
3,700.00	3,682.22	3,720.00	3,720.00	13.39	13.10	-9.14	500.27	-3,703.13	3,518.00	3,499.60	18.40	191.195		
3,800.00	3,780.68	3,800.00	3,799.99	13.81	13.37	-9.19	499.49	-3,703.45	3,501.00	3,482.15	18.85	185.737		
3,900.00	3,879.14	3,879.91	3,879.86	14.23	13.63	-9.27	497.17	-3,704.40	3,484.53	3,465.24	19.29	180.644		
4,000.00	3,977.60	3,959.29	3,959.13	14.65	13.89	-9.38	493.33	-3,705.96	3,468.62	3,448.89	19.73	175.805		
4,100.00	4,076.05	4,038.52	4,038.15	15.07	14.15	-9.51	487.98	-3,708.15	3,453.27	3,433.10	20.17	171.196		
4,200.00	4,174.51	4,133.26	4,132.53	15.50	14.46	-9.69	480.37	-3,711.26	3,438.31	3,417.66	20.65	166.506		
4,300.00	4,272.97	4,231.50	4,230.41	15.93	14.79	-9.87	472.45	-3,714.50	3,423.40	3,402.26	21.14	161.953		
4,400.00	4,371.43	4,329.75	4,328.28	16.36	15.11	-10.06	464.53	-3,717.73	3,408.53	3,386.90	21.63	157.590		
4,500.00	4,469.88	4,427.99	4,426.15	16.79	15.44	-10.26	456.61	-3,720.97	3,393.69	3,371.57	22.12	153.408		
4,600.00	4,568.34	4,526.24	4,524.02	17.22	15.78	-10.45	448.69	-3,724.20	3,378.89	3,356.27	22.62	149.396		
4,700.00	4,666.80	4,624.48	4,621.89	17.65	16.11	-10.64	440.77	-3,727.44	3,364.13	3,341.01	23.11	145.546		
4,800.00	4,765.25	4,722.73	4,719.76	18.08	16.45	-10.84	432.86	-3,730.67	3,349.41	3,325.79	23.61	141.848		
4,900.00	4,863.71	4,820.97	4,817.63	18.52	16.78	-11.04	424.94	-3,733.91	3,334.72	3,310.61	24.11	138.295		
5,000.00	4,962.17	4,919.21	4,915.50	18.95	17.12	-11.24	417.02	-3,737.14	3,320.08	3,295.47	24.62	134.879		

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 503H
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 503H	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	5,060.63	5,017.46	5,013.37	19.39	17.46	-11.44	409.10	-3,740.38	3,305.48	3,280.36	25.12	131.594		
5,200.00	5,159.08	5,115.70	5,111.24	19.83	17.81	-11.64	401.18	-3,743.62	3,290.92	3,265.30	25.62	128.432		
5,300.00	5,257.54	5,213.95	5,209.12	20.27	18.15	-11.85	393.26	-3,746.85	3,276.40	3,250.27	26.13	125.387		
5,400.00	5,356.00	5,312.19	5,306.99	20.71	18.50	-12.05	385.34	-3,750.09	3,261.92	3,235.28	26.64	122.453		
5,500.00	5,454.46	5,410.44	5,404.86	21.15	18.85	-12.26	377.42	-3,753.32	3,247.49	3,220.34	27.15	119.625		
5,600.00	5,552.91	5,508.68	5,502.73	21.59	19.19	-12.47	369.50	-3,756.56	3,233.10	3,205.44	27.66	116.897		
5,700.00	5,651.37	5,606.92	5,600.60	22.03	19.54	-12.69	361.58	-3,759.79	3,218.75	3,190.58	28.17	114.265		
5,800.00	5,749.83	5,705.17	5,698.47	22.47	19.89	-12.90	353.66	-3,763.03	3,204.45	3,175.76	28.68	111.725		
5,900.00	5,848.29	5,803.41	5,796.34	22.91	20.25	-13.12	345.75	-3,766.26	3,190.19	3,160.99	29.20	109.271		
6,000.00	5,946.74	5,901.66	5,894.21	23.36	20.60	-13.34	337.83	-3,769.50	3,175.97	3,146.26	29.71	106.899		
6,100.00	6,045.20	5,999.90	5,992.08	23.80	20.95	-13.56	329.91	-3,772.74	3,161.81	3,131.58	30.23	104.607		
6,200.00	6,143.66	6,098.14	6,089.95	24.24	21.31	-13.78	321.99	-3,775.97	3,147.69	3,116.95	30.74	102.389		
6,300.00	6,242.12	6,196.39	6,187.83	24.69	21.66	-14.00	314.07	-3,779.21	3,133.62	3,102.36	31.26	100.244		
6,400.00	6,340.57	6,294.63	6,285.70	25.13	22.02	-14.23	306.15	-3,782.44	3,119.59	3,087.81	31.78	98.167		
6,500.00	6,439.03	6,392.88	6,383.57	25.58	22.38	-14.46	298.23	-3,785.68	3,105.62	3,073.32	32.30	96.155		
6,600.00	6,537.49	6,491.12	6,481.44	26.02	22.73	-14.69	290.31	-3,788.91	3,091.69	3,058.87	32.82	94.207		
6,700.00	6,635.95	6,589.37	6,579.31	26.47	23.09	-14.92	282.39	-3,792.15	3,077.81	3,044.48	33.34	92.318		
6,757.61	6,692.67	6,645.97	6,635.69	26.73	23.30	-15.05	277.83	-3,794.01	3,069.84	3,036.20	33.64	91.256		
6,800.00	6,734.44	6,687.65	6,677.22	26.91	23.45	-15.13	274.47	-3,795.39	3,064.21	3,030.35	33.86	90.494		
6,900.00	6,833.29	6,786.26	6,775.46	27.34	23.81	-15.31	266.52	-3,798.63	3,052.75	3,018.37	34.38	88.791		
7,000.00	6,932.50	6,885.21	6,874.03	27.75	24.17	-15.48	258.55	-3,801.89	3,043.85	3,008.95	34.90	87.215		
7,100.00	7,032.01	6,984.43	6,972.87	28.14	24.54	-15.66	250.55	-3,805.16	3,037.50	3,002.09	35.42	85.764		
7,200.00	7,131.74	7,083.84	7,071.91	28.51	24.91	-15.83	242.54	-3,808.43	3,033.71	2,997.78	35.93	84.432		
7,298.95	7,230.57	7,182.35	7,170.04	28.85	25.27	-16.00	234.60	-3,811.68	3,032.46	2,996.03	36.44	83.228 CC		
7,300.00	7,231.62	7,183.39	7,171.08	28.86	25.27	-16.01	234.51	-3,811.71	3,032.46	2,996.02	36.44	83.215		
7,400.00	7,331.60	7,283.01	7,270.32	29.19	25.64	-16.17	226.48	-3,814.99	3,033.76	2,996.81	36.95	82.110		
7,429.40	7,361.00	7,312.30	7,299.50	29.28	25.75	-90.05	224.12	-3,815.96	3,034.62	2,997.53	37.10	81.806		
7,500.00	7,431.60	7,382.63	7,369.56	29.50	26.01	-90.16	218.45	-3,818.27	3,036.97	2,999.52	37.45	81.098		
7,600.00	7,531.60	7,493.94	7,480.46	29.82	26.42	-90.33	209.66	-3,821.87	3,040.25	3,002.28	37.97	80.060		
7,700.00	7,631.60	7,637.96	7,624.23	30.14	26.94	-90.47	201.88	-3,825.04	3,042.50	3,003.94	38.56	78.894		
7,800.00	7,731.60	7,782.41	7,768.64	30.45	27.45	-90.52	199.13	-3,826.17	3,043.30	3,004.16	39.14	77.756		
7,900.00	7,831.60	7,884.37	7,870.60	30.77	27.79	-90.52	199.13	-3,826.17	3,043.30	3,003.67	39.63	76.802		
8,000.00	7,931.60	7,984.37	7,970.60	31.09	28.14	-90.52	199.13	-3,826.17	3,043.30	3,003.19	40.11	75.877		
8,100.00	8,031.60	8,084.37	8,070.60	31.41	28.48	-90.52	199.13	-3,826.17	3,043.30	3,002.71	40.59	74.972		
8,200.00	8,131.60	8,184.37	8,170.60	31.73	28.82	-90.52	199.13	-3,826.17	3,043.30	3,002.22	41.08	74.088		
8,300.00	8,231.60	8,284.37	8,270.60	32.06	29.16	-90.52	199.13	-3,826.17	3,043.30	3,001.74	41.56	73.224		
8,400.00	8,331.60	8,384.37	8,370.60	32.38	29.51	-90.52	199.13	-3,826.17	3,043.30	3,001.25	42.05	72.378		
8,500.00	8,431.60	8,484.37	8,470.60	32.70	29.85	-90.52	199.13	-3,826.17	3,043.30	3,000.76	42.53	71.552		
8,600.00	8,531.60	8,584.37	8,570.60	33.03	30.19	-90.52	199.13	-3,826.17	3,043.30	3,000.28	43.02	70.742		
8,700.00	8,631.60	8,684.37	8,670.60	33.35	30.54	-90.52	199.13	-3,826.17	3,043.30	2,999.79	43.51	69.951		
8,800.00	8,731.60	8,784.37	8,770.60	33.68	30.88	-90.52	199.13	-3,826.17	3,043.30	2,999.30	43.99	69.176		
8,900.00	8,831.60	8,884.37	8,870.60	34.00	31.23	-90.52	199.13	-3,826.17	3,043.30	2,998.82	44.48	68.417		
9,000.00	8,931.60	8,984.37	8,970.60	34.33	31.57	-90.52	199.13	-3,826.17	3,043.30	2,998.33	44.97	67.675		
9,100.00	9,031.60	9,084.37	9,070.60	34.66	31.92	-90.52	199.13	-3,826.17	3,043.30	2,997.84	45.46	66.947		
9,200.00	9,131.60	9,184.37	9,170.60	34.98	32.27	-90.52	199.13	-3,826.17	3,043.30	2,997.35	45.95	66.235		
9,300.00	9,231.60	9,284.37	9,270.60	35.31	32.61	-90.52	199.13	-3,826.17	3,043.30	2,996.86	46.44	65.537		
9,400.00	9,331.60	9,384.37	9,370.60	35.64	32.96	-90.52	199.13	-3,826.17	3,043.30	2,996.37	46.93	64.853		
9,500.00	9,431.60	9,484.37	9,470.60	35.97	33.30	-90.52	199.13	-3,826.17	3,043.30	2,995.88	47.42	64.182		
9,600.00	9,531.60	9,584.37	9,570.60	36.30	33.65	-90.52	199.13	-3,826.17	3,043.30	2,995.39	47.91	63.525		
9,700.00	9,631.60	9,684.37	9,670.60	36.63	34.00	-90.52	199.13	-3,826.17	3,043.30	2,994.90	48.40	62.881		
9,800.00	9,731.60	9,784.37	9,770.60	36.96	34.35	-90.52	199.13	-3,826.17	3,043.30	2,994.41	48.89	62.249		
9,900.00	9,831.60	9,884.37	9,870.60	37.30	34.69	-90.52	199.13	-3,826.17	3,043.30	2,993.92	49.38	61.630		

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 503H
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 503H	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		
9,913.44	9,845.04	9,897.81	9,884.04	37.34	34.74	-90.52	199.13	-3,826.17	3,043.30	2,993.85	49.45	61.547		
9,950.00	9,881.57	9,934.34	9,920.57	37.46	34.87	90.07	199.13	-3,826.17	3,043.30	2,993.68	49.62	61.330		
10,000.00	9,931.27	9,984.04	9,970.27	37.60	35.04	90.16	199.13	-3,826.17	3,043.31	2,993.46	49.85	61.048		
10,050.00	9,980.31	10,033.08	10,019.31	37.74	35.21	90.34	199.13	-3,826.17	3,043.35	2,993.28	50.07	60.779		
10,100.00	10,028.32	10,081.09	10,067.32	37.87	35.38	90.58	199.13	-3,826.17	3,043.47	2,993.18	50.29	60.524 ES		
10,150.00	10,074.94	10,127.70	10,113.94	37.99	35.54	90.87	199.13	-3,826.17	3,043.72	2,993.23	50.49	60.284		
10,200.00	10,119.80	10,172.57	10,158.80	38.10	35.70	91.20	199.13	-3,826.17	3,044.16	2,993.48	50.68	60.061		
10,250.00	10,162.58	10,215.34	10,201.58	38.19	35.85	91.54	199.13	-3,826.17	3,044.89	2,994.01	50.87	59.855		
10,300.00	10,202.93	10,255.70	10,241.93	38.28	35.99	91.88	199.13	-3,826.17	3,045.98	2,994.93	51.05	59.666		
10,350.00	10,240.57	10,293.34	10,279.57	38.35	36.12	92.19	199.13	-3,826.17	3,047.54	2,996.32	51.22	59.496		
10,400.00	10,275.19	10,327.96	10,314.19	38.42	36.24	92.45	199.13	-3,826.17	3,049.65	2,998.27	51.39	59.345		
10,450.00	10,306.54	10,359.31	10,345.54	38.47	36.35	92.63	199.13	-3,826.17	3,052.41	3,000.86	51.55	59.213		
10,500.00	10,334.38	10,387.15	10,373.38	38.52	36.44	92.71	199.13	-3,826.17	3,055.90	3,004.19	51.71	59.100		
10,550.00	10,358.49	10,411.26	10,397.49	38.56	36.53	92.68	199.13	-3,826.17	3,060.18	3,008.32	51.86	59.007		
10,600.00	10,378.70	10,431.47	10,417.70	38.60	36.60	92.51	199.13	-3,826.17	3,065.32	3,013.30	52.01	58.934		
10,650.00	10,394.84	10,447.61	10,433.84	38.64	36.66	92.19	199.13	-3,826.17	3,071.33	3,019.17	52.16	58.880		
10,700.00	10,406.80	10,459.57	10,445.80	38.68	36.70	91.71	199.13	-3,826.17	3,078.25	3,025.94	52.31	58.846		
10,750.00	10,414.49	10,467.26	10,453.49	38.74	36.72	91.06	199.13	-3,826.17	3,086.06	3,033.61	52.46	58.831		
10,800.00	10,417.84	10,470.61	10,456.84	38.82	36.74	90.25	199.13	-3,826.17	3,094.73	3,042.13	52.60	58.836		
10,813.44	10,418.00	10,470.77	10,457.00	38.85	36.74	90.00	199.13	-3,826.17	3,097.19	3,044.56	52.64	58.841		
10,900.00	10,418.00	10,470.77	10,457.00	39.04	36.74	90.00	199.13	-3,826.17	3,114.43	3,061.53	52.90	58.871		
11,000.00	10,418.00	10,470.77	10,457.00	39.34	36.74	90.00	199.13	-3,826.17	3,137.21	3,083.94	53.26	58.899		
11,100.00	10,418.00	10,470.77	10,457.00	39.72	36.74	90.00	199.13	-3,826.17	3,162.98	3,109.30	53.68	58.925		
11,200.00	10,418.00	10,470.77	10,457.00	40.19	36.74	90.00	199.13	-3,826.17	3,191.68	3,137.54	54.14	58.955		
11,300.00	10,418.00	10,470.77	10,457.00	40.72	36.74	90.00	199.13	-3,826.17	3,223.22	3,168.59	54.64	58.993		
11,400.00	10,418.00	10,470.77	10,457.00	41.32	36.74	90.00	199.13	-3,826.17	3,257.54	3,202.37	55.17	59.044		
11,500.00	10,418.00	10,470.77	10,457.00	41.98	36.74	90.00	199.13	-3,826.17	3,294.53	3,238.80	55.73	59.114		
11,600.00	10,418.00	10,470.77	10,457.00	42.70	36.74	90.00	199.13	-3,826.17	3,334.11	3,277.79	56.31	59.205		
11,700.00	10,418.00	10,470.77	10,457.00	43.47	36.74	90.00	199.13	-3,826.17	3,376.19	3,319.28	56.91	59.321		
11,800.00	10,418.00	13,272.67	11,973.46	44.29	51.43	116.47	-1,342.62	-3,812.72	3,401.91	3,340.73	61.18	55.609		
11,900.00	10,418.00	13,372.66	11,974.54	45.15	52.41	116.49	-1,442.60	-3,811.85	3,402.50	3,340.14	62.36	54.566		
12,000.00	10,418.00	13,472.66	11,975.62	46.06	53.43	116.50	-1,542.59	-3,810.97	3,403.09	3,339.50	63.59	53.520		
12,100.00	10,418.00	13,572.65	11,976.71	47.01	54.48	116.52	-1,642.57	-3,810.10	3,403.68	3,338.82	64.86	52.475		
12,200.00	10,418.00	13,672.65	11,977.79	47.99	55.56	116.53	-1,742.55	-3,809.23	3,404.27	3,338.08	66.19	51.436		
12,300.00	10,418.00	13,772.64	11,978.87	49.02	56.67	116.55	-1,842.54	-3,808.36	3,404.86	3,337.31	67.55	50.406		
12,400.00	10,418.00	13,872.63	11,979.95	50.07	57.80	116.57	-1,942.52	-3,807.49	3,405.45	3,336.50	68.95	49.389		
12,500.00	10,418.00	13,972.63	11,981.03	51.16	58.96	116.58	-2,042.51	-3,806.61	3,406.04	3,335.65	70.39	48.388		
12,600.00	10,418.00	14,072.62	11,982.11	52.28	60.14	116.60	-2,142.49	-3,805.74	3,406.63	3,334.77	71.86	47.404		
12,700.00	10,418.00	14,172.62	11,983.19	53.42	61.34	116.61	-2,242.48	-3,804.87	3,407.22	3,333.86	73.37	46.441		
12,800.00	10,418.00	14,272.61	11,984.27	54.59	62.56	116.63	-2,342.46	-3,804.00	3,407.82	3,332.91	74.90	45.497		
12,900.00	10,418.00	14,372.60	11,985.35	55.78	63.80	116.64	-2,442.45	-3,803.12	3,408.41	3,331.94	76.46	44.575		
13,000.00	10,418.00	14,472.60	11,986.43	57.00	65.06	116.66	-2,542.43	-3,802.25	3,409.00	3,330.95	78.05	43.675		
13,100.00	10,418.00	14,572.59	11,987.51	58.24	66.34	116.67	-2,642.41	-3,801.38	3,409.59	3,329.92	79.67	42.797		
13,200.00	10,418.00	14,672.59	11,988.59	59.50	67.63	116.69	-2,742.40	-3,800.51	3,410.18	3,328.88	81.31	41.941		
13,300.00	10,418.00	14,772.58	11,989.67	60.77	68.94	116.70	-2,842.38	-3,799.63	3,410.78	3,327.81	82.97	41.109		
13,400.00	10,418.00	14,872.57	11,990.75	62.07	70.26	116.72	-2,942.37	-3,798.76	3,411.37	3,326.72	84.65	40.299		
13,500.00	10,418.00	14,972.57	11,991.84	63.38	71.60	116.73	-3,042.35	-3,797.89	3,411.96	3,325.61	86.35	39.512		
13,600.00	10,418.00	15,072.56	11,992.92	64.71	72.95	116.75	-3,142.34	-3,797.02	3,412.56	3,324.49	88.07	38.748		
13,700.00	10,418.00	15,172.56	11,994.00	66.05	74.31	116.76	-3,242.32	-3,796.14	3,413.15	3,323.35	89.81	38.006		
13,800.00	10,418.00	15,272.55	11,995.08	67.40	75.69	116.78	-3,342.31	-3,795.27	3,413.75	3,322.19	91.56	37.285		
13,900.00	10,418.00	15,372.55	11,996.16	68.77	77.07	116.80	-3,442.29	-3,794.40	3,414.34	3,321.02	93.32	36.586		
14,000.00	10,418.00	15,472.54	11,997.24	70.15	78.46	116.81	-3,542.27	-3,793.53	3,414.93	3,319.83	95.11	35.907		

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 503H
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 503H	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	10,418.00	15,572.53	11,998.32	71.54	79.87	116.83	-3,642.26	-3,792.66	3,415.53	3,318.63	96.90	35.248		
14,200.00	10,418.00	15,672.53	11,999.40	72.95	81.28	116.84	-3,742.24	-3,791.78	3,416.12	3,317.42	98.71	34.608		
14,300.00	10,418.00	15,772.52	12,000.48	74.36	82.70	116.86	-3,842.23	-3,790.91	3,416.72	3,316.19	100.53	33.988		
14,400.00	10,418.00	15,872.52	12,001.56	75.78	84.13	116.87	-3,942.21	-3,790.04	3,417.31	3,314.96	102.36	33.385		
14,500.00	10,418.00	15,972.51	12,002.64	77.21	85.57	116.89	-4,042.20	-3,789.17	3,417.91	3,313.71	104.20	32.801		
14,600.00	10,418.00	16,072.50	12,003.72	78.65	87.02	116.90	-4,142.18	-3,788.29	3,418.51	3,312.45	106.05	32.234		
14,700.00	10,418.00	16,172.50	12,004.80	80.10	88.47	116.92	-4,242.17	-3,787.42	3,419.10	3,311.19	107.91	31.684		
14,800.00	10,418.00	16,272.49	12,005.88	81.55	89.93	116.93	-4,342.15	-3,786.55	3,419.70	3,309.92	109.78	31.150		
14,900.00	10,418.00	16,372.49	12,006.97	83.02	91.40	116.95	-4,442.13	-3,785.68	3,420.30	3,308.64	111.66	30.631		
15,000.00	10,418.00	16,472.48	12,008.05	84.49	92.87	116.96	-4,542.12	-3,784.80	3,420.89	3,307.35	113.55	30.128		
15,100.00	10,418.00	16,572.47	12,009.13	85.96	94.35	116.98	-4,642.10	-3,783.93	3,421.49	3,306.05	115.44	29.639		
15,200.00	10,418.00	16,672.47	12,010.21	87.45	95.84	116.99	-4,742.09	-3,783.06	3,422.09	3,304.75	117.34	29.163		
15,300.00	10,418.00	16,772.46	12,011.29	88.94	97.33	117.01	-4,842.07	-3,782.19	3,422.69	3,303.44	119.25	28.702		
15,400.00	10,418.00	16,872.46	12,012.37	90.43	98.82	117.02	-4,942.06	-3,781.32	3,423.28	3,302.12	121.17	28.253		
15,500.00	10,418.00	16,972.45	12,013.45	91.93	100.32	117.04	-5,042.04	-3,780.44	3,423.88	3,300.79	123.09	27.817		
15,600.00	10,418.00	17,072.44	12,014.53	93.43	101.83	117.05	-5,142.03	-3,779.57	3,424.48	3,299.47	125.01	27.393		
15,700.00	10,418.00	17,172.44	12,015.61	94.94	103.34	117.07	-5,242.01	-3,778.70	3,425.08	3,298.14	126.94	26.981		
15,800.00	10,418.00	17,272.43	12,016.69	96.46	104.85	117.08	-5,341.99	-3,777.83	3,425.68	3,296.80	128.88	26.580		
15,900.00	10,418.00	17,372.43	12,017.77	97.98	106.37	117.10	-5,441.98	-3,776.95	3,426.28	3,295.45	130.82	26.190		
16,000.00	10,418.00	17,472.42	12,018.85	99.50	107.89	117.11	-5,541.96	-3,776.08	3,426.88	3,294.11	132.77	25.811		
16,100.00	10,418.00	17,572.42	12,019.93	101.03	109.41	117.13	-5,641.95	-3,775.21	3,427.48	3,292.76	134.72	25.441		
16,200.00	10,418.00	17,672.41	12,021.01	102.56	110.94	117.15	-5,741.93	-3,774.34	3,428.08	3,291.40	136.68	25.082		
16,300.00	10,418.00	17,772.40	12,022.10	104.09	112.47	117.16	-5,841.92	-3,773.46	3,428.68	3,290.04	138.64	24.731		
16,400.00	10,418.00	17,872.40	12,023.18	105.63	114.01	117.18	-5,941.90	-3,772.59	3,429.28	3,288.68	140.60	24.390		
16,500.00	10,418.00	17,972.39	12,024.26	107.17	115.55	117.19	-6,041.89	-3,771.72	3,429.88	3,287.31	142.57	24.058		
16,600.00	10,418.00	18,072.39	12,025.34	108.72	117.09	117.21	-6,141.87	-3,770.85	3,430.48	3,285.94	144.54	23.734		
16,700.00	10,418.00	18,172.38	12,026.42	110.26	118.64	117.22	-6,241.85	-3,769.98	3,431.08	3,284.57	146.51	23.419		
16,800.00	10,418.00	18,272.37	12,027.50	111.81	120.18	117.24	-6,341.84	-3,769.10	3,431.68	3,283.19	148.49	23.111		
16,900.00	10,418.00	18,372.37	12,028.58	113.37	121.73	117.25	-6,441.82	-3,768.23	3,432.28	3,281.81	150.47	22.811		
17,000.00	10,418.00	18,472.36	12,029.66	114.92	123.29	117.27	-6,541.81	-3,767.36	3,432.88	3,280.43	152.45	22.518		
17,100.00	10,418.00	18,572.36	12,030.74	116.48	124.84	117.28	-6,641.79	-3,766.49	3,433.48	3,279.05	154.44	22.232		
17,200.00	10,418.00	18,672.35	12,031.82	118.04	126.40	117.30	-6,741.78	-3,765.61	3,434.09	3,277.66	156.43	21.954		
17,300.00	10,418.00	18,772.34	12,032.90	119.61	127.96	117.31	-6,841.76	-3,764.74	3,434.69	3,276.27	158.42	21.681		
17,400.00	10,418.00	18,872.34	12,033.98	121.17	129.52	117.33	-6,941.75	-3,763.87	3,435.29	3,274.88	160.41	21.416		
17,500.00	10,418.00	18,972.33	12,035.06	122.74	131.09	117.34	-7,041.73	-3,763.00	3,435.90	3,273.49	162.40	21.157		
17,600.00	10,418.00	19,072.33	12,036.14	124.31	132.65	117.36	-7,141.71	-3,762.12	3,436.50	3,272.10	164.40	20.903		
17,700.00	10,418.00	19,172.32	12,037.23	125.88	134.22	117.37	-7,241.70	-3,761.25	3,437.10	3,270.70	166.40	20.656		
17,800.00	10,418.00	19,272.31	12,038.31	127.46	135.79	117.39	-7,341.68	-3,760.38	3,437.71	3,269.30	168.40	20.414		
17,900.00	10,418.00	19,372.31	12,039.39	129.04	137.37	117.40	-7,441.67	-3,759.51	3,438.31	3,267.90	170.40	20.177		
18,000.00	10,418.00	19,472.30	12,040.47	130.61	138.94	117.42	-7,541.65	-3,758.64	3,438.91	3,266.50	172.41	19.946		
18,100.00	10,418.00	19,572.30	12,041.55	132.19	140.52	117.43	-7,641.64	-3,757.76	3,439.52	3,265.10	174.42	19.720		
18,200.00	10,418.00	19,672.29	12,042.63	133.78	142.10	117.45	-7,741.62	-3,756.89	3,440.12	3,263.70	176.43	19.499		
18,300.00	10,418.00	19,772.29	12,043.71	135.36	143.68	117.46	-7,841.61	-3,756.02	3,440.73	3,262.29	178.43	19.283		
18,400.00	10,418.00	19,872.28	12,044.79	136.94	145.26	117.48	-7,941.59	-3,755.15	3,441.33	3,260.89	180.45	19.071		
18,500.00	10,418.00	19,972.27	12,045.87	138.53	146.84	117.49	-8,041.57	-3,754.27	3,441.94	3,259.48	182.46	18.864		
18,600.00	10,418.00	20,072.27	12,046.95	140.12	148.42	117.51	-8,141.56	-3,753.40	3,442.54	3,258.07	184.47	18.662		
18,700.00	10,418.00	20,172.26	12,048.03	141.71	150.01	117.52	-8,241.54	-3,752.53	3,443.15	3,256.66	186.49	18.463		
18,800.00	10,418.00	20,272.26	12,049.11	143.30	151.60	117.54	-8,341.53	-3,751.66	3,443.76	3,255.25	188.50	18.269		
18,900.00	10,418.00	20,372.25	12,050.19	144.89	153.19	117.55	-8,441.51	-3,750.78	3,444.36	3,253.84	190.52	18.079		
19,000.00	10,418.00	20,472.24	12,051.27	146.49	154.78	117.57	-8,541.50	-3,749.91	3,444.97	3,252.43	192.54	17.892		
19,100.00	10,418.00	20,572.24	12,052.36	148.08	156.37	117.58	-8,641.48	-3,749.04	3,445.57	3,251.02	194.56	17.710		
19,200.00	10,418.00	20,672.23	12,053.44	149.68	157.96	117.60	-8,741.47	-3,748.17	3,446.18	3,249.60	196.58	17.531		

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 503H
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 503H	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		
19,300.00	10,418.00	20,772.23	12,054.52	151.27	159.55	117.61	-8,841.45	-3,747.30	3,446.79	3,248.19	198.60	17.356		
19,400.00	10,418.00	20,872.22	12,055.60	152.87	161.15	117.63	-8,941.43	-3,746.42	3,447.40	3,246.78	200.62	17.184		
19,500.00	10,418.00	20,972.21	12,056.68	154.47	162.74	117.64	-9,041.42	-3,745.55	3,448.00	3,245.36	202.64	17.015		
19,600.00	10,418.00	21,072.21	12,057.76	156.07	164.34	117.66	-9,141.40	-3,744.68	3,448.61	3,243.95	204.67	16.850		
19,700.00	10,418.00	21,172.20	12,058.84	157.67	165.94	117.67	-9,241.39	-3,743.81	3,449.22	3,242.53	206.69	16.688		
19,800.00	10,418.00	21,272.20	12,059.92	159.28	167.54	117.69	-9,341.37	-3,742.93	3,449.83	3,241.11	208.72	16.529		
19,900.00	10,418.00	21,372.19	12,061.00	160.88	169.14	117.70	-9,441.36	-3,742.06	3,450.44	3,239.70	210.74	16.373		
20,000.00	10,418.00	21,472.18	12,062.08	162.48	170.74	117.72	-9,541.34	-3,741.19	3,451.05	3,238.28	212.77	16.220		
20,100.00	10,418.00	21,572.18	12,063.16	164.09	172.34	117.73	-9,641.33	-3,740.32	3,451.66	3,236.86	214.79	16.070		
20,200.00	10,418.00	21,672.17	12,064.24	165.70	173.94	117.75	-9,741.31	-3,739.44	3,452.26	3,235.45	216.82	15.922		
20,300.00	10,418.00	21,772.17	12,065.32	167.30	175.55	117.76	-9,841.29	-3,738.57	3,452.87	3,234.03	218.85	15.778		
20,400.00	10,418.00	21,872.16	12,066.40	168.91	177.15	117.78	-9,941.28	-3,737.70	3,453.48	3,232.61	220.87	15.636		
20,500.00	10,418.00	21,972.16	12,067.49	170.52	178.76	117.79	-10,041.26	-3,736.83	3,454.09	3,231.19	222.90	15.496		
20,600.00	10,418.00	22,072.15	12,068.57	172.13	180.36	117.81	-10,141.25	-3,735.96	3,454.70	3,229.77	224.93	15.359		
20,700.00	10,418.00	22,101.01	12,068.88	173.74	180.83	117.81	-10,170.10	-3,735.70	3,456.05	3,229.72	226.33	15.270		
20,800.00	10,418.00	22,101.01	12,068.88	175.35	180.83	117.81	-10,170.10	-3,735.70	3,460.16	3,232.85	227.31	15.222		
20,900.00	10,418.00	22,101.01	12,068.88	176.97	180.83	117.81	-10,170.10	-3,735.70	3,467.15	3,239.03	228.12	15.199 SF		
21,000.00	10,418.00	22,101.01	12,068.88	178.58	180.83	117.81	-10,170.10	-3,735.70	3,477.01	3,248.26	228.75	15.200		
21,100.00	10,418.00	22,101.01	12,068.88	180.19	180.83	117.81	-10,170.10	-3,735.70	3,489.71	3,260.51	229.20	15.226		
21,200.00	10,418.00	22,101.01	12,068.88	181.81	180.83	117.81	-10,170.10	-3,735.70	3,505.21	3,275.74	229.47	15.275		
21,300.00	10,418.00	22,101.01	12,068.88	183.42	180.83	117.81	-10,170.10	-3,735.70	3,523.48	3,293.91	229.57	15.348		
21,400.00	10,418.00	22,101.01	12,068.88	185.04	180.83	117.81	-10,170.10	-3,735.70	3,544.49	3,314.98	229.51	15.444		
21,500.00	10,418.00	22,101.01	12,068.88	186.65	180.83	117.81	-10,170.10	-3,735.70	3,568.17	3,338.88	229.29	15.562		
21,600.00	10,418.00	22,101.01	12,068.88	188.27	180.83	117.81	-10,170.10	-3,735.70	3,594.48	3,365.58	228.90	15.703		
21,700.00	10,418.00	22,101.01	12,068.88	189.89	180.83	117.81	-10,170.10	-3,735.70	3,623.36	3,394.97	228.39	15.865		
21,800.00	10,418.00	22,101.01	12,068.88	191.50	180.83	117.81	-10,170.10	-3,735.70	3,654.75	3,427.02	227.73	16.049		
21,900.00	10,418.00	22,101.01	12,068.88	193.12	180.83	117.81	-10,170.10	-3,735.70	3,688.58	3,461.64	226.94	16.253		
21,923.68	10,418.00	22,101.01	12,068.88	193.51	180.83	117.81	-10,170.10	-3,735.70	3,696.94	3,470.20	226.74	16.305		

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	-82.23	500.59	-3,668.14	3,702.14					
100.00	100.00	139.00	139.00	0.13	0.27	-82.23	500.59	-3,668.14	3,702.14	3,701.85	0.29	N/A		
200.00	200.00	239.00	239.00	0.48	0.62	-82.23	500.59	-3,668.14	3,702.14	3,701.35	0.79	4,689.457		
300.00	300.00	339.00	339.00	0.84	0.98	-82.23	500.59	-3,668.14	3,702.14	3,700.85	1.29	2,861.041		
400.00	400.00	439.00	439.00	1.20	1.34	-82.23	500.59	-3,668.14	3,702.14	3,700.34	1.80	2,056.889		
500.00	500.00	539.00	539.00	1.56	1.70	-82.23	500.59	-3,668.14	3,702.14	3,699.83	2.31	1,605.276		
600.00	600.00	639.00	639.00	1.92	2.06	-82.23	500.59	-3,668.14	3,702.14	3,699.33	2.81	1,316.173		
700.00	700.00	739.00	739.00	2.28	2.42	-82.23	500.59	-3,668.14	3,702.14	3,698.82	3.32	1,115.272		
800.00	800.00	839.00	839.00	2.63	2.77	-82.23	500.59	-3,668.14	3,702.14	3,698.31	3.83	967.562		
900.00	900.00	939.00	939.00	2.99	3.13	-82.23	500.59	-3,668.14	3,702.14	3,697.81	4.33	854.394		
1,000.00	1,000.00	1,039.00	1,039.00	3.35	3.49	-82.23	500.59	-3,668.14	3,702.14	3,697.30	4.84	764.921		
1,100.00	1,100.00	1,139.00	1,139.00	3.71	3.85	-82.23	500.59	-3,668.14	3,702.14	3,696.79	5.35	692.408		
1,200.00	1,200.00	1,239.00	1,239.00	4.07	4.21	-82.23	500.59	-3,668.14	3,702.14	3,696.29	5.85	632.451		
1,300.00	1,300.00	1,339.00	1,339.00	4.43	4.57	-82.23	500.59	-3,668.14	3,702.14	3,695.78	6.36	582.050		
1,400.00	1,400.00	1,439.00	1,439.00	4.79	4.93	-82.23	500.59	-3,668.14	3,702.14	3,695.27	6.87	539.087		
1,500.00	1,500.00	1,539.00	1,539.00	5.14	5.28	-82.23	500.59	-3,668.14	3,702.14	3,694.77	7.37	502.031		
1,600.00	1,600.00	1,639.00	1,639.00	5.50	5.64	-82.23	500.59	-3,668.14	3,702.14	3,694.26	7.88	469.741		
1,700.00	1,700.00	1,739.00	1,739.00	5.86	6.00	-82.23	500.59	-3,668.14	3,702.14	3,693.75	8.39	441.353		
1,800.00	1,800.00	1,839.00	1,839.00	6.22	6.36	-82.23	500.59	-3,668.14	3,702.14	3,693.24	8.90	416.201		
1,900.00	1,900.00	1,939.00	1,939.00	6.58	6.72	-82.23	500.59	-3,668.14	3,702.14	3,692.74	9.40	393.761		
2,000.00	2,000.00	2,039.00	2,039.00	6.94	7.08	-82.23	500.59	-3,668.14	3,702.14	3,692.23	9.91	373.616		
2,100.00	2,100.00	2,139.00	2,139.00	7.29	7.43	-82.23	500.59	-3,668.14	3,702.14	3,691.72	10.42	355.433		
2,200.00	2,199.99	2,238.99	2,238.99	7.65	7.79	-8.40	500.59	-3,668.14	3,700.84	3,689.93	10.92	338.962		
2,300.00	2,299.91	2,338.91	2,338.91	7.99	8.15	-8.42	500.59	-3,668.14	3,696.96	3,685.54	11.42	323.828		
2,400.00	2,399.69	2,438.69	2,438.69	8.34	8.51	-8.45	500.59	-3,668.14	3,690.49	3,678.58	11.91	309.739		
2,500.00	2,499.27	2,538.27	2,538.27	8.70	8.87	-8.49	500.59	-3,668.14	3,681.44	3,669.03	12.41	296.578		
2,600.00	2,598.57	2,637.57	2,637.57	9.06	9.22	-8.54	500.59	-3,668.14	3,669.81	3,656.90	12.91	284.244		
2,700.00	2,697.54	2,780.08	2,780.08	9.42	9.72	-8.64	499.84	-3,667.76	3,655.41	3,641.90	13.51	270.604		
2,771.79	2,768.33	2,933.91	2,933.77	9.69	10.22	-8.81	494.21	-3,664.89	3,641.99	3,627.95	14.04	259.443		
2,800.00	2,796.11	2,979.01	2,978.77	9.79	10.37	-8.87	491.53	-3,663.53	3,636.05	3,621.84	14.21	255.881		
2,900.00	2,894.56	3,076.40	3,075.91	10.18	10.69	-9.00	485.48	-3,660.45	3,614.89	3,600.21	14.68	246.244		
3,000.00	2,993.02	3,173.78	3,173.06	10.56	11.02	-9.14	479.43	-3,657.37	3,593.75	3,578.59	15.15	237.154		
3,100.00	3,091.48	3,271.16	3,270.21	10.95	11.35	-9.28	473.37	-3,654.29	3,572.62	3,556.99	15.63	228.573		
3,200.00	3,189.94	3,368.55	3,367.35	11.35	11.67	-9.41	467.32	-3,651.22	3,551.52	3,535.41	16.11	220.461		
3,300.00	3,288.39	3,465.93	3,464.50	11.75	12.01	-9.55	461.27	-3,648.14	3,530.43	3,513.84	16.59	212.787		
3,400.00	3,386.85	3,563.32	3,561.65	12.16	12.34	-9.69	455.22	-3,645.06	3,509.36	3,492.29	17.08	205.518		
3,500.00	3,485.31	3,660.70	3,658.80	12.57	12.68	-9.84	449.17	-3,641.98	3,488.32	3,470.76	17.56	198.627		
3,600.00	3,583.77	3,758.08	3,755.94	12.98	13.01	-9.98	443.12	-3,638.90	3,467.30	3,449.25	18.05	192.086		
3,700.00	3,682.22	3,855.47	3,853.09	13.39	13.35	-10.13	437.07	-3,635.82	3,446.30	3,427.75	18.54	185.872		
3,800.00	3,780.68	3,952.85	3,950.24	13.81	13.69	-10.28	431.02	-3,632.74	3,425.32	3,406.28	19.03	179.963		
3,900.00	3,879.14	4,050.24	4,047.38	14.23	14.03	-10.43	424.97	-3,629.67	3,404.36	3,384.83	19.53	174.338		
4,000.00	3,977.60	4,147.62	4,144.53	14.65	14.38	-10.58	418.92	-3,626.59	3,383.42	3,363.40	20.02	168.979		
4,100.00	4,076.05	4,245.00	4,241.68	15.07	14.72	-10.73	412.87	-3,623.51	3,362.51	3,341.99	20.52	163.867		
4,200.00	4,174.51	4,342.39	4,338.82	15.50	15.06	-10.89	406.82	-3,620.43	3,341.63	3,320.61	21.02	158.989		
4,300.00	4,272.97	4,439.77	4,435.97	15.93	15.41	-11.05	400.76	-3,617.35	3,320.76	3,299.25	21.52	154.328		
4,400.00	4,371.43	4,537.16	4,533.12	16.36	15.76	-11.21	394.71	-3,614.27	3,299.92	3,277.91	22.02	149.871		
4,500.00	4,469.88	4,634.54	4,630.26	16.79	16.11	-11.37	388.66	-3,611.20	3,279.11	3,256.59	22.52	145.606		
4,600.00	4,568.34	4,731.92	4,727.41	17.22	16.45	-11.53	382.61	-3,608.12	3,258.32	3,235.30	23.02	141.522		
4,700.00	4,666.80	4,829.31	4,824.56	17.65	16.80	-11.70	376.56	-3,605.04	3,237.56	3,214.03	23.53	137.606		
4,800.00	4,765.25	4,926.69	4,921.71	18.08	17.15	-11.87	370.51	-3,601.96	3,216.83	3,192.79	24.03	133.851		
4,900.00	4,863.71	5,024.07	5,018.85	18.52	17.50	-12.04	364.46	-3,598.88	3,196.12	3,171.58	24.54	130.246		
5,000.00	4,962.17	5,121.46	5,116.00	18.95	17.86	-12.21	358.41	-3,595.80	3,175.44	3,150.39	25.05	126.783		

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 503H
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 503H	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	5,060.63	5,218.84	5,213.15	19.39	18.21	-12.38	352.36	-3,592.72	3,154.78	3,129.23	25.55	123.455		
5,200.00	5,159.08	5,316.23	5,310.29	19.83	18.56	-12.56	346.31	-3,589.65	3,134.16	3,108.10	26.06	120.253		
5,300.00	5,257.54	5,413.61	5,407.44	20.27	18.91	-12.74	340.26	-3,586.57	3,113.56	3,086.99	26.57	117.171		
5,400.00	5,356.00	5,510.99	5,504.59	20.71	19.27	-12.92	334.20	-3,583.49	3,093.00	3,065.92	27.08	114.203		
5,500.00	5,454.46	5,608.38	5,601.73	21.15	19.62	-13.10	328.15	-3,580.41	3,072.46	3,044.87	27.59	111.342		
5,600.00	5,552.91	5,705.76	5,698.88	21.59	19.98	-13.29	322.10	-3,577.33	3,051.96	3,023.85	28.11	108.584		
5,700.00	5,651.37	5,803.15	5,796.03	22.03	20.33	-13.48	316.05	-3,574.25	3,031.49	3,002.87	28.62	105.922		
5,800.00	5,749.83	5,900.53	5,893.18	22.47	20.69	-13.67	310.00	-3,571.17	3,011.05	2,981.91	29.13	103.353		
5,900.00	5,848.29	5,997.91	5,990.32	22.91	21.04	-13.86	303.95	-3,568.10	2,990.64	2,960.99	29.65	100.872		
6,000.00	5,946.74	6,095.30	6,087.47	23.36	21.40	-14.06	297.90	-3,565.02	2,970.27	2,940.11	30.16	98.473		
6,100.00	6,045.20	6,192.68	6,184.62	23.80	21.76	-14.26	291.85	-3,561.94	2,949.93	2,919.25	30.68	96.155		
6,200.00	6,143.66	6,290.07	6,281.76	24.24	22.11	-14.46	285.80	-3,558.86	2,929.63	2,898.43	31.20	93.911		
6,300.00	6,242.12	6,387.45	6,378.91	24.69	22.47	-14.67	279.75	-3,555.78	2,909.36	2,877.65	31.71	91.740		
6,400.00	6,340.57	6,484.83	6,476.06	25.13	22.83	-14.87	273.70	-3,552.70	2,889.13	2,856.90	32.23	89.638		
6,500.00	6,439.03	6,582.22	6,573.20	25.58	23.19	-15.09	267.64	-3,549.62	2,868.93	2,836.18	32.75	87.602		
6,600.00	6,537.49	6,679.60	6,670.35	26.02	23.55	-15.30	261.59	-3,546.55	2,848.78	2,815.51	33.27	85.628		
6,700.00	6,635.95	6,776.98	6,767.50	26.47	23.90	-15.52	255.54	-3,543.47	2,828.66	2,794.87	33.79	83.715		
6,757.61	6,692.67	6,833.09	6,823.47	26.73	24.11	-15.64	252.06	-3,541.69	2,817.09	2,783.00	34.09	82.639		
6,800.00	6,734.44	6,874.42	6,864.70	26.91	24.26	-15.70	249.49	-3,540.39	2,808.80	2,774.49	34.31	81.866		
6,900.00	6,833.29	6,972.31	6,962.35	27.34	24.62	-15.84	243.41	-3,537.29	2,791.05	2,756.22	34.83	80.135		
7,000.00	6,932.50	7,070.68	7,060.48	27.75	24.99	-15.97	237.29	-3,534.18	2,775.82	2,740.47	35.35	78.528		
7,100.00	7,032.01	7,169.47	7,159.03	28.14	25.35	-16.10	231.16	-3,531.06	2,763.11	2,727.24	35.86	77.042		
7,200.00	7,131.74	7,268.61	7,257.93	28.51	25.72	-16.23	225.00	-3,527.93	2,752.92	2,716.54	36.38	75.673		
7,300.00	7,231.62	7,368.03	7,357.10	28.86	26.09	-16.35	218.82	-3,524.78	2,745.26	2,708.37	36.89	74.416		
7,400.00	7,331.60	7,467.66	7,456.50	29.19	26.45	-16.47	212.63	-3,521.63	2,740.13	2,702.73	37.40	73.268		
7,429.40	7,361.00	7,496.99	7,485.75	29.28	26.56	-90.34	210.81	-3,520.71	2,739.10	2,701.55	37.55	72.951		
7,500.00	7,431.60	7,552.25	7,540.89	29.50	26.76	-90.41	207.63	-3,519.09	2,737.06	2,699.19	37.87	72.271		
7,600.00	7,531.60	7,627.91	7,616.47	29.82	27.04	-90.47	204.43	-3,517.46	2,734.94	2,696.62	38.33	71.361		
7,700.00	7,631.60	7,700.00	7,688.53	30.14	27.30	-90.51	202.62	-3,516.54	2,733.71	2,694.94	38.77	70.518		
7,800.00	7,731.60	7,782.07	7,770.60	30.45	27.58	-90.52	202.03	-3,516.24	2,733.35	2,694.14	39.22	69.700		
7,900.00	7,831.60	7,882.07	7,870.60	30.77	27.92	-90.52	202.03	-3,516.24	2,733.35	2,693.66	39.70	68.859		
8,000.00	7,931.60	7,982.07	7,970.60	31.09	28.25	-90.52	202.03	-3,516.24	2,733.35	2,693.18	40.17	68.037		
8,100.00	8,031.60	8,082.07	8,070.60	31.41	28.59	-90.52	202.03	-3,516.24	2,733.35	2,692.70	40.65	67.233		
8,200.00	8,131.60	8,182.07	8,170.60	31.73	28.93	-90.52	202.03	-3,516.24	2,733.35	2,692.22	41.14	66.447		
8,300.00	8,231.60	8,282.07	8,270.60	32.06	29.26	-90.52	202.03	-3,516.24	2,733.35	2,691.74	41.62	65.678		
8,400.00	8,331.60	8,382.07	8,370.60	32.38	29.60	-90.52	202.03	-3,516.24	2,733.35	2,691.25	42.10	64.926		
8,500.00	8,431.60	8,482.07	8,470.60	32.70	29.94	-90.52	202.03	-3,516.24	2,733.35	2,690.77	42.58	64.190		
8,600.00	8,531.60	8,582.07	8,570.60	33.03	30.28	-90.52	202.03	-3,516.24	2,733.35	2,690.29	43.07	63.470		
8,700.00	8,631.60	8,682.07	8,670.60	33.35	30.62	-90.52	202.03	-3,516.24	2,733.35	2,689.80	43.55	62.765		
8,800.00	8,731.60	8,782.07	8,770.60	33.68	30.96	-90.52	202.03	-3,516.24	2,733.35	2,689.32	44.03	62.075		
8,900.00	8,831.60	8,882.07	8,870.60	34.00	31.30	-90.52	202.03	-3,516.24	2,733.35	2,688.84	44.52	61.399		
9,000.00	8,931.60	8,982.07	8,970.60	34.33	31.64	-90.52	202.03	-3,516.24	2,733.35	2,688.35	45.00	60.737		
9,100.00	9,031.60	9,082.07	9,070.60	34.66	31.98	-90.52	202.03	-3,516.24	2,733.35	2,687.86	45.49	60.088		
9,200.00	9,131.60	9,182.07	9,170.60	34.98	32.33	-90.52	202.03	-3,516.24	2,733.35	2,687.38	45.98	59.453		
9,300.00	9,231.60	9,282.07	9,270.60	35.31	32.67	-90.52	202.03	-3,516.24	2,733.35	2,686.89	46.46	58.830		
9,400.00	9,331.60	9,382.07	9,370.60	35.64	33.01	-90.52	202.03	-3,516.24	2,733.35	2,686.40	46.95	58.219		
9,500.00	9,431.60	9,482.07	9,470.60	35.97	33.35	-90.52	202.03	-3,516.24	2,733.35	2,685.92	47.44	57.621		
9,600.00	9,531.60	9,582.07	9,570.60	36.30	33.70	-90.52	202.03	-3,516.24	2,733.35	2,685.43	47.92	57.034		
9,700.00	9,631.60	9,682.07	9,670.60	36.63	34.04	-90.52	202.03	-3,516.24	2,733.35	2,684.94	48.41	56.459		
9,800.00	9,731.60	9,782.07	9,770.60	36.96	34.38	-90.52	202.03	-3,516.24	2,733.35	2,684.45	48.90	55.895		
9,900.00	9,831.60	9,882.07	9,870.60	37.30	34.73	-90.52	202.03	-3,516.24	2,733.35	2,683.96	49.39	55.342		
9,913.44	9,845.04	9,895.51	9,884.04	37.34	34.77	-90.52	202.03	-3,516.24	2,733.35	2,683.90	49.46	55.268 CC		

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 503H
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 503H	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		
9,950.00	9,881.57	9,932.05	9,920.57	37.46	34.90	90.07	202.03	-3,516.24	2,733.36	2,683.72	49.63	55.074		
10,000.00	9,931.27	9,981.74	9,970.27	37.60	35.07	90.18	202.03	-3,516.24	2,733.37	2,683.51	49.86	54.823		
10,050.00	9,980.31	10,030.78	10,019.31	37.74	35.24	90.37	202.03	-3,516.24	2,733.41	2,683.34	50.08	54.585		
10,100.00	10,028.32	10,078.79	10,067.32	37.87	35.41	90.64	202.03	-3,516.24	2,733.54	2,683.26	50.29	54.360 ES		
10,150.00	10,074.94	10,125.41	10,113.94	37.99	35.57	90.97	202.03	-3,516.24	2,733.82	2,683.33	50.49	54.150		
10,200.00	10,119.80	10,170.28	10,158.80	38.10	35.72	91.33	202.03	-3,516.24	2,734.31	2,683.63	50.68	53.956		
10,250.00	10,162.58	10,213.05	10,201.58	38.19	35.87	91.71	202.03	-3,516.24	2,735.12	2,684.26	50.86	53.778		
10,300.00	10,202.93	10,253.41	10,241.93	38.28	36.01	92.09	202.03	-3,516.24	2,736.33	2,685.30	51.03	53.619		
10,350.00	10,240.57	10,291.04	10,279.57	38.35	36.14	92.43	202.03	-3,516.24	2,738.07	2,686.87	51.20	53.478		
10,400.00	10,275.19	10,325.67	10,314.19	38.42	36.26	92.72	202.03	-3,516.24	2,740.42	2,689.06	51.36	53.356		
10,450.00	10,306.54	10,357.02	10,345.54	38.47	36.37	92.92	202.03	-3,516.24	2,743.48	2,691.97	51.52	53.253		
10,500.00	10,334.38	10,384.85	10,373.38	38.52	36.46	93.02	202.03	-3,516.24	2,747.36	2,695.69	51.67	53.171		
10,550.00	10,358.49	10,408.97	10,397.49	38.56	36.55	92.98	202.03	-3,516.24	2,752.12	2,700.30	51.82	53.109		
10,600.00	10,378.70	10,429.17	10,417.70	38.60	36.62	92.79	202.03	-3,516.24	2,757.82	2,705.86	51.97	53.067		
10,650.00	10,394.84	10,445.32	10,433.84	38.64	36.67	92.44	202.03	-3,516.24	2,764.51	2,712.40	52.11	53.047		
10,700.00	10,406.80	10,457.28	10,445.80	38.68	36.71	91.91	202.03	-3,516.24	2,772.19	2,719.93	52.26	53.046		
10,750.00	10,414.49	10,464.96	10,453.49	38.74	36.74	91.19	202.03	-3,516.24	2,780.86	2,728.45	52.40	53.067		
10,800.00	10,417.84	10,468.31	10,456.84	38.82	36.75	90.28	202.03	-3,516.24	2,790.47	2,737.92	52.54	53.108		
10,813.44	10,418.00	10,468.47	10,457.00	38.85	36.75	90.00	202.03	-3,516.24	2,793.20	2,740.62	52.58	53.122		
10,900.00	10,418.00	10,468.47	10,457.00	39.04	36.75	90.00	202.03	-3,516.24	2,812.30	2,759.46	52.84	53.219		
11,000.00	10,418.00	10,468.47	10,457.00	39.34	36.75	90.00	202.03	-3,516.24	2,837.49	2,784.29	53.20	53.334		
11,100.00	10,418.00	10,468.47	10,457.00	39.72	36.75	90.00	202.03	-3,516.24	2,865.96	2,812.34	53.61	53.458		
11,200.00	10,418.00	10,468.47	10,457.00	40.19	36.75	90.00	202.03	-3,516.24	2,897.59	2,843.53	54.07	53.594		
11,300.00	10,418.00	10,468.47	10,457.00	40.72	36.75	90.00	202.03	-3,516.24	2,932.30	2,877.74	54.56	53.748		
11,400.00	10,418.00	10,468.47	10,457.00	41.32	36.75	90.00	202.03	-3,516.24	2,969.97	2,914.89	55.08	53.924		
11,500.00	10,418.00	10,468.47	10,457.00	41.98	36.75	90.00	202.03	-3,516.24	3,010.49	2,954.87	55.62	54.125		
11,600.00	10,418.00	10,468.47	10,457.00	42.70	36.75	90.00	202.03	-3,516.24	3,053.75	2,997.56	56.18	54.354		
11,700.00	10,418.00	10,468.47	10,457.00	43.47	36.75	90.00	202.03	-3,516.24	3,099.63	3,042.87	56.76	54.613		
11,800.00	10,418.00	10,468.47	10,457.00	44.29	36.75	90.00	202.03	-3,516.24	3,148.02	3,090.69	57.34	54.905		
11,900.00	10,418.00	10,468.47	10,457.00	45.15	36.75	90.00	202.03	-3,516.24	3,198.81	3,140.89	57.92	55.231		
12,000.00	10,418.00	10,468.47	10,457.00	46.06	36.75	90.00	202.03	-3,516.24	3,251.88	3,193.38	58.50	55.590		
12,100.00	10,418.00	13,860.35	12,269.70	47.01	55.27	123.53	-1,636.66	-3,500.20	3,281.72	3,219.06	62.66	52.370		
12,200.00	10,418.00	13,960.34	12,270.78	47.99	56.34	123.54	-1,736.65	-3,499.32	3,282.42	3,218.52	63.90	51.370		
12,300.00	10,418.00	14,060.34	12,271.87	49.02	57.43	123.56	-1,836.63	-3,498.45	3,283.12	3,217.95	65.17	50.378		
12,400.00	10,418.00	14,160.33	12,272.95	50.07	58.54	123.57	-1,936.62	-3,497.58	3,283.82	3,217.34	66.48	49.395		
12,500.00	10,418.00	14,260.33	12,274.03	51.16	59.69	123.59	-2,036.60	-3,496.71	3,284.52	3,216.69	67.82	48.427		
12,600.00	10,418.00	14,360.32	12,275.11	52.28	60.85	123.60	-2,136.58	-3,495.83	3,285.22	3,216.02	69.20	47.474		
12,700.00	10,418.00	14,460.32	12,276.20	53.42	62.04	123.62	-2,236.57	-3,494.96	3,285.92	3,215.31	70.61	46.538		
12,800.00	10,418.00	14,560.31	12,277.28	54.59	63.25	123.63	-2,336.55	-3,494.09	3,286.61	3,214.57	72.04	45.620		
12,900.00	10,418.00	14,660.30	12,278.36	55.78	64.48	123.65	-2,436.54	-3,493.22	3,287.31	3,213.81	73.51	44.720		
13,000.00	10,418.00	14,760.30	12,279.45	57.00	65.72	123.66	-2,536.52	-3,492.34	3,288.01	3,213.02	75.00	43.841		
13,100.00	10,418.00	14,860.29	12,280.53	58.24	66.99	123.68	-2,636.51	-3,491.47	3,288.72	3,212.20	76.51	42.983		
13,200.00	10,418.00	14,960.29	12,281.61	59.50	68.27	123.69	-2,736.49	-3,490.60	3,289.42	3,211.37	78.05	42.145		
13,300.00	10,418.00	15,060.28	12,282.69	60.77	69.57	123.70	-2,836.47	-3,489.73	3,290.12	3,210.51	79.61	41.329		
13,400.00	10,418.00	15,160.27	12,283.78	62.07	70.88	123.72	-2,936.46	-3,488.86	3,290.82	3,209.63	81.18	40.535		
13,500.00	10,418.00	15,260.27	12,284.86	63.38	72.20	123.73	-3,036.44	-3,487.98	3,291.52	3,208.74	82.78	39.763		
13,600.00	10,418.00	15,360.26	12,285.94	64.71	73.54	123.75	-3,136.43	-3,487.11	3,292.22	3,207.83	84.39	39.011		
13,700.00	10,418.00	15,460.26	12,287.03	66.05	74.89	123.76	-3,236.41	-3,486.24	3,292.92	3,206.90	86.02	38.281		
13,800.00	10,418.00	15,560.25	12,288.11	67.40	76.25	123.78	-3,336.40	-3,485.37	3,293.62	3,205.96	87.66	37.571		
13,900.00	10,418.00	15,660.24	12,289.19	68.77	77.63	123.79	-3,436.38	-3,484.49	3,294.32	3,205.00	89.32	36.880		
14,000.00	10,418.00	15,760.24	12,290.27	70.15	79.01	123.81	-3,536.37	-3,483.62	3,295.03	3,204.03	91.00	36.210		
14,100.00	10,418.00	15,860.23	12,291.36	71.54	80.41	123.82	-3,636.35	-3,482.75	3,295.73	3,203.04	92.68	35.558		

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 503H
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 503H	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	10,418.00	15,960.23	12,292.44	72.95	81.81	123.84	-3,736.33	-3,481.88	3,296.43	3,202.05	94.38	34.926		
14,300.00	10,418.00	16,060.22	12,293.52	74.36	83.23	123.85	-3,836.32	-3,481.00	3,297.13	3,201.04	96.10	34.311		
14,400.00	10,418.00	16,160.21	12,294.61	75.78	84.65	123.86	-3,936.30	-3,480.13	3,297.84	3,200.02	97.82	33.714		
14,500.00	10,418.00	16,260.21	12,295.69	77.21	86.08	123.88	-4,036.29	-3,479.26	3,298.54	3,198.99	99.55	33.134		
14,600.00	10,418.00	16,360.20	12,296.77	78.65	87.52	123.89	-4,136.27	-3,478.39	3,299.24	3,197.95	101.29	32.571		
14,700.00	10,418.00	16,460.20	12,297.85	80.10	88.96	123.91	-4,236.26	-3,477.51	3,299.95	3,196.90	103.04	32.025		
14,800.00	10,418.00	16,560.19	12,298.94	81.55	90.41	123.92	-4,336.24	-3,476.64	3,300.65	3,195.85	104.80	31.494		
14,900.00	10,418.00	16,660.18	12,300.02	83.02	91.87	123.94	-4,436.23	-3,475.77	3,301.36	3,194.79	106.57	30.978		
15,000.00	10,418.00	16,760.18	12,301.10	84.49	93.34	123.95	-4,536.21	-3,474.90	3,302.06	3,193.71	108.35	30.477		
15,100.00	10,418.00	16,860.17	12,302.19	85.96	94.81	123.97	-4,636.19	-3,474.02	3,302.76	3,192.64	110.13	29.991		
15,200.00	10,418.00	16,960.17	12,303.27	87.45	96.29	123.98	-4,736.18	-3,473.15	3,303.47	3,191.55	111.91	29.518		
15,300.00	10,418.00	17,060.16	12,304.35	88.94	97.77	123.99	-4,836.16	-3,472.28	3,304.17	3,190.46	113.71	29.058		
15,400.00	10,418.00	17,160.15	12,305.44	90.43	99.26	124.01	-4,936.15	-3,471.41	3,304.88	3,189.37	115.51	28.611		
15,500.00	10,418.00	17,260.15	12,306.52	91.93	100.75	124.02	-5,036.13	-3,470.53	3,305.58	3,188.27	117.32	28.176		
15,600.00	10,418.00	17,360.14	12,307.60	93.43	102.25	124.04	-5,136.12	-3,469.66	3,306.29	3,187.16	119.13	27.753		
15,700.00	10,418.00	17,460.14	12,308.68	94.94	103.75	124.05	-5,236.10	-3,468.79	3,307.00	3,186.04	120.95	27.342		
15,800.00	10,418.00	17,560.13	12,309.77	96.46	105.26	124.07	-5,336.08	-3,467.92	3,307.70	3,184.93	122.78	26.941		
15,900.00	10,418.00	17,660.13	12,310.85	97.98	106.77	124.08	-5,436.07	-3,467.05	3,308.41	3,183.80	124.60	26.551		
16,000.00	10,418.00	17,760.12	12,311.93	99.50	108.29	124.10	-5,536.05	-3,466.17	3,309.11	3,182.68	126.44	26.172		
16,100.00	10,418.00	17,860.11	12,313.02	101.03	109.81	124.11	-5,636.04	-3,465.30	3,309.82	3,181.54	128.28	25.802		
16,200.00	10,418.00	17,960.11	12,314.10	102.56	111.33	124.12	-5,736.02	-3,464.43	3,310.53	3,180.41	130.12	25.442		
16,300.00	10,418.00	18,060.10	12,315.18	104.09	112.86	124.14	-5,836.01	-3,463.56	3,311.23	3,179.27	131.96	25.092		
16,400.00	10,418.00	18,160.10	12,316.26	105.63	114.39	124.15	-5,935.99	-3,462.68	3,311.94	3,178.13	133.81	24.751		
16,500.00	10,418.00	18,260.09	12,317.35	107.17	115.92	124.17	-6,035.98	-3,461.81	3,312.65	3,176.98	135.67	24.418		
16,600.00	10,418.00	18,360.08	12,318.43	108.72	117.46	124.18	-6,135.96	-3,460.94	3,313.36	3,175.84	137.52	24.094		
16,700.00	10,418.00	18,460.08	12,319.51	110.26	119.00	124.20	-6,235.94	-3,460.07	3,314.06	3,174.69	139.38	23.778		
16,800.00	10,418.00	18,560.07	12,320.60	111.81	120.54	124.21	-6,335.93	-3,459.19	3,314.77	3,173.53	141.24	23.469		
16,900.00	10,418.00	18,660.07	12,321.68	113.37	122.09	124.22	-6,435.91	-3,458.32	3,315.48	3,172.38	143.10	23.169		
17,000.00	10,418.00	18,760.06	12,322.76	114.92	123.64	124.24	-6,535.90	-3,457.45	3,316.19	3,171.22	144.97	22.875		
17,100.00	10,418.00	18,860.05	12,323.84	116.48	125.19	124.25	-6,635.88	-3,456.58	3,316.90	3,170.06	146.84	22.589		
17,200.00	10,418.00	18,960.05	12,324.93	118.04	126.74	124.27	-6,735.87	-3,455.70	3,317.61	3,168.89	148.71	22.309		
17,300.00	10,418.00	19,060.04	12,326.01	119.61	128.30	124.28	-6,835.85	-3,454.83	3,318.32	3,167.73	150.59	22.036		
17,400.00	10,418.00	19,160.04	12,327.09	121.17	129.85	124.30	-6,935.84	-3,453.96	3,319.02	3,166.56	152.46	21.769		
17,500.00	10,418.00	19,260.03	12,328.18	122.74	131.42	124.31	-7,035.82	-3,453.09	3,319.73	3,165.39	154.34	21.509		
17,600.00	10,418.00	19,360.02	12,329.26	124.31	132.98	124.32	-7,135.80	-3,452.21	3,320.44	3,164.22	156.23	21.254		
17,700.00	10,418.00	19,460.02	12,330.34	125.88	134.54	124.34	-7,235.79	-3,451.34	3,321.15	3,163.04	158.11	21.005		
17,800.00	10,418.00	19,560.01	12,331.42	127.46	136.11	124.35	-7,335.77	-3,450.47	3,321.86	3,161.87	159.99	20.763		
17,900.00	10,418.00	19,660.01	12,332.51	129.04	137.68	124.37	-7,435.76	-3,449.60	3,322.57	3,160.70	161.88	20.525		
18,000.00	10,418.00	19,760.00	12,333.59	130.61	139.25	124.38	-7,535.74	-3,448.72	3,323.28	3,159.52	163.76	20.293		
18,100.00	10,418.00	19,859.99	12,334.67	132.19	140.82	124.40	-7,635.73	-3,447.85	3,323.99	3,158.34	165.65	20.066		
18,200.00	10,418.00	19,959.99	12,335.76	133.78	142.40	124.41	-7,735.71	-3,446.98	3,324.71	3,157.16	167.54	19.844		
18,300.00	10,418.00	20,059.98	12,336.84	135.36	143.97	124.42	-7,835.69	-3,446.11	3,325.42	3,155.98	169.44	19.626		
18,400.00	10,418.00	20,159.98	12,337.92	136.94	145.55	124.44	-7,935.68	-3,445.24	3,326.13	3,154.80	171.33	19.413		
18,500.00	10,418.00	20,259.97	12,339.00	138.53	147.13	124.45	-8,035.66	-3,444.36	3,326.84	3,153.61	173.22	19.205		
18,600.00	10,418.00	20,359.97	12,340.09	140.12	148.71	124.47	-8,135.65	-3,443.49	3,327.55	3,152.43	175.12	19.001		
18,700.00	10,418.00	20,459.96	12,341.17	141.71	150.30	124.48	-8,235.63	-3,442.62	3,328.26	3,151.25	177.02	18.802		
18,800.00	10,418.00	20,559.95	12,342.25	143.30	151.88	124.49	-8,335.62	-3,441.75	3,328.98	3,150.06	178.91	18.607		
18,900.00	10,418.00	20,659.95	12,343.34	144.89	153.46	124.51	-8,435.60	-3,440.87	3,329.69	3,148.88	180.81	18.415		
19,000.00	10,418.00	20,759.94	12,344.42	146.49	155.05	124.52	-8,535.59	-3,440.00	3,330.40	3,147.69	182.71	18.228		
19,100.00	10,418.00	20,859.94	12,345.50	148.08	156.64	124.54	-8,635.57	-3,439.13	3,331.11	3,146.50	184.61	18.044		
19,200.00	10,418.00	20,959.93	12,346.58	149.68	158.23	124.55	-8,735.55	-3,438.26	3,331.83	3,145.31	186.51	17.864		
19,300.00	10,418.00	21,059.92	12,347.67	151.27	159.82	124.57	-8,835.54	-3,437.38	3,332.54	3,144.12	188.42	17.687		

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 503H
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 503H	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	10,418.00	21,159.92	12,348.75	152.87	161.41	124.58	-8,935.52	-3,436.51	3,333.25	3,142.93	190.32	17.514		
19,500.00	10,418.00	21,259.91	12,349.83	154.47	163.01	124.59	-9,035.51	-3,435.64	3,333.97	3,141.75	192.22	17.345		
19,600.00	10,418.00	21,359.91	12,350.92	156.07	164.60	124.61	-9,135.49	-3,434.77	3,334.68	3,140.56	194.12	17.178		
19,700.00	10,418.00	21,459.90	12,352.00	157.67	166.20	124.62	-9,235.48	-3,433.89	3,335.39	3,139.37	196.02	17.015		
19,800.00	10,418.00	21,559.89	12,353.08	159.28	167.79	124.64	-9,335.46	-3,433.02	3,336.11	3,138.18	197.93	16.855		
19,900.00	10,418.00	21,659.89	12,354.16	160.88	169.39	124.65	-9,435.45	-3,432.15	3,336.82	3,136.99	199.83	16.698		
20,000.00	10,418.00	21,759.88	12,355.25	162.48	170.99	124.66	-9,535.43	-3,431.28	3,337.54	3,135.80	201.74	16.544		
20,100.00	10,418.00	21,859.88	12,356.33	164.09	172.59	124.68	-9,635.41	-3,430.40	3,338.25	3,134.61	203.65	16.392		
20,200.00	10,418.00	21,959.87	12,357.41	165.70	174.19	124.69	-9,735.40	-3,429.53	3,338.97	3,133.41	205.55	16.244		
20,300.00	10,418.00	22,059.86	12,358.50	167.30	175.79	124.71	-9,835.38	-3,428.66	3,339.68	3,132.22	207.46	16.098		
20,400.00	10,418.00	22,159.86	12,359.58	168.91	177.39	124.72	-9,935.37	-3,427.79	3,340.40	3,131.03	209.37	15.955		
20,500.00	10,418.00	22,259.85	12,360.66	170.52	179.00	124.74	-10,035.35	-3,426.91	3,341.11	3,129.84	211.28	15.814		
20,600.00	10,418.00	22,359.85	12,361.74	172.13	180.60	124.75	-10,135.34	-3,426.04	3,341.83	3,128.64	213.19	15.676		
20,700.00	10,418.00	22,390.61	12,362.08	173.74	181.09	124.75	-10,166.09	-3,425.77	3,343.26	3,128.82	214.44	15.590		
20,800.00	10,418.00	22,390.61	12,362.08	175.35	181.09	124.75	-10,166.09	-3,425.77	3,347.54	3,132.27	215.27	15.550		
20,900.00	10,418.00	22,390.61	12,362.08	176.97	181.09	124.75	-10,166.09	-3,425.77	3,354.80	3,138.87	215.93	15.537 SF		
21,000.00	10,418.00	22,390.61	12,362.08	178.58	181.09	124.75	-10,166.09	-3,425.77	3,365.01	3,148.61	216.40	15.550		
21,100.00	10,418.00	22,390.61	12,362.08	180.19	181.09	124.75	-10,166.09	-3,425.77	3,378.15	3,161.46	216.70	15.589		
21,200.00	10,418.00	22,390.61	12,362.08	181.81	181.09	124.75	-10,166.09	-3,425.77	3,394.19	3,177.37	216.83	15.654		
21,300.00	10,418.00	22,390.61	12,362.08	183.42	181.09	124.75	-10,166.09	-3,425.77	3,413.09	3,196.31	216.78	15.744		
21,400.00	10,418.00	22,390.61	12,362.08	185.04	181.09	124.75	-10,166.09	-3,425.77	3,434.80	3,218.21	216.58	15.859		
21,500.00	10,418.00	22,390.61	12,362.08	186.65	181.09	124.75	-10,166.09	-3,425.77	3,459.26	3,243.03	216.23	15.998		
21,600.00	10,418.00	22,390.61	12,362.08	188.27	181.09	124.75	-10,166.09	-3,425.77	3,486.41	3,270.69	215.73	16.161		
21,700.00	10,418.00	22,390.61	12,362.08	189.89	181.09	124.75	-10,166.09	-3,425.77	3,516.21	3,301.12	215.09	16.348		
21,800.00	10,418.00	22,390.61	12,362.08	191.50	181.09	124.75	-10,166.09	-3,425.77	3,548.57	3,334.25	214.32	16.558		
21,900.00	10,418.00	22,390.61	12,362.08	193.12	181.09	124.75	-10,166.09	-3,425.77	3,583.43	3,370.00	213.43	16.790		
21,923.68	10,418.00	22,390.61	12,362.08	193.51	181.09	124.75	-10,166.09	-3,425.77	3,592.04	3,378.84	213.20	16.848		

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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		
0.00	0.00	0.50	0.50	0.00	0.00	46.62	540.14	571.54	786.39					
100.00	100.00	100.50	100.50	0.13	0.15	46.62	540.14	571.54	786.39	786.19	0.20	3,994.783		
200.00	200.00	201.38	201.38	0.48	0.33	46.62	540.13	571.54	786.38	785.80	0.58	1,347.360		
300.00	300.00	308.64	308.64	0.84	0.70	46.62	539.68	571.05	785.76	784.66	1.09	717.779		
400.00	400.00	412.68	412.67	1.20	1.06	46.60	538.95	569.87	784.45	782.84	1.60	488.911		
500.00	500.00	517.60	517.57	1.56	1.44	46.54	538.18	567.97	782.63	780.51	2.12	369.076		
600.00	600.00	628.64	628.56	1.92	1.84	46.48	536.65	565.15	779.85	777.20	2.65	293.942		
700.00	700.00	730.62	730.47	2.28	2.21	46.44	534.36	561.86	775.97	772.80	3.16	245.271		
800.00	800.00	830.34	830.11	2.63	2.57	46.40	532.07	558.75	772.13	768.46	3.67	210.442		
900.00	900.00	927.15	926.85	2.99	2.92	46.41	529.47	556.17	768.35	764.18	4.17	184.385		
1,000.00	1,000.00	1,030.44	1,030.07	3.35	3.29	46.40	527.17	553.58	765.00	760.32	4.68	163.414		
1,100.00	1,100.00	1,130.20	1,129.75	3.71	3.65	46.33	525.10	550.04	761.01	755.82	5.19	146.692		
1,200.00	1,200.00	1,228.74	1,228.23	4.07	4.01	46.25	523.35	546.78	757.38	751.69	5.69	133.076		
1,300.00	1,300.00	1,329.92	1,329.32	4.43	4.38	46.15	521.66	543.09	753.60	747.40	6.20	121.522		
1,400.00	1,400.00	1,426.53	1,425.86	4.79	4.53	46.04	520.32	539.64	750.06	743.50	6.56	114.289		
1,500.00	1,500.00	1,525.88	1,525.14	5.14	4.57	45.92	519.13	536.09	746.66	739.81	6.85	109.015		
1,600.00	1,600.00	1,625.34	1,624.54	5.50	4.63	45.80	518.03	532.72	743.46	736.30	7.16	103.841		
1,700.00	1,700.00	1,723.33	1,722.47	5.86	4.72	45.68	516.94	529.43	740.27	732.78	7.49	98.826		
1,800.00	1,800.00	1,820.84	1,819.93	6.22	4.84	45.58	516.05	526.52	737.50	729.66	7.84	94.073		
1,900.00	1,900.00	1,920.49	1,919.54	6.58	4.97	45.49	515.03	523.91	734.91	726.71	8.21	89.560		
2,000.00	2,000.00	2,020.13	2,019.15	6.94	5.13	45.49	513.24	522.07	732.34	723.75	8.59	85.302		
2,100.00	2,100.00	2,118.55	2,117.53	7.29	5.30	45.54	511.07	520.83	729.89	720.92	8.98	81.322		
2,197.92	2,197.91	2,208.65	2,207.61	7.64	5.48	119.52	509.40	520.15	728.72	719.36	9.36	77.891 CC		
2,200.00	2,199.99	2,210.55	2,209.52	7.65	5.48	119.53	509.38	520.14	728.72	719.36	9.36	77.824 ES		
2,300.00	2,299.91	2,305.31	2,304.26	7.99	5.67	119.82	508.34	520.01	729.80	720.04	9.76	74.790		
2,400.00	2,399.69	2,402.44	2,401.39	8.34	5.88	120.26	507.70	520.18	732.75	722.59	10.16	72.102		
2,500.00	2,499.27	2,497.55	2,496.50	8.70	6.08	120.83	507.29	520.73	737.55	726.98	10.57	69.773		
2,600.00	2,598.57	2,593.06	2,592.01	9.06	6.30	121.54	507.22	521.70	744.37	733.38	10.99	67.760		
2,700.00	2,697.54	2,707.73	2,706.66	9.42	6.58	122.63	506.13	522.62	752.02	740.58	11.44	65.726		
2,771.79	2,768.33	2,793.56	2,792.42	9.69	6.80	123.69	502.68	523.15	757.05	745.26	11.78	64.262		
2,800.00	2,796.11	2,819.96	2,818.78	9.79	6.87	124.08	501.20	523.39	759.00	747.10	11.91	63.747		
2,900.00	2,894.56	2,912.43	2,911.05	10.18	7.13	125.48	495.41	524.79	766.34	753.98	12.35	62.040		
3,000.00	2,993.02	3,003.18	3,001.64	10.56	7.38	126.84	490.45	527.22	775.53	762.73	12.80	60.587		
3,100.00	3,091.48	3,120.40	3,118.62	10.95	7.72	128.55	483.36	529.39	784.30	771.00	13.30	58.980		
3,200.00	3,189.94	3,257.61	3,255.33	11.35	8.14	130.52	471.84	527.92	789.95	776.13	13.82	57.159		
3,300.00	3,288.39	3,351.00	3,348.23	11.75	8.44	131.83	462.91	524.64	793.39	779.09	14.30	55.489		
3,400.00	3,386.85	3,445.00	3,441.85	12.16	8.74	133.08	454.98	521.78	798.24	783.46	14.78	54.010		
3,500.00	3,485.31	3,527.12	3,523.74	12.57	9.01	134.12	449.21	520.12	805.00	789.76	15.25	52.803		
3,600.00	3,583.77	3,641.78	3,638.14	12.98	9.38	135.43	442.41	516.71	811.95	796.19	15.76	51.525		
3,700.00	3,682.22	3,728.00	3,724.18	13.39	9.66	136.28	438.57	512.58	818.32	802.09	16.23	50.419		
3,800.00	3,780.68	3,823.00	3,819.07	13.81	9.96	137.09	436.27	508.68	826.38	809.67	16.71	49.443		
3,900.00	3,879.14	3,902.42	3,898.46	14.23	10.22	137.77	434.95	506.87	836.45	819.28	17.17	48.720		
4,000.00	3,977.60	4,014.91	4,010.83	14.65	10.59	138.91	430.29	505.51	846.76	829.07	17.69	47.862		
4,100.00	4,076.05	4,120.19	4,115.79	15.07	10.95	140.17	422.25	504.04	855.75	837.54	18.20	47.008		
4,200.00	4,174.51	4,207.12	4,202.47	15.50	11.24	141.19	415.76	503.17	865.53	846.85	18.68	46.333		
4,300.00	4,272.97	4,302.85	4,298.05	15.93	11.57	142.18	410.49	502.31	876.45	857.27	19.17	45.711		
4,400.00	4,371.43	4,419.35	4,414.40	16.36	11.96	143.25	405.11	499.63	886.66	866.95	19.71	44.981		
4,500.00	4,469.88	4,524.11	4,518.95	16.79	12.32	144.15	400.17	495.35	895.37	875.15	20.22	44.272		
4,600.00	4,568.34	4,612.13	4,606.84	17.22	12.63	144.85	396.93	491.92	904.81	884.11	20.70	43.704		
4,700.00	4,666.80	4,698.36	4,693.00	17.65	12.92	145.52	394.14	489.74	915.83	894.66	21.17	43.252		
4,800.00	4,765.25	4,790.09	4,784.67	18.08	13.23	146.22	391.34	488.33	928.00	906.34	21.66	42.849		
4,900.00	4,863.71	4,884.83	4,879.38	18.52	13.55	146.90	389.03	487.27	940.89	918.74	22.15	42.484		

