

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. 30-025-49852
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: 03/07/2022

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 D / 650 FNL / 1293 FWL / TWSP: 26S / RANGE: 35E / SECTION: 1 / LAT: 32.077787 / LONG: -103.325603 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 0 FNL / 901 FWL / TWSP: 26S / RANGE: 35E / SECTION: 12 / LAT: 32.065045 / LONG: -103.326869 (TVD: 10619 feet, MD: 15700 feet)

PPP: TR D / 623 FNL / 899 FWL / TWSP: 26S / RANGE: 35E / SECTION: 1 / LAT: 32.077861 / LONG: -103.326876 (TVD: 10619 feet, MD: 10998 feet)

BHL: TR M / 150 FSL / 900 FWL / TWSP: 26S / RANGE: 35E / SECTION: 12 / LAT: 32.05094 / LONG: -103.326862 (TVD: 10619 feet, MD: 20792 feet)

BLM Point of Contact

Name: TENILLE ORTIZ

Title: Legal Instruments Examiner

Phone: (575) 234-2224

Email: tortiz@blm.gov

CONFIDENTIAL

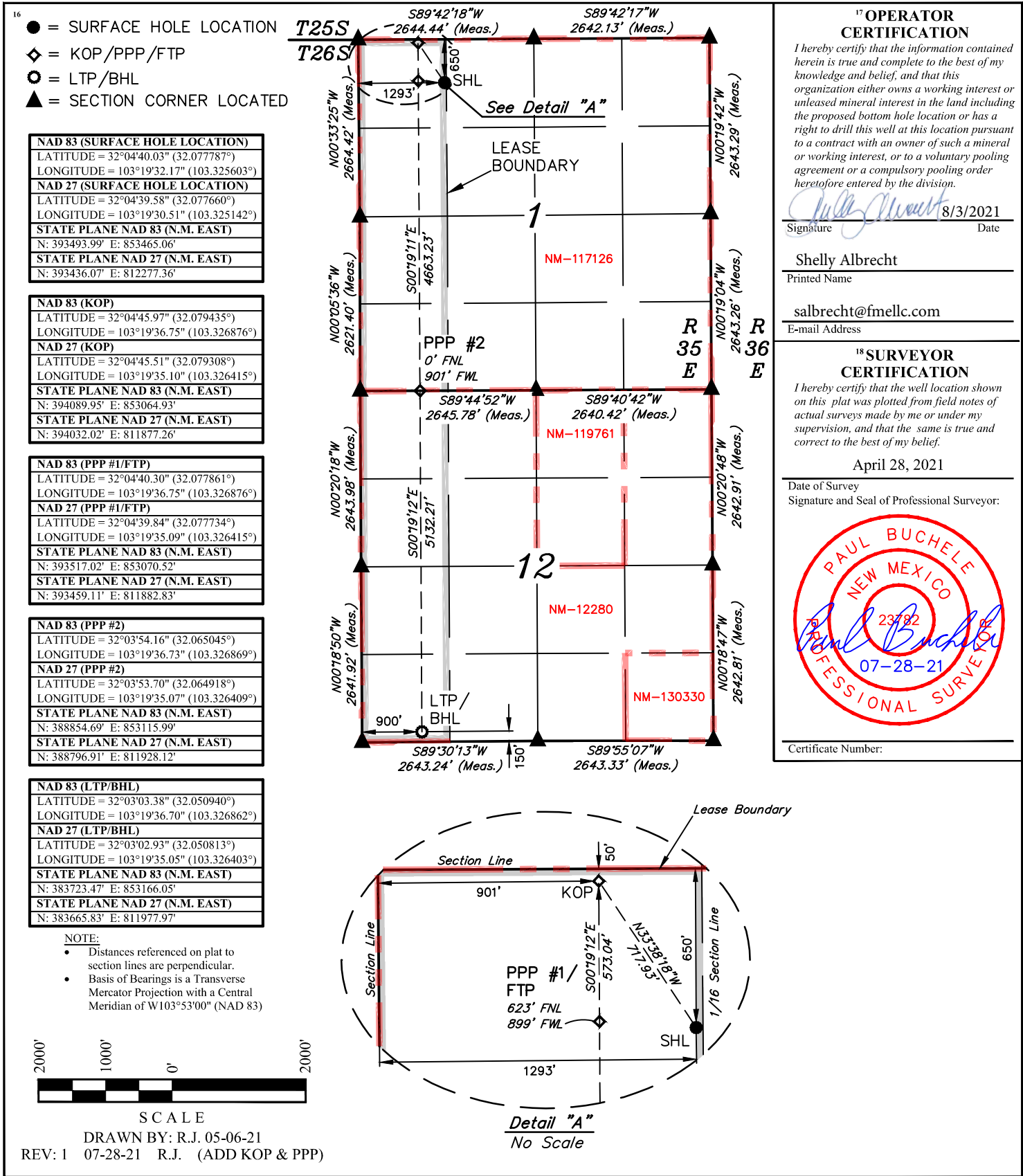
Review and Appeal Rights

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

CONFIDENTIAL

☐ AMENDED REPORT

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.



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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

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

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

If Other, please describe: _____

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

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

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

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

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

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

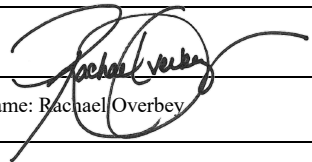
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

Signature: 
Printed Name: Rachael Overbey
Title: Director Operations Planning & Regulatory
E-mail Address: roverbey@fmelle.com
Date: 3/8/2022
Phone: 720-414-7868
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
Tatanka Fed Com 101H	TBD	C-2-26S-35E	20 FNL 1347 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 102H	TBD	C-2-26S-35E	20 FNL 1372 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 103H	TBD	B-2-26S-35E	20 FNL 1875 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 104H	TBD	B-2-26S-35E	20 FNL 1850 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 501H	TBD	C-2-26S-35E	20 FNL 1397 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 502H	TBD	C-2-26S-35E	20 FNL 1422 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 503H	TBD	B-2-26S-35E	20 FNL 1925 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 504H	TBD	B-2-26S-35E	20 FNL 1900 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 601H	TBD	D-2-26S-35E	10 FNL 545 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 602H	TBD	N-35-25S-35E	998 FSL 1807 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 603H	TBD	N-35-25S-35E	998 FSL 1907 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 604H	TBD	A-2-26S-35E	20 FNL 885 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 701H	TBD	D-2-26S-35E	10 FNL 620 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 702H	TBD	N-35-25S-35E	998 FSL 1782 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 703H	TBD	N-35-25S-35E	998 FSL 1857 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 704H	TBD	A-2-26S-35E	20 FNL 935 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 705H	TBD	A-2-26S-35E	20 FNL 860 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 801H	TBD	D-2-26S-35E	10 FNL 570 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 802H	TBD	D-2-26S-35E	10 FNL 595 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 803H	TBD	N-35-25S-35E	998 FSL 1832 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 804H	TBD	N-35-25S-35E	998 FSL 1882 FWL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 805H	TBD	A-2-26S-35E	20 FNL 910 FEL	800 +/-	700 +/-	600 +/-
Tatanka Fed Com 806H	TBD	A-2-26S-35E	20 FNL 835 FEL	800 +/-	700 +/-	600 +/-

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

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



Natural Gas Management Plan

Items VI-VIII

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

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

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

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



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

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

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



PF Fed Com 103H

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
Cutoff	-5,287'	8,348'			Sand/carb/shales - oil/gas/water
HZ Target at Landing	-5,419'	8,480'			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

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,059'	Oil
Leonard	8,348'	Oil
Avalon	8,589'	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	8866	1.50	1.72	2.28	1.55
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	19899 8480	1.32	1.56	1.31	1.09 2.05

7 5/8" casing will be set at 8,866' MD/8,480' TVD at 90° Inc. Stress calculations on 5 1/2" casing performed assuming 18,899' depth. Actual max vertical depth is 8,480'.



Cementing Program:

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft ³ /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft ³ /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1300	795	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	Tail, 14.8 ppg, Class C,	1.349	6.51	1000	100%
					0.125pps Poly-E-Flake					1% CaCl ₂ , 0.125pps Celo-Flake				
Int1	12.25	9.625	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	8866	206	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	7866	50%
					Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake					0.25 pps Cello-Flake, 2% CaCl ₂				
Prod	6.75	5.5	19899	898	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	7866						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' – 8,866'	Brine	8.8-10.2	28-34	N/c
8,866' – 19,899' 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 8,480' TVD (deepest point of the well) is 160F with an estimated maximum bottom-hole pressure (BHP) at the same point of 5,291 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 3:51:15 PM

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: PF Fed Com
Well: Paul Foster Fed Com 103H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.54°
Magnetic North: 5.87°

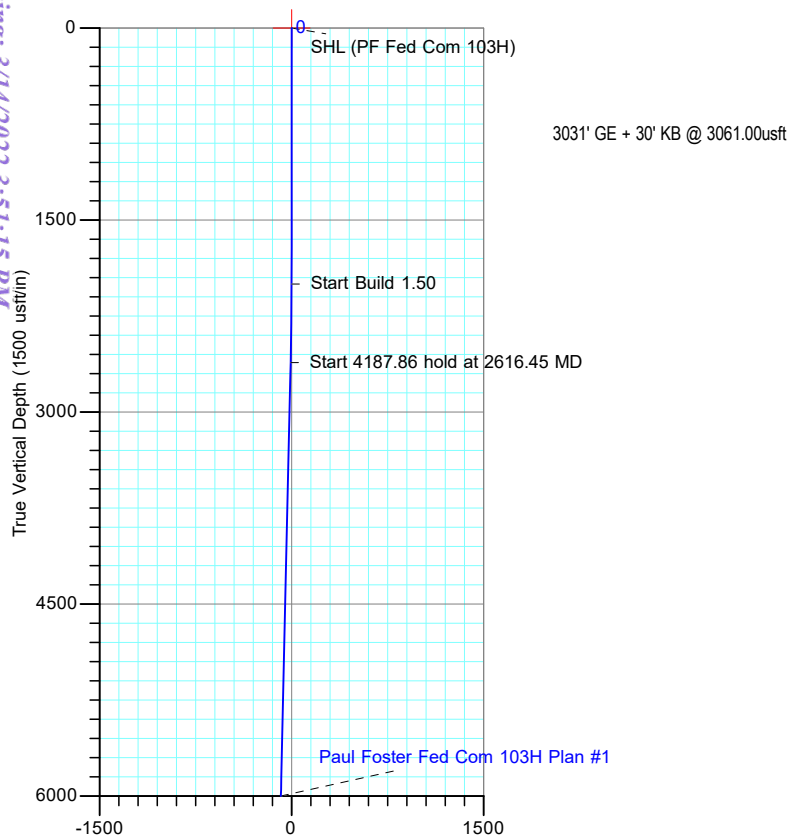
Magnetic Field
Strength: 47427.3nT
Dip Angle: 59.80°
Date: 7/16/2021
Model: IGRF2020