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 503H
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 503H	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		
5,000.00	4,962.17	4,981.39	4,975.92	18.95	13.88	147.55	387.18	486.26	954.13	931.49	22.64	42.141		
5,100.00	5,060.63	5,083.32	5,077.83	19.39	14.23	148.23	385.08	485.31	967.58	944.42	23.15	41.793		
5,200.00	5,159.08	5,230.42	5,224.70	19.83	14.74	149.33	378.56	481.12	978.87	955.10	23.77	41.179		
5,300.00	5,257.54	5,335.06	5,328.89	20.27	15.12	150.23	370.78	475.53	987.06	962.77	24.29	40.637		
5,400.00	5,356.00	5,430.12	5,423.53	20.71	15.47	151.05	363.41	470.47	995.43	970.64	24.79	40.153		
5,500.00	5,454.46	5,524.97	5,517.97	21.15	15.82	151.87	355.89	465.84	1,004.40	979.11	25.29	39.712		
5,600.00	5,552.91	5,626.18	5,618.71	21.59	16.19	152.75	347.45	460.92	1,013.53	987.73	25.81	39.274		
5,700.00	5,651.37	5,717.60	5,709.73	22.03	16.53	153.53	339.98	456.71	1,023.17	996.87	26.30	38.903		
5,800.00	5,749.83	5,810.53	5,802.30	22.47	16.87	154.30	332.74	453.01	1,033.69	1,006.90	26.80	38.575		
5,900.00	5,848.29	5,920.58	5,911.83	22.91	17.28	155.23	323.27	448.34	1,044.04	1,016.70	27.34	38.193		
6,000.00	5,946.74	6,023.97	6,014.59	23.36	17.67	156.15	312.98	443.18	1,053.70	1,025.84	27.86	37.820		
6,100.00	6,045.20	6,120.91	6,110.91	23.80	18.04	157.01	303.19	438.39	1,063.63	1,035.26	28.37	37.489		
6,200.00	6,143.66	6,220.44	6,209.78	24.24	18.42	157.89	292.94	433.39	1,073.71	1,044.82	28.89	37.166		
6,300.00	6,242.12	6,313.32	6,302.03	24.69	18.77	158.71	283.15	428.82	1,084.12	1,054.73	29.39	36.886		
6,400.00	6,340.57	6,404.15	6,392.38	25.13	19.12	159.44	274.60	425.00	1,095.55	1,065.67	29.89	36.657		
6,500.00	6,439.03	6,498.57	6,486.42	25.58	19.47	160.12	267.06	421.26	1,107.52	1,077.13	30.39	36.446		
6,600.00	6,537.49	6,590.17	6,577.81	26.02	19.81	160.66	261.82	418.00	1,120.18	1,089.30	30.88	36.277		
6,700.00	6,635.95	6,682.68	6,670.17	26.47	20.14	161.15	257.31	415.22	1,133.53	1,102.16	31.37	36.135		
6,757.61	6,692.67	6,736.53	6,723.94	26.73	20.34	161.44	254.66	413.80	1,141.47	1,109.82	31.65	36.062		
6,800.00	6,734.44	6,777.21	6,764.55	26.91	20.48	161.68	252.62	412.81	1,147.19	1,115.33	31.87	36.001		
6,900.00	6,833.29	6,871.53	6,858.73	27.34	20.82	162.19	247.84	410.65	1,159.15	1,126.80	32.36	35.823		
7,000.00	6,932.50	6,965.52	6,952.58	27.75	21.16	162.64	243.14	409.09	1,169.32	1,136.48	32.85	35.601		
7,100.00	7,032.01	7,070.61	7,057.56	28.14	21.54	163.04	238.65	407.18	1,176.92	1,143.55	33.37	35.271		
7,200.00	7,131.74	7,168.00	7,154.87	28.51	21.88	163.33	235.15	405.07	1,181.72	1,147.86	33.86	34.902		
7,300.00	7,231.62	7,255.90	7,242.73	28.86	22.19	163.51	233.06	403.82	1,184.78	1,150.47	34.31	34.533		
7,400.00	7,331.60	7,345.45	7,332.27	29.19	22.50	163.61	231.55	403.51	1,186.41	1,151.65	34.76	34.133		
7,429.40	7,361.00	7,373.59	7,360.40	29.28	22.60	89.80	231.11	403.52	1,186.53	1,151.64	34.90	34.003		
7,500.00	7,431.60	7,441.35	7,428.15	29.50	22.83	89.85	230.06	403.67	1,186.68	1,151.46	35.22	33.690		
7,600.00	7,531.60	7,539.32	7,526.12	29.82	23.17	89.92	228.60	404.13	1,187.15	1,151.45	35.70	33.258		
7,700.00	7,631.60	7,637.73	7,624.51	30.14	23.50	89.99	227.12	404.64	1,187.66	1,151.49	36.17	32.836		
7,800.00	7,731.60	7,733.67	7,720.44	30.45	23.82	90.06	225.71	405.43	1,188.49	1,151.85	36.63	32.444		
7,900.00	7,831.60	7,828.90	7,815.65	30.77	24.14	90.11	224.62	406.52	1,189.63	1,152.54	37.09	32.074		
8,000.00	7,931.60	7,925.39	7,912.13	31.09	24.46	90.16	223.75	408.06	1,191.23	1,153.68	37.55	31.724		
8,100.00	8,031.60	8,022.98	8,009.70	31.41	24.78	90.18	223.21	409.74	1,192.96	1,154.94	38.01	31.383		
8,200.00	8,131.60	8,120.58	8,107.28	31.73	25.09	90.19	222.98	411.72	1,194.98	1,156.51	38.47	31.060		
8,300.00	8,231.60	8,218.05	8,204.73	32.06	25.40	90.18	223.30	413.80	1,197.12	1,158.19	38.93	30.750		
8,400.00	8,331.60	8,320.89	8,307.54	32.38	25.72	90.13	224.30	416.16	1,199.41	1,160.00	39.41	30.434		
8,500.00	8,431.60	8,420.17	8,406.79	32.70	26.03	90.06	225.67	418.12	1,201.39	1,161.52	39.87	30.130		
8,600.00	8,531.60	8,515.57	8,502.15	33.03	26.33	89.99	227.31	420.31	1,203.68	1,163.36	40.32	29.853		
8,700.00	8,631.60	8,616.80	8,603.33	33.35	26.64	89.89	229.21	422.84	1,206.18	1,165.39	40.79	29.568		
8,800.00	8,731.60	8,740.83	8,727.33	33.68	27.03	89.80	231.13	424.59	1,207.61	1,166.25	41.36	29.200		
8,900.00	8,831.60	8,843.63	8,830.12	34.00	27.36	89.77	231.93	424.87	1,207.88	1,166.05	41.84	28.872		
9,000.00	8,931.60	8,947.08	8,933.57	34.33	27.68	89.71	233.08	424.91	1,207.93	1,165.61	42.32	28.544		
9,100.00	9,031.60	9,048.73	9,035.20	34.66	28.01	89.62	234.99	424.61	1,207.65	1,164.85	42.79	28.220		
9,172.57	9,104.17	9,118.21	9,104.67	34.89	28.23	89.56	236.34	424.51	1,207.55	1,164.42	43.12	28.001		
9,200.00	9,131.60	9,144.15	9,130.61	34.98	28.31	89.53	236.82	424.52	1,207.56	1,164.32	43.25	27.922		
9,300.00	9,231.60	9,238.96	9,225.39	35.31	28.61	89.45	238.54	424.83	1,207.91	1,164.21	43.70	27.641		
9,400.00	9,331.60	9,336.79	9,323.20	35.64	28.92	89.34	240.87	425.51	1,208.62	1,164.46	44.16	27.367		
9,500.00	9,431.60	9,439.60	9,425.98	35.97	29.25	89.22	243.43	426.14	1,209.27	1,164.62	44.65	27.085		
9,600.00	9,531.60	9,539.59	9,525.94	36.30	29.57	89.11	245.75	426.55	1,209.71	1,164.59	45.12	26.811		
9,700.00	9,631.60	9,634.35	9,620.66	36.63	29.88	89.00	248.12	427.16	1,210.39	1,164.82	45.57	26.558		
9,800.00	9,731.60	9,723.03	9,709.31	36.96	30.16	88.90	250.18	428.30	1,211.73	1,165.73	46.00	26.339		

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 503H
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 503H	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				
9,900.00	9,831.60	9,808.36	9,794.59	37.30	30.44	88.82	251.90	430.38	1,214.21	1,167.79	46.42	26.158				
9,913.44	9,845.04	9,819.77	9,806.00	37.34	30.47	88.81	252.11	430.73	1,214.64	1,168.16	46.47	26.136				
9,950.00	9,881.57	9,850.77	9,836.98	37.46	30.57	-90.56	252.68	431.80	1,215.92	1,169.30	46.62	26.082				
10,000.00	9,931.27	9,903.12	9,889.28	37.60	30.75	-90.67	253.36	433.71	1,217.84	1,170.98	46.86	25.990				
10,050.00	9,980.31	9,957.80	9,943.94	37.74	30.93	-90.98	253.35	435.50	1,219.64	1,172.53	47.10	25.893				
10,100.00	10,028.32	10,003.61	9,989.72	37.87	31.08	-91.37	252.92	436.95	1,221.57	1,174.26	47.31	25.820				
10,150.00	10,074.94	10,048.99	10,035.07	37.99	31.24	-91.87	252.24	438.47	1,223.86	1,176.35	47.51	25.758				
10,200.00	10,119.80	10,102.39	10,088.43	38.10	31.42	-92.66	251.11	440.13	1,226.48	1,178.72	47.75	25.683				
10,250.00	10,162.58	10,152.48	10,138.48	38.19	31.59	-93.51	249.69	441.39	1,229.43	1,181.45	47.98	25.624				
10,300.00	10,202.93	10,195.26	10,181.23	38.28	31.74	-94.26	248.34	442.35	1,233.09	1,184.91	48.17	25.597				
10,350.00	10,240.57	10,235.44	10,221.38	38.35	31.88	-94.97	247.00	443.22	1,237.73	1,189.37	48.36	25.596				
10,400.00	10,275.19	10,267.00	10,252.92	38.42	31.99	-95.39	245.97	443.92	1,243.66	1,195.15	48.50	25.641				
10,450.00	10,306.54	10,295.16	10,281.05	38.47	32.09	-95.63	245.15	444.64	1,251.14	1,202.51	48.64	25.724				
10,500.00	10,334.38	10,320.13	10,306.01	38.52	32.18	-95.63	244.50	445.34	1,260.34	1,211.58	48.76	25.849				
10,550.00	10,358.49	10,346.12	10,331.98	38.56	32.27	-95.54	243.90	446.11	1,271.33	1,222.45	48.89	26.006				
10,600.00	10,378.70	10,372.22	10,358.06	38.60	32.36	-95.32	243.41	446.76	1,284.10	1,235.08	49.02	26.197				
10,650.00	10,394.84	10,392.92	10,378.76	38.64	32.43	-94.70	243.10	447.19	1,298.69	1,249.57	49.12	26.438				
10,700.00	10,406.80	10,408.20	10,394.04	38.68	32.48	-93.64	242.91	447.44	1,315.16	1,265.96	49.21	26.728				
10,750.00	10,414.49	10,418.08	10,403.92	38.74	32.51	-92.13	242.80	447.58	1,333.45	1,284.19	49.27	27.067				
10,800.00	10,417.84	10,422.64	10,408.47	38.82	32.53	-90.16	242.76	447.64	1,353.46	1,304.15	49.30	27.452				
10,813.44	10,418.00	10,422.97	10,408.80	38.85	32.53	-89.55	242.76	447.64	1,359.10	1,309.80	49.31	27.564				
10,900.00	10,418.00	10,423.87	10,409.70	39.04	32.53	-89.59	242.75	447.65	1,398.02	1,348.67	49.34	28.332				
11,000.00	10,418.00	10,424.87	10,410.71	39.34	32.54	-89.64	242.74	447.66	1,448.13	1,398.73	49.39	29.319				
11,100.00	10,418.00	10,425.84	10,411.68	39.72	32.54	-89.68	242.74	447.68	1,503.22	1,453.78	49.44	30.402				
11,200.00	10,418.00	10,426.78	10,412.61	40.19	32.54	-89.73	242.73	447.69	1,562.78	1,513.28	49.50	31.573				
11,300.00	10,418.00	10,427.68	10,413.51	40.72	32.55	-89.77	242.72	447.70	1,626.31	1,576.76	49.55	32.821				
11,400.00	10,418.00	10,428.55	10,414.39	41.32	32.55	-89.81	242.71	447.71	1,693.37	1,643.76	49.60	34.137				
11,500.00	10,418.00	10,427.00	10,412.84	41.98	32.55	-89.74	242.73	447.69	1,763.55	1,713.90	49.65	35.520				
11,600.00	10,418.00	12,771.71	11,784.94	42.70	45.61	-138.92	-1,063.78	421.14	1,813.71	1,764.05	49.65	36.527				
11,700.00	10,418.00	12,895.77	11,787.91	43.47	46.84	-138.94	-1,187.76	424.04	1,816.44	1,765.75	50.70	35.829				
11,800.00	10,418.00	13,013.27	11,789.65	44.29	48.05	-138.97	-1,305.24	425.51	1,817.72	1,765.97	51.75	35.124				
11,900.00	10,418.00	13,118.38	11,789.60	45.15	49.18	-138.95	-1,410.33	427.48	1,818.26	1,765.47	52.79	34.444				
12,000.00	10,418.00	13,203.51	11,790.56	46.06	50.12	-138.96	-1,495.44	428.50	1,819.24	1,765.55	53.69	33.885				
12,100.00	10,418.00	13,282.00	11,791.91	47.01	51.01	-138.98	-1,573.91	429.77	1,821.00	1,766.44	54.56	33.375				
12,200.00	10,418.00	13,358.01	11,794.17	47.99	51.89	-139.01	-1,649.87	431.33	1,824.01	1,768.58	55.43	32.904				
12,300.00	10,418.00	13,443.07	11,798.58	49.02	52.89	-139.08	-1,734.80	432.82	1,828.41	1,772.03	56.38	32.431				
12,400.00	10,418.00	13,531.57	11,803.71	50.07	53.95	-139.17	-1,823.13	434.50	1,833.39	1,776.03	57.37	31.960				
12,500.00	10,418.00	13,616.97	11,808.98	51.16	55.00	-139.24	-1,908.34	436.66	1,839.08	1,780.73	58.35	31.518				
12,600.00	10,418.00	13,698.19	11,814.42	52.28	56.01	-139.31	-1,989.34	439.30	1,845.64	1,786.32	59.32	31.114				
12,700.00	10,418.00	13,778.80	11,820.68	53.42	57.02	-139.38	-2,069.65	442.31	1,853.31	1,793.02	60.29	30.739				
12,800.00	10,418.00	13,867.48	11,828.19	54.59	58.16	-139.47	-2,157.93	445.97	1,861.79	1,800.44	61.35	30.346				
12,900.00	10,418.00	14,039.43	11,838.06	55.78	60.39	-139.48	-2,329.28	455.88	1,869.73	1,806.41	63.32	29.526				
13,000.00	10,418.00	14,213.41	11,839.60	57.00	62.69	-139.43	-2,503.14	461.10	1,871.03	1,805.65	65.38	28.620				
13,100.00	10,418.00	14,299.21	11,841.56	58.24	63.84	-139.47	-2,588.92	461.60	1,872.48	1,805.98	66.50	28.156				
13,200.00	10,418.00	14,379.42	11,844.52	59.50	64.92	-139.56	-2,669.07	461.25	1,874.42	1,806.86	67.56	27.746				
13,300.00	10,418.00	14,445.00	11,848.78	60.77	65.82	-139.67	-2,734.51	460.86	1,878.26	1,809.82	68.44	27.444				
13,400.00	10,418.00	14,494.70	11,853.17	62.07	66.51	-139.76	-2,784.02	460.92	1,884.30	1,815.15	69.15	27.248				
13,500.00	10,418.00	14,577.04	11,861.80	63.38	67.65	-139.92	-2,865.89	462.20	1,892.57	1,822.39	70.18	26.966				
13,600.00	10,418.00	14,695.85	11,872.19	64.71	69.31	-140.10	-2,984.23	464.19	1,899.63	1,828.01	71.62	26.524				
13,700.00	10,418.00	14,768.25	11,878.84	66.05	70.33	-140.22	-3,056.31	465.62	1,907.37	1,834.79	72.58	26.280				
13,800.00	10,418.00	15,014.77	11,900.31	67.40	73.84	-140.65	-3,301.78	467.17	1,916.39	1,841.12	75.27	25.461				
13,900.00	10,418.00	15,106.00	11,903.49	68.77	75.15	-140.78	-3,392.93	465.17	1,917.11	1,840.66	76.46	25.074				

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 503H
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 503H	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				
14,000.00	10,418.00	15,154.78	11,905.74	70.15	75.85	-140.84	-3,441.65	464.62	1,919.62	1,842.40	77.23	24.857				
14,100.00	10,418.00	15,200.00	11,908.98	71.54	76.51	-140.90	-3,486.75	465.25	1,925.28	1,847.35	77.93	24.706				
14,200.00	10,418.00	15,386.58	11,919.25	72.95	79.22	-141.07	-3,673.00	468.07	1,929.81	1,849.60	80.21	24.058				
14,300.00	10,418.00	15,538.52	11,919.46	74.36	81.45	-141.05	-3,824.90	470.76	1,930.14	1,847.90	82.23	23.472				
14,400.00	10,418.00	15,652.48	11,919.59	75.78	83.12	-141.07	-3,938.86	470.91	1,929.71	1,845.92	83.79	23.030				
14,500.00	10,418.00	15,752.34	11,921.08	77.21	84.59	-141.18	-4,038.67	468.35	1,928.64	1,843.52	85.12	22.658				
14,600.00	10,418.00	15,862.00	11,921.79	78.65	86.21	-141.34	-4,148.19	463.20	1,925.40	1,838.89	86.51	22.257				
14,671.96	10,418.00	15,906.33	11,921.88	79.69	86.88	-141.39	-4,192.47	461.40	1,923.88	1,836.69	87.19	22.065				
14,700.00	10,418.00	15,914.16	11,922.16	80.10	86.99	-141.40	-4,200.30	461.20	1,924.03	1,836.67	87.36	22.025				
14,800.00	10,418.00	15,956.00	11,924.98	81.55	87.62	-141.48	-4,242.03	460.65	1,927.12	1,839.08	88.04	21.890				
14,900.00	10,418.00	15,999.66	11,929.11	83.02	88.27	-141.56	-4,285.49	460.66	1,933.21	1,844.53	88.68	21.799				
15,000.00	10,418.00	16,085.49	11,937.26	84.49	89.56	-141.72	-4,370.93	461.32	1,940.53	1,850.74	89.79	21.612				
15,100.00	10,418.00	16,397.83	11,944.05	85.96	94.28	-141.91	-4,682.75	461.50	1,939.31	1,845.73	93.58	20.724				
15,200.00	10,418.00	16,453.04	11,942.96	87.45	95.12	-141.90	-4,737.94	461.56	1,937.22	1,842.65	94.58	20.483				
15,237.11	10,418.00	16,472.62	11,942.86	88.00	95.42	-141.90	-4,757.52	461.73	1,937.05	1,842.13	94.93	20.406				
15,300.00	10,418.00	16,523.00	11,943.38	88.94	96.18	-141.90	-4,807.89	462.52	1,937.68	1,841.97	95.71	20.246				
15,400.00	10,418.00	16,559.32	11,944.44	90.43	96.74	-141.91	-4,844.19	463.37	1,940.27	1,843.87	96.40	20.127				
15,500.00	10,418.00	16,618.00	11,947.44	91.93	97.64	-141.94	-4,902.76	465.09	1,945.40	1,848.09	97.31	19.992				
15,600.00	10,418.00	16,760.14	11,954.27	93.43	99.82	-142.01	-5,044.68	468.68	1,950.03	1,850.77	99.26	19.645				
15,700.00	10,418.00	16,850.64	11,957.74	94.94	101.21	-142.04	-5,135.08	471.03	1,954.06	1,853.46	100.60	19.425				
15,800.00	10,418.00	16,929.20	11,960.75	96.46	102.42	-142.04	-5,213.53	474.09	1,958.89	1,857.08	101.81	19.242				
15,900.00	10,418.00	17,001.92	11,964.64	97.98	103.55	-142.06	-5,286.08	477.15	1,965.06	1,862.16	102.91	19.095				
16,000.00	10,418.00	17,090.25	11,969.11	99.50	104.92	-142.04	-5,374.13	482.53	1,972.19	1,867.91	104.28	18.913				
16,100.00	10,418.00	17,262.77	11,975.22	101.03	107.59	-141.96	-5,546.20	492.25	1,977.90	1,871.02	106.88	18.505				
16,200.00	10,418.00	17,372.00	11,979.10	102.56	109.29	-142.01	-5,655.33	494.24	1,981.19	1,872.75	108.45	18.269				
16,300.00	10,418.00	17,414.48	11,981.62	104.09	109.95	-142.03	-5,697.71	495.70	1,986.54	1,877.38	109.16	18.199				
16,400.00	10,418.00	17,506.69	11,987.12	105.63	111.39	-142.08	-5,789.70	498.89	1,992.76	1,882.26	110.50	18.034				
16,500.00	10,418.00	17,680.36	11,996.77	107.17	114.11	-142.22	-5,963.02	501.86	1,997.70	1,884.88	112.82	17.707				
16,600.00	10,418.00	17,750.00	12,000.61	108.72	115.20	-142.28	-6,032.54	502.88	2,002.04	1,888.19	113.85	17.584				
16,700.00	10,418.00	17,909.48	12,009.18	110.26	117.69	-142.46	-6,191.76	503.19	2,006.33	1,890.46	115.88	17.315				
16,800.00	10,418.00	18,048.81	12,015.09	111.81	119.86	-142.73	-6,330.83	497.13	2,006.34	1,888.90	117.44	17.084				
16,866.12	10,418.00	18,104.39	12,017.50	112.84	120.73	-142.85	-6,386.28	494.27	2,006.17	1,888.02	118.14	16.981				
16,900.00	10,418.00	18,127.00	12,018.55	113.37	121.08	-142.90	-6,408.84	493.15	2,006.22	1,887.77	118.45	16.938				
17,000.00	10,418.00	18,177.85	12,021.49	114.92	121.88	-143.01	-6,459.56	491.12	2,007.93	1,888.74	119.18	16.847				
17,100.00	10,418.00	18,293.83	12,030.28	116.48	123.70	-143.25	-6,575.17	488.24	2,012.14	1,891.61	120.53	16.695				
17,200.00	10,418.00	18,465.02	12,038.89	118.04	126.38	-143.62	-6,745.91	479.94	2,012.75	1,890.47	122.28	16.460				
17,300.00	10,418.00	18,542.45	12,040.05	119.61	127.59	-143.73	-6,823.24	476.95	2,011.30	1,887.94	123.35	16.305				
17,304.35	10,418.00	18,543.89	12,040.07	119.68	127.62	-143.73	-6,824.68	476.94	2,011.30	1,887.91	123.39	16.301				
17,400.00	10,418.00	18,598.00	12,041.65	121.17	128.47	-143.75	-6,878.75	477.80	2,013.20	1,888.91	124.29	16.198				
17,500.00	10,418.00	18,620.25	12,042.68	122.74	128.82	-143.75	-6,900.96	478.76	2,017.57	1,892.84	124.73	16.175				
17,600.00	10,418.00	18,692.00	12,046.24	124.31	129.96	-143.73	-6,972.51	482.72	2,024.23	1,898.39	125.84	16.085				
17,700.00	10,418.00	18,745.00	12,049.33	125.88	130.81	-143.71	-7,025.27	486.67	2,032.72	1,906.07	126.65	16.050				
17,800.00	10,418.00	18,919.65	12,060.26	127.46	133.59	-143.66	-7,199.13	498.40	2,041.67	1,912.25	129.41	15.776				
17,900.00	10,418.00	19,023.94	12,064.35	129.04	135.25	-143.62	-7,303.18	504.29	2,047.59	1,916.53	131.06	15.623				
18,000.00	10,418.00	19,222.37	12,072.20	130.61	138.40	-143.81	-7,501.36	503.73	2,049.17	1,915.60	133.56	15.343				
18,100.00	10,418.00	19,325.01	12,075.90	132.19	140.02	-143.93	-7,603.92	502.13	2,050.59	1,915.70	134.89	15.202				
18,200.00	10,418.00	19,392.24	12,077.79	133.78	141.09	-143.99	-7,671.12	501.34	2,051.78	1,915.90	135.88	15.100				
18,300.00	10,418.00	19,448.00	12,080.88	135.36	141.98	-144.06	-7,726.79	501.32	2,055.48	1,918.81	136.68	15.039				
18,400.00	10,418.00	19,522.77	12,085.78	136.94	143.17	-144.13	-7,801.39	502.38	2,060.95	1,923.25	137.69	14.968				
18,500.00	10,418.00	19,774.69	12,086.44	138.53	147.20	-144.02	-8,053.07	510.04	2,061.35	1,920.03	141.32	14.587				
18,600.00	10,418.00	19,902.97	12,083.20	140.12	149.25	-143.98	-8,181.30	511.01	2,059.19	1,916.00	143.19	14.381				
18,700.00	10,418.00	20,045.99	12,077.17	141.71	151.53	-143.95	-8,324.17	509.44	2,054.28	1,909.15	145.13	14.154				

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 503H
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 503H	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		
18,800.00	10,418.00	20,109.00	12,074.78	143.30	152.53	-143.93	-8,387.14	509.00	2,050.18	1,903.85	146.34	14.010		
18,900.00	10,418.00	20,172.69	12,073.45	144.89	153.55	-143.92	-8,450.81	509.00	2,047.87	1,900.37	147.50	13.884		
18,987.97	10,418.00	20,229.96	12,072.99	146.29	154.47	-143.92	-8,508.09	509.44	2,047.19	1,898.70	148.49	13.787		
19,000.00	10,418.00	20,237.57	12,072.97	146.49	154.59	-143.92	-8,515.69	509.55	2,047.21	1,898.58	148.62	13.774		
19,100.00	10,418.00	20,302.39	12,073.15	148.08	155.63	-143.90	-8,580.49	511.20	2,048.32	1,898.57	149.75	13.679		
19,200.00	10,418.00	20,405.76	12,073.35	149.68	157.29	-143.83	-8,683.78	515.34	2,050.26	1,898.82	151.44	13.538		
19,300.00	10,418.00	20,524.61	12,073.21	151.27	159.20	-143.78	-8,802.58	518.82	2,051.25	1,897.95	153.30	13.380		
19,400.00	10,418.00	20,635.28	12,073.46	152.87	160.98	-143.75	-8,913.22	521.27	2,052.19	1,897.19	155.00	13.240		
19,500.00	10,418.00	20,800.52	12,068.70	154.47	163.63	-143.62	-9,078.32	525.37	2,050.63	1,893.14	157.49	13.021		
19,600.00	10,418.00	20,864.00	12,065.42	156.07	164.65	-143.53	-9,141.68	527.43	2,048.13	1,889.31	158.81	12.896		
19,700.00	10,418.00	20,958.00	12,062.22	157.67	166.17	-143.41	-9,235.54	531.36	2,047.29	1,886.77	160.52	12.754		
19,715.60	10,418.00	20,958.00	12,062.22	157.92	166.17	-143.41	-9,235.54	531.36	2,047.23	1,886.65	160.58	12.749		
19,800.00	10,418.00	21,050.13	12,061.33	159.28	167.65	-143.35	-9,327.62	534.06	2,047.59	1,885.52	162.07	12.634		
19,900.00	10,418.00	21,208.71	12,057.74	160.88	170.20	-143.33	-9,486.15	533.96	2,044.78	1,880.53	164.25	12.449		
20,000.00	10,418.00	21,277.87	12,056.38	162.48	171.31	-143.34	-9,555.30	533.25	2,042.08	1,876.63	165.45	12.342		
20,093.49	10,418.00	21,336.00	12,056.47	163.99	172.25	-143.36	-9,613.42	533.11	2,041.41	1,874.96	166.45	12.265		
20,100.00	10,418.00	21,336.00	12,056.47	164.09	172.25	-143.36	-9,613.42	533.11	2,041.42	1,874.95	166.47	12.263		
20,200.00	10,418.00	21,439.06	12,057.43	165.70	173.91	-143.39	-9,716.47	533.39	2,041.75	1,873.78	167.97	12.156		
20,300.00	10,418.00	21,542.70	12,057.90	167.30	175.58	-143.41	-9,820.11	533.99	2,041.87	1,872.37	169.50	12.047		
20,400.00	10,418.00	21,653.48	12,057.11	168.91	177.36	-143.38	-9,930.88	535.53	2,041.53	1,870.33	171.20	11.925		
20,500.00	10,418.00	21,743.86	12,055.41	170.52	178.82	-143.32	-10,021.21	537.97	2,041.05	1,868.30	172.76	11.815		
20,504.79	10,418.00	21,747.36	12,055.34	170.60	178.88	-143.32	-10,024.70	538.10	2,041.05	1,868.23	172.82	11.810		
20,600.00	10,418.00	21,821.48	12,053.68	172.13	181.94	-143.22	-10,098.71	541.84	2,041.64	1,866.58	175.06	11.663		
20,700.00	10,418.00	21,860.00	12,052.81	173.74	186.65	-143.17	-10,137.16	544.06	2,043.60	1,865.87	177.73	11.498 SF		
20,800.00	10,418.00	21,860.00	12,052.81	175.35	186.65	-143.17	-10,137.16	544.06	2,050.08	1,872.43	177.65	11.540		
20,900.00	10,418.00	21,860.00	12,052.81	176.97	186.65	-143.17	-10,137.16	544.06	2,061.40	1,884.21	177.20	11.634		
21,000.00	10,418.00	21,860.00	12,052.81	178.58	186.65	-143.17	-10,137.16	544.06	2,077.48	1,901.12	176.36	11.780		
21,100.00	10,418.00	21,860.00	12,052.81	180.19	186.65	-143.17	-10,137.16	544.06	2,098.20	1,923.01	175.19	11.976		
21,200.00	10,418.00	21,860.00	12,052.81	181.81	186.65	-143.17	-10,137.16	544.06	2,123.44	1,949.73	173.71	12.224		
21,300.00	10,418.00	21,860.00	12,052.81	183.42	186.65	-143.17	-10,137.16	544.06	2,153.03	1,981.07	171.96	12.521		
21,400.00	10,418.00	21,860.00	12,052.81	185.04	186.65	-143.17	-10,137.16	544.06	2,186.80	2,016.83	169.96	12.866		
21,500.00	10,418.00	21,860.00	12,052.81	186.65	186.65	-143.17	-10,137.16	544.06	2,224.55	2,056.77	167.78	13.259		
21,600.00	10,418.00	21,860.00	12,052.81	188.27	186.65	-143.17	-10,137.16	544.06	2,266.09	2,100.66	165.43	13.698		
21,700.00	10,418.00	21,860.00	12,052.81	189.89	186.65	-143.17	-10,137.16	544.06	2,311.21	2,148.24	162.97	14.182		
21,800.00	10,418.00	21,860.00	12,052.81	191.50	186.65	-143.17	-10,137.16	544.06	2,359.71	2,199.30	160.41	14.710		
21,900.00	10,418.00	21,860.00	12,052.81	193.12	186.65	-143.17	-10,137.16	544.06	2,411.38	2,253.58	157.80	15.281		
21,923.68	10,418.00	21,860.00	12,052.81	193.51	186.65	-143.17	-10,137.16	544.06	2,424.06	2,266.88	157.18	15.422		

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 503H
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 503H	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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
0.00	0.00	0.94	0.94	0.00	0.00	48.30	540.45	606.54	812.39							
100.00	100.00	105.21	105.21	0.13	0.15	48.26	540.70	605.94	812.12	811.93	0.19	4,205.868				
200.00	200.00	201.59	201.58	0.48	0.43	48.21	540.93	605.14	811.67	811.02	0.65	1,257.083				
300.00	300.00	304.84	304.82	0.84	0.80	48.15	541.36	604.42	811.42	810.26	1.16	699.981				
400.00	400.00	405.10	405.08	1.20	1.16	48.10	541.60	603.69	811.04	809.38	1.67	486.622				
500.00	500.00	508.20	508.18	1.56	1.53	48.01	542.06	602.30	810.34	808.16	2.18	371.468				
600.00	600.00	614.93	614.88	1.92	1.91	47.90	542.40	600.24	809.13	806.42	2.71	299.081				
700.00	700.00	722.19	722.10	2.28	2.30	47.77	542.15	597.20	806.86	803.63	3.23	249.778				
800.00	800.00	823.91	823.75	2.63	2.66	47.60	541.93	593.56	804.07	800.33	3.74	214.889				
900.00	900.00	927.03	926.80	2.99	3.04	47.45	541.52	589.84	801.14	796.88	4.26	188.203				
1,000.00	1,000.00	1,031.80	1,031.47	3.35	3.42	47.25	541.07	585.23	797.61	792.84	4.78	166.993				
1,100.00	1,100.00	1,128.02	1,127.60	3.71	3.77	47.07	540.52	580.98	793.98	788.71	5.27	150.521				
1,200.00	1,200.00	1,227.01	1,226.50	4.07	4.12	46.92	539.66	577.12	790.54	784.76	5.78	136.778				
1,300.00	1,300.00	1,323.21	1,322.65	4.43	4.47	46.80	538.89	573.80	787.48	781.20	6.28	125.441				
1,400.00	1,400.00	1,419.74	1,419.11	4.79	4.65	46.61	539.04	570.21	784.87	778.22	6.65	117.952				
1,500.00	1,500.00	1,514.13	1,513.44	5.14	4.68	46.44	539.39	567.11	782.76	775.82	6.94	112.857				
1,588.87	1,588.87	1,590.45	1,589.76	5.46	4.72	46.37	539.53	566.04	781.98	774.78	7.20	108.607 CC				
1,600.00	1,600.00	1,599.42	1,598.72	5.50	4.72	46.37	539.55	566.04	782.00	774.76	7.23	108.100 ES				
1,700.00	1,700.00	1,681.68	1,680.97	5.86	4.78	46.42	539.93	567.41	783.50	775.95	7.54	103.875				
1,800.00	1,800.00	1,772.25	1,771.48	6.22	4.85	46.56	540.60	570.81	786.72	778.86	7.87	99.968				
1,900.00	1,900.00	1,870.25	1,869.38	6.58	4.96	46.71	541.68	575.05	790.63	782.41	8.22	96.187				
2,000.00	2,000.00	1,972.97	1,972.01	6.94	5.09	46.84	543.15	579.17	794.53	785.94	8.59	92.488				
2,100.00	2,100.00	2,082.63	2,081.56	7.29	5.26	47.09	542.95	584.02	797.65	788.66	8.98	88.787				
2,200.00	2,199.99	2,190.03	2,188.72	7.65	5.45	121.45	539.42	589.97	800.17	790.79	9.38	85.298				
2,300.00	2,299.91	2,289.93	2,288.33	7.99	5.64	122.18	534.81	596.08	803.71	793.93	9.78	82.211				
2,400.00	2,399.69	2,381.61	2,379.74	8.34	5.83	122.95	530.80	601.96	809.21	799.04	10.17	79.557				
2,500.00	2,499.27	2,479.08	2,476.91	8.70	6.05	123.88	527.22	608.63	817.12	806.54	10.59	77.193				
2,600.00	2,598.57	2,580.58	2,578.09	9.06	6.29	124.98	523.07	615.56	826.54	815.52	11.02	75.030				
2,700.00	2,697.54	2,698.26	2,695.45	9.42	6.59	126.38	517.60	622.18	836.60	825.11	11.48	72.850				
2,771.79	2,768.33	2,780.65	2,777.66	9.69	6.81	127.40	513.18	625.16	843.59	831.77	11.82	71.362				
2,800.00	2,796.11	2,807.91	2,804.87	9.79	6.88	127.77	511.65	625.92	846.34	834.40	11.95	70.839				
2,900.00	2,894.56	2,899.75	2,896.54	10.18	7.14	129.00	506.74	628.68	856.70	844.31	12.39	69.143				
3,000.00	2,993.02	2,985.82	2,982.48	10.56	7.38	130.09	503.16	631.73	868.57	855.74	12.83	67.710				
3,100.00	3,091.48	3,076.53	3,073.09	10.95	7.64	131.15	500.58	635.34	881.88	868.60	13.28	66.421				
3,200.00	3,189.94	3,178.68	3,175.06	11.35	7.94	132.38	496.85	639.92	895.55	881.80	13.76	65.106				
3,300.00	3,288.39	3,276.63	3,272.72	11.75	8.24	133.64	491.52	645.13	909.44	895.21	14.23	63.909				
3,400.00	3,386.85	3,393.17	3,388.90	12.16	8.60	135.12	484.26	650.76	923.06	908.31	14.75	62.586				
3,500.00	3,485.31	3,517.66	3,513.13	12.57	8.99	136.54	476.35	652.34	933.79	918.51	15.28	61.122				
3,600.00	3,583.77	3,611.31	3,606.62	12.98	9.28	137.50	471.13	652.01	943.88	928.13	15.75	59.925				
3,700.00	3,682.22	3,698.97	3,694.20	13.39	9.55	138.33	467.40	652.08	955.20	938.99	16.21	58.911				
3,800.00	3,780.68	3,784.14	3,779.33	13.81	9.82	139.07	464.91	652.75	967.94	951.27	16.67	58.057				
3,900.00	3,879.14	3,886.53	3,881.62	14.23	10.15	140.02	461.06	654.97	981.80	964.63	17.17	57.180				
4,000.00	3,977.60	4,010.26	4,005.02	14.65	10.56	141.33	452.31	656.82	994.07	976.36	17.72	56.109				
4,100.00	4,076.05	4,100.00	4,094.52	15.07	10.85	142.25	445.69	657.31	1,005.68	987.49	18.19	55.279				
4,200.00	4,174.51	4,184.32	4,178.70	15.50	11.13	143.03	441.03	658.14	1,018.63	999.97	18.65	54.604				
4,300.00	4,272.97	4,285.05	4,279.33	15.93	11.47	143.86	436.80	659.38	1,032.48	1,013.33	19.15	53.903				
4,400.00	4,371.43	4,390.65	4,384.80	16.36	11.82	144.77	431.34	660.31	1,045.91	1,026.24	19.67	53.181				
4,500.00	4,469.88	4,484.00	4,477.97	16.79	12.14	145.59	425.77	661.43	1,059.60	1,039.44	20.15	52.580				
4,600.00	4,568.34	4,571.51	4,565.35	17.22	12.44	146.31	421.17	662.90	1,074.17	1,053.54	20.62	52.090				
4,700.00	4,666.80	4,672.01	4,665.69	17.65	12.78	147.12	416.09	664.74	1,089.16	1,068.03	21.13	51.557				
4,800.00	4,765.25	4,780.76	4,774.24	18.08	13.16	148.01	409.50	666.29	1,103.71	1,082.06	21.65	50.975				
4,900.00	4,863.71	4,885.70	4,878.96	18.52	13.52	148.85	402.84	666.91	1,117.61	1,095.44	22.17	50.415				

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 503H
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 503H	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	4,962.17	4,983.62	4,976.71	18.95	13.86	149.60	396.97	667.15	1,131.46	1,108.79	22.67	49.918				
5,100.00	5,060.63	5,085.43	5,078.36	19.39	14.21	150.32	391.37	667.22	1,145.45	1,122.27	23.17	49.427				
5,200.00	5,159.08	5,175.72	5,168.52	19.83	14.52	150.95	386.51	666.91	1,159.27	1,135.61	23.65	49.012				
5,300.00	5,257.54	5,250.82	5,243.50	20.27	14.78	151.47	382.43	668.13	1,175.05	1,150.96	24.09	48.786				
5,400.00	5,356.00	5,344.05	5,336.52	20.71	15.11	152.14	376.84	670.71	1,192.02	1,167.45	24.57	48.512				
5,500.00	5,454.46	5,441.15	5,433.40	21.15	15.46	152.83	370.85	673.62	1,209.35	1,184.28	25.07	48.238				
5,600.00	5,552.91	5,535.03	5,527.05	21.59	15.80	153.49	364.97	676.40	1,226.81	1,201.25	25.56	48.000				
5,700.00	5,651.37	5,612.00	5,603.80	22.03	16.07	154.01	360.20	679.69	1,245.67	1,219.69	25.99	47.934				
5,800.00	5,749.83	5,703.82	5,695.33	22.47	16.40	154.63	354.67	684.55	1,265.71	1,239.24	26.47	47.823				
5,900.00	5,848.29	5,799.57	5,790.78	22.91	16.75	155.23	349.16	689.67	1,286.00	1,259.04	26.96	47.701				
6,000.00	5,946.74	5,900.00	5,890.92	23.36	17.11	155.84	343.64	694.91	1,306.35	1,278.88	27.47	47.554				
6,100.00	6,045.20	5,997.09	5,987.72	23.80	17.46	156.42	338.07	699.88	1,326.70	1,298.73	27.97	47.433				
6,200.00	6,143.66	6,093.40	6,083.75	24.24	17.81	156.97	332.62	704.84	1,347.21	1,318.74	28.47	47.326				
6,300.00	6,242.12	6,191.71	6,181.78	24.69	18.17	157.51	327.21	709.84	1,367.80	1,338.83	28.97	47.213				
6,400.00	6,340.57	6,286.99	6,276.79	25.13	18.51	158.02	321.97	714.70	1,388.51	1,359.05	29.46	47.127				
6,500.00	6,439.03	6,379.78	6,369.31	25.58	18.85	158.51	316.82	719.67	1,409.58	1,379.63	29.95	47.071				
6,600.00	6,537.49	6,476.21	6,465.44	26.02	19.20	159.00	311.44	724.98	1,430.89	1,400.45	30.44	47.001				
6,700.00	6,635.95	6,572.79	6,561.73	26.47	19.56	159.47	306.23	730.34	1,452.35	1,421.41	30.94	46.938				
6,757.61	6,692.67	6,630.26	6,619.03	26.73	19.77	159.74	303.08	733.50	1,464.73	1,433.49	31.24	46.892				
6,800.00	6,734.44	6,680.81	6,669.43	26.91	19.95	160.02	300.31	736.14	1,473.54	1,442.05	31.49	46.801				
6,900.00	6,833.29	6,857.26	6,845.72	27.34	20.58	160.68	294.81	740.29	1,490.20	1,457.94	32.25	46.202				
7,000.00	6,932.50	6,951.68	6,940.12	27.75	20.87	160.87	295.30	739.97	1,501.70	1,468.98	32.72	45.892				
7,100.00	7,032.01	7,049.37	7,037.80	28.14	21.17	160.97	296.88	739.52	1,510.70	1,477.51	33.19	45.514				
7,200.00	7,131.74	7,146.57	7,134.99	28.51	21.47	161.03	298.53	739.17	1,517.34	1,483.68	33.66	45.081				
7,300.00	7,231.62	7,242.07	7,230.48	28.86	21.77	161.05	299.94	739.15	1,521.82	1,487.71	34.12	44.607				
7,400.00	7,331.60	7,342.89	7,331.29	29.19	22.09	161.04	301.20	739.16	1,523.86	1,489.27	34.59	44.057				
7,429.40	7,361.00	7,371.52	7,359.92	29.28	22.18	87.20	301.50	739.17	1,524.00	1,489.27	34.72	43.890				
7,500.00	7,431.60	7,439.12	7,427.51	29.50	22.40	87.18	302.08	739.29	1,524.14	1,489.10	35.04	43.494				
7,600.00	7,531.60	7,534.75	7,523.14	29.82	22.71	87.16	302.55	739.75	1,524.65	1,489.15	35.50	42.949				
7,700.00	7,631.60	7,631.86	7,620.25	30.14	23.04	87.15	302.83	740.39	1,525.32	1,489.36	35.96	42.412				
7,800.00	7,731.60	7,725.40	7,713.78	30.45	23.35	87.15	302.91	741.32	1,526.32	1,489.90	36.42	41.908				
7,900.00	7,831.60	7,816.98	7,805.35	30.77	23.67	87.14	303.21	742.66	1,527.80	1,490.93	36.87	41.437				
8,000.00	7,931.60	7,908.90	7,897.26	31.09	23.98	87.13	303.58	744.57	1,529.90	1,492.57	37.32	40.992				
8,100.00	8,031.60	8,006.64	7,994.97	31.41	24.31	87.12	304.01	746.89	1,532.29	1,494.49	37.79	40.544				
8,200.00	8,131.60	8,105.47	8,093.76	31.73	24.65	87.09	304.84	749.31	1,534.77	1,496.50	38.27	40.106				
8,300.00	8,231.60	8,202.68	8,190.94	32.06	24.98	87.05	306.02	751.76	1,537.36	1,498.62	38.74	39.687				
8,400.00	8,331.60	8,300.90	8,289.10	32.38	25.31	86.99	307.71	754.45	1,540.17	1,500.96	39.21	39.281				
8,500.00	8,431.60	8,404.94	8,393.09	32.70	25.65	86.92	309.74	757.16	1,542.89	1,503.18	39.70	38.861				
8,600.00	8,531.60	8,511.14	8,499.25	33.03	26.01	86.85	311.77	759.56	1,545.25	1,505.04	40.20	38.436				
8,700.00	8,631.60	8,624.82	8,612.89	33.35	26.39	86.79	313.59	761.47	1,547.02	1,506.29	40.73	37.984				
8,800.00	8,731.60	8,737.07	8,725.13	33.68	26.78	86.79	313.55	762.42	1,547.85	1,506.60	41.25	37.522				
8,900.00	8,831.60	8,837.59	8,825.65	34.00	27.13	86.83	312.50	762.92	1,548.30	1,506.55	41.74	37.093				
9,000.00	8,931.60	8,934.63	8,922.67	34.33	27.47	86.89	310.99	763.53	1,548.84	1,506.62	42.22	36.685				
9,100.00	9,031.60	9,031.94	9,019.97	34.66	27.81	86.96	309.17	764.32	1,549.55	1,506.85	42.70	36.289				
9,200.00	9,131.60	9,127.92	9,115.93	34.98	28.15	87.03	307.44	765.30	1,550.48	1,507.30	43.18	35.910				
9,300.00	9,231.60	9,222.65	9,210.63	35.31	28.48	87.06	306.48	766.54	1,551.73	1,508.08	43.65	35.551				
9,400.00	9,331.60	9,326.95	9,314.93	35.64	28.84	87.07	306.34	768.06	1,553.19	1,509.04	44.15	35.178				
9,500.00	9,431.60	9,439.62	9,427.59	35.97	29.24	87.08	306.03	768.66	1,553.68	1,509.00	44.68	34.773				
9,600.00	9,531.60	9,531.71	9,519.69	36.30	29.55	87.08	306.17	769.09	1,554.16	1,509.01	45.14	34.428				
9,700.00	9,631.60	9,641.13	9,629.10	36.63	29.92	87.04	307.18	769.99	1,555.07	1,509.41	45.65	34.062				
9,800.00	9,731.60	9,752.37	9,740.33	36.96	30.29	87.07	306.53	769.69	1,554.75	1,508.58	46.17	33.676				
9,861.83	9,793.43	9,806.38	9,794.33	37.17	30.48	87.11	305.31	769.57	1,554.55	1,508.10	46.45	33.470				

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 503H
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 503H	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				
9,900.00	9,831.60	9,838.01	9,825.95	37.30	30.59	87.14	304.68	769.67	1,554.63	1,508.02	46.61	33.352				
9,913.44	9,845.04	9,849.15	9,837.09	37.34	30.63	87.14	304.47	769.74	1,554.70	1,508.02	46.67	33.312				
9,950.00	9,881.57	9,892.14	9,880.07	37.46	30.78	-92.29	303.67	769.99	1,554.93	1,508.07	46.87	33.178				
10,000.00	9,931.27	9,961.86	9,949.77	37.60	31.02	-92.51	302.01	769.74	1,554.91	1,507.75	47.16	32.972				
10,049.32	9,979.64	10,010.61	9,998.50	37.74	31.19	-92.82	300.67	769.28	1,554.82	1,507.44	47.38	32.814				
10,050.00	9,980.31	10,011.31	9,999.20	37.74	31.19	-92.82	300.65	769.28	1,554.82	1,507.43	47.39	32.812				
10,100.00	10,028.32	10,059.60	10,047.47	37.87	31.36	-93.25	299.25	768.78	1,554.96	1,507.35	47.61	32.663				
10,150.00	10,074.94	10,100.74	10,088.59	37.99	31.50	-93.70	298.11	768.45	1,555.60	1,507.80	47.80	32.541				
10,200.00	10,119.80	10,144.00	10,131.83	38.10	31.65	-94.23	297.00	768.26	1,556.93	1,508.93	48.00	32.433				
10,250.00	10,162.58	10,182.69	10,170.51	38.19	31.79	-94.73	296.05	768.18	1,559.01	1,510.82	48.19	32.352				
10,300.00	10,202.93	10,223.22	10,211.02	38.28	31.93	-95.29	295.02	768.12	1,561.93	1,513.55	48.38	32.286				
10,350.00	10,240.57	10,257.87	10,245.67	38.35	32.05	-95.70	294.12	768.09	1,565.86	1,517.31	48.55	32.255				
10,400.00	10,275.19	10,287.64	10,275.43	38.42	32.16	-95.95	293.41	768.17	1,571.05	1,522.35	48.70	32.261				
10,450.00	10,306.54	10,314.62	10,302.39	38.47	32.25	-96.04	292.80	768.33	1,577.65	1,528.81	48.84	32.303				
10,500.00	10,334.38	10,339.30	10,327.07	38.52	32.34	-95.96	292.28	768.55	1,585.76	1,536.79	48.97	32.381				
10,550.00	10,358.49	10,362.80	10,350.57	38.56	32.42	-95.72	291.78	768.79	1,595.43	1,546.33	49.10	32.493				
10,600.00	10,378.70	10,382.75	10,370.51	38.60	32.49	-95.22	291.34	769.02	1,606.70	1,557.48	49.22	32.646				
10,650.00	10,394.84	10,398.96	10,386.71	38.64	32.55	-94.45	290.98	769.23	1,619.60	1,570.28	49.32	32.841				
10,700.00	10,406.80	10,411.30	10,399.05	38.68	32.59	-93.37	290.69	769.39	1,634.11	1,584.71	49.40	33.078				
10,750.00	10,414.49	10,419.66	10,407.41	38.74	32.62	-91.98	290.49	769.50	1,650.19	1,600.72	49.47	33.357				
10,800.00	10,417.84	10,423.96	10,411.70	38.82	32.64	-90.27	290.39	769.56	1,667.72	1,618.19	49.52	33.677				
10,813.44	10,418.00	10,424.41	10,412.16	38.85	32.64	-89.75	290.38	769.57	1,672.66	1,623.13	49.53	33.769				
10,900.00	10,418.00	10,428.00	10,415.74	39.04	32.65	-89.88	290.30	769.62	1,706.68	1,657.08	49.61	34.404				
11,000.00	10,418.00	10,428.72	10,416.47	39.34	32.66	-89.91	290.28	769.63	1,750.50	1,700.81	49.69	35.228				
11,100.00	10,418.00	10,431.19	10,418.94	39.72	32.66	-90.00	290.22	769.67	1,798.81	1,749.02	49.79	36.130				
11,200.00	10,418.00	10,433.69	10,421.43	40.19	32.67	-90.09	290.16	769.70	1,851.26	1,801.38	49.89	37.110				
11,300.00	10,418.00	10,436.22	10,423.96	40.72	32.68	-90.19	290.10	769.74	1,907.52	1,857.53	49.99	38.160				
11,400.00	10,418.00	10,438.77	10,426.51	41.32	32.69	-90.28	290.03	769.78	1,967.25	1,917.16	50.09	39.275				
11,500.00	10,418.00	10,441.35	10,429.09	41.98	32.70	-90.38	289.97	769.82	2,030.14	1,979.95	50.19	40.450				
11,600.00	10,418.00	10,443.97	10,431.70	42.70	32.71	-90.47	289.91	769.85	2,095.92	2,045.63	50.29	41.678				
11,700.00	10,418.00	10,446.61	10,434.34	43.47	32.72	-90.57	289.84	769.89	2,164.32	2,113.94	50.38	42.957				
11,800.00	10,418.00	13,212.16	11,983.50	44.29	47.99	-135.46	-1,233.96	771.27	2,196.72	2,143.67	53.05	41.408				
11,900.00	10,418.00	13,280.00	11,987.55	45.15	48.69	-135.55	-1,301.67	771.30	2,200.61	2,146.80	53.81	40.895				
12,000.00	10,418.00	13,349.13	11,990.99	46.06	49.43	-135.58	-1,370.68	773.44	2,205.92	2,151.29	54.63	40.378				
12,100.00	10,418.00	13,403.07	11,993.98	47.01	50.02	-135.58	-1,424.42	776.91	2,213.65	2,158.26	55.38	39.969				
12,200.00	10,418.00	13,738.07	12,006.14	47.99	53.84	-135.70	-1,758.72	785.80	2,218.23	2,160.10	58.12	38.164				
12,300.00	10,418.00	13,837.15	12,004.81	49.02	55.01	-135.70	-1,857.78	785.29	2,216.21	2,156.92	59.29	37.379				
12,400.00	10,418.00	13,972.63	12,001.67	50.07	56.65	-135.67	-1,993.23	785.45	2,214.07	2,153.29	60.79	36.424				
12,500.00	10,418.00	14,084.68	11,997.28	51.16	58.04	-135.62	-2,105.19	784.69	2,210.07	2,147.92	62.15	35.562				
12,600.00	10,418.00	14,162.00	11,994.73	52.28	59.01	-135.59	-2,182.47	784.71	2,206.94	2,143.68	63.25	34.890				
12,700.00	10,418.00	14,228.59	11,993.51	53.42	59.86	-135.58	-2,249.05	784.93	2,205.03	2,140.75	64.28	34.302				
12,800.00	10,418.00	14,305.53	11,993.20	54.59	60.85	-135.58	-2,325.98	784.93	2,204.06	2,138.66	65.39	33.705				
12,900.00	10,418.00	14,419.78	11,994.49	55.78	62.33	-135.64	-2,440.23	784.35	2,203.88	2,137.07	66.81	32.990				
12,948.36	10,418.00	14,445.00	11,994.66	56.37	62.66	-135.65	-2,465.44	783.96	2,203.43	2,136.18	67.25	32.766				
13,000.00	10,418.00	14,476.00	11,995.04	57.00	63.07	-135.67	-2,496.44	783.75	2,203.43	2,135.68	67.75	32.522				
13,100.00	10,418.00	14,539.00	11,997.12	58.24	63.91	-135.69	-2,559.37	785.35	2,206.27	2,137.50	68.77	32.083				
13,200.00	10,418.00	14,539.00	11,997.12	59.50	63.91	-135.69	-2,559.37	785.35	2,211.14	2,141.95	69.20	31.955				
13,300.00	10,418.00	14,592.75	12,000.27	60.77	64.64	-135.70	-2,612.94	788.49	2,219.00	2,148.88	70.12	31.648				
13,400.00	10,418.00	14,822.00	12,013.32	62.07	67.77	-135.83	-2,841.54	796.56	2,224.26	2,151.55	72.72	30.588				
13,500.00	10,418.00	14,869.48	12,015.70	63.38	68.43	-135.85	-2,888.93	798.15	2,229.16	2,155.55	73.61	30.284				
13,600.00	10,418.00	15,170.77	12,022.61	64.71	72.63	-135.98	-3,189.94	800.99	2,231.53	2,154.65	76.87	29.029				
13,700.00	10,418.00	15,251.47	12,021.14	66.05	73.76	-136.00	-3,270.60	798.95	2,227.95	2,149.81	78.14	28.513				

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 503H
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 503H	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				
13,800.00	10,418.00	15,368.53	12,021.39	67.40	75.41	-136.09	-3,387.59	795.78	2,225.59	2,145.90	79.69	27.928				
13,900.00	10,418.00	15,447.95	12,021.40	68.77	76.54	-136.17	-3,466.90	791.87	2,221.78	2,140.87	80.91	27.460				
13,984.83	10,418.00	15,483.00	12,022.38	69.94	77.04	-136.22	-3,501.91	790.69	2,220.88	2,139.22	81.66	27.196				
14,000.00	10,418.00	15,483.00	12,022.38	70.15	77.04	-136.22	-3,501.91	790.69	2,220.93	2,139.19	81.74	27.171				
14,100.00	10,418.00	15,548.76	12,025.14	71.54	77.98	-136.30	-3,567.61	789.65	2,222.25	2,139.43	82.82	26.832				
14,200.00	10,418.00	15,657.40	12,029.99	72.95	79.56	-136.41	-3,676.13	789.60	2,224.81	2,140.49	84.32	26.385				
14,300.00	10,418.00	15,767.00	12,032.62	74.36	81.15	-136.49	-3,785.70	788.87	2,225.31	2,139.45	85.86	25.918				
14,400.00	10,418.00	15,818.01	12,034.01	75.78	81.90	-136.52	-3,836.69	788.95	2,227.26	2,140.43	86.83	25.650				
14,500.00	10,418.00	15,861.00	12,036.80	77.21	82.53	-136.56	-3,879.57	789.85	2,232.39	2,144.71	87.68	25.459				
14,600.00	10,418.00	15,956.00	12,044.33	78.65	83.94	-136.68	-3,974.25	791.58	2,238.74	2,149.69	89.05	25.140				
14,700.00	10,418.00	16,019.45	12,049.43	80.10	84.88	-136.75	-4,037.48	792.99	2,245.61	2,155.53	90.08	24.929				
14,800.00	10,418.00	16,050.00	12,052.04	81.55	85.33	-136.78	-4,067.89	794.36	2,254.86	2,164.14	90.72	24.854				
14,900.00	10,418.00	16,144.00	12,061.37	83.02	86.74	-136.84	-4,161.19	800.80	2,266.12	2,173.98	92.14	24.594				
15,000.00	10,418.00	16,275.18	12,076.00	84.49	88.72	-136.99	-4,291.35	807.75	2,277.38	2,183.43	93.95	24.240				
15,100.00	10,418.00	16,712.00	12,101.13	85.96	95.28	-137.56	-4,726.63	804.53	2,282.16	2,183.61	98.55	23.157				
15,200.00	10,418.00	16,806.00	12,102.11	87.45	96.68	-137.71	-4,820.39	797.98	2,277.55	2,177.67	99.88	22.803				
15,300.00	10,418.00	16,835.58	12,103.12	88.94	97.13	-137.77	-4,849.90	796.10	2,274.73	2,174.01	100.72	22.585				
15,354.33	10,418.00	16,857.17	12,104.08	89.75	97.45	-137.81	-4,871.43	795.02	2,274.34	2,173.14	101.19	22.475				
15,400.00	10,418.00	16,900.00	12,106.54	90.43	98.10	-137.89	-4,914.17	793.63	2,274.95	2,173.16	101.79	22.349				
15,500.00	10,418.00	16,926.09	12,108.32	91.93	98.49	-137.93	-4,940.20	793.13	2,277.06	2,174.56	102.50	22.215				
15,600.00	10,418.00	16,994.00	12,113.43	93.43	99.53	-138.05	-5,007.91	792.24	2,281.12	2,177.56	103.56	22.026				
15,700.00	10,418.00	17,058.00	12,119.01	94.94	100.51	-138.16	-5,071.66	791.95	2,286.68	2,182.12	104.56	21.869				
15,800.00	10,418.00	17,186.89	12,132.03	96.46	102.48	-138.42	-5,199.88	790.72	2,293.10	2,186.93	106.17	21.598				
15,900.00	10,418.00	17,247.11	12,138.81	97.98	103.40	-138.58	-5,259.70	789.17	2,299.15	2,192.09	107.06	21.476				
16,000.00	10,418.00	17,312.61	12,147.29	99.50	104.41	-138.75	-5,324.63	787.69	2,306.77	2,198.82	107.95	21.369				
16,100.00	10,418.00	17,371.00	12,155.72	101.03	105.30	-138.93	-5,382.40	786.52	2,315.85	2,207.12	108.73	21.299				
16,200.00	10,418.00	17,445.72	12,167.53	102.56	106.45	-139.15	-5,456.16	785.41	2,326.33	2,216.68	109.65	21.216				
16,300.00	10,418.00	17,596.10	12,189.64	104.09	108.77	-139.55	-5,604.89	784.68	2,336.64	2,225.24	111.40	20.975				
16,400.00	10,418.00	17,683.76	12,199.55	105.63	110.13	-139.70	-5,691.97	786.11	2,345.73	2,233.13	112.60	20.832				
16,500.00	10,418.00	17,749.00	12,206.60	107.17	111.15	-139.77	-5,756.77	788.98	2,356.14	2,242.56	113.58	20.744				
16,600.00	10,418.00	17,839.67	12,216.39	108.72	112.57	-139.84	-5,846.75	794.25	2,367.50	2,252.58	114.92	20.601				
16,700.00	10,418.00	18,007.06	12,230.11	110.26	115.19	-139.93	-6,013.36	802.61	2,375.57	2,258.24	117.33	20.247				
16,800.00	10,418.00	18,075.69	12,235.85	111.81	116.27	-139.96	-6,081.65	806.28	2,384.78	2,266.37	118.42	20.139				
16,900.00	10,418.00	18,327.90	12,251.46	113.37	120.24	-140.00	-6,332.92	819.75	2,393.63	2,271.71	121.92	19.633				
17,000.00	10,418.00	18,414.64	12,255.93	114.92	121.60	-140.07	-6,419.54	820.51	2,397.49	2,274.26	123.23	19.455				
17,100.00	10,418.00	18,620.43	12,260.58	116.48	124.83	-140.16	-6,625.25	821.50	2,398.41	2,272.58	125.83	19.060				
17,123.64	10,418.00	18,635.94	12,260.64	116.85	125.07	-140.17	-6,640.75	821.53	2,398.37	2,272.26	126.12	19.017				
17,200.00	10,418.00	18,691.00	12,261.11	118.04	125.93	-140.18	-6,695.81	822.02	2,398.79	2,271.71	127.08	18.876				
17,300.00	10,418.00	18,748.81	12,262.31	119.61	126.84	-140.19	-6,753.59	822.89	2,400.64	2,272.47	128.18	18.729				
17,400.00	10,418.00	18,786.00	12,263.60	121.17	127.43	-140.20	-6,790.76	823.51	2,404.27	2,275.29	128.99	18.640				
17,500.00	10,418.00	18,844.28	12,266.92	122.74	128.35	-140.24	-6,848.93	824.90	2,409.89	2,279.92	129.97	18.542				
17,600.00	10,418.00	18,895.09	12,271.33	124.31	129.16	-140.28	-6,899.51	826.69	2,418.04	2,287.24	130.80	18.486				
17,700.00	10,418.00	19,039.27	12,284.09	125.88	131.44	-140.42	-7,043.06	830.97	2,426.12	2,293.34	132.78	18.272				
17,800.00	10,418.00	19,380.03	12,289.64	127.46	136.84	-140.49	-7,383.34	835.46	2,425.79	2,288.84	136.95	17.713				
17,900.00	10,418.00	19,597.38	12,275.40	129.04	140.28	-140.24	-7,600.12	839.60	2,422.14	2,282.29	139.85	17.320				
18,000.00	10,418.00	19,684.88	12,267.59	130.61	141.67	-140.14	-7,687.28	839.44	2,414.55	2,273.04	141.52	17.062				
18,100.00	10,418.00	19,762.41	12,261.93	132.19	142.90	-140.07	-7,764.60	839.18	2,408.07	2,265.01	143.06	16.833				
18,200.00	10,418.00	19,825.00	12,257.56	133.78	143.89	-140.01	-7,827.04	839.11	2,402.27	2,257.81	144.46	16.629				
18,300.00	10,418.00	19,870.96	12,255.38	135.36	144.62	-139.99	-7,872.94	839.19	2,398.48	2,252.84	145.64	16.468				
18,400.00	10,418.00	19,920.00	12,255.33	136.94	145.40	-139.99	-7,921.98	839.44	2,397.64	2,250.89	146.74	16.339				
18,405.16	10,418.00	19,920.00	12,255.33	137.03	145.40	-139.99	-7,921.98	839.44	2,397.63	2,250.86	146.77	16.336				
18,500.00	10,418.00	20,032.62	12,255.57	138.53	147.19	-139.99	-8,034.59	840.70	2,397.98	2,249.51	148.47	16.152				

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 503H
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 503H	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				
18,600.00	10,418.00	20,138.64	12,253.60	140.12	148.88	-139.95	-8,140.56	842.60	2,397.06	2,246.86	150.21	15.958				
18,688.11	10,418.00	20,203.00	12,252.03	141.52	149.91	-139.90	-8,204.89	844.13	2,396.32	2,244.87	151.45	15.822				
18,700.00	10,418.00	20,203.00	12,252.03	141.71	149.91	-139.90	-8,204.89	844.13	2,396.35	2,244.83	151.52	15.815				
18,800.00	10,418.00	20,256.75	12,251.13	143.30	150.77	-139.86	-8,258.58	846.35	2,397.42	2,244.73	152.69	15.701				
18,900.00	10,418.00	20,297.00	12,251.13	144.89	151.42	-139.82	-8,298.74	849.05	2,401.10	2,247.48	153.62	15.630				
19,000.00	10,418.00	20,364.70	12,252.06	146.49	152.51	-139.75	-8,366.22	854.49	2,406.70	2,251.76	154.94	15.533				
19,100.00	10,418.00	20,632.70	12,256.84	148.08	156.81	-139.65	-8,633.77	866.73	2,411.90	2,253.12	158.78	15.191				
19,200.00	10,418.00	20,826.44	12,251.07	149.68	159.91	-139.60	-8,827.40	866.05	2,408.31	2,247.02	161.28	14.932				
19,300.00	10,418.00	20,935.38	12,246.46	151.27	161.64	-139.58	-8,936.22	864.31	2,403.39	2,240.40	162.99	14.745				
19,400.00	10,418.00	21,061.82	12,241.05	152.87	163.66	-139.58	-9,062.52	861.32	2,397.98	2,233.19	164.79	14.551				
19,500.00	10,418.00	21,102.94	12,239.79	154.47	164.31	-139.58	-9,103.60	860.35	2,393.27	2,227.31	165.96	14.421				
19,600.00	10,418.00	21,146.00	12,239.08	156.07	165.00	-139.59	-9,146.65	859.85	2,390.74	2,223.69	167.05	14.312				
19,700.00	10,418.00	21,274.96	12,239.29	157.67	167.07	-139.64	-9,275.59	858.72	2,389.88	2,221.04	168.83	14.155				
19,800.00	10,418.00	21,477.85	12,232.88	159.28	170.30	-139.70	-9,478.23	852.00	2,384.08	2,213.01	171.07	13.936				
19,900.00	10,418.00	21,581.76	12,226.80	160.88	171.96	-139.67	-9,581.93	849.28	2,377.29	2,204.54	172.75	13.762				
20,000.00	10,418.00	21,653.58	12,222.09	162.48	173.11	-139.63	-9,653.57	848.08	2,370.67	2,196.41	174.26	13.604				
20,100.00	10,418.00	21,713.00	12,219.22	164.09	174.06	-139.60	-9,712.93	847.76	2,365.90	2,190.27	175.63	13.471				
20,200.00	10,418.00	21,789.00	12,216.20	165.70	175.28	-139.56	-9,788.86	848.19	2,362.53	2,185.40	177.14	13.337				
20,300.00	10,418.00	21,861.14	12,213.23	167.30	176.45	-139.50	-9,860.93	849.55	2,360.01	2,181.38	178.63	13.212				
20,400.00	10,418.00	21,934.66	12,210.39	168.91	177.63	-139.42	-9,934.34	852.22	2,358.77	2,178.60	180.17	13.092				
20,500.00	10,418.00	22,023.78	12,207.03	170.52	179.08	-139.31	-10,023.30	856.53	2,358.39	2,176.44	181.94	12.962				
20,600.00	10,418.00	22,149.92	12,200.44	172.13	181.12	-139.09	-10,149.03	864.04	2,357.71	2,173.38	184.33	12.791				
20,700.00	10,418.00	22,230.00	12,194.93	173.74	187.87	-138.92	-10,228.76	869.18	2,356.21	2,167.43	188.78	12.481				
20,712.13	10,418.00	22,230.00	12,194.93	173.94	187.87	-138.92	-10,228.76	869.18	2,356.18	2,167.32	188.86	12.476				
20,800.00	10,418.00	22,230.00	12,194.93	175.35	187.87	-138.92	-10,228.76	869.18	2,357.82	2,168.52	189.29	12.456 SF				
20,900.00	10,418.00	22,230.00	12,194.93	176.97	187.87	-138.92	-10,228.76	869.18	2,363.66	2,174.17	189.49	12.474				
21,000.00	10,418.00	22,230.00	12,194.93	178.58	187.87	-138.92	-10,228.76	869.18	2,373.70	2,184.34	189.36	12.535				
21,100.00	10,418.00	22,230.00	12,194.93	180.19	187.87	-138.92	-10,228.76	869.18	2,387.89	2,198.96	188.93	12.639				
21,200.00	10,418.00	22,230.00	12,194.93	181.81	187.87	-138.92	-10,228.76	869.18	2,406.16	2,217.95	188.21	12.784				
21,300.00	10,418.00	22,230.00	12,194.93	183.42	187.87	-138.92	-10,228.76	869.18	2,428.41	2,241.19	187.21	12.971				
21,400.00	10,418.00	22,230.00	12,194.93	185.04	187.87	-138.92	-10,228.76	869.18	2,454.54	2,268.57	185.97	13.199				
21,500.00	10,418.00	22,230.00	12,194.93	186.65	187.87	-138.92	-10,228.76	869.18	2,484.42	2,299.93	184.49	13.466				
21,600.00	10,418.00	22,230.00	12,194.93	188.27	187.87	-138.92	-10,228.76	869.18	2,517.92	2,335.10	182.82	13.773				
21,700.00	10,418.00	22,230.00	12,194.93	189.89	187.87	-138.92	-10,228.76	869.18	2,554.89	2,373.92	180.97	14.118				
21,800.00	10,418.00	22,230.00	12,194.93	191.50	187.87	-138.92	-10,228.76	869.18	2,595.20	2,416.22	178.98	14.500				
21,900.00	10,418.00	22,230.00	12,194.93	193.12	187.87	-138.92	-10,228.76	869.18	2,638.68	2,461.82	176.86	14.919				
21,923.68	10,418.00	22,230.00	12,194.93	193.51	187.87	-138.92	-10,228.76	869.18	2,649.42	2,473.08	176.34	15.024				

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 503H
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 503H	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	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor				
0.00	0.00	0.00	0.00	0.00	0.00	-90.54	-0.23	-24.78	24.78							
100.00	100.00	100.00	100.00	0.13	0.13	-90.54	-0.23	-24.78	24.78	24.60	0.18	139.661				
200.00	200.00	200.00	200.00	0.48	0.48	-90.54	-0.23	-24.78	24.78	24.10	0.68	36.208				
300.00	300.00	300.00	300.00	0.84	0.84	-90.54	-0.23	-24.78	24.78	23.59	1.19	20.801				
400.00	400.00	400.00	400.00	1.20	1.20	-90.54	-0.23	-24.78	24.78	23.08	1.70	14.591				
500.00	500.00	500.00	500.00	1.56	1.56	-90.54	-0.23	-24.78	24.78	22.58	2.21	11.237				
600.00	600.00	600.00	600.00	1.92	1.92	-90.54	-0.23	-24.78	24.78	22.07	2.71	9.137				
700.00	700.00	700.00	700.00	2.28	2.28	-90.54	-0.23	-24.78	24.78	21.56	3.22	7.698				
800.00	800.00	800.00	800.00	2.63	2.63	-90.54	-0.23	-24.78	24.78	21.05	3.73	6.651				
900.00	900.00	900.00	900.00	2.99	2.99	-90.54	-0.23	-24.78	24.78	20.55	4.23	5.854				
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.54	-0.23	-24.78	24.78	20.04	4.74	5.228				
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-90.54	-0.23	-24.78	24.78	19.53	5.25	4.723				
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-90.54	-0.23	-24.78	24.78	19.03	5.75	4.307				
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.54	-0.23	-24.78	24.78	18.52	6.26	3.958				
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.54	-0.23	-24.78	24.78	18.01	6.77	3.662				
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	-90.54	-0.23	-24.78	24.78	17.51	7.27	3.406				
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	-90.54	-0.23	-24.78	24.78	17.00	7.78	3.184				
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	-90.54	-0.23	-24.78	24.78	16.49	8.29	2.990				
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-90.54	-0.23	-24.78	24.78	15.98	8.80	2.817				
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-90.54	-0.23	-24.78	24.78	15.48	9.30	2.664				
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-90.54	-0.23	-24.78	24.78	14.97	9.81	2.526 CC, ES				
2,100.00	2,100.00	2,099.35	2,099.34	7.29	7.29	-89.96	0.02	-26.05	26.06	15.75	10.31	2.528				
2,200.00	2,199.99	2,198.61	2,198.53	7.65	7.63	-15.34	0.77	-29.84	28.63	17.84	10.78	2.655				
2,300.00	2,299.91	2,297.82	2,297.51	7.99	7.98	-15.09	2.02	-36.16	31.23	19.98	11.25	2.776				
2,400.00	2,399.69	2,396.95	2,396.24	8.34	8.33	-15.26	3.77	-44.99	33.87	22.16	11.71	2.893				
2,500.00	2,499.27	2,496.02	2,494.62	8.70	8.68	-15.75	6.01	-56.33	36.53	24.37	12.16	3.004				
2,600.00	2,598.57	2,595.02	2,592.61	9.06	9.04	-16.49	8.75	-70.15	39.22	26.62	12.60	3.112				
2,700.00	2,697.54	2,694.77	2,691.08	9.42	9.41	-17.69	11.85	-85.82	41.18	28.09	13.09	3.146				
2,771.79	2,768.33	2,766.55	2,761.93	9.69	9.68	-19.19	14.09	-97.13	41.10	27.66	13.45	3.056				
2,800.00	2,796.11	2,794.76	2,789.77	9.79	9.79	-19.90	14.97	-101.58	40.83	27.24	13.59	3.005				
2,900.00	2,894.56	2,894.74	2,888.45	10.18	10.17	-22.52	18.09	-117.34	39.93	25.83	14.10	2.833				
3,000.00	2,993.02	2,994.72	2,987.13	10.56	10.56	-25.25	21.21	-133.09	39.12	24.50	14.61	2.677				
3,100.00	3,091.48	3,094.70	3,085.81	10.95	10.95	-28.09	24.34	-148.85	38.39	23.26	15.13	2.537				
3,200.00	3,189.94	3,194.67	3,184.49	11.35	11.35	-31.03	27.46	-164.61	37.77	22.10	15.66	2.411				
3,300.00	3,288.39	3,294.65	3,283.17	11.75	11.75	-34.06	30.58	-180.37	37.24	21.04	16.20	2.299				
3,400.00	3,386.85	3,394.63	3,381.85	12.16	12.15	-37.16	33.70	-196.13	36.83	20.08	16.75	2.198				
3,500.00	3,485.31	3,494.61	3,480.53	12.57	12.55	-40.33	36.82	-211.89	36.52	19.21	17.31	2.110				
3,600.00	3,583.77	3,594.59	3,579.21	12.98	12.96	-43.55	39.94	-227.65	36.33	18.45	17.88	2.031				
3,700.00	3,682.22	3,694.57	3,677.89	13.39	13.37	-46.78	43.06	-243.41	36.25	17.79	18.47	1.963				
3,716.20	3,698.18	3,710.77	3,693.87	13.46	13.44	-47.31	43.57	-245.96	36.25	17.69	18.56	1.953				
3,800.00	3,780.68	3,794.55	3,776.57	13.81	13.78	-50.02	46.18	-259.17	36.29	17.23	19.06	1.904				
3,900.00	3,879.14	3,894.53	3,875.25	14.23	14.19	-53.25	49.30	-274.93	36.45	16.78	19.66	1.853				
4,000.00	3,977.60	3,994.51	3,973.93	14.65	14.61	-56.43	52.42	-290.69	36.72	16.44	20.28	1.811				
4,100.00	4,076.05	4,094.48	4,072.61	15.07	15.03	-59.56	55.54	-306.45	37.10	16.20	20.90	1.775				
4,200.00	4,174.51	4,194.46	4,171.29	15.50	15.44	-62.62	58.66	-322.21	37.59	16.06	21.53	1.746				
4,300.00	4,272.97	4,294.44	4,269.97	15.93	15.86	-65.59	61.78	-337.97	38.18	16.02	22.16	1.723				
4,400.00	4,371.43	4,394.42	4,368.65	16.36	16.28	-68.46	64.90	-353.73	38.87	16.07	22.80	1.705				
4,500.00	4,469.88	4,494.40	4,467.32	16.79	16.70	-71.23	68.02	-369.48	39.66	16.22	23.44	1.692				
4,600.00	4,568.34	4,594.38	4,566.00	17.22	17.13	-73.88	71.15	-385.24	40.53	16.46	24.08	1.683				
4,700.00	4,666.80	4,694.36	4,664.68	17.65	17.55	-76.41	74.27	-401.00	41.49	16.77	24.72	1.679				
4,800.00	4,765.25	4,794.34	4,763.36	18.08	17.97	-78.83	77.39	-416.76	42.53	17.17	25.36	1.677 SF				
4,900.00	4,863.71	4,894.32	4,862.04	18.52	18.40	-81.13	80.51	-432.52	43.64	17.64	26.00	1.679				

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 503H
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 503H	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	4,962.17	4,994.30	4,960.72	18.95	18.82	-83.31	83.63	-448.28	44.81	18.18	26.63	1.683		
5,100.00	5,060.63	5,094.27	5,059.40	19.39	19.25	-85.37	86.75	-464.04	46.05	18.78	27.26	1.689		
5,200.00	5,159.08	5,194.25	5,158.08	19.83	19.68	-87.33	89.87	-479.80	47.34	19.44	27.89	1.697		
5,300.00	5,257.54	5,294.23	5,256.76	20.27	20.11	-89.18	92.99	-495.56	48.68	20.16	28.52	1.707		
5,400.00	5,356.00	5,394.21	5,355.44	20.71	20.53	-90.92	96.11	-511.32	50.08	20.93	29.15	1.718		
5,500.00	5,454.46	5,494.19	5,454.12	21.15	20.96	-92.58	99.23	-527.08	51.51	21.74	29.77	1.730		
5,600.00	5,552.91	5,594.17	5,552.80	21.59	21.39	-94.14	102.35	-542.84	52.99	22.60	30.39	1.744		
5,700.00	5,651.37	5,694.15	5,651.48	22.03	21.82	-95.61	105.47	-558.60	54.50	23.50	31.00	1.758		
5,800.00	5,749.83	5,794.13	5,750.16	22.47	22.25	-97.01	108.59	-574.36	56.05	24.44	31.62	1.773		
5,900.00	5,848.29	5,894.11	5,848.84	22.91	22.69	-98.33	111.71	-590.12	57.63	25.41	32.23	1.788		
6,000.00	5,946.74	5,994.09	5,947.52	23.36	23.12	-99.58	114.83	-605.88	59.24	26.41	32.84	1.804		
6,100.00	6,045.20	6,094.06	6,046.20	23.80	23.55	-100.76	117.96	-621.63	60.88	27.44	33.44	1.820		
6,200.00	6,143.66	6,194.04	6,144.88	24.24	23.98	-101.88	121.08	-637.39	62.54	28.49	34.05	1.837		
6,300.00	6,242.12	6,294.02	6,243.56	24.69	24.41	-102.94	124.20	-653.15	64.22	29.57	34.65	1.853		
6,400.00	6,340.57	6,394.00	6,342.24	25.13	24.85	-103.94	127.32	-668.91	65.93	30.67	35.25	1.870		
6,500.00	6,439.03	6,493.98	6,440.92	25.58	25.28	-104.90	130.44	-684.67	67.65	31.80	35.85	1.887		
6,600.00	6,537.49	6,593.96	6,539.60	26.02	25.71	-105.81	133.56	-700.43	69.39	32.94	36.45	1.904		
6,700.00	6,635.95	6,693.94	6,638.28	26.47	26.15	-106.67	136.68	-716.19	71.15	34.10	37.05	1.920		
6,757.61	6,692.67	6,751.54	6,696.13	26.73	26.40	-107.15	138.48	-725.27	72.17	34.77	37.39	1.930		
6,800.00	6,734.44	6,793.92	6,736.96	26.91	26.58	-107.33	139.80	-731.95	72.85	35.20	37.65	1.935		
6,900.00	6,833.29	6,893.54	6,835.45	27.34	27.00	-107.14	142.71	-746.64	74.13	35.88	38.25	1.938		
7,000.00	6,932.50	6,993.13	6,934.26	27.75	27.41	-106.99	145.12	-758.82	75.19	36.36	38.83	1.936		
7,100.00	7,032.01	7,092.72	7,033.35	28.14	27.80	-106.87	147.03	-768.47	76.03	36.65	39.38	1.931		
7,200.00	7,131.74	7,192.30	7,132.68	28.51	28.17	-106.78	148.44	-775.58	76.65	36.75	39.90	1.921		
7,300.00	7,231.62	7,291.89	7,232.15	28.86	28.52	-106.73	149.34	-780.15	77.05	36.66	40.39	1.908		
7,400.00	7,331.60	7,391.48	7,331.72	29.19	28.85	-106.70	149.74	-782.17	77.23	36.37	40.86	1.890		
7,429.40	7,361.00	7,420.77	7,361.00	29.28	28.95	179.47	149.77	-782.28	77.24	36.25	40.99	1.884		
7,500.00	7,431.60	7,491.36	7,431.60	29.50	29.17	179.47	149.77	-782.28	77.24	35.93	41.30	1.870		
7,600.00	7,531.60	7,591.36	7,531.60	29.82	29.49	179.47	149.77	-782.28	77.24	35.48	41.75	1.850		
7,700.00	7,631.60	7,691.36	7,631.60	30.14	29.81	179.47	149.77	-782.28	77.24	35.03	42.21	1.830		
7,800.00	7,731.60	7,791.36	7,731.60	30.45	30.13	179.47	149.77	-782.28	77.24	34.58	42.66	1.811		
7,900.00	7,831.60	7,891.36	7,831.60	30.77	30.45	179.47	149.77	-782.28	77.24	34.12	43.11	1.792		
7,905.81	7,837.41	7,897.18	7,837.41	30.79	30.47	179.47	149.77	-782.28	77.24	34.10	43.14	1.790		
8,000.00	7,931.60	7,988.44	7,928.67	31.09	30.76	179.47	149.36	-782.28	77.70	34.25	43.45	1.788		
8,100.00	8,031.60	8,075.25	8,014.84	31.41	31.01	179.46	139.53	-782.18	89.06	46.38	42.68	2.087		
8,200.00	8,131.60	8,157.34	8,094.08	31.73	31.23	179.46	118.38	-781.97	114.92	73.66	41.27	2.785		
8,300.00	8,231.60	8,232.08	8,162.93	32.06	31.41	179.45	89.45	-781.68	153.74	114.12	39.62	3.880		
8,400.00	8,331.60	8,300.00	8,221.77	32.38	31.55	179.45	55.59	-781.34	203.59	165.49	38.10	5.344		
8,500.00	8,431.60	8,350.00	8,262.30	32.70	31.65	179.44	26.34	-781.05	262.55	226.84	35.71	7.352		
8,600.00	8,531.60	8,400.00	8,300.13	33.03	31.74	179.44	-6.33	-780.73	328.68	294.39	34.29	9.586		
8,700.00	8,631.60	8,450.00	8,334.96	33.35	31.82	179.44	-42.18	-780.37	400.57	367.13	33.45	11.977		
8,800.00	8,731.60	8,484.23	8,356.95	33.68	31.87	179.44	-68.41	-780.11	477.11	445.01	32.11	14.861		
8,900.00	8,831.60	8,515.64	8,375.71	34.00	31.91	179.44	-93.59	-779.86	557.34	526.25	31.09	17.929		
9,000.00	8,931.60	8,550.00	8,394.62	34.33	31.96	179.44	-122.27	-779.58	640.58	610.07	30.52	20.992		
9,100.00	9,031.60	8,566.45	8,403.06	34.66	31.98	179.44	-136.39	-779.44	726.04	696.52	29.52	24.596		
9,200.00	9,131.60	8,600.00	8,418.99	34.98	32.03	179.44	-165.91	-779.15	813.76	784.43	29.33	27.747		
9,300.00	9,231.60	8,600.00	8,418.99	35.31	32.03	179.44	-165.91	-779.15	902.62	874.30	28.32	31.873		
9,400.00	9,331.60	8,621.48	8,428.27	35.64	32.06	179.44	-185.27	-778.95	992.97	964.88	28.09	35.356		
9,500.00	9,431.60	8,650.00	8,439.47	35.97	32.11	179.44	-211.51	-778.69	1,084.73	1,056.64	28.09	38.615		
9,600.00	9,531.60	8,650.00	8,439.47	36.30	32.11	179.44	-211.51	-778.69	1,176.89	1,149.30	27.59	42.661		
9,700.00	9,631.60	8,650.00	8,439.47	36.63	32.11	179.44	-211.51	-778.69	1,270.23	1,243.01	27.22	46.670		
9,800.00	9,731.60	8,670.67	8,446.75	36.96	32.14	179.44	-230.84	-778.50	1,363.99	1,336.71	27.28	49.997		

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 503H
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 503H	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,900.00	9,831.60	8,680.13	8,449.86	37.30	32.15	179.44	-239.79	-778.41	1,458.47	1,431.25	27.21	53.594		
9,913.44	9,845.04	8,681.34	8,450.24	37.34	32.15	179.44	-240.93	-778.40	1,471.20	1,444.00	27.21	54.076		
9,950.00	9,881.57	8,700.00	8,455.89	37.46	32.19	0.00	-258.71	-778.22	1,505.79	1,478.40	27.39	54.979		
10,000.00	9,931.27	8,700.00	8,455.89	37.60	32.19	0.00	-258.71	-778.22	1,551.26	1,524.01	27.25	56.932		
10,050.00	9,980.31	8,700.00	8,455.89	37.74	32.19	0.00	-258.71	-778.22	1,595.10	1,568.01	27.08	58.893		
10,100.00	10,028.32	8,700.00	8,455.89	37.87	32.19	0.00	-258.71	-778.22	1,637.11	1,610.21	26.91	60.844		
10,150.00	10,074.94	8,700.00	8,455.89	37.99	32.19	0.00	-258.71	-778.22	1,677.14	1,650.42	26.72	62.768		
10,200.00	10,119.80	8,719.92	8,461.27	38.10	32.22	0.00	-277.89	-778.03	1,714.56	1,687.83	26.73	64.141		
10,250.00	10,162.58	8,728.77	8,463.45	38.19	32.24	0.00	-286.47	-777.95	1,749.65	1,723.05	26.61	65.757		
10,300.00	10,202.93	8,750.00	8,468.13	38.28	32.29	0.00	-307.17	-777.74	1,782.29	1,755.69	26.59	67.023		
10,350.00	10,240.57	8,750.00	8,468.13	38.35	32.29	0.00	-307.17	-777.74	1,811.83	1,785.46	26.37	68.699		
10,400.00	10,275.19	8,750.00	8,468.13	38.42	32.29	0.00	-307.17	-777.74	1,838.71	1,812.54	26.17	70.256		
10,450.00	10,306.54	8,750.00	8,468.13	38.47	32.29	0.00	-307.17	-777.74	1,862.85	1,836.86	25.99	71.671		
10,500.00	10,334.38	8,778.92	8,473.27	38.52	32.35	0.00	-335.63	-777.46	1,883.22	1,857.20	26.02	72.381		
10,550.00	10,358.49	8,800.00	8,476.11	38.56	32.40	0.00	-356.51	-777.25	1,900.93	1,874.94	25.99	73.144		
10,600.00	10,378.70	8,800.00	8,476.11	38.60	32.40	0.00	-356.51	-777.25	1,915.17	1,889.31	25.86	74.073		
10,650.00	10,394.84	8,800.00	8,476.11	38.64	32.40	0.00	-356.51	-777.25	1,926.41	1,900.65	25.76	74.785		
10,700.00	10,406.80	8,823.35	8,478.35	38.68	32.46	0.00	-379.76	-777.02	1,934.01	1,908.23	25.79	75.004		
10,750.00	10,414.49	8,850.00	8,479.75	38.74	32.54	0.00	-406.36	-776.76	1,938.69	1,912.85	25.84	75.032		
10,800.00	10,417.84	8,850.00	8,479.75	38.82	32.54	0.00	-406.36	-776.76	1,939.50	1,913.67	25.83	75.091		
10,813.44	10,418.00	8,850.00	8,479.75	38.85	32.54	0.00	-406.36	-776.76	1,939.19	1,913.36	25.83	75.069		
10,900.00	10,418.00	8,876.13	8,480.00	39.04	32.62	0.00	-432.48	-776.50	1,938.00	1,912.02	25.98	74.583		
11,000.00	10,418.00	8,976.13	8,480.00	39.34	32.99	0.00	-532.48	-775.51	1,938.00	1,911.70	26.30	73.680		
11,100.00	10,418.00	9,076.13	8,480.00	39.72	33.45	0.00	-632.47	-774.51	1,938.00	1,911.34	26.66	72.688		
11,200.00	10,418.00	9,176.13	8,480.00	40.19	34.00	0.00	-732.47	-773.52	1,938.00	1,910.94	27.06	71.614		
11,300.00	10,418.00	9,276.13	8,480.00	40.72	34.63	0.00	-832.47	-772.53	1,938.00	1,910.50	27.50	70.471		
11,400.00	10,418.00	9,376.13	8,480.00	41.32	35.33	0.00	-932.46	-771.53	1,938.00	1,910.02	27.98	69.272		
11,500.00	10,418.00	9,476.13	8,480.00	41.98	36.09	0.00	-1,032.46	-770.54	1,938.00	1,909.51	28.49	68.029		
11,600.00	10,418.00	9,576.13	8,480.00	42.70	36.91	0.00	-1,132.45	-769.55	1,938.00	1,908.97	29.03	66.752		
11,700.00	10,418.00	9,676.13	8,480.00	43.47	37.79	0.00	-1,232.45	-768.55	1,938.00	1,908.39	29.61	65.452		
11,800.00	10,418.00	9,776.13	8,480.00	44.29	38.72	0.00	-1,332.44	-767.56	1,938.00	1,907.78	30.22	64.139		
11,900.00	10,418.00	9,876.13	8,480.00	45.15	39.70	0.00	-1,432.44	-766.57	1,938.00	1,907.15	30.85	62.820		
12,000.00	10,418.00	9,976.13	8,480.00	46.06	40.72	0.00	-1,532.43	-765.58	1,938.00	1,906.49	31.51	61.503		
12,100.00	10,418.00	10,076.13	8,480.00	47.01	41.78	0.00	-1,632.43	-764.58	1,938.00	1,905.80	32.20	60.194		
12,200.00	10,418.00	10,176.13	8,480.00	47.99	42.88	0.00	-1,732.42	-763.59	1,938.00	1,905.10	32.90	58.897		
12,300.00	10,418.00	10,276.13	8,480.00	49.02	44.01	0.00	-1,832.42	-762.60	1,938.00	1,904.37	33.63	57.619		
12,400.00	10,418.00	10,376.13	8,480.00	50.07	45.18	0.00	-1,932.41	-761.60	1,938.00	1,903.61	34.39	56.361		
12,500.00	10,418.00	10,476.13	8,480.00	51.16	46.37	0.00	-2,032.41	-760.61	1,938.00	1,902.84	35.16	55.127		
12,600.00	10,418.00	10,576.13	8,480.00	52.28	47.60	0.00	-2,132.40	-759.62	1,938.00	1,902.06	35.94	53.919		
12,700.00	10,418.00	10,676.13	8,480.00	53.42	48.84	0.00	-2,232.40	-758.63	1,938.00	1,901.25	36.75	52.739		
12,800.00	10,418.00	10,776.13	8,480.00	54.59	50.11	0.00	-2,332.39	-757.63	1,938.00	1,900.43	37.57	51.588		
12,900.00	10,418.00	10,876.13	8,480.00	55.78	51.41	0.00	-2,432.39	-756.64	1,938.00	1,899.60	38.40	50.467		
13,000.00	10,418.00	10,976.13	8,480.00	57.00	52.72	0.00	-2,532.38	-755.65	1,938.00	1,898.75	39.25	49.377		
13,100.00	10,418.00	11,076.13	8,480.00	58.24	54.05	0.00	-2,632.38	-754.65	1,938.00	1,897.89	40.11	48.317		
13,200.00	10,418.00	11,176.13	8,480.00	59.50	55.40	0.00	-2,732.37	-753.66	1,938.00	1,897.02	40.98	47.288		
13,300.00	10,418.00	11,276.13	8,480.00	60.77	56.76	0.00	-2,832.37	-752.67	1,938.00	1,896.13	41.87	46.290		
13,400.00	10,418.00	11,376.13	8,480.00	62.07	58.14	0.00	-2,932.36	-751.68	1,938.00	1,895.24	42.76	45.321		
13,500.00	10,418.00	11,476.13	8,480.00	63.38	59.53	0.00	-3,032.36	-750.68	1,938.00	1,894.33	43.67	44.383		
13,600.00	10,418.00	11,576.13	8,480.00	64.71	60.94	0.00	-3,132.35	-749.69	1,938.00	1,893.42	44.58	43.473		
13,700.00	10,418.00	11,676.13	8,480.00	66.05	62.35	0.00	-3,232.35	-748.70	1,938.00	1,892.50	45.50	42.592		
13,800.00	10,418.00	11,776.13	8,480.00	67.40	63.78	0.00	-3,332.34	-747.70	1,938.00	1,891.57	46.43	41.738		
13,900.00	10,418.00	11,876.13	8,480.00	68.77	65.22	0.00	-3,432.34	-746.71	1,938.00	1,890.63	47.37	40.911		

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 503H
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 503H	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							
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	10,418.00	11,976.13	8,480.00	70.15	66.67	0.00	-3,532.33	-745.72	1,938.00	1,889.68	48.32	40.110		
14,100.00	10,418.00	12,076.13	8,480.00	71.54	68.13	0.00	-3,632.33	-744.73	1,938.00	1,888.73	49.27	39.335		
14,200.00	10,418.00	12,176.13	8,480.00	72.95	69.60	0.00	-3,732.32	-743.73	1,938.00	1,887.77	50.23	38.584		
14,300.00	10,418.00	12,276.13	8,480.00	74.36	71.07	0.00	-3,832.32	-742.74	1,938.00	1,886.81	51.19	37.857		
14,400.00	10,418.00	12,376.13	8,480.00	75.78	72.55	0.00	-3,932.31	-741.75	1,938.00	1,885.84	52.16	37.152		
14,500.00	10,418.00	12,476.13	8,480.00	77.21	74.04	0.00	-4,032.31	-740.75	1,938.00	1,884.86	53.14	36.469		
14,600.00	10,418.00	12,576.13	8,480.00	78.65	75.54	0.00	-4,132.30	-739.76	1,938.00	1,883.88	54.12	35.808		
14,700.00	10,418.00	12,676.13	8,480.00	80.10	77.04	0.00	-4,232.30	-738.77	1,938.00	1,882.89	55.11	35.167		
14,800.00	10,418.00	12,776.13	8,480.00	81.55	78.55	0.00	-4,332.29	-737.78	1,938.00	1,881.90	56.10	34.546		
14,900.00	10,418.00	12,876.13	8,480.00	83.02	80.06	0.00	-4,432.29	-736.78	1,938.00	1,880.91	57.09	33.944		
15,000.00	10,418.00	12,976.13	8,480.00	84.49	81.58	0.00	-4,532.28	-735.79	1,938.00	1,879.91	58.09	33.360		
15,100.00	10,418.00	13,076.13	8,480.00	85.96	83.11	0.00	-4,632.28	-734.80	1,938.00	1,878.90	59.10	32.793		
15,200.00	10,418.00	13,176.13	8,480.00	87.45	84.64	0.00	-4,732.27	-733.80	1,938.00	1,877.90	60.10	32.244		
15,300.00	10,418.00	13,276.13	8,480.00	88.94	86.17	0.00	-4,832.27	-732.81	1,938.00	1,876.88	61.12	31.710		
15,400.00	10,418.00	13,376.13	8,480.00	90.43	87.71	0.00	-4,932.26	-731.82	1,938.00	1,875.87	62.13	31.193		
15,500.00	10,418.00	13,476.13	8,480.00	91.93	89.25	0.00	-5,032.26	-730.82	1,938.00	1,874.85	63.15	30.690		
15,600.00	10,418.00	13,576.13	8,480.00	93.43	90.80	0.00	-5,132.25	-729.83	1,938.00	1,873.83	64.17	30.202		
15,700.00	10,418.00	13,676.13	8,480.00	94.94	92.35	0.00	-5,232.25	-728.84	1,938.00	1,872.81	65.19	29.728		
15,800.00	10,418.00	13,776.13	8,480.00	96.46	93.90	0.00	-5,332.24	-727.85	1,938.00	1,871.78	66.22	29.268		
15,900.00	10,418.00	13,876.13	8,480.00	97.98	95.46	0.00	-5,432.24	-726.85	1,938.00	1,870.75	67.25	28.820		
16,000.00	10,418.00	13,976.13	8,480.00	99.50	97.02	0.00	-5,532.23	-725.86	1,938.00	1,869.72	68.28	28.384		
16,100.00	10,418.00	14,076.13	8,480.00	101.03	98.58	0.00	-5,632.23	-724.87	1,938.00	1,868.69	69.31	27.961		
16,200.00	10,418.00	14,176.13	8,480.00	102.56	100.14	0.00	-5,732.22	-723.87	1,938.00	1,867.65	70.35	27.549		
16,300.00	10,418.00	14,276.13	8,480.00	104.09	101.71	0.00	-5,832.22	-722.88	1,938.00	1,866.62	71.39	27.149		
16,400.00	10,418.00	14,376.13	8,480.00	105.63	103.28	0.00	-5,932.21	-721.89	1,938.00	1,865.57	72.43	26.759		
16,500.00	10,418.00	14,476.13	8,480.00	107.17	104.86	0.00	-6,032.21	-720.90	1,938.00	1,864.53	73.47	26.379		
16,600.00	10,418.00	14,576.13	8,480.00	108.72	106.43	0.00	-6,132.20	-719.90	1,938.00	1,863.49	74.51	26.009		
16,700.00	10,418.00	14,676.13	8,480.00	110.26	108.01	0.00	-6,232.20	-718.91	1,938.00	1,862.44	75.56	25.649		
16,800.00	10,418.00	14,776.13	8,480.00	111.81	109.59	0.00	-6,332.19	-717.92	1,938.00	1,861.39	76.61	25.298		
16,900.00	10,418.00	14,876.13	8,480.00	113.37	111.17	0.00	-6,432.19	-716.92	1,938.00	1,860.34	77.66	24.956		
17,000.00	10,418.00	14,976.13	8,480.00	114.92	112.75	0.00	-6,532.18	-715.93	1,938.00	1,859.29	78.71	24.623		
17,100.00	10,418.00	15,076.13	8,480.00	116.48	114.34	0.00	-6,632.18	-714.94	1,938.00	1,858.24	79.76	24.298		
17,200.00	10,418.00	15,176.13	8,480.00	118.04	115.93	0.00	-6,732.17	-713.95	1,938.00	1,857.18	80.82	23.981		
17,300.00	10,418.00	15,276.13	8,480.00	119.61	117.52	0.00	-6,832.17	-712.95	1,938.00	1,856.13	81.87	23.671		
17,400.00	10,418.00	15,376.13	8,480.00	121.17	119.11	0.00	-6,932.16	-711.96	1,938.00	1,855.07	82.93	23.369		
17,500.00	10,418.00	15,476.13	8,480.00	122.74	120.70	0.00	-7,032.16	-710.97	1,938.00	1,854.01	83.99	23.075		
17,600.00	10,418.00	15,576.13	8,480.00	124.31	122.30	0.00	-7,132.15	-709.97	1,938.00	1,852.95	85.05	22.787		
17,700.00	10,418.00	15,676.13	8,480.00	125.88	123.89	0.00	-7,232.15	-708.98	1,938.00	1,851.89	86.11	22.506		
17,800.00	10,418.00	15,776.13	8,480.00	127.46	125.49	0.00	-7,332.14	-707.99	1,938.00	1,850.83	87.17	22.232		
17,900.00	10,418.00	15,876.13	8,480.00	129.04	127.09	0.00	-7,432.14	-707.00	1,938.00	1,849.76	88.24	21.964		
18,000.00	10,418.00	15,976.13	8,480.00	130.61	128.69	0.00	-7,532.13	-706.00	1,938.00	1,848.70	89.30	21.702		
18,100.00	10,418.00	16,076.13	8,480.00	132.19	130.29	0.00	-7,632.13	-705.01	1,938.00	1,847.63	90.37	21.446		
18,200.00	10,418.00	16,176.13	8,480.00	133.78	131.89	0.00	-7,732.13	-704.02	1,938.00	1,846.57	91.43	21.196		
18,300.00	10,418.00	16,276.13	8,480.00	135.36	133.49	0.00	-7,832.12	-703.02	1,938.00	1,845.50	92.50	20.951		
18,400.00	10,418.00	16,376.13	8,480.00	136.94	135.10	0.00	-7,932.12	-702.03	1,938.00	1,844.43	93.57	20.712		
18,500.00	10,418.00	16,476.13	8,480.00	138.53	136.71	0.00	-8,032.11	-701.04	1,938.00	1,843.36	94.64	20.478		
18,600.00	10,418.00	16,576.13	8,480.00	140.12	138.31	0.00	-8,132.11	-700.04	1,938.00	1,842.29	95.71	20.249		
18,700.00	10,418.00	16,676.13	8,480.00	141.71	139.92	0.00	-8,232.10	-699.05	1,938.00	1,841.22	96.78	20.024		
18,800.00	10,418.00	16,776.13	8,480.00	143.30	141.53	0.00	-8,332.10	-698.06	1,938.00	1,840.15	97.85	19.805		
18,900.00	10,418.00	16,876.13	8,480.00	144.89	143.14	0.00	-8,432.09	-697.07	1,938.00	1,839.07	98.93	19.590		
19,000.00	10,418.00	16,976.13	8,480.00	146.49	144.75	0.00	-8,532.09	-696.07	1,938.00	1,838.00	100.00	19.380		
19,100.00	10,418.00	17,076.13	8,480.00	148.08	146.36	0.00	-8,632.08	-695.08	1,938.00	1,836.92	101.08	19.173		

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 503H
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 503H	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							
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	10,418.00	17,176.13	8,480.00	149.68	147.97	0.00	-8,732.08	-694.09	1,938.00	1,835.85	102.15	18.972		
19,300.00	10,418.00	17,276.13	8,480.00	151.27	149.59	0.00	-8,832.07	-693.09	1,938.00	1,834.77	103.23	18.774		
19,400.00	10,418.00	17,376.13	8,480.00	152.87	151.20	0.00	-8,932.07	-692.10	1,938.00	1,833.69	104.31	18.580		
19,500.00	10,418.00	17,476.13	8,480.00	154.47	152.82	0.00	-9,032.06	-691.11	1,938.00	1,832.62	105.38	18.390		
19,600.00	10,418.00	17,576.13	8,480.00	156.07	154.43	0.00	-9,132.06	-690.12	1,938.00	1,831.54	106.46	18.204		
19,700.00	10,418.00	17,676.13	8,480.00	157.67	156.05	0.00	-9,232.05	-689.12	1,938.00	1,830.46	107.54	18.021		
19,800.00	10,418.00	17,776.13	8,480.00	159.28	157.67	0.00	-9,332.05	-688.13	1,938.00	1,829.38	108.62	17.842		
19,900.00	10,418.00	17,876.13	8,480.00	160.88	159.29	0.00	-9,432.04	-687.14	1,938.00	1,828.30	109.70	17.666		
20,000.00	10,418.00	17,976.13	8,480.00	162.48	160.90	0.00	-9,532.04	-686.14	1,938.00	1,827.22	110.78	17.494		
20,100.00	10,418.00	18,076.13	8,480.00	164.09	162.52	0.00	-9,632.03	-685.15	1,938.00	1,826.14	111.86	17.325		
20,200.00	10,418.00	18,176.13	8,480.00	165.70	164.14	0.00	-9,732.03	-684.16	1,938.00	1,825.05	112.95	17.159		
20,300.00	10,418.00	18,276.13	8,480.00	167.30	165.76	0.00	-9,832.02	-683.17	1,938.00	1,823.97	114.03	16.996		
20,400.00	10,418.00	18,376.13	8,480.00	168.91	167.39	0.00	-9,932.02	-682.17	1,938.00	1,822.89	115.11	16.836		
20,500.00	10,418.00	18,476.13	8,480.00	170.52	169.01	0.00	-10,032.01	-681.18	1,938.00	1,821.80	116.20	16.679		
20,600.00	10,418.00	18,576.13	8,480.00	172.13	170.63	0.00	-10,132.01	-680.19	1,938.00	1,820.72	117.28	16.525		
20,700.00	10,418.00	18,676.13	8,480.00	173.74	172.25	0.00	-10,232.00	-679.19	1,938.00	1,819.64	118.36	16.373		
20,800.00	10,418.00	18,776.13	8,480.00	175.35	173.88	0.00	-10,332.00	-678.20	1,938.00	1,818.55	119.45	16.225		
20,900.00	10,418.00	18,876.13	8,480.00	176.97	175.50	0.00	-10,431.99	-677.21	1,938.00	1,817.47	120.53	16.078		
21,000.00	10,418.00	18,976.13	8,480.00	178.58	177.13	0.00	-10,531.99	-676.22	1,938.00	1,816.38	121.62	15.935		
21,100.00	10,418.00	19,076.13	8,480.00	180.19	178.75	0.00	-10,631.98	-675.22	1,938.00	1,815.29	122.71	15.794		
21,200.00	10,418.00	19,176.13	8,480.00	181.81	180.38	0.00	-10,731.98	-674.23	1,938.00	1,814.21	123.79	15.655		
21,300.00	10,418.00	19,276.13	8,480.00	183.42	182.00	0.00	-10,831.97	-673.24	1,938.00	1,813.12	124.88	15.519		
21,400.00	10,418.00	19,376.13	8,480.00	185.04	183.63	0.00	-10,931.97	-672.24	1,938.00	1,812.03	125.97	15.385		
21,500.00	10,418.00	19,476.13	8,480.00	186.65	185.25	0.00	-11,031.96	-671.25	1,938.00	1,810.94	127.06	15.253		
21,600.00	10,418.00	19,576.13	8,480.00	188.27	186.88	0.00	-11,131.96	-670.26	1,938.00	1,809.86	128.14	15.124		
21,700.00	10,418.00	19,676.13	8,480.00	189.89	188.51	0.00	-11,231.95	-669.26	1,938.00	1,808.77	129.23	14.996		
21,800.00	10,418.00	19,776.13	8,480.00	191.50	190.14	0.00	-11,331.95	-668.27	1,938.00	1,807.68	130.32	14.871		
21,900.00	10,418.00	19,876.13	8,480.00	193.12	191.77	0.00	-11,431.94	-667.28	1,938.00	1,806.59	131.41	14.748		
21,915.87	10,418.00	19,891.99	8,480.00	193.38	192.02	0.00	-11,447.81	-667.12	1,938.00	1,806.42	131.58	14.728		
21,923.68	10,418.00	19,899.80	8,480.00	193.51	192.15	0.00	-11,455.62	-667.04	1,938.00	1,806.33	131.67	14.719		

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	0.47	50.18	50.18					
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.47	50.18	50.18	50.00	0.18	282.813		
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.47	50.18	50.18	49.50	0.68	73.322		
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.47	50.18	50.18	48.99	1.19	42.121		
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.47	50.18	50.18	48.48	1.70	29.548		
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.47	50.18	50.18	47.98	2.21	22.755		
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.47	50.18	50.18	47.47	2.71	18.502		
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.47	50.18	50.18	46.96	3.22	15.588		
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.47	50.18	50.18	46.45	3.73	13.467		
900.00	900.00	900.00	900.00	2.99	2.99	89.46	0.47	50.18	50.18	45.95	4.23	11.854		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	89.46	0.47	50.18	50.18	45.44	4.74	10.587		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	89.46	0.47	50.18	50.18	44.93	5.25	9.564		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	89.46	0.47	50.18	50.18	44.43	5.75	8.721		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	89.46	0.47	50.18	50.18	43.92	6.26	8.015		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	89.46	0.47	50.18	50.18	43.41	6.77	7.415		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.46	0.47	50.18	50.18	42.91	7.27	6.898		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	89.46	0.47	50.18	50.18	42.40	7.78	6.449		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	89.46	0.47	50.18	50.18	41.89	8.29	6.054		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	89.46	0.47	50.18	50.18	41.39	8.80	5.705		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	89.46	0.47	50.18	50.18	40.88	9.30	5.394		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	89.46	0.47	50.18	50.18	40.37	9.81	5.115		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	89.46	0.47	50.18	50.18	39.86	10.32	4.864 CC, ES, SF		
2,200.00	2,199.99	2,198.67	2,198.66	7.65	7.64	163.37	0.77	51.42	52.69	41.89	10.81	4.876		
2,300.00	2,299.91	2,296.98	2,296.89	7.99	7.98	163.57	1.66	55.11	60.22	48.94	11.28	5.337		
2,400.00	2,399.69	2,394.54	2,394.25	8.34	8.32	163.80	3.14	61.21	72.73	60.98	11.75	6.190		
2,500.00	2,499.27	2,491.01	2,490.33	8.70	8.66	164.01	5.16	69.62	90.16	77.95	12.21	7.386		
2,600.00	2,598.57	2,586.05	2,584.74	9.06	9.00	164.16	7.72	80.20	112.45	99.79	12.65	8.886		
2,700.00	2,697.54	2,680.27	2,678.06	9.42	9.34	164.27	10.77	92.85	139.40	126.30	13.10	10.638		
2,771.79	2,768.33	2,748.84	2,745.91	9.69	9.60	164.42	13.09	102.46	160.66	147.21	13.45	11.946		
2,800.00	2,796.11	2,775.71	2,772.49	9.79	9.70	164.52	14.00	106.23	169.26	155.68	13.58	12.460		
2,900.00	2,894.56	2,870.94	2,866.73	10.18	10.05	164.81	17.23	119.58	199.74	185.68	14.06	14.205		
3,000.00	2,993.02	2,966.18	2,960.97	10.56	10.41	165.03	20.45	132.94	230.23	215.69	14.54	15.834		
3,100.00	3,091.48	3,061.41	3,055.21	10.95	10.77	165.19	23.67	146.29	260.72	245.70	15.02	17.356		
3,200.00	3,189.94	3,156.65	3,149.45	11.35	11.13	165.32	26.90	159.64	291.21	275.71	15.51	18.781		
3,300.00	3,288.39	3,251.89	3,243.69	11.75	11.50	165.43	30.12	173.00	321.70	305.71	15.99	20.118		
3,400.00	3,386.85	3,347.12	3,337.93	12.16	11.87	165.51	33.34	186.35	352.20	335.72	16.48	21.374		
3,500.00	3,485.31	3,442.36	3,432.17	12.57	12.24	165.59	36.57	199.71	382.69	365.72	16.97	22.556		
3,600.00	3,583.77	3,537.60	3,526.41	12.98	12.62	165.65	39.79	213.06	413.18	395.73	17.46	23.670		
3,700.00	3,682.22	3,632.83	3,620.66	13.39	12.99	165.70	43.01	226.41	443.68	425.73	17.95	24.721		
3,800.00	3,780.68	3,728.07	3,714.90	13.81	13.37	165.75	46.24	239.77	474.17	455.73	18.44	25.715		
3,900.00	3,879.14	3,823.30	3,809.14	14.23	13.75	165.79	49.46	253.12	504.67	485.74	18.93	26.656		
4,000.00	3,977.60	3,918.54	3,903.38	14.65	14.13	165.83	52.68	266.48	535.16	515.74	19.43	27.547		
4,100.00	4,076.05	4,013.78	3,997.62	15.07	14.51	165.86	55.91	279.83	565.66	545.74	19.92	28.392		
4,200.00	4,174.51	4,109.01	4,091.86	15.50	14.89	165.89	59.13	293.18	596.15	575.73	20.42	29.195		
4,300.00	4,272.97	4,204.25	4,186.10	15.93	15.28	165.91	62.35	306.54	626.65	605.73	20.92	29.959		
4,400.00	4,371.43	4,299.49	4,280.34	16.36	15.66	165.94	65.58	319.89	657.15	635.73	21.41	30.686		
4,500.00	4,469.88	4,394.72	4,374.58	16.79	16.05	165.96	68.80	333.24	687.64	665.73	21.91	31.380		
4,600.00	4,568.34	4,489.96	4,468.82	17.22	16.44	165.98	72.02	346.60	718.14	695.72	22.41	32.041		
4,700.00	4,666.80	4,585.19	4,563.06	17.65	16.82	166.00	75.25	359.95	748.63	725.72	22.91	32.672		
4,800.00	4,765.25	4,680.43	4,657.30	18.08	17.21	166.02	78.47	373.31	779.13	755.71	23.41	33.276		
4,900.00	4,863.71	4,775.67	4,751.54	18.52	17.60	166.03	81.69	386.66	809.63	785.71	23.92	33.853		
5,000.00	4,962.17	4,870.90	4,845.78	18.95	17.99	166.05	84.92	400.01	840.12	815.70	24.42	34.406		

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 503H
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 503H	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	5,060.63	4,966.14	4,940.02	19.39	18.38	166.06	88.14	413.37	870.62	845.70	24.92	34.936		
5,200.00	5,159.08	5,061.38	5,034.26	19.83	18.78	166.07	91.36	426.72	901.11	875.69	25.42	35.444		
5,300.00	5,257.54	5,156.61	5,128.50	20.27	19.17	166.08	94.59	440.08	931.61	905.68	25.93	35.932		
5,400.00	5,356.00	5,251.85	5,222.74	20.71	19.56	166.09	97.81	453.43	962.11	935.67	26.43	36.400		
5,500.00	5,454.46	5,347.08	5,316.98	21.15	19.95	166.11	101.03	466.78	992.60	965.67	26.94	36.851		
5,600.00	5,552.91	5,442.32	5,411.22	21.59	20.35	166.11	104.26	480.14	1,023.10	995.66	27.44	37.284		
5,700.00	5,651.37	5,537.56	5,505.46	22.03	20.74	166.12	107.48	493.49	1,053.60	1,025.65	27.95	37.701		
5,800.00	5,749.83	5,632.79	5,599.70	22.47	21.14	166.13	110.70	506.84	1,084.09	1,055.64	28.45	38.103		
5,900.00	5,848.29	5,728.03	5,693.94	22.91	21.53	166.14	113.93	520.20	1,114.59	1,085.63	28.96	38.490		
6,000.00	5,946.74	5,823.27	5,788.18	23.36	21.93	166.15	117.15	533.55	1,145.08	1,115.62	29.46	38.864		
6,100.00	6,045.20	5,918.50	5,882.42	23.80	22.32	166.16	120.37	546.91	1,175.58	1,145.61	29.97	39.224		
6,200.00	6,143.66	6,013.74	5,976.66	24.24	22.72	166.16	123.60	560.26	1,206.08	1,175.60	30.48	39.572		
6,300.00	6,242.12	6,108.98	6,070.90	24.69	23.11	166.17	126.82	573.61	1,236.57	1,205.59	30.99	39.908		
6,400.00	6,340.57	6,204.21	6,165.14	25.13	23.51	166.18	130.04	586.97	1,267.07	1,235.58	31.49	40.233		
6,500.00	6,439.03	6,299.45	6,259.38	25.58	23.91	166.18	133.27	600.32	1,297.57	1,265.57	32.00	40.547		
6,600.00	6,537.49	6,394.68	6,353.62	26.02	24.30	166.19	136.49	613.68	1,328.06	1,295.55	32.51	40.851		
6,700.00	6,635.95	6,489.92	6,447.86	26.47	24.70	166.19	139.71	627.03	1,358.56	1,325.54	33.02	41.146		
6,757.61	6,692.67	6,544.79	6,502.16	26.73	24.93	166.20	141.57	634.72	1,376.13	1,342.82	33.31	41.311		
6,800.00	6,734.44	6,585.23	6,542.17	26.91	25.10	166.24	142.94	640.39	1,388.84	1,355.31	33.53	41.425		
6,900.00	6,833.29	6,681.15	6,637.09	27.34	25.50	166.33	146.19	653.84	1,417.09	1,383.05	34.04	41.635		
7,000.00	6,932.50	6,777.75	6,732.69	27.75	25.90	166.38	149.45	667.39	1,442.89	1,408.35	34.54	41.769		
7,100.00	7,032.01	6,886.11	6,839.92	28.14	26.35	166.39	153.09	682.47	1,466.15	1,431.04	35.12	41.753		
7,200.00	7,131.74	7,042.42	6,995.17	28.51	26.98	166.36	157.35	700.11	1,484.34	1,448.43	35.92	41.329		
7,300.00	7,231.62	7,201.26	7,153.55	28.86	27.57	166.34	160.15	711.70	1,496.10	1,459.43	36.67	40.803		
7,400.00	7,331.60	7,361.57	7,313.76	29.19	28.13	166.33	161.40	716.89	1,501.32	1,463.96	37.36	40.183		
7,429.40	7,361.00	7,408.81	7,361.00	29.28	28.29	92.50	161.47	717.18	1,501.61	1,464.05	37.56	39.984		
7,500.00	7,431.60	7,479.41	7,431.60	29.50	28.52	92.50	161.47	717.18	1,501.61	1,463.71	37.90	39.625		
7,600.00	7,531.60	7,579.41	7,531.60	29.82	28.84	92.50	161.47	717.18	1,501.61	1,463.23	38.38	39.127		
7,700.00	7,631.60	7,679.41	7,631.60	30.14	29.17	92.50	161.47	717.18	1,501.61	1,462.75	38.86	38.640		
7,800.00	7,731.60	7,779.41	7,731.60	30.45	29.49	92.50	161.47	717.18	1,501.61	1,462.26	39.35	38.165		
7,900.00	7,831.60	7,879.41	7,831.60	30.77	29.82	92.50	161.47	717.18	1,501.61	1,461.78	39.83	37.701		
8,000.00	7,931.60	7,968.58	7,920.57	31.09	30.09	92.68	156.74	717.23	1,501.91	1,461.64	40.27	37.296		
8,100.00	8,031.60	8,050.00	8,000.30	31.41	30.33	93.30	140.60	717.39	1,503.20	1,462.53	40.67	36.961		
8,200.00	8,131.60	8,130.17	8,075.79	31.73	30.53	94.31	113.83	717.65	1,505.95	1,464.91	41.04	36.692		
8,300.00	8,231.60	8,200.00	8,137.97	32.06	30.69	95.51	82.12	717.97	1,510.85	1,469.49	41.36	36.529		
8,400.00	8,331.60	8,260.43	8,188.31	32.38	30.82	96.77	48.75	718.30	1,518.62	1,477.01	41.61	36.496		
8,500.00	8,431.60	8,313.00	8,229.04	32.70	30.91	98.02	15.55	718.64	1,529.92	1,488.14	41.78	36.617		
8,600.00	8,531.60	8,350.00	8,255.81	33.03	30.98	98.97	-9.99	718.89	1,545.28	1,503.45	41.83	36.941		
8,700.00	8,631.60	8,400.00	8,289.24	33.35	31.06	100.34	-47.14	719.26	1,564.98	1,523.10	41.87	37.375		
8,800.00	8,731.60	8,430.30	8,307.88	33.68	31.11	101.22	-71.03	719.50	1,589.30	1,547.54	41.76	38.059		
8,900.00	8,831.60	8,450.00	8,319.31	34.00	31.14	101.81	-87.07	719.66	1,618.35	1,576.83	41.52	38.978		
9,000.00	8,931.60	8,484.16	8,337.80	34.33	31.19	102.85	-115.78	719.95	1,651.95	1,610.65	41.30	40.000		
9,100.00	9,031.60	8,500.00	8,345.79	34.66	31.22	103.34	-129.46	720.08	1,690.17	1,649.24	40.93	41.298		
9,200.00	9,131.60	8,525.23	8,357.72	34.98	31.26	104.14	-151.68	720.31	1,732.69	1,692.12	40.57	42.708		
9,300.00	9,231.60	8,550.00	8,368.47	35.31	31.30	104.93	-174.00	720.53	1,779.43	1,739.25	40.19	44.281		
9,400.00	9,331.60	8,550.00	8,368.47	35.64	31.30	104.93	-174.00	720.53	1,830.03	1,790.40	39.64	46.171		
9,500.00	9,431.60	8,570.74	8,376.72	35.97	31.34	105.61	-193.03	720.72	1,884.24	1,845.03	39.21	48.058		
9,600.00	9,531.60	8,582.83	8,381.22	36.30	31.36	106.00	-204.25	720.83	1,941.87	1,903.14	38.73	50.138		
9,700.00	9,631.60	8,600.00	8,387.18	36.63	31.39	106.56	-220.35	720.99	2,002.67	1,964.37	38.29	52.297		
9,800.00	9,731.60	8,600.00	8,387.18	36.96	31.39	106.56	-220.35	720.99	2,066.29	2,028.52	37.78	54.698		
9,900.00	9,831.60	8,600.00	8,387.18	37.30	31.39	106.56	-220.35	720.99	2,132.71	2,095.43	37.28	57.203		
9,913.44	9,845.04	8,600.00	8,387.18	37.34	31.39	106.56	-220.35	720.99	2,141.83	2,104.62	37.22	57.547		

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 503H
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 503H	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			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	
9,950.00	9,881.57	8,600.00	8,387.18	37.46	31.39	-69.67	-220.35	720.99	2,166.62	2,129.58	37.04	58.490		
10,000.00	9,931.27	8,622.41	8,394.24	37.60	31.44	-64.89	-241.62	721.20	2,199.64	2,162.71	36.93	59.569		
10,050.00	9,980.31	8,628.53	8,396.03	37.74	31.45	-60.92	-247.47	721.26	2,232.10	2,195.39	36.71	60.796		
10,100.00	10,028.32	8,650.00	8,401.78	37.87	31.50	-56.97	-268.15	721.47	2,263.72	2,227.13	36.59	61.873		
10,150.00	10,074.94	8,650.00	8,401.78	37.99	31.50	-53.88	-268.15	721.47	2,293.74	2,257.39	36.35	63.106		
10,200.00	10,119.80	8,650.00	8,401.78	38.10	31.50	-51.10	-268.15	721.47	2,322.39	2,286.28	36.11	64.306		
10,250.00	10,162.58	8,650.00	8,401.78	38.19	31.50	-48.63	-268.15	721.47	2,349.52	2,313.63	35.89	65.462		
10,300.00	10,202.93	8,650.00	8,401.78	38.28	31.50	-46.45	-268.15	721.47	2,374.96	2,339.28	35.68	66.563		
10,350.00	10,240.57	8,678.00	8,408.12	38.35	31.57	-44.25	-295.42	721.74	2,397.89	2,362.27	35.61	67.329		
10,400.00	10,275.19	8,700.00	8,412.16	38.42	31.63	-42.45	-317.04	721.96	2,419.12	2,383.60	35.53	68.091		
10,450.00	10,306.54	8,700.00	8,412.16	38.47	31.63	-41.10	-317.04	721.96	2,437.85	2,402.49	35.36	68.944		
10,500.00	10,334.38	8,700.00	8,412.16	38.52	31.63	-39.96	-317.04	721.96	2,454.39	2,419.18	35.21	69.700		
10,550.00	10,358.49	8,700.00	8,412.16	38.56	31.63	-39.01	-317.04	721.96	2,468.68	2,433.58	35.09	70.348		
10,600.00	10,378.70	8,729.72	8,416.30	38.60	31.71	-38.14	-346.47	722.25	2,479.84	2,444.74	35.11	70.635		
10,650.00	10,394.84	8,750.00	8,418.24	38.64	31.78	-37.53	-366.65	722.45	2,488.81	2,453.70	35.11	70.893		
10,700.00	10,406.80	8,750.00	8,418.24	38.68	31.78	-37.15	-366.65	722.45	2,494.96	2,459.90	35.06	71.153		
10,750.00	10,414.49	8,750.00	8,418.24	38.74	31.78	-36.93	-366.65	722.45	2,498.65	2,463.59	35.06	71.276		
10,800.00	10,417.84	8,773.93	8,419.62	38.82	31.85	-36.87	-390.53	722.69	2,499.34	2,464.19	35.15	71.110		
10,813.44	10,418.00	8,776.92	8,419.72	38.85	31.86	-36.88	-393.53	722.72	2,499.10	2,463.93	35.17	71.064		
10,895.08	10,418.00	8,795.99	8,420.00	39.02	31.93	-36.89	-412.60	722.91	2,498.09	2,462.78	35.31	70.738		
10,900.00	10,418.00	8,800.91	8,420.00	39.04	31.95	-36.89	-417.51	722.96	2,498.09	2,462.76	35.33	70.702		
11,000.00	10,418.00	8,900.91	8,420.00	39.34	32.36	-36.89	-517.51	723.96	2,498.10	2,462.35	35.75	69.883		
11,100.00	10,418.00	9,000.91	8,420.00	39.72	32.85	-36.89	-617.50	724.96	2,498.10	2,461.87	36.23	68.948		
11,200.00	10,418.00	9,100.91	8,420.00	40.19	33.43	-36.89	-717.50	725.96	2,498.10	2,461.32	36.78	67.913		
11,300.00	10,418.00	9,200.91	8,420.00	40.72	34.07	-36.89	-817.49	726.95	2,498.11	2,460.71	37.40	66.792		
11,400.00	10,418.00	9,300.91	8,420.00	41.32	34.79	-36.89	-917.49	727.95	2,498.11	2,460.03	38.08	65.602		
11,500.00	10,418.00	9,400.91	8,420.00	41.98	35.57	-36.89	-1,017.48	728.95	2,498.11	2,459.30	38.82	64.356		
11,600.00	10,418.00	9,500.91	8,420.00	42.70	36.41	-36.89	-1,117.48	729.95	2,498.12	2,458.51	39.61	63.069		
11,700.00	10,418.00	9,600.91	8,420.00	43.47	37.30	-36.89	-1,217.47	730.95	2,498.12	2,457.67	40.45	61.753		
11,800.00	10,418.00	9,700.91	8,420.00	44.29	38.24	-36.89	-1,317.47	731.95	2,498.13	2,456.78	41.35	60.420		
11,900.00	10,418.00	9,800.91	8,420.00	45.15	39.23	-36.89	-1,417.46	732.94	2,498.13	2,455.85	42.28	59.080		
12,000.00	10,418.00	9,900.91	8,420.00	46.06	40.26	-36.89	-1,517.46	733.94	2,498.13	2,454.87	43.26	57.743		
12,100.00	10,418.00	10,000.91	8,420.00	47.01	41.34	-36.89	-1,617.45	734.94	2,498.14	2,453.86	44.28	56.415		
12,200.00	10,418.00	10,100.91	8,420.00	47.99	42.44	-36.89	-1,717.45	735.94	2,498.14	2,452.80	45.34	55.102		
12,300.00	10,418.00	10,200.91	8,420.00	49.02	43.59	-36.89	-1,817.44	736.94	2,498.14	2,451.72	46.43	53.809		
12,400.00	10,418.00	10,300.91	8,420.00	50.07	44.76	-36.89	-1,917.44	737.94	2,498.15	2,450.60	47.55	52.540		
12,500.00	10,418.00	10,400.91	8,420.00	51.16	45.97	-36.89	-2,017.43	738.94	2,498.15	2,449.45	48.70	51.298		
12,600.00	10,418.00	10,500.91	8,420.00	52.28	47.20	-36.89	-2,117.43	739.93	2,498.15	2,448.28	49.88	50.086		
12,700.00	10,418.00	10,600.91	8,420.00	53.42	48.45	-36.89	-2,217.42	740.93	2,498.16	2,447.08	51.08	48.904		
12,800.00	10,418.00	10,700.91	8,420.00	54.59	49.73	-36.89	-2,317.42	741.93	2,498.16	2,445.85	52.31	47.755		
12,900.00	10,418.00	10,800.91	8,420.00	55.78	51.03	-36.89	-2,417.41	742.93	2,498.16	2,444.60	53.56	46.640		
13,000.00	10,418.00	10,900.91	8,420.00	57.00	52.35	-36.89	-2,517.41	743.93	2,498.17	2,443.33	54.84	45.558		
13,100.00	10,418.00	11,000.91	8,420.00	58.24	53.69	-36.89	-2,617.40	744.93	2,498.17	2,442.05	56.12	44.512		
13,200.00	10,418.00	11,100.91	8,420.00	59.50	55.05	-36.89	-2,717.40	745.92	2,498.18	2,440.75	57.43	43.499		
13,300.00	10,418.00	11,200.91	8,420.00	60.77	56.42	-36.89	-2,817.39	746.92	2,498.18	2,439.43	58.75	42.520		
13,400.00	10,418.00	11,300.91	8,420.00	62.07	57.80	-36.89	-2,917.39	747.92	2,498.18	2,438.09	60.09	41.572		
13,500.00	10,418.00	11,400.91	8,420.00	63.38	59.20	-36.89	-3,017.38	748.92	2,498.19	2,436.74	61.45	40.656		
13,600.00	10,418.00	11,500.91	8,420.00	64.71	60.62	-36.89	-3,117.38	749.92	2,498.19	2,435.38	62.81	39.771		
13,700.00	10,418.00	11,600.91	8,420.00	66.05	62.04	-36.89	-3,217.37	750.92	2,498.19	2,434.00	64.19	38.917		
13,800.00	10,418.00	11,700.91	8,420.00	67.40	63.47	-36.89	-3,317.37	751.91	2,498.20	2,432.61	65.58	38.092		
13,900.00	10,418.00	11,800.91	8,420.00	68.77	64.92	-36.89	-3,417.36	752.91	2,498.20	2,431.22	66.98	37.296		
14,000.00	10,418.00	11,900.91	8,420.00	70.15	66.37	-36.89	-3,517.36	753.91	2,498.20	2,429.81	68.39	36.526		

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 503H
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 503H	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			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,100.00	10,418.00	12,000.91	8,420.00	71.54	67.84	-36.89	-3,617.35	754.91	2,498.21	2,428.39	69.82	35.782		
14,200.00	10,418.00	12,100.91	8,420.00	72.95	69.31	-36.89	-3,717.35	755.91	2,498.21	2,426.96	71.25	35.064		
14,300.00	10,418.00	12,200.91	8,420.00	74.36	70.79	-36.89	-3,817.34	756.91	2,498.21	2,425.53	72.68	34.371		
14,400.00	10,418.00	12,300.91	8,420.00	75.78	72.28	-36.89	-3,917.34	757.91	2,498.22	2,424.09	74.13	33.701		
14,500.00	10,418.00	12,400.91	8,420.00	77.21	73.77	-36.89	-4,017.33	758.90	2,498.22	2,422.64	75.58	33.053		
14,600.00	10,418.00	12,500.91	8,420.00	78.65	75.27	-36.89	-4,117.33	759.90	2,498.23	2,421.18	77.04	32.427		
14,700.00	10,418.00	12,600.91	8,420.00	80.10	76.78	-36.89	-4,217.32	760.90	2,498.23	2,419.72	78.51	31.821		
14,800.00	10,418.00	12,700.91	8,420.00	81.55	78.29	-36.89	-4,317.32	761.90	2,498.23	2,418.25	79.98	31.235		
14,900.00	10,418.00	12,800.91	8,420.00	83.02	79.81	-36.89	-4,417.31	762.90	2,498.24	2,416.78	81.46	30.668		
15,000.00	10,418.00	12,900.91	8,420.00	84.49	81.33	-36.89	-4,517.31	763.90	2,498.24	2,415.29	82.95	30.119		
15,100.00	10,418.00	13,000.91	8,420.00	85.96	82.86	-36.89	-4,617.30	764.89	2,498.24	2,413.81	84.43	29.589		
15,200.00	10,418.00	13,100.91	8,420.00	87.45	84.39	-36.89	-4,717.30	765.89	2,498.25	2,412.32	85.92	29.075		
15,300.00	10,418.00	13,200.91	8,420.00	88.94	85.93	-36.89	-4,817.29	766.89	2,498.25	2,410.83	87.42	28.577		
15,400.00	10,418.00	13,300.91	8,420.00	90.43	87.47	-36.89	-4,917.29	767.89	2,498.25	2,409.33	88.92	28.094		
15,500.00	10,418.00	13,400.91	8,420.00	91.93	89.02	-36.89	-5,017.28	768.89	2,498.26	2,407.83	90.43	27.626		
15,600.00	10,418.00	13,500.91	8,420.00	93.43	90.57	-36.89	-5,117.28	769.89	2,498.26	2,406.32	91.94	27.173		
15,700.00	10,418.00	13,600.91	8,420.00	94.94	92.12	-36.89	-5,217.27	770.89	2,498.26	2,404.81	93.45	26.733		
15,800.00	10,418.00	13,700.91	8,420.00	96.46	93.68	-36.89	-5,317.27	771.88	2,498.27	2,403.30	94.97	26.306		
15,900.00	10,418.00	13,800.91	8,420.00	97.98	95.23	-36.89	-5,417.26	772.88	2,498.27	2,401.78	96.49	25.892		
16,000.00	10,418.00	13,900.91	8,420.00	99.50	96.80	-36.89	-5,517.26	773.88	2,498.28	2,400.26	98.01	25.490		
16,100.00	10,418.00	14,000.91	8,420.00	101.03	98.36	-36.89	-5,617.25	774.88	2,498.28	2,398.74	99.54	25.099		
16,200.00	10,418.00	14,100.91	8,420.00	102.56	99.93	-36.89	-5,717.25	775.88	2,498.28	2,397.22	101.06	24.720		
16,300.00	10,418.00	14,200.91	8,420.00	104.09	101.50	-36.89	-5,817.24	776.88	2,498.29	2,395.69	102.59	24.351		
16,400.00	10,418.00	14,300.91	8,420.00	105.63	103.07	-36.89	-5,917.24	777.87	2,498.29	2,394.16	104.12	23.993		
16,500.00	10,418.00	14,400.91	8,420.00	107.17	104.65	-36.89	-6,017.23	778.87	2,498.29	2,392.63	105.66	23.645		
16,600.00	10,418.00	14,500.91	8,420.00	108.72	106.23	-36.89	-6,117.23	779.87	2,498.30	2,391.10	107.20	23.306		
16,700.00	10,418.00	14,600.91	8,420.00	110.26	107.81	-36.89	-6,217.22	780.87	2,498.30	2,389.56	108.74	22.976		
16,800.00	10,418.00	14,700.91	8,420.00	111.81	109.39	-36.89	-6,317.22	781.87	2,498.30	2,388.03	110.28	22.655		
16,900.00	10,418.00	14,800.91	8,420.00	113.37	110.97	-36.89	-6,417.21	782.87	2,498.31	2,386.49	111.82	22.342		
17,000.00	10,418.00	14,900.91	8,420.00	114.92	112.56	-36.89	-6,517.21	783.87	2,498.31	2,384.95	113.37	22.038		
17,100.00	10,418.00	15,000.91	8,420.00	116.48	114.15	-36.89	-6,617.20	784.86	2,498.31	2,383.40	114.91	21.741		
17,200.00	10,418.00	15,100.91	8,420.00	118.04	115.74	-36.89	-6,717.20	785.86	2,498.32	2,381.86	116.46	21.453		
17,300.00	10,418.00	15,200.91	8,420.00	119.61	117.33	-36.90	-6,817.19	786.86	2,498.32	2,380.32	118.00	21.171		
17,400.00	10,418.00	15,300.91	8,420.00	121.17	118.92	-36.90	-6,917.19	787.86	2,498.33	2,378.77	119.55	20.897		
17,500.00	10,418.00	15,400.91	8,420.00	122.74	120.52	-36.90	-7,017.18	788.86	2,498.33	2,377.22	121.11	20.629		
17,600.00	10,418.00	15,500.91	8,420.00	124.31	122.11	-36.90	-7,117.18	789.86	2,498.33	2,375.67	122.66	20.368		
17,700.00	10,418.00	15,600.91	8,420.00	125.88	123.71	-36.90	-7,217.17	790.85	2,498.34	2,374.12	124.21	20.113		
17,800.00	10,418.00	15,700.91	8,420.00	127.46	125.31	-36.90	-7,317.17	791.85	2,498.34	2,372.57	125.77	19.864		
17,900.00	10,418.00	15,800.91	8,420.00	129.04	126.91	-36.90	-7,417.16	792.85	2,498.34	2,371.02	127.32	19.622		
18,000.00	10,418.00	15,900.91	8,420.00	130.61	128.51	-36.90	-7,517.16	793.85	2,498.35	2,369.47	128.88	19.385		
18,100.00	10,418.00	16,000.91	8,420.00	132.19	130.11	-36.90	-7,617.15	794.85	2,498.35	2,367.91	130.44	19.154		
18,200.00	10,418.00	16,100.91	8,420.00	133.78	131.72	-36.90	-7,717.15	795.85	2,498.35	2,366.36	131.99	18.928		
18,300.00	10,418.00	16,200.91	8,420.00	135.36	133.32	-36.90	-7,817.14	796.85	2,498.36	2,364.81	133.55	18.707		
18,400.00	10,418.00	16,300.91	8,420.00	136.94	134.93	-36.90	-7,917.14	797.84	2,498.36	2,363.25	135.11	18.491		
18,500.00	10,418.00	16,400.91	8,420.00	138.53	136.54	-36.90	-8,017.13	798.84	2,498.36	2,361.69	136.67	18.280		
18,600.00	10,418.00	16,500.91	8,420.00	140.12	138.15	-36.90	-8,117.13	799.84	2,498.37	2,360.13	138.24	18.073		
18,700.00	10,418.00	16,600.91	8,420.00	141.71	139.76	-36.90	-8,217.12	800.84	2,498.37	2,358.57	139.80	17.871		
18,800.00	10,418.00	16,700.91	8,420.00	143.30	141.37	-36.90	-8,317.12	801.84	2,498.38	2,357.02	141.36	17.674		
18,900.00	10,418.00	16,800.91	8,420.00	144.89	142.98	-36.90	-8,417.11	802.84	2,498.38	2,355.46	142.92	17.481		
19,000.00	10,418.00	16,900.91	8,420.00	146.49	144.59	-36.90	-8,517.11	803.83	2,498.38	2,353.90	144.48	17.292		
19,100.00	10,418.00	17,000.91	8,420.00	148.08	146.20	-36.90	-8,617.10	804.83	2,498.39	2,352.34	146.05	17.106		
19,200.00	10,418.00	17,100.91	8,420.00	149.68	147.82	-36.90	-8,717.10	805.83	2,498.39	2,350.78	147.61	16.925		

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 503H
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 503H	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			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
19,300.00	10,418.00	17,200.91	8,420.00	151.27	149.43	-36.90	-8,817.09	806.83	2,498.39	2,349.22	149.18	16.748				
19,400.00	10,418.00	17,300.91	8,420.00	152.87	151.05	-36.90	-8,917.09	807.83	2,498.40	2,347.65	150.74	16.574				
19,500.00	10,418.00	17,400.91	8,420.00	154.47	152.66	-36.90	-9,017.08	808.83	2,498.40	2,346.09	152.31	16.404				
19,600.00	10,418.00	17,500.91	8,420.00	156.07	154.28	-36.90	-9,117.08	809.83	2,498.40	2,344.53	153.87	16.237				
19,700.00	10,418.00	17,600.91	8,420.00	157.67	155.90	-36.90	-9,217.07	810.82	2,498.41	2,342.97	155.44	16.073				
19,800.00	10,418.00	17,700.91	8,420.00	159.28	157.52	-36.90	-9,317.07	811.82	2,498.41	2,341.41	157.00	15.913				
19,900.00	10,418.00	17,800.91	8,420.00	160.88	159.14	-36.90	-9,417.06	812.82	2,498.41	2,339.85	158.57	15.756				
20,000.00	10,418.00	17,900.91	8,420.00	162.48	160.76	-36.90	-9,517.06	813.82	2,498.42	2,338.28	160.13	15.602				
20,100.00	10,418.00	18,000.91	8,420.00	164.09	162.38	-36.90	-9,617.05	814.82	2,498.42	2,336.72	161.70	15.451				
20,200.00	10,418.00	18,100.91	8,420.00	165.70	164.00	-36.90	-9,717.05	815.82	2,498.43	2,335.16	163.27	15.303				
20,300.00	10,418.00	18,200.91	8,420.00	167.30	165.62	-36.90	-9,817.04	816.81	2,498.43	2,333.60	164.83	15.157				
20,400.00	10,418.00	18,300.91	8,420.00	168.91	167.24	-36.90	-9,917.04	817.81	2,498.43	2,332.03	166.40	15.014				
20,500.00	10,418.00	18,400.91	8,420.00	170.52	168.86	-36.90	-10,017.03	818.81	2,498.44	2,330.47	167.97	14.874				
20,600.00	10,418.00	18,500.91	8,420.00	172.13	170.49	-36.90	-10,117.03	819.81	2,498.44	2,328.90	169.54	14.737				
20,700.00	10,418.00	18,511.34	8,420.00	173.74	170.66	-36.90	-10,127.46	819.91	2,500.05	2,329.69	170.36	14.675				
20,800.00	10,418.00	18,511.34	8,420.00	175.35	170.66	-36.90	-10,127.46	819.91	2,505.63	2,334.77	170.86	14.665				
20,900.00	10,418.00	18,511.34	8,420.00	176.97	170.66	-36.90	-10,127.46	819.91	2,515.17	2,344.07	171.10	14.700				
21,000.00	10,418.00	18,511.34	8,420.00	178.58	170.66	-36.90	-10,127.46	819.91	2,528.64	2,357.56	171.09	14.780				
21,100.00	10,418.00	18,511.34	8,420.00	180.19	170.66	-36.90	-10,127.46	819.91	2,545.97	2,375.14	170.83	14.904				
21,200.00	10,418.00	18,511.34	8,420.00	181.81	170.66	-36.90	-10,127.46	819.91	2,567.08	2,396.74	170.34	15.071				
21,300.00	10,418.00	18,511.34	8,420.00	183.42	170.66	-36.90	-10,127.46	819.91	2,591.88	2,422.25	169.63	15.280				
21,400.00	10,418.00	18,511.34	8,420.00	185.04	170.66	-36.90	-10,127.46	819.91	2,620.26	2,451.55	168.71	15.531				
21,500.00	10,418.00	18,511.34	8,420.00	186.65	170.66	-36.90	-10,127.46	819.91	2,652.11	2,484.49	167.62	15.822				
21,600.00	10,418.00	18,511.34	8,420.00	188.27	170.66	-36.90	-10,127.46	819.91	2,687.31	2,520.95	166.36	16.153				
21,700.00	10,418.00	18,511.34	8,420.00	189.89	170.66	-36.90	-10,127.46	819.91	2,725.72	2,560.76	164.96	16.523				
21,800.00	10,418.00	18,511.34	8,420.00	191.50	170.66	-36.90	-10,127.46	819.91	2,767.22	2,603.78	163.44	16.932				
21,900.00	10,418.00	18,511.34	8,420.00	193.12	170.66	-36.90	-10,127.46	819.91	2,811.66	2,649.85	161.81	17.376				
21,923.68	10,418.00	18,511.34	8,420.00	193.51	170.66	-36.90	-10,127.46	819.91	2,822.60	2,661.18	161.41	17.487				

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 503H
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 503H	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 504H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between		Minimum	Separation	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)		Separation (usft)	Factor	
0.00	0.00	0.00	0.00	0.00	0.00	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, SF		
2,200.00	2,199.99	2,199.99	2,199.99	7.65	7.65	164.11	0.24	25.09	26.35	15.53	10.82	2.435		
2,300.00	2,299.91	2,299.16	2,299.15	7.99	8.00	165.25	0.66	26.30	31.35	20.04	11.31	2.773		
2,400.00	2,399.69	2,397.79	2,397.70	8.34	8.35	165.62	1.92	29.92	41.30	29.52	11.78	3.505		
2,500.00	2,499.27	2,495.51	2,495.22	8.70	8.69	165.52	4.00	35.88	56.15	43.90	12.25	4.583		
2,600.00	2,598.57	2,592.00	2,591.31	9.06	9.03	165.23	6.85	44.07	75.83	63.12	12.71	5.966		
2,700.00	2,697.54	2,686.92	2,685.60	9.42	9.37	164.90	10.44	54.35	100.27	87.11	13.16	7.620		
2,771.79	2,768.33	2,753.93	2,751.99	9.69	9.61	164.67	13.44	62.95	120.69	107.22	13.47	8.958		
2,800.00	2,796.11	2,780.00	2,777.78	9.79	9.71	164.60	14.71	66.59	129.26	115.67	13.60	9.508		
2,900.00	2,894.56	2,873.77	2,870.35	10.18	10.05	164.28	19.61	80.64	160.64	146.59	14.05	11.432		
3,000.00	2,993.02	2,968.66	2,964.01	10.56	10.41	164.05	24.63	95.02	192.19	177.66	14.53	13.227		
3,100.00	3,091.48	3,063.55	3,057.68	10.95	10.77	163.88	29.64	109.40	223.73	208.72	15.01	14.905		
3,200.00	3,189.94	3,158.44	3,151.34	11.35	11.13	163.76	34.66	123.78	255.28	239.79	15.49	16.477		
3,300.00	3,288.39	3,253.34	3,245.00	11.75	11.50	163.66	39.67	138.16	286.83	270.85	15.98	17.952		
3,400.00	3,386.85	3,348.23	3,338.66	12.16	11.87	163.58	44.69	152.54	318.38	301.91	16.46	19.338		
3,500.00	3,485.31	3,443.12	3,432.33	12.57	12.24	163.52	49.70	166.92	349.93	332.97	16.95	20.642		
3,600.00	3,583.77	3,538.01	3,525.99	12.98	12.62	163.46	54.72	181.30	381.47	364.03	17.44	21.871		
3,700.00	3,682.22	3,632.90	3,619.65	13.39	13.00	163.42	59.73	195.67	413.02	395.09	17.93	23.031		
3,800.00	3,780.68	3,727.80	3,713.31	13.81	13.38	163.38	64.75	210.05	444.57	426.15	18.43	24.127		
3,900.00	3,879.14	3,822.69	3,806.97	14.23	13.76	163.34	69.76	224.43	476.12	457.20	18.92	25.165		
4,000.00	3,977.60	3,917.58	3,900.64	14.65	14.15	163.31	74.78	238.81	507.67	488.26	19.42	26.148		
4,100.00	4,076.05	4,012.47	3,994.30	15.07	14.54	163.29	79.79	253.19	539.22	519.31	19.91	27.080		
4,200.00	4,174.51	4,107.37	4,087.96	15.50	14.93	163.27	84.81	267.57	570.77	550.36	20.41	27.966		
4,300.00	4,272.97	4,202.26	4,181.62	15.93	15.32	163.24	89.82	281.95	602.32	581.42	20.91	28.808		
4,400.00	4,371.43	4,297.15	4,275.29	16.36	15.71	163.23	94.84	296.33	633.87	612.47	21.41	29.610		
4,500.00	4,469.88	4,392.04	4,368.95	16.79	16.10	163.21	99.85	310.71	665.43	643.52	21.91	30.374		
4,600.00	4,568.34	4,486.93	4,462.61	17.22	16.50	163.19	104.87	325.09	696.98	674.57	22.41	31.103		
4,700.00	4,666.80	4,581.83	4,556.27	17.65	16.89	163.18	109.88	339.47	728.53	705.62	22.91	31.799		
4,800.00	4,765.25	4,676.72	4,649.94	18.08	17.29	163.17	114.90	353.85	760.08	736.66	23.41	32.464		
4,900.00	4,863.71	4,771.61	4,743.60	18.52	17.68	163.15	119.91	368.22	791.63	767.71	23.92	33.100		
5,000.00	4,962.17	4,866.50	4,837.26	18.95	18.08	163.14	124.93	382.60	823.18	798.76	24.42	33.709		

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 503H
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 503H	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	5,060.63	4,961.40	4,930.92	19.39	18.48	163.13	129.94	396.98	854.73	829.80	24.93	34.292		
5,200.00	5,159.08	5,056.29	5,024.58	19.83	18.88	163.12	134.96	411.36	886.28	860.85	25.43	34.851		
5,300.00	5,257.54	5,151.18	5,118.25	20.27	19.28	163.11	139.97	425.74	917.83	891.89	25.94	35.388		
5,400.00	5,356.00	5,246.07	5,211.91	20.71	19.68	163.11	144.99	440.12	949.38	922.94	26.44	35.904		
5,500.00	5,454.46	5,340.97	5,305.57	21.15	20.08	163.10	150.00	454.50	980.93	953.98	26.95	36.400		
5,600.00	5,552.91	5,435.86	5,399.23	21.59	20.49	163.09	155.02	468.88	1,012.48	985.03	27.46	36.876		
5,700.00	5,651.37	5,530.75	5,492.90	22.03	20.89	163.08	160.03	483.26	1,044.03	1,016.07	27.96	37.335		
5,800.00	5,749.83	5,625.64	5,586.56	22.47	21.29	163.08	165.05	497.64	1,075.58	1,047.11	28.47	37.777		
5,900.00	5,848.29	5,720.53	5,680.22	22.91	21.70	163.07	170.06	512.02	1,107.13	1,078.15	28.98	38.203		
6,000.00	5,946.74	5,815.43	5,773.88	23.36	22.10	163.07	175.08	526.40	1,138.68	1,109.20	29.49	38.613		
6,100.00	6,045.20	5,910.32	5,867.55	23.80	22.51	163.06	180.09	540.77	1,170.24	1,140.24	30.00	39.009		
6,200.00	6,143.66	6,005.21	5,961.21	24.24	22.91	163.06	185.11	555.15	1,201.79	1,171.28	30.51	39.392		
6,300.00	6,242.12	6,100.10	6,054.87	24.69	23.32	163.05	190.12	569.53	1,233.34	1,202.32	31.02	39.761		
6,400.00	6,340.57	6,195.00	6,148.53	25.13	23.73	163.05	195.14	583.91	1,264.89	1,233.36	31.53	40.118		
6,500.00	6,439.03	6,289.89	6,242.19	25.58	24.13	163.04	200.15	598.29	1,296.44	1,264.40	32.04	40.463		
6,600.00	6,537.49	6,384.78	6,335.86	26.02	24.54	163.04	205.17	612.67	1,327.99	1,295.44	32.55	40.797		
6,700.00	6,635.95	6,479.67	6,429.52	26.47	24.95	163.03	210.18	627.05	1,359.54	1,326.48	33.06	41.120		
6,757.61	6,692.67	6,534.34	6,483.48	26.73	25.18	163.03	213.07	635.33	1,377.72	1,344.36	33.36	41.302		
6,800.00	6,734.44	6,574.63	6,523.25	26.91	25.35	163.09	215.20	641.44	1,390.88	1,357.30	33.57	41.427		
6,900.00	6,833.29	6,670.23	6,617.60	27.34	25.77	163.19	220.25	655.92	1,420.22	1,386.14	34.09	41.666		
7,000.00	6,932.50	6,770.84	6,716.92	27.75	26.20	163.24	225.56	671.15	1,447.15	1,412.53	34.62	41.798		
7,100.00	7,032.01	6,873.47	6,868.08	28.14	26.83	163.24	232.48	690.98	1,469.55	1,434.12	35.43	41.476		
7,200.00	7,131.74	6,979.21	6,973.07	28.51	27.43	163.25	237.48	705.32	1,485.74	1,449.54	36.20	41.044		
7,300.00	7,231.62	7,079.10	7,073.69	28.86	28.00	163.27	240.42	713.76	1,495.59	1,458.67	36.92	40.514		
7,400.00	7,331.60	7,178.03	7,173.60	29.19	28.51	163.29	241.24	716.09	1,499.05	1,461.49	37.56	39.915		
7,429.40	7,361.00	7,217.43	7,213.00	29.28	28.60	89.46	241.24	716.09	1,499.16	1,461.46	37.70	39.767		
7,500.00	7,431.60	7,288.03	7,283.60	29.50	28.83	89.46	241.24	716.09	1,499.16	1,461.12	38.04	39.412		
7,600.00	7,531.60	7,388.03	7,383.60	29.82	29.15	89.46	241.24	716.09	1,499.16	1,460.64	38.52	38.920		
7,700.00	7,631.60	7,488.03	7,483.60	30.14	29.48	89.46	241.24	716.09	1,499.16	1,460.16	39.00	38.438		
7,800.00	7,731.60	7,588.03	7,583.60	30.45	29.80	89.46	241.24	716.09	1,499.16	1,459.67	39.48	37.968		
7,900.00	7,831.60	7,688.03	7,683.60	30.77	30.13	89.46	241.24	716.09	1,499.16	1,459.19	39.97	37.509		
8,000.00	7,931.60	7,788.03	7,783.60	31.09	30.45	89.46	241.24	716.09	1,499.16	1,458.71	40.45	37.060		
8,100.00	8,031.60	7,888.03	7,883.60	31.41	30.78	89.46	241.24	716.09	1,499.16	1,458.22	40.94	36.622		
8,200.00	8,131.60	7,988.03	7,983.60	31.73	31.11	89.46	241.24	716.09	1,499.16	1,457.74	41.42	36.193		
8,300.00	8,231.60	8,088.03	8,083.60	32.06	31.44	89.46	241.24	716.09	1,499.16	1,457.25	41.91	35.773		
8,400.00	8,331.60	8,188.03	8,183.60	32.38	31.77	89.46	241.24	716.09	1,499.16	1,456.76	42.39	35.363		
8,500.00	8,431.60	8,288.03	8,283.60	32.70	32.09	89.46	241.24	716.09	1,499.16	1,456.28	42.88	34.962		
8,600.00	8,531.60	8,388.03	8,383.60	33.03	32.42	89.46	241.24	716.09	1,499.16	1,455.79	43.37	34.569		
8,700.00	8,631.60	8,488.03	8,483.60	33.35	32.76	89.46	241.24	716.09	1,499.16	1,455.30	43.85	34.185		
8,800.00	8,731.60	8,588.03	8,583.60	33.68	33.09	89.46	241.24	716.09	1,499.16	1,454.81	44.34	33.809		
8,900.00	8,831.60	8,688.03	8,683.60	34.00	33.42	89.46	241.24	716.09	1,499.16	1,454.33	44.83	33.440		
9,000.00	8,931.60	8,788.03	8,783.60	34.33	33.75	89.46	241.24	716.09	1,499.16	1,453.84	45.32	33.080		
9,100.00	9,031.60	8,888.03	8,883.60	34.66	34.08	89.46	241.24	716.09	1,499.16	1,453.35	45.81	32.726		
9,200.00	9,131.60	8,988.03	8,983.60	34.98	34.42	89.46	241.24	716.09	1,499.16	1,452.86	46.30	32.380		
9,300.00	9,231.60	9,088.03	9,083.60	35.31	34.75	89.46	241.24	716.09	1,499.16	1,452.37	46.79	32.041		
9,400.00	9,331.60	9,188.03	9,183.60	35.64	35.09	89.46	241.24	716.09	1,499.16	1,451.88	47.28	31.709		
9,500.00	9,431.60	9,288.03	9,283.60	35.97	35.42	89.46	241.24	716.09	1,499.16	1,451.39	47.77	31.383		
9,600.00	9,531.60	9,388.03	9,383.60	36.30	35.76	89.46	241.24	716.09	1,499.16	1,450.90	48.26	31.064		
9,700.00	9,631.60	9,488.03	9,483.60	36.63	36.09	89.46	241.24	716.09	1,499.16	1,450.41	48.75	30.751		
9,800.00	9,731.60	9,588.03	9,583.60	36.96	36.43	89.46	241.24	716.09	1,499.16	1,449.91	49.24	30.444		
9,809.77	9,741.37	9,597.80	9,593.37	37.00	36.46	89.46	241.24	716.09	1,499.16	1,449.87	49.29	30.414		
9,900.00	9,831.60	9,687.79	9,683.28	37.30	36.75	89.55	238.66	716.12	1,499.16	1,449.44	49.72	30.150		

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 503H
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 503H	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 504H - 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	
9,913.44	9,845.04	9,901.07	9,844.48	37.34	36.79	89.61	237.25	716.13	1,499.16	1,449.38	49.79	30.113		
9,950.00	9,881.57	9,936.94	9,879.94	37.46	36.89	-89.66	231.92	716.18	1,499.18	1,449.24	49.95	30.016		
10,000.00	9,931.27	9,985.59	9,927.38	37.60	37.03	-89.44	221.16	716.29	1,499.23	1,449.08	50.15	29.894		
10,050.00	9,980.31	10,033.78	9,973.30	37.74	37.15	-89.23	206.58	716.44	1,499.30	1,448.95	50.34	29.781		
10,100.00	10,028.32	10,081.55	10,017.44	37.87	37.26	-89.02	188.37	716.62	1,499.38	1,448.86	50.53	29.675		
10,150.00	10,074.94	10,128.91	10,059.56	37.99	37.36	-88.82	166.74	716.84	1,499.49	1,448.79	50.70	29.577		
10,200.00	10,119.80	10,175.90	10,099.44	38.10	37.45	-88.63	141.93	717.08	1,499.60	1,448.74	50.86	29.486		
10,250.00	10,162.58	10,222.53	10,136.88	38.19	37.53	-88.45	114.15	717.36	1,499.72	1,448.71	51.01	29.400		
10,300.00	10,202.93	10,268.85	10,171.71	38.28	37.60	-88.28	83.63	717.67	1,499.85	1,448.69	51.16	29.318		
10,350.00	10,240.57	10,314.88	10,203.77	38.35	37.66	-88.12	50.63	718.00	1,499.98	1,448.68	51.30	29.239		
10,400.00	10,275.19	10,360.64	10,232.91	38.42	37.72	-87.98	15.36	718.35	1,500.12	1,448.67	51.44	29.161		
10,450.00	10,306.54	10,406.17	10,259.03	38.47	37.76	-87.85	-21.92	718.72	1,500.24	1,448.66	51.58	29.084		
10,500.00	10,334.38	10,450.00	10,281.29	38.52	37.81	-87.74	-59.66	719.10	1,500.36	1,448.64	51.72	29.008		
10,550.00	10,358.49	10,496.65	10,301.75	38.56	37.85	-87.64	-101.56	719.52	1,500.46	1,448.59	51.87	28.927		
10,600.00	10,378.70	10,541.65	10,318.19	38.60	37.89	-87.56	-143.44	719.94	1,500.56	1,448.53	52.02	28.844		
10,650.00	10,394.84	10,586.53	10,331.26	38.64	37.94	-87.49	-186.37	720.37	1,500.63	1,448.45	52.18	28.759		
10,700.00	10,406.80	10,631.33	10,340.92	38.68	38.00	-87.44	-230.09	720.81	1,500.69	1,448.35	52.34	28.669		
10,750.00	10,414.49	10,676.06	10,347.12	38.74	38.07	-87.41	-274.38	721.25	1,500.73	1,448.21	52.52	28.577		
10,800.00	10,417.84	10,720.77	10,349.86	38.82	38.16	-87.40	-318.99	721.70	1,500.75	1,448.06	52.69	28.482		
10,813.44	10,418.00	10,733.47	10,350.00	38.85	38.19	-87.40	-331.69	721.83	1,500.75	1,448.01	52.74	28.455		
10,814.06	10,418.00	10,733.47	10,350.00	38.85	38.19	-87.40	-331.69	721.83	1,500.75	1,448.01	52.74	28.454		
10,900.00	10,418.00	10,819.26	10,350.00	39.04	38.41	-87.40	-417.47	722.69	1,500.76	1,447.64	53.11	28.255		
11,000.00	10,418.00	10,919.26	10,350.00	39.34	38.75	-87.40	-517.47	723.69	1,500.76	1,447.13	53.63	27.981		
11,100.00	10,418.00	11,019.26	10,350.00	39.72	39.17	-87.40	-617.46	724.69	1,500.77	1,446.52	54.25	27.664		
11,200.00	10,418.00	11,119.26	10,350.00	40.19	39.66	-87.40	-717.46	725.69	1,500.78	1,445.82	54.96	27.308		
11,300.00	10,418.00	11,219.26	10,350.00	40.72	40.21	-87.40	-817.45	726.69	1,500.79	1,445.04	55.76	26.918		
11,400.00	10,418.00	11,319.26	10,350.00	41.32	40.83	-87.40	-917.45	727.69	1,500.80	1,444.16	56.64	26.499		
11,500.00	10,418.00	11,419.26	10,350.00	41.98	41.50	-87.40	-1,017.44	728.69	1,500.81	1,443.21	57.60	26.056		
11,600.00	10,418.00	11,519.26	10,350.00	42.70	42.23	-87.40	-1,117.44	729.69	1,500.82	1,442.18	58.64	25.594		
11,700.00	10,418.00	11,619.26	10,350.00	43.47	43.01	-87.40	-1,217.43	730.70	1,500.83	1,441.07	59.75	25.117		
11,800.00	10,418.00	11,719.26	10,350.00	44.29	43.83	-87.40	-1,317.43	731.70	1,500.83	1,439.90	60.94	24.630		
11,900.00	10,418.00	11,819.26	10,350.00	45.15	44.71	-87.40	-1,417.42	732.70	1,500.84	1,438.66	62.18	24.136		
12,000.00	10,418.00	11,919.26	10,350.00	46.06	45.62	-87.40	-1,517.42	733.70	1,500.85	1,437.36	63.49	23.639		
12,100.00	10,418.00	12,019.26	10,350.00	47.01	46.58	-87.40	-1,617.41	734.70	1,500.86	1,436.00	64.86	23.141		
12,200.00	10,418.00	12,119.26	10,350.00	47.99	47.57	-87.40	-1,717.41	735.70	1,500.87	1,434.59	66.28	22.645		
12,300.00	10,418.00	12,219.26	10,350.00	49.02	48.60	-87.40	-1,817.40	736.70	1,500.88	1,433.13	67.75	22.154		
12,400.00	10,418.00	12,319.26	10,350.00	50.07	49.66	-87.40	-1,917.40	737.70	1,500.89	1,431.62	69.27	21.668		
12,500.00	10,418.00	12,419.26	10,350.00	51.16	50.75	-87.40	-2,017.39	738.71	1,500.90	1,430.07	70.83	21.190		
12,600.00	10,418.00	12,519.26	10,350.00	52.28	51.88	-87.40	-2,117.39	739.71	1,500.90	1,428.47	72.43	20.721		
12,700.00	10,418.00	12,619.26	10,350.00	53.42	53.03	-87.40	-2,217.38	740.71	1,500.91	1,426.84	74.08	20.262		
12,800.00	10,418.00	12,719.26	10,350.00	54.59	54.20	-87.40	-2,317.38	741.71	1,500.92	1,425.17	75.76	19.813		
12,900.00	10,418.00	12,819.26	10,350.00	55.78	55.40	-87.40	-2,417.37	742.71	1,500.93	1,423.46	77.47	19.375		
13,000.00	10,418.00	12,919.26	10,350.00	57.00	56.63	-87.40	-2,517.37	743.71	1,500.94	1,421.73	79.21	18.948		
13,100.00	10,418.00	13,019.26	10,350.00	58.24	57.87	-87.40	-2,617.36	744.71	1,500.95	1,419.96	80.99	18.533		
13,200.00	10,418.00	13,119.26	10,350.00	59.50	59.13	-87.40	-2,717.36	745.71	1,500.96	1,418.17	82.79	18.129		
13,300.00	10,418.00	13,219.26	10,350.00	60.77	60.42	-87.40	-2,817.35	746.72	1,500.97	1,416.35	84.62	17.738		
13,400.00	10,418.00	13,319.26	10,350.00	62.07	61.72	-87.40	-2,917.35	747.72	1,500.98	1,414.50	86.47	17.358		
13,500.00	10,418.00	13,419.26	10,350.00	63.38	63.03	-87.40	-3,017.34	748.72	1,500.98	1,412.64	88.35	16.990		
13,600.00	10,418.00	13,519.26	10,350.00	64.71	64.37	-87.40	-3,117.34	749.72	1,500.99	1,410.75	90.24	16.633		
13,700.00	10,418.00	13,619.26	10,350.00	66.05	65.71	-87.40	-3,217.33	750.72	1,501.00	1,408.84	92.16	16.287		
13,800.00	10,418.00	13,719.26	10,350.00	67.40	67.07	-87.40	-3,317.33	751.72	1,501.01	1,406.91	94.10	15.952		
13,900.00	10,418.00	13,819.26	10,350.00	68.77	68.45	-87.40	-3,417.32	752.72	1,501.02	1,404.97	96.05	15.628		