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 5:06:11 PM

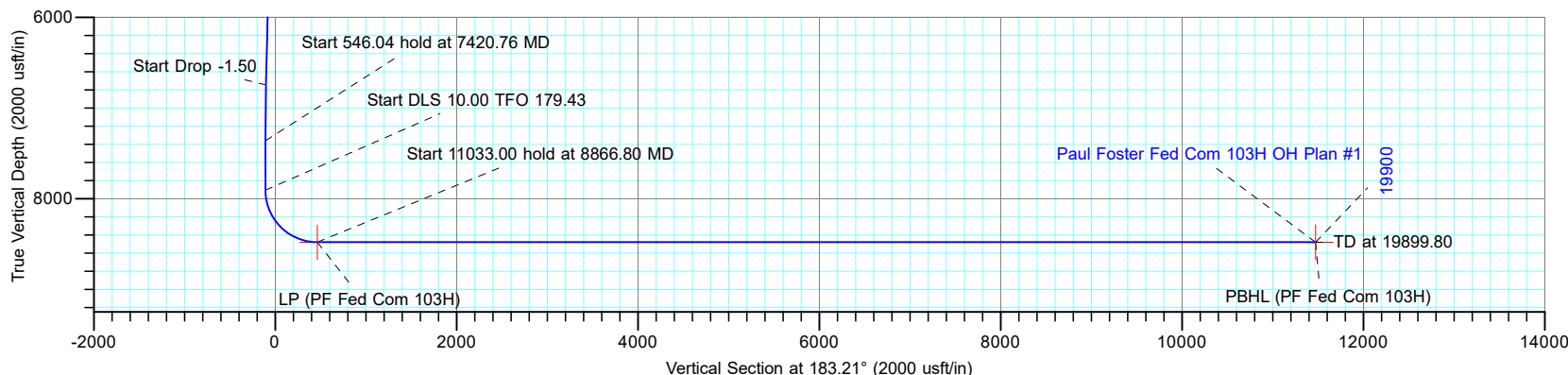
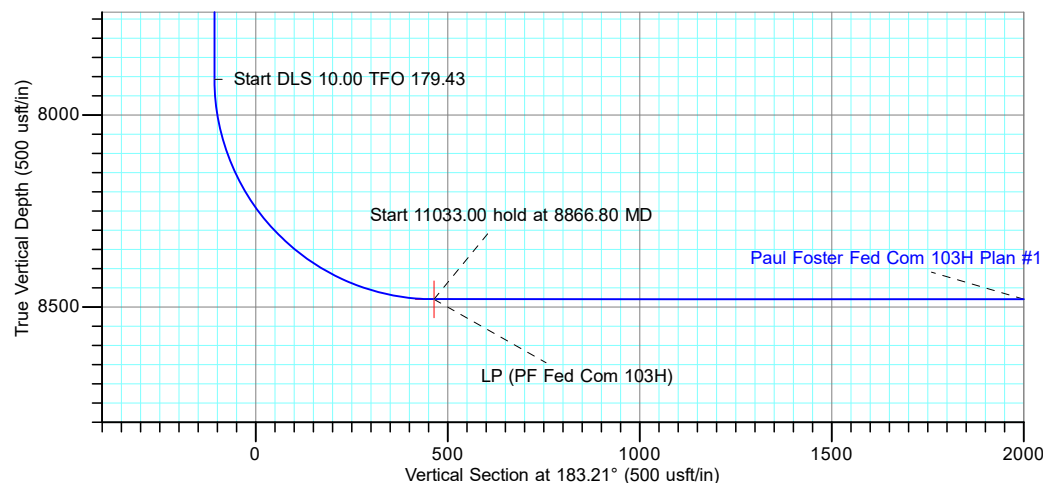


SECTION DETAILS

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	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2616.45	9.25	281.20	2613.78	9.64	-48.69	1.50	281.20	-6.90	Start 4187.86 hold at 2616.45 MD
6804.31	9.25	281.20	6747.22	140.36	-708.81	0.00	0.00	-100.46	Start Drop -1.50
7420.76	0.00	0.00	7361.00	150.00	-757.50	1.50	180.00	-107.36	Start 546.04 hold at 7420.76 MD
7966.80	0.00	0.00	7907.04	150.00	-757.50	0.00	0.00	-107.36	Start DLS 10.00 TFO 179.43
8866.80	90.00	179.43	8480.00	-422.93	-751.81	10.00	179.43	464.35	Start 11033.00 hold at 8866.80 MD
19899.80	90.00	179.43	8480.00	-11455.38	-642.26	0.00	0.00	11473.37	TD at 19899.80

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (PF Fed Com 103H)	8480.00	-422.93	-751.81	32.077647	-103.318792
PBHL (PF Fed Com 103H)	8480.00	-11455.38	-642.26	32.047321	-103.318773
SHL (PF Fed Com 103H)	0.00	0.00	0.00	32.078790	-103.316352



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

Plan: Plan #1 (Paul Foster Fed Com 103H/OH)
PF Fed Com
Created By: Dustin Ault Date: 23:58, July 16 2021
Date: _____
Approved: _____ Date: _____

Page 18 of 173

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: PF Fed Com
Well: Paul Foster Fed Com 103H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.54°
Magnetic North: 5.87°
Magnetic Field
Strength: 47427.3nT
Dip Angle: 59.80°
Date: 7/16/2021
Model: IGRF2020



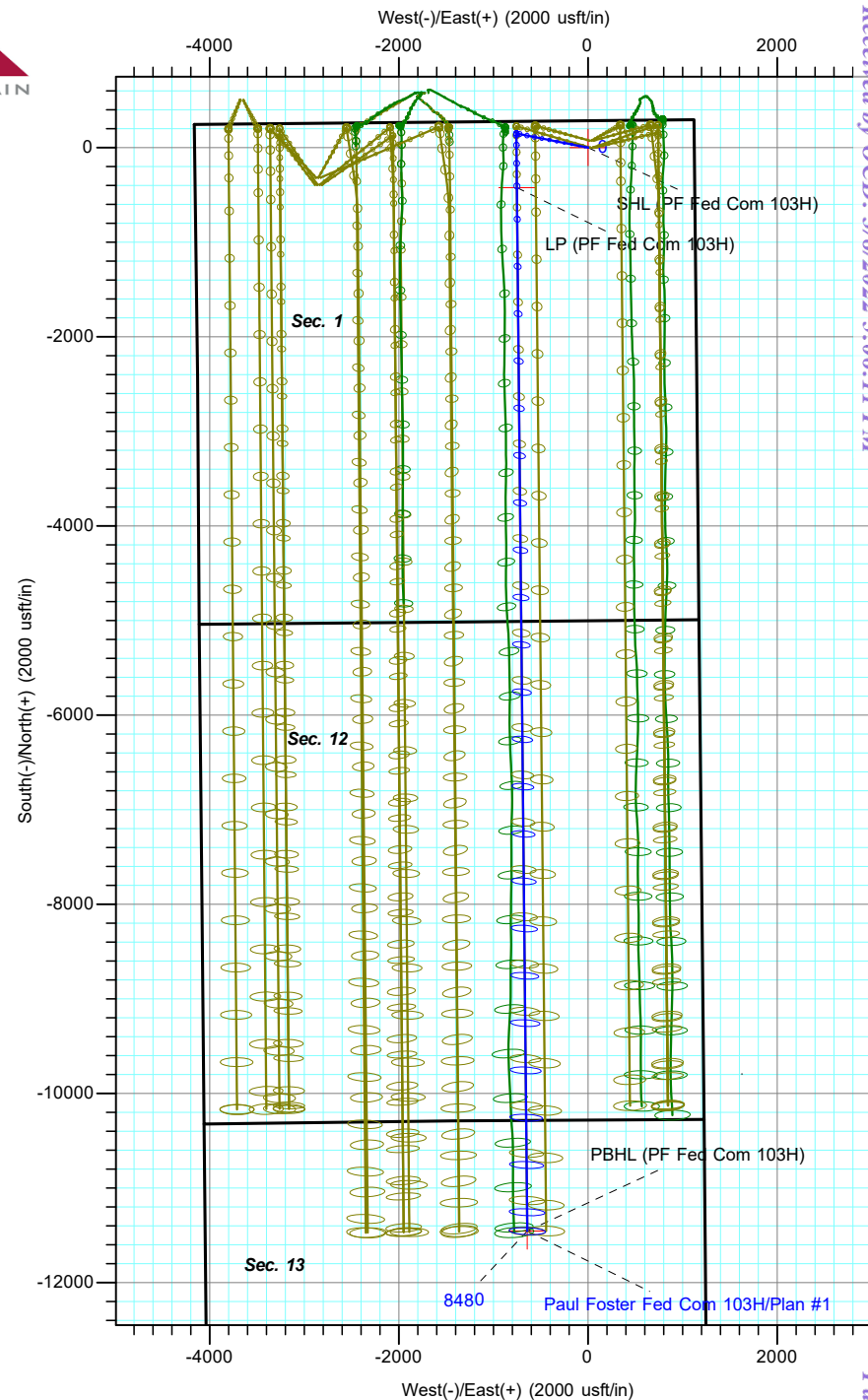
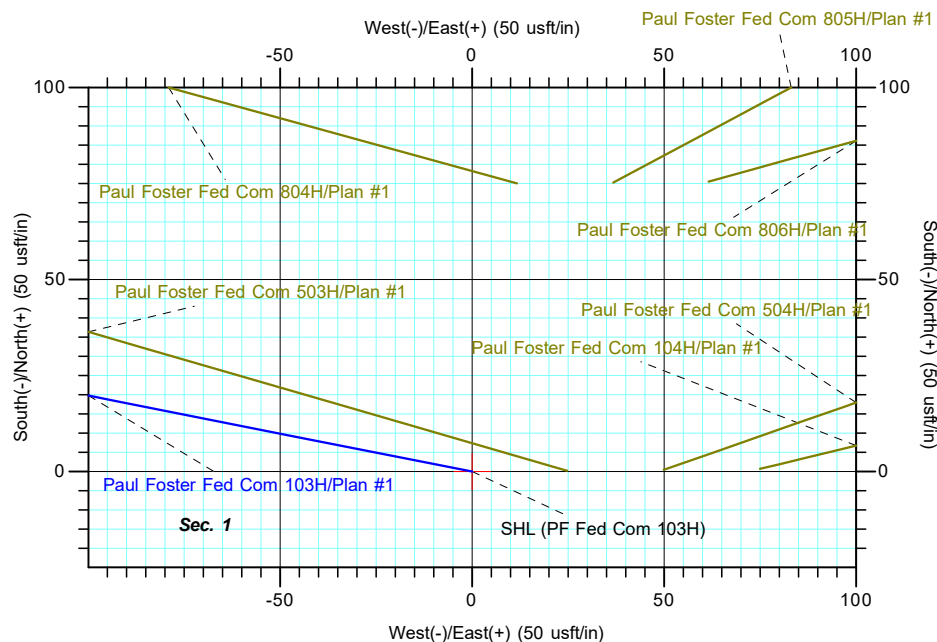
PROJECT DETAILS: Lea County, NM (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (PF Fed Com 103H)	8480.00	-422.93	-751.81	393462.80	855575.15	32.077647	-103.318792
PBHL (PF Fed Com 103H)	8480.00	-11455.38	-642.26	382430.35	855684.70	32.047321	-103.318773
SHL (PF Fed Com 103H)	0.00	0.00	0.00	393885.73	856326.96	32.078790	-103.316352

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	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2616.45	9.25	281.20	2613.78	9.64	-48.69	1.50	281.20	-6.90	Start 4187.86 hold at 2616.45 MD
6804.31	9.25	281.20	6747.22	140.36	-708.81	0.00	0.00	-100.46	Start Drop -1.50
7420.76	0.00	0.00	7361.00	150.00	-757.50	1.50	180.00	-107.36	Start 546.04 hold at 7420.76 MD
7966.80	0.00	0.00	7907.04	150.00	-757.50	0.00	0.00	-107.36	Start DLS 10.00 TFO 179.43
8866.80	90.00	179.43	8480.00	-422.93	-751.81	10.00	179.43	464.35	Start 11033.00 hold at 8866.80 MD
19899.80	90.00	179.43	8480.00	-11455.38	-642.26	0.00	0.00	11473.37	TD at 19899.80



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

Plan: Plan #1 (Paul Foster Fed Com 103H/OH)
PF Fed Com
Created By: Dustin Ault
Date: 0:00, July 17 2021
Approved: _____
Date: _____



Franklin Mountain Energy

Lea County, NM (NAD83)

PF Fed Com

Paul Foster Fed Com 103H

OH

Plan: Plan #1

Standard Planning Report

16 July, 2021





Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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 103H					
Well Position	+N/-S	392.01 usft	Northing:	393,885.73 usft	Latitude:	32.078790
	+E/-W	2,886.81 usft	Easting:	856,326.96 usft	Longitude:	-103.316352
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	47,427.27702433

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	183.21

Plan Survey Tool Program	Date	7/16/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,899.80 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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,616.45	9.25	281.20	2,613.78	9.64	-48.69	1.50	1.50	0.00	281.20	
6,804.31	9.25	281.20	6,747.22	140.36	-708.81	0.00	0.00	0.00	0.00	
7,420.77	0.00	0.00	7,361.00	150.00	-757.50	1.50	-1.50	0.00	180.00	
7,966.81	0.00	0.00	7,907.04	150.00	-757.50	0.00	0.00	0.00	0.00	
8,866.81	90.00	179.43	8,480.00	-422.93	-751.81	10.00	10.00	19.94	179.43	
19,899.80	90.00	179.43	8,480.00	-11,455.38	-642.26	0.00	0.00	0.00	0.00	PBHL (PF Fed Com 1