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 503H
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 503H	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 504H - 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	10,418.00	13,919.26	10,350.00	70.15	69.83	-87.40	-3,517.32	753.72	1,501.03	1,403.01	98.02	15.314				
14,100.00	10,418.00	14,019.26	10,350.00	71.54	71.23	-87.40	-3,617.31	754.73	1,501.04	1,401.03	100.00	15.010				
14,200.00	10,418.00	14,119.26	10,350.00	72.95	72.63	-87.40	-3,717.31	755.73	1,501.05	1,399.04	102.00	14.716				
14,300.00	10,418.00	14,219.26	10,350.00	74.36	74.05	-87.40	-3,817.30	756.73	1,501.05	1,397.04	104.02	14.431				
14,400.00	10,418.00	14,319.26	10,350.00	75.78	75.48	-87.40	-3,917.30	757.73	1,501.06	1,395.02	106.04	14.155				
14,500.00	10,418.00	14,419.26	10,350.00	77.21	76.91	-87.40	-4,017.29	758.73	1,501.07	1,392.99	108.08	13.888				
14,600.00	10,418.00	14,519.26	10,350.00	78.65	78.36	-87.40	-4,117.29	759.73	1,501.08	1,390.94	110.14	13.629				
14,700.00	10,418.00	14,619.26	10,350.00	80.10	79.81	-87.40	-4,217.28	760.73	1,501.09	1,388.89	112.20	13.379				
14,800.00	10,418.00	14,719.26	10,350.00	81.55	81.27	-87.40	-4,317.28	761.73	1,501.10	1,386.83	114.27	13.136				
14,900.00	10,418.00	14,819.26	10,350.00	83.02	82.73	-87.40	-4,417.27	762.74	1,501.11	1,384.75	116.35	12.901				
15,000.00	10,418.00	14,919.26	10,350.00	84.49	84.21	-87.40	-4,517.27	763.74	1,501.12	1,382.67	118.44	12.674				
15,100.00	10,418.00	15,019.26	10,350.00	85.96	85.69	-87.40	-4,617.26	764.74	1,501.12	1,380.58	120.55	12.453				
15,200.00	10,418.00	15,119.26	10,350.00	87.45	87.17	-87.40	-4,717.26	765.74	1,501.13	1,378.48	122.65	12.239				
15,300.00	10,418.00	15,219.26	10,350.00	88.94	88.67	-87.40	-4,817.25	766.74	1,501.14	1,376.37	124.77	12.031				
15,400.00	10,418.00	15,319.26	10,350.00	90.43	90.16	-87.40	-4,917.25	767.74	1,501.15	1,374.25	126.90	11.830				
15,500.00	10,418.00	15,419.26	10,350.00	91.93	91.67	-87.40	-5,017.24	768.74	1,501.16	1,372.13	129.03	11.634				
15,600.00	10,418.00	15,519.26	10,350.00	93.43	93.17	-87.40	-5,117.24	769.75	1,501.17	1,370.00	131.17	11.445				
15,700.00	10,418.00	15,619.26	10,350.00	94.94	94.69	-87.40	-5,217.23	770.75	1,501.18	1,367.86	133.31	11.261				
15,800.00	10,418.00	15,719.26	10,350.00	96.46	96.20	-87.40	-5,317.23	771.75	1,501.19	1,365.72	135.46	11.082				
15,900.00	10,418.00	15,819.26	10,350.00	97.98	97.73	-87.40	-5,417.22	772.75	1,501.19	1,363.57	137.62	10.908				
16,000.00	10,418.00	15,919.26	10,350.00	99.50	99.25	-87.40	-5,517.22	773.75	1,501.20	1,361.42	139.78	10.739				
16,100.00	10,418.00	16,019.26	10,350.00	101.03	100.78	-87.40	-5,617.21	774.75	1,501.21	1,359.26	141.95	10.575				
16,200.00	10,418.00	16,119.26	10,350.00	102.56	102.31	-87.40	-5,717.21	775.75	1,501.22	1,357.09	144.13	10.416				
16,300.00	10,418.00	16,219.26	10,350.00	104.09	103.85	-87.40	-5,817.20	776.75	1,501.23	1,354.92	146.30	10.261				
16,400.00	10,418.00	16,319.26	10,350.00	105.63	105.39	-87.40	-5,917.20	777.76	1,501.24	1,352.75	148.49	10.110				
16,500.00	10,418.00	16,419.26	10,350.00	107.17	106.94	-87.40	-6,017.19	778.76	1,501.25	1,350.57	150.68	9.963				
16,600.00	10,418.00	16,519.26	10,350.00	108.72	108.48	-87.40	-6,117.19	779.76	1,501.26	1,348.39	152.87	9.821				
16,700.00	10,418.00	16,619.26	10,350.00	110.26	110.03	-87.40	-6,217.18	780.76	1,501.26	1,346.20	155.06	9.682				
16,800.00	10,418.00	16,719.26	10,350.00	111.81	111.59	-87.40	-6,317.18	781.76	1,501.27	1,344.01	157.26	9.546				
16,900.00	10,418.00	16,819.26	10,350.00	113.37	113.14	-87.40	-6,417.17	782.76	1,501.28	1,341.81	159.47	9.414				
17,000.00	10,418.00	16,919.26	10,350.00	114.92	114.70	-87.40	-6,517.17	783.76	1,501.29	1,339.62	161.68	9.286				
17,100.00	10,418.00	17,019.26	10,350.00	116.48	116.26	-87.40	-6,617.16	784.76	1,501.30	1,337.41	163.89	9.161				
17,200.00	10,418.00	17,119.26	10,350.00	118.04	117.82	-87.40	-6,717.16	785.77	1,501.31	1,335.21	166.10	9.039				
17,300.00	10,418.00	17,219.26	10,350.00	119.61	119.39	-87.40	-6,817.15	786.77	1,501.32	1,333.00	168.32	8.920				
17,400.00	10,418.00	17,319.26	10,350.00	121.17	120.96	-87.40	-6,917.15	787.77	1,501.33	1,330.79	170.54	8.803				
17,500.00	10,418.00	17,419.26	10,350.00	122.74	122.53	-87.40	-7,017.14	788.77	1,501.33	1,328.57	172.76	8.690				
17,600.00	10,418.00	17,519.26	10,350.00	124.31	124.10	-87.40	-7,117.14	789.77	1,501.34	1,326.35	174.99	8.580				
17,700.00	10,418.00	17,619.26	10,350.00	125.88	125.67	-87.40	-7,217.13	790.77	1,501.35	1,324.13	177.22	8.472				
17,800.00	10,418.00	17,719.26	10,350.00	127.46	127.25	-87.40	-7,317.13	791.77	1,501.36	1,321.91	179.45	8.366				
17,900.00	10,418.00	17,819.26	10,350.00	129.04	128.83	-87.40	-7,417.12	792.77	1,501.37	1,319.69	181.68	8.264				
18,000.00	10,418.00	17,919.26	10,350.00	130.61	130.41	-87.40	-7,517.12	793.78	1,501.38	1,317.46	183.92	8.163				
18,100.00	10,418.00	18,019.26	10,350.00	132.19	131.99	-87.40	-7,617.11	794.78	1,501.39	1,315.23	186.16	8.065				
18,200.00	10,418.00	18,119.26	10,350.00	133.78	133.57	-87.40	-7,717.11	795.78	1,501.40	1,312.99	188.40	7.969				
18,300.00	10,418.00	18,219.26	10,350.00	135.36	135.16	-87.40	-7,817.10	796.78	1,501.40	1,310.76	190.65	7.875				
18,400.00	10,418.00	18,319.26	10,350.00	136.94	136.75	-87.40	-7,917.10	797.78	1,501.41	1,308.52	192.89	7.784				
18,500.00	10,418.00	18,419.26	10,350.00	138.53	138.33	-87.40	-8,017.09	798.78	1,501.42	1,306.28	195.14	7.694				
18,600.00	10,418.00	18,519.26	10,350.00	140.12	139.92	-87.40	-8,117.09	799.78	1,501.43	1,304.04	197.39	7.606				
18,700.00	10,418.00	18,619.26	10,350.00	141.71	141.51	-87.40	-8,217.08	800.78	1,501.44	1,301.80	199.64	7.521				
18,800.00	10,418.00	18,719.26	10,350.00	143.30	143.11	-87.40	-8,317.08	801.79	1,501.45	1,299.55	201.90	7.437				
18,900.00	10,418.00	18,819.26	10,350.00	144.89	144.70	-87.40	-8,417.07	802.79	1,501.46	1,297.31	204.15	7.355				
19,000.00	10,418.00	18,919.26	10,350.00	146.49	146.30	-87.40	-8,517.07	803.79	1,501.47	1,295.06	206.41	7.274				
19,100.00	10,418.00	19,019.26	10,350.00	148.08	147.89	-87.40	-8,617.06	804.79	1,501.47	1,292.81	208.67	7.196				

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 503H
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 503H	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		
19,200.00	10,418.00	19,119.26	10,350.00	149.68	149.49	-87.40	-8,717.06	805.79	1,501.48	1,290.56	210.93	7.118		
19,300.00	10,418.00	19,219.26	10,350.00	151.27	151.09	-87.40	-8,817.05	806.79	1,501.49	1,288.30	213.19	7.043		
19,400.00	10,418.00	19,319.26	10,350.00	152.87	152.69	-87.40	-8,917.05	807.79	1,501.50	1,286.05	215.45	6.969		
19,500.00	10,418.00	19,419.26	10,350.00	154.47	154.29	-87.40	-9,017.04	808.79	1,501.51	1,283.79	217.72	6.897		
19,600.00	10,418.00	19,519.26	10,350.00	156.07	155.89	-87.40	-9,117.04	809.80	1,501.52	1,281.53	219.98	6.826		
19,700.00	10,418.00	19,619.26	10,350.00	157.67	157.49	-87.40	-9,217.03	810.80	1,501.53	1,279.27	222.25	6.756		
19,800.00	10,418.00	19,719.26	10,350.00	159.28	159.10	-87.40	-9,317.03	811.80	1,501.54	1,277.01	224.52	6.688		
19,900.00	10,418.00	19,819.26	10,350.00	160.88	160.70	-87.40	-9,417.02	812.80	1,501.54	1,274.75	226.79	6.621		
20,000.00	10,418.00	19,919.26	10,350.00	162.48	162.31	-87.40	-9,517.02	813.80	1,501.55	1,272.49	229.06	6.555		
20,100.00	10,418.00	20,019.26	10,350.00	164.09	163.91	-87.40	-9,617.01	814.80	1,501.56	1,270.23	231.34	6.491		
20,200.00	10,418.00	20,119.26	10,350.00	165.70	165.52	-87.40	-9,717.01	815.80	1,501.57	1,267.96	233.61	6.428		
20,300.00	10,418.00	20,219.26	10,350.00	167.30	167.13	-87.40	-9,817.00	816.81	1,501.58	1,265.69	235.89	6.366		
20,400.00	10,418.00	20,319.26	10,350.00	168.91	168.74	-87.40	-9,917.00	817.81	1,501.59	1,263.43	238.16	6.305		
20,500.00	10,418.00	20,419.26	10,350.00	170.52	170.35	-87.40	-10,016.99	818.81	1,501.60	1,261.16	240.44	6.245		
20,600.00	10,418.00	20,519.26	10,350.00	172.13	171.96	-87.40	-10,116.99	819.81	1,501.61	1,258.89	242.72	6.187		
20,700.00	10,418.00	20,529.73	10,350.00	173.74	172.13	-87.40	-10,127.46	819.91	1,504.28	1,260.82	243.46	6.179		
20,800.00	10,418.00	20,529.73	10,350.00	175.35	172.13	-87.40	-10,127.46	819.91	1,513.54	1,270.63	242.91	6.231		
20,900.00	10,418.00	20,529.73	10,350.00	176.97	172.13	-87.40	-10,127.46	819.91	1,529.29	1,288.07	241.22	6.340		
21,000.00	10,418.00	20,529.73	10,350.00	178.58	172.13	-87.40	-10,127.46	819.91	1,551.34	1,312.82	238.52	6.504		
21,100.00	10,418.00	20,529.73	10,350.00	180.19	172.13	-87.40	-10,127.46	819.91	1,579.43	1,344.49	234.93	6.723		
21,200.00	10,418.00	20,529.73	10,350.00	181.81	172.13	-87.40	-10,127.46	819.91	1,613.23	1,382.61	230.62	6.995		
21,300.00	10,418.00	20,529.73	10,350.00	183.42	172.13	-87.40	-10,127.46	819.91	1,652.41	1,426.65	225.76	7.319		
21,400.00	10,418.00	20,529.73	10,350.00	185.04	172.13	-87.40	-10,127.46	819.91	1,696.58	1,476.09	220.49	7.695		
21,500.00	10,418.00	20,529.73	10,350.00	186.65	172.13	-87.40	-10,127.46	819.91	1,745.37	1,530.41	214.96	8.119		
21,600.00	10,418.00	20,529.73	10,350.00	188.27	172.13	-87.40	-10,127.46	819.91	1,798.40	1,589.10	209.30	8.592		
21,700.00	10,418.00	20,529.73	10,350.00	189.89	172.13	-87.40	-10,127.46	819.91	1,855.31	1,651.70	203.61	9.112		
21,800.00	10,418.00	20,529.73	10,350.00	191.50	172.13	-87.40	-10,127.46	819.91	1,915.75	1,717.79	197.97	9.677		
21,900.00	10,418.00	20,529.73	10,350.00	193.12	172.13	-87.40	-10,127.46	819.91	1,979.40	1,786.97	192.43	10.286		
21,923.68	10,418.00	20,529.73	10,350.00	193.51	172.13	-87.40	-10,127.46	819.91	1,994.91	1,803.77	191.14	10.437		

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
0.00	0.00	0.00	0.00	0.00	0.00	-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	2,099.13	2,099.12	7.29	7.29	-10.80	75.17	-14.34	76.53	66.22	10.31	7.423				
2,200.00	2,199.99	2,198.19	2,198.10	7.65	7.63	61.32	76.19	-18.05	77.69	66.89	10.80	7.194				
2,300.00	2,299.91	2,297.18	2,296.88	7.99	7.98	59.66	77.89	-24.24	78.87	67.59	11.28	6.989				
2,400.00	2,399.69	2,396.11	2,395.40	8.34	8.33	58.06	80.27	-32.88	80.08	68.30	11.77	6.803				
2,500.00	2,499.27	2,495.39	2,494.02	8.70	8.68	56.60	83.30	-43.86	81.20	68.94	12.26	6.622				
2,600.00	2,598.57	2,595.39	2,593.30	9.06	9.04	56.41	86.48	-55.40	81.19	68.42	12.77	6.359				
2,700.00	2,697.54	2,695.35	2,692.55	9.42	9.41	57.79	89.66	-66.95	79.76	66.47	13.28	6.004				
2,771.79	2,768.33	2,767.07	2,763.74	9.69	9.67	59.84	91.94	-75.23	77.93	64.27	13.66	5.705				
2,800.00	2,796.11	2,795.23	2,791.71	9.79	9.78	60.83	92.84	-78.49	77.12	63.31	13.81	5.584				
2,900.00	2,894.56	2,895.08	2,890.83	10.18	10.15	64.52	96.01	-90.02	74.41	60.06	14.34	5.187				
3,000.00	2,993.02	2,994.92	2,989.96	10.56	10.52	68.47	99.19	-101.55	72.03	57.14	14.89	4.838				
3,100.00	3,091.48	3,094.76	3,089.08	10.95	10.90	72.67	102.36	-113.08	70.02	54.58	15.44	4.536				
3,200.00	3,189.94	3,194.61	3,188.21	11.35	11.28	77.08	105.54	-124.61	68.41	52.41	15.99	4.277				
3,300.00	3,288.39	3,294.45	3,287.33	11.75	11.66	81.68	108.72	-136.14	67.22	50.67	16.55	4.061				
3,400.00	3,386.85	3,394.30	3,386.46	12.16	12.04	86.42	111.89	-147.67	66.48	49.37	17.11	3.885				
3,500.00	3,485.31	3,494.14	3,485.58	12.57	12.42	91.22	115.07	-159.21	66.20	48.54	17.67	3.747				
3,508.81	3,493.98	3,502.94	3,494.31	12.60	12.46	91.65	115.35	-160.22	66.20	48.49	17.72	3.737 CC				
3,600.00	3,583.77	3,593.99	3,584.71	12.98	12.81	96.04	118.25	-170.74	66.40	48.18	18.22	3.645 ES				
3,700.00	3,682.22	3,693.83	3,683.83	13.39	13.19	100.79	121.42	-182.27	67.06	48.29	18.76	3.574				
3,800.00	3,780.68	3,793.67	3,782.96	13.81	13.58	105.42	124.60	-193.80	68.17	48.87	19.30	3.532				
3,900.00	3,879.14	3,893.52	3,882.08	14.23	13.97	109.87	127.77	-205.33	69.71	49.88	19.83	3.515 SF				
4,000.00	3,977.60	3,993.36	3,981.21	14.65	14.36	114.11	130.95	-216.86	71.65	51.30	20.35	3.521				
4,100.00	4,076.05	4,093.21	4,080.33	15.07	14.75	118.10	134.13	-228.39	73.96	53.10	20.87	3.545				
4,200.00	4,174.51	4,193.05	4,179.46	15.50	15.14	121.83	137.30	-239.93	76.62	55.24	21.37	3.585				
4,300.00	4,272.97	4,292.90	4,278.58	15.93	15.53	125.30	140.48	-251.46	79.57	57.69	21.88	3.637				
4,400.00	4,371.43	4,392.74	4,377.71	16.36	15.92	128.52	143.66	-262.99	82.80	60.42	22.38	3.700				
4,500.00	4,469.88	4,492.58	4,476.84	16.79	16.31	131.48	146.83	-274.52	86.26	63.38	22.88	3.771				
4,600.00	4,568.34	4,592.43	4,575.96	17.22	16.71	134.21	150.01	-286.05	89.94	66.57	23.38	3.848				
4,700.00	4,666.80	4,692.27	4,675.09	17.65	17.10	136.72	153.18	-297.58	93.81	69.94	23.87	3.930				
4,800.00	4,765.25	4,792.12	4,774.21	18.08	17.49	139.02	156.36	-309.11	97.84	73.47	24.37	4.015				
4,900.00	4,863.71	4,891.96	4,873.34	18.52	17.89	141.14	159.54	-320.65	102.02	77.15	24.87	4.103				

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 503H
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 503H	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	4,962.17	4,991.80	4,972.46	18.95	18.28	143.10	162.71	-332.18	106.33	80.96	25.37	4.192		
5,100.00	5,060.63	5,091.65	5,071.59	19.39	18.68	144.89	165.89	-343.71	110.75	84.88	25.87	4.282		
5,200.00	5,159.08	5,191.49	5,170.71	19.83	19.08	146.55	169.07	-355.24	115.27	88.90	26.37	4.372		
5,300.00	5,257.54	5,291.34	5,269.84	20.27	19.47	148.09	172.24	-366.77	119.88	93.01	26.87	4.462		
5,400.00	5,356.00	5,391.18	5,368.96	20.71	19.87	149.50	175.42	-378.30	124.57	97.20	27.37	4.551		
5,500.00	5,454.46	5,491.03	5,468.09	21.15	20.27	150.82	178.59	-389.83	129.33	101.45	27.87	4.640		
5,600.00	5,552.91	5,590.87	5,567.21	21.59	20.66	152.04	181.77	-401.37	134.15	105.77	28.38	4.727		
5,700.00	5,651.37	5,690.71	5,666.34	22.03	21.06	153.18	184.95	-412.90	139.03	110.14	28.89	4.813		
5,800.00	5,749.83	5,790.56	5,765.46	22.47	21.46	154.23	188.12	-424.43	143.96	114.57	29.39	4.898		
5,900.00	5,848.29	5,890.40	5,864.59	22.91	21.86	155.22	191.30	-435.96	148.94	119.04	29.90	4.981		
6,000.00	5,946.74	5,990.25	5,963.71	23.36	22.26	156.15	194.47	-447.49	153.96	123.55	30.41	5.062		
6,100.00	6,045.20	6,090.09	6,062.84	23.80	22.66	157.01	197.65	-459.02	159.01	128.09	30.92	5.142		
6,200.00	6,143.66	6,189.94	6,161.96	24.24	23.06	157.82	200.83	-470.55	164.10	132.67	31.43	5.221		
6,300.00	6,242.12	6,289.78	6,261.09	24.69	23.45	158.59	204.00	-482.09	169.22	137.28	31.94	5.297		
6,400.00	6,340.57	6,389.62	6,360.21	25.13	23.85	159.30	207.18	-493.62	174.37	141.91	32.46	5.372		
6,500.00	6,439.03	6,489.47	6,459.34	25.58	24.25	159.98	210.36	-505.15	179.54	146.57	32.97	5.446		
6,600.00	6,537.49	6,589.31	6,558.46	26.02	24.65	160.62	213.53	-516.68	184.74	151.26	33.48	5.517		
6,700.00	6,635.95	6,689.16	6,657.59	26.47	25.05	161.22	216.71	-528.21	189.96	155.96	34.00	5.587		
6,757.61	6,692.67	6,746.68	6,714.70	26.73	25.28	161.56	218.54	-534.86	192.98	158.68	34.30	5.627		
6,800.00	6,734.44	6,789.01	6,756.73	26.91	25.45	161.78	219.88	-539.74	194.98	160.46	34.51	5.649		
6,900.00	6,833.29	6,888.96	6,855.95	27.34	25.85	162.13	223.06	-551.29	197.93	162.90	35.03	5.650		
7,000.00	6,932.50	6,986.39	6,952.72	27.75	26.24	162.25	226.07	-562.21	198.75	163.20	35.55	5.591		
7,100.00	7,032.01	7,081.64	7,047.55	28.14	26.61	162.33	228.45	-570.83	199.21	163.16	36.05	5.526		
7,200.00	7,131.74	7,176.88	7,142.56	28.51	26.97	162.39	230.20	-577.18	199.57	163.04	36.52	5.464		
7,300.00	7,231.62	7,272.11	7,237.70	28.86	27.31	162.43	231.31	-581.24	199.81	162.84	36.97	5.404		
7,400.00	7,331.60	7,367.34	7,332.91	29.19	27.63	162.45	231.80	-583.01	199.94	162.55	37.39	5.347		
7,429.40	7,361.00	7,395.44	7,361.00	29.28	27.73	88.62	231.83	-583.10	199.96	162.45	37.51	5.331		
7,500.00	7,431.60	7,466.04	7,431.60	29.50	27.96	88.62	231.83	-583.10	199.96	162.11	37.85	5.283		
7,600.00	7,531.60	7,566.04	7,531.60	29.82	28.30	88.62	231.83	-583.10	199.96	161.62	38.34	5.216		
7,700.00	7,631.60	7,666.04	7,631.60	30.14	28.63	88.62	231.83	-583.10	199.96	161.14	38.82	5.151		
7,800.00	7,731.60	7,766.04	7,731.60	30.45	28.96	88.62	231.83	-583.10	199.96	160.66	39.31	5.087		
7,900.00	7,831.60	7,866.04	7,831.60	30.77	29.29	88.62	231.83	-583.10	199.96	160.17	39.79	5.025		
8,000.00	7,931.60	7,966.04	7,931.60	31.09	29.63	88.62	231.83	-583.10	199.96	159.68	40.28	4.965		
8,100.00	8,031.60	8,066.04	8,031.60	31.41	29.96	88.62	231.83	-583.10	199.96	159.20	40.76	4.905		
8,200.00	8,131.60	8,166.04	8,131.60	31.73	30.30	88.62	231.83	-583.10	199.96	158.71	41.25	4.847		
8,300.00	8,231.60	8,266.04	8,231.60	32.06	30.64	88.62	231.83	-583.10	199.96	158.22	41.74	4.791		
8,400.00	8,331.60	8,366.04	8,331.60	32.38	30.97	88.62	231.83	-583.10	199.96	157.73	42.23	4.735		
8,500.00	8,431.60	8,466.04	8,431.60	32.70	31.31	88.62	231.83	-583.10	199.96	157.25	42.72	4.681		
8,600.00	8,531.60	8,566.04	8,531.60	33.03	31.65	88.62	231.83	-583.10	199.96	156.76	43.20	4.628		
8,700.00	8,631.60	8,666.04	8,631.60	33.35	31.98	88.62	231.83	-583.10	199.96	156.27	43.69	4.576		
8,800.00	8,731.60	8,766.04	8,731.60	33.68	32.32	88.62	231.83	-583.10	199.96	155.78	44.18	4.526		
8,900.00	8,831.60	8,866.04	8,831.60	34.00	32.66	88.62	231.83	-583.10	199.96	155.29	44.67	4.476		
9,000.00	8,931.60	8,966.04	8,931.60	34.33	33.00	88.62	231.83	-583.10	199.96	154.80	45.16	4.428		
9,100.00	9,031.60	9,066.04	9,031.60	34.66	33.34	88.62	231.83	-583.10	199.96	154.31	45.65	4.380		
9,200.00	9,131.60	9,166.04	9,131.60	34.98	33.68	88.62	231.83	-583.10	199.96	153.82	46.15	4.333		
9,300.00	9,231.60	9,266.04	9,231.60	35.31	34.02	88.62	231.83	-583.10	199.96	153.33	46.64	4.288		
9,400.00	9,331.60	9,366.04	9,331.60	35.64	34.36	88.62	231.83	-583.10	199.96	152.83	47.13	4.243		
9,500.00	9,431.60	9,466.04	9,431.60	35.97	34.70	88.62	231.83	-583.10	199.96	152.34	47.62	4.199		
9,600.00	9,531.60	9,566.04	9,531.60	36.30	35.04	88.62	231.83	-583.10	199.96	151.85	48.11	4.156		
9,700.00	9,631.60	9,666.04	9,631.60	36.63	35.38	88.62	231.83	-583.10	199.96	151.36	48.61	4.114		
9,800.00	9,731.60	9,766.04	9,731.60	36.96	35.73	88.62	231.83	-583.10	199.96	150.86	49.10	4.073		
9,900.00	9,831.60	9,866.04	9,831.60	37.30	36.07	88.62	231.83	-583.10	199.96	150.37	49.59	4.032		

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 503H
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 503H	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		
9,913.44	9,845.04	9,879.48	9,845.04	37.34	36.12	88.62	231.83	-583.10	199.96	150.30	49.66	4.027		
9,950.00	9,881.57	9,916.01	9,881.57	37.46	36.24	-91.15	231.83	-583.10	199.98	150.14	49.84	4.012		
10,000.00	9,931.27	9,965.71	9,931.27	37.60	36.41	-92.65	231.83	-583.10	200.16	150.05	50.11	3.995		
10,050.00	9,980.31	10,014.75	9,980.31	37.74	36.58	-95.29	231.83	-583.10	200.85	150.45	50.40	3.985		
10,100.00	10,028.32	10,062.76	10,028.32	37.87	36.74	-98.87	231.83	-583.10	202.64	151.92	50.72	3.996		
10,150.00	10,074.94	10,109.37	10,074.94	37.99	36.90	-103.15	231.83	-583.10	206.34	155.27	51.07	4.040		
10,200.00	10,119.80	10,154.24	10,119.80	38.10	37.06	-107.77	231.83	-583.10	212.86	161.40	51.46	4.137		
10,250.00	10,162.58	10,197.01	10,162.58	38.19	37.20	-112.37	231.83	-583.10	223.06	171.20	51.86	4.301		
10,300.00	10,202.93	10,237.37	10,202.93	38.28	37.34	-116.63	231.83	-583.10	237.60	185.34	52.26	4.546		
10,350.00	10,240.57	10,275.00	10,240.57	38.35	37.47	-120.27	231.83	-583.10	256.87	204.24	52.63	4.880		
10,400.00	10,275.19	10,309.63	10,275.19	38.42	37.59	-123.10	231.83	-583.10	280.91	227.95	52.96	5.304		
10,450.00	10,306.54	10,340.98	10,306.54	38.47	37.70	-125.00	231.83	-583.10	309.50	256.27	53.23	5.815		
10,500.00	10,334.38	10,368.82	10,334.38	38.52	37.79	-125.85	231.83	-583.10	342.24	288.80	53.44	6.404		
10,550.00	10,358.49	10,392.93	10,358.49	38.56	37.88	-125.51	231.83	-583.10	378.64	325.03	53.61	7.063		
10,600.00	10,378.70	10,413.14	10,378.70	38.60	37.95	-123.76	231.83	-583.10	418.16	364.43	53.73	7.783		
10,650.00	10,394.84	10,429.28	10,394.84	38.64	38.00	-120.26	231.83	-583.10	460.26	406.44	53.82	8.552		
10,700.00	10,406.80	10,441.24	10,406.80	38.68	38.04	-114.49	231.83	-583.10	504.42	450.54	53.88	9.362		
10,750.00	10,414.49	10,448.93	10,414.49	38.74	38.07	-105.81	231.83	-583.10	550.11	496.20	53.91	10.204		
10,800.00	10,417.84	10,452.28	10,417.84	38.82	38.08	-93.77	231.83	-583.10	596.85	542.92	53.92	11.068		
10,813.44	10,418.00	10,452.44	10,418.00	38.85	38.08	-90.00	231.83	-583.10	609.53	555.60	53.92	11.303		
10,900.00	10,418.00	10,452.44	10,418.00	39.04	38.08	-90.00	231.83	-583.10	691.88	637.96	53.92	12.831		
11,000.00	10,418.00	10,452.44	10,418.00	39.34	38.08	-90.00	231.83	-583.10	788.14	734.23	53.91	14.618		
11,100.00	10,418.00	10,452.44	10,418.00	39.72	38.08	-90.00	231.83	-583.10	885.23	831.33	53.91	16.421		
11,200.00	10,418.00	10,452.44	10,418.00	40.19	38.08	-90.00	231.83	-583.10	982.91	929.01	53.90	18.235		
11,300.00	10,418.00	10,452.44	10,418.00	40.72	38.08	-90.00	231.83	-583.10	1,081.01	1,027.11	53.90	20.056		
11,400.00	10,418.00	10,452.44	10,418.00	41.32	38.08	-90.00	231.83	-583.10	1,179.43	1,125.53	53.90	21.883		
11,500.00	10,418.00	10,452.44	10,418.00	41.98	38.08	-90.00	231.83	-583.10	1,278.09	1,224.20	53.90	23.714		
11,600.00	10,418.00	10,452.44	10,418.00	42.70	38.08	-90.00	231.83	-583.10	1,376.95	1,323.06	53.90	25.548		
11,700.00	10,418.00	10,452.44	10,418.00	43.47	38.08	-90.00	231.83	-583.10	1,475.96	1,422.06	53.90	27.384		
11,800.00	10,418.00	10,452.44	10,418.00	44.29	38.08	-90.00	231.83	-583.10	1,575.10	1,521.20	53.90	29.221		
11,900.00	10,418.00	10,452.44	10,418.00	45.15	38.08	-90.00	231.83	-583.10	1,674.34	1,620.43	53.91	31.060		
12,000.00	10,418.00	10,452.44	10,418.00	46.06	38.08	-90.00	231.83	-583.10	1,773.66	1,719.75	53.91	32.898		
12,100.00	10,418.00	10,452.44	10,418.00	47.01	38.08	-90.00	231.83	-583.10	1,873.06	1,819.14	53.92	34.737		
12,200.00	10,418.00	10,452.44	10,418.00	47.99	38.08	-90.00	231.83	-583.10	1,972.52	1,918.59	53.93	36.576		
12,300.00	10,418.00	14,249.87	12,399.00	49.02	54.43	-174.24	-1,830.43	-562.59	1,991.07	1,949.21	41.86	47.562		
12,400.00	10,418.00	14,349.87	12,399.00	50.07	55.41	-174.24	-1,930.42	-561.59	1,991.07	1,948.56	42.51	46.840		
12,500.00	10,418.00	14,449.87	12,399.00	51.16	56.41	-174.24	-2,030.42	-560.60	1,991.07	1,947.90	43.17	46.119		
12,600.00	10,418.00	14,549.87	12,399.00	52.28	57.45	-174.24	-2,130.41	-559.60	1,991.07	1,947.21	43.85	45.401		
12,700.00	10,418.00	14,649.87	12,399.00	53.42	58.51	-174.24	-2,230.41	-558.61	1,991.07	1,946.51	44.56	44.686		
12,800.00	10,418.00	14,749.87	12,399.00	54.59	59.61	-174.24	-2,330.40	-557.61	1,991.07	1,945.79	45.27	43.977		
12,900.00	10,418.00	14,849.87	12,399.00	55.78	60.72	-174.24	-2,430.40	-556.62	1,991.07	1,945.06	46.01	43.275		
13,000.00	10,418.00	14,949.87	12,399.00	57.00	61.86	-174.24	-2,530.39	-555.63	1,991.07	1,944.31	46.76	42.581		
13,100.00	10,418.00	15,049.87	12,399.00	58.24	63.03	-174.24	-2,630.39	-554.63	1,991.07	1,943.55	47.52	41.895		
13,200.00	10,418.00	15,149.87	12,399.00	59.50	64.21	-174.24	-2,730.38	-553.64	1,991.07	1,942.77	48.30	41.220		
13,300.00	10,418.00	15,249.87	12,399.00	60.77	65.41	-174.23	-2,830.38	-552.64	1,991.07	1,941.97	49.10	40.554		
13,400.00	10,418.00	15,349.87	12,399.00	62.07	66.64	-174.23	-2,930.37	-551.65	1,991.07	1,941.17	49.90	39.900		
13,500.00	10,418.00	15,449.87	12,399.00	63.38	67.88	-174.23	-3,030.37	-550.65	1,991.07	1,940.35	50.72	39.256		
13,600.00	10,418.00	15,549.87	12,399.00	64.71	69.14	-174.23	-3,130.36	-549.66	1,991.07	1,939.52	51.55	38.625		
13,700.00	10,418.00	15,649.87	12,399.00	66.05	70.41	-174.23	-3,230.36	-548.66	1,991.07	1,938.68	52.39	38.006		
13,800.00	10,418.00	15,749.87	12,399.00	67.40	71.70	-174.23	-3,330.35	-547.67	1,991.07	1,937.83	53.24	37.399		
13,900.00	10,418.00	15,849.87	12,399.00	68.77	73.01	-174.23	-3,430.35	-546.68	1,991.07	1,936.97	54.10	36.804		
14,000.00	10,418.00	15,949.87	12,399.00	70.15	74.33	-174.23	-3,530.34	-545.68	1,991.07	1,936.10	54.97	36.222		

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 503H
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 503H	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	10,418.00	16,049.87	12,399.00	71.54	75.66	-174.23	-3,630.34	-544.69	1,991.07	1,935.22	55.85	35.652		
14,200.00	10,418.00	16,149.87	12,399.00	72.95	77.00	-174.23	-3,730.33	-543.69	1,991.07	1,934.34	56.74	35.094		
14,300.00	10,418.00	16,249.87	12,399.00	74.36	78.36	-174.23	-3,830.33	-542.70	1,991.07	1,933.44	57.63	34.548		
14,400.00	10,418.00	16,349.87	12,399.00	75.78	79.73	-174.23	-3,930.32	-541.70	1,991.07	1,932.54	58.53	34.015		
14,500.00	10,418.00	16,449.87	12,399.00	77.21	81.10	-174.23	-4,030.32	-540.71	1,991.07	1,931.63	59.45	33.494		
14,600.00	10,418.00	16,549.87	12,399.00	78.65	82.49	-174.23	-4,130.31	-539.71	1,991.07	1,930.71	60.37	32.984		
14,700.00	10,418.00	16,649.87	12,399.00	80.10	83.89	-174.23	-4,230.31	-538.72	1,991.07	1,929.78	61.29	32.485		
14,800.00	10,418.00	16,749.87	12,399.00	81.55	85.29	-174.23	-4,330.30	-537.73	1,991.07	1,928.85	62.22	31.999		
14,900.00	10,418.00	16,849.87	12,399.00	83.02	86.71	-174.23	-4,430.30	-536.73	1,991.07	1,927.91	63.16	31.524		
15,000.00	10,418.00	16,949.87	12,399.00	84.49	88.13	-174.23	-4,530.29	-535.74	1,991.07	1,926.97	64.10	31.060		
15,100.00	10,418.00	17,049.87	12,399.00	85.96	89.56	-174.23	-4,630.29	-534.74	1,991.07	1,926.02	65.05	30.606		
15,200.00	10,418.00	17,149.87	12,399.00	87.45	91.00	-174.23	-4,730.28	-533.75	1,991.07	1,925.07	66.01	30.164		
15,300.00	10,418.00	17,249.87	12,399.00	88.94	92.45	-174.23	-4,830.28	-532.75	1,991.07	1,924.11	66.97	29.731		
15,400.00	10,418.00	17,349.87	12,399.00	90.43	93.90	-174.23	-4,930.27	-531.76	1,991.07	1,923.14	67.93	29.309		
15,500.00	10,418.00	17,449.87	12,399.00	91.93	95.36	-174.23	-5,030.27	-530.76	1,991.07	1,922.17	68.91	28.896		
15,600.00	10,418.00	17,549.87	12,399.00	93.43	96.82	-174.23	-5,130.26	-529.77	1,991.08	1,921.20	69.88	28.493		
15,700.00	10,418.00	17,649.87	12,399.00	94.94	98.29	-174.23	-5,230.26	-528.77	1,991.08	1,920.22	70.86	28.099		
15,800.00	10,418.00	17,749.87	12,399.00	96.46	99.77	-174.23	-5,330.25	-527.78	1,991.08	1,919.23	71.84	27.714		
15,900.00	10,418.00	17,849.87	12,399.00	97.98	101.25	-174.23	-5,430.25	-526.79	1,991.08	1,918.25	72.83	27.339		
16,000.00	10,418.00	17,949.87	12,399.00	99.50	102.74	-174.23	-5,530.24	-525.79	1,991.08	1,917.25	73.82	26.971		
16,100.00	10,418.00	18,049.87	12,399.00	101.03	104.23	-174.23	-5,630.24	-524.80	1,991.08	1,916.26	74.82	26.613		
16,200.00	10,418.00	18,149.87	12,399.00	102.56	105.73	-174.23	-5,730.23	-523.80	1,991.08	1,915.26	75.82	26.262		
16,300.00	10,418.00	18,249.87	12,399.00	104.09	107.23	-174.23	-5,830.23	-522.81	1,991.08	1,914.26	76.82	25.919		
16,400.00	10,418.00	18,349.87	12,399.00	105.63	108.73	-174.23	-5,930.22	-521.81	1,991.08	1,913.25	77.82	25.584		
16,500.00	10,418.00	18,449.87	12,399.00	107.17	110.24	-174.23	-6,030.22	-520.82	1,991.08	1,912.24	78.83	25.257		
16,600.00	10,418.00	18,549.87	12,399.00	108.72	111.76	-174.23	-6,130.21	-519.82	1,991.08	1,911.23	79.85	24.937		
16,700.00	10,418.00	18,649.87	12,399.00	110.26	113.27	-174.23	-6,230.21	-518.83	1,991.08	1,910.22	80.86	24.624		
16,800.00	10,418.00	18,749.87	12,399.00	111.81	114.80	-174.23	-6,330.20	-517.84	1,991.08	1,909.20	81.88	24.318		
16,900.00	10,418.00	18,849.87	12,399.00	113.37	116.32	-174.23	-6,430.20	-516.84	1,991.08	1,908.18	82.90	24.018		
17,000.00	10,418.00	18,949.87	12,399.00	114.92	117.85	-174.23	-6,530.19	-515.85	1,991.08	1,907.16	83.92	23.725		
17,100.00	10,418.00	19,049.87	12,399.00	116.48	119.38	-174.23	-6,630.19	-514.85	1,991.08	1,906.13	84.95	23.439		
17,200.00	10,418.00	19,149.87	12,399.00	118.04	120.92	-174.23	-6,730.18	-513.86	1,991.08	1,905.10	85.97	23.159		
17,300.00	10,418.00	19,249.87	12,399.00	119.61	122.45	-174.23	-6,830.18	-512.86	1,991.08	1,904.07	87.00	22.885		
17,400.00	10,418.00	19,349.87	12,399.00	121.17	123.99	-174.23	-6,930.17	-511.87	1,991.08	1,903.04	88.04	22.617		
17,500.00	10,418.00	19,449.87	12,399.00	122.74	125.54	-174.23	-7,030.17	-510.87	1,991.08	1,902.01	89.07	22.354		
17,600.00	10,418.00	19,549.87	12,399.00	124.31	127.08	-174.23	-7,130.16	-509.88	1,991.08	1,900.97	90.11	22.097		
17,700.00	10,418.00	19,649.87	12,399.00	125.88	128.63	-174.23	-7,230.16	-508.89	1,991.08	1,899.93	91.14	21.845		
17,800.00	10,418.00	19,749.87	12,399.00	127.46	130.18	-174.23	-7,330.15	-507.89	1,991.08	1,898.89	92.19	21.599		
17,900.00	10,418.00	19,849.87	12,399.00	129.04	131.74	-174.23	-7,430.15	-506.90	1,991.08	1,897.85	93.23	21.357		
18,000.00	10,418.00	19,949.87	12,399.00	130.61	133.29	-174.23	-7,530.14	-505.90	1,991.08	1,896.81	94.27	21.121		
18,100.00	10,418.00	20,049.87	12,399.00	132.19	134.85	-174.23	-7,630.14	-504.91	1,991.08	1,895.76	95.32	20.889		
18,200.00	10,418.00	20,149.87	12,399.00	133.78	136.41	-174.23	-7,730.13	-503.91	1,991.08	1,894.72	96.37	20.662		
18,300.00	10,418.00	20,249.87	12,399.00	135.36	137.98	-174.23	-7,830.13	-502.92	1,991.08	1,893.67	97.41	20.439		
18,400.00	10,418.00	20,349.87	12,399.00	136.94	139.54	-174.23	-7,930.12	-501.92	1,991.08	1,892.62	98.47	20.221		
18,500.00	10,418.00	20,449.87	12,399.00	138.53	141.11	-174.23	-8,030.12	-500.93	1,991.08	1,891.56	99.52	20.007		
18,600.00	10,418.00	20,549.87	12,399.00	140.12	142.68	-174.23	-8,130.11	-499.94	1,991.08	1,890.51	100.57	19.798		
18,700.00	10,418.00	20,649.87	12,399.00	141.71	144.25	-174.23	-8,230.11	-498.94	1,991.08	1,889.45	101.63	19.592		
18,800.00	10,418.00	20,749.87	12,399.00	143.30	145.82	-174.23	-8,330.10	-497.95	1,991.08	1,888.40	102.68	19.390		
18,900.00	10,418.00	20,849.87	12,399.00	144.89	147.39	-174.23	-8,430.10	-496.95	1,991.08	1,887.34	103.74	19.192		
19,000.00	10,418.00	20,949.87	12,399.00	146.49	148.97	-174.23	-8,530.09	-495.96	1,991.08	1,886.28	104.80	18.998		
19,100.00	10,418.00	21,049.87	12,399.00	148.08	150.54	-174.23	-8,630.09	-494.96	1,991.08	1,885.22	105.86	18.808		
19,200.00	10,418.00	21,149.87	12,399.00	149.68	152.12	-174.23	-8,730.08	-493.97	1,991.08	1,884.16	106.93	18.621		

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 503H
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 503H	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		
19,300.00	10,418.00	21,249.87	12,399.00	151.27	153.70	-174.23	-8,830.08	-492.97	1,991.08	1,883.09	107.99	18.438		
19,400.00	10,418.00	21,349.87	12,399.00	152.87	155.29	-174.23	-8,930.07	-491.98	1,991.08	1,882.03	109.05	18.258		
19,500.00	10,418.00	21,449.87	12,399.00	154.47	156.87	-174.23	-9,030.07	-490.99	1,991.08	1,880.96	110.12	18.081		
19,600.00	10,418.00	21,549.87	12,399.00	156.07	158.45	-174.23	-9,130.07	-489.99	1,991.08	1,879.90	111.19	17.908		
19,700.00	10,418.00	21,649.87	12,399.00	157.67	160.04	-174.23	-9,230.06	-489.00	1,991.08	1,878.83	112.25	17.737		
19,800.00	10,418.00	21,749.87	12,399.00	159.28	161.63	-174.23	-9,330.06	-488.00	1,991.08	1,877.76	113.32	17.570		
19,900.00	10,418.00	21,849.87	12,399.00	160.88	163.22	-174.23	-9,430.05	-487.01	1,991.08	1,876.69	114.39	17.406		
20,000.00	10,418.00	21,949.87	12,399.00	162.48	164.81	-174.23	-9,530.05	-486.01	1,991.08	1,875.62	115.46	17.245		
20,100.00	10,418.00	22,049.87	12,399.00	164.09	166.40	-174.23	-9,630.04	-485.02	1,991.08	1,874.55	116.53	17.086		
20,200.00	10,418.00	22,149.87	12,399.00	165.70	167.99	-174.23	-9,730.04	-484.02	1,991.08	1,873.48	117.61	16.930		
20,300.00	10,418.00	22,249.87	12,399.00	167.30	169.58	-174.23	-9,830.03	-483.03	1,991.08	1,872.41	118.68	16.777		
20,400.00	10,418.00	22,349.87	12,399.00	168.91	171.18	-174.23	-9,930.03	-482.03	1,991.08	1,871.33	119.75	16.627		
20,500.00	10,418.00	22,449.87	12,399.00	170.52	172.77	-174.23	-10,030.02	-481.04	1,991.08	1,870.26	120.83	16.479		
20,600.00	10,418.00	22,549.87	12,399.00	172.13	174.37	-174.23	-10,130.02	-480.05	1,991.08	1,869.18	121.90	16.333		
20,700.00	10,418.00	22,649.87	12,399.00	173.74	175.97	-174.23	-10,230.01	-479.05	1,991.09	1,868.10	122.98	16.190		
20,800.00	10,418.00	22,749.87	12,399.00	175.35	177.56	-174.23	-10,330.01	-478.06	1,991.09	1,867.03	124.06	16.050		
20,900.00	10,418.00	22,849.87	12,399.00	176.97	179.16	-174.23	-10,430.00	-477.06	1,991.09	1,865.95	125.14	15.911		
21,000.00	10,418.00	22,949.87	12,399.00	178.58	180.76	-174.23	-10,530.00	-476.07	1,991.09	1,864.87	126.22	15.775		
21,100.00	10,418.00	23,049.87	12,399.00	180.19	182.37	-174.23	-10,629.99	-475.07	1,991.09	1,863.79	127.30	15.641		
21,200.00	10,418.00	23,149.87	12,399.00	181.81	183.97	-174.23	-10,729.99	-474.08	1,991.09	1,862.71	128.38	15.510		
21,300.00	10,418.00	23,249.87	12,399.00	183.42	185.57	-174.23	-10,829.98	-473.08	1,991.09	1,861.63	129.46	15.380		
21,400.00	10,418.00	23,349.87	12,399.00	185.04	187.18	-174.23	-10,929.98	-472.09	1,991.09	1,860.55	130.54	15.253		
21,500.00	10,418.00	23,449.87	12,399.00	186.65	188.78	-174.23	-11,029.97	-471.10	1,991.09	1,859.47	131.62	15.128		
21,600.00	10,418.00	23,549.87	12,399.00	188.27	190.39	-174.23	-11,129.97	-470.10	1,991.09	1,858.38	132.70	15.004		
21,700.00	10,418.00	23,649.87	12,399.00	189.89	191.99	-174.23	-11,229.96	-469.11	1,991.09	1,857.30	133.79	14.883		
21,800.00	10,418.00	23,749.87	12,399.00	191.50	193.60	-174.23	-11,329.96	-468.11	1,991.09	1,856.22	134.87	14.763		
21,900.00	10,418.00	23,849.87	12,399.00	193.12	195.21	-174.23	-11,429.95	-467.12	1,991.09	1,855.13	135.96	14.645		
21,923.68	10,418.00	23,873.55	12,399.00	193.51	195.59	-174.23	-11,453.62	-466.88	1,991.09	1,854.87	136.21	14.617		

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 503H
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 503H	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							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	9.08	75.06	11.99	76.01					
100.00	100.00	100.00	100.00	0.13	0.13	9.08	75.06	11.99	76.01	75.84	0.18	428.406		
200.00	200.00	200.00	200.00	0.48	0.48	9.08	75.06	11.99	76.01	75.33	0.68	111.068		
300.00	300.00	300.00	300.00	0.84	0.84	9.08	75.06	11.99	76.01	74.82	1.19	63.805		
400.00	400.00	400.00	400.00	1.20	1.20	9.08	75.06	11.99	76.01	74.32	1.70	44.759		
500.00	500.00	500.00	500.00	1.56	1.56	9.08	75.06	11.99	76.01	73.81	2.21	34.470		
600.00	600.00	600.00	600.00	1.92	1.92	9.08	75.06	11.99	76.01	73.30	2.71	28.027		
700.00	700.00	700.00	700.00	2.28	2.28	9.08	75.06	11.99	76.01	72.79	3.22	23.613		
800.00	800.00	800.00	800.00	2.63	2.63	9.08	75.06	11.99	76.01	72.29	3.73	20.400		
900.00	900.00	900.00	900.00	2.99	2.99	9.08	75.06	11.99	76.01	71.78	4.23	17.957		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	9.08	75.06	11.99	76.01	71.27	4.74	16.037		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	9.08	75.06	11.99	76.01	70.77	5.25	14.487		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	9.08	75.06	11.99	76.01	70.26	5.75	13.211		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	9.08	75.06	11.99	76.01	69.75	6.26	12.141		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	9.08	75.06	11.99	76.01	69.25	6.77	11.232		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	9.08	75.06	11.99	76.01	68.74	7.27	10.449		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	9.08	75.06	11.99	76.01	68.23	7.78	9.768		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	9.08	75.06	11.99	76.01	67.73	8.29	9.171		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	9.08	75.06	11.99	76.01	67.22	8.80	8.642		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	9.08	75.06	11.99	76.01	66.71	9.30	8.171		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	9.08	75.06	11.99	76.01	66.20	9.81	7.749		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	9.08	75.06	11.99	76.01	65.70	10.32	7.368		
2,200.00	2,199.99	2,199.99	2,199.99	7.65	7.65	83.89	75.06	11.99	75.86	65.04	10.82	7.012		
2,219.11	2,219.09	2,218.85	2,218.85	7.71	7.72	84.33	75.08	12.03	75.84	64.92	10.91	6.949 CC, ES		
2,300.00	2,299.91	2,298.60	2,298.59	7.99	8.00	87.52	75.66	13.12	76.40	65.09	11.31	6.755		
2,400.00	2,399.69	2,396.71	2,396.63	8.34	8.35	94.17	77.45	16.46	79.26	67.46	11.79	6.720 SF		
2,500.00	2,499.27	2,494.41	2,494.13	8.70	8.69	102.83	80.38	21.93	85.74	73.46	12.27	6.986		
2,600.00	2,598.57	2,592.87	2,592.34	9.06	9.04	111.78	83.67	28.10	95.60	82.83	12.76	7.489		
2,700.00	2,697.54	2,690.85	2,690.07	9.42	9.39	120.06	86.95	34.24	108.70	95.44	13.26	8.201		
2,771.79	2,768.33	2,760.87	2,759.91	9.69	9.64	125.40	89.29	38.62	120.21	106.60	13.61	8.833		
2,800.00	2,796.11	2,788.32	2,787.29	9.79	9.73	127.37	90.21	40.34	125.15	111.40	13.75	9.104		
2,900.00	2,894.56	2,885.64	2,884.37	10.18	10.08	133.25	93.47	46.44	143.66	129.42	14.24	10.090		
3,000.00	2,993.02	2,982.96	2,981.44	10.56	10.43	137.77	96.73	52.53	163.32	148.59	14.73	11.088		
3,100.00	3,091.48	3,080.28	3,078.51	10.95	10.78	141.31	99.99	58.63	183.75	168.53	15.22	12.071		
3,200.00	3,189.94	3,177.60	3,175.59	11.35	11.13	144.15	103.24	64.72	204.73	189.01	15.72	13.027		
3,300.00	3,288.39	3,274.92	3,272.66	11.75	11.49	146.46	106.50	70.82	226.10	209.89	16.21	13.948		
3,400.00	3,386.85	3,372.24	3,369.73	12.16	11.84	148.37	109.76	76.91	247.77	231.06	16.71	14.831		
3,500.00	3,485.31	3,469.56	3,466.81	12.57	12.19	149.97	113.02	83.01	269.65	252.45	17.20	15.674		
3,600.00	3,583.77	3,566.88	3,563.88	12.98	12.55	151.33	116.27	89.11	291.71	274.01	17.70	16.479		
3,700.00	3,682.22	3,664.19	3,660.95	13.39	12.90	152.50	119.53	95.20	313.90	295.70	18.20	17.247		
3,800.00	3,780.68	3,761.51	3,758.03	13.81	13.26	153.52	122.79	101.30	336.20	317.50	18.70	17.979		
3,900.00	3,879.14	3,858.83	3,855.10	14.23	13.61	154.41	126.05	107.39	358.59	339.39	19.20	18.676		
4,000.00	3,977.60	3,956.15	3,952.18	14.65	13.97	155.19	129.30	113.49	381.05	361.35	19.70	19.341		
4,100.00	4,076.05	4,053.47	4,049.25	15.07	14.33	155.89	132.56	119.58	403.57	383.37	20.20	19.975		
4,200.00	4,174.51	4,150.79	4,146.32	15.50	14.68	156.51	135.82	125.68	426.14	405.44	20.71	20.580		
4,300.00	4,272.97	4,248.11	4,243.40	15.93	15.04	157.07	139.08	131.77	448.76	427.55	21.21	21.158		
4,400.00	4,371.43	4,345.43	4,340.47	16.36	15.40	157.58	142.33	137.87	471.41	449.70	21.71	21.711		
4,500.00	4,469.88	4,442.75	4,437.54	16.79	15.76	158.04	145.59	143.96	494.10	471.88	22.22	22.239		
4,600.00	4,568.34	4,540.07	4,534.62	17.22	16.11	158.46	148.85	150.06	516.81	494.09	22.72	22.744		
4,700.00	4,666.80	4,637.39	4,631.69	17.65	16.47	158.85	152.11	156.15	539.55	516.32	23.23	23.228		
4,800.00	4,765.25	4,734.71	4,728.77	18.08	16.83	159.20	155.36	162.25	562.30	538.57	23.73	23.692		
4,900.00	4,863.71	4,832.03	4,825.84	18.52	17.19	159.53	158.62	168.34	585.08	560.84	24.24	24.137		

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 503H
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 503H	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								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	4,962.17	4,929.35	4,922.91	18.95	17.55	159.83	161.88	174.44	607.87	583.13	24.75	24.564			
5,100.00	5,060.63	5,026.67	5,019.99	19.39	17.91	160.11	165.14	180.54	630.68	605.43	25.25	24.974			
5,200.00	5,159.08	5,123.99	5,117.06	19.83	18.27	160.37	168.39	186.63	653.51	627.74	25.76	25.368			
5,300.00	5,257.54	5,221.30	5,214.13	20.27	18.63	160.62	171.65	192.73	676.34	650.07	26.27	25.747			
5,400.00	5,356.00	5,318.62	5,311.21	20.71	18.99	160.84	174.91	198.82	699.18	672.41	26.78	26.111			
5,500.00	5,454.46	5,415.94	5,408.28	21.15	19.35	161.06	178.17	204.92	722.04	694.75	27.29	26.462			
5,600.00	5,552.91	5,513.26	5,505.35	21.59	19.71	161.26	181.42	211.01	744.90	717.11	27.79	26.800			
5,700.00	5,651.37	5,610.58	5,602.43	22.03	20.07	161.45	184.68	217.11	767.77	739.47	28.30	27.126			
5,800.00	5,749.83	5,707.90	5,699.50	22.47	20.43	161.62	187.94	223.20	790.65	761.84	28.81	27.441			
5,900.00	5,848.29	5,805.22	5,796.58	22.91	20.79	161.79	191.20	229.30	813.54	784.22	29.32	27.744			
6,000.00	5,946.74	5,902.54	5,893.65	23.36	21.15	161.95	194.45	235.39	836.43	806.60	29.83	28.038			
6,100.00	6,045.20	5,999.86	5,990.72	23.80	21.52	162.10	197.71	241.49	859.33	828.98	30.34	28.321			
6,200.00	6,143.66	6,097.18	6,087.80	24.24	21.88	162.24	200.97	247.58	882.23	851.38	30.85	28.595			
6,300.00	6,242.12	6,194.50	6,184.87	24.69	22.24	162.37	204.23	253.68	905.14	873.77	31.36	28.860			
6,400.00	6,340.57	6,291.82	6,281.94	25.13	22.60	162.50	207.48	259.77	928.05	896.18	31.87	29.116			
6,500.00	6,439.03	6,389.14	6,379.02	25.58	22.96	162.62	210.74	265.87	950.97	918.58	32.39	29.364			
6,600.00	6,537.49	6,486.46	6,476.09	26.02	23.32	162.74	214.00	271.97	973.89	940.99	32.90	29.605			
6,700.00	6,635.95	6,583.78	6,573.16	26.47	23.68	162.85	217.26	278.06	996.81	963.40	33.41	29.838			
6,757.61	6,692.67	6,639.84	6,629.09	26.73	23.89	162.91	219.13	281.57	1,010.02	976.32	33.70	29.969			
6,800.00	6,734.44	6,681.15	6,670.29	26.91	24.05	163.00	220.51	284.16	1,019.52	985.60	33.92	30.057			
6,900.00	6,833.29	6,778.98	6,767.87	27.34	24.41	163.15	223.79	290.29	1,040.19	1,005.76	34.43	30.212			
7,000.00	6,932.50	6,877.30	6,865.95	27.75	24.78	163.25	227.08	296.44	1,058.40	1,023.46	34.94	30.292			
7,100.00	7,032.01	6,976.05	6,964.45	28.14	25.14	163.29	230.39	302.63	1,074.15	1,038.70	35.45	30.301			
7,200.00	7,131.74	7,077.04	7,065.18	28.51	25.52	163.29	233.76	308.95	1,087.41	1,051.44	35.97	30.234			
7,300.00	7,231.62	7,210.42	7,198.38	28.86	26.01	163.25	237.01	315.02	1,096.47	1,059.84	36.63	29.933			
7,400.00	7,331.60	7,344.56	7,332.49	29.19	26.48	163.25	238.06	316.99	1,099.94	1,062.68	37.26	29.522			
7,429.40	7,361.00	7,373.07	7,361.00	29.28	26.58	89.42	238.06	316.99	1,100.05	1,062.65	37.40	29.414			
7,500.00	7,431.60	7,443.67	7,431.60	29.50	26.83	89.42	238.06	316.99	1,100.05	1,062.31	37.74	29.146			
7,600.00	7,531.60	7,543.67	7,531.60	29.82	27.17	89.42	238.06	316.99	1,100.05	1,061.82	38.23	28.774			
7,700.00	7,631.60	7,643.67	7,631.60	30.14	27.52	89.42	238.06	316.99	1,100.05	1,061.33	38.72	28.411			
7,800.00	7,731.60	7,743.67	7,731.60	30.45	27.87	89.42	238.06	316.99	1,100.05	1,060.84	39.21	28.057			
7,900.00	7,831.60	7,843.67	7,831.60	30.77	28.22	89.42	238.06	316.99	1,100.05	1,060.35	39.70	27.711			
8,000.00	7,931.60	7,943.67	7,931.60	31.09	28.56	89.42	238.06	316.99	1,100.05	1,059.86	40.19	27.373			
8,100.00	8,031.60	8,043.67	8,031.60	31.41	28.91	89.42	238.06	316.99	1,100.05	1,059.37	40.68	27.043			
8,200.00	8,131.60	8,143.67	8,131.60	31.73	29.26	89.42	238.06	316.99	1,100.05	1,058.88	41.17	26.721			
8,300.00	8,231.60	8,243.67	8,231.60	32.06	29.61	89.42	238.06	316.99	1,100.05	1,058.39	41.66	26.406			
8,400.00	8,331.60	8,343.67	8,331.60	32.38	29.96	89.42	238.06	316.99	1,100.05	1,057.90	42.15	26.098			
8,500.00	8,431.60	8,443.67	8,431.60	32.70	30.31	89.42	238.06	316.99	1,100.05	1,057.41	42.64	25.797			
8,600.00	8,531.60	8,543.67	8,531.60	33.03	30.66	89.42	238.06	316.99	1,100.05	1,056.91	43.13	25.503			
8,700.00	8,631.60	8,643.67	8,631.60	33.35	31.01	89.42	238.06	316.99	1,100.05	1,056.42	43.63	25.215			
8,800.00	8,731.60	8,743.67	8,731.60	33.68	31.36	89.42	238.06	316.99	1,100.05	1,055.93	44.12	24.934			
8,900.00	8,831.60	8,843.67	8,831.60	34.00	31.71	89.42	238.06	316.99	1,100.05	1,055.44	44.61	24.658			
9,000.00	8,931.60	8,943.67	8,931.60	34.33	32.06	89.42	238.06	316.99	1,100.05	1,054.94	45.11	24.389			
9,100.00	9,031.60	9,043.67	9,031.60	34.66	32.41	89.42	238.06	316.99	1,100.05	1,054.45	45.60	24.125			
9,200.00	9,131.60	9,143.67	9,131.60	34.98	32.76	89.42	238.06	316.99	1,100.05	1,053.96	46.09	23.866			
9,300.00	9,231.60	9,243.67	9,231.60	35.31	33.11	89.42	238.06	316.99	1,100.05	1,053.46	46.59	23.613			
9,400.00	9,331.60	9,343.67	9,331.60	35.64	33.46	89.42	238.06	316.99	1,100.05	1,052.97	47.08	23.365			
9,500.00	9,431.60	9,443.67	9,431.60	35.97	33.81	89.42	238.06	316.99	1,100.05	1,052.47	47.58	23.122			
9,600.00	9,531.60	9,543.67	9,531.60	36.30	34.17	89.42	238.06	316.99	1,100.05	1,051.98	48.07	22.884			
9,700.00	9,631.60	9,643.67	9,631.60	36.63	34.52	89.42	238.06	316.99	1,100.05	1,051.48	48.57	22.651			
9,800.00	9,731.60	9,743.67	9,731.60	36.96	34.87	89.42	238.06	316.99	1,100.05	1,050.99	49.06	22.422			
9,900.00	9,831.60	9,843.67	9,831.60	37.30	35.22	89.42	238.06	316.99	1,100.05	1,050.49	49.56	22.197			

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 503H
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 503H	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	
9,913.44	9,845.04	9,857.11	9,845.04	37.34	35.27	89.42	238.06	316.99	1,100.05	1,050.42	49.62	22.168		
9,913.46	9,845.06	9,857.13	9,845.06	37.34	35.27	89.42	238.06	316.99	1,100.05	1,050.42	49.62	22.168		
9,950.00	9,881.57	9,893.64	9,881.57	37.46	35.40	-90.07	238.06	316.99	1,100.05	1,050.25	49.80	22.089		
10,000.00	9,931.27	9,943.34	9,931.27	37.60	35.57	-90.34	238.06	316.99	1,100.07	1,050.03	50.04	21.985		
10,050.00	9,980.31	9,992.38	9,980.31	37.74	35.74	-90.83	238.06	316.99	1,100.17	1,049.90	50.27	21.886		
10,100.00	10,028.32	10,040.39	10,028.32	37.87	35.91	-91.49	238.06	316.99	1,100.46	1,049.97	50.49	21.795		
10,150.00	10,074.94	10,087.00	10,074.94	37.99	36.08	-92.30	238.06	316.99	1,101.11	1,050.40	50.71	21.715		
10,200.00	10,119.80	10,131.87	10,119.80	38.10	36.24	-93.21	238.06	316.99	1,102.29	1,051.38	50.92	21.649		
10,250.00	10,162.58	10,174.64	10,162.58	38.19	36.39	-94.16	238.06	316.99	1,104.25	1,053.13	51.12	21.603		
10,300.00	10,202.93	10,215.00	10,202.93	38.28	36.53	-95.10	238.06	316.99	1,107.20	1,055.90	51.31	21.580		
10,350.00	10,240.57	10,252.63	10,240.57	38.35	36.66	-95.95	238.06	316.99	1,111.42	1,059.93	51.49	21.587		
10,400.00	10,275.19	10,287.26	10,275.19	38.42	36.78	-96.67	238.06	316.99	1,117.13	1,065.48	51.65	21.627		
10,450.00	10,306.54	10,318.61	10,306.54	38.47	36.89	-97.17	238.06	316.99	1,124.57	1,072.76	51.81	21.705		
10,500.00	10,334.38	10,346.45	10,334.38	38.52	36.99	-97.41	238.06	316.99	1,133.92	1,081.96	51.95	21.825		
10,550.00	10,358.49	10,370.56	10,358.49	38.56	37.08	-97.33	238.06	316.99	1,145.32	1,093.24	52.08	21.990		
10,600.00	10,378.70	10,390.77	10,378.70	38.60	37.15	-96.88	238.06	316.99	1,158.88	1,106.69	52.20	22.202		
10,650.00	10,394.84	10,406.91	10,394.84	38.64	37.20	-96.01	238.06	316.99	1,174.62	1,122.33	52.29	22.462		
10,700.00	10,406.80	10,418.87	10,406.80	38.68	37.25	-94.71	238.06	316.99	1,192.51	1,140.14	52.37	22.770		
10,750.00	10,414.49	10,426.56	10,414.49	38.74	37.27	-92.93	238.06	316.99	1,212.43	1,160.00	52.43	23.125		
10,800.00	10,417.84	10,429.91	10,417.84	38.82	37.29	-90.68	238.06	316.99	1,234.23	1,181.76	52.47	23.523		
10,813.44	10,418.00	10,430.06	10,418.00	38.85	37.29	-90.00	238.06	316.99	1,240.38	1,187.91	52.48	23.637		
10,900.00	10,418.00	10,430.06	10,418.00	39.04	37.29	-90.00	238.06	316.99	1,282.68	1,230.16	52.52	24.423		
11,000.00	10,418.00	10,430.06	10,418.00	39.34	37.29	-90.00	238.06	316.99	1,336.86	1,284.29	52.57	25.429		
11,100.00	10,418.00	10,430.06	10,418.00	39.72	37.29	-90.00	238.06	316.99	1,396.11	1,343.48	52.63	26.528		
11,200.00	10,418.00	10,430.06	10,418.00	40.19	37.29	-90.00	238.06	316.99	1,459.81	1,407.13	52.68	27.710		
11,300.00	10,418.00	10,430.06	10,418.00	40.72	37.29	-90.00	238.06	316.99	1,527.41	1,474.68	52.73	28.965		
11,400.00	10,418.00	10,430.06	10,418.00	41.32	37.29	-90.00	238.06	316.99	1,598.41	1,545.63	52.78	30.282		
11,500.00	10,418.00	10,430.06	10,418.00	41.98	37.29	-90.00	238.06	316.99	1,672.38	1,619.55	52.83	31.654		
11,600.00	10,418.00	10,430.06	10,418.00	42.70	37.29	-90.00	238.06	316.99	1,748.94	1,696.06	52.88	33.075		
11,700.00	10,418.00	10,430.06	10,418.00	43.47	37.29	-90.00	238.06	316.99	1,827.76	1,774.84	52.92	34.537		
11,800.00	10,418.00	10,430.06	10,418.00	44.29	37.29	-90.00	238.06	316.99	1,908.57	1,855.61	52.96	36.036		
11,900.00	10,418.00	10,430.06	10,418.00	45.15	37.29	-90.00	238.06	316.99	1,991.13	1,938.12	53.00	37.566		
12,000.00	10,418.00	10,430.06	10,418.00	46.06	37.29	-90.00	238.06	316.99	2,075.21	2,022.17	53.04	39.125		
12,100.00	10,418.00	10,430.06	10,418.00	47.01	37.29	-90.00	238.06	316.99	2,160.66	2,107.58	53.08	40.708		
12,200.00	10,418.00	10,430.06	10,418.00	47.99	37.29	-90.00	238.06	316.99	2,247.30	2,194.19	53.11	42.313		
12,300.00	10,418.00	10,430.06	10,418.00	49.02	37.29	-90.00	238.06	316.99	2,335.02	2,281.87	53.15	43.936		
12,400.00	10,418.00	10,430.06	10,418.00	50.07	37.29	-90.00	238.06	316.99	2,423.68	2,370.51	53.18	45.577		
12,500.00	10,418.00	10,430.06	10,418.00	51.16	37.29	-90.00	238.06	316.99	2,513.20	2,459.99	53.21	47.232		
12,600.00	10,418.00	14,865.81	12,740.00	52.28	58.03	-154.65	-2,121.48	340.41	2,569.40	2,517.47	51.93	49.482		
12,700.00	10,418.00	14,965.81	12,740.00	53.42	59.09	-154.65	-2,221.48	341.41	2,569.40	2,516.58	52.81	48.652		
12,800.00	10,418.00	15,065.81	12,740.00	54.59	60.16	-154.65	-2,321.47	342.40	2,569.40	2,515.68	53.72	47.830		
12,900.00	10,418.00	15,165.81	12,740.00	55.78	61.27	-154.65	-2,421.47	343.39	2,569.40	2,514.75	54.65	47.016		
13,000.00	10,418.00	15,265.81	12,740.00	57.00	62.40	-154.65	-2,521.46	344.38	2,569.40	2,513.80	55.60	46.214		
13,100.00	10,418.00	15,365.81	12,740.00	58.24	63.55	-154.65	-2,621.46	345.38	2,569.40	2,512.83	56.57	45.423		
13,200.00	10,418.00	15,465.81	12,740.00	59.50	64.72	-154.65	-2,721.45	346.37	2,569.40	2,511.84	57.55	44.645		
13,300.00	10,418.00	15,565.81	12,740.00	60.77	65.91	-154.65	-2,821.45	347.36	2,569.40	2,510.84	58.55	43.882		
13,400.00	10,418.00	15,665.81	12,740.00	62.07	67.13	-154.65	-2,921.44	348.35	2,569.40	2,509.83	59.57	43.133		
13,500.00	10,418.00	15,765.81	12,740.00	63.38	68.36	-154.65	-3,021.44	349.35	2,569.40	2,508.79	60.60	42.398		
13,600.00	10,418.00	15,865.81	12,740.00	64.71	69.61	-154.65	-3,121.43	350.34	2,569.40	2,507.75	61.65	41.679		
13,700.00	10,418.00	15,965.81	12,740.00	66.05	70.87	-154.65	-3,221.43	351.33	2,569.40	2,506.69	62.71	40.974		
13,800.00	10,418.00	16,065.81	12,740.00	67.40	72.15	-154.65	-3,321.42	352.32	2,569.40	2,505.61	63.78	40.285		
13,900.00	10,418.00	16,165.81	12,740.00	68.77	73.45	-154.65	-3,421.42	353.32	2,569.40	2,504.53	64.87	39.610		

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 503H
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 503H	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	10,418.00	16,265.81	12,740.00	70.15	74.76	-154.65	-3,521.41	354.31	2,569.40	2,503.43	65.96	38.952		
14,100.00	10,418.00	16,365.81	12,740.00	71.54	76.08	-154.65	-3,621.41	355.30	2,569.40	2,502.33	67.07	38.310		
14,200.00	10,418.00	16,465.81	12,740.00	72.95	77.41	-154.65	-3,721.40	356.29	2,569.40	2,501.21	68.19	37.682		
14,300.00	10,418.00	16,565.81	12,740.00	74.36	78.76	-154.65	-3,821.40	357.29	2,569.40	2,500.08	69.31	37.069		
14,400.00	10,418.00	16,665.81	12,740.00	75.78	80.12	-154.65	-3,921.39	358.28	2,569.40	2,498.95	70.45	36.472		
14,500.00	10,418.00	16,765.81	12,740.00	77.21	81.49	-154.65	-4,021.39	359.27	2,569.40	2,497.80	71.59	35.889		
14,600.00	10,418.00	16,865.81	12,740.00	78.65	82.87	-154.65	-4,121.38	360.26	2,569.40	2,496.65	72.75	35.320		
14,700.00	10,418.00	16,965.81	12,740.00	80.10	84.26	-154.65	-4,221.38	361.26	2,569.40	2,495.49	73.91	34.765		
14,800.00	10,418.00	17,065.81	12,740.00	81.55	85.66	-154.65	-4,321.37	362.25	2,569.40	2,494.32	75.08	34.224		
14,900.00	10,418.00	17,165.81	12,740.00	83.02	87.07	-154.65	-4,421.37	363.24	2,569.40	2,493.14	76.25	33.696		
15,000.00	10,418.00	17,265.81	12,740.00	84.49	88.48	-154.65	-4,521.36	364.23	2,569.40	2,491.96	77.44	33.181		
15,100.00	10,418.00	17,365.81	12,740.00	85.96	89.91	-154.65	-4,621.36	365.23	2,569.40	2,490.77	78.63	32.679		
15,200.00	10,418.00	17,465.81	12,740.00	87.45	91.34	-154.65	-4,721.35	366.22	2,569.40	2,489.57	79.82	32.189		
15,300.00	10,418.00	17,565.81	12,740.00	88.94	92.78	-154.65	-4,821.35	367.21	2,569.40	2,488.37	81.02	31.712		
15,400.00	10,418.00	17,665.81	12,740.00	90.43	94.22	-154.65	-4,921.34	368.20	2,569.40	2,487.17	82.23	31.247		
15,500.00	10,418.00	17,765.81	12,740.00	91.93	95.68	-154.65	-5,021.34	369.20	2,569.40	2,485.96	83.44	30.793		
15,600.00	10,418.00	17,865.81	12,740.00	93.43	97.14	-154.65	-5,121.33	370.19	2,569.40	2,484.74	84.66	30.351		
15,700.00	10,418.00	17,965.81	12,740.00	94.94	98.60	-154.65	-5,221.33	371.18	2,569.40	2,483.52	85.88	29.919		
15,800.00	10,418.00	18,065.81	12,740.00	96.46	100.07	-154.65	-5,321.32	372.17	2,569.40	2,482.29	87.10	29.498		
15,900.00	10,418.00	18,165.81	12,740.00	97.98	101.55	-154.65	-5,421.32	373.17	2,569.40	2,481.06	88.33	29.087		
16,000.00	10,418.00	18,265.81	12,740.00	99.50	103.03	-154.65	-5,521.31	374.16	2,569.40	2,479.82	89.57	28.686		
16,100.00	10,418.00	18,365.81	12,740.00	101.03	104.52	-154.65	-5,621.31	375.15	2,569.40	2,478.58	90.81	28.294		
16,200.00	10,418.00	18,465.81	12,740.00	102.56	106.01	-154.65	-5,721.30	376.14	2,569.40	2,477.34	92.06	27.911		
16,300.00	10,418.00	18,565.81	12,740.00	104.09	107.51	-154.65	-5,821.30	377.14	2,569.40	2,476.09	93.30	27.539		
16,400.00	10,418.00	18,665.81	12,740.00	105.63	109.01	-154.65	-5,921.29	378.13	2,569.40	2,474.84	94.55	27.174		
16,500.00	10,418.00	18,765.81	12,740.00	107.17	110.51	-154.65	-6,021.29	379.12	2,569.40	2,473.59	95.80	26.819		
16,600.00	10,418.00	18,865.81	12,740.00	108.72	112.02	-154.65	-6,121.28	380.11	2,569.40	2,472.34	97.06	26.472		
16,700.00	10,418.00	18,965.81	12,740.00	110.26	113.53	-154.65	-6,221.28	381.11	2,569.40	2,471.08	98.32	26.133		
16,800.00	10,418.00	19,065.81	12,740.00	111.81	115.05	-154.65	-6,321.27	382.10	2,569.40	2,469.82	99.58	25.802		
16,900.00	10,418.00	19,165.81	12,740.00	113.37	116.57	-154.65	-6,421.27	383.09	2,569.40	2,468.55	100.85	25.479		
17,000.00	10,418.00	19,265.81	12,740.00	114.92	118.10	-154.65	-6,521.27	384.08	2,569.40	2,467.28	102.11	25.162		
17,100.00	10,418.00	19,365.81	12,740.00	116.48	119.62	-154.65	-6,621.26	385.08	2,569.40	2,466.01	103.38	24.853		
17,200.00	10,418.00	19,465.81	12,740.00	118.04	121.15	-154.65	-6,721.26	386.07	2,569.40	2,464.74	104.66	24.550		
17,300.00	10,418.00	19,565.81	12,740.00	119.61	122.69	-154.65	-6,821.25	387.06	2,569.40	2,463.46	105.94	24.254		
17,400.00	10,418.00	19,665.81	12,740.00	121.17	124.23	-154.65	-6,921.25	388.05	2,569.40	2,462.18	107.21	23.966		
17,500.00	10,418.00	19,765.81	12,740.00	122.74	125.77	-154.65	-7,021.24	389.05	2,569.40	2,460.90	108.49	23.683		
17,600.00	10,418.00	19,865.81	12,740.00	124.31	127.31	-154.65	-7,121.24	390.04	2,569.40	2,459.62	109.77	23.407		
17,700.00	10,418.00	19,965.81	12,740.00	125.88	128.85	-154.65	-7,221.23	391.03	2,569.40	2,458.34	111.05	23.137		
17,800.00	10,418.00	20,065.81	12,740.00	127.46	130.40	-154.65	-7,321.23	392.02	2,569.40	2,457.06	112.34	22.872		
17,900.00	10,418.00	20,165.81	12,740.00	129.04	131.95	-154.65	-7,421.22	393.02	2,569.40	2,455.77	113.62	22.613		
18,000.00	10,418.00	20,265.81	12,740.00	130.61	133.51	-154.65	-7,521.22	394.01	2,569.40	2,454.48	114.91	22.359		
18,100.00	10,418.00	20,365.81	12,740.00	132.19	135.06	-154.65	-7,621.21	395.00	2,569.40	2,453.19	116.20	22.111		
18,200.00	10,418.00	20,465.81	12,740.00	133.78	136.62	-154.65	-7,721.21	395.99	2,569.40	2,451.90	117.50	21.868		
18,300.00	10,418.00	20,565.81	12,740.00	135.36	138.18	-154.65	-7,821.20	396.99	2,569.40	2,450.60	118.79	21.629		
18,400.00	10,418.00	20,665.81	12,740.00	136.94	139.74	-154.65	-7,921.20	397.98	2,569.40	2,449.31	120.09	21.396		
18,500.00	10,418.00	20,765.81	12,740.00	138.53	141.30	-154.65	-8,021.19	398.97	2,569.40	2,448.01	121.38	21.168		
18,600.00	10,418.00	20,865.81	12,740.00	140.12	142.87	-154.65	-8,121.19	399.96	2,569.40	2,446.71	122.68	20.944		
18,700.00	10,418.00	20,965.81	12,740.00	141.71	144.44	-154.65	-8,221.18	400.96	2,569.40	2,445.42	123.98	20.725		
18,800.00	10,418.00	21,065.81	12,740.00	143.30	146.01	-154.65	-8,321.18	401.95	2,569.40	2,444.12	125.28	20.510		
18,900.00	10,418.00	21,165.81	12,740.00	144.89	147.58	-154.65	-8,421.17	402.94	2,569.40	2,442.82	126.58	20.299		
19,000.00	10,418.00	21,265.81	12,740.00	146.49	149.15	-154.65	-8,521.17	403.93	2,569.40	2,441.52	127.88	20.092		
19,100.00	10,418.00	21,365.81	12,740.00	148.08	150.73	-154.65	-8,621.16	404.93	2,569.40	2,440.21	129.18	19.890		