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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 103H)									
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
Start Build 1.50									
2,100.00	1.50	281.20	2,099.99	0.25	-1.28	-0.18	1.50	1.50	0.00
2,200.00	3.00	281.20	2,199.91	1.02	-5.14	-0.73	1.50	1.50	0.00
2,300.00	4.50	281.20	2,299.69	2.29	-11.55	-1.64	1.50	1.50	0.00
2,400.00	6.00	281.20	2,399.27	4.06	-20.53	-2.91	1.50	1.50	0.00
2,500.00	7.50	281.20	2,498.57	6.35	-32.06	-4.54	1.50	1.50	0.00
2,600.00	9.00	281.20	2,597.54	9.13	-46.13	-6.54	1.50	1.50	0.00
2,616.45	9.25	281.20	2,613.78	9.64	-48.69	-6.90	1.50	1.50	0.00
Start 4187.86 hold at 2616.45 MD									
2,700.00	9.25	281.20	2,696.24	12.25	-61.86	-8.77	0.00	0.00	0.00
2,800.00	9.25	281.20	2,794.94	15.37	-77.62	-11.00	0.00	0.00	0.00
2,900.00	9.25	281.20	2,893.64	18.49	-93.39	-13.24	0.00	0.00	0.00
3,000.00	9.25	281.20	2,992.34	21.61	-109.15	-15.47	0.00	0.00	0.00
3,100.00	9.25	281.20	3,091.04	24.73	-124.91	-17.70	0.00	0.00	0.00
3,200.00	9.25	281.20	3,189.74	27.86	-140.67	-19.94	0.00	0.00	0.00
3,300.00	9.25	281.20	3,288.45	30.98	-156.44	-22.17	0.00	0.00	0.00
3,400.00	9.25	281.20	3,387.15	34.10	-172.20	-24.41	0.00	0.00	0.00
3,500.00	9.25	281.20	3,485.85	37.22	-187.96	-26.64	0.00	0.00	0.00
3,600.00	9.25	281.20	3,584.55	40.34	-203.72	-28.87	0.00	0.00	0.00
3,700.00	9.25	281.20	3,683.25	43.46	-219.49	-31.11	0.00	0.00	0.00
3,800.00	9.25	281.20	3,781.95	46.58	-235.25	-33.34	0.00	0.00	0.00
3,900.00	9.25	281.20	3,880.65	49.71	-251.01	-35.58	0.00	0.00	0.00
4,000.00	9.25	281.20	3,979.35	52.83	-266.77	-37.81	0.00	0.00	0.00
4,100.00	9.25	281.20	4,078.05	55.95	-282.54	-40.04	0.00	0.00	0.00
4,200.00	9.25	281.20	4,176.75	59.07	-298.30	-42.28	0.00	0.00	0.00
4,300.00	9.25	281.20	4,275.45	62.19	-314.06	-44.51	0.00	0.00	0.00
4,400.00	9.25	281.20	4,374.15	65.31	-329.83	-46.75	0.00	0.00	0.00
4,500.00	9.25	281.20	4,472.85	68.43	-345.59	-48.98	0.00	0.00	0.00
4,600.00	9.25	281.20	4,571.55	71.55	-361.35	-51.21	0.00	0.00	0.00
4,700.00	9.25	281.20	4,670.25	74.68	-377.11	-53.45	0.00	0.00	0.00
4,800.00	9.25	281.20	4,768.95	77.80	-392.88	-55.68	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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	9.25	281.20	4,867.65	80.92	-408.64	-57.92	0.00	0.00	0.00
5,000.00	9.25	281.20	4,966.35	84.04	-424.40	-60.15	0.00	0.00	0.00
5,100.00	9.25	281.20	5,065.05	87.16	-440.16	-62.38	0.00	0.00	0.00
5,200.00	9.25	281.20	5,163.76	90.28	-455.93	-64.62	0.00	0.00	0.00
5,300.00	9.25	281.20	5,262.46	93.40	-471.69	-66.85	0.00	0.00	0.00
5,400.00	9.25	281.20	5,361.16	96.53	-487.45	-69.09	0.00	0.00	0.00
5,500.00	9.25	281.20	5,459.86	99.65	-503.21	-71.32	0.00	0.00	0.00
5,600.00	9.25	281.20	5,558.56	102.77	-518.98	-73.56	0.00	0.00	0.00
5,700.00	9.25	281.20	5,657.26	105.89	-534.74	-75.79	0.00	0.00	0.00
5,800.00	9.25	281.20	5,755.96	109.01	-550.50	-78.02	0.00	0.00	0.00
5,900.00	9.25	281.20	5,854.66	112.13	-566.27	-80.26	0.00	0.00	0.00
6,000.00	9.25	281.20	5,953.36	115.25	-582.03	-82.49	0.00	0.00	0.00
6,100.00	9.25	281.20	6,052.06	118.37	-597.79	-84.73	0.00	0.00	0.00
6,200.00	9.25	281.20	6,150.76	121.50	-613.55	-86.96	0.00	0.00	0.00
6,300.00	9.25	281.20	6,249.46	124.62	-629.32	-89.19	0.00	0.00	0.00
6,400.00	9.25	281.20	6,348.16	127.74	-645.08	-91.43	0.00	0.00	0.00
6,500.00	9.25	281.20	6,446.86	130.86	-660.84	-93.66	0.00	0.00	0.00
6,600.00	9.25	281.20	6,545.56	133.98	-676.60	-95.90	0.00	0.00	0.00
6,700.00	9.25	281.20	6,644.26	137.10	-692.37	-98.13	0.00	0.00	0.00
6,804.31	9.25	281.20	6,747.22	140.36	-708.81	-100.46	0.00	0.00	0.00
Start Drop -1.50									
6,900.00	7.81	281.20	6,841.85	143.11	-722.73	-102.43	1.50	-1.50	0.00
7,000.00	6.31	281.20	6,941.09	145.50	-734.79	-104.14	1.50	-1.50	0.00
7,100.00	4.81	281.20	7,040.61	147.39	-744.30	-105.49	1.50	-1.50	0.00
7,200.00	3.31	281.20	7,140.36	148.76	-751.24	-106.47	1.50	-1.50	0.00
7,300.00	1.81	281.20	7,240.26	149.63	-755.63	-107.10	1.50	-1.50	0.00
7,400.00	0.31	281.20	7,340.24	149.99	-757.44	-107.35	1.50	-1.50	0.00
7,420.77	0.00	0.00	7,361.00	150.00	-757.50	-107.36	1.50	-1.50	0.00
Start 546.04 hold at 7420.76 MD									
7,500.00	0.00	0.00	7,440.24	150.00	-757.50	-107.36	0.00	0.00	0.00
7,600.00	0.00	0.00	7,540.24	150.00	-757.50	-107.36	0.00	0.00	0.00
7,700.00	0.00	0.00	7,640.24	150.00	-757.50	-107.36	0.00	0.00	0.00
7,800.00	0.00	0.00	7,740.24	150.00	-757.50	-107.36	0.00	0.00	0.00
7,900.00	0.00	0.00	7,840.24	150.00	-757.50	-107.36	0.00	0.00	0.00
7,966.81	0.00	0.00	7,907.04	150.00	-757.50	-107.36	0.00	0.00	0.00
Start DLS 10.00 TFO 179.43									
8,000.00	3.32	179.43	7,940.22	149.04	-757.49	-106.40	10.00	10.00	0.00
8,050.00	8.32	179.43	7,989.94	143.97	-757.44	-101.34	10.00	10.00	0.00
8,100.00	13.32	179.43	8,039.04	134.59	-757.35	-91.98	10.00	10.00	0.00
8,150.00	18.32	179.43	8,087.13	120.96	-757.21	-78.39	10.00	10.00	0.00
8,200.00	23.32	179.43	8,133.85	103.20	-757.04	-60.66	10.00	10.00	0.00
8,250.00	28.32	179.43	8,178.84	81.43	-756.82	-38.94	10.00	10.00	0.00
8,300.00	33.32	179.43	8,221.77	55.82	-756.56	-13.38	10.00	10.00	0.00
8,350.00	38.32	179.43	8,262.30	26.57	-756.27	15.81	10.00	10.00	0.00
8,400.00	43.32	179.43	8,300.13	-6.10	-755.95	48.41	10.00	10.00	0.00
8,450.00	48.32	179.43	8,334.96	-41.95	-755.59	84.18	10.00	10.00	0.00
8,500.00	53.32	179.43	8,366.54	-80.69	-755.21	122.84	10.00	10.00	0.00
8,550.00	58.32	179.43	8,394.62	-122.04	-754.80	164.10	10.00	10.00	0.00
8,600.00	63.32	179.43	8,418.99	-165.68	-754.37	207.64	10.00	10.00	0.00
8,650.00	68.32	179.43	8,439.47	-211.27	-753.91	253.14	10.00	10.00	0.00
8,700.00	73.32	179.43	8,455.89	-258.48	-753.44	300.25	10.00	10.00	0.00
8,750.00	78.32	179.43	8,468.13	-306.94	-752.96	348.61	10.00	10.00	0.00
8,800.00	83.32	179.43	8,476.11	-356.28	-752.47	397.84	10.00	10.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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)	
8,850.00	88.32	179.43	8,479.75	-406.13	-751.98	447.59	10.00	10.00	0.00	
8,866.81	90.00	179.43	8,480.00	-422.93	-751.81	464.35	10.00	10.00	0.00	
Start 11033.00 hold at 8866.80 MD - LP (PF Fed Com 103H)										
8,900.00	90.00	179.43	8,480.00	-456.12	-751.48	497.47	0.00	0.00	0.00	
9,000.00	90.00	179.43	8,480.00	-556.12	-750.49	597.26	0.00	0.00	0.00	
9,100.00	90.00	179.43	8,480.00	-656.11	-749.50	697.04	0.00	0.00	0.00	
9,200.00	90.00	179.43	8,480.00	-756.11	-748.50	796.82	0.00	0.00	0.00	
9,300.00	90.00	179.43	8,480.00	-856.10	-747.51	896.61	0.00	0.00	0.00	
9,400.00	90.00	179.43	8,480.00	-956.10	-746.52	996.39	0.00	0.00	0.00	
9,500.00	90.00	179.43	8,480.00	-1,056.09	-745.52	1,096.17	0.00	0.00	0.00	
9,600.00	90.00	179.43	8,480.00	-1,156.09	-744.53	1,195.95	0.00	0.00	0.00	
9,700.00	90.00	179.43	8,480.00	-1,256.08	-743.54	1,295.74	0.00	0.00	0.00	
9,800.00	90.00	179.43	8,480.00	-1,356.08	-742.55	1,395.52	0.00	0.00	0.00	
9,900.00	90.00	179.43	8,480.00	-1,456.07	-741.55	1,495.30	0.00	0.00	0.00	
10,000.00	90.00	179.43	8,480.00	-1,556.07	-740.56	1,595.08	0.00	0.00	0.00	
10,100.00	90.00	179.43	8,480.00	-1,656.06	-739.57	1,694.87	0.00	0.00	0.00	
10,200.00	90.00	179.43	8,480.00	-1,756.06	-738.57	1,794.65	0.00	0.00	0.00	
10,300.00	90.00	179.43	8,480.00	-1,856.05	-737.58	1,894.43	0.00	0.00	0.00	
10,400.00	90.00	179.43	8,480.00	-1,956.05	-736.59	1,994.22	0.00	0.00	0.00	
10,500.00	90.00	179.43	8,480.00	-2,056.04	-735.60	2,094.00	0.00	0.00	0.00	
10,600.00	90.00	179.43	8,480.00	-2,156.04	-734.60	2,193.78	0.00	0.00	0.00	
10,700.00	90.00	179.43	8,480.00	-2,256.03	-733.61	2,293.56	0.00	0.00	0.00	
10,800.00	90.00	179.43	8,480.00	-2,356.03	-732.62	2,393.35	0.00	0.00	0.00	
10,900.00	90.00	179.43	8,480.00	-2,456.02	-731.62	2,493.13	0.00	0.00	0.00	
11,000.00	90.00	179.43	8,480.00	-2,556.02	-730.63	2,592.91	0.00	0.00	0.00	
11,100.00	90.00	179.43	8,480.00	-2,656.01	-729.64	2,692.69	0.00	0.00	0.00	
11,200.00	90.00	179.43	8,480.00	-2,756.01	-728.64	2,792.48	0.00	0.00	0.00	
11,300.00	90.00	179.43	8,480.00	-2,856.00	-727.65	2,892.26	0.00	0.00	0.00	
11,400.00	90.00	179.43	8,480.00	-2,956.00	-726.66	2,992.04	0.00	0.00	0.00	
11,500.00	90.00	179.43	8,480.00	-3,055.99	-725.67	3,091.82	0.00	0.00	0.00	
11,600.00	90.00	179.43	8,480.00	-3,155.99	-724.67	3,191.61	0.00	0.00	0.00	
11,700.00	90.00	179.43	8,480.00	-3,255.99	-723.68	3,291.39	0.00	0.00	0.00	
11,800.00	90.00	179.43	8,480.00	-3,355.98	-722.69	3,391.17	0.00	0.00	0.00	
11,900.00	90.00	179.43	8,480.00	-3,455.98	-721.69	3,490.96	0.00	0.00	0.00	
12,000.00	90.00	179.43	8,480.00	-3,555.97	-720.70	3,590.74	0.00	0.00	0.00	
12,100.00	90.00	179.43	8,480.00	-3,655.97	-719.71	3,690.52	0.00	0.00	0.00	
12,200.00	90.00	179.43	8,480.00	-3,755.96	-718.72	3,790.30	0.00	0.00	0.00	
12,300.00	90.00	179.43	8,480.00	-3,855.96	-717.72	3,890.09	0.00	0.00	0.00	
12,400.00	90.00	179.43	8,480.00	-3,955.95	-716.73	3,989.87	0.00	0.00	0.00	
12,500.00	90.00	179.43	8,480.00	-4,055.95	-715.74	4,089.65	0.00	0.00	0.00	
12,600.00	90.00	179.43	8,480.00	-4,155.94	-714.74	4,189.43	0.00	0.00	0.00	
12,700.00	90.00	179.43	8,480.00	-4,255.94	-713.75	4,289.22	0.00	0.00	0.00	
12,800.00	90.00	179.43	8,480.00	-4,355.93	-712.76	4,389.00	0.00	0.00	0.00	
12,900.00	90.00	179.43	8,480.00	-4,455.93	-711.77	4,488.78	0.00	0.00	0.00	
13,000.00	90.00	179.43	8,480.00	-4,555.92	-710.77	4,588.57	0.00	0.00	0.00	
13,100.00	90.00	179.43	8,480.00	-4,655.92	-709.78	4,688.35	0.00	0.00	0.00	
13,200.00	90.00	179.43	8,480.00	-4,755.91	-708.79	4,788.13	0.00	0.00	0.00	
13,300.00	90.00	179.43	8,480.00	-4,855.91	-707.79	4,887.91	0.00	0.00	0.00	
13,400.00	90.00	179.43	8,480.00	-4,955.90	-706.80	4,987.70	0.00	0.00	0.00	
13,500.00	90.00	179.43	8,480.00	-5,055.90	-705.81	5,087.48	0.00	0.00	0.00	
13,600.00	90.00	179.43	8,480.00	-5,155.89	-704.82	5,187.26	0.00	0.00	0.00	
13,700.00	90.00	179.43	8,480.00	-5,255.89	-703.82	5,287.04	0.00	0.00	0.00	
13,800.00	90.00	179.43	8,480.00	-5,355.88	-702.83	5,386.83	0.00	0.00	0.00	
13,900.00	90.00	179.43	8,480.00	-5,455.88	-701.84	5,486.61	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 103H
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 103H	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	8,480.00	-5,555.87	-700.84	5,586.39	0.00	0.00	0.00	
14,100.00	90.00	179.43	8,480.00	-5,655.87	-699.85	5,686.17	0.00	0.00	0.00	
14,200.00	90.00	179.43	8,480.00	-5,755.86	-698.86	5,785.96	0.00	0.00	0.00	
14,300.00	90.00	179.43	8,480.00	-5,855.86	-697.86	5,885.74	0.00	0.00	0.00	
14,400.00	90.00	179.43	8,480.00	-5,955.85	-696.87	5,985.52	0.00	0.00	0.00	
14,500.00	90.00	179.43	8,480.00	-6,055.85	-695.88	6,085.31	0.00	0.00	0.00	
14,600.00	90.00	179.43	8,480.00	-6,155.84	-694.89	6,185.09	0.00	0.00	0.00	
14,700.00	90.00	179.43	8,480.00	-6,255.84	-693.89	6,284.87	0.00	0.00	0.00	
14,800.00	90.00	179.43	8,480.00	-6,355.83	-692.90	6,384.65	0.00	0.00	0.00	
14,900.00	90.00	179.43	8,480.00	-6,455.83	-691.91	6,484.44	0.00	0.00	0.00	
15,000.00	90.00	179.43	8,480.00	-6,555.82	-690.91	6,584.22	0.00	0.00	0.00	
15,100.00	90.00	179.43	8,480.00	-6,655.82	-689.92	6,684.00	0.00	0.00	0.00	
15,200.00	90.00	179.43	8,480.00	-6,755.81	-688.93	6,783.78	0.00	0.00	0.00	
15,300.00	90.00	179.43	8,480.00	-6,855.81	-687.94	6,883.57	0.00	0.00	0.00	
15,400.00	90.00	179.43	8,480.00	-6,955.80	-686.94	6,983.35	0.00	0.00	0.00	
15,500.00	90.00	179.43	8,480.00	-7,055.80	-685.95	7,083.13	0.00	0.00	0.00	
15,600.00	90.00	179.43	8,480.00	-7,155.79	-684.96	7,182.92	0.00	0.00	0.00	
15,700.00	90.00	179.43	8,480.00	-7,255.79	-683.96	7,282.70	0.00	0.00	0.00	
15,800.00	90.00	179.43	8,480.00	-7,355.78	-682.97	7,382.48	0.00	0.00	0.00	
15,900.00	90.00	179.43	8,480.00	-7,455.78	-681.98	7,482.26	0.00	0.00	0.00	
16,000.00	90.00	179.43	8,480.00	-7,555.77	-680.99	7,582.05	0.00	0.00	0.00	
16,100.00	90.00	179.43	8,480.00	-7,655.77	-679.99	7,681.83	0.00	0.00	0.00	
16,200.00	90.00	179.43	8,480.00	-7,755.76	-679.00	7,781.61	0.00	0.00	0.00	
16,300.00	90.00	179.43	8,480.00	-7,855.76	-678.01	7,881.39	0.00	0.00	0.00	
16,400.00	90.00	179.43	8,480.00	-7,955.75	-677.01	7,981.18	0.00	0.00	0.00	
16,500.00	90.00	179.43	8,480.00	-8,055.75	-676.02	8,080.96	0.00	0.00	0.00	
16,600.00	90.00	179.43	8,480.00	-8,155.74	-675.03	8,180.74	0.00	0.00	0.00	
16,700.00	90.00	179.43	8,480.00	-8,255.74	-674.04	8,280.52	0.00	0.00	0.00	
16,800.00	90.00	179.43	8,480.00	-8,355.73	-673.04	8,380.31	0.00	0.00	0.00	
16,900.00	90.00	179.43	8,480.00	-8,455.73	-672.05	8,480.09	0.00	0.00	0.00	
17,000.00	90.00	179.43	8,480.00	-8,555.72	-671.06	8,579.87	0.00	0.00	0.00	
17,100.00	90.00	179.43	8,480.00	-8,655.72	-670.06	8,679.66	0.00	0.00	0.00	
17,200.00	90.00	179.43	8,480.00	-8,755.71	-669.07	8,779.44	0.00	0.00	0.00	
17,300.00	90.00	179.43	8,480.00	-8,855.71	-668.08	8,879.22	0.00	0.00	0.00	
17,400.00	90.00	179.43	8,480.00	-8,955.70	-667.09	8,979.00	0.00	0.00	0.00	
17,500.00	90.00	179.43	8,480.00	-9,055.70	-666.09	9,078.79	0.00	0.00	0.00	
17,600.00	90.00	179.43	8,480.00	-9,155.69	-665.10	9,178.57	0.00	0.00	0.00	
17,700.00	90.00	179.43	8,480.00	-9,255.69	-664.11	9,278.35	0.00	0.00	0.00	
17,800.00	90.00	179.43	8,480.00	-9,355.68	-663.11	9,378.13	0.00	0.00	0.00	
17,900.00	90.00	179.43	8,480.00	-9,455.68	-662.12	9,477.92	0.00	0.00	0.00	
18,000.00	90.00	179.43	8,480.00	-9,555.67	-661.13	9,577.70	0.00	0.00	0.00	
18,100.00	90.00	179.43	8,480.00	-9,655.67	-660.13	9,677.48	0.00	0.00	0.00	
18,200.00	90.00	179.43	8,480.00	-9,755.66	-659.14	9,777.27	0.00	0.00	0.00	
18,300.00	90.00	179.43	8,480.00	-9,855.66	-658.15	9,877.05	0.00	0.00	0.00	
18,400.00	90.00	179.43	8,480.00	-9,955.65	-657.16	9,976.83	0.00	0.00	0.00	
18,500.00	90.00	179.43	8,480.00	-10,055.65	-656.16	10,076.61	0.00	0.00	0.00	
18,600.00	90.00	179.43	8,480.00	-10,155.65	-655.17	10,176.40	0.00	0.00	0.00	
18,700.00	90.00	179.43	8,480.00	-10,255.64	-654.18	10,276.18	0.00	0.00	0.00	
18,800.00	90.00	179.43	8,480.00	-10,355.64	-653.18	10,375.96	0.00	0.00	0.00	
18,900.00	90.00	179.43	8,480.00	-10,455.63	-652.19	10,475.74	0.00	0.00	0.00	
19,000.00	90.00	179.43	8,480.00	-10,555.63	-651.20	10,575.53	0.00	0.00	0.00	
19,100.00	90.00	179.43	8,480.00	-10,655.62	-650.21	10,675.31	0.00	0.00	0.00	
19,200.00	90.00	179.43	8,480.00	-10,755.62	-649.21	10,775.09	0.00	0.00	0.00	
19,300.00	90.00	179.43	8,480.00	-10,855.61	-648.22	10,874.88	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 103H
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 103H	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	8,480.00	-10,955.61	-647.23	10,974.66	0.00	0.00	0.00
19,500.00	90.00	179.43	8,480.00	-11,055.60	-646.23	11,074.44	0.00	0.00	0.00
19,600.00	90.00	179.43	8,480.00	-11,155.60	-645.24	11,174.22	0.00	0.00	0.00
19,700.00	90.00	179.43	8,480.00	-11,255.59	-644.25	11,274.01	0.00	0.00	0.00
19,800.00	90.00	179.43	8,480.00	-11,355.59	-643.26	11,373.79	0.00	0.00	0.00
19,899.80	90.00	179.43	8,480.00	-11,455.38	-642.26	11,473.37	0.00	0.00	0.00
TD at 19899.80 - PBHL (PF Fed Com 103H)									

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 103H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	393,885.73	856,326.96	32.078790	-103.316352
LP (PF Fed Com 103H) - plan hits target center - Point	0.00	0.00	8,480.00	-422.93	-751.81	393,462.80	855,575.15	32.077647	-103.318792
PBHL (PF Fed Com 103) - plan hits target center - Point	0.00	0.00	8,480.00	-11,455.38	-642.26	382,430.35	855,684.69	32.047321	-103.318773

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,000.00	2,000.00	0.00	0.00	Start Build 1.50	
2,616.45	2,613.78	9.64	-48.69	Start 4187.86 hold at 2616.45 MD	
6,804.31	6,747.22	140.36	-708.81	Start Drop -1.50	
7,420.77	7,361.00	150.00	-757.50	Start 546.04 hold at 7420.76 MD	
7,966.81	7,907.04	150.00	-757.50	Start DLS 10.00 TFO 179.43	
8,866.81	8,480.00	-422.93	-751.81	Start 11033.00 hold at 8866.80 MD	
19,899.80	8,480.00	-11,455.38	-642.26	TD at 19899.80	



Franklin Mountain Energy

Lea County, NM (NAD83)
PF Fed Com
Paul Foster Fed Com 103H

OH
Plan #1

Anticollision Report

16 July, 2021





Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.00 usft	Error Surface:	Combined Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	7/16/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	19,899.80	Plan #1 (OH)	OWSG (Rev2) MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Bus Driver/Kaston Fed Com						
Bus Driver Fed Com 602H - OH - OH	7,225.62	7,152.78	1,216.24	1,182.54	36.084	CC, ES
Bus Driver Fed Com 602H - OH - OH	8,400.00	8,340.93	1,246.93	1,207.70	31.783	SF
Bus Driver Fed Com 602H - OH - Plan #6	7,225.62	7,152.78	1,216.24	1,182.54	36.084	CC, ES
Bus Driver Fed Com 602H - OH - Plan #6	19,899.80	22,937.32	4,005.57	3,857.96	27.136	SF
Bus Driver Fed Com 702H - OH - OH	6,966.45	6,794.96	1,642.71	1,610.10	50.375	CC
Bus Driver Fed Com 702H - OH - OH	7,000.00	6,835.49	1,642.80	1,609.99	50.082	ES
Bus Driver Fed Com 702H - OH - OH	8,600.00	8,509.04	1,746.33	1,705.54	42.818	SF
Bus Driver Fed Com 702H - OH - Plan #5	6,926.22	6,730.85	1,630.11	1,597.80	50.453	CC, ES
Bus Driver Fed Com 702H - OH - Plan #5	19,899.80	23,496.18	4,066.32	3,903.35	24.951	SF
Kaston Fed Com 603H - OH - OH	7,983.25	8,035.16	133.47	95.56	3.521	CC, ES
Kaston Fed Com 603H - OH - OH	8,000.00	8,052.10	133.58	95.59	3.516	SF
Kaston Fed Com 703H - OH - OH	7,346.21	7,328.11	703.83	669.38	20.430	CC
Kaston Fed Com 703H - OH - OH	8,000.00	7,997.75	706.06	668.52	18.810	ES
Kaston Fed Com 703H - OH - OH	8,200.00	8,180.72	713.55	675.20	18.604	SF
Kaston Fed Com 703H - OH - Plan #9	7,346.24	7,328.13	703.75	669.24	20.388	CC
Kaston Fed Com 703H - OH - Plan #9	8,000.00	7,997.73	705.98	668.37	18.772	ES
Kaston Fed Com 703H - OH - Plan #9	8,200.00	8,180.70	713.49	675.07	18.567	SF
Judge Baylor Fed Com						
Judge Baylor Fed Com 601H - OH - Plan #5	7,301.44	7,199.61	3,034.39	2,998.02	83.431	CC, ES
Judge Baylor Fed Com 601H - OH - Plan #5	19,200.00	22,101.01	4,724.28	4,537.89	25.347	SF
Judge Baylor Fed Com 701H - OH - Plan #5	7,966.81	7,957.51	2,734.46	2,694.55	68.511	CC
Judge Baylor Fed Com 701H - OH - Plan #5	8,050.00	8,040.42	2,734.64	2,694.34	67.863	ES
Judge Baylor Fed Com 701H - OH - Plan #5	19,200.00	22,390.61	4,763.33	4,588.58	27.258	SF
LHS Wildcat Fed Com						
LHS Wildcat Fed Com 604H - OH - OH	2,131.21	2,147.76	748.57	739.48	82.361	CC, ES
LHS Wildcat Fed Com 604H - OH - OH	18,900.00	21,860.00	3,788.65	3,648.14	26.964	SF
LHS Wildcat Fed Com 705H - OH - OH	1,589.03	1,590.62	800.26	793.06	111.146	CC
LHS Wildcat Fed Com 705H - OH - OH	1,600.00	1,599.39	800.27	793.04	110.634	ES
LHS Wildcat Fed Com 705H - OH - OH	19,000.00	22,230.00	4,035.90	3,886.98	27.101	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 103H
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 103H	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 104H - OH - Plan #1	2,000.00	2,000.00	74.96	65.15	7.642	CC, ES
Paul Foster Fed Com 104H - OH - Plan #1	18,600.00	18,511.34	1,501.33	1,260.28	6.228	SF
Paul Foster Fed Com 503H - OH - Plan #1	2,000.00	2,000.00	24.78	14.97	2.526	CC, ES
Paul Foster Fed Com 503H - OH - Plan #1	4,800.00	4,805.21	42.59	17.18	1.677	SF
Paul Foster Fed Com 504H - OH - Plan #1	2,000.00	2,000.00	49.87	40.06	5.084	CC, ES
Paul Foster Fed Com 504H - OH - Plan #1	2,100.00	2,099.99	51.15	40.84	4.961	SF
Paul Foster Fed Com 804H - OH - Plan #1	2,000.00	2,000.00	75.96	66.15	7.744	CC
Paul Foster Fed Com 804H - OH - Plan #1	2,300.00	2,299.32	76.82	65.53	6.804	ES
Paul Foster Fed Com 804H - OH - Plan #1	8,000.00	7,974.65	215.78	174.91	5.279	SF
Paul Foster Fed Com 805H - OH - Plan #1	2,000.00	2,000.00	83.80	73.99	8.542	CC
Paul Foster Fed Com 805H - OH - Plan #1	2,100.00	2,099.99	84.14	73.83	8.160	ES
Paul Foster Fed Com 805H - OH - Plan #1	2,300.00	2,297.70	88.68	77.38	7.849	SF
Paul Foster Fed Com 806H - OH - Plan #1	2,000.00	2,000.00	97.43	87.62	9.932	CC, ES
Paul Foster Fed Com 806H - OH - Plan #1	2,200.00	2,197.73	101.07	90.28	9.361	SF
PF Fed Com 101H - OH - Plan #1	7,132.22	6,947.80	2,503.74	2,467.41	68.930	CC
PF Fed Com 101H - OH - Plan #1	18,600.00	18,634.72	2,506.55	2,268.37	10.524	ES
PF Fed Com 101H - OH - Plan #1	18,800.00	18,634.72	2,515.96	2,275.53	10.464	SF
PF Fed Com 102H - OH - Plan #1	8,064.55	8,111.70	1,304.50	1,263.05	31.471	CC
PF Fed Com 102H - OH - Plan #1	19,899.80	20,078.25	1,313.66	1,046.76	4.922	ES, SF
PF Fed Com 501H - OH - Plan #1	7,192.72	7,059.42	2,504.59	2,467.57	67.649	CC
PF Fed Com 501H - OH - Plan #1	8,050.00	8,063.99	2,505.32	2,463.87	60.448	ES
PF Fed Com 501H - OH - Plan #1	18,900.00	20,792.10	3,295.67	3,098.96	16.754	SF
PF Fed Com 502H - OH - Plan #1	7,966.81	8,027.70	1,337.00	1,295.59	32.286	CC
PF Fed Com 502H - OH - Plan #1	8,000.00	8,060.88	1,337.05	1,295.49	32.166	ES
PF Fed Com 502H - OH - Plan #1	19,899.80	22,046.30	2,396.23	2,216.10	13.303	SF
PF Fed Com 801H - OH - Plan #1	7,027.01	6,774.36	2,599.69	2,564.07	72.989	CC, ES
PF Fed Com 801H - OH - Plan #1	19,200.00	22,715.49	4,848.68	4,684.32	29.500	SF
PF Fed Com 802H - OH - Plan #1	7,966.81	7,966.36	1,796.61	1,755.77	43.994	CC
PF Fed Com 802H - OH - Plan #1	8,000.00	7,999.53	1,796.66	1,755.66	43.826	ES
PF Fed Com 802H - OH - Plan #1	19,899.80	23,929.64	4,289.25	4,129.63	26.873	SF
PF Fed Com 803H - OH - Plan #1	7,966.81	8,100.99	820.79	778.87	19.581	CC
PF Fed Com 803H - OH - Plan #1	8,000.00	8,134.17	820.88	778.81	19.511	ES
PF Fed Com 803H - OH - Plan #1	8,350.00	8,456.25	841.63	797.44	19.048	SF