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 503H
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 503H	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							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	10,418.00	21,465.81	12,740.00	149.68	152.30	-154.65	-8,721.16	405.92	2,569.40	2,438.91	130.49	19.691			
19,300.00	10,418.00	21,565.81	12,740.00	151.27	153.88	-154.65	-8,821.15	406.91	2,569.40	2,437.60	131.79	19.496			
19,400.00	10,418.00	21,665.81	12,740.00	152.87	155.46	-154.65	-8,921.15	407.90	2,569.40	2,436.29	133.10	19.304			
19,500.00	10,418.00	21,765.81	12,740.00	154.47	157.04	-154.65	-9,021.14	408.90	2,569.40	2,434.99	134.41	19.116			
19,600.00	10,418.00	21,865.81	12,740.00	156.07	158.62	-154.65	-9,121.14	409.89	2,569.40	2,433.68	135.72	18.932			
19,700.00	10,418.00	21,965.81	12,740.00	157.67	160.21	-154.65	-9,221.13	410.88	2,569.40	2,432.37	137.02	18.751			
19,800.00	10,418.00	22,065.81	12,740.00	159.28	161.79	-154.65	-9,321.13	411.87	2,569.40	2,431.06	138.33	18.574			
19,900.00	10,418.00	22,165.81	12,740.00	160.88	163.38	-154.65	-9,421.12	412.87	2,569.40	2,429.75	139.64	18.400			
20,000.00	10,418.00	22,265.81	12,740.00	162.48	164.97	-154.65	-9,521.12	413.86	2,569.40	2,428.44	140.95	18.229			
20,100.00	10,418.00	22,365.81	12,740.00	164.09	166.56	-154.65	-9,621.11	414.85	2,569.40	2,427.13	142.26	18.061			
20,200.00	10,418.00	22,465.81	12,740.00	165.70	168.15	-154.65	-9,721.11	415.84	2,569.40	2,425.82	143.57	17.896			
20,300.00	10,418.00	22,565.81	12,740.00	167.30	169.74	-154.65	-9,821.10	416.84	2,569.40	2,424.51	144.89	17.734			
20,400.00	10,418.00	22,665.81	12,740.00	168.91	171.33	-154.65	-9,921.10	417.83	2,569.40	2,423.19	146.20	17.574			
20,500.00	10,418.00	22,765.81	12,740.00	170.52	172.92	-154.65	-10,021.09	418.82	2,569.40	2,421.88	147.52	17.418			
20,600.00	10,418.00	22,865.81	12,740.00	172.13	174.52	-154.65	-10,121.09	419.81	2,569.40	2,420.56	148.83	17.264			
20,700.00	10,418.00	22,874.14	12,740.00	173.74	174.65	-154.65	-10,129.42	419.90	2,571.03	2,421.88	149.15	17.237			
20,800.00	10,418.00	22,874.14	12,740.00	175.35	174.65	-154.65	-10,129.42	419.90	2,576.53	2,427.32	149.21	17.268			
20,900.00	10,418.00	22,874.14	12,740.00	176.97	174.65	-154.65	-10,129.42	419.90	2,585.90	2,436.82	149.08	17.346			
21,000.00	10,418.00	22,874.14	12,740.00	178.58	174.65	-154.65	-10,129.42	419.90	2,599.08	2,450.31	148.77	17.471			
21,100.00	10,418.00	22,874.14	12,740.00	180.19	174.65	-154.65	-10,129.42	419.90	2,616.01	2,467.73	148.28	17.642			
21,200.00	10,418.00	22,874.14	12,740.00	181.81	174.65	-154.65	-10,129.42	419.90	2,636.64	2,489.01	147.63	17.859			
21,300.00	10,418.00	22,874.14	12,740.00	183.42	174.65	-154.65	-10,129.42	419.90	2,660.86	2,514.03	146.83	18.122			
21,400.00	10,418.00	22,874.14	12,740.00	185.04	174.65	-154.65	-10,129.42	419.90	2,688.59	2,542.70	145.89	18.428			
21,500.00	10,418.00	22,874.14	12,740.00	186.65	174.65	-154.65	-10,129.42	419.90	2,719.72	2,574.89	144.83	18.778			
21,600.00	10,418.00	22,874.14	12,740.00	188.27	174.65	-154.65	-10,129.42	419.90	2,754.12	2,610.46	143.67	19.170			
21,700.00	10,418.00	22,874.14	12,740.00	189.89	174.65	-154.65	-10,129.42	419.90	2,791.69	2,649.29	142.40	19.604			
21,800.00	10,418.00	22,874.14	12,740.00	191.50	174.65	-154.65	-10,129.42	419.90	2,832.29	2,691.24	141.05	20.079			
21,900.00	10,418.00	22,874.14	12,740.00	193.12	174.65	-154.65	-10,129.42	419.90	2,875.80	2,736.15	139.64	20.594			
21,923.68	10,418.00	22,874.14	12,740.00	193.51	174.65	-154.65	-10,129.42	419.90	2,886.51	2,747.21	139.30	20.721			

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	26.03	75.30	36.77	83.80					
100.00	100.00	100.00	100.00	0.13	0.13	26.03	75.30	36.77	83.80	83.62	0.18	472.260		
200.00	200.00	200.00	200.00	0.48	0.48	26.03	75.30	36.77	83.80	83.11	0.68	122.438		
300.00	300.00	300.00	300.00	0.84	0.84	26.03	75.30	36.77	83.80	82.60	1.19	70.337		
400.00	400.00	400.00	400.00	1.20	1.20	26.03	75.30	36.77	83.80	82.10	1.70	49.341		
500.00	500.00	500.00	500.00	1.56	1.56	26.03	75.30	36.77	83.80	81.59	2.21	37.998		
600.00	600.00	600.00	600.00	1.92	1.92	26.03	75.30	36.77	83.80	81.08	2.71	30.896		
700.00	700.00	700.00	700.00	2.28	2.28	26.03	75.30	36.77	83.80	80.58	3.22	26.030		
800.00	800.00	800.00	800.00	2.63	2.63	26.03	75.30	36.77	83.80	80.07	3.73	22.489		
900.00	900.00	900.00	900.00	2.99	2.99	26.03	75.30	36.77	83.80	79.56	4.23	19.795		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	26.03	75.30	36.77	83.80	79.06	4.74	17.678		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	26.03	75.30	36.77	83.80	78.55	5.25	15.970		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	26.03	75.30	36.77	83.80	78.04	5.75	14.563		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	26.03	75.30	36.77	83.80	77.53	6.26	13.384		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	26.03	75.30	36.77	83.80	77.03	6.77	12.381		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	26.03	75.30	36.77	83.80	76.52	7.27	11.519		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	26.03	75.30	36.77	83.80	76.01	7.78	10.768		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	26.03	75.30	36.77	83.80	75.51	8.29	10.110		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	26.03	75.30	36.77	83.80	75.00	8.80	9.527		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	26.03	75.30	36.77	83.80	74.49	9.30	9.008		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	26.03	75.30	36.77	83.80	73.99	9.81	8.542		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	26.03	75.30	36.77	83.80	73.48	10.32	8.122 CC, ES		
2,200.00	2,199.99	2,198.51	2,198.50	7.65	7.64	101.35	75.63	38.00	84.90	74.09	10.81	7.855		
2,300.00	2,299.91	2,296.64	2,296.56	7.99	7.98	105.54	76.65	41.65	88.56	77.27	11.29	7.844 SF		
2,400.00	2,399.69	2,394.05	2,393.76	8.34	8.32	111.68	78.31	47.68	95.63	83.86	11.76	8.129		
2,500.00	2,499.27	2,490.38	2,489.70	8.70	8.66	118.72	80.61	55.98	107.11	94.88	12.23	8.761		
2,600.00	2,598.57	2,585.30	2,583.99	9.06	9.00	125.62	83.51	66.45	123.77	111.10	12.67	9.765		
2,700.00	2,697.54	2,681.33	2,679.20	9.42	9.35	131.82	86.85	78.53	145.17	132.03	13.15	11.043		
2,771.79	2,768.33	2,750.19	2,747.47	9.69	9.60	135.61	89.25	87.21	162.55	149.05	13.49	12.048		
2,800.00	2,796.11	2,777.18	2,774.23	9.79	9.70	137.01	90.19	90.62	169.74	156.11	13.63	12.456		
2,900.00	2,894.56	2,872.84	2,869.06	10.18	10.05	141.16	93.53	102.68	195.88	181.78	14.11	13.886		
3,000.00	2,993.02	2,968.50	2,963.90	10.56	10.41	144.34	96.87	114.75	222.77	208.18	14.59	15.270		
3,100.00	3,091.48	3,064.16	3,058.74	10.95	10.77	146.83	100.21	126.81	250.16	235.09	15.07	16.597		
3,200.00	3,189.94	3,159.82	3,153.58	11.35	11.13	148.83	103.55	138.88	277.91	262.35	15.56	17.862		
3,300.00	3,288.39	3,255.48	3,248.42	11.75	11.50	150.47	106.88	150.95	305.92	289.87	16.05	19.065		
3,400.00	3,386.85	3,351.14	3,343.26	12.16	11.86	151.84	110.22	163.01	334.12	317.58	16.53	20.207		
3,500.00	3,485.31	3,446.80	3,438.09	12.57	12.23	152.99	113.56	175.08	362.47	345.44	17.03	21.290		
3,600.00	3,583.77	3,542.46	3,532.93	12.98	12.60	153.98	116.90	187.14	390.93	373.41	17.52	22.317		
3,700.00	3,682.22	3,638.12	3,627.77	13.39	12.97	154.83	120.24	199.21	419.49	401.48	18.01	23.292		
3,800.00	3,780.68	3,733.79	3,722.61	13.81	13.34	155.58	123.58	211.28	448.12	429.61	18.50	24.217		
3,900.00	3,879.14	3,829.45	3,817.45	14.23	13.72	156.23	126.91	223.34	476.81	457.81	19.00	25.096		
4,000.00	3,977.60	3,925.11	3,912.28	14.65	14.09	156.81	130.25	235.41	505.55	486.06	19.50	25.932		
4,100.00	4,076.05	4,020.77	4,007.12	15.07	14.47	157.33	133.59	247.47	534.34	514.35	19.99	26.727		
4,200.00	4,174.51	4,116.43	4,101.96	15.50	14.85	157.80	136.93	259.54	563.16	542.67	20.49	27.485		
4,300.00	4,272.97	4,212.09	4,196.80	15.93	15.22	158.22	140.27	271.61	592.02	571.03	20.99	28.206		
4,400.00	4,371.43	4,307.75	4,291.64	16.36	15.60	158.60	143.60	283.67	620.90	599.41	21.49	28.895		
4,500.00	4,469.88	4,403.41	4,386.48	16.79	15.98	158.95	146.94	295.74	649.80	627.81	21.99	29.552		
4,600.00	4,568.34	4,499.07	4,481.31	17.22	16.36	159.26	150.28	307.80	678.72	656.23	22.49	30.180		
4,700.00	4,666.80	4,594.73	4,576.15	17.65	16.74	159.55	153.62	319.87	707.66	684.67	22.99	30.781		
4,800.00	4,765.25	4,690.40	4,670.99	18.08	17.13	159.82	156.96	331.94	736.62	713.13	23.49	31.356		
4,900.00	4,863.71	4,786.06	4,765.83	18.52	17.51	160.07	160.30	344.00	765.59	741.59	23.99	31.906		
5,000.00	4,962.17	4,881.72	4,860.67	18.95	17.89	160.30	163.63	356.07	794.57	770.07	24.50	32.434		

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 503H
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 503H	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	5,060.63	4,977.38	4,955.50	19.39	18.28	160.52	166.97	368.13	823.56	798.56	25.00	32.940		
5,200.00	5,159.08	5,073.04	5,050.34	19.83	18.66	160.72	170.31	380.20	852.57	827.06	25.51	33.426		
5,300.00	5,257.54	5,168.70	5,145.18	20.27	19.05	160.90	173.65	392.27	881.58	855.57	26.01	33.893		
5,400.00	5,356.00	5,264.36	5,240.02	20.71	19.43	161.08	176.99	404.33	910.60	884.08	26.52	34.342		
5,500.00	5,454.46	5,360.02	5,334.86	21.15	19.82	161.24	180.33	416.40	939.62	912.60	27.02	34.774		
5,600.00	5,552.91	5,455.68	5,429.70	21.59	20.20	161.40	183.66	428.46	968.66	941.13	27.53	35.190		
5,700.00	5,651.37	5,551.34	5,524.53	22.03	20.59	161.54	187.00	440.53	997.70	969.66	28.03	35.591		
5,800.00	5,749.83	5,647.00	5,619.37	22.47	20.97	161.68	190.34	452.60	1,026.74	998.20	28.54	35.977		
5,900.00	5,848.29	5,742.67	5,714.21	22.91	21.36	161.81	193.68	464.66	1,055.79	1,026.75	29.05	36.349		
6,000.00	5,946.74	5,838.33	5,809.05	23.36	21.75	161.93	197.02	476.73	1,084.85	1,055.29	29.55	36.709		
6,100.00	6,045.20	5,933.99	5,903.89	23.80	22.14	162.05	200.36	488.80	1,113.91	1,083.85	30.06	37.056		
6,200.00	6,143.66	6,029.65	5,998.72	24.24	22.52	162.16	203.69	500.86	1,142.97	1,112.40	30.57	37.391		
6,300.00	6,242.12	6,125.31	6,093.56	24.69	22.91	162.26	207.03	512.93	1,172.04	1,140.96	31.08	37.715		
6,400.00	6,340.57	6,220.97	6,188.40	25.13	23.30	162.36	210.37	524.99	1,201.11	1,169.52	31.58	38.028		
6,500.00	6,439.03	6,316.63	6,283.24	25.58	23.69	162.46	213.71	537.06	1,230.18	1,198.09	32.09	38.331		
6,600.00	6,537.49	6,412.29	6,378.08	26.02	24.08	162.55	217.05	549.13	1,259.26	1,226.65	32.60	38.624		
6,700.00	6,635.95	6,507.95	6,472.92	26.47	24.47	162.63	220.39	561.19	1,288.34	1,255.22	33.11	38.909		
6,757.61	6,692.67	6,563.06	6,527.55	26.73	24.69	162.68	222.31	568.14	1,305.09	1,271.68	33.41	39.068		
6,800.00	6,734.44	6,603.68	6,567.82	26.91	24.86	162.77	223.73	573.27	1,317.20	1,283.58	33.62	39.178		
6,900.00	6,833.29	6,699.99	6,663.31	27.34	25.25	162.94	227.09	585.41	1,344.07	1,309.94	34.13	39.380		
7,000.00	6,932.50	6,796.96	6,759.43	27.75	25.65	163.06	230.47	597.64	1,368.51	1,333.87	34.64	39.508		
7,100.00	7,032.01	6,915.32	6,876.83	28.14	26.12	163.14	234.48	612.14	1,390.24	1,354.98	35.26	39.428		
7,200.00	7,131.74	7,008.03	7,028.84	28.51	26.71	163.19	238.37	626.21	1,406.43	1,370.40	36.03	39.039		
7,300.00	7,231.62	7,222.83	7,183.38	28.86	27.28	163.23	240.66	634.49	1,416.27	1,379.53	36.74	38.544		
7,400.00	7,331.60	7,371.07	7,331.60	29.19	27.78	163.25	241.30	636.77	1,419.74	1,382.35	37.39	37.973		
7,429.40	7,361.00	7,400.47	7,361.00	29.28	27.88	89.42	241.30	636.77	1,419.84	1,382.31	37.53	37.831		
7,500.00	7,431.60	7,471.07	7,431.60	29.50	28.11	89.42	241.30	636.77	1,419.84	1,381.97	37.87	37.491		
7,600.00	7,531.60	7,571.07	7,531.60	29.82	28.44	89.42	241.30	636.77	1,419.84	1,381.49	38.36	37.018		
7,700.00	7,631.60	7,671.07	7,631.60	30.14	28.77	89.42	241.30	636.77	1,419.84	1,381.00	38.84	36.557		
7,800.00	7,731.60	7,771.07	7,731.60	30.45	29.11	89.42	241.30	636.77	1,419.84	1,380.52	39.32	36.106		
7,900.00	7,831.60	7,871.07	7,831.60	30.77	29.44	89.42	241.30	636.77	1,419.84	1,380.03	39.81	35.666		
8,000.00	7,931.60	7,971.07	7,931.60	31.09	29.77	89.42	241.30	636.77	1,419.84	1,379.55	40.30	35.236		
8,100.00	8,031.60	8,071.07	8,031.60	31.41	30.10	89.42	241.30	636.77	1,419.84	1,379.06	40.78	34.816		
8,200.00	8,131.60	8,171.07	8,131.60	31.73	30.44	89.42	241.30	636.77	1,419.84	1,378.58	41.27	34.405		
8,300.00	8,231.60	8,271.07	8,231.60	32.06	30.77	89.42	241.30	636.77	1,419.84	1,378.09	41.76	34.004		
8,400.00	8,331.60	8,371.07	8,331.60	32.38	31.11	89.42	241.30	636.77	1,419.84	1,377.60	42.24	33.611		
8,500.00	8,431.60	8,471.07	8,431.60	32.70	31.44	89.42	241.30	636.77	1,419.84	1,377.11	42.73	33.227		
8,600.00	8,531.60	8,571.07	8,531.60	33.03	31.78	89.42	241.30	636.77	1,419.84	1,376.62	43.22	32.851		
8,700.00	8,631.60	8,671.07	8,631.60	33.35	32.12	89.42	241.30	636.77	1,419.84	1,376.14	43.71	32.484		
8,800.00	8,731.60	8,771.07	8,731.60	33.68	32.45	89.42	241.30	636.77	1,419.84	1,375.65	44.20	32.124		
8,900.00	8,831.60	8,871.07	8,831.60	34.00	32.79	89.42	241.30	636.77	1,419.84	1,375.16	44.69	31.772		
9,000.00	8,931.60	8,971.07	8,931.60	34.33	33.13	89.42	241.30	636.77	1,419.84	1,374.67	45.18	31.427		
9,100.00	9,031.60	9,071.07	9,031.60	34.66	33.47	89.42	241.30	636.77	1,419.84	1,374.18	45.67	31.090		
9,200.00	9,131.60	9,171.07	9,131.60	34.98	33.80	89.42	241.30	636.77	1,419.84	1,373.68	46.16	30.759		
9,300.00	9,231.60	9,271.07	9,231.60	35.31	34.14	89.42	241.30	636.77	1,419.84	1,373.19	46.65	30.435		
9,400.00	9,331.60	9,371.07	9,331.60	35.64	34.48	89.42	241.30	636.77	1,419.84	1,372.70	47.14	30.118		
9,500.00	9,431.60	9,471.07	9,431.60	35.97	34.82	89.42	241.30	636.77	1,419.84	1,372.21	47.64	29.807		
9,600.00	9,531.60	9,571.07	9,531.60	36.30	35.16	89.42	241.30	636.77	1,419.84	1,371.72	48.13	29.502		
9,700.00	9,631.60	9,671.07	9,631.60	36.63	35.50	89.42	241.30	636.77	1,419.84	1,371.22	48.62	29.203		
9,800.00	9,731.60	9,771.07	9,731.60	36.96	35.85	89.42	241.30	636.77	1,419.84	1,370.73	49.11	28.910		
9,900.00	9,831.60	9,871.07	9,831.60	37.30	36.19	89.42	241.30	636.77	1,419.84	1,370.24	49.61	28.623		
9,913.44	9,845.04	9,884.51	9,845.04	37.34	36.23	89.42	241.30	636.77	1,419.84	1,370.17	49.67	28.584		

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 503H
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 503H	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		
9,913.50	9,845.09	9,884.56	9,845.09	37.34	36.23	89.42	241.30	636.77	1,419.84	1,370.17	49.67	28.584		
9,950.00	9,881.57	9,921.04	9,881.57	37.46	36.36	-90.06	241.30	636.77	1,419.85	1,370.00	49.85	28.483		
10,000.00	9,931.27	9,970.74	9,931.27	37.60	36.53	-90.27	241.30	636.77	1,419.86	1,369.78	50.08	28.351		
10,050.00	9,980.31	10,019.78	9,980.31	37.74	36.69	-90.64	241.30	636.77	1,419.94	1,369.63	50.31	28.225		
10,100.00	10,028.32	10,067.79	10,028.32	37.87	36.86	-91.16	241.30	636.77	1,420.17	1,369.64	50.53	28.107		
10,150.00	10,074.94	10,114.41	10,074.94	37.99	37.02	-91.79	241.30	636.77	1,420.67	1,369.93	50.74	27.999		
10,200.00	10,119.80	10,159.27	10,119.80	38.10	37.17	-92.49	241.30	636.77	1,421.59	1,370.65	50.94	27.906		
10,250.00	10,162.58	10,202.05	10,162.58	38.19	37.32	-93.23	241.30	636.77	1,423.10	1,371.97	51.14	27.830		
10,300.00	10,202.93	10,242.40	10,202.93	38.28	37.46	-93.96	241.30	636.77	1,425.40	1,374.08	51.32	27.775		
10,350.00	10,240.57	10,280.04	10,240.57	38.35	37.59	-94.62	241.30	636.77	1,428.68	1,377.18	51.49	27.745		
10,400.00	10,275.19	10,314.66	10,275.19	38.42	37.70	-95.18	241.30	636.77	1,433.13	1,381.47	51.66	27.743		
10,450.00	10,306.54	10,346.01	10,306.54	38.47	37.81	-95.57	241.30	636.77	1,438.93	1,387.12	51.81	27.774		
10,500.00	10,334.38	10,373.85	10,334.38	38.52	37.91	-95.76	241.30	636.77	1,446.25	1,394.30	51.95	27.839		
10,550.00	10,358.49	10,397.96	10,358.49	38.56	37.99	-95.69	241.30	636.77	1,455.22	1,403.14	52.08	27.942		
10,600.00	10,378.70	10,418.17	10,378.70	38.60	38.06	-95.34	241.30	636.77	1,465.92	1,413.72	52.20	28.085		
10,650.00	10,394.84	10,434.31	10,394.84	38.64	38.12	-94.67	241.30	636.77	1,478.39	1,426.09	52.30	28.269		
10,700.00	10,406.80	10,446.28	10,406.80	38.68	38.16	-93.65	241.30	636.77	1,492.64	1,440.26	52.38	28.494		
10,750.00	10,414.49	10,453.96	10,414.49	38.74	38.18	-92.27	241.30	636.77	1,508.61	1,456.16	52.45	28.760		
10,800.00	10,417.84	10,457.31	10,417.84	38.82	38.19	-90.53	241.30	636.77	1,526.19	1,473.68	52.51	29.066		
10,813.44	10,418.00	10,457.47	10,418.00	38.85	38.19	-90.00	241.30	636.77	1,531.17	1,478.65	52.52	29.155		
10,900.00	10,418.00	10,457.47	10,418.00	39.04	38.19	-90.00	241.30	636.77	1,565.63	1,513.03	52.59	29.768		
11,000.00	10,418.00	10,457.47	10,418.00	39.34	38.19	-90.00	241.30	636.77	1,610.32	1,557.63	52.69	30.562		
11,100.00	10,418.00	10,457.47	10,418.00	39.72	38.19	-90.00	241.30	636.77	1,659.84	1,607.05	52.79	31.439		
11,200.00	10,418.00	10,457.47	10,418.00	40.19	38.19	-90.00	241.30	636.77	1,713.77	1,660.87	52.90	32.394		
11,300.00	10,418.00	10,457.47	10,418.00	40.72	38.19	-90.00	241.30	636.77	1,771.71	1,718.70	53.01	33.420		
11,400.00	10,418.00	10,457.47	10,418.00	41.32	38.19	-90.00	241.30	636.77	1,833.28	1,780.15	53.12	34.509		
11,500.00	10,418.00	10,457.47	10,418.00	41.98	38.19	-90.00	241.30	636.77	1,898.12	1,844.89	53.23	35.658		
11,600.00	10,418.00	10,457.47	10,418.00	42.70	38.19	-90.00	241.30	636.77	1,965.91	1,912.57	53.34	36.858		
11,700.00	10,418.00	10,457.47	10,418.00	43.47	38.19	-90.00	241.30	636.77	2,036.35	1,982.92	53.44	38.107		
11,800.00	10,418.00	10,457.47	10,418.00	44.29	38.19	-90.00	241.30	636.77	2,109.19	2,055.66	53.54	39.398		
11,900.00	10,418.00	10,457.47	10,418.00	45.15	38.19	-90.00	241.30	636.77	2,184.18	2,130.55	53.63	40.728		
12,000.00	10,418.00	10,457.47	10,418.00	46.06	38.19	-90.00	241.30	636.77	2,261.10	2,207.38	53.72	42.093		
12,100.00	10,418.00	10,457.47	10,418.00	47.01	38.19	-90.00	241.30	636.77	2,339.77	2,285.97	53.80	43.489		
12,200.00	10,418.00	10,457.47	10,418.00	47.99	38.19	-90.00	241.30	636.77	2,420.01	2,366.13	53.88	44.914		
12,300.00	10,418.00	14,237.48	12,380.00	49.02	54.80	-142.59	-1,817.59	737.82	2,469.98	2,415.35	54.63	45.215		
12,400.00	10,418.00	14,337.48	12,380.00	50.07	55.77	-142.59	-1,917.59	738.80	2,469.97	2,414.35	55.62	44.406		
12,500.00	10,418.00	14,437.48	12,380.00	51.16	56.77	-142.59	-2,017.58	739.79	2,469.97	2,413.32	56.65	43.601		
12,600.00	10,418.00	14,537.48	12,380.00	52.28	57.80	-142.59	-2,117.58	740.78	2,469.97	2,412.26	57.71	42.803		
12,700.00	10,418.00	14,637.48	12,380.00	53.42	58.86	-142.59	-2,217.57	741.77	2,469.97	2,411.18	58.79	42.014		
12,800.00	10,418.00	14,737.48	12,380.00	54.59	59.95	-142.59	-2,317.57	742.75	2,469.96	2,410.07	59.90	41.236		
12,900.00	10,418.00	14,837.48	12,380.00	55.78	61.06	-142.59	-2,417.56	743.74	2,469.96	2,408.93	61.03	40.470		
13,000.00	10,418.00	14,937.48	12,380.00	57.00	62.20	-142.59	-2,517.56	744.73	2,469.96	2,407.77	62.19	39.719		
13,100.00	10,418.00	15,037.48	12,380.00	58.24	63.36	-142.59	-2,617.55	745.72	2,469.96	2,406.59	63.36	38.981		
13,200.00	10,418.00	15,137.48	12,380.00	59.50	64.54	-142.59	-2,717.55	746.71	2,469.95	2,405.39	64.56	38.257		
13,300.00	10,418.00	15,237.48	12,380.00	60.77	65.74	-142.59	-2,817.54	747.69	2,469.95	2,404.17	65.78	37.549		
13,400.00	10,418.00	15,337.48	12,380.00	62.07	66.96	-142.59	-2,917.54	748.68	2,469.95	2,402.93	67.01	36.857		
13,500.00	10,418.00	15,437.48	12,380.00	63.38	68.20	-142.59	-3,017.53	749.67	2,469.94	2,401.68	68.27	36.181		
13,600.00	10,418.00	15,537.48	12,380.00	64.71	69.45	-142.59	-3,117.53	750.66	2,469.94	2,400.41	69.54	35.521		
13,700.00	10,418.00	15,637.48	12,380.00	66.05	70.72	-142.59	-3,217.52	751.65	2,469.94	2,399.12	70.82	34.876		
13,800.00	10,418.00	15,737.48	12,380.00	67.40	72.01	-142.59	-3,317.52	752.63	2,469.94	2,397.82	72.12	34.248		
13,900.00	10,418.00	15,837.48	12,380.00	68.77	73.31	-142.59	-3,417.51	753.62	2,469.93	2,396.50	73.43	33.636		
14,000.00	10,418.00	15,937.48	12,380.00	70.15	74.63	-142.59	-3,517.51	754.61	2,469.93	2,395.17	74.76	33.040		

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 503H
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 503H	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	10,418.00	16,037.48	12,380.00	71.54	75.96	-142.59	-3,617.50	755.60	2,469.93	2,393.84	76.09	32.460		
14,200.00	10,418.00	16,137.48	12,380.00	72.95	77.30	-142.59	-3,717.50	756.59	2,469.92	2,392.48	77.44	31.894		
14,300.00	10,418.00	16,237.48	12,380.00	74.36	78.65	-142.59	-3,817.49	757.57	2,469.92	2,391.12	78.80	31.343		
14,400.00	10,418.00	16,337.48	12,380.00	75.78	80.01	-142.59	-3,917.49	758.56	2,469.92	2,389.75	80.17	30.808		
14,500.00	10,418.00	16,437.48	12,380.00	77.21	81.39	-142.59	-4,017.48	759.55	2,469.92	2,388.37	81.55	30.287		
14,600.00	10,418.00	16,537.48	12,380.00	78.65	82.77	-142.59	-4,117.48	760.54	2,469.91	2,386.98	82.94	29.780		
14,700.00	10,418.00	16,637.48	12,380.00	80.10	84.17	-142.59	-4,217.47	761.53	2,469.91	2,385.57	84.34	29.287		
14,800.00	10,418.00	16,737.48	12,380.00	81.55	85.57	-142.60	-4,317.47	762.51	2,469.91	2,384.17	85.74	28.806		
14,900.00	10,418.00	16,837.48	12,380.00	83.02	86.98	-142.60	-4,417.46	763.50	2,469.90	2,382.75	87.16	28.339		
15,000.00	10,418.00	16,937.48	12,380.00	84.49	88.40	-142.60	-4,517.46	764.49	2,469.90	2,381.33	88.58	27.885		
15,100.00	10,418.00	17,037.48	12,380.00	85.96	89.83	-142.60	-4,617.45	765.48	2,469.90	2,379.90	90.00	27.442		
15,200.00	10,418.00	17,137.48	12,380.00	87.45	91.27	-142.60	-4,717.45	766.46	2,469.90	2,378.46	91.44	27.012		
15,300.00	10,418.00	17,237.48	12,380.00	88.94	92.71	-142.60	-4,817.45	767.45	2,469.89	2,377.01	92.88	26.592		
15,400.00	10,418.00	17,337.48	12,380.00	90.43	94.16	-142.60	-4,917.44	768.44	2,469.89	2,375.56	94.33	26.185		
15,500.00	10,418.00	17,437.48	12,380.00	91.93	95.62	-142.60	-5,017.44	769.43	2,469.89	2,374.11	95.78	25.788		
15,600.00	10,418.00	17,537.48	12,380.00	93.43	97.08	-142.60	-5,117.43	770.42	2,469.89	2,372.65	97.23	25.401		
15,700.00	10,418.00	17,637.48	12,380.00	94.94	98.55	-142.60	-5,217.43	771.40	2,469.88	2,371.18	98.70	25.024		
15,800.00	10,418.00	17,737.48	12,380.00	96.46	100.02	-142.60	-5,317.42	772.39	2,469.88	2,369.71	100.17	24.657		
15,900.00	10,418.00	17,837.48	12,380.00	97.98	101.50	-142.60	-5,417.42	773.38	2,469.88	2,368.24	101.64	24.300		
16,000.00	10,418.00	17,937.48	12,380.00	99.50	102.99	-142.60	-5,517.41	774.37	2,469.87	2,366.76	103.12	23.952		
16,100.00	10,418.00	18,037.48	12,380.00	101.03	104.48	-142.60	-5,617.41	775.36	2,469.87	2,365.27	104.60	23.613		
16,200.00	10,418.00	18,137.48	12,380.00	102.56	105.97	-142.60	-5,717.40	776.34	2,469.87	2,363.79	106.08	23.282		
16,300.00	10,418.00	18,237.48	12,380.00	104.09	107.47	-142.60	-5,817.40	777.33	2,469.87	2,362.29	107.57	22.960		
16,400.00	10,418.00	18,337.48	12,380.00	105.63	108.98	-142.60	-5,917.39	778.32	2,469.86	2,360.80	109.06	22.646		
16,500.00	10,418.00	18,437.48	12,380.00	107.17	110.48	-142.60	-6,017.39	779.31	2,469.86	2,359.30	110.56	22.339		
16,600.00	10,418.00	18,537.48	12,380.00	108.72	112.00	-142.60	-6,117.38	780.30	2,469.86	2,357.80	112.06	22.041		
16,700.00	10,418.00	18,637.48	12,380.00	110.26	113.51	-142.60	-6,217.38	781.28	2,469.85	2,356.29	113.56	21.749		
16,800.00	10,418.00	18,737.48	12,380.00	111.81	115.03	-142.60	-6,317.37	782.27	2,469.85	2,354.78	115.07	21.464		
16,900.00	10,418.00	18,837.48	12,380.00	113.37	116.56	-142.60	-6,417.37	783.26	2,469.85	2,353.27	116.58	21.187		
17,000.00	10,418.00	18,937.48	12,380.00	114.92	118.08	-142.60	-6,517.36	784.25	2,469.85	2,351.76	118.09	20.916		
17,100.00	10,418.00	19,037.48	12,380.00	116.48	119.61	-142.60	-6,617.36	785.24	2,469.84	2,350.24	119.60	20.651		
17,200.00	10,418.00	19,137.48	12,380.00	118.04	121.15	-142.60	-6,717.35	786.22	2,469.84	2,348.72	121.12	20.392		
17,300.00	10,418.00	19,237.48	12,380.00	119.61	122.68	-142.60	-6,817.35	787.21	2,469.84	2,347.20	122.63	20.140		
17,400.00	10,418.00	19,337.48	12,380.00	121.17	124.22	-142.60	-6,917.34	788.20	2,469.84	2,345.68	124.15	19.894		
17,500.00	10,418.00	19,437.48	12,380.00	122.74	125.76	-142.60	-7,017.34	789.19	2,469.83	2,344.16	125.68	19.652		
17,600.00	10,418.00	19,537.48	12,380.00	124.31	127.31	-142.60	-7,117.33	790.17	2,469.83	2,342.63	127.20	19.416		
17,700.00	10,418.00	19,637.48	12,380.00	125.88	128.86	-142.60	-7,217.33	791.16	2,469.83	2,341.10	128.73	19.186		
17,800.00	10,418.00	19,737.48	12,380.00	127.46	130.41	-142.60	-7,317.32	792.15	2,469.82	2,339.57	130.26	18.961		
17,900.00	10,418.00	19,837.48	12,380.00	129.04	131.96	-142.60	-7,417.32	793.14	2,469.82	2,338.03	131.79	18.741		
18,000.00	10,418.00	19,937.48	12,380.00	130.61	133.51	-142.60	-7,517.31	794.13	2,469.82	2,336.50	133.32	18.526		
18,100.00	10,418.00	20,037.48	12,380.00	132.19	135.07	-142.60	-7,617.31	795.11	2,469.82	2,334.96	134.85	18.315		
18,200.00	10,418.00	20,137.48	12,380.00	133.78	136.63	-142.60	-7,717.30	796.10	2,469.81	2,333.43	136.39	18.109		
18,300.00	10,418.00	20,237.48	12,380.00	135.36	138.19	-142.60	-7,817.30	797.09	2,469.81	2,331.89	137.92	17.907		
18,400.00	10,418.00	20,337.48	12,380.00	136.94	139.75	-142.60	-7,917.29	798.08	2,469.81	2,330.35	139.46	17.710		
18,500.00	10,418.00	20,437.48	12,380.00	138.53	141.32	-142.60	-8,017.29	799.07	2,469.80	2,328.80	141.00	17.516		
18,600.00	10,418.00	20,537.48	12,380.00	140.12	142.89	-142.60	-8,117.28	800.05	2,469.80	2,327.26	142.54	17.327		
18,700.00	10,418.00	20,637.48	12,380.00	141.71	144.46	-142.60	-8,217.28	801.04	2,469.80	2,325.72	144.08	17.142		
18,800.00	10,418.00	20,737.48	12,380.00	143.30	146.03	-142.60	-8,317.27	802.03	2,469.80	2,324.17	145.62	16.960		
18,900.00	10,418.00	20,837.48	12,380.00	144.89	147.60	-142.60	-8,417.27	803.02	2,469.79	2,322.62	147.17	16.782		
19,000.00	10,418.00	20,937.48	12,380.00	146.49	149.18	-142.60	-8,517.26	804.01	2,469.79	2,321.08	148.71	16.608		
19,100.00	10,418.00	21,037.48	12,380.00	148.08	150.75	-142.60	-8,617.26	804.99	2,469.79	2,319.53	150.26	16.437		
19,200.00	10,418.00	21,137.48	12,380.00	149.68	152.33	-142.60	-8,717.25	805.98	2,469.79	2,317.98	151.80	16.270		

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 503H
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 503H	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	10,418.00	21,237.48	12,380.00	151.27	153.91	-142.60	-8,817.25	806.97	2,469.78	2,316.43	153.35	16.105		
19,400.00	10,418.00	21,337.48	12,380.00	152.87	155.49	-142.60	-8,917.25	807.96	2,469.78	2,314.88	154.90	15.944		
19,500.00	10,418.00	21,437.48	12,380.00	154.47	157.07	-142.60	-9,017.24	808.95	2,469.78	2,313.33	156.45	15.786		
19,600.00	10,418.00	21,537.48	12,380.00	156.07	158.66	-142.60	-9,117.24	809.93	2,469.77	2,311.77	158.00	15.632		
19,700.00	10,418.00	21,637.48	12,380.00	157.67	160.24	-142.60	-9,217.23	810.92	2,469.77	2,310.22	159.55	15.480		
19,800.00	10,418.00	21,737.48	12,380.00	159.28	161.83	-142.60	-9,317.23	811.91	2,469.77	2,308.67	161.10	15.331		
19,900.00	10,418.00	21,837.48	12,380.00	160.88	163.42	-142.60	-9,417.22	812.90	2,469.77	2,307.11	162.65	15.184		
20,000.00	10,418.00	21,937.48	12,380.00	162.48	165.00	-142.60	-9,517.22	813.88	2,469.76	2,305.56	164.21	15.041		
20,100.00	10,418.00	22,037.48	12,380.00	164.09	166.59	-142.60	-9,617.21	814.87	2,469.76	2,304.00	165.76	14.900		
20,200.00	10,418.00	22,137.48	12,380.00	165.70	168.19	-142.60	-9,717.21	815.86	2,469.76	2,302.45	167.31	14.761		
20,300.00	10,418.00	22,237.48	12,380.00	167.30	169.78	-142.60	-9,817.20	816.85	2,469.75	2,300.89	168.87	14.626		
20,400.00	10,418.00	22,337.48	12,380.00	168.91	171.37	-142.60	-9,917.20	817.84	2,469.75	2,299.33	170.42	14.492		
20,500.00	10,418.00	22,437.48	12,380.00	170.52	172.97	-142.60	-10,017.19	818.82	2,469.75	2,297.77	171.97	14.361		
20,600.00	10,418.00	22,537.48	12,380.00	172.13	174.56	-142.60	-10,117.19	819.81	2,469.75	2,296.22	173.53	14.232		
20,611.25	10,418.00	22,548.65	12,380.00	172.31	174.75	-142.60	-10,128.36	819.92	2,469.75	2,296.04	173.70	14.218		
20,700.00	10,418.00	22,548.65	12,380.00	173.74	174.75	-142.60	-10,128.36	819.92	2,471.34	2,297.15	174.19	14.187		
20,800.00	10,418.00	22,548.65	12,380.00	175.35	174.75	-142.60	-10,128.36	819.92	2,476.95	2,302.44	174.51	14.194		
20,900.00	10,418.00	22,548.65	12,380.00	176.97	174.75	-142.60	-10,128.36	819.92	2,486.57	2,312.00	174.57	14.244		
21,000.00	10,418.00	22,548.65	12,380.00	178.58	174.75	-142.60	-10,128.36	819.92	2,500.16	2,325.77	174.39	14.337		
21,100.00	10,418.00	22,548.65	12,380.00	180.19	174.75	-142.60	-10,128.36	819.92	2,517.64	2,343.68	173.97	14.472		
21,200.00	10,418.00	22,548.65	12,380.00	181.81	174.75	-142.60	-10,128.36	819.92	2,538.95	2,365.62	173.33	14.648		
21,300.00	10,418.00	22,548.65	12,380.00	183.42	174.75	-142.60	-10,128.36	819.92	2,563.99	2,391.51	172.47	14.866		
21,400.00	10,418.00	22,548.65	12,380.00	185.04	174.75	-142.60	-10,128.36	819.92	2,592.64	2,421.20	171.44	15.123		
21,500.00	10,418.00	22,548.65	12,380.00	186.65	174.75	-142.60	-10,128.36	819.92	2,624.79	2,454.57	170.23	15.419		
21,600.00	10,418.00	22,548.65	12,380.00	188.27	174.75	-142.60	-10,128.36	819.92	2,660.32	2,491.45	168.87	15.754		
21,700.00	10,418.00	22,548.65	12,380.00	189.89	174.75	-142.60	-10,128.36	819.92	2,699.08	2,531.71	167.37	16.126		
21,800.00	10,418.00	22,548.65	12,380.00	191.50	174.75	-142.60	-10,128.36	819.92	2,740.95	2,575.17	165.78	16.534		
21,900.00	10,418.00	22,548.65	12,380.00	193.12	174.75	-142.60	-10,128.36	819.92	2,785.77	2,621.69	164.08	16.978		
21,923.68	10,418.00	22,548.65	12,380.00	193.51	174.75	-142.60	-10,128.36	819.92	2,796.81	2,633.14	163.67	17.088		



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	-2,911.59	2,937.89					
100.00	100.00	122.00	122.00	0.13	0.20	-97.67	-392.25	-2,911.59	2,937.89	2,937.65	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.67	-392.25	-2,911.59	2,937.89	2,937.15	0.74	3,958.078		
300.00	300.00	322.00	322.00	0.84	0.92	-97.67	-392.25	-2,911.59	2,937.89	2,936.65	1.25	2,353.410		
400.00	400.00	422.00	422.00	1.20	1.28	-97.67	-392.25	-2,911.59	2,937.89	2,936.14	1.75	1,674.060		
500.00	500.00	522.00	522.00	1.56	1.64	-97.67	-392.25	-2,911.59	2,937.89	2,935.63	2.26	1,298.971		
600.00	600.00	622.00	622.00	1.92	2.00	-97.67	-392.25	-2,911.59	2,937.89	2,935.13	2.77	1,061.172		
700.00	700.00	722.00	722.00	2.28	2.36	-97.67	-392.25	-2,911.59	2,937.89	2,934.62	3.28	896.956		
800.00	800.00	822.00	822.00	2.63	2.71	-97.67	-392.25	-2,911.59	2,937.89	2,934.11	3.78	776.749		
900.00	900.00	922.00	922.00	2.99	3.07	-97.67	-392.25	-2,911.59	2,937.89	2,933.61	4.29	684.951		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.67	-392.25	-2,911.59	2,937.89	2,933.10	4.80	612.556		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.67	-392.25	-2,911.59	2,937.89	2,932.59	5.30	554.001		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.67	-392.25	-2,911.59	2,937.89	2,932.08	5.81	505.664		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.67	-392.25	-2,911.59	2,937.89	2,931.58	6.32	465.084		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.67	-392.25	-2,911.59	2,937.89	2,931.07	6.82	430.533		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.67	-392.25	-2,911.59	2,937.89	2,930.56	7.33	400.761		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.67	-392.25	-2,911.59	2,937.89	2,930.06	7.84	374.840		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.67	-392.25	-2,911.59	2,937.89	2,929.55	8.34	352.068		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.67	-392.25	-2,911.59	2,937.89	2,929.04	8.85	331.905		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.67	-392.25	-2,911.59	2,937.89	2,928.54	9.36	313.926		
1,907.27	1,907.27	1,929.27	1,929.27	6.60	6.68	-97.67	-392.25	-2,911.59	2,937.89	2,928.50	9.40	312.695		
2,000.00	2,000.00	2,016.04	2,016.04	6.94	6.99	-97.67	-392.22	-2,911.61	2,937.92	2,928.07	9.85	298.263		
2,100.00	2,100.00	2,100.00	2,099.99	7.29	7.29	-97.65	-391.19	-2,912.37	2,938.61	2,928.29	10.31	284.891		
2,200.00	2,199.99	2,161.81	2,161.76	7.65	7.51	-23.79	-389.49	-2,913.63	2,938.97	2,928.25	10.72	274.223		
2,300.00	2,299.91	2,234.63	2,234.48	7.99	7.77	-23.75	-386.46	-2,915.88	2,937.89	2,926.75	11.14	263.644		
2,400.00	2,399.69	2,300.00	2,299.69	8.34	8.01	-23.72	-382.78	-2,918.60	2,935.35	2,923.80	11.55	254.136		
2,500.00	2,499.27	2,380.06	2,379.44	8.70	8.29	-23.68	-377.07	-2,922.84	2,931.32	2,919.32	12.00	244.355		
2,600.00	2,598.57	2,452.65	2,451.59	9.06	8.55	-23.65	-370.72	-2,927.54	2,925.84	2,913.42	12.42	235.507		
2,700.00	2,697.54	2,539.38	2,537.64	9.42	8.87	-23.60	-361.98	-2,934.02	2,918.77	2,905.88	12.89	226.427		
2,771.79	2,768.33	2,610.81	2,608.48	9.69	9.13	-23.58	-354.69	-2,939.43	2,912.30	2,899.05	13.25	219.757		
2,800.00	2,796.11	2,638.86	2,636.30	9.79	9.23	-23.55	-351.82	-2,941.55	2,909.52	2,896.12	13.40	217.206		
2,900.00	2,894.56	2,738.28	2,734.93	10.18	9.60	-23.47	-341.66	-2,949.08	2,899.66	2,885.76	13.90	208.574		
3,000.00	2,993.02	2,837.71	2,833.55	10.56	9.97	-23.39	-331.50	-2,956.61	2,889.80	2,875.39	14.41	200.501		
3,100.00	3,091.48	2,937.14	2,932.17	10.95	10.35	-23.31	-321.35	-2,964.14	2,879.95	2,865.03	14.93	192.942		
3,200.00	3,189.94	3,036.57	3,030.79	11.35	10.73	-23.23	-311.19	-2,971.66	2,870.11	2,854.66	15.44	185.852		
3,300.00	3,288.39	3,136.00	3,129.41	11.75	11.10	-23.14	-301.03	-2,979.19	2,860.27	2,844.31	15.96	179.193		
3,400.00	3,386.85	3,235.43	3,228.03	12.16	11.48	-23.06	-290.87	-2,986.72	2,850.44	2,833.95	16.48	172.931		
3,500.00	3,485.31	3,334.85	3,326.65	12.57	11.87	-22.97	-280.71	-2,994.25	2,840.61	2,823.61	17.01	167.034		
3,600.00	3,583.77	3,434.28	3,425.27	12.98	12.25	-22.89	-270.55	-3,001.78	2,830.79	2,813.26	17.53	161.472		
3,700.00	3,682.22	3,533.71	3,523.89	13.39	12.64	-22.80	-260.39	-3,009.31	2,820.98	2,802.92	18.06	156.219		
3,800.00	3,780.68	3,633.14	3,622.51	13.81	13.02	-22.72	-250.23	-3,016.84	2,811.17	2,792.59	18.59	151.253		
3,900.00	3,879.14	3,732.57	3,721.13	14.23	13.41	-22.63	-240.08	-3,024.37	2,801.37	2,782.25	19.12	146.551		
4,000.00	3,977.60	3,831.99	3,819.76	14.65	13.80	-22.54	-229.92	-3,031.89	2,791.58	2,771.93	19.65	142.095		
4,100.00	4,076.05	3,931.42	3,918.38	15.07	14.19	-22.45	-219.76	-3,039.42	2,781.79	2,761.61	20.18	137.865		
4,200.00	4,174.51	4,030.85	4,017.00	15.50	14.58	-22.37	-209.60	-3,046.95	2,772.01	2,751.30	20.71	133.846		
4,300.00	4,272.97	4,130.28	4,115.62	15.93	14.97	-22.28	-199.44	-3,054.48	2,762.23	2,740.99	21.24	130.024		
4,400.00	4,371.43	4,229.71	4,214.24	16.36	15.36	-22.19	-189.28	-3,062.01	2,752.46	2,730.68	21.78	126.385		
4,500.00	4,469.88	4,329.14	4,312.86	16.79	15.76	-22.10	-179.12	-3,069.54	2,742.70	2,720.39	22.31	122.916		
4,600.00	4,568.34	4,428.56	4,411.48	17.22	16.15	-22.00	-168.96	-3,077.07	2,732.95	2,710.10	22.85	119.606		
4,700.00	4,666.80	4,527.99	4,510.10	17.65	16.54	-21.91	-158.81	-3,084.60	2,723.20	2,699.81	23.39	116.446		
4,800.00	4,765.25	4,627.42	4,608.72	18.08	16.94	-21.82	-148.65	-3,092.12	2,713.46	2,689.54	23.92	113.424		
4,900.00	4,863.71	4,726.85	4,707.34	18.52	17.33	-21.73	-138.49	-3,099.65	2,703.73	2,679.27	24.46	110.533		

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 503H
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 503H	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	4,962.17	4,826.28	4,805.97	18.95	17.73	-21.63	-128.33	-3,107.18	2,694.00	2,669.00	25.00	107.765		
5,100.00	5,060.63	4,925.71	4,904.59	19.39	18.13	-21.54	-118.17	-3,114.71	2,684.28	2,658.74	25.54	105.112		
5,200.00	5,159.08	5,025.13	5,003.21	19.83	18.52	-21.44	-108.01	-3,122.24	2,674.57	2,648.49	26.08	102.568		
5,300.00	5,257.54	5,124.56	5,101.83	20.27	18.92	-21.35	-97.85	-3,129.77	2,664.86	2,638.25	26.62	100.125		
5,400.00	5,356.00	5,223.99	5,200.45	20.71	19.32	-21.25	-87.70	-3,137.30	2,655.17	2,628.01	27.15	97.779		
5,500.00	5,454.46	5,323.42	5,299.07	21.15	19.72	-21.15	-77.54	-3,144.82	2,645.48	2,617.78	27.69	95.523		
5,600.00	5,552.91	5,422.85	5,397.69	21.59	20.11	-21.05	-67.38	-3,152.35	2,635.80	2,607.56	28.23	93.353		
5,700.00	5,651.37	5,522.27	5,496.31	22.03	20.51	-20.96	-57.22	-3,159.88	2,626.12	2,597.35	28.77	91.264		
5,800.00	5,749.83	5,621.70	5,594.93	22.47	20.91	-20.86	-47.06	-3,167.41	2,616.46	2,587.14	29.32	89.252		
5,900.00	5,848.29	5,721.13	5,693.55	22.91	21.31	-20.76	-36.90	-3,174.94	2,606.80	2,576.94	29.86	87.312		
6,000.00	5,946.74	5,820.56	5,792.18	23.36	21.71	-20.65	-26.74	-3,182.47	2,597.15	2,566.75	30.40	85.441		
6,100.00	6,045.20	5,919.99	5,890.80	23.80	22.11	-20.55	-16.58	-3,190.00	2,587.51	2,556.57	30.94	83.636		
6,200.00	6,143.66	6,019.42	5,989.42	24.24	22.51	-20.45	-6.43	-3,197.53	2,577.87	2,546.39	31.48	81.892		
6,300.00	6,242.12	6,118.84	6,088.04	24.69	22.91	-20.35	3.73	-3,205.05	2,568.25	2,536.23	32.02	80.208		
6,400.00	6,340.57	6,218.27	6,186.66	25.13	23.31	-20.24	13.89	-3,212.58	2,558.63	2,526.07	32.56	78.579		
6,500.00	6,439.03	6,317.70	6,285.28	25.58	23.71	-20.14	24.05	-3,220.11	2,549.02	2,515.92	33.10	77.004		
6,600.00	6,537.49	6,417.13	6,383.90	26.02	24.11	-20.03	34.21	-3,227.64	2,539.42	2,505.78	33.64	75.480		
6,700.00	6,635.95	6,516.56	6,482.52	26.47	24.51	-19.93	44.37	-3,235.17	2,529.83	2,495.64	34.18	74.004		
6,757.61	6,692.67	6,573.84	6,539.34	26.73	24.75	-19.86	50.22	-3,239.51	2,524.31	2,489.81	34.50	73.175		
6,800.00	6,734.44	6,616.00	6,581.16	26.91	24.92	-19.80	54.53	-3,242.70	2,520.47	2,485.74	34.73	72.582		
6,900.00	6,833.29	6,715.58	6,679.93	27.34	25.32	-19.63	64.70	-3,250.24	2,513.16	2,477.90	35.26	71.268		
7,000.00	6,932.50	6,815.25	6,778.79	27.75	25.72	-19.46	74.89	-3,257.79	2,508.33	2,472.54	35.80	70.071		
7,100.00	7,032.01	6,914.95	6,877.68	28.14	26.12	-19.28	85.07	-3,265.33	2,505.99	2,469.66	36.33	68.985		
7,200.00	7,131.74	7,050.65	7,012.43	28.51	26.66	-19.05	97.92	-3,274.85	2,505.69	2,468.75	36.94	67.833		
7,216.33	7,148.04	7,076.31	7,037.97	28.57	26.76	-19.01	99.94	-3,276.35	2,505.69	2,468.64	37.05	67.638 CC		
7,300.00	7,231.62	7,207.96	7,169.22	28.86	27.26	-18.86	108.15	-3,282.44	2,505.76	2,468.18	37.58	66.680		
7,400.00	7,331.60	7,365.66	7,326.77	29.19	27.82	-18.77	113.19	-3,286.17	2,506.01	2,467.83	38.18	65.634		
7,429.40	7,361.00	7,412.06	7,373.17	29.28	27.98	-92.59	113.68	-3,286.54	2,506.12	2,467.77	38.35	65.344		
7,500.00	7,431.60	7,492.49	7,453.60	29.50	28.25	-92.59	113.75	-3,286.59	2,506.15	2,467.45	38.71	64.749		
7,600.00	7,531.60	7,592.49	7,553.60	29.82	28.58	-92.59	113.75	-3,286.59	2,506.15	2,466.97	39.18	63.958		
7,700.00	7,631.60	7,692.49	7,653.60	30.14	28.91	-92.59	113.75	-3,286.59	2,506.15	2,466.49	39.66	63.186		
7,800.00	7,731.60	7,792.49	7,753.60	30.45	29.25	-92.59	113.75	-3,286.59	2,506.15	2,466.01	40.14	62.430		
7,900.00	7,831.60	7,892.49	7,853.60	30.77	29.58	-92.59	113.75	-3,286.59	2,506.15	2,465.53	40.62	61.692		
8,000.00	7,931.60	7,992.49	7,953.60	31.09	29.92	-92.59	113.75	-3,286.59	2,506.15	2,465.05	41.10	60.970		
8,005.12	7,936.72	7,997.61	7,958.72	31.11	29.94	-92.59	113.75	-3,286.59	2,506.15	2,465.02	41.13	60.933		
8,100.00	8,031.60	8,084.08	8,045.12	31.41	30.20	-92.65	111.29	-3,286.57	2,506.25	2,464.70	41.56	60.306 ES		
8,200.00	8,131.60	8,168.15	8,127.96	31.73	30.41	-92.96	97.40	-3,286.43	2,506.91	2,464.94	41.97	59.729		
8,300.00	8,231.60	8,250.00	8,205.81	32.06	30.58	-93.53	72.38	-3,286.19	2,508.41	2,466.05	42.36	59.214		
8,400.00	8,331.60	8,317.48	8,266.80	32.38	30.67	-94.19	43.58	-3,285.90	2,511.12	2,468.40	42.72	58.786		
8,500.00	8,431.60	8,379.93	8,319.86	32.70	30.74	-94.94	10.71	-3,285.58	2,515.47	2,472.42	43.05	58.433		
8,600.00	8,531.60	8,434.16	8,362.80	33.03	30.79	-95.69	-22.37	-3,285.26	2,521.88	2,478.53	43.35	58.171		
8,700.00	8,631.60	8,480.90	8,397.16	33.35	30.81	-96.41	-54.03	-3,284.94	2,530.70	2,487.08	43.62	58.010		
8,800.00	8,731.60	8,521.10	8,424.57	33.68	30.83	-97.07	-83.43	-3,284.66	2,542.22	2,498.36	43.86	57.961		
8,900.00	8,831.60	8,550.00	8,442.97	34.00	30.83	-97.58	-105.71	-3,284.44	2,556.66	2,512.61	44.05	58.042		
9,000.00	8,931.60	8,585.62	8,464.06	34.33	30.84	-98.22	-134.41	-3,284.16	2,574.11	2,529.90	44.21	58.218		
9,100.00	9,031.60	8,600.00	8,472.06	34.66	30.84	-98.49	-146.36	-3,284.04	2,594.76	2,550.46	44.30	58.569		
9,200.00	9,131.60	8,634.27	8,489.90	34.98	30.83	-99.15	-175.61	-3,283.75	2,618.46	2,574.06	44.40	58.975		
9,300.00	9,231.60	8,650.00	8,497.50	35.31	30.83	-99.45	-189.38	-3,283.62	2,645.40	2,600.98	44.42	59.556		
9,400.00	9,331.60	8,671.76	8,507.38	35.64	30.83	-99.89	-208.77	-3,283.43	2,675.46	2,631.04	44.42	60.229		
9,500.00	9,431.60	8,700.00	8,519.09	35.97	30.82	-100.46	-234.46	-3,283.17	2,708.71	2,664.30	44.41	60.992		
9,600.00	9,531.60	8,700.00	8,519.09	36.30	30.82	-100.46	-234.46	-3,283.17	2,744.82	2,700.51	44.30	61.956		
9,700.00	9,631.60	8,700.00	8,519.09	36.63	30.82	-100.46	-234.46	-3,283.17	2,784.05	2,739.88	44.17	63.032		

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 503H
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 503H	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		
9,800.00	9,731.60	8,725.07	8,528.41	36.96	30.81	-100.97	-257.73	-3,282.94	2,825.91	2,781.83	44.08	64.105		
9,900.00	9,831.60	8,750.00	8,536.67	37.30	30.81	-101.49	-281.25	-3,282.71	2,870.75	2,826.77	43.98	65.277		
9,913.44	9,845.04	8,750.00	8,536.67	37.34	30.81	-101.49	-281.25	-3,282.71	2,876.94	2,832.98	43.95	65.454		
9,950.00	9,881.57	8,750.00	8,536.67	37.46	30.81	77.21	-281.25	-3,282.71	2,893.82	2,849.94	43.88	65.946		
10,000.00	9,931.27	8,750.00	8,536.67	37.60	30.81	74.71	-281.25	-3,282.71	2,916.74	2,872.97	43.77	66.637		
10,050.00	9,980.31	8,750.00	8,536.67	37.74	30.81	72.29	-281.25	-3,282.71	2,939.32	2,895.67	43.65	67.336		
10,100.00	10,028.32	8,750.00	8,536.67	37.87	30.81	69.96	-281.25	-3,282.71	2,961.39	2,917.86	43.53	68.036		
10,150.00	10,074.94	8,750.00	8,536.67	37.99	30.81	67.75	-281.25	-3,282.71	2,982.80	2,939.40	43.40	68.729		
10,200.00	10,119.80	8,777.10	8,544.47	38.10	30.80	65.31	-307.20	-3,282.46	3,002.92	2,959.58	43.35	69.278		
10,250.00	10,162.58	8,800.00	8,550.10	38.19	30.79	63.14	-329.39	-3,282.24	3,022.32	2,979.04	43.28	69.831		
10,300.00	10,202.93	8,800.00	8,550.10	38.28	30.79	61.44	-329.39	-3,282.24	3,040.25	2,997.09	43.16	70.434		
10,350.00	10,240.57	8,800.00	8,550.10	38.35	30.79	59.90	-329.39	-3,282.24	3,056.96	3,013.90	43.06	70.992		
10,400.00	10,275.19	8,800.00	8,550.10	38.42	30.79	58.51	-329.39	-3,282.24	3,072.32	3,029.35	42.97	71.498		
10,450.00	10,306.54	8,827.07	8,555.61	38.47	30.79	57.10	-355.89	-3,281.98	3,085.76	3,042.80	42.96	71.832		
10,500.00	10,334.38	8,850.00	8,559.29	38.52	30.79	55.93	-378.52	-3,281.76	3,097.78	3,054.83	42.95	72.125		
10,550.00	10,358.49	8,850.00	8,559.29	38.56	30.79	55.08	-378.52	-3,281.76	3,107.84	3,064.92	42.92	72.411		
10,600.00	10,378.70	8,850.00	8,559.29	38.60	30.79	54.39	-378.52	-3,281.76	3,116.22	3,073.30	42.92	72.614		
10,650.00	10,394.84	8,872.09	8,561.98	38.64	30.79	53.79	-400.44	-3,281.54	3,122.53	3,079.56	42.97	72.661		
10,700.00	10,406.80	8,900.00	8,564.16	38.68	30.80	53.38	-428.26	-3,281.27	3,127.16	3,084.10	43.06	72.620		
10,750.00	10,414.49	8,900.00	8,564.16	38.74	30.80	53.19	-428.26	-3,281.27	3,129.45	3,086.31	43.14	72.541		
10,800.00	10,417.84	8,900.00	8,564.16	38.82	30.80	53.15	-428.26	-3,281.27	3,129.93	3,086.68	43.25	72.370		
10,813.44	10,418.00	8,900.00	8,564.16	38.85	30.80	53.17	-428.26	-3,281.27	3,129.75	3,086.47	43.28	72.309		
10,900.00	10,418.00	8,930.93	8,565.00	39.04	30.82	53.18	-459.18	-3,280.97	3,128.72	3,085.16	43.57	71.817		
10,902.46	10,418.00	8,931.29	8,565.00	39.04	30.82	53.18	-459.54	-3,280.96	3,128.72	3,085.15	43.57	71.802		
11,000.00	10,418.00	9,028.83	8,565.00	39.34	31.02	53.18	-557.07	-3,280.01	3,128.73	3,084.73	44.01	71.095		
11,100.00	10,418.00	9,128.83	8,565.00	39.72	31.35	53.18	-657.07	-3,279.02	3,128.74	3,084.21	44.53	70.260		
11,200.00	10,418.00	9,228.83	8,565.00	40.19	31.75	53.18	-757.06	-3,278.04	3,128.75	3,083.61	45.14	69.319		
11,300.00	10,418.00	9,328.83	8,565.00	40.72	32.24	53.18	-857.06	-3,277.06	3,128.76	3,082.94	45.82	68.288		
11,400.00	10,418.00	9,428.83	8,565.00	41.32	32.80	53.18	-957.05	-3,276.08	3,128.77	3,082.20	46.57	67.182		
11,500.00	10,418.00	9,528.83	8,565.00	41.98	33.42	53.18	-1,057.05	-3,275.10	3,128.78	3,081.38	47.40	66.012		
11,600.00	10,418.00	9,628.83	8,565.00	42.70	34.11	53.18	-1,157.04	-3,274.11	3,128.78	3,080.49	48.29	64.792		
11,700.00	10,418.00	9,728.83	8,565.00	43.47	34.87	53.18	-1,257.04	-3,273.13	3,128.79	3,079.55	49.25	63.534		
11,800.00	10,418.00	9,828.83	8,565.00	44.29	35.68	53.18	-1,357.03	-3,272.15	3,128.80	3,078.54	50.26	62.250		
11,900.00	10,418.00	9,928.83	8,565.00	45.15	36.54	53.18	-1,457.03	-3,271.17	3,128.81	3,077.48	51.33	60.950		
12,000.00	10,418.00	10,028.83	8,565.00	46.06	37.46	53.18	-1,557.02	-3,270.19	3,128.82	3,076.36	52.46	59.645		
12,100.00	10,418.00	10,128.83	8,565.00	47.01	38.43	53.18	-1,657.02	-3,269.21	3,128.83	3,075.20	53.63	58.340		
12,200.00	10,418.00	10,228.83	8,565.00	47.99	39.44	53.18	-1,757.01	-3,268.22	3,128.84	3,073.99	54.85	57.043		
12,300.00	10,418.00	10,328.83	8,565.00	49.02	40.49	53.18	-1,857.01	-3,267.24	3,128.84	3,072.73	56.11	55.760		
12,400.00	10,418.00	10,428.83	8,565.00	50.07	41.58	53.18	-1,957.00	-3,266.26	3,128.85	3,071.44	57.42	54.494		
12,500.00	10,418.00	10,528.83	8,565.00	51.16	42.71	53.18	-2,057.00	-3,265.28	3,128.86	3,070.10	58.76	53.251		
12,600.00	10,418.00	10,628.83	8,565.00	52.28	43.87	53.18	-2,156.99	-3,264.30	3,128.87	3,068.74	60.13	52.033		
12,700.00	10,418.00	10,728.83	8,565.00	53.42	45.06	53.18	-2,256.99	-3,263.31	3,128.88	3,067.34	61.54	50.843		
12,800.00	10,418.00	10,828.83	8,565.00	54.59	46.28	53.18	-2,356.98	-3,262.33	3,128.89	3,065.91	62.98	49.683		
12,900.00	10,418.00	10,928.83	8,565.00	55.78	47.52	53.18	-2,456.98	-3,261.35	3,128.90	3,064.45	64.44	48.553		
13,000.00	10,418.00	11,028.83	8,565.00	57.00	48.79	53.18	-2,556.97	-3,260.37	3,128.90	3,062.97	65.94	47.453		
13,100.00	10,418.00	11,128.83	8,565.00	58.24	50.08	53.18	-2,656.97	-3,259.39	3,128.91	3,061.46	67.46	46.385		
13,200.00	10,418.00	11,228.83	8,565.00	59.50	51.39	53.18	-2,756.96	-3,258.41	3,128.92	3,059.93	69.00	45.349		
13,300.00	10,418.00	11,328.83	8,565.00	60.77	52.72	53.18	-2,856.96	-3,257.42	3,128.93	3,058.37	70.56	44.346		
13,400.00	10,418.00	11,428.83	8,565.00	62.07	54.07	53.18	-2,956.95	-3,256.44	3,128.94	3,056.80	72.14	43.374		
13,500.00	10,418.00	11,528.83	8,565.00	63.38	55.43	53.18	-3,056.95	-3,255.46	3,128.95	3,055.21	73.74	42.433		
13,600.00	10,418.00	11,628.83	8,565.00	64.71	56.81	53.18	-3,156.95	-3,254.48	3,128.96	3,053.60	75.36	41.522		
13,700.00	10,418.00	11,728.83	8,565.00	66.05	58.21	53.18	-3,256.94	-3,253.50	3,128.96	3,051.97	76.99	40.641		

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 503H
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 503H	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		
13,800.00	10,418.00	11,828.83	8,565.00	67.40	59.61	53.18	-3,356.94	-3,252.51	3,128.97	3,050.33	78.64	39.788		
13,900.00	10,418.00	11,928.83	8,565.00	68.77	61.03	53.18	-3,456.93	-3,251.53	3,128.98	3,048.68	80.30	38.964		
14,000.00	10,418.00	12,028.83	8,565.00	70.15	62.46	53.18	-3,556.93	-3,250.55	3,128.99	3,047.01	81.98	38.166		
14,100.00	10,418.00	12,128.83	8,565.00	71.54	63.90	53.18	-3,656.92	-3,249.57	3,129.00	3,045.32	83.67	37.395		
14,200.00	10,418.00	12,228.83	8,565.00	72.95	65.35	53.19	-3,756.92	-3,248.59	3,129.01	3,043.63	85.38	36.649		
14,300.00	10,418.00	12,328.83	8,565.00	74.36	66.81	53.19	-3,856.91	-3,247.61	3,129.02	3,041.92	87.09	35.928		
14,400.00	10,418.00	12,428.83	8,565.00	75.78	68.28	53.19	-3,956.91	-3,246.62	3,129.02	3,040.21	88.82	35.230		
14,500.00	10,418.00	12,528.83	8,565.00	77.21	69.76	53.19	-4,056.90	-3,245.64	3,129.03	3,038.48	90.55	34.556		
14,600.00	10,418.00	12,628.83	8,565.00	78.65	71.24	53.19	-4,156.90	-3,244.66	3,129.04	3,036.75	92.29	33.903		
14,700.00	10,418.00	12,728.83	8,565.00	80.10	72.73	53.19	-4,256.89	-3,243.68	3,129.05	3,035.01	94.04	33.273		
14,800.00	10,418.00	12,828.83	8,565.00	81.55	74.23	53.19	-4,356.89	-3,242.70	3,129.06	3,033.26	95.80	32.662		
14,900.00	10,418.00	12,928.83	8,565.00	83.02	75.74	53.19	-4,456.88	-3,241.71	3,129.07	3,031.50	97.57	32.071		
15,000.00	10,418.00	13,028.83	8,565.00	84.49	77.25	53.19	-4,556.88	-3,240.73	3,129.08	3,029.73	99.34	31.498		
15,100.00	10,418.00	13,128.83	8,565.00	85.96	78.76	53.19	-4,656.87	-3,239.75	3,129.08	3,027.96	101.12	30.943		
15,200.00	10,418.00	13,228.83	8,565.00	87.45	80.28	53.19	-4,756.87	-3,238.77	3,129.09	3,026.18	102.91	30.405		
15,300.00	10,418.00	13,328.83	8,565.00	88.94	81.81	53.19	-4,856.86	-3,237.79	3,129.10	3,024.39	104.71	29.884		
15,400.00	10,418.00	13,428.83	8,565.00	90.43	83.34	53.19	-4,956.86	-3,236.81	3,129.11	3,022.60	106.51	29.379		
15,500.00	10,418.00	13,528.83	8,565.00	91.93	84.88	53.19	-5,056.85	-3,235.82	3,129.12	3,020.80	108.31	28.889		
15,600.00	10,418.00	13,628.83	8,565.00	93.43	86.42	53.19	-5,156.85	-3,234.84	3,129.13	3,019.00	110.13	28.414		
15,700.00	10,418.00	13,728.83	8,565.00	94.94	87.96	53.19	-5,256.84	-3,233.86	3,129.14	3,017.19	111.94	27.953		
15,800.00	10,418.00	13,828.83	8,565.00	96.46	89.51	53.19	-5,356.84	-3,232.88	3,129.14	3,015.38	113.77	27.505		
15,900.00	10,418.00	13,928.83	8,565.00	97.98	91.06	53.19	-5,456.83	-3,231.90	3,129.15	3,013.56	115.59	27.070		
16,000.00	10,418.00	14,028.83	8,565.00	99.50	92.62	53.19	-5,556.83	-3,230.92	3,129.16	3,011.74	117.42	26.649		
16,100.00	10,418.00	14,128.83	8,565.00	101.03	94.18	53.19	-5,656.82	-3,229.93	3,129.17	3,009.92	119.25	26.240		
16,200.00	10,418.00	14,228.83	8,565.00	102.56	95.74	53.19	-5,756.82	-3,228.95	3,129.18	3,008.09	121.09	25.842		
16,300.00	10,418.00	14,328.83	8,565.00	104.09	97.30	53.19	-5,856.81	-3,227.97	3,129.19	3,006.26	122.93	25.455		
16,400.00	10,418.00	14,428.83	8,565.00	105.63	98.87	53.19	-5,956.81	-3,226.99	3,129.20	3,004.42	124.77	25.079		
16,500.00	10,418.00	14,528.83	8,565.00	107.17	100.44	53.19	-6,056.81	-3,226.01	3,129.20	3,002.58	126.62	24.713		
16,600.00	10,418.00	14,628.83	8,565.00	108.72	102.01	53.19	-6,156.80	-3,225.02	3,129.21	3,000.74	128.47	24.357		
16,700.00	10,418.00	14,728.83	8,565.00	110.26	103.59	53.19	-6,256.80	-3,224.04	3,129.22	2,998.89	130.33	24.010		
16,800.00	10,418.00	14,828.83	8,565.00	111.81	105.16	53.19	-6,356.79	-3,223.06	3,129.23	2,997.04	132.18	23.673		
16,900.00	10,418.00	14,928.83	8,565.00	113.37	106.74	53.19	-6,456.79	-3,222.08	3,129.24	2,995.19	134.05	23.345		
17,000.00	10,418.00	15,028.83	8,565.00	114.92	108.32	53.19	-6,556.78	-3,221.10	3,129.25	2,993.34	135.91	23.025		
17,100.00	10,418.00	15,128.83	8,565.00	116.48	109.91	53.19	-6,656.78	-3,220.12	3,129.26	2,991.48	137.78	22.713		
17,200.00	10,418.00	15,228.83	8,565.00	118.04	111.49	53.19	-6,756.77	-3,219.13	3,129.26	2,989.62	139.64	22.409		
17,300.00	10,418.00	15,328.83	8,565.00	119.61	113.08	53.19	-6,856.77	-3,218.15	3,129.27	2,987.76	141.51	22.113		
17,400.00	10,418.00	15,428.83	8,565.00	121.17	114.67	53.19	-6,956.76	-3,217.17	3,129.28	2,985.90	143.38	21.825		
17,500.00	10,418.00	15,528.83	8,565.00	122.74	116.26	53.19	-7,056.76	-3,216.19	3,129.29	2,984.03	145.25	21.544		
17,600.00	10,418.00	15,628.83	8,565.00	124.31	117.85	53.19	-7,156.75	-3,215.21	3,129.30	2,982.17	147.13	21.269		
17,700.00	10,418.00	15,728.83	8,565.00	125.88	119.45	53.19	-7,256.75	-3,214.22	3,129.31	2,980.30	149.01	21.001		
17,800.00	10,418.00	15,828.83	8,565.00	127.46	121.04	53.19	-7,356.74	-3,213.24	3,129.31	2,978.43	150.88	20.740		
17,900.00	10,418.00	15,928.83	8,565.00	129.04	122.64	53.19	-7,456.74	-3,212.26	3,129.32	2,976.56	152.76	20.485		
18,000.00	10,418.00	16,028.83	8,565.00	130.61	124.24	53.19	-7,556.73	-3,211.28	3,129.33	2,974.68	154.65	20.235		
18,100.00	10,418.00	16,128.83	8,565.00	132.19	125.84	53.19	-7,656.73	-3,210.30	3,129.34	2,972.81	156.53	19.992		
18,200.00	10,418.00	16,228.83	8,565.00	133.78	127.44	53.19	-7,756.72	-3,209.32	3,129.35	2,970.93	158.42	19.754		
18,300.00	10,418.00	16,328.83	8,565.00	135.36	129.04	53.19	-7,856.72	-3,208.33	3,129.36	2,969.05	160.31	19.521		
18,400.00	10,418.00	16,428.83	8,565.00	136.94	130.65	53.19	-7,956.71	-3,207.35	3,129.37	2,967.17	162.20	19.294		
18,500.00	10,418.00	16,528.83	8,565.00	138.53	132.25	53.19	-8,056.71	-3,206.37	3,129.37	2,965.29	164.09	19.071		
18,600.00	10,418.00	16,628.83	8,565.00	140.12	133.86	53.19	-8,156.70	-3,205.39	3,129.38	2,963.41	165.98	18.854		
18,700.00	10,418.00	16,728.83	8,565.00	141.71	135.47	53.19	-8,256.70	-3,204.41	3,129.39	2,961.52	167.87	18.642		
18,800.00	10,418.00	16,828.83	8,565.00	143.30	137.07	53.19	-8,356.69	-3,203.42	3,129.40	2,959.64	169.76	18.434		
18,900.00	10,418.00	16,928.83	8,565.00	144.89	138.68	53.19	-8,456.69	-3,202.44	3,129.41	2,957.76	171.65	18.231		

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 503H
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 503H	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		
19,000.00	10,418.00	17,028.83	8,565.00	146.49	140.29	53.19	-8,556.68	-3,201.46	3,129.42	2,955.87	173.55	18.032		
19,100.00	10,418.00	17,128.83	8,565.00	148.08	141.91	53.19	-8,656.68	-3,200.48	3,129.43	2,953.98	175.44	17.837		
19,200.00	10,418.00	17,228.83	8,565.00	149.68	143.52	53.19	-8,756.68	-3,199.50	3,129.43	2,952.09	177.34	17.646		
19,300.00	10,418.00	17,328.83	8,565.00	151.27	145.13	53.19	-8,856.67	-3,198.52	3,129.44	2,950.20	179.24	17.460		
19,400.00	10,418.00	17,428.83	8,565.00	152.87	146.74	53.19	-8,956.67	-3,197.53	3,129.45	2,948.31	181.14	17.277		
19,500.00	10,418.00	17,528.83	8,565.00	154.47	148.36	53.19	-9,056.66	-3,196.55	3,129.46	2,946.42	183.04	17.097		
19,600.00	10,418.00	17,628.83	8,565.00	156.07	149.98	53.19	-9,156.66	-3,195.57	3,129.47	2,944.53	184.94	16.921		
19,700.00	10,418.00	17,728.83	8,565.00	157.67	151.59	53.19	-9,256.65	-3,194.59	3,129.48	2,942.63	186.84	16.749		
19,800.00	10,418.00	17,828.83	8,565.00	159.28	153.21	53.19	-9,356.65	-3,193.61	3,129.49	2,940.74	188.75	16.580		
19,900.00	10,418.00	17,928.83	8,565.00	160.88	154.83	53.19	-9,456.64	-3,192.62	3,129.49	2,938.85	190.65	16.415		
20,000.00	10,418.00	18,028.83	8,565.00	162.48	156.44	53.19	-9,556.64	-3,191.64	3,129.50	2,936.95	192.55	16.253		
20,100.00	10,418.00	18,128.83	8,565.00	164.09	158.06	53.19	-9,656.63	-3,190.66	3,129.51	2,935.06	194.45	16.094		
20,200.00	10,418.00	18,228.83	8,565.00	165.70	159.68	53.19	-9,756.63	-3,189.68	3,129.52	2,933.16	196.36	15.938		
20,300.00	10,418.00	18,328.83	8,565.00	167.30	161.30	53.19	-9,856.62	-3,188.70	3,129.53	2,931.27	198.26	15.785		
20,400.00	10,418.00	18,428.83	8,565.00	168.91	162.92	53.19	-9,956.62	-3,187.72	3,129.54	2,929.37	200.17	15.635		
20,500.00	10,418.00	18,528.83	8,565.00	170.52	164.55	53.19	-10,056.61	-3,186.73	3,129.55	2,927.47	202.07	15.487		
20,600.00	10,418.00	18,628.83	8,565.00	172.13	166.17	53.19	-10,156.61	-3,185.75	3,129.55	2,925.57	203.98	15.342		
20,700.00	10,418.00	18,634.72	8,565.00	173.74	166.26	53.19	-10,162.50	-3,185.69	3,130.98	2,925.69	205.29	15.252		
20,800.00	10,418.00	18,634.72	8,565.00	175.35	166.26	53.19	-10,162.50	-3,185.69	3,135.59	2,929.23	206.36	15.195		
20,900.00	10,418.00	18,634.72	8,565.00	176.97	166.26	53.19	-10,162.50	-3,185.69	3,143.37	2,936.15	207.22	15.169 SF		
21,000.00	10,418.00	18,634.72	8,565.00	178.58	166.26	53.19	-10,162.50	-3,185.69	3,154.31	2,946.43	207.88	15.174		
21,100.00	10,418.00	18,634.72	8,565.00	180.19	166.26	53.19	-10,162.50	-3,185.69	3,168.36	2,960.03	208.33	15.208		
21,200.00	10,418.00	18,634.72	8,565.00	181.81	166.26	53.19	-10,162.50	-3,185.69	3,185.50	2,976.91	208.59	15.272		
21,300.00	10,418.00	18,634.72	8,565.00	183.42	166.26	53.19	-10,162.50	-3,185.69	3,205.66	2,997.01	208.65	15.364		
21,400.00	10,418.00	18,634.72	8,565.00	185.04	166.26	53.19	-10,162.50	-3,185.69	3,228.80	3,020.27	208.53	15.484		
21,500.00	10,418.00	18,634.72	8,565.00	186.65	166.26	53.19	-10,162.50	-3,185.69	3,254.85	3,046.62	208.23	15.631		
21,600.00	10,418.00	18,634.72	8,565.00	188.27	166.26	53.19	-10,162.50	-3,185.69	3,283.73	3,075.97	207.76	15.805		
21,700.00	10,418.00	18,634.72	8,565.00	189.89	166.26	53.19	-10,162.50	-3,185.69	3,315.39	3,108.25	207.13	16.006		
21,800.00	10,418.00	18,634.72	8,565.00	191.50	166.26	53.19	-10,162.50	-3,185.69	3,349.72	3,143.36	206.36	16.232		
21,900.00	10,418.00	18,634.72	8,565.00	193.12	166.26	53.19	-10,162.50	-3,185.69	3,386.67	3,181.21	205.46	16.484		
21,923.68	10,418.00	18,634.72	8,565.00	193.51	166.26	53.19	-10,162.50	-3,185.69	3,395.79	3,190.57	205.22	16.547		



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	-97.86	-391.54	-2,836.63	2,863.53					
100.00	100.00	122.00	122.00	0.13	0.20	-97.86	-391.54	-2,836.63	2,863.53	2,863.29	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.86	-391.54	-2,836.63	2,863.53	2,862.79	0.74	3,857.888		
300.00	300.00	322.00	322.00	0.84	0.92	-97.86	-391.54	-2,836.63	2,863.53	2,862.28	1.25	2,293.839		
400.00	400.00	422.00	422.00	1.20	1.28	-97.86	-391.54	-2,836.63	2,863.53	2,861.77	1.75	1,631.685		
500.00	500.00	522.00	522.00	1.56	1.64	-97.86	-391.54	-2,836.63	2,863.53	2,861.27	2.26	1,266.091		
600.00	600.00	622.00	622.00	1.92	2.00	-97.86	-391.54	-2,836.63	2,863.53	2,860.76	2.77	1,034.311		
700.00	700.00	722.00	722.00	2.28	2.36	-97.86	-391.54	-2,836.63	2,863.53	2,860.25	3.28	874.251		
800.00	800.00	822.00	822.00	2.63	2.71	-97.86	-391.54	-2,836.63	2,863.53	2,859.75	3.78	757.087		
900.00	900.00	922.00	922.00	2.99	3.07	-97.86	-391.54	-2,836.63	2,863.53	2,859.24	4.29	667.613		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.86	-391.54	-2,836.63	2,863.53	2,858.73	4.80	597.051		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.86	-391.54	-2,836.63	2,863.53	2,858.23	5.30	539.978		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.86	-391.54	-2,836.63	2,863.53	2,857.72	5.81	492.864		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.86	-391.54	-2,836.63	2,863.53	2,857.21	6.32	453.312		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.86	-391.54	-2,836.63	2,863.53	2,856.70	6.82	419.635		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.86	-391.54	-2,836.63	2,863.53	2,856.20	7.33	390.617		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.86	-391.54	-2,836.63	2,863.53	2,855.69	7.84	365.352		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.86	-391.54	-2,836.63	2,863.53	2,855.18	8.34	343.157		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.86	-391.54	-2,836.63	2,863.53	2,854.68	8.85	323.503		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.86	-391.54	-2,836.63	2,863.53	2,854.17	9.36	305.980		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.86	-391.54	-2,836.63	2,863.53	2,853.66	9.87	290.257		
2,100.00	2,100.00	2,122.00	2,122.00	7.29	7.37	-97.86	-391.54	-2,836.63	2,863.53	2,853.16	10.37	276.070		
2,200.00	2,199.99	2,266.32	2,266.32	7.65	7.89	-24.05	-391.22	-2,836.16	2,862.16	2,851.18	10.99	260.543		
2,300.00	2,299.91	2,565.89	2,565.33	7.99	8.95	-24.04	-381.57	-2,822.24	2,853.53	2,841.58	11.96	238.622		
2,400.00	2,399.69	2,858.64	2,855.38	8.34	10.01	-23.95	-359.27	-2,790.08	2,835.68	2,822.80	12.88	220.077		
2,500.00	2,499.27	3,017.83	3,011.71	8.70	10.62	-23.94	-342.15	-2,765.40	2,810.39	2,796.88	13.50	208.114		
2,600.00	2,598.57	3,113.76	3,105.77	9.06	10.99	-24.03	-331.44	-2,749.95	2,782.44	2,768.45	13.99	198.908		
2,700.00	2,697.54	3,209.03	3,199.20	9.42	11.37	-24.16	-320.81	-2,734.61	2,752.21	2,737.74	14.47	190.162		
2,771.79	2,768.33	3,276.98	3,265.83	9.69	11.64	-24.28	-313.22	-2,723.66	2,729.11	2,714.29	14.82	184.138		
2,800.00	2,796.11	3,303.61	3,291.94	9.79	11.75	-24.27	-310.25	-2,719.38	2,719.80	2,704.84	14.96	181.832		
2,900.00	2,894.56	3,397.99	3,384.50	10.18	12.13	-24.23	-299.71	-2,704.18	2,686.81	2,671.37	15.44	173.997		
3,000.00	2,993.02	3,492.38	3,477.06	10.56	12.52	-24.19	-289.17	-2,688.98	2,653.83	2,637.90	15.93	166.604		
3,100.00	3,091.48	3,586.77	3,569.61	10.95	12.91	-24.15	-278.63	-2,673.78	2,620.84	2,604.42	16.42	159.623		
3,200.00	3,189.94	3,681.15	3,662.17	11.35	13.31	-24.11	-268.09	-2,658.58	2,587.85	2,570.94	16.91	153.023		
3,300.00	3,288.39	3,775.54	3,754.73	11.75	13.71	-24.06	-257.56	-2,643.38	2,554.87	2,537.46	17.41	146.776		
3,400.00	3,386.85	3,869.93	3,847.28	12.16	14.11	-24.02	-247.02	-2,628.18	2,521.89	2,503.99	17.90	140.857		
3,500.00	3,485.31	3,964.31	3,939.84	12.57	14.51	-23.97	-236.48	-2,612.98	2,488.91	2,470.51	18.40	135.244		
3,600.00	3,583.77	4,058.70	4,032.40	12.98	14.92	-23.93	-225.94	-2,597.78	2,455.93	2,437.02	18.90	129.914		
3,700.00	3,682.22	4,153.09	4,124.95	13.39	15.33	-23.88	-215.40	-2,582.58	2,422.95	2,403.54	19.41	124.848		
3,800.00	3,780.68	4,247.47	4,217.51	13.81	15.74	-23.83	-204.87	-2,567.39	2,389.97	2,370.06	19.91	120.028		
3,900.00	3,879.14	4,341.86	4,310.07	14.23	16.15	-23.78	-194.33	-2,552.19	2,357.00	2,336.58	20.42	115.438		
4,000.00	3,977.60	4,436.25	4,402.62	14.65	16.57	-23.73	-183.79	-2,536.99	2,324.03	2,303.10	20.93	111.062		
4,100.00	4,076.05	4,530.63	4,495.18	15.07	16.98	-23.68	-173.25	-2,521.79	2,291.06	2,269.62	21.43	106.888		
4,200.00	4,174.51	4,625.02	4,587.74	15.50	17.40	-23.62	-162.71	-2,506.59	2,258.09	2,236.14	21.94	102.901		
4,300.00	4,272.97	4,719.41	4,680.29	15.93	17.82	-23.57	-152.18	-2,491.39	2,225.12	2,202.66	22.46	99.090		
4,400.00	4,371.43	4,813.79	4,772.85	16.36	18.24	-23.51	-141.64	-2,476.19	2,192.15	2,169.18	22.97	95.444		
4,500.00	4,469.88	4,908.18	4,865.41	16.79	18.66	-23.45	-131.10	-2,460.99	2,159.19	2,135.71	23.48	91.954		
4,600.00	4,568.34	5,002.57	4,957.97	17.22	19.09	-23.39	-120.56	-2,445.79	2,126.23	2,102.23	24.00	88.609		
4,700.00	4,666.80	5,096.95	5,050.52	17.65	19.51	-23.32	-110.02	-2,430.59	2,093.27	2,068.76	24.51	85.401		
4,800.00	4,765.25	5,191.34	5,143.08	18.08	19.94	-23.26	-99.49	-2,415.39	2,060.31	2,035.28	25.03	82.323		
4,900.00	4,863.71	5,285.73	5,235.64	18.52	20.36	-23.19	-88.95	-2,400.19	2,027.36	2,001.81	25.54	79.367		
5,000.00	4,962.17	5,380.11	5,328.19	18.95	20.79	-23.12	-78.41	-2,385.00	1,994.40	1,968.34	26.06	76.525		

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 503H
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 503H	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	5,060.63	5,474.50	5,420.75	19.39	21.22	-23.05	-67.87	-2,369.80	1,961.45	1,934.87	26.58	73.792		
5,200.00	5,159.08	5,568.88	5,513.31	19.83	21.65	-22.97	-57.33	-2,354.60	1,928.51	1,901.41	27.10	71.162		
5,300.00	5,257.54	5,663.27	5,605.86	20.27	22.08	-22.90	-46.80	-2,339.40	1,895.56	1,867.94	27.62	68.630		
5,400.00	5,356.00	5,757.66	5,698.42	20.71	22.51	-22.82	-36.26	-2,324.20	1,862.62	1,834.48	28.14	66.189		
5,500.00	5,454.46	5,852.04	5,790.98	21.15	22.94	-22.73	-25.72	-2,309.00	1,829.69	1,801.03	28.66	63.837		
5,600.00	5,552.91	5,946.43	5,883.53	21.59	23.37	-22.65	-15.18	-2,293.80	1,796.75	1,767.57	29.18	61.567		
5,700.00	5,651.37	6,040.82	5,976.09	22.03	23.80	-22.56	-4.64	-2,278.60	1,763.83	1,734.12	29.71	59.375		
5,800.00	5,749.83	6,135.20	6,068.65	22.47	24.23	-22.47	5.90	-2,263.40	1,730.90	1,700.67	30.23	57.259		
5,900.00	5,848.29	6,229.59	6,161.20	22.91	24.67	-22.37	16.43	-2,248.20	1,697.98	1,667.23	30.75	55.214		
6,000.00	5,946.74	6,323.98	6,253.76	23.36	25.10	-22.27	26.97	-2,233.00	1,665.06	1,633.79	31.28	53.237		
6,100.00	6,045.20	6,418.36	6,346.32	23.80	25.53	-22.17	37.51	-2,217.80	1,632.15	1,600.35	31.80	51.324		
6,200.00	6,143.66	6,512.75	6,438.87	24.24	25.97	-22.06	48.05	-2,202.61	1,599.24	1,566.92	32.33	49.472		
6,300.00	6,242.12	6,607.14	6,531.43	24.69	26.40	-21.95	58.59	-2,187.41	1,566.34	1,533.49	32.85	47.679		
6,400.00	6,340.57	6,701.52	6,623.99	25.13	26.84	-21.83	69.12	-2,172.21	1,533.44	1,500.07	33.38	45.942		
6,500.00	6,439.03	6,795.91	6,716.54	25.58	27.27	-21.71	79.66	-2,157.01	1,500.55	1,466.65	33.90	44.258		
6,600.00	6,537.49	6,881.48	6,800.47	26.02	27.67	-21.59	89.16	-2,143.30	1,467.78	1,433.34	34.43	42.627		
6,700.00	6,635.95	6,952.82	6,870.64	26.47	27.99	-21.52	96.48	-2,132.75	1,436.23	1,401.27	34.96	41.082		
6,757.61	6,692.67	7,000.00	6,917.18	26.73	28.20	-21.48	100.91	-2,126.37	1,418.78	1,383.51	35.26	40.235		
6,800.00	6,734.44	7,024.99	6,941.87	26.91	28.30	-21.39	103.12	-2,123.18	1,406.45	1,370.97	35.48	39.638		
6,900.00	6,833.29	7,100.00	7,016.11	27.34	28.62	-21.19	109.21	-2,114.40	1,380.20	1,344.21	36.00	38.341		
7,000.00	6,932.50	7,172.70	7,088.25	27.75	28.91	-21.01	114.31	-2,107.03	1,357.95	1,321.45	36.50	37.202		
7,100.00	7,032.01	7,248.01	7,163.15	28.14	29.20	-20.86	118.78	-2,100.59	1,339.76	1,302.76	37.00	36.213		
7,200.00	7,131.74	7,324.06	7,238.93	28.51	29.49	-20.73	122.43	-2,095.33	1,325.67	1,288.19	37.48	35.370		
7,300.00	7,231.62	7,400.00	7,314.72	28.86	29.77	-20.62	125.22	-2,091.30	1,315.73	1,277.78	37.95	34.672		
7,400.00	7,331.60	7,477.65	7,392.28	29.19	30.03	-20.54	127.18	-2,088.47	1,309.96	1,271.56	38.40	34.112		
7,429.40	7,361.00	7,500.00	7,414.63	29.28	30.11	-94.36	127.58	-2,087.90	1,309.06	1,270.53	38.53	33.973		
7,500.00	7,431.60	7,554.81	7,469.42	29.50	30.28	-94.33	128.24	-2,086.94	1,307.77	1,268.93	38.84	33.673		
7,600.00	7,531.60	7,638.99	7,553.60	29.82	30.55	-94.32	128.46	-2,086.63	1,307.35	1,268.07	39.28	33.285		
7,700.00	7,631.60	7,738.99	7,653.60	30.14	30.86	-94.32	128.46	-2,086.63	1,307.35	1,267.60	39.75	32.888		
7,800.00	7,731.60	7,838.99	7,753.60	30.45	31.17	-94.32	128.46	-2,086.63	1,307.35	1,267.12	40.23	32.499		
7,900.00	7,831.60	7,938.99	7,853.60	30.77	31.49	-94.32	128.46	-2,086.63	1,307.35	1,266.65	40.70	32.119		
8,000.00	7,931.60	8,038.99	7,953.60	31.09	31.80	-94.32	128.46	-2,086.63	1,307.35	1,266.17	41.18	31.747		
8,100.00	8,031.60	8,138.99	8,053.60	31.41	32.12	-94.32	128.46	-2,086.63	1,307.35	1,265.69	41.66	31.383 CC		
8,200.00	8,131.60	8,227.72	8,142.14	31.73	32.37	-94.52	123.90	-2,086.59	1,307.71	1,265.62	42.08	31.074 ES		
8,300.00	8,231.60	8,311.14	8,223.84	32.06	32.56	-95.24	107.43	-2,086.43	1,309.24	1,266.79	42.45	30.840		
8,400.00	8,331.60	8,388.33	8,296.58	32.38	32.69	-96.36	81.77	-2,086.18	1,312.48	1,269.72	42.77	30.690		
8,500.00	8,431.60	8,457.54	8,358.34	32.70	32.77	-97.71	50.64	-2,085.87	1,318.20	1,275.18	43.02	30.641		
8,600.00	8,531.60	8,518.24	8,409.09	33.03	32.82	-99.14	17.38	-2,085.55	1,327.20	1,284.00	43.20	30.724		
8,700.00	8,631.60	8,570.80	8,449.97	33.35	32.84	-100.55	-15.62	-2,085.22	1,340.19	1,296.91	43.28	30.962		
8,800.00	8,731.60	8,616.02	8,482.61	33.68	32.85	-101.88	-46.91	-2,084.92	1,357.74	1,314.47	43.27	31.379		
8,900.00	8,831.60	8,650.00	8,505.44	34.00	32.85	-102.94	-72.06	-2,084.67	1,380.21	1,337.10	43.12	32.010		
9,000.00	8,931.60	8,700.00	8,536.25	34.33	32.84	-104.58	-111.43	-2,084.28	1,407.85	1,364.88	42.97	32.763		
9,100.00	9,031.60	8,717.31	8,546.09	34.66	32.83	-105.16	-125.66	-2,084.14	1,440.45	1,397.89	42.57	33.840		
9,200.00	9,131.60	8,750.00	8,563.50	34.98	32.81	-106.30	-153.32	-2,083.87	1,478.22	1,436.03	42.19	35.038		
9,300.00	9,231.60	8,764.44	8,570.68	35.31	32.80	-106.81	-165.85	-2,083.75	1,520.74	1,479.10	41.65	36.515		
9,400.00	9,331.60	8,783.76	8,579.79	35.64	32.79	-107.49	-182.88	-2,083.58	1,567.90	1,526.79	41.10	38.144		
9,500.00	9,431.60	8,800.00	8,587.00	35.97	32.78	-108.08	-197.44	-2,083.44	1,619.35	1,578.82	40.53	39.959		
9,600.00	9,531.60	8,800.00	8,587.00	36.30	32.78	-108.08	-197.44	-2,083.44	1,675.00	1,635.16	39.83	42.049		
9,700.00	9,631.60	8,829.56	8,599.05	36.63	32.76	-109.15	-224.43	-2,083.18	1,733.87	1,694.52	39.36	44.056		
9,800.00	9,731.60	8,850.00	8,606.56	36.96	32.74	-109.89	-243.43	-2,082.99	1,796.38	1,757.54	38.84	46.256		
9,900.00	9,831.60	8,850.00	8,606.56	37.30	32.74	-109.89	-243.43	-2,082.99	1,861.82	1,823.61	38.21	48.724		
9,913.44	9,845.04	8,850.00	8,606.56	37.34	32.74	-109.89	-243.43	-2,082.99	1,870.85	1,832.72	38.13	49.064		

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 503H
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 503H	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		
9,950.00	9,881.57	8,850.00	8,606.56	37.46	32.74	67.59	-243.43	-2,082.99	1,895.38	1,857.47	37.91	50.001		
10,000.00	9,931.27	8,850.00	8,606.56	37.60	32.74	63.57	-243.43	-2,082.99	1,928.46	1,890.87	37.59	51.296		
10,050.00	9,980.31	8,871.49	8,613.73	37.74	32.72	59.24	-263.69	-2,082.79	1,960.40	1,922.99	37.41	52.400		
10,100.00	10,028.32	8,879.31	8,616.14	37.87	32.71	55.70	-271.13	-2,082.72	1,991.47	1,954.33	37.15	53.612		
10,150.00	10,074.94	8,900.00	8,622.05	37.99	32.70	52.25	-290.95	-2,082.53	2,021.39	1,984.44	36.95	54.700		
10,200.00	10,119.80	8,900.00	8,622.05	38.10	32.70	49.60	-290.95	-2,082.53	2,049.57	2,012.91	36.66	55.914		
10,250.00	10,162.58	8,900.00	8,622.05	38.19	32.70	47.24	-290.95	-2,082.53	2,076.24	2,039.86	36.37	57.081		
10,300.00	10,202.93	8,900.00	8,622.05	38.28	32.70	45.15	-290.95	-2,082.53	2,101.25	2,065.14	36.11	58.188		
10,350.00	10,240.57	8,926.89	8,628.64	38.35	32.67	43.03	-317.02	-2,082.27	2,123.82	2,087.83	35.99	59.008		
10,400.00	10,275.19	8,950.00	8,633.33	38.42	32.66	41.27	-339.65	-2,082.05	2,144.65	2,108.78	35.87	59.795		
10,450.00	10,306.54	8,950.00	8,633.33	38.47	32.66	39.99	-339.65	-2,082.05	2,162.95	2,127.28	35.68	60.629		
10,500.00	10,334.38	8,950.00	8,633.33	38.52	32.66	38.90	-339.65	-2,082.05	2,179.14	2,143.62	35.52	61.348		
10,550.00	10,358.49	8,971.71	8,636.89	38.56	32.64	37.89	-361.06	-2,081.84	2,192.70	2,157.23	35.47	61.821		
10,600.00	10,378.70	9,000.00	8,640.32	38.60	32.62	37.08	-389.14	-2,081.56	2,204.08	2,168.63	35.46	62.165		
10,650.00	10,394.84	9,000.00	8,640.32	38.64	32.62	36.57	-389.14	-2,081.56	2,212.40	2,176.99	35.41	62.476		
10,700.00	10,406.80	9,000.00	8,640.32	38.68	32.62	36.21	-389.14	-2,081.56	2,218.36	2,182.95	35.42	62.635		
10,750.00	10,414.49	9,019.38	8,641.86	38.74	32.61	35.99	-408.45	-2,081.37	2,221.59	2,186.09	35.49	62.593		
10,800.00	10,417.84	9,050.00	8,642.97	38.82	32.59	35.96	-439.05	-2,081.07	2,222.51	2,186.90	35.60	62.423		
10,813.44	10,418.00	9,050.00	8,642.97	38.85	32.59	35.98	-439.05	-2,081.07	2,222.11	2,186.47	35.64	62.356		
10,899.08	10,418.00	9,055.43	8,643.00	39.03	32.59	35.98	-444.48	-2,081.02	2,220.64	2,184.74	35.90	61.862		
10,900.00	10,418.00	9,056.21	8,643.00	39.04	32.59	35.98	-445.26	-2,081.01	2,220.64	2,184.74	35.90	61.857		
11,000.00	10,418.00	9,156.21	8,643.00	39.34	32.60	35.98	-545.26	-2,080.03	2,220.65	2,184.40	36.25	61.258		
11,100.00	10,418.00	9,256.21	8,643.00	39.72	32.74	35.98	-645.25	-2,079.06	2,220.66	2,183.99	36.67	60.562		
11,200.00	10,418.00	9,356.21	8,643.00	40.19	33.02	35.98	-745.25	-2,078.08	2,220.66	2,183.51	37.15	59.774		
11,300.00	10,418.00	9,456.21	8,643.00	40.72	33.43	35.98	-845.24	-2,077.10	2,220.67	2,182.97	37.70	58.906		
11,400.00	10,418.00	9,556.21	8,643.00	41.32	33.94	35.98	-945.24	-2,076.12	2,220.68	2,182.37	38.31	57.970		
11,500.00	10,418.00	9,656.21	8,643.00	41.98	34.54	35.98	-1,045.23	-2,075.14	2,220.69	2,181.71	38.97	56.977		
11,600.00	10,418.00	9,756.21	8,643.00	42.70	35.20	35.98	-1,145.23	-2,074.16	2,220.70	2,181.00	39.70	55.940		
11,700.00	10,418.00	9,856.21	8,643.00	43.47	35.93	35.98	-1,245.22	-2,073.18	2,220.70	2,180.23	40.47	54.868		
11,800.00	10,418.00	9,956.21	8,643.00	44.29	36.72	35.98	-1,345.22	-2,072.20	2,220.71	2,179.41	41.30	53.772		
11,900.00	10,418.00	10,056.21	8,643.00	45.15	37.57	35.98	-1,445.21	-2,071.22	2,220.72	2,178.55	42.17	52.659		
12,000.00	10,418.00	10,156.21	8,643.00	46.06	38.46	35.98	-1,545.21	-2,070.24	2,220.73	2,177.64	43.09	51.541		
12,100.00	10,418.00	10,256.21	8,643.00	47.01	39.40	35.98	-1,645.20	-2,069.26	2,220.73	2,176.69	44.04	50.423		
12,200.00	10,418.00	10,356.21	8,643.00	47.99	40.39	35.98	-1,745.20	-2,068.28	2,220.74	2,175.71	45.04	49.310		
12,300.00	10,418.00	10,456.21	8,643.00	49.02	41.42	35.98	-1,845.19	-2,067.30	2,220.75	2,174.68	46.07	48.208		
12,400.00	10,418.00	10,556.21	8,643.00	50.07	42.48	35.98	-1,945.19	-2,066.32	2,220.76	2,173.63	47.13	47.121		
12,500.00	10,418.00	10,656.21	8,643.00	51.16	43.58	35.98	-2,045.18	-2,065.34	2,220.77	2,172.54	48.22	46.051		
12,600.00	10,418.00	10,756.21	8,643.00	52.28	44.72	35.98	-2,145.18	-2,064.37	2,220.77	2,171.43	49.35	45.002		
12,700.00	10,418.00	10,856.21	8,643.00	53.42	45.89	35.98	-2,245.17	-2,063.39	2,220.78	2,170.28	50.50	43.977		
12,800.00	10,418.00	10,956.21	8,643.00	54.59	47.08	35.98	-2,345.17	-2,062.41	2,220.79	2,169.12	51.67	42.978		
12,900.00	10,418.00	11,056.21	8,643.00	55.78	48.30	35.99	-2,445.16	-2,061.43	2,220.80	2,167.92	52.87	42.004		
13,000.00	10,418.00	11,156.21	8,643.00	57.00	49.55	35.99	-2,545.16	-2,060.45	2,220.80	2,166.71	54.09	41.056		
13,100.00	10,418.00	11,256.21	8,643.00	58.24	50.81	35.99	-2,645.16	-2,059.47	2,220.81	2,165.48	55.33	40.135		
13,200.00	10,418.00	11,356.21	8,643.00	59.50	52.10	35.99	-2,745.15	-2,058.49	2,220.82	2,164.23	56.59	39.242		
13,300.00	10,418.00	11,456.21	8,643.00	60.77	53.41	35.99	-2,845.15	-2,057.51	2,220.83	2,162.96	57.87	38.377		
13,400.00	10,418.00	11,556.21	8,643.00	62.07	54.74	35.99	-2,945.14	-2,056.53	2,220.84	2,161.67	59.16	37.539		
13,500.00	10,418.00	11,656.21	8,643.00	63.38	56.08	35.99	-3,045.14	-2,055.55	2,220.84	2,160.37	60.47	36.726		
13,600.00	10,418.00	11,756.21	8,643.00	64.71	57.44	35.99	-3,145.13	-2,054.57	2,220.85	2,159.05	61.80	35.938		
13,700.00	10,418.00	11,856.21	8,643.00	66.05	58.82	35.99	-3,245.13	-2,053.59	2,220.86	2,157.73	63.13	35.177		
13,800.00	10,418.00	11,956.21	8,643.00	67.40	60.20	35.99	-3,345.12	-2,052.61	2,220.87	2,156.38	64.48	34.442		
13,900.00	10,418.00	12,056.21	8,643.00	68.77	61.61	35.99	-3,445.12	-2,051.63	2,220.87	2,155.03	65.84	33.730		
14,000.00	10,418.00	12,156.21	8,643.00	70.15	63.02	35.99	-3,545.11	-2,050.66	2,220.88	2,153.67	67.21	33.042		

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 503H
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 503H	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	10,418.00	12,256.21	8,643.00	71.54	64.44	35.99	-3,645.11	-2,049.68	2,220.89	2,152.29	68.60	32.376		
14,200.00	10,418.00	12,356.21	8,643.00	72.95	65.88	35.99	-3,745.10	-2,048.70	2,220.90	2,150.91	69.99	31.733		
14,300.00	10,418.00	12,456.21	8,643.00	74.36	67.32	35.99	-3,845.10	-2,047.72	2,220.90	2,149.52	71.39	31.111		
14,400.00	10,418.00	12,556.21	8,643.00	75.78	68.78	35.99	-3,945.09	-2,046.74	2,220.91	2,148.12	72.80	30.509		
14,500.00	10,418.00	12,656.21	8,643.00	77.21	70.24	35.99	-4,045.09	-2,045.76	2,220.92	2,146.71	74.21	29.927		
14,600.00	10,418.00	12,756.21	8,643.00	78.65	71.71	35.99	-4,145.08	-2,044.78	2,220.93	2,145.29	75.64	29.363		
14,700.00	10,418.00	12,856.21	8,643.00	80.10	73.19	35.99	-4,245.08	-2,043.80	2,220.94	2,143.87	77.07	28.818		
14,800.00	10,418.00	12,956.21	8,643.00	81.55	74.67	35.99	-4,345.07	-2,042.82	2,220.94	2,142.44	78.50	28.291		
14,900.00	10,418.00	13,056.21	8,643.00	83.02	76.16	35.99	-4,445.07	-2,041.84	2,220.95	2,141.00	79.95	27.780		
15,000.00	10,418.00	13,156.21	8,643.00	84.49	77.66	35.99	-4,545.06	-2,040.86	2,220.96	2,139.56	81.40	27.285		
15,100.00	10,418.00	13,256.21	8,643.00	85.96	79.17	35.99	-4,645.06	-2,039.88	2,220.97	2,138.12	82.85	26.807		
15,200.00	10,418.00	13,356.21	8,643.00	87.45	80.68	35.99	-4,745.05	-2,038.90	2,220.97	2,136.67	84.31	26.343		
15,300.00	10,418.00	13,456.21	8,643.00	88.94	82.19	35.99	-4,845.05	-2,037.92	2,220.98	2,135.21	85.77	25.893		
15,400.00	10,418.00	13,556.21	8,643.00	90.43	83.71	35.99	-4,945.05	-2,036.94	2,220.99	2,133.75	87.24	25.457		
15,500.00	10,418.00	13,656.21	8,643.00	91.93	85.24	35.99	-5,045.04	-2,035.97	2,221.00	2,132.28	88.72	25.034		
15,600.00	10,418.00	13,756.21	8,643.00	93.43	86.77	35.99	-5,145.04	-2,034.99	2,221.01	2,130.81	90.19	24.625		
15,700.00	10,418.00	13,856.21	8,643.00	94.94	88.30	35.99	-5,245.03	-2,034.01	2,221.01	2,129.34	91.68	24.227		
15,800.00	10,418.00	13,956.21	8,643.00	96.46	89.84	35.99	-5,345.03	-2,033.03	2,221.02	2,127.86	93.16	23.841		
15,900.00	10,418.00	14,056.21	8,643.00	97.98	91.39	35.99	-5,445.02	-2,032.05	2,221.03	2,126.38	94.65	23.466		
16,000.00	10,418.00	14,156.21	8,643.00	99.50	92.93	35.99	-5,545.02	-2,031.07	2,221.04	2,124.90	96.14	23.102		
16,100.00	10,418.00	14,256.21	8,643.00	101.03	94.48	35.99	-5,645.01	-2,030.09	2,221.04	2,123.41	97.63	22.749		
16,200.00	10,418.00	14,356.21	8,643.00	102.56	96.04	35.99	-5,745.01	-2,029.11	2,221.05	2,121.92	99.13	22.405		
16,300.00	10,418.00	14,456.21	8,643.00	104.09	97.59	35.99	-5,845.00	-2,028.13	2,221.06	2,120.43	100.63	22.071		
16,400.00	10,418.00	14,556.21	8,643.00	105.63	99.15	35.99	-5,945.00	-2,027.15	2,221.07	2,118.93	102.13	21.747		
16,500.00	10,418.00	14,656.21	8,643.00	107.17	100.71	36.00	-6,044.99	-2,026.17	2,221.08	2,117.44	103.64	21.431		
16,600.00	10,418.00	14,756.21	8,643.00	108.72	102.28	36.00	-6,144.99	-2,025.19	2,221.08	2,115.94	105.14	21.124		
16,700.00	10,418.00	14,856.21	8,643.00	110.26	103.85	36.00	-6,244.98	-2,024.21	2,221.09	2,114.44	106.65	20.825		
16,800.00	10,418.00	14,956.21	8,643.00	111.81	105.42	36.00	-6,344.98	-2,023.23	2,221.10	2,112.93	108.16	20.535		
16,900.00	10,418.00	15,056.21	8,643.00	113.37	106.99	36.00	-6,444.97	-2,022.25	2,221.11	2,111.43	109.68	20.251		
17,000.00	10,418.00	15,156.21	8,643.00	114.92	108.56	36.00	-6,544.97	-2,021.28	2,221.11	2,109.92	111.19	19.976		
17,100.00	10,418.00	15,256.21	8,643.00	116.48	110.14	36.00	-6,644.96	-2,020.30	2,221.12	2,108.41	112.71	19.707		
17,200.00	10,418.00	15,356.21	8,643.00	118.04	111.72	36.00	-6,744.96	-2,019.32	2,221.13	2,106.90	114.23	19.445		
17,300.00	10,418.00	15,456.21	8,643.00	119.61	113.30	36.00	-6,844.95	-2,018.34	2,221.14	2,105.39	115.75	19.190		
17,400.00	10,418.00	15,556.21	8,643.00	121.17	114.89	36.00	-6,944.95	-2,017.36	2,221.14	2,103.88	117.27	18.941		
17,500.00	10,418.00	15,656.21	8,643.00	122.74	116.47	36.00	-7,044.94	-2,016.38	2,221.15	2,102.36	118.79	18.698		
17,600.00	10,418.00	15,756.21	8,643.00	124.31	118.06	36.00	-7,144.94	-2,015.40	2,221.16	2,100.85	120.31	18.462		
17,700.00	10,418.00	15,856.21	8,643.00	125.88	119.65	36.00	-7,244.93	-2,014.42	2,221.17	2,099.33	121.84	18.231		
17,800.00	10,418.00	15,956.21	8,643.00	127.46	121.24	36.00	-7,344.93	-2,013.44	2,221.18	2,097.81	123.36	18.005		
17,900.00	10,418.00	16,056.21	8,643.00	129.04	122.83	36.00	-7,444.93	-2,012.46	2,221.18	2,096.29	124.89	17.785		
18,000.00	10,418.00	16,156.21	8,643.00	130.61	124.42	36.00	-7,544.92	-2,011.48	2,221.19	2,094.77	126.42	17.570		
18,100.00	10,418.00	16,256.21	8,643.00	132.19	126.02	36.00	-7,644.92	-2,010.50	2,221.20	2,093.25	127.95	17.360		
18,200.00	10,418.00	16,356.21	8,643.00	133.78	127.62	36.00	-7,744.91	-2,009.52	2,221.21	2,091.73	129.48	17.155		
18,300.00	10,418.00	16,456.21	8,643.00	135.36	129.21	36.00	-7,844.91	-2,008.54	2,221.21	2,090.21	131.01	16.955		
18,400.00	10,418.00	16,556.21	8,643.00	136.94	130.81	36.00	-7,944.90	-2,007.56	2,221.22	2,088.68	132.54	16.759		
18,500.00	10,418.00	16,656.21	8,643.00	138.53	132.41	36.00	-8,044.90	-2,006.59	2,221.23	2,087.16	134.07	16.568		
18,600.00	10,418.00	16,756.21	8,643.00	140.12	134.01	36.00	-8,144.89	-2,005.61	2,221.24	2,085.64	135.60	16.381		
18,700.00	10,418.00	16,856.21	8,643.00	141.71	135.62	36.00	-8,244.89	-2,004.63	2,221.25	2,084.11	137.14	16.197		
18,800.00	10,418.00	16,956.21	8,643.00	143.30	137.22	36.00	-8,344.88	-2,003.65	2,221.25	2,082.58	138.67	16.018		
18,900.00	10,418.00	17,056.21	8,643.00	144.89	138.83	36.00	-8,444.88	-2,002.67	2,221.26	2,081.06	140.20	15.843		
19,000.00	10,418.00	17,156.21	8,643.00	146.49	140.43	36.00	-8,544.87	-2,001.69	2,221.27	2,079.53	141.74	15.672		
19,100.00	10,418.00	17,256.21	8,643.00	148.08	142.04	36.00	-8,644.87	-2,000.71	2,221.28	2,078.00	143.27	15.504		
19,200.00	10,418.00	17,356.21	8,643.00	149.68	143.65	36.00	-8,744.86	-1,999.73	2,221.28	2,076.47	144.81	15.339		

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 503H
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 503H	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			
19,300.00	10,418.00	17,456.21	8,643.00	151.27	145.26	36.00	-8,844.86	-1,998.75	2,221.29	2,074.95	146.35	15.178			
19,400.00	10,418.00	17,556.21	8,643.00	152.87	146.87	36.00	-8,944.85	-1,997.77	2,221.30	2,073.42	147.88	15.021			
19,500.00	10,418.00	17,656.21	8,643.00	154.47	148.48	36.00	-9,044.85	-1,996.79	2,221.31	2,071.89	149.42	14.866			
19,600.00	10,418.00	17,756.21	8,643.00	156.07	150.09	36.00	-9,144.84	-1,995.81	2,221.32	2,070.36	150.96	14.715			
19,700.00	10,418.00	17,856.21	8,643.00	157.67	151.70	36.00	-9,244.84	-1,994.83	2,221.32	2,068.83	152.49	14.567			
19,800.00	10,418.00	17,956.21	8,643.00	159.28	153.32	36.00	-9,344.83	-1,993.85	2,221.33	2,067.30	154.03	14.421			
19,900.00	10,418.00	18,056.21	8,643.00	160.88	154.93	36.00	-9,444.83	-1,992.87	2,221.34	2,065.77	155.57	14.279			
20,000.00	10,418.00	18,156.21	8,643.00	162.48	156.55	36.00	-9,544.82	-1,991.90	2,221.35	2,064.24	157.11	14.139			
20,100.00	10,418.00	18,256.21	8,643.00	164.09	158.16	36.00	-9,644.82	-1,990.92	2,221.35	2,062.71	158.65	14.002			
20,200.00	10,418.00	18,356.21	8,643.00	165.70	159.78	36.01	-9,744.81	-1,989.94	2,221.36	2,061.18	160.18	13.868			
20,300.00	10,418.00	18,456.21	8,643.00	167.30	161.40	36.01	-9,844.81	-1,988.96	2,221.37	2,059.65	161.72	13.736			
20,400.00	10,418.00	18,556.21	8,643.00	168.91	163.02	36.01	-9,944.81	-1,987.98	2,221.38	2,058.11	163.26	13.606			
20,500.00	10,418.00	18,656.21	8,643.00	170.52	164.63	36.01	-10,044.80	-1,987.00	2,221.38	2,056.58	164.80	13.479			
20,600.00	10,418.00	18,756.21	8,643.00	172.13	166.25	36.01	-10,144.80	-1,986.02	2,221.39	2,055.05	166.34	13.355			
20,700.00	10,418.00	18,856.21	8,643.00	173.74	167.87	36.01	-10,244.79	-1,985.04	2,221.40	2,053.52	167.88	13.232			
20,800.00	10,418.00	18,956.21	8,643.00	175.35	169.49	36.01	-10,344.79	-1,984.06	2,221.41	2,051.99	169.42	13.112			
20,900.00	10,418.00	19,056.21	8,643.00	176.97	171.11	36.01	-10,444.78	-1,983.08	2,221.42	2,050.46	170.96	12.994			
21,000.00	10,418.00	19,156.21	8,643.00	178.58	172.74	36.01	-10,544.78	-1,982.10	2,221.42	2,048.93	172.49	12.878			
21,100.00	10,418.00	19,256.21	8,643.00	180.19	174.36	36.01	-10,644.77	-1,981.12	2,221.43	2,047.40	174.03	12.764			
21,200.00	10,418.00	19,356.21	8,643.00	181.81	175.98	36.01	-10,744.77	-1,980.14	2,221.44	2,045.87	175.57	12.653			
21,300.00	10,418.00	19,456.21	8,643.00	183.42	177.60	36.01	-10,844.76	-1,979.16	2,221.45	2,044.34	177.11	12.543			
21,400.00	10,418.00	19,556.21	8,643.00	185.04	179.23	36.01	-10,944.76	-1,978.18	2,221.45	2,042.81	178.65	12.435			
21,500.00	10,418.00	19,656.21	8,643.00	186.65	180.85	36.01	-11,044.75	-1,977.21	2,221.46	2,041.27	180.19	12.329			
21,600.00	10,418.00	19,756.21	8,643.00	188.27	182.48	36.01	-11,144.75	-1,976.23	2,221.47	2,039.74	181.73	12.224			
21,700.00	10,418.00	19,856.21	8,643.00	189.89	184.10	36.01	-11,244.74	-1,975.25	2,221.48	2,038.21	183.26	12.122			
21,800.00	10,418.00	19,956.21	8,643.00	191.50	185.73	36.01	-11,344.74	-1,974.27	2,221.49	2,036.69	184.80	12.021			
21,900.00	10,418.00	20,056.21	8,643.00	193.12	187.36	36.01	-11,444.73	-1,973.29	2,221.49	2,035.15	186.34	11.922			
21,900.51	10,418.00	20,056.72	8,643.00	193.13	187.36	36.01	-11,445.24	-1,973.28	2,221.49	2,035.15	186.35	11.921			
21,923.68	10,418.00	20,078.25	8,643.00	193.51	187.71	36.01	-11,466.77	-1,973.07	2,221.50	2,034.80	186.70	11.899 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 503H
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 503H	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	-392.01	-2,886.81	2,913.31					
100.00	100.00	122.00	122.00	0.13	0.20	-97.73	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-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	-392.01	-2,886.81	2,913.31	2,903.44	9.87	295.302		
2,007.27	2,007.27	2,029.27	2,029.27	6.96	7.04	-97.73	-392.01	-2,886.81	2,913.31	2,903.40	9.90	294.204		
2,100.00	2,100.00	2,116.47	2,116.47	7.29	7.35	-97.73	-391.98	-2,886.83	2,913.33	2,902.97	10.36	281.260		
2,200.00	2,199.99	2,200.00	2,199.99	7.65	7.65	-23.89	-390.93	-2,887.54	2,912.77	2,901.95	10.82	269.270		
2,300.00	2,299.91	2,266.13	2,266.08	7.99	7.89	-23.88	-389.01	-2,888.83	2,910.65	2,899.42	11.23	259.257		
2,400.00	2,399.69	2,340.90	2,340.74	8.34	8.15	-23.87	-385.71	-2,891.04	2,907.01	2,895.36	11.66	249.343		
2,500.00	2,499.27	2,415.61	2,415.25	8.70	8.42	-23.86	-381.19	-2,894.07	2,901.86	2,889.76	12.09	240.005		
2,600.00	2,598.57	2,500.00	2,499.27	9.06	8.72	-23.85	-374.64	-2,898.47	2,895.20	2,882.65	12.55	230.711		
2,700.00	2,697.54	2,564.73	2,563.59	9.42	8.96	-23.84	-368.57	-2,902.55	2,886.97	2,874.01	12.96	222.806		
2,771.79	2,768.33	2,618.15	2,616.56	9.69	9.15	-23.83	-362.88	-2,906.37	2,880.15	2,866.88	13.27	217.045		
2,800.00	2,796.11	2,639.12	2,637.33	9.79	9.23	-23.81	-360.47	-2,907.98	2,877.35	2,863.96	13.39	214.839		
2,900.00	2,894.56	2,726.03	2,723.28	10.18	9.55	-23.70	-349.78	-2,915.16	2,867.88	2,854.02	13.86	206.845		
3,000.00	2,993.02	2,825.38	2,821.51	10.56	9.92	-23.57	-337.38	-2,923.48	2,858.53	2,844.16	14.38	198.854		
3,100.00	3,091.48	2,924.74	2,919.73	10.95	10.29	-23.44	-324.99	-2,931.80	2,849.20	2,834.31	14.89	191.360		
3,200.00	3,189.94	3,024.09	3,017.96	11.35	10.67	-23.31	-312.59	-2,940.12	2,839.88	2,824.47	15.41	184.324		
3,300.00	3,288.39	3,123.45	3,116.19	11.75	11.05	-23.18	-300.20	-2,948.43	2,830.57	2,814.65	15.93	177.710		
3,400.00	3,386.85	3,222.80	3,214.41	12.16	11.44	-23.05	-287.80	-2,956.75	2,821.28	2,804.83	16.45	171.487		
3,500.00	3,485.31	3,322.16	3,312.64	12.57	11.83	-22.91	-275.40	-2,965.07	2,812.01	2,795.03	16.98	165.623		
3,600.00	3,583.77	3,421.51	3,410.87	12.98	12.22	-22.78	-263.01	-2,973.39	2,802.75	2,785.24	17.51	160.092		
3,700.00	3,682.22	3,520.87	3,509.09	13.39	12.61	-22.64	-250.61	-2,981.71	2,793.51	2,775.47	18.04	154.868		
3,800.00	3,780.68	3,620.22	3,607.32	13.81	13.00	-22.51	-238.22	-2,990.03	2,784.28	2,765.71	18.57	149.928		
3,900.00	3,879.14	3,719.57	3,705.55	14.23	13.40	-22.37	-225.82	-2,998.35	2,775.06	2,755.96	19.11	145.252		
4,000.00	3,977.60	3,818.93	3,803.77	14.65	13.80	-22.23	-213.42	-3,006.67	2,765.87	2,746.23	19.64	140.821		
4,100.00	4,076.05	3,918.28	3,902.00	15.07	14.20	-22.10	-201.03	-3,014.99	2,756.69	2,736.51	20.18	136.616		
4,200.00	4,174.51	4,017.64	4,000.23	15.50	14.60	-21.96	-188.63	-3,023.31	2,747.52	2,726.80	20.72	132.622		
4,300.00	4,272.97	4,116.99	4,098.45	15.93	15.00	-21.82	-176.24	-3,031.63	2,738.37	2,717.12	21.26	128.825		
4,400.00	4,371.43	4,216.35	4,196.68	16.36	15.40	-21.68	-163.84	-3,039.95	2,729.24	2,707.44	21.80	125.211		
4,500.00	4,469.88	4,315.70	4,294.91	16.79	15.81	-21.53	-151.45	-3,048.27	2,720.13	2,697.79	22.34	121.767		
4,600.00	4,568.34	4,415.06	4,393.13	17.22	16.21	-21.39	-139.05	-3,056.59	2,711.03	2,688.15	22.88	118.483		
4,700.00	4,666.80	4,514.41	4,491.36	17.65	16.62	-21.25	-126.65	-3,064.91	2,701.94	2,678.52	23.42	115.349		
4,800.00	4,765.25	4,613.77	4,589.59	18.08	17.03	-21.10	-114.26	-3,073.23	2,692.88	2,668.91	23.97	112.354		
4,900.00	4,863.71	4,713.12	4,687.81	18.52	17.44	-20.95	-101.86	-3,081.54	2,683.83	2,659.32	24.51	109.490		

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 503H
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 503H	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		
5,000.00	4,962.17	4,812.48	4,786.04	18.95	17.85	-20.81	-89.47	-3,089.86	2,674.80	2,649.75	25.06	106.749		
5,100.00	5,060.63	4,911.83	4,884.27	19.39	18.25	-20.66	-77.07	-3,098.18	2,665.79	2,640.19	25.60	104.123		
5,200.00	5,159.08	5,011.18	4,982.49	19.83	18.67	-20.51	-64.67	-3,106.50	2,656.80	2,630.65	26.15	101.606		
5,300.00	5,257.54	5,110.54	5,080.72	20.27	19.08	-20.36	-52.28	-3,114.82	2,647.82	2,621.13	26.69	99.191		
5,400.00	5,356.00	5,209.89	5,178.95	20.71	19.49	-20.21	-39.88	-3,123.14	2,638.86	2,611.62	27.24	96.873		
5,500.00	5,454.46	5,309.25	5,277.17	21.15	19.90	-20.06	-27.49	-3,131.46	2,629.92	2,602.14	27.79	94.645		
5,600.00	5,552.91	5,408.60	5,375.40	21.59	20.31	-19.90	-15.09	-3,139.78	2,621.00	2,592.67	28.33	92.503		
5,700.00	5,651.37	5,507.96	5,473.62	22.03	20.73	-19.75	-2.69	-3,148.10	2,612.10	2,583.22	28.88	90.443		
5,800.00	5,749.83	5,607.31	5,571.85	22.47	21.14	-19.59	9.70	-3,156.42	2,603.22	2,573.79	29.43	88.459		
5,900.00	5,848.29	5,706.67	5,670.08	22.91	21.56	-19.44	22.10	-3,164.74	2,594.35	2,564.38	29.98	86.548		
6,000.00	5,946.74	5,806.02	5,768.30	23.36	21.97	-19.28	34.49	-3,173.06	2,585.51	2,554.99	30.52	84.706		
6,100.00	6,045.20	5,905.38	5,866.53	23.80	22.38	-19.12	46.89	-3,181.38	2,576.68	2,545.61	31.07	82.929		
6,200.00	6,143.66	6,004.73	5,964.76	24.24	22.80	-18.96	59.29	-3,189.70	2,567.88	2,536.26	31.62	81.214		
6,300.00	6,242.12	6,104.08	6,062.98	24.69	23.22	-18.80	71.68	-3,198.02	2,559.09	2,526.93	32.17	79.558		
6,400.00	6,340.57	6,203.44	6,161.21	25.13	23.63	-18.64	84.08	-3,206.34	2,550.33	2,517.61	32.71	77.959		
6,500.00	6,439.03	6,302.79	6,259.44	25.58	24.05	-18.48	96.47	-3,214.66	2,541.58	2,508.32	33.26	76.412		
6,600.00	6,537.49	6,402.15	6,357.66	26.02	24.47	-18.31	108.87	-3,222.97	2,532.86	2,499.05	33.81	74.916		
6,700.00	6,635.95	6,501.50	6,455.89	26.47	24.88	-18.15	121.26	-3,231.29	2,524.16	2,489.80	34.36	73.469		
6,757.61	6,692.67	6,558.74	6,512.48	26.73	25.12	-18.05	128.41	-3,236.09	2,519.15	2,484.48	34.67	72.656		
6,800.00	6,734.44	6,600.87	6,554.13	26.91	25.30	-17.97	133.66	-3,239.61	2,515.70	2,480.79	34.90	72.075		
6,900.00	6,833.29	6,700.34	6,652.47	27.34	25.72	-17.75	146.07	-3,247.94	2,509.33	2,473.89	35.45	70.790		
7,000.00	6,932.50	6,799.86	6,750.86	27.75	26.14	-17.53	158.49	-3,256.28	2,505.49	2,469.50	35.99	69.621		
7,100.00	7,032.01	6,912.39	6,862.14	28.14	26.61	-17.28	172.39	-3,265.60	2,504.11	2,467.55	36.56	68.495		
7,200.00	7,131.74	7,067.56	7,016.16	28.51	27.23	-16.99	187.93	-3,276.04	2,503.71	2,466.49	37.23	67.259		
7,285.38	7,217.01	7,200.54	7,148.67	28.81	27.74	-16.82	197.11	-3,282.20	2,503.61	2,465.84	37.77	66.289 CC		
7,300.00	7,231.62	7,223.35	7,171.44	28.86	27.82	-16.80	198.30	-3,283.00	2,503.61	2,465.75	37.86	66.132		
7,400.00	7,331.60	7,379.52	7,327.48	29.19	28.37	-16.71	203.41	-3,286.43	2,503.78	2,465.33	38.45	65.112		
7,429.40	7,361.00	7,425.47	7,373.43	29.28	28.52	-90.53	203.91	-3,286.76	2,503.89	2,465.26	38.62	64.831		
7,500.00	7,431.60	7,505.64	7,453.60	29.50	28.78	-90.53	203.99	-3,286.81	2,503.92	2,464.95	38.97	64.250		
7,600.00	7,531.60	7,605.64	7,553.60	29.82	29.11	-90.53	203.99	-3,286.81	2,503.92	2,464.47	39.45	63.476		
7,700.00	7,631.60	7,705.64	7,653.60	30.14	29.44	-90.53	203.99	-3,286.81	2,503.92	2,464.00	39.92	62.720		
7,800.00	7,731.60	7,805.64	7,753.60	30.45	29.77	-90.53	203.99	-3,286.81	2,503.92	2,463.52	40.40	61.980		
7,900.00	7,831.60	7,905.64	7,853.60	30.77	30.10	-90.53	203.99	-3,286.81	2,503.92	2,463.04	40.88	61.256		
8,000.00	7,931.60	8,005.64	7,953.60	31.09	30.43	-90.53	203.99	-3,286.81	2,503.92	2,462.56	41.35	60.548		
8,100.00	8,031.60	8,105.64	8,053.60	31.41	30.76	-90.53	203.99	-3,286.81	2,503.92	2,462.08	41.83	59.855		
8,200.00	8,131.60	8,205.64	8,153.60	31.73	31.09	-90.53	203.99	-3,286.81	2,503.92	2,461.61	42.31	59.176		
8,300.00	8,231.60	8,305.64	8,253.60	32.06	31.42	-90.53	203.99	-3,286.81	2,503.92	2,461.12	42.79	58.513		
8,400.00	8,331.60	8,405.64	8,353.60	32.38	31.76	-90.53	203.99	-3,286.81	2,503.92	2,460.64	43.27	57.863		
8,500.00	8,431.60	8,505.64	8,453.60	32.70	32.09	-90.53	203.99	-3,286.81	2,503.92	2,460.16	43.75	57.226		
8,600.00	8,531.60	8,605.64	8,553.60	33.03	32.42	-90.53	203.99	-3,286.81	2,503.92	2,459.68	44.24	56.603		
8,700.00	8,631.60	8,705.64	8,653.60	33.35	32.76	-90.53	203.99	-3,286.81	2,503.92	2,459.20	44.72	55.992		
8,800.00	8,731.60	8,805.64	8,753.60	33.68	33.09	-90.53	203.99	-3,286.81	2,503.92	2,458.72	45.20	55.394		
8,900.00	8,831.60	8,905.64	8,853.60	34.00	33.43	-90.53	203.99	-3,286.81	2,503.92	2,458.23	45.69	54.808		
9,000.00	8,931.60	9,005.64	8,953.60	34.33	33.76	-90.53	203.99	-3,286.81	2,503.92	2,457.75	46.17	54.233		
9,100.00	9,031.60	9,105.64	9,053.60	34.66	34.10	-90.53	203.99	-3,286.81	2,503.92	2,457.26	46.65	53.670		
9,200.00	9,131.60	9,205.64	9,153.60	34.98	34.44	-90.53	203.99	-3,286.81	2,503.92	2,456.78	47.14	53.118		
9,300.00	9,231.60	9,305.64	9,253.60	35.31	34.77	-90.53	203.99	-3,286.81	2,503.92	2,456.29	47.62	52.577		
9,400.00	9,331.60	9,405.64	9,353.60	35.64	35.11	-90.53	203.99	-3,286.81	2,503.92	2,455.81	48.11	52.046		
9,500.00	9,431.60	9,505.64	9,453.60	35.97	35.45	-90.53	203.99	-3,286.81	2,503.92	2,455.32	48.60	51.525		
9,600.00	9,531.60	9,605.64	9,553.60	36.30	35.79	-90.53	203.99	-3,286.81	2,503.92	2,454.83	49.08	51.014		
9,700.00	9,631.60	9,705.64	9,653.60	36.63	36.12	-90.53	203.99	-3,286.81	2,503.92	2,454.35	49.57	50.513		
9,800.00	9,731.60	9,805.64	9,753.60	36.96	36.46	-90.53	203.99	-3,286.81	2,503.92	2,453.86	50.06	50.021		

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 503H
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 503H	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	9,831.60	9,905.64	9,853.60	37.30	36.80	-90.53	203.99	-3,286.81	2,503.92	2,453.37	50.55	49.538		
9,913.44	9,845.04	9,919.09	9,867.04	37.34	36.85	-90.53	203.99	-3,286.81	2,503.92	2,453.31	50.61	49.474		
9,950.00	9,881.57	9,955.62	9,903.57	37.46	36.97	90.07	203.99	-3,286.81	2,503.92	2,453.13	50.78	49.305		
10,000.00	9,931.27	10,005.32	9,953.27	37.60	37.14	90.19	203.99	-3,286.81	2,503.93	2,452.92	51.01	49.087		
10,050.00	9,980.31	10,054.35	10,002.31	37.74	37.31	90.40	203.99	-3,286.81	2,503.98	2,452.76	51.22	48.882		
10,100.00	10,028.32	10,102.61	10,050.57	37.87	37.47	90.69	203.97	-3,286.81	2,504.12	2,452.69	51.43	48.691		
10,150.00	10,074.94	10,153.62	10,101.49	37.99	37.62	91.03	201.30	-3,286.79	2,504.37	2,452.75	51.61	48.521		
10,200.00	10,119.80	10,206.22	10,153.53	38.10	37.76	91.37	193.81	-3,286.71	2,504.71	2,452.93	51.78	48.369		
10,250.00	10,162.58	10,260.51	10,206.30	38.19	37.88	91.70	181.12	-3,286.59	2,505.14	2,453.20	51.94	48.233		
10,300.00	10,202.93	10,316.64	10,259.33	38.28	37.99	92.03	162.81	-3,286.41	2,505.64	2,453.57	52.08	48.113		
10,350.00	10,240.57	10,374.68	10,312.02	38.35	38.08	92.35	138.51	-3,286.17	2,506.21	2,454.01	52.20	48.009		
10,400.00	10,275.19	10,434.74	10,363.66	38.42	38.15	92.65	107.90	-3,285.87	2,506.82	2,454.50	52.32	47.918		
10,450.00	10,306.54	10,466.85	10,413.39	38.47	38.21	92.94	70.74	-3,285.51	2,507.45	2,455.04	52.42	47.838		
10,500.00	10,334.38	10,561.02	10,460.23	38.52	38.25	93.21	26.93	-3,285.08	2,508.08	2,455.58	52.51	47.767		
10,550.00	10,358.49	10,627.19	10,503.09	38.56	38.26	93.46	-23.43	-3,284.59	2,508.68	2,456.09	52.59	47.701		
10,600.00	10,378.70	10,695.23	10,540.80	38.60	38.26	93.67	-80.01	-3,284.04	2,509.23	2,456.56	52.68	47.636		
10,650.00	10,394.84	10,764.91	10,572.20	38.64	38.24	93.84	-142.17	-3,283.44	2,509.70	2,456.93	52.76	47.566		
10,700.00	10,406.80	10,835.96	10,596.21	38.68	38.22	93.97	-208.98	-3,282.78	2,510.06	2,457.20	52.86	47.488		
10,750.00	10,414.49	10,908.00	10,611.93	38.74	38.19	94.05	-279.23	-3,282.10	2,510.30	2,457.33	52.96	47.398		
10,800.00	10,417.84	10,980.59	10,618.73	38.82	38.16	94.09	-351.45	-3,281.39	2,510.40	2,457.32	53.08	47.293		
10,813.44	10,418.00	10,999.49	10,619.00	38.85	38.16	94.09	-370.35	-3,281.21	2,510.41	2,457.29	53.12	47.263		
10,900.00	10,418.00	11,086.05	10,619.00	39.04	38.18	94.09	-456.91	-3,280.37	2,510.42	2,457.05	53.37	47.042		
11,000.00	10,418.00	11,186.05	10,619.00	39.34	38.34	94.09	-556.90	-3,279.39	2,510.44	2,456.69	53.74	46.710		
11,100.00	10,418.00	11,286.05	10,619.00	39.72	38.60	94.09	-656.90	-3,278.41	2,510.45	2,456.23	54.22	46.299		
11,200.00	10,418.00	11,386.05	10,619.00	40.19	38.94	94.09	-756.89	-3,277.44	2,510.47	2,455.68	54.79	45.816		
11,300.00	10,418.00	11,486.05	10,619.00	40.72	39.35	94.09	-856.89	-3,276.46	2,510.49	2,455.03	55.46	45.268		
11,400.00	10,418.00	11,586.05	10,619.00	41.32	39.82	94.09	-956.88	-3,275.49	2,510.51	2,454.29	56.21	44.662		
11,500.00	10,418.00	11,686.05	10,619.00	41.98	40.35	94.09	-1,056.88	-3,274.51	2,510.52	2,453.47	57.05	44.006		
11,600.00	10,418.00	11,786.05	10,619.00	42.70	40.94	94.09	-1,156.87	-3,273.54	2,510.54	2,452.57	57.97	43.308		
11,700.00	10,418.00	11,886.05	10,619.00	43.47	41.59	94.09	-1,256.87	-3,272.56	2,510.56	2,451.59	58.97	42.575		
11,800.00	10,418.00	11,986.05	10,619.00	44.29	42.29	94.09	-1,356.86	-3,271.59	2,510.57	2,450.53	60.04	41.815		
11,900.00	10,418.00	12,086.05	10,619.00	45.15	43.03	94.09	-1,456.86	-3,270.61	2,510.59	2,449.41	61.18	41.034		
12,000.00	10,418.00	12,186.05	10,619.00	46.06	43.83	94.09	-1,556.86	-3,269.64	2,510.61	2,448.22	62.39	40.240		
12,100.00	10,418.00	12,286.05	10,619.00	47.01	44.67	94.09	-1,656.85	-3,268.66	2,510.62	2,446.96	63.66	39.437		
12,200.00	10,418.00	12,386.05	10,619.00	47.99	45.56	94.09	-1,756.85	-3,267.69	2,510.64	2,445.65	64.99	38.631		
12,300.00	10,418.00	12,486.05	10,619.00	49.02	46.49	94.09	-1,856.84	-3,266.71	2,510.66	2,444.29	66.37	37.826		
12,400.00	10,418.00	12,586.05	10,619.00	50.07	47.45	94.09	-1,956.84	-3,265.73	2,510.68	2,442.87	67.81	37.025		
12,500.00	10,418.00	12,686.05	10,619.00	51.16	48.45	94.09	-2,056.83	-3,264.76	2,510.69	2,441.40	69.29	36.232		
12,600.00	10,418.00	12,786.05	10,619.00	52.28	49.49	94.09	-2,156.83	-3,263.78	2,510.71	2,439.89	70.82	35.450		
12,700.00	10,418.00	12,886.05	10,619.00	53.42	50.56	94.09	-2,256.82	-3,262.81	2,510.73	2,438.33	72.40	34.680		
12,800.00	10,418.00	12,986.05	10,619.00	54.59	51.66	94.09	-2,356.82	-3,261.83	2,510.74	2,436.73	74.01	33.924		
12,900.00	10,418.00	13,086.05	10,619.00	55.78	52.79	94.09	-2,456.81	-3,260.86	2,510.76	2,435.10	75.66	33.184		
13,000.00	10,418.00	13,186.05	10,619.00	57.00	53.94	94.09	-2,556.81	-3,259.88	2,510.78	2,433.43	77.35	32.462		
13,100.00	10,418.00	13,286.05	10,619.00	58.24	55.12	94.09	-2,656.80	-3,258.91	2,510.80	2,431.73	79.06	31.756		
13,200.00	10,418.00	13,386.05	10,619.00	59.50	56.33	94.09	-2,756.80	-3,257.93	2,510.81	2,430.00	80.81	31.069		
13,300.00	10,418.00	13,486.05	10,619.00	60.77	57.55	94.09	-2,856.79	-3,256.96	2,510.83	2,428.24	82.59	30.401		
13,400.00	10,418.00	13,586.05	10,619.00	62.07	58.80	94.09	-2,956.79	-3,255.98	2,510.85	2,426.45	84.40	29.751		
13,500.00	10,418.00	13,686.05	10,619.00	63.38	60.06	94.09	-3,056.78	-3,255.01	2,510.86	2,424.64	86.23	29.120		
13,600.00	10,418.00	13,786.05	10,619.00	64.71	61.35	94.09	-3,156.78	-3,254.03	2,510.88	2,422.80	88.08	28.507		
13,700.00	10,418.00	13,886.05	10,619.00	66.05	62.65	94.09	-3,256.77	-3,253.05	2,510.90	2,420.94	89.95	27.913		
13,800.00	10,418.00	13,986.05	10,619.00	67.40	63.97	94.09	-3,356.77	-3,252.08	2,510.92	2,419.06	91.85	27.337		
13,900.00	10,418.00	14,086.05	10,619.00	68.77	65.30	94.09	-3,456.77	-3,251.10	2,510.93	2,417.17	93.77	26.778		

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 503H
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 503H	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		
14,000.00	10,418.00	14,186.05	10,619.00	70.15	66.65	94.09	-3,556.76	-3,250.13	2,510.95	2,415.25	95.70	26.237		
14,100.00	10,418.00	14,286.05	10,619.00	71.54	68.01	94.09	-3,656.76	-3,249.15	2,510.97	2,413.31	97.65	25.713		
14,200.00	10,418.00	14,386.05	10,619.00	72.95	69.38	94.09	-3,756.75	-3,248.18	2,510.98	2,411.36	99.62	25.205		
14,300.00	10,418.00	14,486.05	10,619.00	74.36	70.76	94.09	-3,856.75	-3,247.20	2,511.00	2,409.40	101.60	24.713		
14,400.00	10,418.00	14,586.05	10,619.00	75.78	72.16	94.09	-3,956.74	-3,246.23	2,511.02	2,407.41	103.60	24.237		
14,500.00	10,418.00	14,686.05	10,619.00	77.21	73.57	94.09	-4,056.74	-3,245.25	2,511.03	2,405.42	105.61	23.775		
14,600.00	10,418.00	14,786.05	10,619.00	78.65	74.98	94.09	-4,156.73	-3,244.28	2,511.05	2,403.41	107.64	23.328		
14,700.00	10,418.00	14,886.05	10,619.00	80.10	76.41	94.09	-4,256.73	-3,243.30	2,511.07	2,401.39	109.68	22.895		
14,800.00	10,418.00	14,986.05	10,619.00	81.55	77.84	94.09	-4,356.72	-3,242.33	2,511.09	2,399.36	111.72	22.476		
14,900.00	10,418.00	15,086.05	10,619.00	83.02	79.28	94.09	-4,456.72	-3,241.35	2,511.10	2,397.32	113.78	22.069		
15,000.00	10,418.00	15,186.05	10,619.00	84.49	80.74	94.09	-4,556.71	-3,240.37	2,511.12	2,395.27	115.85	21.675		
15,100.00	10,418.00	15,286.05	10,619.00	85.96	82.19	94.09	-4,656.71	-3,239.40	2,511.14	2,393.21	117.93	21.293		
15,200.00	10,418.00	15,386.05	10,619.00	87.45	83.66	94.09	-4,756.70	-3,238.42	2,511.15	2,391.14	120.02	20.923		
15,300.00	10,418.00	15,486.05	10,619.00	88.94	85.13	94.09	-4,856.70	-3,237.45	2,511.17	2,389.06	122.12	20.564		
15,400.00	10,418.00	15,586.05	10,619.00	90.43	86.61	94.09	-4,956.69	-3,236.47	2,511.19	2,386.97	124.22	20.215		
15,500.00	10,418.00	15,686.05	10,619.00	91.93	88.10	94.09	-5,056.69	-3,235.50	2,511.21	2,384.87	126.33	19.877		
15,600.00	10,418.00	15,786.05	10,619.00	93.43	89.59	94.09	-5,156.68	-3,234.52	2,511.22	2,382.77	128.46	19.549		
15,700.00	10,418.00	15,886.05	10,619.00	94.94	91.08	94.09	-5,256.68	-3,233.55	2,511.24	2,380.66	130.58	19.231		
15,800.00	10,418.00	15,986.05	10,619.00	96.46	92.58	94.09	-5,356.67	-3,232.57	2,511.26	2,378.54	132.72	18.922		
15,900.00	10,418.00	16,086.05	10,619.00	97.98	94.09	94.09	-5,456.67	-3,231.60	2,511.27	2,376.42	134.86	18.622		
16,000.00	10,418.00	16,186.05	10,619.00	99.50	95.60	94.09	-5,556.67	-3,230.62	2,511.29	2,374.29	137.01	18.330		
16,100.00	10,418.00	16,286.05	10,619.00	101.03	97.12	94.09	-5,656.66	-3,229.65	2,511.31	2,372.15	139.16	18.046		
16,200.00	10,418.00	16,386.05	10,619.00	102.56	98.64	94.09	-5,756.66	-3,228.67	2,511.33	2,370.01	141.32	17.771		
16,300.00	10,418.00	16,486.05	10,619.00	104.09	100.16	94.09	-5,856.65	-3,227.69	2,511.34	2,367.86	143.48	17.503		
16,400.00	10,418.00	16,586.05	10,619.00	105.63	101.69	94.09	-5,956.65	-3,226.72	2,511.36	2,365.71	145.65	17.242		
16,500.00	10,418.00	16,686.05	10,619.00	107.17	103.22	94.09	-6,056.64	-3,225.74	2,511.38	2,363.55	147.82	16.989		
16,600.00	10,418.00	16,786.05	10,619.00	108.72	104.76	94.09	-6,156.64	-3,224.77	2,511.39	2,361.39	150.00	16.742		
16,700.00	10,418.00	16,886.05	10,619.00	110.26	106.30	94.09	-6,256.63	-3,223.79	2,511.41	2,359.23	152.19	16.502		
16,800.00	10,418.00	16,986.05	10,619.00	111.81	107.84	94.09	-6,356.63	-3,222.82	2,511.43	2,357.06	154.37	16.269		
16,900.00	10,418.00	17,086.05	10,619.00	113.37	109.39	94.09	-6,456.62	-3,221.84	2,511.44	2,354.88	156.56	16.041		
17,000.00	10,418.00	17,186.05	10,619.00	114.92	110.94	94.09	-6,556.62	-3,220.87	2,511.46	2,352.70	158.76	15.819		
17,100.00	10,418.00	17,286.05	10,619.00	116.48	112.49	94.09	-6,656.61	-3,219.89	2,511.48	2,350.52	160.96	15.603		
17,200.00	10,418.00	17,386.05	10,619.00	118.04	114.04	94.09	-6,756.61	-3,218.92	2,511.50	2,348.33	163.16	15.393		
17,300.00	10,418.00	17,486.05	10,619.00	119.61	115.60	94.09	-6,856.60	-3,217.94	2,511.51	2,346.15	165.37	15.187		
17,400.00	10,418.00	17,586.05	10,619.00	121.17	117.16	94.09	-6,956.60	-3,216.97	2,511.53	2,343.95	167.58	14.987		
17,500.00	10,418.00	17,686.05	10,619.00	122.74	118.72	94.09	-7,056.59	-3,215.99	2,511.55	2,341.76	169.79	14.792		
17,600.00	10,418.00	17,786.05	10,619.00	124.31	120.29	94.09	-7,156.59	-3,215.01	2,511.56	2,339.56	172.01	14.602		
17,700.00	10,418.00	17,886.05	10,619.00	125.88	121.85	94.09	-7,256.58	-3,214.04	2,511.58	2,337.36	174.23	14.416		
17,800.00	10,418.00	17,986.05	10,619.00	127.46	123.42	94.09	-7,356.58	-3,213.06	2,511.60	2,335.15	176.45	14.234		
17,900.00	10,418.00	18,086.05	10,619.00	129.04	124.99	94.09	-7,456.57	-3,212.09	2,511.62	2,332.94	178.67	14.057		
18,000.00	10,418.00	18,186.05	10,619.00	130.61	126.57	94.09	-7,556.57	-3,211.11	2,511.63	2,330.73	180.90	13.884		
18,100.00	10,418.00	18,286.05	10,619.00	132.19	128.14	94.09	-7,656.57	-3,210.14	2,511.65	2,328.52	183.13	13.715		
18,200.00	10,418.00	18,386.05	10,619.00	133.78	129.72	94.09	-7,756.56	-3,209.16	2,511.67	2,326.31	185.36	13.550		
18,300.00	10,418.00	18,486.05	10,619.00	135.36	131.30	94.09	-7,856.56	-3,208.19	2,511.68	2,324.09	187.60	13.389		
18,400.00	10,418.00	18,586.05	10,619.00	136.94	132.88	94.09	-7,956.55	-3,207.21	2,511.70	2,321.87	189.83	13.231		
18,500.00	10,418.00	18,686.05	10,619.00	138.53	134.46	94.09	-8,056.55	-3,206.24	2,511.72	2,319.65	192.07	13.077		
18,600.00	10,418.00	18,786.05	10,619.00	140.12	136.04	94.09	-8,156.54	-3,205.26	2,511.73	2,317.42	194.31	12.926		
18,700.00	10,418.00	18,886.05	10,619.00	141.71	137.63	94.09	-8,256.54	-3,204.29	2,511.75	2,315.20	196.56	12.779		
18,800.00	10,418.00	18,986.05	10,619.00	143.30	139.22	94.09	-8,356.53	-3,203.31	2,511.77	2,312.97	198.80	12.635		
18,900.00	10,418.00	19,086.05	10,619.00	144.89	140.81	94.09	-8,456.53	-3,202.33	2,511.79	2,310.74	201.05	12.493		
19,000.00	10,418.00	19,186.05	10,619.00	146.49	142.40	94.09	-8,556.52	-3,201.36	2,511.80	2,308.50	203.30	12.355		
19,100.00	10,418.00	19,286.05	10,619.00	148.08	143.99	94.09	-8,656.52	-3,200.38	2,511.82	2,306.27	205.55	12.220		

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 503H
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 503H	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			
19,200.00	10,418.00	19,386.05	10,619.00	149.68	145.58	94.09	-8,756.51	-3,199.41	2,511.84	2,304.04	207.80	12.088			
19,300.00	10,418.00	19,486.05	10,619.00	151.27	147.17	94.09	-8,856.51	-3,198.43	2,511.85	2,301.80	210.06	11.958			
19,400.00	10,418.00	19,586.05	10,619.00	152.87	148.77	94.09	-8,956.50	-3,197.46	2,511.87	2,299.56	212.31	11.831			
19,500.00	10,418.00	19,686.05	10,619.00	154.47	150.37	94.09	-9,056.50	-3,196.48	2,511.89	2,297.32	214.57	11.707			
19,600.00	10,418.00	19,786.05	10,619.00	156.07	151.96	94.09	-9,156.49	-3,195.51	2,511.91	2,295.08	216.83	11.585			
19,700.00	10,418.00	19,886.05	10,619.00	157.67	153.56	94.09	-9,256.49	-3,194.53	2,511.92	2,292.83	219.09	11.465			
19,800.00	10,418.00	19,986.05	10,619.00	159.28	155.16	94.09	-9,356.48	-3,193.56	2,511.94	2,290.59	221.35	11.348			
19,900.00	10,418.00	20,086.05	10,619.00	160.88	156.76	94.09	-9,456.48	-3,192.58	2,511.96	2,288.34	223.62	11.233			
20,000.00	10,418.00	20,186.05	10,619.00	162.48	158.36	94.09	-9,556.47	-3,191.61	2,511.97	2,286.09	225.88	11.121			
20,100.00	10,418.00	20,286.05	10,619.00	164.09	159.97	94.09	-9,656.47	-3,190.63	2,511.99	2,283.84	228.15	11.010			
20,200.00	10,418.00	20,386.05	10,619.00	165.70	161.57	94.09	-9,756.47	-3,189.65	2,512.01	2,281.59	230.41	10.902			
20,300.00	10,418.00	20,486.05	10,619.00	167.30	163.18	94.09	-9,856.46	-3,188.68	2,512.03	2,279.34	232.68	10.796			
20,400.00	10,418.00	20,586.05	10,619.00	168.91	164.78	94.09	-9,956.46	-3,187.70	2,512.04	2,277.09	234.95	10.692			
20,500.00	10,418.00	20,686.05	10,619.00	170.52	166.39	94.09	-10,056.45	-3,186.73	2,512.06	2,274.84	237.22	10.589			
20,600.00	10,418.00	20,786.05	10,619.00	172.13	167.84	94.09	-10,156.45	-3,185.75	2,512.08	2,272.69	239.38	10.494 ES			
20,700.00	10,418.00	20,792.10	10,619.00	173.74	167.92	94.09	-10,162.50	-3,185.69	2,513.85	2,273.02	240.83	10.438			
20,800.00	10,418.00	20,792.10	10,619.00	175.35	167.92	94.09	-10,162.50	-3,185.69	2,519.59	2,277.74	241.85	10.418 SF			
20,900.00	10,418.00	20,792.10	10,619.00	176.97	167.92	94.09	-10,162.50	-3,185.69	2,529.27	2,286.77	242.50	10.430			
21,000.00	10,418.00	20,792.10	10,619.00	178.58	167.92	94.09	-10,162.50	-3,185.69	2,542.85	2,300.09	242.76	10.475			
21,100.00	10,418.00	20,792.10	10,619.00	180.19	167.92	94.09	-10,162.50	-3,185.69	2,560.26	2,317.61	242.65	10.551			
21,200.00	10,418.00	20,792.10	10,619.00	181.81	167.92	94.09	-10,162.50	-3,185.69	2,581.44	2,339.24	242.19	10.659			
21,300.00	10,418.00	20,792.10	10,619.00	183.42	167.92	94.09	-10,162.50	-3,185.69	2,606.28	2,364.87	241.41	10.796			
21,400.00	10,418.00	20,792.10	10,619.00	185.04	167.92	94.09	-10,162.50	-3,185.69	2,634.69	2,394.37	240.31	10.963			
21,500.00	10,418.00	20,792.10	10,619.00	186.65	167.92	94.09	-10,162.50	-3,185.69	2,666.54	2,427.60	238.94	11.160			
21,600.00	10,418.00	20,792.10	10,619.00	188.27	167.92	94.09	-10,162.50	-3,185.69	2,701.73	2,464.41	237.32	11.385			
21,700.00	10,418.00	20,792.10	10,619.00	189.89	167.92	94.09	-10,162.50	-3,185.69	2,740.11	2,504.64	235.46	11.637			
21,800.00	10,418.00	20,792.10	10,619.00	191.50	167.92	94.09	-10,162.50	-3,185.69	2,781.56	2,548.13	233.42	11.916			
21,900.00	10,418.00	20,792.10	10,619.00	193.12	167.92	94.09	-10,162.50	-3,185.69	2,825.94	2,594.73	231.22	12.222			
21,923.68	10,418.00	20,792.10	10,619.00	193.51	167.92	94.09	-10,162.50	-3,185.69	2,836.86	2,606.19	230.67	12.298			

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

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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	2,199.99	2,221.99	2,221.99	7.65	7.73	-23.98	-391.78	-2,861.72	2,887.22	2,876.35	10.87	265.497		
2,300.00	2,299.91	2,361.69	2,361.69	7.99	8.23	-24.05	-391.46	-2,861.34	2,883.48	2,872.01	11.47	251.338		
2,400.00	2,399.69	2,640.84	2,640.38	8.34	9.22	-24.11	-382.18	-2,849.94	2,873.02	2,860.62	12.40	231.708		
2,500.00	2,499.27	2,913.68	2,911.05	8.70	10.20	-24.07	-360.71	-2,823.58	2,854.09	2,840.80	13.28	214.852		
2,600.00	2,598.57	3,150.65	3,143.64	9.06	11.10	-23.98	-332.23	-2,788.61	2,827.08	2,813.01	14.07	200.941		
2,700.00	2,697.54	3,245.48	3,236.22	9.42	11.48	-24.07	-319.23	-2,772.65	2,795.82	2,781.26	14.55	192.117		
2,771.79	2,768.33	3,313.12	3,302.25	9.69	11.75	-24.15	-309.96	-2,761.28	2,771.98	2,757.08	14.90	186.038		
2,800.00	2,796.11	3,339.63	3,328.12	9.79	11.86	-24.13	-306.33	-2,756.82	2,762.39	2,747.35	15.04	183.706		
2,900.00	2,894.56	3,433.58	3,419.83	10.18	12.24	-24.04	-293.46	-2,741.01	2,728.39	2,712.87	15.52	175.784		
3,000.00	2,993.02	3,527.53	3,511.55	10.56	12.63	-23.94	-280.58	-2,725.21	2,694.39	2,678.38	16.01	168.303		
3,100.00	3,091.48	3,621.49	3,603.26	10.95	13.03	-23.85	-267.71	-2,709.40	2,660.40	2,643.90	16.50	161.230		
3,200.00	3,189.94	3,715.44	3,694.98	11.35	13.43	-23.75	-254.84	-2,693.60	2,626.42	2,609.43	17.00	154.537		
3,300.00	3,288.39	3,809.39	3,786.69	11.75	13.83	-23.65	-241.96	-2,677.79	2,592.45	2,574.95	17.49	148.199		
3,400.00	3,386.85	3,903.34	3,878.41	12.16	14.24	-23.54	-229.09	-2,661.98	2,558.48	2,540.49	17.99	142.190		
3,500.00	3,485.31	3,997.30	3,970.12	12.57	14.65	-23.44	-216.22	-2,646.18	2,524.52	2,506.02	18.50	136.487		
3,600.00	3,583.77	4,091.25	4,061.84	12.98	15.06	-23.33	-203.34	-2,630.37	2,490.57	2,471.57	19.00	131.070		
3,700.00	3,682.22	4,185.20	4,153.55	13.39	15.48	-23.22	-190.47	-2,614.57	2,456.62	2,437.12	19.51	125.920		
3,800.00	3,780.68	4,279.15	4,245.26	13.81	15.90	-23.10	-177.59	-2,598.76	2,422.69	2,402.67	20.02	121.020		
3,900.00	3,879.14	4,373.11	4,336.98	14.23	16.32	-22.98	-164.72	-2,582.96	2,388.76	2,368.23	20.53	116.352		
4,000.00	3,977.60	4,467.06	4,428.69	14.65	16.75	-22.86	-151.85	-2,567.15	2,354.85	2,333.80	21.04	111.902		
4,100.00	4,076.05	4,561.01	4,520.41	15.07	17.17	-22.74	-138.97	-2,551.35	2,320.94	2,299.38	21.56	107.655		
4,200.00	4,174.51	4,654.96	4,612.12	15.50	17.60	-22.61	-126.10	-2,535.54	2,287.04	2,264.97	22.08	103.600		
4,300.00	4,272.97	4,748.92	4,703.84	15.93	18.03	-22.47	-113.23	-2,519.74	2,253.16	2,230.56	22.59	99.724		
4,400.00	4,371.43	4,842.87	4,795.55	16.36	18.47	-22.34	-100.35	-2,503.93	2,219.28	2,196.17	23.11	96.016		
4,500.00	4,469.88	4,936.82	4,887.26	16.79	18.90	-22.20	-87.48	-2,488.13	2,185.42	2,161.78	23.63	92.466		
4,600.00	4,568.34	5,030.77	4,978.98	17.22	19.34	-22.05	-74.61	-2,472.32	2,151.57	2,127.41	24.16	89.065		
4,700.00	4,666.80	5,124.73	5,070.69	17.65	19.77	-21.90	-61.73	-2,456.52	2,117.73	2,093.05	24.68	85.804		
4,800.00	4,765.25	5,218.68	5,162.41	18.08	20.21	-21.74	-48.86	-2,440.71	2,083.90	2,058.70	25.21	82.675		
4,900.00	4,863.71	5,312.63	5,254.12	18.52	20.65	-21.58	-35.98	-2,424.90	2,050.09	2,024.36	25.73	79.670		
5,000.00	4,962.17	5,406.58	5,345.84	18.95	21.09	-21.42	-23.11	-2,409.10	2,016.29	1,990.03	26.26	76.783		