Offset Design												Offset Site Error:	0.00 usft
Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1352-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 +/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	26.15	26.15	0.00	0.03	-71.73	580.36	-1,757.57	1,850.91				
100.00	100.00	125.35	125.35	0.13	0.19	-71.72	580.58	-1,757.55	1,850.96	1,850.73	0.23	8,038.635	
200.00	200.00	221.52	221.52	0.48	0.53	-71.72	580.70	-1,757.60	1,851.05	1,850.33	0.72	2,583.799	
300.00	300.00	300.25	300.24	0.84	0.81	-71.70	581.43	-1,758.08	1,851.91	1,850.74	1.17	1,585.451	
400.00	400.00	379.26	379.23	1.20	1.09	-71.67	582.79	-1,759.31	1,853.93	1,852.30	1.62	1,142.264	
500.00	500.00	479.77	479.70	1.56	1.45	-71.65	584.32	-1,761.75	1,856.71	1,854.59	2.13	872.108	
600.00	600.00	591.55	591.45	1.92	1.85	-71.68	584.24	-1,764.33	1,858.88	1,856.22	2.66	698.694	
700.00	700.00	687.42	687.27	2.28	2.18	-71.76	582.22	-1,766.77	1,860.65	1,857.49	3.15	590.491	
800.00	800.00	871.81	871.28	2.63	2.83	-72.09	571.37	-1,768.44	1,858.99	1,855.13	3.86	481.616	
900.00	900.00	959.38	958.59	2.99	3.14	-72.30	564.64	-1,769.37	1,857.55	1,853.22	4.33	428.603	
1,000.00	1,000.00	1,049.14	1,048.17	3.35	3.46	-72.46	559.17	-1,769.65	1,856.01	1,851.20	4.81	385.519	