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 503H
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 503H	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	5,060.63	5,500.54	5,437.55	19.39	21.54	-21.25	-10.24	-2,393.29	1,982.51	1,955.72	26.79	74.007		
5,200.00	5,159.08	5,594.49	5,529.27	19.83	21.98	-21.07	2.64	-2,377.49	1,948.75	1,921.43	27.32	71.336		
5,300.00	5,257.54	5,688.44	5,620.98	20.27	22.42	-20.89	15.51	-2,361.68	1,915.00	1,887.15	27.85	68.766		
5,400.00	5,356.00	5,782.39	5,712.69	20.71	22.87	-20.70	28.38	-2,345.88	1,881.27	1,852.89	28.38	66.289		
5,500.00	5,454.46	5,876.35	5,804.41	21.15	23.31	-20.50	41.26	-2,330.07	1,847.56	1,818.65	28.91	63.902		
5,600.00	5,552.91	5,970.30	5,896.12	21.59	23.76	-20.30	54.13	-2,314.27	1,813.87	1,784.42	29.45	61.599		
5,700.00	5,651.37	6,064.25	5,987.84	22.03	24.21	-20.08	67.01	-2,298.46	1,780.20	1,750.22	29.98	59.377		
5,800.00	5,749.83	6,158.20	6,079.55	22.47	24.66	-19.86	79.88	-2,282.66	1,746.55	1,716.04	30.52	57.231		
5,900.00	5,848.29	6,252.16	6,171.27	22.91	25.10	-19.64	92.75	-2,266.85	1,712.93	1,681.88	31.05	55.159		
6,000.00	5,946.74	6,346.11	6,262.98	23.36	25.55	-19.40	105.63	-2,251.05	1,679.33	1,647.74	31.59	53.156		
6,100.00	6,045.20	6,440.06	6,354.70	23.80	26.00	-19.15	118.50	-2,235.24	1,645.76	1,613.63	32.13	51.219		
6,200.00	6,143.66	6,534.01	6,446.41	24.24	26.45	-18.89	131.37	-2,219.44	1,612.22	1,579.55	32.67	49.345		
6,300.00	6,242.12	6,627.97	6,538.12	24.69	26.90	-18.62	144.25	-2,203.63	1,578.71	1,545.49	33.21	47.531		
6,400.00	6,340.57	6,719.26	6,627.24	25.13	27.34	-18.35	156.76	-2,188.27	1,545.23	1,511.48	33.76	45.775		
6,500.00	6,439.03	6,800.00	6,706.24	25.58	27.73	-18.12	167.29	-2,175.34	1,512.55	1,478.25	34.30	44.103		
6,600.00	6,537.49	6,865.08	6,770.16	26.02	28.02	-17.96	175.02	-2,165.85	1,481.26	1,446.43	34.83	42.534		
6,700.00	6,635.95	6,938.20	6,842.21	26.47	28.34	-17.81	182.87	-2,156.21	1,451.44	1,416.09	35.35	41.060		
6,757.61	6,692.67	6,980.68	6,884.17	26.73	28.53	-17.74	187.04	-2,151.10	1,434.93	1,399.28	35.65	40.252		
6,800.00	6,734.44	7,012.13	6,915.29	26.91	28.66	-17.63	189.93	-2,147.55	1,423.31	1,387.44	35.87	39.683		
6,900.00	6,833.29	7,087.16	6,989.66	27.34	28.97	-17.40	196.18	-2,139.88	1,398.68	1,362.30	36.38	38.450		
7,000.00	6,932.50	7,163.21	7,065.23	27.75	29.27	-17.20	201.56	-2,133.26	1,378.00	1,341.13	36.88	37.368		
7,100.00	7,032.01	7,240.12	7,141.82	28.14	29.56	-17.04	206.05	-2,127.76	1,361.33	1,323.97	37.37	36.433		
7,200.00	7,131.74	7,317.72	7,219.21	28.51	29.84	-16.90	209.58	-2,123.42	1,348.71	1,310.87	37.84	35.641		
7,300.00	7,231.62	7,400.00	7,301.38	28.86	30.13	-16.80	212.24	-2,120.15	1,340.18	1,301.87	38.31	34.981		
7,400.00	7,331.60	7,474.24	7,375.58	29.19	30.37	-16.74	213.69	-2,118.38	1,335.73	1,296.99	38.75	34.471		
7,429.40	7,361.00	7,500.00	7,401.34	29.28	30.46	-90.56	213.97	-2,118.03	1,335.22	1,296.33	38.88	34.339		
7,500.00	7,431.60	7,554.66	7,456.00	29.50	30.63	-90.55	214.22	-2,117.72	1,334.79	1,295.60	39.18	34.066		
7,534.15	7,465.75	7,586.41	7,487.75	29.61	30.73	-90.55	214.22	-2,117.72	1,334.78	1,295.45	39.34	33.932		
7,600.00	7,531.60	7,652.26	7,553.60	29.82	30.93	-90.55	214.22	-2,117.72	1,334.78	1,295.14	39.65	33.667		
7,700.00	7,631.60	7,752.26	7,653.60	30.14	31.24	-90.55	214.22	-2,117.72	1,334.78	1,294.67	40.12	33.272		
7,800.00	7,731.60	7,852.26	7,753.60	30.45	31.55	-90.55	214.22	-2,117.72	1,334.78	1,294.20	40.59	32.886		
7,900.00	7,831.60	7,952.26	7,853.60	30.77	31.86	-90.55	214.22	-2,117.72	1,334.78	1,293.72	41.06	32.507		
8,000.00	7,931.60	8,052.26	7,953.60	31.09	32.17	-90.55	214.22	-2,117.72	1,334.78	1,293.25	41.53	32.137		
8,100.00	8,031.60	8,152.26	8,053.60	31.41	32.48	-90.55	214.22	-2,117.72	1,334.78	1,292.78	42.01	31.774		
8,200.00	8,131.60	8,252.26	8,153.60	31.73	32.79	-90.55	214.22	-2,117.72	1,334.78	1,292.30	42.48	31.419		
8,300.00	8,231.60	8,352.26	8,253.60	32.06	33.11	-90.55	214.22	-2,117.72	1,334.78	1,291.83	42.96	31.072		
8,400.00	8,331.60	8,452.26	8,353.60	32.38	33.42	-90.55	214.22	-2,117.72	1,334.78	1,291.35	43.43	30.731		
8,500.00	8,431.60	8,552.26	8,453.60	32.70	33.74	-90.55	214.22	-2,117.72	1,334.78	1,290.87	43.91	30.397		
8,600.00	8,531.60	8,652.26	8,553.60	33.03	34.05	-90.55	214.22	-2,117.72	1,334.78	1,290.39	44.39	30.070		
8,700.00	8,631.60	8,752.26	8,653.60	33.35	34.37	-90.55	214.22	-2,117.72	1,334.78	1,289.92	44.87	29.750		
8,800.00	8,731.60	8,852.26	8,753.60	33.68	34.69	-90.55	214.22	-2,117.72	1,334.78	1,289.44	45.35	29.436		
8,900.00	8,831.60	8,952.26	8,853.60	34.00	35.01	-90.55	214.22	-2,117.72	1,334.78	1,288.96	45.83	29.128		
9,000.00	8,931.60	9,052.26	8,953.60	34.33	35.33	-90.55	214.22	-2,117.72	1,334.78	1,288.48	46.31	28.826		
9,100.00	9,031.60	9,152.26	9,053.60	34.66	35.65	-90.55	214.22	-2,117.72	1,334.78	1,288.00	46.79	28.530		
9,200.00	9,131.60	9,252.26	9,153.60	34.98	35.97	-90.55	214.22	-2,117.72	1,334.78	1,287.52	47.27	28.239		
9,300.00	9,231.60	9,352.26	9,253.60	35.31	36.29	-90.55	214.22	-2,117.72	1,334.78	1,287.03	47.75	27.954		
9,400.00	9,331.60	9,452.26	9,353.60	35.64	36.61	-90.55	214.22	-2,117.72	1,334.78	1,286.55	48.23	27.675		
9,500.00	9,431.60	9,552.26	9,453.60	35.97	36.94	-90.55	214.22	-2,117.72	1,334.78	1,286.07	48.71	27.401		
9,600.00	9,531.60	9,652.26	9,553.60	36.30	37.26	-90.55	214.22	-2,117.72	1,334.78	1,285.59	49.20	27.131		
9,700.00	9,631.60	9,752.26	9,653.60	36.63	37.59	-90.55	214.22	-2,117.72	1,334.78	1,285.10	49.68	26.867		
9,800.00	9,731.60	9,852.26	9,753.60	36.96	37.91	-90.55	214.22	-2,117.72	1,334.78	1,284.62	50.16	26.608		
9,900.00	9,831.60	9,952.26	9,853.60	37.30	38.24	-90.55	214.22	-2,117.72	1,334.78	1,284.13	50.65	26.353		

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 503H
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 503H	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		
9,913.44	9,845.04	9,965.70	9,867.04	37.34	38.28	-90.55	214.22	-2,117.72	1,334.78	1,284.07	50.71	26.320		
9,913.80	9,845.40	9,966.06	9,867.40	37.34	38.28	90.02	214.22	-2,117.72	1,334.78	1,284.07	50.72	26.319		
9,950.00	9,881.57	10,002.24	9,903.57	37.46	38.40	90.07	214.22	-2,117.72	1,334.78	1,283.90	50.89	26.230		
10,000.00	9,931.27	10,054.07	9,955.40	37.60	38.56	90.30	213.96	-2,117.71	1,334.79	1,283.67	51.12	26.110		
10,050.00	9,980.31	10,111.02	10,012.15	37.74	38.72	90.59	209.42	-2,117.45	1,334.64	1,283.30	51.34	25.995		
10,100.00	10,028.32	10,168.67	10,068.85	37.87	38.86	90.88	199.11	-2,116.85	1,334.28	1,282.74	51.54	25.888		
10,150.00	10,074.94	10,226.96	10,124.82	37.99	38.98	91.16	182.97	-2,115.92	1,333.70	1,281.98	51.72	25.789		
10,200.00	10,119.80	10,285.79	10,179.36	38.10	39.08	91.43	161.01	-2,114.65	1,332.89	1,281.02	51.87	25.697		
10,250.00	10,162.58	10,345.07	10,231.74	38.19	39.15	91.68	133.35	-2,113.06	1,331.85	1,279.85	52.00	25.612		
10,300.00	10,202.93	10,404.70	10,281.26	38.28	39.21	91.92	100.24	-2,111.15	1,330.59	1,278.47	52.11	25.532		
10,350.00	10,240.57	10,464.55	10,327.22	38.35	39.24	92.13	62.01	-2,108.95	1,329.11	1,276.90	52.21	25.456		
10,400.00	10,275.19	10,524.50	10,369.01	38.42	39.25	92.32	19.14	-2,106.47	1,327.42	1,275.12	52.30	25.381		
10,450.00	10,306.54	10,584.43	10,406.07	38.47	39.24	92.49	-27.84	-2,103.77	1,325.53	1,273.14	52.38	25.305		
10,500.00	10,334.38	10,644.21	10,437.95	38.52	39.21	92.63	-78.29	-2,100.86	1,323.45	1,270.98	52.47	25.225		
10,550.00	10,358.49	10,703.71	10,464.27	38.56	39.17	92.74	-131.54	-2,097.79	1,321.21	1,268.66	52.55	25.141		
10,600.00	10,378.70	10,762.83	10,484.82	38.60	39.12	92.83	-186.85	-2,094.60	1,318.83	1,266.18	52.65	25.051		
10,650.00	10,394.84	10,821.46	10,499.45	38.64	39.07	92.89	-243.51	-2,091.33	1,316.33	1,263.58	52.75	24.955		
10,700.00	10,406.80	10,879.51	10,508.15	38.68	39.01	92.93	-300.78	-2,088.03	1,313.73	1,260.87	52.86	24.852		
10,750.00	10,414.49	10,936.91	10,511.00	38.74	38.97	92.94	-358.00	-2,084.73	1,311.08	1,258.09	52.98	24.745		
10,800.00	10,417.84	10,971.04	10,511.00	38.82	38.95	93.07	-392.08	-2,082.97	1,308.82	1,255.71	53.11	24.643		
10,813.44	10,418.00	10,980.26	10,511.00	38.85	38.95	93.11	-401.29	-2,082.56	1,308.35	1,255.21	53.15	24.618		
10,900.00	10,418.00	11,039.71	10,511.00	39.04	38.92	93.12	-460.71	-2,080.66	1,306.44	1,253.04	53.40	24.464		
10,949.32	10,418.00	11,073.75	10,511.00	39.17	38.93	93.12	-494.75	-2,080.13	1,306.16	1,252.58	53.57	24.380 CC		
11,000.00	10,418.00	11,124.21	10,511.00	39.34	38.94	93.12	-545.20	-2,079.63	1,306.17	1,252.39	53.78	24.288		
11,100.00	10,418.00	11,224.21	10,511.00	39.72	39.07	93.12	-645.20	-2,078.66	1,306.18	1,251.92	54.26	24.073		
11,200.00	10,418.00	11,324.21	10,511.00	40.19	39.33	93.12	-745.19	-2,077.68	1,306.20	1,251.36	54.84	23.820		
11,300.00	10,418.00	11,424.21	10,511.00	40.72	39.69	93.12	-845.19	-2,076.71	1,306.22	1,250.71	55.50	23.534		
11,400.00	10,418.00	11,524.21	10,511.00	41.32	40.15	93.12	-945.18	-2,075.73	1,306.23	1,249.97	56.26	23.218		
11,500.00	10,418.00	11,624.21	10,511.00	41.98	40.67	93.12	-1,045.18	-2,074.76	1,306.25	1,249.15	57.10	22.876		
11,600.00	10,418.00	11,724.21	10,511.00	42.70	41.25	93.12	-1,145.18	-2,073.78	1,306.27	1,248.24	58.03	22.512		
11,700.00	10,418.00	11,824.21	10,511.00	43.47	41.89	93.12	-1,245.17	-2,072.80	1,306.28	1,247.26	59.03	22.130		
11,800.00	10,418.00	11,924.21	10,511.00	44.29	42.59	93.12	-1,345.17	-2,071.83	1,306.30	1,246.20	60.10	21.735		
11,900.00	10,418.00	12,024.21	10,511.00	45.15	43.33	93.12	-1,445.16	-2,070.85	1,306.32	1,245.07	61.25	21.328		
12,000.00	10,418.00	12,124.21	10,511.00	46.06	44.12	93.12	-1,545.16	-2,069.88	1,306.33	1,243.87	62.46	20.915		
12,100.00	10,418.00	12,224.21	10,511.00	47.01	44.96	93.12	-1,645.15	-2,068.90	1,306.35	1,242.62	63.73	20.497		
12,200.00	10,418.00	12,324.21	10,511.00	47.99	45.84	93.12	-1,745.15	-2,067.93	1,306.37	1,241.30	65.07	20.078		
12,300.00	10,418.00	12,424.21	10,511.00	49.02	46.76	93.12	-1,845.14	-2,066.95	1,306.38	1,239.93	66.45	19.659		
12,400.00	10,418.00	12,524.21	10,511.00	50.07	47.72	93.12	-1,945.14	-2,065.98	1,306.40	1,238.51	67.89	19.242		
12,500.00	10,418.00	12,624.21	10,511.00	51.16	48.72	93.12	-2,045.13	-2,065.00	1,306.42	1,237.04	69.38	18.830		
12,600.00	10,418.00	12,724.21	10,511.00	52.28	49.75	93.12	-2,145.13	-2,064.02	1,306.43	1,235.52	70.91	18.423		
12,700.00	10,418.00	12,824.21	10,511.00	53.42	50.81	93.12	-2,245.12	-2,063.05	1,306.45	1,233.96	72.49	18.022		
12,800.00	10,418.00	12,924.21	10,511.00	54.59	51.90	93.12	-2,345.12	-2,062.07	1,306.47	1,232.36	74.11	17.630		
12,900.00	10,418.00	13,024.21	10,511.00	55.78	53.02	93.12	-2,445.11	-2,061.10	1,306.49	1,230.72	75.76	17.245		
13,000.00	10,418.00	13,124.21	10,511.00	57.00	54.17	93.12	-2,545.11	-2,060.12	1,306.50	1,229.05	77.45	16.869		
13,100.00	10,418.00	13,224.21	10,511.00	58.24	55.34	93.12	-2,645.10	-2,059.15	1,306.52	1,227.35	79.17	16.503		
13,200.00	10,418.00	13,324.21	10,511.00	59.50	56.54	93.12	-2,745.10	-2,058.17	1,306.54	1,225.61	80.92	16.146		
13,300.00	10,418.00	13,424.21	10,511.00	60.77	57.76	93.12	-2,845.09	-2,057.19	1,306.55	1,223.85	82.70	15.798		
13,400.00	10,418.00	13,524.21	10,511.00	62.07	58.99	93.12	-2,945.09	-2,056.22	1,306.57	1,222.06	84.51	15.461		
13,500.00	10,418.00	13,624.21	10,511.00	63.38	60.25	93.11	-3,045.08	-2,055.24	1,306.59	1,220.24	86.34	15.133		
13,600.00	10,418.00	13,724.21	10,511.00	64.71	61.53	93.11	-3,145.08	-2,054.27	1,306.60	1,218.40	88.20	14.814		
13,700.00	10,418.00	13,824.21	10,511.00	66.05	62.82	93.11	-3,245.08	-2,053.29	1,306.62	1,216.54	90.08	14.506		
13,800.00	10,418.00	13,924.21	10,511.00	67.40	64.13	93.11	-3,345.07	-2,052.32	1,306.64	1,214.66	91.98	14.206		

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 503H
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 503H	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	10,418.00	14,024.21	10,511.00	68.77	65.46	93.11	-3,445.07	-2,051.34	1,306.65	1,212.76	93.89	13.916		
14,000.00	10,418.00	14,124.21	10,511.00	70.15	66.80	93.11	-3,545.06	-2,050.36	1,306.67	1,210.84	95.83	13.635		
14,100.00	10,418.00	14,224.21	10,511.00	71.54	68.15	93.11	-3,645.06	-2,049.39	1,306.69	1,208.90	97.79	13.363		
14,200.00	10,418.00	14,324.21	10,511.00	72.95	69.52	93.11	-3,745.05	-2,048.41	1,306.70	1,206.95	99.76	13.099		
14,300.00	10,418.00	14,424.21	10,511.00	74.36	70.89	93.11	-3,845.05	-2,047.44	1,306.72	1,204.98	101.74	12.844		
14,400.00	10,418.00	14,524.21	10,511.00	75.78	72.28	93.11	-3,945.04	-2,046.46	1,306.74	1,203.00	103.74	12.596		
14,500.00	10,418.00	14,624.21	10,511.00	77.21	73.68	93.11	-4,045.04	-2,045.49	1,306.75	1,201.00	105.76	12.356		
14,600.00	10,418.00	14,724.21	10,511.00	78.65	75.09	93.11	-4,145.03	-2,044.51	1,306.77	1,198.99	107.78	12.124		
14,700.00	10,418.00	14,824.21	10,511.00	80.10	76.51	93.11	-4,245.03	-2,043.54	1,306.79	1,196.97	109.82	11.899		
14,800.00	10,418.00	14,924.21	10,511.00	81.55	77.94	93.11	-4,345.02	-2,042.56	1,306.81	1,194.93	111.87	11.681		
14,900.00	10,418.00	15,024.21	10,511.00	83.02	79.38	93.11	-4,445.02	-2,041.58	1,306.82	1,192.89	113.93	11.470		
15,000.00	10,418.00	15,124.21	10,511.00	84.49	80.83	93.11	-4,545.01	-2,040.61	1,306.84	1,190.83	116.00	11.265		
15,100.00	10,418.00	15,224.21	10,511.00	85.96	82.28	93.11	-4,645.01	-2,039.63	1,306.86	1,188.77	118.09	11.067		
15,200.00	10,418.00	15,324.21	10,511.00	87.45	83.74	93.11	-4,745.00	-2,038.66	1,306.87	1,186.70	120.18	10.875		
15,300.00	10,418.00	15,424.21	10,511.00	88.94	85.21	93.11	-4,845.00	-2,037.68	1,306.89	1,184.61	122.27	10.688		
15,400.00	10,418.00	15,524.21	10,511.00	90.43	86.68	93.11	-4,944.99	-2,036.71	1,306.91	1,182.52	124.38	10.507		
15,500.00	10,418.00	15,624.21	10,511.00	91.93	88.16	93.11	-5,044.99	-2,035.73	1,306.92	1,180.43	126.50	10.332		
15,600.00	10,418.00	15,724.21	10,511.00	93.43	89.65	93.11	-5,144.98	-2,034.75	1,306.94	1,178.32	128.62	10.161		
15,700.00	10,418.00	15,824.21	10,511.00	94.94	91.14	93.11	-5,244.98	-2,033.78	1,306.96	1,176.21	130.75	9.996		
15,800.00	10,418.00	15,924.21	10,511.00	96.46	92.64	93.11	-5,344.98	-2,032.80	1,306.97	1,174.09	132.89	9.835		
15,900.00	10,418.00	16,024.21	10,511.00	97.98	94.14	93.11	-5,444.97	-2,031.83	1,306.99	1,171.96	135.03	9.679		
16,000.00	10,418.00	16,124.21	10,511.00	99.50	95.65	93.11	-5,544.97	-2,030.85	1,307.01	1,169.83	137.18	9.528		
16,100.00	10,418.00	16,224.21	10,511.00	101.03	97.16	93.11	-5,644.96	-2,029.88	1,307.02	1,167.69	139.34	9.380		
16,200.00	10,418.00	16,324.21	10,511.00	102.56	98.67	93.11	-5,744.96	-2,028.90	1,307.04	1,165.54	141.50	9.237		
16,300.00	10,418.00	16,424.21	10,511.00	104.09	100.19	93.11	-5,844.95	-2,027.92	1,307.06	1,163.39	143.66	9.098		
16,400.00	10,418.00	16,524.21	10,511.00	105.63	101.72	93.11	-5,944.95	-2,026.95	1,307.07	1,161.24	145.83	8.963		
16,500.00	10,418.00	16,624.21	10,511.00	107.17	103.25	93.11	-6,044.94	-2,025.97	1,307.09	1,159.08	148.01	8.831		
16,600.00	10,418.00	16,724.21	10,511.00	108.72	104.78	93.11	-6,144.94	-2,025.00	1,307.11	1,156.92	150.19	8.703		
16,700.00	10,418.00	16,824.21	10,511.00	110.26	106.32	93.11	-6,244.93	-2,024.02	1,307.12	1,154.75	152.38	8.578		
16,800.00	10,418.00	16,924.21	10,511.00	111.81	107.85	93.11	-6,344.93	-2,023.05	1,307.14	1,152.57	154.57	8.457		
16,900.00	10,418.00	17,024.21	10,511.00	113.37	109.40	93.11	-6,444.92	-2,022.07	1,307.16	1,150.40	156.76	8.339		
17,000.00	10,418.00	17,124.21	10,511.00	114.92	110.94	93.11	-6,544.92	-2,021.10	1,307.18	1,148.22	158.96	8.223		
17,100.00	10,418.00	17,224.21	10,511.00	116.48	112.49	93.11	-6,644.91	-2,020.12	1,307.19	1,146.03	161.16	8.111		
17,200.00	10,418.00	17,324.21	10,511.00	118.04	114.04	93.11	-6,744.91	-2,019.14	1,307.21	1,143.84	163.37	8.002		
17,300.00	10,418.00	17,424.21	10,511.00	119.61	115.60	93.11	-6,844.90	-2,018.17	1,307.23	1,141.65	165.57	7.895		
17,400.00	10,418.00	17,524.21	10,511.00	121.17	117.15	93.11	-6,944.90	-2,017.19	1,307.24	1,139.46	167.79	7.791		
17,500.00	10,418.00	17,624.21	10,511.00	122.74	118.71	93.11	-7,044.89	-2,016.22	1,307.26	1,137.26	170.00	7.690		
17,600.00	10,418.00	17,724.21	10,511.00	124.31	120.27	93.11	-7,144.89	-2,015.24	1,307.28	1,135.06	172.22	7.591		
17,700.00	10,418.00	17,824.21	10,511.00	125.88	121.84	93.11	-7,244.89	-2,014.27	1,307.29	1,132.85	174.44	7.494		
17,800.00	10,418.00	17,924.21	10,511.00	127.46	123.41	93.11	-7,344.88	-2,013.29	1,307.31	1,130.64	176.67	7.400		
17,900.00	10,418.00	18,024.21	10,511.00	129.04	124.97	93.11	-7,444.88	-2,012.31	1,307.33	1,128.43	178.89	7.308		
18,000.00	10,418.00	18,124.21	10,511.00	130.61	126.54	93.11	-7,544.87	-2,011.34	1,307.34	1,126.22	181.12	7.218		
18,100.00	10,418.00	18,224.21	10,511.00	132.19	128.12	93.11	-7,644.87	-2,010.36	1,307.36	1,124.01	183.36	7.130		
18,200.00	10,418.00	18,324.21	10,511.00	133.78	129.69	93.11	-7,744.86	-2,009.39	1,307.38	1,121.79	185.59	7.044		
18,300.00	10,418.00	18,424.21	10,511.00	135.36	131.27	93.11	-7,844.86	-2,008.41	1,307.39	1,119.57	187.83	6.961		
18,400.00	10,418.00	18,524.21	10,511.00	136.94	132.85	93.11	-7,944.85	-2,007.44	1,307.41	1,117.34	190.07	6.879		
18,500.00	10,418.00	18,624.21	10,511.00	138.53	134.43	93.11	-8,044.85	-2,006.46	1,307.43	1,115.12	192.31	6.799		
18,600.00	10,418.00	18,724.21	10,511.00	140.12	136.01	93.11	-8,144.84	-2,005.48	1,307.44	1,112.89	194.55	6.720		
18,700.00	10,418.00	18,824.21	10,511.00	141.71	137.59	93.11	-8,244.84	-2,004.51	1,307.46	1,110.67	196.80	6.644		
18,800.00	10,418.00	18,924.21	10,511.00	143.30	139.18	93.11	-8,344.83	-2,003.53	1,307.48	1,108.43	199.04	6.569		
18,900.00	10,418.00	19,024.21	10,511.00	144.89	140.76	93.11	-8,444.83	-2,002.56	1,307.49	1,106.20	201.29	6.495		
19,000.00	10,418.00	19,124.21	10,511.00	146.49	142.35	93.11	-8,544.82	-2,001.58	1,307.51	1,103.97	203.54	6.424		

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 503H
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 503H	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		
19,100.00	10,418.00	19,224.21	10,511.00	148.08	143.94	93.11	-8,644.82	-2,000.61	1,307.53	1,101.73	205.80	6.353		
19,200.00	10,418.00	19,324.21	10,511.00	149.68	145.53	93.11	-8,744.81	-1,999.63	1,307.55	1,099.49	208.05	6.285		
19,300.00	10,418.00	19,424.21	10,511.00	151.27	147.12	93.11	-8,844.81	-1,998.65	1,307.56	1,097.25	210.31	6.217		
19,400.00	10,418.00	19,524.21	10,511.00	152.87	148.72	93.11	-8,944.80	-1,997.68	1,307.58	1,095.01	212.57	6.151		
19,500.00	10,418.00	19,624.21	10,511.00	154.47	150.31	93.11	-9,044.80	-1,996.70	1,307.60	1,092.77	214.83	6.087		
19,600.00	10,418.00	19,724.21	10,511.00	156.07	151.91	93.11	-9,144.79	-1,995.73	1,307.61	1,090.53	217.09	6.023		
19,700.00	10,418.00	19,824.21	10,511.00	157.67	153.51	93.11	-9,244.79	-1,994.75	1,307.63	1,088.28	219.35	5.961		
19,800.00	10,418.00	19,924.21	10,511.00	159.28	155.10	93.11	-9,344.79	-1,993.78	1,307.65	1,086.03	221.61	5.901		
19,900.00	10,418.00	20,024.21	10,511.00	160.88	156.70	93.11	-9,444.78	-1,992.80	1,307.66	1,083.78	223.88	5.841		
20,000.00	10,418.00	20,124.21	10,511.00	162.48	158.30	93.11	-9,544.78	-1,991.83	1,307.68	1,081.53	226.15	5.782		
20,100.00	10,418.00	20,224.21	10,511.00	164.09	159.90	93.11	-9,644.77	-1,990.85	1,307.70	1,079.28	228.41	5.725		
20,200.00	10,418.00	20,324.21	10,511.00	165.70	161.51	93.11	-9,744.77	-1,989.87	1,307.71	1,077.03	230.68	5.669		
20,300.00	10,418.00	20,424.21	10,511.00	167.30	163.11	93.11	-9,844.76	-1,988.90	1,307.73	1,074.78	232.95	5.614		
20,400.00	10,418.00	20,524.21	10,511.00	168.91	164.71	93.11	-9,944.76	-1,987.92	1,307.75	1,072.52	235.23	5.560		
20,500.00	10,418.00	20,624.21	10,511.00	170.52	166.32	93.11	-10,044.75	-1,986.95	1,307.76	1,070.26	237.50	5.506		
20,600.00	10,418.00	20,724.21	10,511.00	172.13	167.93	93.11	-10,144.75	-1,985.97	1,307.78	1,068.01	239.77	5.454		
20,700.00	10,418.00	20,824.21	10,511.00	173.74	169.53	93.11	-10,244.74	-1,985.00	1,307.80	1,065.75	242.05	5.403		
20,800.00	10,418.00	20,924.21	10,511.00	175.35	171.14	93.11	-10,344.74	-1,984.02	1,307.81	1,063.49	244.33	5.353		
20,900.00	10,418.00	21,024.21	10,511.00	176.97	172.75	93.11	-10,444.73	-1,983.04	1,307.83	1,061.23	246.60	5.303		
21,000.00	10,418.00	21,124.21	10,511.00	178.58	174.36	93.11	-10,544.73	-1,982.07	1,307.85	1,058.97	248.88	5.255		
21,100.00	10,418.00	21,224.21	10,511.00	180.19	175.97	93.11	-10,644.72	-1,981.09	1,307.86	1,056.71	251.16	5.207		
21,200.00	10,418.00	21,324.21	10,511.00	181.81	177.58	93.11	-10,744.72	-1,980.12	1,307.88	1,054.44	253.44	5.161		
21,300.00	10,418.00	21,424.21	10,511.00	183.42	179.19	93.11	-10,844.71	-1,979.14	1,307.90	1,052.18	255.72	5.115		
21,400.00	10,418.00	21,524.21	10,511.00	185.04	180.80	93.11	-10,944.71	-1,978.17	1,307.92	1,049.91	258.00	5.069		
21,500.00	10,418.00	21,624.21	10,511.00	186.65	182.42	93.11	-11,044.70	-1,977.19	1,307.93	1,047.65	260.29	5.025		
21,600.00	10,418.00	21,724.21	10,511.00	188.27	184.03	93.11	-11,144.70	-1,976.21	1,307.95	1,045.38	262.57	4.981		
21,700.00	10,418.00	21,824.21	10,511.00	189.89	185.65	93.11	-11,244.69	-1,975.24	1,307.97	1,043.11	264.85	4.938		
21,800.00	10,418.00	21,924.21	10,511.00	191.50	187.26	93.11	-11,344.69	-1,974.26	1,307.98	1,040.84	267.14	4.896		
21,900.00	10,418.00	22,024.21	10,511.00	193.12	188.88	93.11	-11,444.69	-1,973.29	1,308.00	1,038.57	269.43	4.855		
21,900.00	10,418.00	22,024.22	10,511.00	193.12	188.88	93.11	-11,444.69	-1,973.29	1,308.00	1,038.57	269.43	4.855		
21,923.68	10,418.00	22,046.30	10,511.00	193.51	189.23	93.11	-11,466.77	-1,973.07	1,308.00	1,038.06	269.95	4.845 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 503H
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 503H	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		
1,907.26	1,907.26	1,929.26	1,929.26	6.60	6.68	-96.24	-317.19	-2,899.90	2,917.20	2,907.80	9.40	310.492		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-96.24	-317.19	-2,899.90	2,917.28	2,907.47	9.81	297.397		
2,100.00	2,100.00	2,083.64	2,083.64	7.29	7.23	-96.23	-316.52	-2,900.53	2,918.00	2,907.73	10.27	284.049		
2,200.00	2,199.99	2,152.17	2,152.13	7.65	7.48	-22.36	-314.98	-2,901.97	2,918.64	2,907.95	10.69	272.975		
2,300.00	2,299.91	2,220.67	2,220.54	7.99	7.72	-22.34	-312.54	-2,904.26	2,917.94	2,906.84	11.11	262.735		
2,400.00	2,399.69	2,300.00	2,299.69	8.34	8.00	-22.30	-308.59	-2,907.95	2,915.94	2,904.39	11.55	252.501		
2,500.00	2,499.27	2,357.55	2,357.03	8.70	8.21	-22.29	-304.98	-2,911.33	2,912.53	2,900.59	11.93	244.044		
2,600.00	2,598.57	2,425.91	2,425.03	9.06	8.45	-22.26	-299.87	-2,916.12	2,907.81	2,895.46	12.35	235.468		
2,700.00	2,697.54	2,500.00	2,498.57	9.42	8.72	-22.23	-293.34	-2,922.24	2,901.77	2,888.99	12.78	227.056		
2,771.79	2,768.33	2,543.22	2,541.39	9.69	8.88	-22.23	-289.04	-2,926.26	2,896.60	2,883.53	13.06	221.731		
2,800.00	2,796.11	2,563.62	2,561.58	9.79	8.96	-22.21	-286.89	-2,928.27	2,894.47	2,881.29	13.18	219.537		
2,900.00	2,894.56	2,663.22	2,660.11	10.18	9.32	-22.11	-276.27	-2,938.22	2,887.07	2,873.38	13.69	210.891		
3,000.00	2,993.02	2,762.82	2,758.64	10.56	9.70	-22.01	-265.66	-2,948.16	2,879.68	2,865.48	14.20	202.807		
3,100.00	3,091.48	2,862.42	2,857.17	10.95	10.08	-21.90	-255.04	-2,958.11	2,872.29	2,857.58	14.71	195.235		
3,200.00	3,189.94	2,962.01	2,955.70	11.35	10.46	-21.80	-244.42	-2,968.05	2,864.92	2,849.69	15.23	188.136		
3,300.00	3,288.39	3,061.61	3,054.23	11.75	10.84	-21.70	-233.80	-2,978.00	2,857.55	2,841.81	15.75	181.470		
3,400.00	3,386.85	3,161.21	3,152.76	12.16	11.23	-21.60	-223.18	-2,987.94	2,850.20	2,833.93	16.27	175.202		
3,500.00	3,485.31	3,260.81	3,251.29	12.57	11.62	-21.50	-212.56	-2,997.89	2,842.85	2,826.06	16.79	169.301		
3,600.00	3,583.77	3,360.41	3,349.82	12.98	12.01	-21.39	-201.94	-3,007.83	2,835.51	2,818.19	17.32	163.739		
3,700.00	3,682.22	3,460.01	3,448.35	13.39	12.40	-21.29	-191.32	-3,017.78	2,828.18	2,810.33	17.84	158.488		
3,800.00	3,780.68	3,559.61	3,546.88	13.81	12.80	-21.18	-180.71	-3,027.72	2,820.86	2,802.49	18.37	153.526		
3,900.00	3,879.14	3,659.21	3,645.41	14.23	13.19	-21.08	-170.09	-3,037.67	2,813.55	2,794.64	18.90	148.830		
4,000.00	3,977.60	3,758.80	3,743.94	14.65	13.59	-20.97	-159.47	-3,047.61	2,806.25	2,786.81	19.44	144.381		
4,100.00	4,076.05	3,858.40	3,842.47	15.07	13.99	-20.87	-148.85	-3,057.56	2,798.96	2,778.99	19.97	140.161		
4,200.00	4,174.51	3,958.00	3,941.00	15.50	14.40	-20.76	-138.23	-3,067.50	2,791.67	2,771.17	20.50	136.154		
4,300.00	4,272.97	4,057.60	4,039.53	15.93	14.80	-20.65	-127.61	-3,077.45	2,784.40	2,763.36	21.04	132.344		
4,400.00	4,371.43	4,157.20	4,138.06	16.36	15.20	-20.54	-116.99	-3,087.39	2,777.14	2,755.56	21.58	128.719		
4,500.00	4,469.88	4,256.80	4,236.59	16.79	15.61	-20.44	-106.37	-3,097.34	2,769.89	2,747.77	22.11	125.265		
4,600.00	4,568.34	4,356.40	4,335.12	17.22	16.01	-20.33	-95.76	-3,107.28	2,762.64	2,739.99	22.65	121.972		
4,700.00	4,666.80	4,456.00	4,433.66	17.65	16.42	-20.22	-85.14	-3,117.23	2,755.41	2,732.22	23.19	118.828		
4,800.00	4,765.25	4,555.59	4,532.19	18.08	16.83	-20.11	-74.52	-3,127.17	2,748.19	2,724.46	23.73	115.825		
4,900.00	4,863.71	4,655.19	4,630.72	18.52	17.24	-20.00	-63.90	-3,137.12	2,740.97	2,716.71	24.27	112.952		

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 503H
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 503H	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	4,962.17	4,754.79	4,729.25	18.95	17.64	-19.89	-53.28	-3,147.06	2,733.77	2,708.97	24.81	110.203		
5,100.00	5,060.63	4,854.39	4,827.78	19.39	18.05	-19.77	-42.66	-3,157.01	2,726.58	2,701.23	25.35	107.570		
5,200.00	5,159.08	4,953.99	4,926.31	19.83	18.46	-19.66	-32.04	-3,166.95	2,719.40	2,693.51	25.89	105.046		
5,300.00	5,257.54	5,053.59	5,024.84	20.27	18.88	-19.55	-21.42	-3,176.89	2,712.23	2,685.80	26.43	102.624		
5,400.00	5,356.00	5,153.19	5,123.37	20.71	19.29	-19.43	-10.81	-3,186.84	2,705.07	2,678.10	26.97	100.298		
5,500.00	5,454.46	5,252.79	5,221.90	21.15	19.70	-19.32	-0.19	-3,196.78	2,697.92	2,670.41	27.51	98.063		
5,600.00	5,552.91	5,352.38	5,320.43	21.59	20.11	-19.21	10.43	-3,206.73	2,690.78	2,662.73	28.05	95.914		
5,700.00	5,651.37	5,451.98	5,418.96	22.03	20.52	-19.09	21.05	-3,216.67	2,683.65	2,655.06	28.60	93.847		
5,800.00	5,749.83	5,551.58	5,517.49	22.47	20.94	-18.97	31.67	-3,226.62	2,676.53	2,647.40	29.14	91.856		
5,900.00	5,848.29	5,651.18	5,616.02	22.91	21.35	-18.86	42.29	-3,236.56	2,669.43	2,639.75	29.68	89.937		
6,000.00	5,946.74	5,750.78	5,714.55	23.36	21.77	-18.74	52.91	-3,246.51	2,662.33	2,632.11	30.22	88.088		
6,100.00	6,045.20	5,850.38	5,813.08	23.80	22.18	-18.62	63.53	-3,256.45	2,655.25	2,624.48	30.77	86.304		
6,200.00	6,143.66	5,949.98	5,911.61	24.24	22.59	-18.50	74.14	-3,266.40	2,648.18	2,616.87	31.31	84.582		
6,300.00	6,242.12	6,049.58	6,010.14	24.69	23.01	-18.38	84.76	-3,276.34	2,641.12	2,609.26	31.85	82.918		
6,400.00	6,340.57	6,149.17	6,108.67	25.13	23.42	-18.26	95.38	-3,286.29	2,634.07	2,601.67	32.39	81.311		
6,500.00	6,439.03	6,248.77	6,207.20	25.58	23.84	-18.14	106.00	-3,296.23	2,627.03	2,594.09	32.94	79.757		
6,600.00	6,537.49	6,348.37	6,305.73	26.02	24.26	-18.02	116.62	-3,306.18	2,620.00	2,586.52	33.48	78.254		
6,700.00	6,635.95	6,447.97	6,404.26	26.47	24.67	-17.90	127.24	-3,316.12	2,612.99	2,578.96	34.02	76.799		
6,757.61	6,692.67	6,505.35	6,461.03	26.73	24.91	-17.83	133.36	-3,321.85	2,608.95	2,574.62	34.34	75.982		
6,800.00	6,734.44	6,547.58	6,502.81	26.91	25.09	-17.76	137.86	-3,326.07	2,606.21	2,571.64	34.57	75.397		
6,900.00	6,833.29	6,647.27	6,601.42	27.34	25.51	-17.60	148.49	-3,336.02	2,601.52	2,566.41	35.11	74.105		
7,000.00	6,932.50	6,746.98	6,700.07	27.75	25.92	-17.44	159.12	-3,345.98	2,599.34	2,563.70	35.64	72.932		
7,036.48	6,968.78	6,783.36	6,736.06	27.89	26.07	-17.37	163.00	-3,349.61	2,599.17	2,563.34	35.83	72.533 CC		
7,100.00	7,032.01	6,846.67	6,798.68	28.14	26.34	-17.26	169.74	-3,355.93	2,599.68	2,563.51	36.17	71.871		
7,200.00	7,131.74	7,005.68	6,956.29	28.51	26.99	-17.00	185.12	-3,370.33	2,601.75	2,564.90	36.86	70.592		
7,300.00	7,231.62	7,190.65	7,140.52	28.86	27.70	-16.80	197.05	-3,381.50	2,603.23	2,565.67	37.56	69.305		
7,400.00	7,331.60	7,376.15	7,325.85	29.19	28.35	-16.71	202.47	-3,386.58	2,603.95	2,565.74	38.21	68.143		
7,429.40	7,361.00	7,430.73	7,380.43	29.28	28.53	-90.53	202.81	-3,386.90	2,604.01	2,565.62	38.39	67.824		
7,500.00	7,431.60	7,503.90	7,453.60	29.50	28.77	-90.53	202.81	-3,386.90	2,604.01	2,565.28	38.73	67.228		
7,600.00	7,531.60	7,603.90	7,553.60	29.82	29.10	-90.53	202.81	-3,386.90	2,604.01	2,564.80	39.21	66.410		
7,700.00	7,631.60	7,703.90	7,653.60	30.14	29.43	-90.53	202.81	-3,386.90	2,604.01	2,564.33	39.69	65.610		
7,800.00	7,731.60	7,803.90	7,753.60	30.45	29.76	-90.53	202.81	-3,386.90	2,604.01	2,563.85	40.17	64.829		
7,900.00	7,831.60	7,903.90	7,853.60	30.77	30.08	-90.53	202.81	-3,386.90	2,604.01	2,563.37	40.65	64.064		
8,000.00	7,931.60	8,003.90	7,953.60	31.09	30.41	-90.53	202.81	-3,386.90	2,604.01	2,562.89	41.13	63.316		
8,100.00	8,031.60	8,103.90	8,053.60	31.41	30.75	-90.53	202.81	-3,386.90	2,604.01	2,562.41	41.61	62.585		
8,200.00	8,131.60	8,203.90	8,153.60	31.73	31.08	-90.53	202.81	-3,386.90	2,604.01	2,561.93	42.09	61.869		
8,300.00	8,231.60	8,303.90	8,253.60	32.06	31.41	-90.53	202.81	-3,386.90	2,604.01	2,561.44	42.57	61.169		
8,400.00	8,331.60	8,403.90	8,353.60	32.38	31.74	-90.53	202.81	-3,386.90	2,604.01	2,560.96	43.05	60.484		
8,500.00	8,431.60	8,503.90	8,453.60	32.70	32.07	-90.53	202.81	-3,386.90	2,604.01	2,560.48	43.54	59.813		
8,600.00	8,531.60	8,603.90	8,553.60	33.03	32.41	-90.53	202.81	-3,386.90	2,604.01	2,559.99	44.02	59.156		
8,700.00	8,631.60	8,703.90	8,653.60	33.35	32.74	-90.53	202.81	-3,386.90	2,604.01	2,559.51	44.50	58.512		
8,800.00	8,731.60	8,803.90	8,753.60	33.68	33.08	-90.53	202.81	-3,386.90	2,604.01	2,559.03	44.99	57.882		
8,900.00	8,831.60	8,903.90	8,853.60	34.00	33.41	-90.53	202.81	-3,386.90	2,604.01	2,558.54	45.47	57.265		
9,000.00	8,931.60	9,003.90	8,953.60	34.33	33.75	-90.53	202.81	-3,386.90	2,604.01	2,558.06	45.96	56.660		
9,100.00	9,031.60	9,103.90	9,053.60	34.66	34.08	-90.53	202.81	-3,386.90	2,604.01	2,557.57	46.44	56.067		
9,200.00	9,131.60	9,203.90	9,153.60	34.98	34.42	-90.53	202.81	-3,386.90	2,604.01	2,557.08	46.93	55.486		
9,300.00	9,231.60	9,303.90	9,253.60	35.31	34.76	-90.53	202.81	-3,386.90	2,604.01	2,556.60	47.42	54.916		
9,400.00	9,331.60	9,403.90	9,353.60	35.64	35.09	-90.53	202.81	-3,386.90	2,604.01	2,556.11	47.91	54.358		
9,500.00	9,431.60	9,503.90	9,453.60	35.97	35.43	-90.53	202.81	-3,386.90	2,604.01	2,555.62	48.39	53.810		
9,600.00	9,531.60	9,603.90	9,553.60	36.30	35.77	-90.53	202.81	-3,386.90	2,604.01	2,555.13	48.88	53.273		
9,700.00	9,631.60	9,703.90	9,653.60	36.63	36.11	-90.53	202.81	-3,386.90	2,604.01	2,554.64	49.37	52.746		
9,800.00	9,731.60	9,803.90	9,753.60	36.96	36.45	-90.53	202.81	-3,386.90	2,604.01	2,554.16	49.86	52.228		

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 503H
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 503H	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	9,831.60	9,903.90	9,853.60	37.30	36.79	-90.53	202.81	-3,386.90	2,604.01	2,553.67	50.35	51.721		
9,913.44	9,845.04	9,917.34	9,867.04	37.34	36.83	-90.53	202.81	-3,386.90	2,604.01	2,553.60	50.41	51.653		
9,950.00	9,881.57	9,953.88	9,903.57	37.46	36.96	90.06	202.81	-3,386.90	2,604.02	2,553.43	50.59	51.476		
10,000.00	9,931.27	10,003.57	9,953.27	37.60	37.13	90.18	202.81	-3,386.90	2,604.03	2,553.21	50.81	51.248		
10,050.00	9,980.31	10,052.61	10,002.31	37.74	37.29	90.38	202.81	-3,386.90	2,604.07	2,553.05	51.03	51.032		
10,100.00	10,028.32	10,100.62	10,050.32	37.87	37.46	90.66	202.81	-3,386.90	2,604.21	2,552.97	51.23	50.830 ES		
10,150.00	10,074.94	10,147.24	10,096.94	37.99	37.61	91.00	202.81	-3,386.90	2,604.49	2,553.06	51.43	50.643		
10,200.00	10,119.80	10,192.10	10,141.80	38.10	37.77	91.39	202.81	-3,386.90	2,605.00	2,553.39	51.61	50.472		
10,250.00	10,162.58	10,234.88	10,184.58	38.19	37.91	91.79	202.81	-3,386.90	2,605.85	2,554.06	51.79	50.319		
10,300.00	10,202.93	10,275.24	10,224.93	38.28	38.05	92.18	202.81	-3,386.90	2,607.12	2,555.17	51.95	50.184		
10,350.00	10,240.57	10,312.87	10,262.57	38.35	38.18	92.55	202.81	-3,386.90	2,608.93	2,556.82	52.11	50.067		
10,400.00	10,275.19	10,347.50	10,297.19	38.42	38.30	92.85	202.81	-3,386.90	2,611.39	2,559.13	52.26	49.970		
10,450.00	10,306.54	10,378.85	10,328.54	38.47	38.40	93.06	202.81	-3,386.90	2,614.60	2,562.20	52.40	49.894		
10,500.00	10,334.38	10,406.68	10,356.38	38.52	38.50	93.16	202.81	-3,386.90	2,618.66	2,566.12	52.54	49.837		
10,550.00	10,358.49	10,430.80	10,380.49	38.56	38.58	93.12	202.81	-3,386.90	2,623.65	2,570.96	52.68	49.802		
10,600.00	10,378.70	10,451.00	10,400.70	38.60	38.65	92.93	202.81	-3,386.90	2,629.62	2,576.80	52.82	49.788		
10,650.00	10,394.84	10,467.15	10,416.84	38.64	38.70	92.56	202.81	-3,386.90	2,636.62	2,583.67	52.95	49.794		
10,700.00	10,406.80	10,479.11	10,428.80	38.68	38.75	92.00	202.81	-3,386.90	2,644.66	2,591.58	53.08	49.822		
10,750.00	10,414.49	10,486.79	10,436.49	38.74	38.77	91.24	202.81	-3,386.90	2,653.74	2,600.52	53.21	49.871		
10,800.00	10,417.84	10,490.14	10,439.84	38.82	38.78	90.29	202.81	-3,386.90	2,663.80	2,610.46	53.34	49.940		
10,813.44	10,418.00	10,490.30	10,440.00	38.85	38.78	90.00	202.81	-3,386.90	2,666.66	2,613.29	53.37	49.962		
10,900.00	10,418.00	10,490.30	10,440.00	39.04	38.78	90.00	202.81	-3,386.90	2,686.64	2,633.03	53.61	50.110		
11,000.00	10,418.00	10,490.30	10,440.00	39.34	38.78	90.00	202.81	-3,386.90	2,712.98	2,659.03	53.95	50.288		
11,100.00	10,418.00	10,490.30	10,440.00	39.72	38.78	90.00	202.81	-3,386.90	2,742.72	2,688.38	54.33	50.478		
11,200.00	10,418.00	10,490.30	10,440.00	40.19	38.78	90.00	202.81	-3,386.90	2,775.74	2,720.98	54.77	50.684		
11,300.00	10,418.00	10,490.30	10,440.00	40.72	38.78	90.00	202.81	-3,386.90	2,811.94	2,756.70	55.23	50.910		
11,400.00	10,418.00	10,490.30	10,440.00	41.32	38.78	90.00	202.81	-3,386.90	2,851.18	2,795.45	55.73	51.160		
11,500.00	10,418.00	10,490.30	10,440.00	41.98	38.78	90.00	202.81	-3,386.90	2,893.35	2,837.09	56.25	51.436		
11,600.00	10,418.00	10,490.30	10,440.00	42.70	38.78	90.00	202.81	-3,386.90	2,938.31	2,881.52	56.79	51.742		
11,700.00	10,418.00	10,490.30	10,440.00	43.47	38.78	90.00	202.81	-3,386.90	2,985.95	2,928.62	57.34	52.078		
11,800.00	10,418.00	10,490.30	10,440.00	44.29	38.78	90.00	202.81	-3,386.90	3,036.14	2,978.25	57.89	52.447		
11,900.00	10,418.00	10,490.30	10,440.00	45.15	38.78	90.00	202.81	-3,386.90	3,088.75	3,030.31	58.44	52.849		
12,000.00	10,418.00	10,490.30	10,440.00	46.06	38.78	90.00	202.81	-3,386.90	3,143.66	3,084.67	59.00	53.285		
12,100.00	10,418.00	10,490.30	10,440.00	47.01	38.78	90.00	202.81	-3,386.90	3,200.76	3,141.22	59.54	53.755		
12,200.00	10,418.00	10,490.30	10,440.00	47.99	38.78	90.00	202.81	-3,386.90	3,259.92	3,199.84	60.08	54.259		
12,300.00	10,418.00	10,490.30	10,440.00	49.02	38.78	90.00	202.81	-3,386.90	3,321.04	3,260.44	60.61	54.796		
12,400.00	10,418.00	14,509.12	12,544.00	50.07	53.41	128.93	-1,957.82	-3,365.82	3,348.08	3,288.33	59.75	56.036		
12,500.00	10,418.00	14,609.12	12,544.00	51.16	54.32	128.93	-2,057.81	-3,364.85	3,348.09	3,287.19	60.90	54.977		
12,600.00	10,418.00	14,709.12	12,544.00	52.28	55.27	128.93	-2,157.81	-3,363.87	3,348.10	3,286.01	62.09	53.924		
12,700.00	10,418.00	14,809.12	12,544.00	53.42	56.25	128.93	-2,257.80	-3,362.90	3,348.12	3,284.80	63.32	52.880		
12,800.00	10,418.00	14,909.12	12,544.00	54.59	57.26	128.93	-2,357.80	-3,361.92	3,348.13	3,283.55	64.58	51.848		
12,900.00	10,418.00	15,009.12	12,544.00	55.78	58.30	128.93	-2,457.79	-3,360.95	3,348.14	3,282.27	65.87	50.831		
13,000.00	10,418.00	15,109.12	12,544.00	57.00	59.37	128.93	-2,557.79	-3,359.97	3,348.16	3,280.96	67.19	49.830		
13,100.00	10,418.00	15,209.12	12,544.00	58.24	60.47	128.93	-2,657.78	-3,358.99	3,348.17	3,279.62	68.54	48.847		
13,200.00	10,418.00	15,309.12	12,544.00	59.50	61.59	128.93	-2,757.78	-3,358.02	3,348.18	3,278.26	69.92	47.883		
13,300.00	10,418.00	15,409.12	12,544.00	60.77	62.73	128.93	-2,857.77	-3,357.04	3,348.20	3,276.86	71.33	46.939		
13,400.00	10,418.00	15,509.12	12,544.00	62.07	63.89	128.93	-2,957.77	-3,356.07	3,348.21	3,275.45	72.76	46.016		
13,500.00	10,418.00	15,609.12	12,544.00	63.38	65.08	128.93	-3,057.76	-3,355.09	3,348.22	3,274.01	74.22	45.114		
13,600.00	10,418.00	15,709.12	12,544.00	64.71	66.28	128.93	-3,157.76	-3,354.12	3,348.23	3,272.54	75.69	44.235		
13,700.00	10,418.00	15,809.12	12,544.00	66.05	67.51	128.93	-3,257.75	-3,353.14	3,348.25	3,271.06	77.19	43.379		
13,800.00	10,418.00	15,909.12	12,544.00	67.40	68.75	128.93	-3,357.75	-3,352.17	3,348.26	3,269.56	78.70	42.545		
13,900.00	10,418.00	16,009.12	12,544.00	68.77	70.00	128.93	-3,457.74	-3,351.19	3,348.27	3,268.04	80.23	41.734		

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 503H
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 503H	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	10,418.00	16,109.12	12,544.00	70.15	71.28	128.93	-3,557.74	-3,350.22	3,348.29	3,266.51	81.78	40.944		
14,100.00	10,418.00	16,209.12	12,544.00	71.54	72.57	128.93	-3,657.74	-3,349.24	3,348.30	3,264.96	83.34	40.176		
14,200.00	10,418.00	16,309.12	12,544.00	72.95	73.87	128.93	-3,757.73	-3,348.26	3,348.31	3,263.39	84.92	39.429		
14,300.00	10,418.00	16,409.12	12,544.00	74.36	75.19	128.93	-3,857.73	-3,347.29	3,348.33	3,261.81	86.51	38.702		
14,400.00	10,418.00	16,509.12	12,544.00	75.78	76.52	128.93	-3,957.72	-3,346.31	3,348.34	3,260.22	88.12	37.997		
14,500.00	10,418.00	16,609.12	12,544.00	77.21	77.86	128.93	-4,057.72	-3,345.34	3,348.35	3,258.61	89.74	37.311		
14,600.00	10,418.00	16,709.12	12,544.00	78.65	79.22	128.93	-4,157.71	-3,344.36	3,348.37	3,256.99	91.37	36.644		
14,700.00	10,418.00	16,809.12	12,544.00	80.10	80.58	128.93	-4,257.71	-3,343.39	3,348.38	3,255.36	93.02	35.998		
14,800.00	10,418.00	16,909.12	12,544.00	81.55	81.96	128.93	-4,357.70	-3,342.41	3,348.39	3,253.73	94.67	35.370		
14,900.00	10,418.00	17,009.12	12,544.00	83.02	83.34	128.93	-4,457.70	-3,341.44	3,348.41	3,252.08	96.33	34.759		
15,000.00	10,418.00	17,109.12	12,544.00	84.49	84.74	128.93	-4,557.69	-3,340.46	3,348.42	3,250.42	98.00	34.166		
15,100.00	10,418.00	17,209.12	12,544.00	85.96	86.14	128.93	-4,657.69	-3,339.48	3,348.43	3,248.75	99.69	33.590		
15,200.00	10,418.00	17,309.12	12,544.00	87.45	87.56	128.93	-4,757.68	-3,338.51	3,348.45	3,247.07	101.38	33.029		
15,300.00	10,418.00	17,409.12	12,544.00	88.94	88.98	128.93	-4,857.68	-3,337.53	3,348.46	3,245.38	103.08	32.485		
15,400.00	10,418.00	17,509.12	12,544.00	90.43	90.41	128.93	-4,957.67	-3,336.56	3,348.47	3,243.69	104.78	31.956		
15,500.00	10,418.00	17,609.12	12,544.00	91.93	91.84	128.93	-5,057.67	-3,335.58	3,348.49	3,241.99	106.50	31.442		
15,600.00	10,418.00	17,709.12	12,544.00	93.43	93.29	128.93	-5,157.66	-3,334.61	3,348.50	3,240.28	108.22	30.943		
15,700.00	10,418.00	17,809.12	12,544.00	94.94	94.74	128.93	-5,257.66	-3,333.63	3,348.51	3,238.57	109.94	30.457		
15,800.00	10,418.00	17,909.12	12,544.00	96.46	96.19	128.93	-5,357.65	-3,332.66	3,348.53	3,236.85	111.68	29.984		
15,900.00	10,418.00	18,009.12	12,544.00	97.98	97.66	128.93	-5,457.65	-3,331.68	3,348.54	3,235.12	113.42	29.524		
16,000.00	10,418.00	18,109.12	12,544.00	99.50	99.13	128.93	-5,557.64	-3,330.70	3,348.55	3,233.39	115.16	29.076		
16,100.00	10,418.00	18,209.12	12,544.00	101.03	100.60	128.93	-5,657.64	-3,329.73	3,348.57	3,231.65	116.91	28.641		
16,200.00	10,418.00	18,309.12	12,544.00	102.56	102.08	128.93	-5,757.64	-3,328.75	3,348.58	3,229.91	118.67	28.218		
16,300.00	10,418.00	18,409.12	12,544.00	104.09	103.56	128.93	-5,857.63	-3,327.78	3,348.59	3,228.16	120.43	27.805		
16,400.00	10,418.00	18,509.12	12,544.00	105.63	105.05	128.93	-5,957.63	-3,326.80	3,348.60	3,226.41	122.20	27.404		
16,500.00	10,418.00	18,609.12	12,544.00	107.17	106.55	128.93	-6,057.62	-3,325.83	3,348.62	3,224.65	123.97	27.012		
16,600.00	10,418.00	18,709.12	12,544.00	108.72	108.05	128.93	-6,157.62	-3,324.85	3,348.63	3,222.89	125.74	26.631		
16,700.00	10,418.00	18,809.12	12,544.00	110.26	109.55	128.93	-6,257.61	-3,323.88	3,348.64	3,221.12	127.52	26.260		
16,800.00	10,418.00	18,909.12	12,544.00	111.81	111.06	128.93	-6,357.61	-3,322.90	3,348.66	3,219.35	129.30	25.898		
16,900.00	10,418.00	19,009.12	12,544.00	113.37	112.57	128.93	-6,457.60	-3,321.92	3,348.67	3,217.58	131.09	25.545		
17,000.00	10,418.00	19,109.12	12,544.00	114.92	114.09	128.93	-6,557.60	-3,320.95	3,348.68	3,215.81	132.88	25.201		
17,100.00	10,418.00	19,209.12	12,544.00	116.48	115.61	128.93	-6,657.59	-3,319.97	3,348.70	3,214.03	134.67	24.866		
17,200.00	10,418.00	19,309.12	12,544.00	118.04	117.13	128.92	-6,757.59	-3,319.00	3,348.71	3,212.24	136.47	24.539		
17,300.00	10,418.00	19,409.12	12,544.00	119.61	118.66	128.92	-6,857.58	-3,318.02	3,348.72	3,210.46	138.27	24.219		
17,400.00	10,418.00	19,509.12	12,544.00	121.17	120.19	128.92	-6,957.58	-3,317.05	3,348.74	3,208.67	140.07	23.907		
17,500.00	10,418.00	19,609.12	12,544.00	122.74	121.72	128.92	-7,057.57	-3,316.07	3,348.75	3,206.87	141.88	23.603		
17,600.00	10,418.00	19,709.12	12,544.00	124.31	123.26	128.92	-7,157.57	-3,315.10	3,348.76	3,205.08	143.68	23.307		
17,700.00	10,418.00	19,809.12	12,544.00	125.88	124.79	128.92	-7,257.56	-3,314.12	3,348.78	3,203.28	145.49	23.017		
17,800.00	10,418.00	19,909.12	12,544.00	127.46	126.34	128.92	-7,357.56	-3,313.15	3,348.79	3,201.48	147.31	22.734		
17,900.00	10,418.00	20,009.12	12,544.00	129.04	127.88	128.92	-7,457.55	-3,312.17	3,348.80	3,199.68	149.12	22.457		
18,000.00	10,418.00	20,109.12	12,544.00	130.61	129.43	128.92	-7,557.55	-3,311.19	3,348.82	3,197.88	150.94	22.186		
18,100.00	10,418.00	20,209.12	12,544.00	132.19	130.98	128.92	-7,657.54	-3,310.22	3,348.83	3,196.07	152.76	21.922		
18,200.00	10,418.00	20,309.12	12,544.00	133.78	132.53	128.92	-7,757.54	-3,309.24	3,348.84	3,194.26	154.58	21.664		
18,300.00	10,418.00	20,409.12	12,544.00	135.36	134.08	128.92	-7,857.54	-3,308.27	3,348.86	3,192.45	156.40	21.411		
18,400.00	10,418.00	20,509.12	12,544.00	136.94	135.64	128.92	-7,957.53	-3,307.29	3,348.87	3,190.64	158.23	21.165		
18,500.00	10,418.00	20,609.12	12,544.00	138.53	137.20	128.92	-8,057.53	-3,306.32	3,348.88	3,188.82	160.06	20.923		
18,600.00	10,418.00	20,709.12	12,544.00	140.12	138.76	128.92	-8,157.52	-3,305.34	3,348.90	3,187.01	161.89	20.686		
18,700.00	10,418.00	20,809.12	12,544.00	141.71	140.32	128.92	-8,257.52	-3,304.37	3,348.91	3,185.19	163.72	20.455		
18,800.00	10,418.00	20,909.12	12,544.00	143.30	141.89	128.92	-8,357.51	-3,303.39	3,348.92	3,183.36	165.56	20.228		
18,900.00	10,418.00	21,009.12	12,544.00	144.89	143.46	128.92	-8,457.51	-3,302.41	3,348.93	3,181.54	167.39	20.007		
19,000.00	10,418.00	21,109.12	12,544.00	146.49	145.03	128.92	-8,557.50	-3,301.44	3,348.95	3,179.72	169.23	19.790		
19,100.00	10,418.00	21,209.12	12,544.00	148.08	146.60	128.92	-8,657.50	-3,300.46	3,348.96	3,177.90	171.06	19.577		

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 503H
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 503H	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		
19,200.00	10,418.00	21,309.12	12,544.00	149.68	148.17	128.92	-8,757.49	-3,299.49	3,348.97	3,176.07	172.90	19.369		
19,300.00	10,418.00	21,409.12	12,544.00	151.27	149.74	128.92	-8,857.49	-3,298.51	3,348.99	3,174.24	174.74	19.165		
19,400.00	10,418.00	21,509.12	12,544.00	152.87	151.32	128.92	-8,957.48	-3,297.54	3,349.00	3,172.41	176.59	18.965		
19,500.00	10,418.00	21,609.12	12,544.00	154.47	152.90	128.92	-9,057.48	-3,296.56	3,349.01	3,170.58	178.43	18.769		
19,600.00	10,418.00	21,709.12	12,544.00	156.07	154.48	128.92	-9,157.47	-3,295.59	3,349.03	3,168.75	180.27	18.578		
19,700.00	10,418.00	21,809.12	12,544.00	157.67	156.06	128.92	-9,257.47	-3,294.61	3,349.04	3,166.92	182.12	18.389		
19,800.00	10,418.00	21,909.12	12,544.00	159.28	157.64	128.92	-9,357.46	-3,293.63	3,349.05	3,165.09	183.96	18.205		
19,900.00	10,418.00	22,009.12	12,544.00	160.88	159.22	128.92	-9,457.46	-3,292.66	3,349.07	3,163.26	185.81	18.024		
20,000.00	10,418.00	22,109.12	12,544.00	162.48	160.81	128.92	-9,557.45	-3,291.68	3,349.08	3,161.42	187.66	17.847		
20,100.00	10,418.00	22,209.12	12,544.00	164.09	162.39	128.92	-9,657.45	-3,290.71	3,349.09	3,159.58	189.51	17.672		
20,200.00	10,418.00	22,309.12	12,544.00	165.70	163.98	128.92	-9,757.44	-3,289.73	3,349.11	3,157.75	191.36	17.502		
20,300.00	10,418.00	22,409.12	12,544.00	167.30	165.57	128.92	-9,857.44	-3,288.76	3,349.12	3,155.91	193.21	17.334		
20,400.00	10,418.00	22,509.12	12,544.00	168.91	167.16	128.92	-9,957.44	-3,287.78	3,349.13	3,154.07	195.06	17.169		
20,500.00	10,418.00	22,609.12	12,544.00	170.52	168.75	128.92	-10,057.43	-3,286.81	3,349.15	3,152.23	196.92	17.008		
20,600.00	10,418.00	22,709.12	12,544.00	172.13	170.34	128.92	-10,157.43	-3,285.83	3,349.16	3,150.39	198.77	16.849		
20,700.00	10,418.00	22,715.49	12,544.00	173.74	170.44	128.92	-10,163.79	-3,285.77	3,350.48	3,150.62	199.87	16.764		
20,800.00	10,418.00	22,715.49	12,544.00	175.35	170.44	128.92	-10,163.79	-3,285.77	3,354.78	3,154.03	200.75	16.711		
20,900.00	10,418.00	22,715.49	12,544.00	176.97	170.44	128.92	-10,163.79	-3,285.77	3,362.05	3,160.57	201.48	16.687 SF		
21,000.00	10,418.00	22,715.49	12,544.00	178.58	170.44	128.92	-10,163.79	-3,285.77	3,372.26	3,170.23	202.04	16.691		
21,100.00	10,418.00	22,715.49	12,544.00	180.19	170.44	128.92	-10,163.79	-3,285.77	3,385.41	3,182.98	202.43	16.724		
21,200.00	10,418.00	22,715.49	12,544.00	181.81	170.44	128.92	-10,163.79	-3,285.77	3,401.44	3,198.77	202.67	16.783		
21,300.00	10,418.00	22,715.49	12,544.00	183.42	170.44	128.92	-10,163.79	-3,285.77	3,420.32	3,217.57	202.75	16.870		
21,400.00	10,418.00	22,715.49	12,544.00	185.04	170.44	128.92	-10,163.79	-3,285.77	3,442.01	3,239.33	202.68	16.982		
21,500.00	10,418.00	22,715.49	12,544.00	186.65	170.44	128.92	-10,163.79	-3,285.77	3,466.45	3,263.98	202.46	17.122		
21,600.00	10,418.00	22,715.49	12,544.00	188.27	170.44	128.92	-10,163.79	-3,285.77	3,493.57	3,291.47	202.11	17.286		
21,700.00	10,418.00	22,715.49	12,544.00	189.89	170.44	128.92	-10,163.79	-3,285.77	3,523.33	3,321.72	201.62	17.475		
21,800.00	10,418.00	22,715.49	12,544.00	191.50	170.44	128.92	-10,163.79	-3,285.77	3,555.66	3,354.65	201.01	17.689		
21,900.00	10,418.00	22,715.49	12,544.00	193.12	170.44	128.92	-10,163.79	-3,285.77	3,590.47	3,390.19	200.29	17.927		
21,923.68	10,418.00	22,715.49	12,544.00	193.51	170.44	128.92	-10,163.79	-3,285.77	3,599.07	3,398.97	200.10	17.986		

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 503H
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 503H	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	-316.95	-2,874.81	2,892.23					
100.00	100.00	122.00	122.00	0.13	0.20	-96.29	-316.95	-2,874.81	2,892.23	2,891.99	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.29	-316.95	-2,874.81	2,892.23	2,891.49	0.74	3,896.559		
300.00	300.00	322.00	322.00	0.84	0.92	-96.29	-316.95	-2,874.81	2,892.23	2,890.98	1.25	2,316.832		
400.00	400.00	422.00	422.00	1.20	1.28	-96.29	-316.95	-2,874.81	2,892.23	2,890.48	1.75	1,648.041		
500.00	500.00	522.00	522.00	1.56	1.64	-96.29	-316.95	-2,874.81	2,892.23	2,889.97	2.26	1,278.782		
600.00	600.00	622.00	622.00	1.92	2.00	-96.29	-316.95	-2,874.81	2,892.23	2,889.46	2.77	1,044.678		
700.00	700.00	722.00	722.00	2.28	2.36	-96.29	-316.95	-2,874.81	2,892.23	2,888.96	3.28	883.015		
800.00	800.00	822.00	822.00	2.63	2.71	-96.29	-316.95	-2,874.81	2,892.23	2,888.45	3.78	764.676		
900.00	900.00	922.00	922.00	2.99	3.07	-96.29	-316.95	-2,874.81	2,892.23	2,887.94	4.29	674.305		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.29	-316.95	-2,874.81	2,892.23	2,887.44	4.80	603.036		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.29	-316.95	-2,874.81	2,892.23	2,886.93	5.30	545.391		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.29	-316.95	-2,874.81	2,892.23	2,886.42	5.81	497.804		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.29	-316.95	-2,874.81	2,892.23	2,885.92	6.32	457.856		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.29	-316.95	-2,874.81	2,892.23	2,885.41	6.82	423.842		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.29	-316.95	-2,874.81	2,892.23	2,884.90	7.33	394.532		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-96.29	-316.95	-2,874.81	2,892.23	2,884.39	7.84	369.014		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-96.29	-316.95	-2,874.81	2,892.23	2,883.89	8.34	346.596		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-96.29	-316.95	-2,874.81	2,892.23	2,883.38	8.85	326.746		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-96.29	-316.95	-2,874.81	2,892.23	2,882.87	9.36	309.047		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-96.29	-316.95	-2,874.81	2,892.23	2,882.37	9.87	293.166		
2,100.00	2,100.00	2,122.00	2,122.00	7.29	7.37	-96.29	-316.95	-2,874.81	2,892.23	2,881.86	10.37	278.838		
2,200.00	2,199.99	2,239.32	2,239.31	7.65	7.79	-22.48	-316.78	-2,874.71	2,890.96	2,880.04	10.92	264.777		
2,300.00	2,299.91	2,417.65	2,417.53	7.99	8.43	-22.46	-311.55	-2,871.78	2,885.37	2,873.76	11.61	248.505		
2,400.00	2,399.69	2,594.54	2,593.84	8.34	9.06	-22.38	-299.20	-2,864.85	2,874.68	2,862.39	12.30	233.804		
2,500.00	2,499.27	2,732.94	2,731.25	8.70	9.56	-22.30	-284.84	-2,856.78	2,859.26	2,846.37	12.89	221.894		
2,600.00	2,598.57	2,831.10	2,828.62	9.06	9.92	-22.28	-273.98	-2,850.69	2,841.10	2,827.72	13.38	212.321		
2,700.00	2,697.54	2,928.85	2,925.58	9.42	10.28	-22.30	-263.17	-2,844.62	2,820.58	2,806.71	13.88	203.249		
2,771.79	2,768.33	2,998.73	2,994.90	9.69	10.54	-22.34	-255.44	-2,840.28	2,804.40	2,790.16	14.23	197.018		
2,800.00	2,796.11	3,026.14	3,022.08	9.79	10.64	-22.31	-252.41	-2,838.58	2,797.80	2,783.43	14.37	194.631		
2,900.00	2,894.56	3,123.30	3,118.46	10.18	11.00	-22.24	-241.67	-2,832.54	2,774.41	2,759.54	14.87	186.550		
3,000.00	2,993.02	3,220.45	3,214.83	10.56	11.37	-22.16	-230.92	-2,826.51	2,751.03	2,735.66	15.37	178.958		
3,100.00	3,091.48	3,317.61	3,311.20	10.95	11.74	-22.08	-220.18	-2,820.48	2,727.66	2,711.78	15.88	171.816		
3,200.00	3,189.94	3,414.77	3,407.57	11.35	12.11	-22.00	-209.43	-2,814.45	2,704.28	2,687.90	16.38	165.090		
3,300.00	3,288.39	3,511.93	3,503.95	11.75	12.48	-21.91	-198.69	-2,808.41	2,680.92	2,664.03	16.89	158.746		
3,400.00	3,386.85	3,609.08	3,600.32	12.16	12.85	-21.83	-187.94	-2,802.38	2,657.56	2,640.16	17.40	152.755		
3,500.00	3,485.31	3,706.24	3,696.69	12.57	13.22	-21.74	-177.20	-2,796.35	2,634.20	2,616.29	17.91	147.090		
3,600.00	3,583.77	3,803.40	3,793.07	12.98	13.60	-21.65	-166.45	-2,790.31	2,610.85	2,592.43	18.42	141.728		
3,700.00	3,682.22	3,900.56	3,889.44	13.39	13.97	-21.57	-155.70	-2,784.28	2,587.51	2,568.57	18.94	136.645		
3,800.00	3,780.68	3,997.72	3,985.81	13.81	14.35	-21.48	-144.96	-2,778.25	2,564.17	2,544.72	19.45	131.822		
3,900.00	3,879.14	4,094.87	4,082.18	14.23	14.73	-21.38	-134.21	-2,772.22	2,540.84	2,520.87	19.97	127.240		
4,000.00	3,977.60	4,192.03	4,178.56	14.65	15.11	-21.29	-123.47	-2,766.18	2,517.51	2,497.03	20.49	122.883		
4,100.00	4,076.05	4,289.19	4,274.93	15.07	15.49	-21.19	-112.72	-2,760.15	2,494.20	2,473.19	21.01	118.734		
4,200.00	4,174.51	4,386.35	4,371.30	15.50	15.87	-21.10	-101.98	-2,754.12	2,470.88	2,449.36	21.53	114.781		
4,300.00	4,272.97	4,483.50	4,467.68	15.93	16.25	-21.00	-91.23	-2,748.09	2,447.58	2,425.53	22.05	111.010		
4,400.00	4,371.43	4,580.66	4,564.05	16.36	16.63	-20.89	-80.49	-2,742.05	2,424.28	2,401.71	22.57	107.409		
4,500.00	4,469.88	4,677.82	4,660.42	16.79	17.01	-20.79	-69.74	-2,736.02	2,400.99	2,377.90	23.09	103.967		
4,600.00	4,568.34	4,774.98	4,756.80	17.22	17.40	-20.69	-59.00	-2,729.99	2,377.71	2,354.09	23.62	100.675		
4,700.00	4,666.80	4,872.13	4,853.17	17.65	17.78	-20.58	-48.25	-2,723.95	2,354.43	2,330.29	24.14	97.524		
4,800.00	4,765.25	4,969.29	4,949.54	18.08	18.16	-20.47	-37.51	-2,717.92	2,331.17	2,306.50	24.67	94.504		
4,900.00	4,863.71	5,066.45	5,045.91	18.52	18.55	-20.36	-26.76	-2,711.89	2,307.91	2,282.71	25.19	91.608		
5,000.00	4,962.17	5,163.61	5,142.29	18.95	18.93	-20.24	-16.02	-2,705.86	2,284.66	2,258.94	25.72	88.828		