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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				
1,100.00	1,100.00	1,155.74	1,154.61	3.71	3.84	-72.65	553.19	-1,770.18	1,854.82	1,849.48	5.34	347.394				
1,200.00	1,200.00	1,245.23	1,243.99	4.07	4.16	-72.77	548.92	-1,770.15	1,853.39	1,847.57	5.82	318.451				
1,300.00	1,300.00	1,337.64	1,336.35	4.43	4.49	-72.87	545.59	-1,770.40	1,852.59	1,846.28	6.31	293.699				
1,400.00	1,400.00	1,425.00	1,423.68	4.79	4.68	-72.93	543.72	-1,770.75	1,852.35	1,845.65	6.69	276.790				
1,408.59	1,408.59	1,436.18	1,434.86	4.82	4.68	-72.94	543.52	-1,770.80	1,852.34	1,845.62	6.72	275.801				
1,500.00	1,500.00	1,507.12	1,505.79	5.14	4.70	-72.96	542.81	-1,771.44	1,852.85	1,845.89	6.97	265.966				
1,600.00	1,600.00	1,600.96	1,599.63	5.50	4.74	-72.96	543.34	-1,772.61	1,854.20	1,846.94	7.26	255.352				
1,700.00	1,700.00	1,698.36	1,697.00	5.86	4.80	-72.91	545.14	-1,773.60	1,855.72	1,848.15	7.58	244.933				
1,800.00	1,800.00	1,798.97	1,797.58	6.22	4.89	-72.86	547.42	-1,774.57	1,857.31	1,849.39	7.91	234.748				
1,900.00	1,900.00	1,902.23	1,900.81	6.58	5.01	-72.80	549.75	-1,775.45	1,858.79	1,850.52	8.27	224.824				
2,000.00	2,000.00	2,014.68	2,013.23	6.94	5.17	-72.72	552.32	-1,775.86	1,859.82	1,851.17	8.65	215.052				
2,100.00	2,099.99	2,121.55	2,120.07	7.29	5.34	6.16	555.02	-1,775.59	1,859.02	1,849.99	9.03	205.828				
2,200.00	2,199.91	2,224.67	2,223.15	7.63	5.52	6.27	557.91	-1,774.94	1,855.36	1,845.94	9.42	196.980				
2,300.00	2,299.69	2,324.32	2,322.75	7.98	5.71	6.40	560.89	-1,774.16	1,849.01	1,839.20	9.81	188.416				
2,400.00	2,399.27	2,423.70	2,422.07	8.34	5.92	6.55	564.11	-1,773.36	1,840.14	1,829.92	10.22	180.101				
2,500.00	2,498.57	2,543.81	2,542.12	8.69	6.19	6.74	567.40	-1,772.06	1,828.30	1,817.64	10.66	171.579				
2,600.00	2,597.54	2,652.72	2,651.00	9.06	6.45	6.89	569.12	-1,770.05	1,812.79	1,801.71	11.09	163.501				
2,616.45	2,613.78	2,665.52	2,663.80	9.12	6.48	6.92	569.31	-1,769.81	1,809.98	1,798.83	11.15	162.285				
2,700.00	2,696.24	2,732.78	2,731.05	9.43	6.64	6.98	569.72	-1,769.05	1,795.92	1,784.44	11.48	156.378				
2,800.00	2,794.94	2,824.87	2,823.15	9.81	6.87	7.03	569.37	-1,768.94	1,779.74	1,767.84	11.90	149.566				
2,900.00	2,893.64	2,933.31	2,931.59	10.19	7.14	7.10	569.28	-1,768.61	1,763.49	1,751.14	12.34	142.856				
3,000.00	2,992.34	3,055.38	3,053.63	10.58	7.47	7.23	570.15	-1,766.55	1,746.16	1,733.34	12.82	136.226				
3,100.00	3,091.04	3,153.31	3,151.53	10.97	7.75	7.34	570.77	-1,764.07	1,728.05	1,714.78	13.26	130.296				
3,200.00	3,189.74	3,236.18	3,234.39	11.37	7.98	7.39	570.04	-1,763.11	1,710.72	1,697.04	13.69	124.974				
3,300.00	3,288.45	3,335.87	3,333.99	11.77	8.26	7.32	565.99	-1,763.22	1,693.62	1,679.48	14.14	119.773				
3,400.00	3,387.15	3,406.00	3,403.95	12.17	8.46	7.21	561.26	-1,764.12	1,676.97	1,662.41	14.55	115.224				
3,500.00	3,485.85	3,500.00	3,497.57	12.58	8.73	6.98	553.56	-1,767.40	1,661.76	1,646.75	15.01	110.736				
3,600.00	3,584.55	3,558.11	3,555.38	12.98	8.91	6.82	548.60	-1,770.71	1,648.29	1,632.89	15.41	106.992				
3,700.00	3,683.25	3,640.17	3,636.98	13.39	9.16	6.60	542.08	-1,776.28	1,636.32	1,620.47	15.84	103.273				
3,800.00	3,781.95	3,727.66	3,724.09	13.80	9.43	6.40	536.57	-1,782.41	1,625.09	1,608.79	16.30	99.729				
3,900.00	3,880.65	3,816.38	3,812.47	14.22	9.70	6.25	532.52	-1,788.89	1,614.67	1,597.92	16.75	96.398				
4,000.00	3,979.35	3,924.06	3,919.60	14.63	10.05	6.00	525.93	-1,797.52	1,604.50	1,587.26	17.25	93.040				
4,100.00	4,078.05	4,037.61	4,032.20	15.05	10.42	5.57	514.48	-1,806.66	1,593.25	1,575.49	17.76	89.723				
4,200.00	4,176.75	4,141.08	4,134.80	15.47	10.77	5.17	503.74	-1,814.60	1,581.64	1,563.38	18.25	86.645				
4,300.00	4,275.45	4,231.94	4,225.11	15.89	11.08	4.89	496.18	-1,821.06	1,570.12	1,551.40	18.73	83.835				
4,400.00	4,374.15	4,366.10	4,358.68	16.31	11.53	4.53	486.70	-1,829.33	1,558.15	1,538.87	19.28	80.803				
4,500.00	4,472.85	4,481.37	4,473.68	16.73	11.92	4.31	480.26	-1,833.72	1,544.28	1,524.48	19.80	77.992				
4,600.00	4,571.55	4,585.46	4,577.53	17.15	12.27	4.10	473.98	-1,836.89	1,529.57	1,509.27	20.30	75.346				
4,700.00	4,670.25	4,676.52	4,668.24	17.57	12.58	3.84	466.80	-1,840.30	1,515.09	1,494.30	20.78	72.899				
4,800.00	4,768.95	4,768.52	4,759.89	18.00	12.90	3.58	459.76	-1,844.26	1,501.22	1,479.95	21.27	70.580				
4,900.00	4,867.65	4,865.25	4,856.25	18.42	13.24	3.30	452.53	-1,848.59	1,487.61	1,465.84	21.77	68.347				
5,000.00	4,966.35	4,959.66	4,950.26	18.85	13.58	3.01	445.17	-1,853.07	1,474.22	1,451.96	22.26	66.230				
5,100.00	5,065.05	5,052.27	5,042.43	19.28	13.91	2.70	437.55	-1,857.95	1,461.27	1,438.51	22.75	64.227				
5,200.00	5,163.76	5,149.21	5,138.93	19.70	14.25	2.39	429.98	-1,863.31	1,448.71	1,425.46	23.25	62.302				
5,300.00	5,262.46	5,265.25	5,254.24	20.13	14.68	1.92	418.77	-1,869.74	1,435.83	1,412.04	23.79	60.350				
5,400.00	5,361.16	5,371.35	5,359.43	20.56	15.07	1.38	405.88	-1,874.87	1,421.76	1,397.45	24.32	58.468				
5,500.00	5,459.86	5,474.91	5,462.13	20.99	15.46	0.86	393.40	-1,879.57	1,407.56	1,382.72	24.84	56.667				
5,600.00	5,558.56	5,582.67	5,569.07	21.42	15.86	0.32	380.87	-1,883.76	1,392.92	1,367.55	25.37	54.908				
5,700.00	5,657.26	5,658.47	5,644.32	21.85	16.14	-0.06	372.33	-1,887.06	1,378.88	1,353.03	25.85	53.347				
5,800.00	5,755.96	5,748.84	5,734.01	22.28	16.48	-0.51	362.45	-1,891.98	1,366.06	1,339.71	26.35	51.843				
5,900.00	5,854.66	5,858.09	5,842.55	22.71	16.89	-1.02	351.40	-1,897.66	1,353.28	1,326.39	26.88	50.337				
6,000.00	5,953.36	5,963.02	5,946.94	23.14	17.28	-1.48	341.76	-1,902.15	1,339.82	1,312.41	27.41	48.881				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1352-OWSG (Rev2) MWD															Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
6,100.00	6,052.06	6,062.42	6,045.86	23.57	17.65	-1.91	332.89	-1,906.12	1,326.20	1,298.28	27.93	47.490				
6,200.00	6,150.76	6,161.16	6,144.16	24.01	18.02	-2.32	324.43	-1,909.84	1,312.49	1,284.05	28.44	46.148				
6,300.00	6,249.46	6,244.56	6,227.15	24.44	18.33	-2.70	317.07	-1,913.61	1,299.55	1,270.62	28.93	44.916				
6,400.00	6,348.16	6,332.42	6,314.47	24.87	18.66	-3.13	308.70	-1,918.56	1,287.68	1,258.25	29.43	43.750				
6,500.00	6,446.86	6,433.33	6,414.72	25.30	19.05	-3.65	298.84	-1,924.61	1,276.23	1,246.28	29.96	42.600				
6,600.00	6,545.56	6,535.11	6,515.82	25.74	19.44	-4.19	288.73	-1,930.52	1,264.68	1,234.19	30.49	41.483				
6,700.00	6,644.26	6,637.20	6,617.26	26.17	19.83	-4.74	278.63	-1,936.20	1,253.00	1,221.98	31.02	40.399				
6,804.31	6,747.22	6,744.96	6,724.44	26.62	20.24	-5.28	268.95	-1,941.65	1,240.51	1,208.94	31.57	39.297				
6,900.00	6,841.85	6,838.30	6,817.35	27.03	20.59	-5.71	261.25	-1,946.16	1,230.18	1,198.12	32.06	38.369				
7,000.00	6,941.09	6,929.80	6,908.48	27.44	20.94	-6.09	254.46	-1,950.84	1,222.36	1,189.79	32.56	37.537				
7,100.00	7,040.61	7,021.87	7,000.23	27.83	21.28	-6.40	248.95	-1,956.22	1,218.01	1,184.95	33.06	36.841				
7,200.00	7,140.36	7,125.87	7,103.92	28.20	21.66	-6.71	243.71	-1,962.21	1,216.32	1,182.74	33.58	36.227				
7,225.62	7,165.94	7,152.78	7,130.76	28.29	21.76	-6.78	242.39	-1,963.70	1,216.24	1,182.54	33.71	36.084	CC, ES			
7,300.00	7,240.26	7,230.03	7,207.81	28.55	22.04	-6.99	238.68	-1,967.80	1,216.87	1,182.79	34.08	35.702				
7,400.00	7,340.24	7,328.58	7,306.14	28.88	22.40	-7.22	234.45	-1,972.86	1,219.86	1,185.28	34.58	35.277				
7,420.77	7,361.00	7,348.29	7,325.81	28.95	22.47	-86.07	233.65	-1,973.91	1,220.84	1,186.16	34.68	35.203				
7,500.00	7,440.24	7,435.10	7,412.43	29.20	22.78	-86.24	230.22	-1,978.37	1,224.71	1,189.63	35.08	34.912				
7,600.00	7,540.24	7,548.39	7,525.56	29.52	23.19	-86.44	226.30	-1,983.02	1,228.58	1,192.99	35.59	34.522				
7,700.00	7,640.24	7,675.39	7,652.50	29.84	23.62	-86.53	224.51	-1,986.01	1,230.85	1,194.75	36.10	34.097				
7,800.00	7,740.24	7,789.50	7,766.60	30.16	23.99	-86.50	225.12	-1,986.43	1,231.23	1,194.65	36.58	33.663				
7,900.00	7,840.24	7,894.23	7,871.33	30.48	24.32	-86.48	225.50	-1,986.28	1,231.10	1,194.06	37.04	33.234				
7,966.81	7,907.04	7,966.31	7,943.41	30.69	24.55	-86.49	225.45	-1,985.86	1,230.71	1,193.35	37.36	32.943				
8,000.00	7,940.22	8,002.27	7,979.37	30.79	24.66	94.15	225.37	-1,985.53	1,230.48	1,192.97	37.51	32.801				
8,050.00	7,989.94	8,056.06	8,033.16	30.94	24.83	94.42	225.19	-1,984.90	1,230.26	1,192.52	37.74	32.599				
8,075.50	8,015.08	8,083.21	8,060.31	31.01	24.92	94.63	225.07	-1,984.52	1,230.23	1,192.37	37.85	32.500				
8,100.00	8,039.04	8,109.10	8,086.19	31.08	25.00	94.87	224.94	-1,984.11	1,230.26	1,192.30	37.96	32.408				
8,150.00	8,087.13	8,158.82	8,135.90	31.21	25.16	95.45	224.64	-1,983.25	1,230.62	1,192.44	38.18	32.234				
8,200.00	8,133.85	8,206.24	8,183.32	31.33	25.32	96.13	224.36	-1,982.40	1,231.56	1,193.17	38.39	32.079				
8,250.00	8,178.84	8,244.74	8,221.80	31.45	25.44	96.72	224.13	-1,981.77	1,233.35	1,194.75	38.60	31.950				
8,300.00	8,221.77	8,279.11	8,256.17	31.55	25.56	97.22	223.93	-1,981.46	1,236.40	1,197.59	38.81	31.856				
8,350.00	8,262.30	8,312.00	8,289.07	31.65	25.67	97.65	223.73	-1,981.39	1,240.87	1,201.85	39.02	31.800				
8,400.00	8,300.13	8,340.93	8,318.00	31.74	25.76	97.91	223.58	-1,981.52	1,246.93	1,207.70	39.23	31.783	SF			
8,450.00	8,334.96	8,367.87	8,344.93	31.82	25.85	98.01	223.49	-1,981.81	1,254.73	1,215.28	39.45	31.806				
8,500.00	8,366.54	8,392.21	8,369.27	31.89	25.94	97.90	223.45	-1,982.22	1,264.36	1,224.69	39.67	31.871				
8,550.00	8,394.62	8,417.09	8,394.15	31.96	26.02	97.67	223.44	-1,982.76	1,275.92	1,236.02	39.90	31.975				
8,600.00	8,418.99	8,444.94	8,421.99	32.03	26.12	97.40	223.44	-1,983.33	1,289.31	1,249.16	40.15	32.113				
8,650.00	8,439.47	8,468.30	8,445.34	32.11	26.19	96.79	223.46	-1,983.75	1,304.57	1,264.17	40.40	32.291				
8,700.00	8,455.89	8,487.00	8,464.04	32.19	26.26	95.79	223.47	-1,984.04	1,321.73	1,281.08	40.66	32.510				
8,750.00	8,468.13	8,500.91	8,477.95	32.29	26.30	94.36	223.49	-1,984.23	1,340.76	1,299.85	40.91	32.773				
8,800.00	8,476.11	8,509.50	8,486.54	32.40	26.33	92.47	223.50	-1,984.34	1,361.58	1,320.41	41.16	33.078				
8,850.00	8,479.75	8,513.36	8,490.40	32.54	26.35	90.14	223.50	-1,984.39	1,384.02	1,342.61	41.41	33.422				
8,866.81	8,480.00	8,513.60	8,490.64	32.59	26.35	89.26	223.50	-1,984.39	1,391.90	1,350.41	41.49	33.547				
8,900.00	8,480.00	8,513.54	8,490.58	32.70	26.35	89.26	223.50	-1,984.39	1,407.91	1,366.26	41.65	33.802				
9,000.00	8,480.00	8,513.36	8,490.40	33.09	26.35	89.25	223.50	-1,984.39	1,459.65	1,417.50	42.15	34.631				
9,100.00	8,480.00	8,513.18	8,490.22	33.57	26.35	89.24	223.50	-1,984.38	1,516.23	1,473.58	42.65	35.553				
9,200.00	8,480.00	8,513.00	8,490.04	34.14	26.34	89.23	223.50	-1,984.38	1,577.12	1,533.99	43.13	36.564				
9,300.00	8,480.00	8,512.83	8,489.87	34.79	26.34	89.22	223.50	-1,984.38	1,641.85	1,598.25	43.60	37.657				
9,400.00	8,480.00	8,512.65	8,489.69	35.50	26.34	89.21	223.50	-1,984.38	1,709.98	1,665.94	44.04	38.827				
9,500.00	8,480.00	8,512.48	8,489.52	36.28	26.34	89.21	223.50	-1,984.38	1,781.13	1,736.67	44.45	40.067				
9,600.00	8,480.00	8,512.31	8,489.35	37.11	26.34	89.20	223.50	-1,984.37	1,854.93	1,810.10	44.84	41.371				
9,700.00	8,480.00	8,512.14	8,489.18	38.01	26.34	89.19	223.50	-1,984.37	1,931.10	1,885.91	45.19	42.734				
9,800.00	8,480.00	8,511.97	8,489.01	38.95	26.34	89.18	223.50	-1,984.37	2,009.36	1,963.84	45.51	44.150				