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 503H
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 503H	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	5,060.63	5,260.76	5,238.66	19.39	19.32	-20.13	-5.27	-2,699.82	2,261.42	2,235.17	26.25	86.159		
5,200.00	5,159.08	5,357.92	5,335.03	19.83	19.71	-20.01	5.47	-2,693.79	2,238.18	2,211.41	26.77	83.593		
5,300.00	5,257.54	5,455.08	5,431.41	20.27	20.09	-19.89	16.22	-2,687.76	2,214.96	2,187.66	27.30	81.126		
5,400.00	5,356.00	5,552.24	5,527.78	20.71	20.48	-19.76	26.96	-2,681.73	2,191.75	2,163.91	27.83	78.751		
5,500.00	5,454.46	5,649.39	5,624.15	21.15	20.87	-19.64	37.71	-2,675.69	2,168.54	2,140.18	28.36	76.463		
5,600.00	5,552.91	5,746.55	5,720.52	21.59	21.25	-19.51	48.45	-2,669.66	2,145.35	2,116.46	28.89	74.259		
5,700.00	5,651.37	5,843.71	5,816.90	22.03	21.64	-19.37	59.20	-2,663.63	2,122.17	2,092.75	29.42	72.133		
5,800.00	5,749.83	5,940.87	5,913.27	22.47	22.03	-19.24	69.94	-2,657.59	2,098.99	2,069.04	29.95	70.082		
5,900.00	5,848.29	6,038.03	6,009.64	22.91	22.42	-19.10	80.69	-2,651.56	2,075.83	2,045.35	30.48	68.102		
6,000.00	5,946.74	6,135.18	6,106.02	23.36	22.81	-18.96	91.43	-2,645.53	2,052.69	2,021.67	31.01	66.190		
6,100.00	6,045.20	6,232.34	6,202.39	23.80	23.20	-18.82	102.18	-2,639.50	2,029.55	1,998.00	31.54	64.341		
6,200.00	6,143.66	6,329.50	6,298.76	24.24	23.59	-18.67	112.93	-2,633.46	2,006.42	1,974.35	32.08	62.554		
6,300.00	6,242.12	6,426.66	6,395.14	24.69	23.98	-18.52	123.67	-2,627.43	1,983.31	1,950.71	32.61	60.824		
6,400.00	6,340.57	6,523.81	6,491.51	25.13	24.36	-18.36	134.42	-2,621.40	1,960.21	1,927.07	33.14	59.150		
6,500.00	6,439.03	6,620.97	6,587.88	25.58	24.75	-18.20	145.16	-2,615.37	1,937.13	1,903.46	33.67	57.529		
6,600.00	6,537.49	6,718.13	6,684.25	26.02	25.14	-18.04	155.91	-2,609.33	1,914.06	1,879.86	34.21	55.958		
6,700.00	6,635.95	6,815.29	6,780.63	26.47	25.53	-17.88	166.65	-2,603.30	1,891.01	1,856.27	34.74	54.435		
6,757.61	6,692.67	6,871.26	6,836.15	26.73	25.76	-17.78	172.84	-2,599.82	1,877.73	1,842.69	35.05	53.579		
6,800.00	6,734.44	6,912.49	6,877.05	26.91	25.93	-17.66	177.40	-2,597.26	1,868.19	1,832.91	35.27	52.965		
6,900.00	6,833.29	7,000.00	6,963.85	27.34	26.28	-17.39	187.05	-2,591.85	1,847.46	1,811.67	35.79	51.619		
7,000.00	6,932.50	7,083.76	7,047.09	27.75	26.61	-17.15	195.18	-2,587.28	1,829.95	1,793.66	36.30	50.417		
7,100.00	7,032.01	7,163.53	7,126.54	28.14	26.91	-16.97	201.45	-2,583.76	1,815.97	1,779.18	36.79	49.363		
7,200.00	7,131.74	7,243.86	7,206.68	28.51	27.21	-16.82	206.30	-2,581.04	1,805.53	1,768.26	37.27	48.443		
7,300.00	7,231.62	7,324.60	7,287.31	28.86	27.50	-16.72	209.69	-2,579.14	1,798.63	1,760.89	37.74	47.655		
7,400.00	7,331.60	7,400.00	7,362.69	29.19	27.77	-16.66	211.51	-2,578.11	1,795.31	1,757.12	38.19	47.005		
7,429.40	7,361.00	7,429.40	7,392.09	29.28	27.87	-90.48	211.87	-2,577.91	1,795.00	1,756.66	38.34	46.822		
7,500.00	7,431.60	7,490.92	7,453.60	29.50	28.07	-90.48	212.05	-2,577.81	1,794.87	1,756.22	38.66	46.428		
7,600.00	7,531.60	7,590.92	7,553.60	29.82	28.41	-90.48	212.05	-2,577.81	1,794.87	1,755.74	39.14	45.860		
7,700.00	7,631.60	7,690.92	7,653.60	30.14	28.75	-90.48	212.05	-2,577.81	1,794.87	1,755.26	39.62	45.304		
7,800.00	7,731.60	7,790.92	7,753.60	30.45	29.08	-90.48	212.05	-2,577.81	1,794.87	1,754.78	40.10	44.761		
7,900.00	7,831.60	7,890.92	7,853.60	30.77	29.42	-90.48	212.05	-2,577.81	1,794.87	1,754.29	40.58	44.230		
8,000.00	7,931.60	7,990.92	7,953.60	31.09	29.76	-90.48	212.05	-2,577.81	1,794.87	1,753.81	41.06	43.710		
8,100.00	8,031.60	8,090.92	8,053.60	31.41	30.09	-90.48	212.05	-2,577.81	1,794.87	1,753.33	41.55	43.203		
8,200.00	8,131.60	8,190.92	8,153.60	31.73	30.43	-90.48	212.05	-2,577.81	1,794.87	1,752.85	42.03	42.706		
8,300.00	8,231.60	8,290.92	8,253.60	32.06	30.77	-90.48	212.05	-2,577.81	1,794.87	1,752.36	42.51	42.220		
8,400.00	8,331.60	8,390.92	8,353.60	32.38	31.11	-90.48	212.05	-2,577.81	1,794.87	1,751.88	43.00	41.744		
8,500.00	8,431.60	8,490.92	8,453.60	32.70	31.45	-90.48	212.05	-2,577.81	1,794.87	1,751.39	43.48	41.279		
8,600.00	8,531.60	8,590.92	8,553.60	33.03	31.79	-90.48	212.05	-2,577.81	1,794.87	1,750.91	43.97	40.823		
8,700.00	8,631.60	8,690.92	8,653.60	33.35	32.13	-90.48	212.05	-2,577.81	1,794.87	1,750.42	44.45	40.377		
8,800.00	8,731.60	8,790.92	8,753.60	33.68	32.47	-90.48	212.05	-2,577.81	1,794.87	1,749.94	44.94	39.940		
8,900.00	8,831.60	8,890.92	8,853.60	34.00	32.82	-90.48	212.05	-2,577.81	1,794.87	1,749.45	45.43	39.512		
9,000.00	8,931.60	8,990.92	8,953.60	34.33	33.16	-90.48	212.05	-2,577.81	1,794.87	1,748.96	45.91	39.093		
9,100.00	9,031.60	9,090.92	9,053.60	34.66	33.50	-90.48	212.05	-2,577.81	1,794.87	1,748.47	46.40	38.682		
9,200.00	9,131.60	9,190.92	9,153.60	34.98	33.84	-90.48	212.05	-2,577.81	1,794.87	1,747.99	46.89	38.280		
9,300.00	9,231.60	9,290.92	9,253.60	35.31	34.18	-90.48	212.05	-2,577.81	1,794.87	1,747.50	47.38	37.885		
9,400.00	9,331.60	9,390.92	9,353.60	35.64	34.53	-90.48	212.05	-2,577.81	1,794.87	1,747.01	47.87	37.498		
9,500.00	9,431.60	9,490.92	9,453.60	35.97	34.87	-90.48	212.05	-2,577.81	1,794.87	1,746.52	48.35	37.119		
9,600.00	9,531.60	9,590.92	9,553.60	36.30	35.21	-90.48	212.05	-2,577.81	1,794.87	1,746.03	48.84	36.747		
9,700.00	9,631.60	9,690.92	9,653.60	36.63	35.56	-90.48	212.05	-2,577.81	1,794.87	1,745.54	49.33	36.382		
9,800.00	9,731.60	9,790.92	9,753.60	36.96	35.90	-90.48	212.05	-2,577.81	1,794.87	1,745.05	49.82	36.024		
9,900.00	9,831.60	9,890.92	9,853.60	37.30	36.25	-90.48	212.05	-2,577.81	1,794.87	1,744.56	50.31	35.673		
9,913.44	9,845.04	9,904.36	9,867.04	37.34	36.29	-90.48	212.05	-2,577.81	1,794.87	1,744.49	50.38	35.626 CC		

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 503H
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 503H	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	
9,950.00	9,881.57	9,940.89	9,903.57	37.46	36.42	90.13	212.05	-2,577.81	1,794.88	1,744.32	50.56	35.503		
10,000.00	9,931.27	9,990.59	9,953.27	37.60	36.59	90.30	212.05	-2,577.81	1,794.90	1,744.11	50.79	35.343		
10,050.00	9,980.31	10,039.63	10,002.31	37.74	36.76	90.59	212.05	-2,577.81	1,794.97	1,743.97	51.01	35.190		
10,100.00	10,028.32	10,087.64	10,050.32	37.87	36.93	91.00	212.05	-2,577.81	1,795.18	1,743.95	51.22	35.046	ES	
10,150.00	10,074.94	10,134.25	10,096.94	37.99	37.09	91.49	212.05	-2,577.81	1,795.60	1,744.17	51.43	34.913		
10,200.00	10,119.80	10,179.12	10,141.80	38.10	37.24	92.05	212.05	-2,577.81	1,796.36	1,744.73	51.63	34.792		
10,250.00	10,162.58	10,221.89	10,184.58	38.19	37.39	92.63	212.05	-2,577.81	1,797.60	1,745.77	51.82	34.687		
10,300.00	10,202.93	10,262.25	10,224.93	38.28	37.53	93.20	212.05	-2,577.81	1,799.46	1,747.45	52.01	34.597		
10,350.00	10,240.57	10,299.89	10,262.57	38.35	37.66	93.72	212.05	-2,577.81	1,802.10	1,749.91	52.19	34.527		
10,400.00	10,275.19	10,334.51	10,297.19	38.42	37.78	94.15	212.05	-2,577.81	1,805.69	1,753.31	52.37	34.477		
10,450.00	10,306.54	10,365.86	10,328.54	38.47	37.89	94.46	212.05	-2,577.81	1,810.36	1,757.80	52.55	34.450		
10,500.00	10,334.38	10,393.70	10,356.38	38.52	37.98	94.60	212.05	-2,577.81	1,816.24	1,763.51	52.73	34.446		
10,550.00	10,358.49	10,417.81	10,380.49	38.56	38.07	94.55	212.05	-2,577.81	1,823.45	1,770.55	52.90	34.468		
10,600.00	10,378.70	10,438.02	10,400.70	38.60	38.14	94.26	212.05	-2,577.81	1,832.07	1,778.99	53.08	34.516		
10,650.00	10,394.84	10,454.16	10,416.84	38.64	38.19	93.72	212.05	-2,577.81	1,842.13	1,788.88	53.25	34.591		
10,700.00	10,406.80	10,466.12	10,428.80	38.68	38.23	92.91	212.05	-2,577.81	1,853.66	1,800.23	53.43	34.694		
10,750.00	10,414.49	10,473.81	10,436.49	38.74	38.26	91.81	212.05	-2,577.81	1,866.61	1,813.01	53.60	34.823		
10,800.00	10,417.84	10,477.16	10,439.84	38.82	38.27	90.42	212.05	-2,577.81	1,880.91	1,827.14	53.77	34.979		
10,813.44	10,418.00	10,477.32	10,440.00	38.85	38.27	90.00	212.05	-2,577.81	1,884.98	1,831.16	53.82	35.026		
10,900.00	10,418.00	10,477.32	10,440.00	39.04	38.27	90.00	212.05	-2,577.81	1,913.19	1,859.07	54.12	35.348		
11,000.00	10,418.00	10,477.32	10,440.00	39.34	38.27	90.00	212.05	-2,577.81	1,950.07	1,895.55	54.52	35.767		
11,100.00	10,418.00	10,477.32	10,440.00	39.72	38.27	90.00	212.05	-2,577.81	1,991.30	1,936.35	54.95	36.239		
11,200.00	10,418.00	10,477.32	10,440.00	40.19	38.27	90.00	212.05	-2,577.81	2,036.60	1,981.20	55.40	36.762		
11,300.00	10,418.00	10,477.32	10,440.00	40.72	38.27	90.00	212.05	-2,577.81	2,085.72	2,029.86	55.86	37.338		
11,400.00	10,418.00	10,477.32	10,440.00	41.32	38.27	90.00	212.05	-2,577.81	2,138.38	2,082.06	56.33	37.965		
11,500.00	10,418.00	10,477.32	10,440.00	41.98	38.27	90.00	212.05	-2,577.81	2,194.35	2,137.56	56.79	38.642		
11,600.00	10,418.00	10,477.32	10,440.00	42.70	38.27	90.00	212.05	-2,577.81	2,253.36	2,196.12	57.24	39.367		
11,700.00	10,418.00	10,477.32	10,440.00	43.47	38.27	90.00	212.05	-2,577.81	2,315.19	2,257.51	57.68	40.138		
11,800.00	10,418.00	10,477.32	10,440.00	44.29	38.27	90.00	212.05	-2,577.81	2,379.62	2,321.51	58.11	40.952		
11,900.00	10,418.00	10,477.32	10,440.00	45.15	38.27	90.00	212.05	-2,577.81	2,446.44	2,387.92	58.52	41.808		
12,000.00	10,418.00	10,477.32	10,440.00	46.06	38.27	90.00	212.05	-2,577.81	2,515.46	2,456.55	58.91	42.703		
12,100.00	10,418.00	10,477.32	10,440.00	47.01	38.27	90.00	212.05	-2,577.81	2,586.51	2,527.23	59.28	43.635		
12,200.00	10,418.00	14,206.75	12,446.00	47.99	51.52	139.97	-1,749.00	-2,448.59	2,619.86	2,566.52	53.34	49.116		
12,300.00	10,418.00	14,306.75	12,446.00	49.02	52.37	139.97	-1,848.99	-2,447.60	2,619.86	2,565.57	54.29	48.255		
12,400.00	10,418.00	14,406.75	12,446.00	50.07	53.26	139.97	-1,948.99	-2,446.62	2,619.87	2,564.59	55.28	47.394		
12,500.00	10,418.00	14,506.75	12,446.00	51.16	54.18	139.97	-2,048.98	-2,445.64	2,619.87	2,563.58	56.30	46.535		
12,600.00	10,418.00	14,606.75	12,446.00	52.28	55.13	139.97	-2,148.98	-2,444.65	2,619.88	2,562.53	57.35	45.679		
12,700.00	10,418.00	14,706.75	12,446.00	53.42	56.12	139.97	-2,248.97	-2,443.67	2,619.89	2,561.45	58.44	44.831		
12,800.00	10,418.00	14,806.75	12,446.00	54.59	57.13	139.97	-2,348.97	-2,442.68	2,619.89	2,560.34	59.55	43.992		
12,900.00	10,418.00	14,906.75	12,446.00	55.78	58.18	139.97	-2,448.96	-2,441.70	2,619.90	2,559.20	60.70	43.164		
13,000.00	10,418.00	15,006.75	12,446.00	57.00	59.25	139.97	-2,548.96	-2,440.72	2,619.90	2,558.04	61.87	42.348		
13,100.00	10,418.00	15,106.75	12,446.00	58.24	60.35	139.97	-2,648.95	-2,439.73	2,619.91	2,556.85	63.06	41.547		
13,200.00	10,418.00	15,206.75	12,446.00	59.50	61.47	139.97	-2,748.95	-2,438.75	2,619.91	2,555.64	64.28	40.760		
13,300.00	10,418.00	15,306.75	12,446.00	60.77	62.62	139.97	-2,848.94	-2,437.77	2,619.92	2,554.40	65.52	39.989		
13,400.00	10,418.00	15,406.75	12,446.00	62.07	63.79	139.97	-2,948.94	-2,436.78	2,619.93	2,553.15	66.77	39.235		
13,500.00	10,418.00	15,506.75	12,446.00	63.38	64.98	139.97	-3,048.93	-2,435.80	2,619.93	2,551.88	68.05	38.499		
13,600.00	10,418.00	15,606.75	12,446.00	64.71	66.19	139.97	-3,148.93	-2,434.81	2,619.94	2,550.59	69.35	37.779		
13,700.00	10,418.00	15,706.75	12,446.00	66.05	67.42	139.97	-3,248.92	-2,433.83	2,619.94	2,549.28	70.66	37.077		
13,800.00	10,418.00	15,806.75	12,446.00	67.40	68.67	139.97	-3,348.92	-2,432.85	2,619.95	2,547.96	71.99	36.393		
13,900.00	10,418.00	15,906.75	12,446.00	68.77	69.93	139.97	-3,448.91	-2,431.86	2,619.95	2,546.62	73.33	35.726		
14,000.00	10,418.00	16,006.75	12,446.00	70.15	71.21	139.97	-3,548.91	-2,430.88	2,619.96	2,545.27	74.69	35.076		
14,100.00	10,418.00	16,106.75	12,446.00	71.54	72.50	139.97	-3,648.91	-2,429.90	2,619.96	2,543.90	76.07	34.443		

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 503H
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 503H	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	10,418.00	16,206.75	12,446.00	72.95	73.81	139.97	-3,748.90	-2,428.91	2,619.97	2,542.52	77.45	33.826		
14,300.00	10,418.00	16,306.75	12,446.00	74.36	75.13	139.97	-3,848.90	-2,427.93	2,619.98	2,541.12	78.85	33.226		
14,400.00	10,418.00	16,406.75	12,446.00	75.78	76.47	139.97	-3,948.89	-2,426.94	2,619.98	2,539.72	80.26	32.642		
14,500.00	10,418.00	16,506.75	12,446.00	77.21	77.81	139.97	-4,048.89	-2,425.96	2,619.99	2,538.30	81.68	32.075		
14,600.00	10,418.00	16,606.75	12,446.00	78.65	79.17	139.96	-4,148.88	-2,424.98	2,619.99	2,536.88	83.11	31.523		
14,700.00	10,418.00	16,706.75	12,446.00	80.10	80.54	139.96	-4,248.88	-2,423.99	2,620.00	2,535.44	84.56	30.986		
14,800.00	10,418.00	16,806.75	12,446.00	81.55	81.92	139.96	-4,348.87	-2,423.01	2,620.00	2,534.00	86.00	30.464		
14,900.00	10,418.00	16,906.75	12,446.00	83.02	83.31	139.96	-4,448.87	-2,422.03	2,620.01	2,532.55	87.46	29.956		
15,000.00	10,418.00	17,006.75	12,446.00	84.49	84.71	139.96	-4,548.86	-2,421.04	2,620.02	2,531.09	88.93	29.462		
15,100.00	10,418.00	17,106.75	12,446.00	85.96	86.11	139.96	-4,648.86	-2,420.06	2,620.02	2,529.62	90.40	28.982		
15,200.00	10,418.00	17,206.75	12,446.00	87.45	87.53	139.96	-4,748.85	-2,419.07	2,620.03	2,528.14	91.88	28.515		
15,300.00	10,418.00	17,306.75	12,446.00	88.94	88.95	139.96	-4,848.85	-2,418.09	2,620.03	2,526.66	93.37	28.060		
15,400.00	10,418.00	17,406.75	12,446.00	90.43	90.39	139.96	-4,948.84	-2,417.11	2,620.04	2,525.17	94.87	27.617		
15,500.00	10,418.00	17,506.75	12,446.00	91.93	91.83	139.96	-5,048.84	-2,416.12	2,620.04	2,523.67	96.37	27.186		
15,600.00	10,418.00	17,606.75	12,446.00	93.43	93.27	139.96	-5,148.83	-2,415.14	2,620.05	2,522.17	97.88	26.768		
15,700.00	10,418.00	17,706.75	12,446.00	94.94	94.73	139.96	-5,248.83	-2,414.16	2,620.05	2,520.66	99.39	26.361		
15,800.00	10,418.00	17,806.75	12,446.00	96.46	96.18	139.96	-5,348.82	-2,413.17	2,620.06	2,519.15	100.91	25.964		
15,900.00	10,418.00	17,906.75	12,446.00	97.98	97.65	139.96	-5,448.82	-2,412.19	2,620.07	2,517.63	102.44	25.578		
16,000.00	10,418.00	18,006.75	12,446.00	99.50	99.12	139.96	-5,548.81	-2,411.20	2,620.07	2,516.11	103.97	25.201		
16,100.00	10,418.00	18,106.75	12,446.00	101.03	100.60	139.96	-5,648.81	-2,410.22	2,620.08	2,514.58	105.50	24.835		
16,200.00	10,418.00	18,206.75	12,446.00	102.56	102.08	139.96	-5,748.80	-2,409.24	2,620.08	2,513.05	107.04	24.478		
16,300.00	10,418.00	18,306.75	12,446.00	104.09	103.57	139.96	-5,848.80	-2,408.25	2,620.09	2,511.51	108.58	24.130		
16,400.00	10,418.00	18,406.75	12,446.00	105.63	105.06	139.96	-5,948.79	-2,407.27	2,620.09	2,509.97	110.13	23.792		
16,500.00	10,418.00	18,506.75	12,446.00	107.17	106.56	139.96	-6,048.79	-2,406.29	2,620.10	2,508.43	111.67	23.462		
16,600.00	10,418.00	18,606.75	12,446.00	108.72	108.06	139.96	-6,148.78	-2,405.30	2,620.11	2,506.88	113.23	23.140		
16,700.00	10,418.00	18,706.75	12,446.00	110.26	109.57	139.96	-6,248.78	-2,404.32	2,620.11	2,505.32	114.79	22.826		
16,800.00	10,418.00	18,806.75	12,446.00	111.81	111.08	139.96	-6,348.77	-2,403.33	2,620.12	2,503.77	116.35	22.520		
16,900.00	10,418.00	18,906.75	12,446.00	113.37	112.59	139.96	-6,448.77	-2,402.35	2,620.12	2,502.21	117.91	22.221		
17,000.00	10,418.00	19,006.75	12,446.00	114.92	114.11	139.96	-6,548.76	-2,401.37	2,620.13	2,500.65	119.48	21.930		
17,100.00	10,418.00	19,106.75	12,446.00	116.48	115.63	139.96	-6,648.76	-2,400.38	2,620.13	2,499.09	121.05	21.646		
17,200.00	10,418.00	19,206.75	12,446.00	118.04	117.15	139.96	-6,748.76	-2,399.40	2,620.14	2,497.52	122.62	21.368		
17,300.00	10,418.00	19,306.75	12,446.00	119.61	118.68	139.96	-6,848.75	-2,398.42	2,620.15	2,495.95	124.19	21.097		
17,400.00	10,418.00	19,406.75	12,446.00	121.17	120.21	139.96	-6,948.75	-2,397.43	2,620.15	2,494.38	125.77	20.833		
17,500.00	10,418.00	19,506.75	12,446.00	122.74	121.75	139.96	-7,048.74	-2,396.45	2,620.16	2,492.80	127.35	20.574		
17,600.00	10,418.00	19,606.75	12,446.00	124.31	123.29	139.96	-7,148.74	-2,395.46	2,620.16	2,491.23	128.93	20.322		
17,700.00	10,418.00	19,706.75	12,446.00	125.88	124.83	139.96	-7,248.73	-2,394.48	2,620.17	2,489.65	130.52	20.075		
17,800.00	10,418.00	19,806.75	12,446.00	127.46	126.37	139.96	-7,348.73	-2,393.50	2,620.17	2,488.07	132.10	19.834		
17,900.00	10,418.00	19,906.75	12,446.00	129.04	127.92	139.96	-7,448.72	-2,392.51	2,620.18	2,486.49	133.69	19.599		
18,000.00	10,418.00	20,006.75	12,446.00	130.61	129.46	139.96	-7,548.72	-2,391.53	2,620.18	2,484.90	135.28	19.368		
18,100.00	10,418.00	20,106.75	12,446.00	132.19	131.02	139.96	-7,648.71	-2,390.55	2,620.19	2,483.32	136.87	19.143		
18,200.00	10,418.00	20,206.75	12,446.00	133.78	132.57	139.96	-7,748.71	-2,389.56	2,620.20	2,481.73	138.47	18.923		
18,300.00	10,418.00	20,306.75	12,446.00	135.36	134.13	139.96	-7,848.70	-2,388.58	2,620.20	2,480.14	140.06	18.707		
18,400.00	10,418.00	20,406.75	12,446.00	136.94	135.68	139.96	-7,948.70	-2,387.59	2,620.21	2,478.55	141.66	18.497		
18,500.00	10,418.00	20,506.75	12,446.00	138.53	137.24	139.96	-8,048.69	-2,386.61	2,620.21	2,476.96	143.26	18.290		
18,600.00	10,418.00	20,606.75	12,446.00	140.12	138.81	139.96	-8,148.69	-2,385.63	2,620.22	2,475.36	144.86	18.088		
18,700.00	10,418.00	20,706.75	12,446.00	141.71	140.37	139.96	-8,248.68	-2,384.64	2,620.22	2,473.77	146.46	17.891		
18,800.00	10,418.00	20,806.75	12,446.00	143.30	141.94	139.96	-8,348.68	-2,383.66	2,620.23	2,472.17	148.06	17.697		
18,900.00	10,418.00	20,906.75	12,446.00	144.89	143.51	139.96	-8,448.67	-2,382.68	2,620.24	2,470.57	149.66	17.508		
19,000.00	10,418.00	21,006.75	12,446.00	146.49	145.08	139.96	-8,548.67	-2,381.69	2,620.24	2,468.97	151.27	17.322		
19,100.00	10,418.00	21,106.75	12,446.00	148.08	146.65	139.96	-8,648.66	-2,380.71	2,620.25	2,467.37	152.87	17.140		
19,200.00	10,418.00	21,206.75	12,446.00	149.68	148.22	139.96	-8,748.66	-2,379.72	2,620.25	2,465.77	154.48	16.962		
19,300.00	10,418.00	21,306.75	12,446.00	151.27	149.80	139.96	-8,848.65	-2,378.74	2,620.26	2,464.17	156.09	16.787		

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 503H
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 503H	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	10,418.00	21,406.75	12,446.00	152.87	151.38	139.96	-8,948.65	-2,377.76	2,620.26	2,462.57	157.70	16.616		
19,500.00	10,418.00	21,506.75	12,446.00	154.47	152.95	139.96	-9,048.64	-2,376.77	2,620.27	2,460.96	159.31	16.448		
19,600.00	10,418.00	21,606.75	12,446.00	156.07	154.53	139.96	-9,148.64	-2,375.79	2,620.27	2,459.36	160.91	16.284		
19,700.00	10,418.00	21,706.75	12,446.00	157.67	156.12	139.96	-9,248.63	-2,374.81	2,620.28	2,457.75	162.53	16.122		
19,800.00	10,418.00	21,806.75	12,446.00	159.28	157.70	139.96	-9,348.63	-2,373.82	2,620.29	2,456.15	164.14	15.964		
19,900.00	10,418.00	21,906.75	12,446.00	160.88	159.28	139.96	-9,448.62	-2,372.84	2,620.29	2,454.54	165.75	15.808		
20,000.00	10,418.00	22,006.75	12,446.00	162.48	160.87	139.96	-9,548.62	-2,371.85	2,620.30	2,452.93	167.37	15.656		
20,100.00	10,418.00	22,106.75	12,446.00	164.09	162.46	139.96	-9,648.61	-2,370.87	2,620.30	2,451.32	168.98	15.507		
20,200.00	10,418.00	22,206.75	12,446.00	165.70	164.04	139.96	-9,748.61	-2,369.89	2,620.31	2,449.71	170.60	15.360		
20,300.00	10,418.00	22,306.75	12,446.00	167.30	165.63	139.96	-9,848.61	-2,368.90	2,620.31	2,448.10	172.21	15.216		
20,400.00	10,418.00	22,406.75	12,446.00	168.91	167.22	139.96	-9,948.60	-2,367.92	2,620.32	2,446.50	173.82	15.075		
20,500.00	10,418.00	22,506.75	12,446.00	170.52	168.82	139.96	-10,048.60	-2,366.94	2,620.33	2,444.88	175.44	14.936		
20,600.00	10,418.00	22,606.75	12,446.00	172.13	170.41	139.96	-10,148.59	-2,365.95	2,620.33	2,443.27	177.06	14.799		
20,700.00	10,418.00	22,706.75	12,446.00	173.74	172.00	139.96	-10,248.59	-2,364.97	2,620.34	2,441.66	178.68	14.665		
20,800.00	10,418.00	22,806.75	12,446.00	175.35	173.60	139.96	-10,348.58	-2,363.98	2,620.34	2,440.05	180.29	14.534		
20,900.00	10,418.00	22,906.75	12,446.00	176.97	175.20	139.96	-10,448.58	-2,363.00	2,620.35	2,438.44	181.91	14.405		
21,000.00	10,418.00	23,006.75	12,446.00	178.58	176.79	139.96	-10,548.57	-2,362.02	2,620.35	2,436.82	183.53	14.278		
21,100.00	10,418.00	23,106.75	12,446.00	180.19	178.39	139.96	-10,648.57	-2,361.03	2,620.36	2,435.21	185.15	14.153		
21,200.00	10,418.00	23,206.75	12,446.00	181.81	179.99	139.96	-10,748.56	-2,360.05	2,620.36	2,433.60	186.77	14.030		
21,300.00	10,418.00	23,306.75	12,446.00	183.42	181.59	139.96	-10,848.56	-2,359.07	2,620.37	2,431.98	188.39	13.909		
21,400.00	10,418.00	23,406.75	12,446.00	185.04	183.19	139.95	-10,948.55	-2,358.08	2,620.38	2,430.37	190.01	13.791		
21,500.00	10,418.00	23,506.75	12,446.00	186.65	184.79	139.95	-11,048.55	-2,357.10	2,620.38	2,428.75	191.63	13.674		
21,600.00	10,418.00	23,606.75	12,446.00	188.27	186.40	139.95	-11,148.54	-2,356.11	2,620.39	2,427.14	193.25	13.560		
21,700.00	10,418.00	23,706.75	12,446.00	189.89	188.00	139.95	-11,248.54	-2,355.13	2,620.39	2,425.52	194.87	13.447		
21,800.00	10,418.00	23,806.75	12,446.00	191.50	189.61	139.95	-11,348.53	-2,354.15	2,620.40	2,423.91	196.49	13.336		
21,900.00	10,418.00	23,906.75	12,446.00	193.12	191.21	139.95	-11,448.53	-2,353.16	2,620.40	2,422.29	198.11	13.227		
21,900.00	10,418.00	23,906.75	12,446.00	193.12	191.21	139.95	-11,448.53	-2,353.16	2,620.40	2,422.29	198.11	13.227		
21,923.68	10,418.00	23,929.64	12,446.00	193.51	191.58	139.95	-11,471.42	-2,352.94	2,620.41	2,421.92	198.49	13.202 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 503H
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 503H	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	-96.34	-316.72	-2,850.03	2,867.58					
100.00	100.00	122.00	122.00	0.13	0.20	-96.34	-316.72	-2,850.03	2,867.58	2,867.34	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.34	-316.72	-2,850.03	2,867.58	2,866.83	0.74	3,863.343		
300.00	300.00	322.00	322.00	0.84	0.92	-96.34	-316.72	-2,850.03	2,867.58	2,866.33	1.25	2,297.082		
400.00	400.00	422.00	422.00	1.20	1.28	-96.34	-316.72	-2,850.03	2,867.58	2,865.82	1.75	1,633.992		
500.00	500.00	522.00	522.00	1.56	1.64	-96.34	-316.72	-2,850.03	2,867.58	2,865.32	2.26	1,267.881		
600.00	600.00	622.00	622.00	1.92	2.00	-96.34	-316.72	-2,850.03	2,867.58	2,864.81	2.77	1,035.773		
700.00	700.00	722.00	722.00	2.28	2.36	-96.34	-316.72	-2,850.03	2,867.58	2,864.30	3.28	875.487		
800.00	800.00	822.00	822.00	2.63	2.71	-96.34	-316.72	-2,850.03	2,867.58	2,863.79	3.78	758.157		
900.00	900.00	922.00	922.00	2.99	3.07	-96.34	-316.72	-2,850.03	2,867.58	2,863.29	4.29	668.557		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.34	-316.72	-2,850.03	2,867.58	2,862.78	4.80	597.895		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.34	-316.72	-2,850.03	2,867.58	2,862.27	5.30	540.742		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.34	-316.72	-2,850.03	2,867.58	2,861.77	5.81	493.561		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.34	-316.72	-2,850.03	2,867.58	2,861.26	6.32	453.953		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.34	-316.72	-2,850.03	2,867.58	2,860.75	6.82	420.229		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.34	-316.72	-2,850.03	2,867.58	2,860.25	7.33	391.169		
1,600.00	1,600.00	2,114.59	2,111.83	5.50	7.34	-96.07	-298.53	-2,807.68	2,865.68	2,856.63	9.05	316.687		
1,700.00	1,700.00	2,443.22	2,431.44	5.86	8.68	-95.60	-268.58	-2,737.98	2,841.12	2,831.03	10.09	281.589		
1,800.00	1,800.00	2,539.74	2,524.62	6.22	9.10	-95.44	-258.63	-2,714.81	2,816.16	2,805.58	10.58	266.165		
1,900.00	1,900.00	2,636.27	2,617.80	6.58	9.54	-95.28	-248.68	-2,691.65	2,791.22	2,780.15	11.08	252.018		
2,000.00	2,000.00	2,732.80	2,710.97	6.94	9.99	-95.11	-238.73	-2,668.48	2,766.31	2,754.73	11.57	239.007		
2,100.00	2,100.00	2,829.33	2,804.15	7.29	10.44	-94.94	-228.77	-2,645.31	2,741.41	2,729.34	12.08	227.012		
2,200.00	2,199.99	2,925.58	2,897.06	7.65	10.90	-21.09	-218.85	-2,622.21	2,715.36	2,702.78	12.58	215.899		
2,300.00	2,299.91	3,021.24	2,989.40	7.99	11.37	-21.11	-208.99	-2,599.25	2,686.97	2,673.90	13.08	205.500		
2,400.00	2,399.69	3,116.24	3,081.10	8.34	11.84	-21.16	-199.19	-2,576.45	2,656.27	2,642.70	13.57	195.704		
2,500.00	2,499.27	3,210.51	3,172.10	8.70	12.31	-21.24	-189.47	-2,553.83	2,623.26	2,609.19	14.07	186.456		
2,600.00	2,598.57	3,304.00	3,262.34	9.06	12.78	-21.35	-179.83	-2,531.39	2,587.97	2,573.40	14.56	177.702		
2,700.00	2,697.54	3,396.63	3,351.76	9.42	13.25	-21.51	-170.28	-2,509.16	2,550.41	2,535.35	15.06	169.397		
2,771.79	2,768.33	3,462.57	3,415.40	9.69	13.58	-21.64	-163.48	-2,493.33	2,522.06	2,506.65	15.41	163.682		
2,800.00	2,796.11	3,488.38	3,440.32	9.79	13.71	-21.63	-160.82	-2,487.14	2,510.69	2,495.15	15.55	161.495		
2,900.00	2,894.56	3,579.89	3,528.65	10.18	14.18	-21.59	-151.39	-2,465.18	2,470.40	2,454.37	16.03	154.065		
3,000.00	2,993.02	3,671.40	3,616.98	10.56	14.66	-21.54	-141.95	-2,443.21	2,430.11	2,413.59	16.53	147.052		
3,100.00	3,091.48	3,762.91	3,705.32	10.95	15.13	-21.49	-132.52	-2,421.25	2,389.83	2,372.81	17.02	140.425		
3,200.00	3,189.94	3,854.41	3,793.65	11.35	15.61	-21.45	-123.08	-2,399.29	2,349.54	2,332.03	17.51	134.155		
3,300.00	3,288.39	3,945.92	3,881.98	11.75	16.09	-21.40	-113.65	-2,377.33	2,309.26	2,291.24	18.01	128.215		
3,400.00	3,386.85	4,037.43	3,970.31	12.16	16.57	-21.35	-104.21	-2,355.36	2,268.97	2,250.46	18.51	122.583		
3,500.00	3,485.31	4,128.94	4,058.64	12.57	17.05	-21.29	-94.78	-2,333.40	2,228.69	2,209.68	19.01	117.236		
3,600.00	3,583.77	4,220.45	4,146.97	12.98	17.53	-21.24	-85.34	-2,311.44	2,188.41	2,168.90	19.51	112.155		
3,700.00	3,682.22	4,311.95	4,235.30	13.39	18.02	-21.18	-75.91	-2,289.48	2,148.13	2,128.12	20.02	107.321		
3,800.00	3,780.68	4,403.46	4,323.63	13.81	18.50	-21.12	-66.47	-2,267.52	2,107.86	2,087.34	20.52	102.716		
3,900.00	3,879.14	4,494.97	4,411.97	14.23	18.99	-21.06	-57.04	-2,245.55	2,067.58	2,046.56	21.03	98.327		
4,000.00	3,977.60	4,586.48	4,500.30	14.65	19.48	-21.00	-47.60	-2,223.59	2,027.31	2,005.78	21.54	94.139		
4,100.00	4,076.05	4,677.99	4,588.63	15.07	19.97	-20.93	-38.17	-2,201.63	1,987.04	1,965.00	22.04	90.139		
4,200.00	4,174.51	4,769.50	4,676.96	15.50	20.46	-20.86	-28.73	-2,179.67	1,946.77	1,924.22	22.55	86.316		
4,300.00	4,272.97	4,861.00	4,765.29	15.93	20.95	-20.79	-19.30	-2,157.71	1,906.51	1,883.44	23.06	82.659		
4,400.00	4,371.43	4,952.51	4,853.62	16.36	21.44	-20.71	-9.86	-2,135.74	1,866.25	1,842.67	23.58	79.158		
4,500.00	4,469.88	5,044.02	4,941.95	16.79	21.94	-20.63	-0.43	-2,113.78	1,825.99	1,801.90	24.09	75.803		
4,600.00	4,568.34	5,135.53	5,030.28	17.22	22.43	-20.55	9.01	-2,091.82	1,785.73	1,761.13	24.60	72.584		
4,700.00	4,666.80	5,227.04	5,118.61	17.65	22.93	-20.46	18.44	-2,069.86	1,745.48	1,720.36	25.12	69.493		
4,800.00	4,765.25	5,318.55	5,206.95	18.08	23.42	-20.37	27.88	-2,047.89	1,705.23	1,679.59	25.63	66.524		
4,900.00	4,863.71	5,410.05	5,295.28	18.52	23.92	-20.28	37.31	-2,025.93	1,664.98	1,638.83	26.15	63.671		
5,000.00	4,962.17	5,501.56	5,383.61	18.95	24.41	-20.18	46.75	-2,003.97	1,624.74	1,598.07	26.67	60.926		

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 503H
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 503H	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	5,060.63	5,593.07	5,471.94	19.39	24.91	-20.08	56.18	-1,982.01	1,584.50	1,557.31	27.19	58.284		
5,200.00	5,159.08	5,684.58	5,560.27	19.83	25.41	-19.97	65.62	-1,960.05	1,544.27	1,516.56	27.71	55.740		
5,300.00	5,257.54	5,776.09	5,648.60	20.27	25.91	-19.85	75.05	-1,938.08	1,504.04	1,475.81	28.23	53.287		
5,400.00	5,356.00	5,867.59	5,736.93	20.71	26.40	-19.73	84.49	-1,916.12	1,463.82	1,435.07	28.75	50.922		
5,500.00	5,454.46	5,959.10	5,825.26	21.15	26.90	-19.60	93.92	-1,894.16	1,423.60	1,394.33	29.27	48.640		
5,600.00	5,552.91	6,050.61	5,913.60	21.59	27.40	-19.46	103.36	-1,872.20	1,383.39	1,353.60	29.79	46.437		
5,700.00	5,651.37	6,142.12	6,001.93	22.03	27.90	-19.32	112.79	-1,850.23	1,343.18	1,312.87	30.31	44.308		
5,800.00	5,749.83	6,233.63	6,090.26	22.47	28.40	-19.16	122.23	-1,828.27	1,302.99	1,272.15	30.84	42.250		
5,900.00	5,848.29	6,325.14	6,178.59	22.91	28.90	-19.00	131.66	-1,806.31	1,262.80	1,231.43	31.37	40.260		
6,000.00	5,946.74	6,416.64	6,266.92	23.36	29.40	-18.83	141.10	-1,784.35	1,222.62	1,190.73	31.89	38.335		
6,100.00	6,045.20	6,508.15	6,355.25	23.80	29.90	-18.64	150.53	-1,762.39	1,182.45	1,150.03	32.42	36.471		
6,200.00	6,143.66	6,599.66	6,443.58	24.24	30.40	-18.44	159.97	-1,740.42	1,142.30	1,109.34	32.95	34.665		
6,300.00	6,242.12	6,691.17	6,531.91	24.69	30.91	-18.23	169.40	-1,718.46	1,102.15	1,068.67	33.48	32.917		
6,400.00	6,340.57	6,782.68	6,620.24	25.13	31.41	-18.00	178.84	-1,696.50	1,062.02	1,028.01	34.02	31.222		
6,500.00	6,439.03	6,856.70	6,691.82	25.58	31.80	-17.81	186.28	-1,679.17	1,022.51	987.93	34.58	29.571		
6,600.00	6,537.49	6,926.64	6,759.86	26.02	32.16	-17.66	192.67	-1,664.29	985.02	949.88	35.14	28.029		
6,700.00	6,635.95	7,000.00	6,831.63	26.47	32.53	-17.54	198.67	-1,650.33	949.67	913.97	35.70	26.605		
6,757.61	6,692.67	7,039.49	6,870.42	26.73	32.71	-17.50	201.60	-1,643.52	930.29	894.28	36.01	25.834		
6,800.00	6,734.44	7,070.42	6,900.87	26.91	32.85	-17.40	203.74	-1,638.52	916.71	880.47	36.24	25.298		
6,900.00	6,833.29	7,144.60	6,974.12	27.34	33.17	-17.19	208.36	-1,627.78	887.99	851.23	36.76	24.155		
7,000.00	6,932.50	7,220.30	7,049.15	27.75	33.47	-17.01	212.29	-1,618.62	864.01	826.74	37.27	23.182		
7,100.00	7,032.01	7,300.00	7,128.41	28.14	33.78	-16.86	215.59	-1,610.94	844.89	807.13	37.76	22.373		
7,200.00	7,131.74	7,375.20	7,203.39	28.51	34.03	-16.75	217.90	-1,605.56	830.69	792.47	38.23	21.731		
7,300.00	7,231.62	7,453.86	7,281.94	28.86	34.28	-16.68	219.49	-1,601.87	821.49	782.83	38.67	21.246		
7,400.00	7,331.60	7,532.92	7,360.97	29.19	34.52	-16.64	220.22	-1,600.16	817.33	778.25	39.08	20.917		
7,429.40	7,361.00	7,560.95	7,389.00	29.28	34.59	-90.47	220.28	-1,600.03	817.08	777.88	39.21	20.840		
7,455.12	7,386.72	7,580.67	7,408.72	29.36	34.65	-90.47	220.28	-1,600.03	817.06	777.76	39.30	20.789		
7,500.00	7,431.60	7,625.55	7,453.60	29.50	34.77	-90.47	220.28	-1,600.03	817.06	777.55	39.51	20.680		
7,600.00	7,531.60	7,725.55	7,553.60	29.82	35.04	-90.47	220.28	-1,600.03	817.06	777.09	39.97	20.441		
7,700.00	7,631.60	7,825.55	7,653.60	30.14	35.31	-90.47	220.28	-1,600.03	817.06	776.63	40.43	20.208		
7,800.00	7,731.60	7,925.55	7,753.60	30.45	35.58	-90.47	220.28	-1,600.03	817.06	776.16	40.90	19.979		
7,900.00	7,831.60	8,025.55	7,853.60	30.77	35.86	-90.47	220.28	-1,600.03	817.06	775.70	41.36	19.754		
8,000.00	7,931.60	8,125.55	7,953.60	31.09	36.13	-90.47	220.28	-1,600.03	817.06	775.23	41.83	19.535		
8,100.00	8,031.60	8,225.55	8,053.60	31.41	36.41	-90.47	220.28	-1,600.03	817.06	774.77	42.29	19.319		
8,200.00	8,131.60	8,325.55	8,153.60	31.73	36.69	-90.47	220.28	-1,600.03	817.06	774.30	42.76	19.108		
8,300.00	8,231.60	8,425.55	8,253.60	32.06	36.97	-90.47	220.28	-1,600.03	817.06	773.83	43.23	18.901		
8,400.00	8,331.60	8,525.55	8,353.60	32.38	37.25	-90.47	220.28	-1,600.03	817.06	773.36	43.70	18.698		
8,500.00	8,431.60	8,625.55	8,453.60	32.70	37.53	-90.47	220.28	-1,600.03	817.06	772.89	44.17	18.499		
8,600.00	8,531.60	8,725.55	8,553.60	33.03	37.82	-90.47	220.28	-1,600.03	817.06	772.42	44.64	18.304		
8,700.00	8,631.60	8,825.55	8,653.60	33.35	38.10	-90.47	220.28	-1,600.03	817.06	771.95	45.11	18.113		
8,800.00	8,731.60	8,925.55	8,753.60	33.68	38.39	-90.47	220.28	-1,600.03	817.06	771.48	45.58	17.925		
8,900.00	8,831.60	9,025.55	8,853.60	34.00	38.68	-90.47	220.28	-1,600.03	817.06	771.01	46.05	17.741		
9,000.00	8,931.60	9,125.55	8,953.60	34.33	38.97	-90.47	220.28	-1,600.03	817.06	770.53	46.53	17.561		
9,100.00	9,031.60	9,225.55	9,053.60	34.66	39.26	-90.47	220.28	-1,600.03	817.06	770.06	47.00	17.383		
9,200.00	9,131.60	9,325.55	9,153.60	34.98	39.55	-90.47	220.28	-1,600.03	817.06	769.58	47.48	17.209		
9,300.00	9,231.60	9,425.55	9,253.60	35.31	39.84	-90.47	220.28	-1,600.03	817.06	769.11	47.95	17.039		
9,400.00	9,331.60	9,525.55	9,353.60	35.64	40.14	-90.47	220.28	-1,600.03	817.06	768.63	48.43	16.871		
9,500.00	9,431.60	9,625.55	9,453.60	35.97	40.43	-90.47	220.28	-1,600.03	817.06	768.15	48.91	16.706		
9,600.00	9,531.60	9,725.55	9,553.60	36.30	40.73	-90.47	220.28	-1,600.03	817.06	767.68	49.38	16.545		
9,700.00	9,631.60	9,825.55	9,653.60	36.63	41.02	-90.47	220.28	-1,600.03	817.06	767.20	49.86	16.386		
9,800.00	9,731.60	9,925.55	9,753.60	36.96	41.32	-90.47	220.28	-1,600.03	817.06	766.72	50.34	16.230		
9,900.00	9,831.60	10,025.55	9,853.60	37.30	41.62	-90.47	220.28	-1,600.03	817.06	766.24	50.82	16.077		

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 503H
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 503H	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		
9,913.44	9,845.04	10,038.99	9,867.04	37.34	41.66	-90.47	220.28	-1,600.03	817.06	766.18	50.88	16.057	CC	
9,950.00	9,881.57	10,075.52	9,903.57	37.46	41.77	90.18	220.28	-1,600.03	817.06	766.00	51.06	16.002		
10,000.00	9,931.27	10,125.22	9,953.27	37.60	41.92	90.55	220.28	-1,600.03	817.10	765.80	51.30	15.928		
10,050.00	9,980.31	10,174.26	10,002.31	37.74	42.06	91.20	220.28	-1,600.03	817.25	765.71	51.54	15.856	ES	
10,100.00	10,028.32	10,222.27	10,050.32	37.87	42.21	92.09	220.28	-1,600.03	817.67	765.87	51.80	15.787		
10,150.00	10,074.94	10,268.88	10,096.94	37.99	42.35	93.18	220.28	-1,600.03	818.56	766.50	52.06	15.725		
10,200.00	10,119.80	10,313.75	10,141.80	38.10	42.48	94.40	220.28	-1,600.03	820.19	767.86	52.33	15.674		
10,250.00	10,162.58	10,356.52	10,184.58	38.19	42.61	95.67	220.28	-1,600.03	822.85	770.23	52.62	15.639		
10,300.00	10,202.93	10,396.88	10,224.93	38.28	42.73	96.92	220.28	-1,600.03	826.86	773.94	52.92	15.625		
10,350.00	10,240.57	10,434.52	10,262.57	38.35	42.85	98.05	220.28	-1,600.03	832.54	779.30	53.24	15.636		
10,400.00	10,275.19	10,469.14	10,297.19	38.42	42.95	99.00	220.28	-1,600.03	840.21	786.62	53.59	15.679		
10,450.00	10,306.54	10,500.49	10,328.54	38.47	43.05	99.66	220.28	-1,600.03	850.13	796.17	53.95	15.757		
10,500.00	10,334.38	10,528.33	10,356.38	38.52	43.13	99.98	220.28	-1,600.03	862.51	808.18	54.33	15.875		
10,550.00	10,358.49	10,552.44	10,380.49	38.56	43.21	99.86	220.28	-1,600.03	877.52	822.80	54.72	16.036		
10,600.00	10,378.70	10,572.65	10,400.70	38.60	43.27	99.26	220.28	-1,600.03	895.21	840.09	55.12	16.242		
10,650.00	10,394.84	10,588.79	10,416.84	38.64	43.32	98.10	220.28	-1,600.03	915.56	860.05	55.51	16.494		
10,700.00	10,406.80	10,600.75	10,428.80	38.68	43.35	96.34	220.28	-1,600.03	938.46	882.57	55.89	16.791		
10,750.00	10,414.49	10,608.44	10,436.49	38.74	43.38	93.95	220.28	-1,600.03	963.71	907.46	56.25	17.131		
10,800.00	10,417.84	10,611.79	10,439.84	38.82	43.39	90.92	220.28	-1,600.03	991.06	934.46	56.60	17.511		
10,813.44	10,418.00	10,611.95	10,440.00	38.85	43.39	90.00	220.28	-1,600.03	998.73	942.05	56.68	17.620		
10,900.00	10,418.00	10,611.95	10,440.00	39.04	43.39	90.00	220.28	-1,600.03	1,050.90	993.68	57.22	18.367		
11,000.00	10,418.00	10,611.95	10,440.00	39.34	43.39	90.00	220.28	-1,600.03	1,116.50	1,058.72	57.77	19.326		
11,100.00	10,418.00	10,611.95	10,440.00	39.72	43.39	90.00	220.28	-1,600.03	1,186.90	1,128.65	58.26	20.374		
11,200.00	10,418.00	10,611.95	10,440.00	40.19	43.39	90.00	220.28	-1,600.03	1,261.32	1,202.64	58.68	21.497		
11,300.00	10,418.00	10,611.95	10,440.00	40.72	43.39	90.00	220.28	-1,600.03	1,339.07	1,280.03	59.03	22.683		
11,400.00	10,418.00	10,611.95	10,440.00	41.32	43.39	90.00	220.28	-1,600.03	1,419.61	1,360.27	59.34	23.923		
11,500.00	10,418.00	10,611.95	10,440.00	41.98	43.39	90.00	220.28	-1,600.03	1,502.49	1,442.88	59.60	25.208		
11,600.00	10,418.00	10,611.95	10,440.00	42.70	43.39	90.00	220.28	-1,600.03	1,587.34	1,527.51	59.83	26.531		
11,700.00	10,418.00	10,611.95	10,440.00	43.47	43.39	90.00	220.28	-1,600.03	1,673.87	1,613.84	60.03	27.886		
11,800.00	10,418.00	10,611.95	10,440.00	44.29	43.39	90.00	220.28	-1,600.03	1,761.82	1,701.62	60.19	29.269		
11,900.00	10,418.00	10,611.95	10,440.00	45.15	43.39	90.00	220.28	-1,600.03	1,851.00	1,790.66	60.34	30.676		
12,000.00	10,418.00	10,611.95	10,440.00	46.06	43.39	90.00	220.28	-1,600.03	1,941.23	1,880.76	60.47	32.104		
12,100.00	10,418.00	10,611.95	10,440.00	47.01	43.39	90.00	220.28	-1,600.03	2,032.38	1,971.80	60.58	33.549		
12,200.00	10,418.00	10,611.95	10,440.00	47.99	43.39	90.00	220.28	-1,600.03	2,124.32	2,063.64	60.68	35.009		
12,300.00	10,418.00	14,509.73	12,517.00	49.02	55.31	160.91	-1,839.49	-1,481.51	2,197.92	2,151.01	46.91	46.852		
12,400.00	10,418.00	14,609.73	12,517.00	50.07	56.12	160.91	-1,939.48	-1,480.53	2,197.93	2,150.26	47.66	46.114		
12,500.00	10,418.00	14,709.73	12,517.00	51.16	56.97	160.91	-2,039.48	-1,479.54	2,197.93	2,149.49	48.44	45.378		
12,600.00	10,418.00	14,809.73	12,517.00	52.28	57.86	160.91	-2,139.47	-1,478.56	2,197.93	2,148.70	49.23	44.645		
12,700.00	10,418.00	14,909.73	12,517.00	53.42	58.78	160.91	-2,239.47	-1,477.58	2,197.94	2,147.89	50.05	43.918		
12,800.00	10,418.00	15,009.73	12,517.00	54.59	59.74	160.90	-2,339.46	-1,476.59	2,197.94	2,147.06	50.88	43.197		
12,900.00	10,418.00	15,109.73	12,517.00	55.78	60.73	160.90	-2,439.46	-1,475.61	2,197.94	2,146.21	51.74	42.484		
13,000.00	10,418.00	15,209.73	12,517.00	57.00	61.74	160.90	-2,539.46	-1,474.62	2,197.94	2,145.34	52.61	41.781		
13,100.00	10,418.00	15,309.73	12,517.00	58.24	62.79	160.90	-2,639.45	-1,473.64	2,197.95	2,144.45	53.50	41.087		
13,200.00	10,418.00	15,409.73	12,517.00	59.50	63.86	160.90	-2,739.45	-1,472.66	2,197.95	2,143.55	54.40	40.404		
13,300.00	10,418.00	15,509.73	12,517.00	60.77	64.95	160.90	-2,839.44	-1,471.67	2,197.95	2,142.64	55.32	39.733		
13,400.00	10,418.00	15,609.73	12,517.00	62.07	66.07	160.90	-2,939.44	-1,470.69	2,197.96	2,141.71	56.25	39.076		
13,500.00	10,418.00	15,709.73	12,517.00	63.38	67.21	160.90	-3,039.43	-1,469.70	2,197.96	2,140.77	57.19	38.431		
13,600.00	10,418.00	15,809.73	12,517.00	64.71	68.37	160.90	-3,139.43	-1,468.72	2,197.96	2,139.81	58.15	37.798		
13,700.00	10,418.00	15,909.73	12,517.00	66.05	69.55	160.90	-3,239.42	-1,467.74	2,197.96	2,138.84	59.12	37.178		
13,800.00	10,418.00	16,009.73	12,517.00	67.40	70.75	160.90	-3,339.42	-1,466.75	2,197.97	2,137.87	60.10	36.571		
13,900.00	10,418.00	16,109.73	12,517.00	68.77	71.97	160.90	-3,439.41	-1,465.77	2,197.97	2,136.88	61.09	35.977		
14,000.00	10,418.00	16,209.73	12,517.00	70.15	73.21	160.90	-3,539.41	-1,464.79	2,197.97	2,135.87	62.10	35.396		

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 503H
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 503H	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	
14,100.00	10,418.00	16,309.73	12,517.00	71.54	74.46	160.90	-3,639.40	-1,463.80	2,197.98	2,134.86	63.11	34.827		
14,200.00	10,418.00	16,409.73	12,517.00	72.95	75.73	160.90	-3,739.40	-1,462.82	2,197.98	2,133.84	64.13	34.272		
14,300.00	10,418.00	16,509.73	12,517.00	74.36	77.01	160.90	-3,839.39	-1,461.83	2,197.98	2,132.81	65.17	33.729		
14,400.00	10,418.00	16,609.73	12,517.00	75.78	78.31	160.90	-3,939.39	-1,460.85	2,197.98	2,131.78	66.21	33.198		
14,500.00	10,418.00	16,709.73	12,517.00	77.21	79.61	160.90	-4,039.38	-1,459.87	2,197.99	2,130.73	67.26	32.681		
14,600.00	10,418.00	16,809.73	12,517.00	78.65	80.94	160.90	-4,139.38	-1,458.88	2,197.99	2,129.68	68.31	32.176		
14,700.00	10,418.00	16,909.73	12,517.00	80.10	82.27	160.90	-4,239.37	-1,457.90	2,197.99	2,128.62	69.37	31.683		
14,800.00	10,418.00	17,009.73	12,517.00	81.55	83.61	160.90	-4,339.37	-1,456.91	2,197.99	2,127.55	70.44	31.203		
14,900.00	10,418.00	17,109.73	12,517.00	83.02	84.97	160.90	-4,439.36	-1,455.93	2,198.00	2,126.48	71.52	30.733		
15,000.00	10,418.00	17,209.73	12,517.00	84.49	86.33	160.90	-4,539.36	-1,454.95	2,198.00	2,125.40	72.60	30.275		
15,100.00	10,418.00	17,309.73	12,517.00	85.96	87.71	160.90	-4,639.35	-1,453.96	2,198.00	2,124.31	73.69	29.828		
15,200.00	10,418.00	17,409.73	12,517.00	87.45	89.10	160.90	-4,739.35	-1,452.98	2,198.01	2,123.22	74.78	29.391		
15,300.00	10,418.00	17,509.73	12,517.00	88.94	90.49	160.90	-4,839.34	-1,451.99	2,198.01	2,122.12	75.88	28.965		
15,400.00	10,418.00	17,609.73	12,517.00	90.43	91.89	160.90	-4,939.34	-1,451.01	2,198.01	2,121.02	76.99	28.549		
15,500.00	10,418.00	17,709.73	12,517.00	91.93	93.30	160.90	-5,039.33	-1,450.03	2,198.01	2,119.91	78.10	28.143		
15,600.00	10,418.00	17,809.73	12,517.00	93.43	94.72	160.90	-5,139.33	-1,449.04	2,198.02	2,118.80	79.22	27.747		
15,700.00	10,418.00	17,909.73	12,517.00	94.94	96.15	160.90	-5,239.32	-1,448.06	2,198.02	2,117.68	80.34	27.360		
15,800.00	10,418.00	18,009.73	12,517.00	96.46	97.58	160.90	-5,339.32	-1,447.07	2,198.02	2,116.56	81.46	26.983		
15,900.00	10,418.00	18,109.73	12,517.00	97.98	99.02	160.90	-5,439.31	-1,446.09	2,198.03	2,115.44	82.59	26.615		
16,000.00	10,418.00	18,209.73	12,517.00	99.50	100.46	160.90	-5,539.31	-1,445.11	2,198.03	2,114.31	83.72	26.255		
16,100.00	10,418.00	18,309.73	12,517.00	101.03	101.92	160.90	-5,639.31	-1,444.12	2,198.03	2,113.18	84.85	25.904		
16,200.00	10,418.00	18,409.73	12,517.00	102.56	103.38	160.90	-5,739.30	-1,443.14	2,198.03	2,112.04	85.99	25.561		
16,300.00	10,418.00	18,509.73	12,517.00	104.09	104.84	160.90	-5,839.30	-1,442.15	2,198.04	2,110.90	87.13	25.226		
16,400.00	10,418.00	18,609.73	12,517.00	105.63	106.31	160.90	-5,939.29	-1,441.17	2,198.04	2,109.76	88.28	24.898		
16,500.00	10,418.00	18,709.73	12,517.00	107.17	107.78	160.90	-6,039.29	-1,440.19	2,198.04	2,108.61	89.43	24.578		
16,600.00	10,418.00	18,809.73	12,517.00	108.72	109.26	160.90	-6,139.28	-1,439.20	2,198.05	2,107.46	90.58	24.265		
16,700.00	10,418.00	18,909.73	12,517.00	110.26	110.75	160.90	-6,239.28	-1,438.22	2,198.05	2,106.31	91.74	23.960		
16,800.00	10,418.00	19,009.73	12,517.00	111.81	112.24	160.90	-6,339.27	-1,437.24	2,198.05	2,105.16	92.89	23.662		
16,900.00	10,418.00	19,109.73	12,517.00	113.37	113.73	160.90	-6,439.27	-1,436.25	2,198.05	2,104.00	94.06	23.370		
17,000.00	10,418.00	19,209.73	12,517.00	114.92	115.23	160.90	-6,539.26	-1,435.27	2,198.06	2,102.84	95.22	23.084		
17,100.00	10,418.00	19,309.73	12,517.00	116.48	116.73	160.90	-6,639.26	-1,434.28	2,198.06	2,101.68	96.38	22.805		
17,200.00	10,418.00	19,409.73	12,517.00	118.04	118.24	160.90	-6,739.25	-1,433.30	2,198.06	2,100.51	97.55	22.533		
17,300.00	10,418.00	19,509.73	12,517.00	119.61	119.75	160.90	-6,839.25	-1,432.32	2,198.06	2,099.34	98.72	22.266		
17,400.00	10,418.00	19,609.73	12,517.00	121.17	121.26	160.90	-6,939.24	-1,431.33	2,198.07	2,098.18	99.89	22.004		
17,500.00	10,418.00	19,709.73	12,517.00	122.74	122.78	160.89	-7,039.24	-1,430.35	2,198.07	2,097.00	101.07	21.749		
17,600.00	10,418.00	19,809.73	12,517.00	124.31	124.30	160.89	-7,139.23	-1,429.36	2,198.07	2,095.83	102.24	21.499		
17,700.00	10,418.00	19,909.73	12,517.00	125.88	125.82	160.89	-7,239.23	-1,428.38	2,198.08	2,094.65	103.42	21.254		
17,800.00	10,418.00	20,009.73	12,517.00	127.46	127.35	160.89	-7,339.22	-1,427.40	2,198.08	2,093.48	104.60	21.014		
17,900.00	10,418.00	20,109.73	12,517.00	129.04	128.88	160.89	-7,439.22	-1,426.41	2,198.08	2,092.30	105.78	20.780		
18,000.00	10,418.00	20,209.73	12,517.00	130.61	130.41	160.89	-7,539.21	-1,425.43	2,198.08	2,091.12	106.96	20.550		
18,100.00	10,418.00	20,309.73	12,517.00	132.19	131.95	160.89	-7,639.21	-1,424.44	2,198.09	2,089.94	108.15	20.324		
18,200.00	10,418.00	20,409.73	12,517.00	133.78	133.49	160.89	-7,739.20	-1,423.46	2,198.09	2,088.75	109.34	20.104		
18,300.00	10,418.00	20,509.73	12,517.00	135.36	135.03	160.89	-7,839.20	-1,422.48	2,198.09	2,087.57	110.52	19.888		
18,400.00	10,418.00	20,609.73	12,517.00	136.94	136.57	160.89	-7,939.19	-1,421.49	2,198.10	2,086.38	111.71	19.677		
18,500.00	10,418.00	20,709.73	12,517.00	138.53	138.12	160.89	-8,039.19	-1,420.51	2,198.10	2,085.20	112.90	19.469		
18,600.00	10,418.00	20,809.73	12,517.00	140.12	139.67	160.89	-8,139.18	-1,419.52	2,198.10	2,084.01	114.09	19.266		
18,700.00	10,418.00	20,909.73	12,517.00	141.71	141.22	160.89	-8,239.18	-1,418.54	2,198.10	2,082.82	115.29	19.066		
18,800.00	10,418.00	21,009.73	12,517.00	143.30	142.77	160.89	-8,339.17	-1,417.56	2,198.11	2,081.62	116.48	18.871		
18,900.00	10,418.00	21,109.73	12,517.00	144.89	144.33	160.89	-8,439.17	-1,416.57	2,198.11	2,080.43	117.68	18.679		
19,000.00	10,418.00	21,209.73	12,517.00	146.49	145.89	160.89	-8,539.16	-1,415.59	2,198.11	2,079.24	118.87	18.491		
19,100.00	10,418.00	21,309.73	12,517.00	148.08	147.45	160.89	-8,639.16	-1,414.60	2,198.12	2,078.05	120.07	18.307		
19,200.00	10,418.00	21,409.73	12,517.00	149.68	149.01	160.89	-8,739.16	-1,413.62	2,198.12	2,076.85	121.27	18.126		

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 503H
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 503H	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							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)				
19,300.00	10,418.00	21,509.73	12,517.00	151.27	150.57	160.89	-8,839.15	-1,412.64	2,198.12	2,075.65	122.47	17.948			
19,400.00	10,418.00	21,609.73	12,517.00	152.87	152.14	160.89	-8,939.15	-1,411.65	2,198.12	2,074.45	123.67	17.774			
19,500.00	10,418.00	21,709.73	12,517.00	154.47	153.70	160.89	-9,039.14	-1,410.67	2,198.13	2,073.26	124.87	17.603			
19,600.00	10,418.00	21,809.73	12,517.00	156.07	155.27	160.89	-9,139.14	-1,409.68	2,198.13	2,072.06	126.07	17.436			
19,700.00	10,418.00	21,909.73	12,517.00	157.67	156.84	160.89	-9,239.13	-1,408.70	2,198.13	2,070.86	127.28	17.271			
19,800.00	10,418.00	22,009.73	12,517.00	159.28	158.41	160.89	-9,339.13	-1,407.72	2,198.13	2,069.66	128.48	17.109			
19,900.00	10,418.00	22,109.73	12,517.00	160.88	159.99	160.89	-9,439.12	-1,406.73	2,198.14	2,068.45	129.68	16.950			
20,000.00	10,418.00	22,209.73	12,517.00	162.48	161.56	160.89	-9,539.12	-1,405.75	2,198.14	2,067.25	130.89	16.794			
20,100.00	10,418.00	22,309.73	12,517.00	164.09	163.14	160.89	-9,639.11	-1,404.77	2,198.14	2,066.05	132.10	16.641			
20,200.00	10,418.00	22,409.73	12,517.00	165.70	164.72	160.89	-9,739.11	-1,403.78	2,198.15	2,064.85	133.30	16.490			
20,300.00	10,418.00	22,509.73	12,517.00	167.30	166.30	160.89	-9,839.10	-1,402.80	2,198.15	2,063.64	134.51	16.342			
20,400.00	10,418.00	22,609.73	12,517.00	168.91	167.88	160.89	-9,939.10	-1,401.81	2,198.15	2,062.43	135.72	16.196			
20,500.00	10,418.00	22,709.73	12,517.00	170.52	169.46	160.89	-10,039.09	-1,400.83	2,198.15	2,061.23	136.93	16.053			
20,600.00	10,418.00	22,809.73	12,517.00	172.13	171.05	160.89	-10,139.09	-1,399.85	2,198.16	2,060.02	138.14	15.913			
20,700.00	10,418.00	22,909.73	12,517.00	173.74	172.63	160.89	-10,239.08	-1,398.86	2,198.16	2,058.82	139.34	15.775			
20,800.00	10,418.00	23,009.73	12,517.00	175.35	174.22	160.89	-10,339.08	-1,397.88	2,198.16	2,057.61	140.55	15.639			
20,900.00	10,418.00	23,109.73	12,517.00	176.97	175.80	160.89	-10,439.07	-1,396.89	2,198.17	2,056.40	141.77	15.506			
21,000.00	10,418.00	23,209.73	12,517.00	178.58	177.39	160.89	-10,539.07	-1,395.91	2,198.17	2,055.19	142.98	15.374			
21,100.00	10,418.00	23,309.73	12,517.00	180.19	178.98	160.89	-10,639.06	-1,394.93	2,198.17	2,053.98	144.19	15.245			
21,200.00	10,418.00	23,409.73	12,517.00	181.81	180.57	160.89	-10,739.06	-1,393.94	2,198.17	2,052.77	145.40	15.118			
21,300.00	10,418.00	23,509.73	12,517.00	183.42	182.17	160.89	-10,839.05	-1,392.96	2,198.18	2,051.56	146.61	14.993			
21,400.00	10,418.00	23,609.73	12,517.00	185.04	183.76	160.89	-10,939.05	-1,391.97	2,198.18	2,050.35	147.83	14.870			
21,500.00	10,418.00	23,709.73	12,517.00	186.65	185.35	160.89	-11,039.04	-1,390.99	2,198.18	2,049.14	149.04	14.749			
21,600.00	10,418.00	23,809.73	12,517.00	188.27	186.95	160.89	-11,139.04	-1,390.01	2,198.19	2,047.93	150.26	14.630			
21,700.00	10,418.00	23,909.73	12,517.00	189.89	188.54	160.89	-11,239.03	-1,389.02	2,198.19	2,046.72	151.47	14.512			
21,800.00	10,418.00	24,009.73	12,517.00	191.50	190.14	160.89	-11,339.03	-1,388.04	2,198.19	2,045.51	152.68	14.397			
21,900.00	10,418.00	24,109.73	12,517.00	193.12	191.73	160.89	-11,439.02	-1,387.05	2,198.19	2,044.32	153.88	14.285			
21,901.10	10,418.00	24,110.83	12,517.00	193.14	191.75	160.89	-11,440.13	-1,387.04	2,198.19	2,044.31	153.89	14.284			
21,923.68	10,418.00	24,130.17	12,517.00	193.51	192.05	160.89	-11,459.46	-1,386.85	2,198.20	2,044.11	154.09	14.266 SF			

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

7/17/2021 12:10:34AM

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COMPASS 5000.15 Build 91



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
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 503H	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

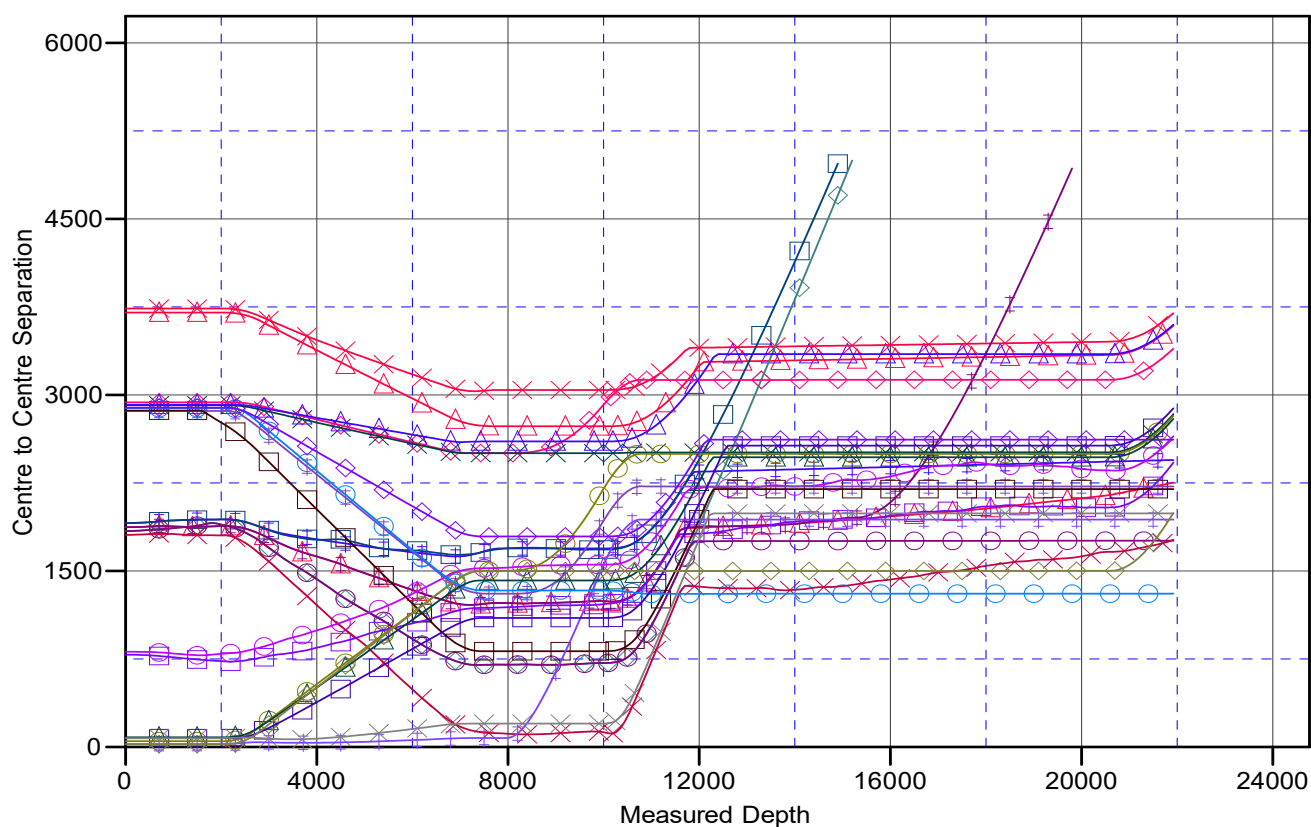
Central Meridian is -104.333334

Coordinates are relative to: Paul Foster Fed Com 503H

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

Grid Convergence at Surface is: 0.54°

Ladder Plot



LEGEND

Judge Baylor Fed Com 701H, OH, Plan #5 V0	Bus Driver Fed Com 602H, OH, OH V0	Paul Foster Fed Com 104H, OH, Plan #1 V0
Judge Baylor Fed Com 601H, OH, Plan #5 V0	LHS Wildcat Fed Com 604H, OH, OH V0	Paul Foster Fed Com 103H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, Plan #5 V0	LHS Wildcat Fed Com 705H, OH, OH V0	PF Fed Com 802H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, OH V0	PF Fed Com 101H, OH, Plan #1 V0	PF Fed Com 802H, OH, Plan #1 V0
Kastoni Fed Com 703H, OH, OH V0	PF Fed Com 501H, OH, Plan #1 V0	Paul Foster Fed Com 806H, OH, Plan #1 V0
Kastoni Fed Com 703H, OH, Plan #9 V0	PF Fed Com 801H, OH, Plan #1 V0	Paul Foster Fed Com 805H, OH, Plan #1 V0
Kastoni Fed Com 603H, OH, OH V0	PF Fed Com 102H, OH, Plan #1 V0	Paul Foster Fed Com 804H, OH, Plan #1 V0
Bus Driver Fed Com 602H, OH, Plan #6 V0	PF Fed Com 803H, OH, Plan #1 V0	Paul Foster Fed Com 504H, OH, Plan #1 V0

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



Total Directional Services

Anticollision Report

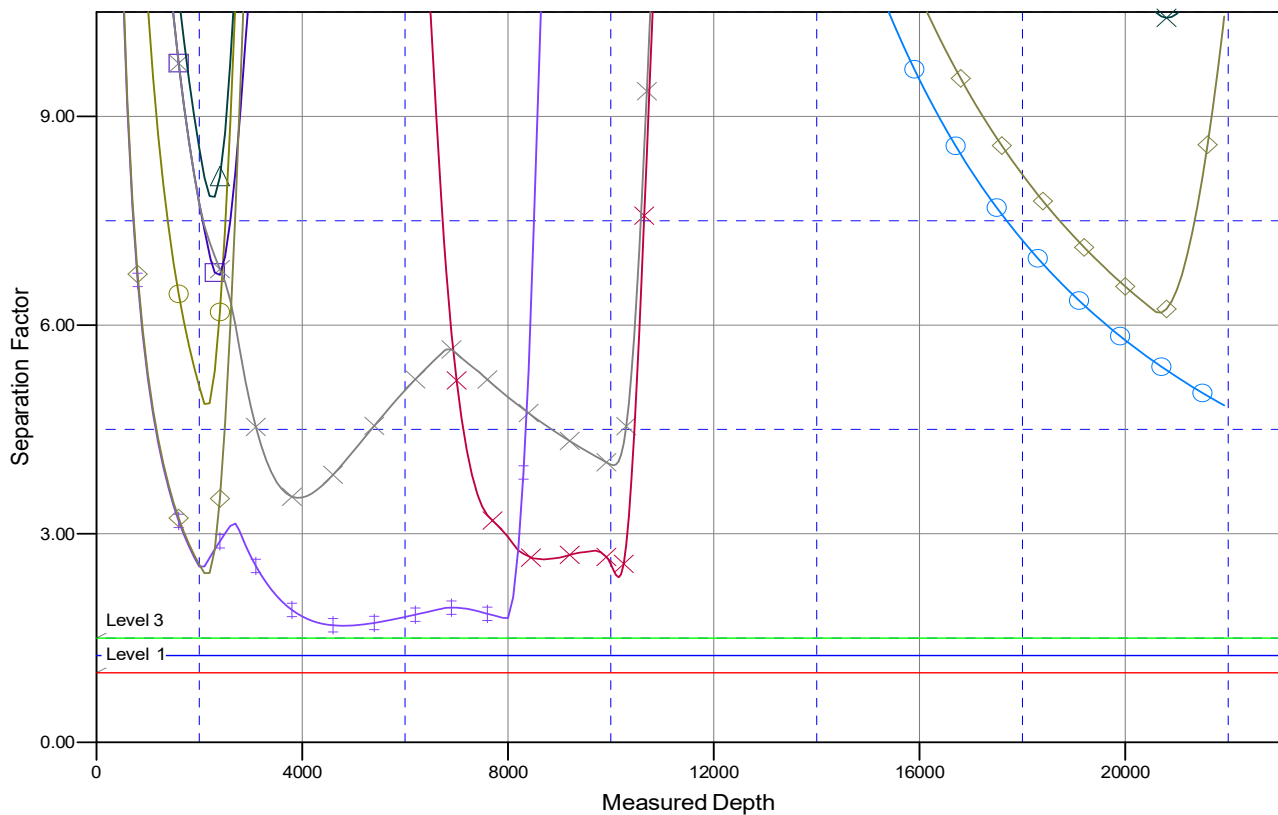


Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 503H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
Reference Site:	PF Fed Com	MD Reference:	3031' GE + 30' KB @ 3061.00usft
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Reference Well:	Paul Foster Fed Com 503H	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 503H
 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	Paul Foster Fed Com 104H, OH, Plan #1 V0
Judge Baylor Fed Com 601H, OH, Plan #5 V0	LHS Wildcat Fed Com 604H, OH, OH V0	Paul Foster Fed Com 103H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, Plan #5 V0	LHS Wildcat Fed Com 705H, OH, OH V0	PF Fed Com 802H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, OH V0	PF Fed Com 101H, OH, Plan #1 V0	PF Fed Com 802H, OH, Plan #1 V0
Kastoni Fed Com 703H, OH, OH V0	PF Fed Com 501H, OH, Plan #1 V0	Paul Foster Fed Com 806H, OH, Plan #1 V0
Kastoni Fed Com 703H, OH, Plan #9 V0	PF Fed Com 801H, OH, Plan #1 V0	Paul Foster Fed Com 805H, OH, Plan #1 V0
Kastoni Fed Com 603H, OH, OH V0	PF Fed Com 102H, OH, Plan #1 V0	Paul Foster Fed Com 804H, OH, Plan #1 V0
Bus Driver Fed Com 602H, OH, Plan #6 V0	PF Fed Com 803H, OH, Plan #1 V0	Paul Foster Fed Com 504H, 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.

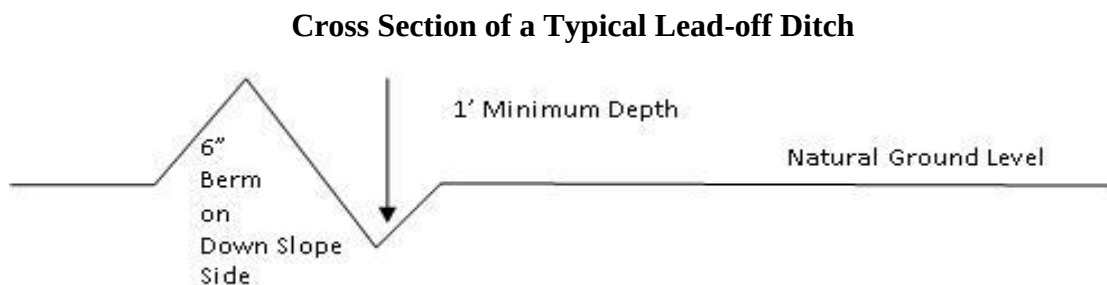
Turnouts

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.



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

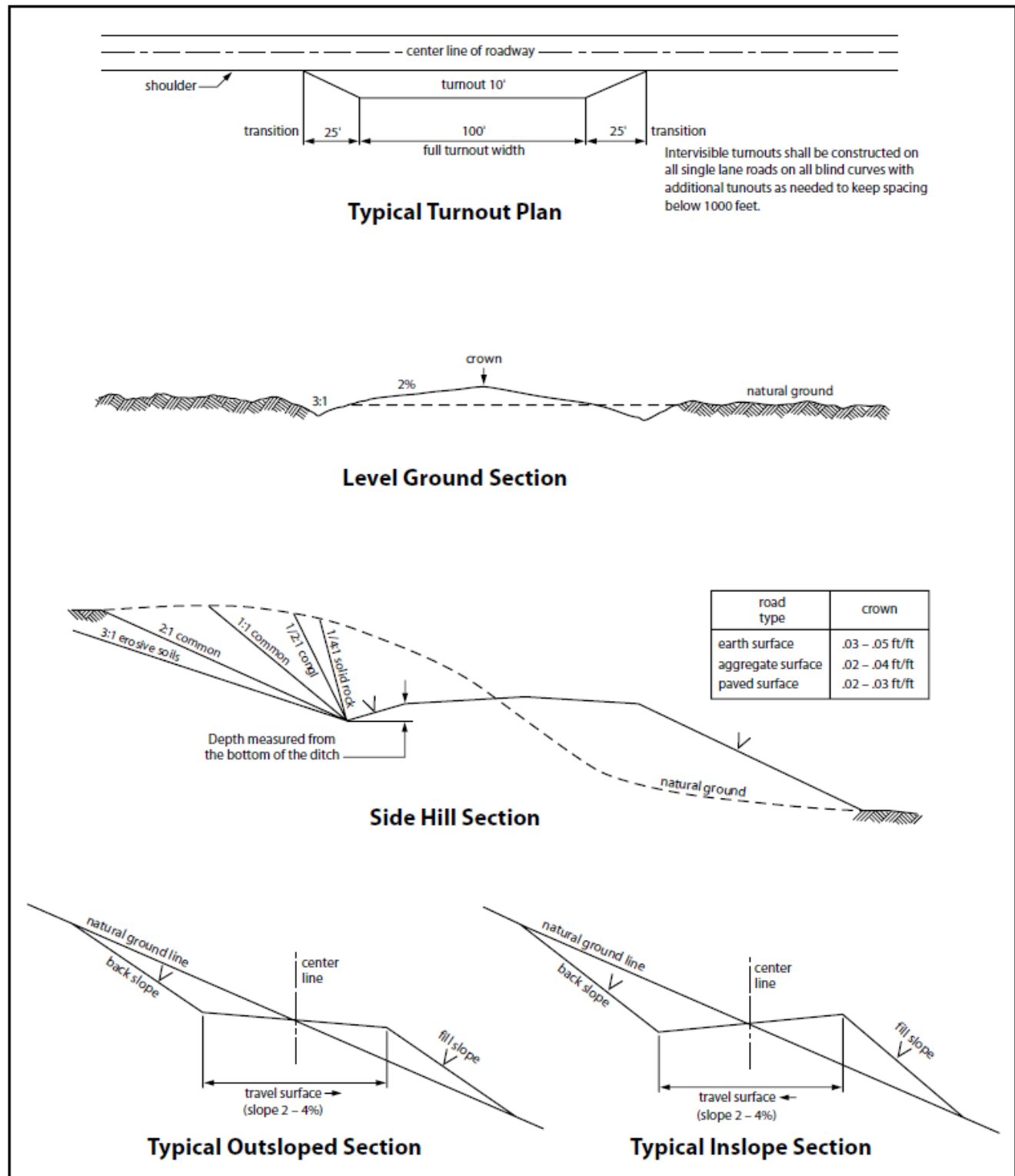


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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
WELL NAME & NO.:	PF Fed Com 503H
SURFACE HOLE FOOTAGE:	285'/N & 1100'/E
BOTTOM HOLE FOOTAGE:	1170'/N & 1880'/E
LOCATION:	Section 1, T.26 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

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
Other	☒ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☒ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit

A. HYDROGEN SULFIDE

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

B. CASING

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

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

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
Cement excess is less than 25%, more cement might be required.

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 **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:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the

blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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 88435

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 88435
	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