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 103H
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 103H	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				
9,900.00	8,480.00	8,511.80	8,488.84	39.94	26.34	89.17	223.50	-1,984.37	2,089.47	2,043.66	45.81	45.612				
10,000.00	8,480.00	8,511.63	8,488.67	40.97	26.34	89.17	223.50	-1,984.36	2,171.23	2,125.15	46.08	47.116				
10,100.00	8,480.00	8,511.46	8,488.50	42.04	26.34	89.16	223.50	-1,984.36	2,254.46	2,208.13	46.33	48.657				
10,200.00	8,480.00	8,511.30	8,488.34	43.14	26.34	89.15	223.50	-1,984.36	2,339.01	2,292.45	46.56	50.231				
10,300.00	8,480.00	8,511.13	8,488.17	44.29	26.34	89.14	223.50	-1,984.36	2,424.74	2,377.96	46.78	51.836				
10,400.00	8,480.00	8,510.97	8,488.01	45.46	26.34	89.14	223.50	-1,984.36	2,511.51	2,464.54	46.97	53.467				
10,500.00	8,480.00	8,510.80	8,487.84	46.66	26.34	89.13	223.50	-1,984.35	2,599.24	2,552.09	47.15	55.124				
10,600.00	8,480.00	8,510.64	8,487.68	47.89	26.34	89.12	223.50	-1,984.35	2,687.83	2,640.51	47.32	56.803				
10,700.00	8,480.00	8,510.48	8,487.52	49.14	26.34	89.11	223.50	-1,984.35	2,777.19	2,729.72	47.47	58.499				
10,800.00	8,480.00	8,510.32	8,487.36	50.42	26.34	89.11	223.50	-1,984.35	2,867.26	2,819.64	47.62	60.215				
10,900.00	8,480.00	8,510.16	8,487.20	51.72	26.34	89.10	223.50	-1,984.35	2,957.96	2,910.21	47.75	61.948				
11,000.00	8,480.00	8,510.00	8,487.04	53.03	26.33	89.09	223.50	-1,984.34	3,049.25	3,001.37	47.87	63.695				
11,100.00	8,480.00	8,509.85	8,486.89	54.37	26.33	89.08	223.50	-1,984.34	3,141.06	3,093.07	47.99	65.454				
11,200.00	8,480.00	8,509.69	8,486.73	55.72	26.33	89.08	223.50	-1,984.34	3,233.36	3,185.27	48.10	67.225				
11,300.00	8,480.00	8,509.53	8,486.57	57.09	26.33	89.07	223.50	-1,984.34	3,326.11	3,277.91	48.20	69.007				
11,400.00	8,480.00	8,509.38	8,486.42	58.47	26.33	89.06	223.50	-1,984.34	3,419.26	3,370.97	48.30	70.797				
11,500.00	8,480.00	8,509.23	8,486.27	59.86	26.33	89.05	223.50	-1,984.34	3,512.80	3,464.41	48.39	72.596				
11,600.00	8,480.00	14,939.00	11,880.67	61.27	71.52	159.96	-3,115.39	-1,956.02	3,592.06	3,539.52	52.54	68.371				
11,700.00	8,480.00	15,006.26	11,881.66	62.69	72.47	159.96	-3,182.63	-1,955.45	3,593.65	3,540.21	53.45	67.236				
11,800.00	8,480.00	15,081.82	11,883.92	64.13	73.54	159.97	-3,258.16	-1,955.08	3,596.57	3,542.17	54.40	66.109				
11,900.00	8,480.00	15,220.87	11,887.05	65.57	75.53	159.97	-3,397.17	-1,954.52	3,598.82	3,543.17	55.65	64.668				
12,000.00	8,480.00	15,279.81	11,888.02	67.02	76.38	159.97	-3,456.10	-1,954.79	3,601.06	3,544.50	56.56	63.671				
12,100.00	8,480.00	15,317.00	11,889.15	68.48	76.92	159.96	-3,493.27	-1,955.46	3,604.98	3,547.62	57.37	62.842				
12,200.00	8,480.00	15,389.67	11,892.24	69.95	77.97	159.94	-3,565.85	-1,957.00	3,610.09	3,551.74	58.35	61.868				
12,300.00	8,480.00	15,477.60	11,896.74	71.42	79.25	159.92	-3,653.65	-1,958.92	3,615.97	3,556.56	59.42	60.859				
12,400.00	8,480.00	15,606.27	11,903.06	72.91	81.14	159.90	-3,782.13	-1,961.43	3,621.62	3,560.94	60.69	59.678				
12,500.00	8,480.00	15,705.84	11,908.32	74.40	82.61	159.92	-3,881.56	-1,961.28	3,626.87	3,565.08	61.80	58.692				
12,600.00	8,480.00	15,838.50	11,913.99	75.90	84.57	159.93	-4,014.10	-1,961.33	3,631.12	3,568.05	63.08	57.568				
12,700.00	8,480.00	15,921.60	11,917.63	77.40	85.81	159.93	-4,097.12	-1,961.45	3,635.63	3,571.50	64.13	56.696				
12,800.00	8,480.00	16,002.26	11,921.59	78.91	87.01	159.95	-4,177.68	-1,961.30	3,640.54	3,575.37	65.16	55.868				
12,900.00	8,480.00	16,074.00	11,925.75	80.43	88.09	159.96	-4,249.30	-1,961.22	3,646.24	3,580.08	66.16	55.113				
13,000.00	8,480.00	16,148.86	11,930.74	81.95	89.21	159.98	-4,324.00	-1,960.90	3,652.68	3,585.51	67.17	54.381				
13,100.00	8,480.00	16,311.81	11,940.94	83.47	91.67	160.02	-4,486.62	-1,959.96	3,658.82	3,590.22	68.61	53.330				
13,200.00	8,480.00	16,402.92	11,945.39	85.00	93.05	160.04	-4,577.61	-1,959.33	3,663.55	3,593.85	69.71	52.557				
13,300.00	8,480.00	16,643.00	11,955.45	86.54	96.71	160.21	-4,817.17	-1,949.25	3,665.78	3,594.36	71.43	51.322				
13,400.00	8,480.00	16,643.00	11,955.45	88.08	96.71	160.21	-4,817.17	-1,949.25	3,668.54	3,596.45	72.09	50.886				
13,500.00	8,480.00	16,643.00	11,955.45	89.62	96.71	160.21	-4,817.17	-1,949.25	3,674.02	3,601.27	72.74	50.507				
13,600.00	8,480.00	16,643.00	11,955.45	91.17	96.71	160.21	-4,817.17	-1,949.25	3,682.20	3,608.84	73.36	50.194				
13,700.00	8,480.00	16,643.00	11,955.45	92.72	96.71	160.21	-4,817.17	-1,949.25	3,693.08	3,619.12	73.96	49.935				
13,800.00	8,480.00	16,643.00	11,955.45	94.27	96.71	160.21	-4,817.17	-1,949.25	3,706.62	3,632.09	74.53	49.736				
13,900.00	8,480.00	16,643.00	11,955.45	95.83	96.71	160.21	-4,817.17	-1,949.25	3,722.80	3,647.73	75.07	49.590				
14,000.00	8,480.00	16,643.00	11,955.45	97.39	96.71	160.21	-4,817.17	-1,949.25	3,741.58	3,666.00	75.58	49.503				
14,100.00	8,480.00	16,643.00	11,955.45	98.95	96.71	160.21	-4,817.17	-1,949.25	3,762.93	3,686.87	76.07	49.468				
14,200.00	8,480.00	16,643.00	11,955.45	100.52	96.71	160.21	-4,817.17	-1,949.25	3,786.80	3,710.29	76.52	49.491				
14,300.00	8,480.00	16,643.00	11,955.45	102.09	96.71	160.21	-4,817.17	-1,949.25	3,813.15	3,736.21	76.94	49.562				
14,400.00	8,480.00	16,643.00	11,955.45	103.66	96.71	160.21	-4,817.17	-1,949.25	3,841.91	3,764.58	77.33	49.682				
14,500.00	8,480.00	16,643.00	11,955.45	105.23	96.71	160.21	-4,817.17	-1,949.25	3,873.05	3,795.35	77.70	49.847				
14,600.00	8,480.00	16,643.00	11,955.45	106.81	96.71	160.21	-4,817.17	-1,949.25	3,906.50	3,828.47	78.03	50.066				
14,700.00	8,480.00	16,643.00	11,955.45	108.39	96.71	160.21	-4,817.17	-1,949.25	3,942.20	3,863.87	78.33	50.326				
14,800.00	8,480.00	16,643.00	11,955.45	109.97	96.71	160.21	-4,817.17	-1,949.25	3,980.10	3,901.49	78.61	50.633				
14,900.00	8,480.00	16,643.00	11,955.45	111.55	96.71	160.21	-4,817.17	-1,949.25	4,020.12	3,941.27	78.85	50.982				
15,000.00	8,480.00	16,643.00	11,955.45	113.13	96.71	160.21	-4,817.17	-1,949.25	4,062.21	3,983.14	79.08	51.370				

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 103H
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 103H	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 - OH												Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1352-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
15,100.00	8,480.00	16,643.00	11,955.45	114.72	96.71	160.21	-4,817.17	-1,949.25	4,106.31	4,027.04	79.27	51.801	
15,200.00	8,480.00	16,643.00	11,955.45	116.31	96.71	160.21	-4,817.17	-1,949.25	4,152.35	4,072.91	79.44	52.270	
15,300.00	8,480.00	16,643.00	11,955.45	117.90	96.71	160.21	-4,817.17	-1,949.25	4,200.26	4,120.68	79.59	52.776	
15,400.00	8,480.00	16,643.00	11,955.45	119.49	96.71	160.21	-4,817.17	-1,949.25	4,249.99	4,170.28	79.71	53.316	
15,500.00	8,480.00	16,643.00	11,955.45	121.08	96.71	160.21	-4,817.17	-1,949.25	4,301.47	4,221.65	79.82	53.890	
15,600.00	8,480.00	16,643.00	11,955.45	122.68	96.71	160.21	-4,817.17	-1,949.25	4,354.64	4,274.73	79.91	54.496	
15,700.00	8,480.00	16,643.00	11,955.45	124.27	96.71	160.21	-4,817.17	-1,949.25	4,409.43	4,329.45	79.98	55.132	
15,800.00	8,480.00	16,643.00	11,955.45	125.87	96.71	160.21	-4,817.17	-1,949.25	4,465.79	4,385.76	80.03	55.800	
15,900.00	8,480.00	16,643.00	11,955.45	127.47	96.71	160.21	-4,817.17	-1,949.25	4,523.66	4,443.59	80.07	56.499	
16,000.00	8,480.00	16,643.00	11,955.45	129.07	96.71	160.21	-4,817.17	-1,949.25	4,582.98	4,502.89	80.09	57.226	
16,100.00	8,480.00	16,643.00	11,955.45	130.67	96.71	160.21	-4,817.17	-1,949.25	4,643.70	4,563.60	80.10	57.977	
16,200.00	8,480.00	16,643.00	11,955.45	132.27	96.71	160.21	-4,817.17	-1,949.25	4,705.76	4,625.66	80.09	58.753	
16,300.00	8,480.00	16,643.00	11,955.45	133.88	96.71	160.21	-4,817.17	-1,949.25	4,769.10	4,689.02	80.08	59.554	
16,400.00	8,480.00	16,643.00	11,955.45	135.48	96.71	160.21	-4,817.17	-1,949.25	4,833.69	4,753.63	80.06	60.378	
16,500.00	8,480.00	16,643.00	11,955.45	137.09	96.71	160.21	-4,817.17	-1,949.25	4,899.47	4,819.45	80.02	61.227	
16,600.00	8,480.00	16,643.00	11,955.45	138.70	96.71	160.21	-4,817.17	-1,949.25	4,966.39	4,886.41	79.98	62.097	



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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				
0.00	0.00	26.15	26.15	0.00	0.03	-71.73	580.36	-1,757.57	1,850.91							
100.00	100.00	125.35	125.35	0.13	0.19	-71.72	580.58	-1,757.55	1,850.96	1,850.73	0.23	8,038.635				
200.00	200.00	221.52	221.52	0.48	0.53	-71.72	580.70	-1,757.60	1,851.05	1,850.33	0.72	2,583.799				
300.00	300.00	300.25	300.24	0.84	0.81	-71.70	581.43	-1,758.08	1,851.91	1,850.74	1.17	1,585.451				
400.00	400.00	379.26	379.23	1.20	1.09	-71.67	582.79	-1,759.31	1,853.93	1,852.30	1.62	1,142.264				
500.00	500.00	479.77	479.70	1.56	1.45	-71.65	584.32	-1,761.75	1,856.71	1,854.59	2.13	872.108				
600.00	600.00	591.55	591.45	1.92	1.85	-71.68	584.24	-1,764.33	1,858.88	1,856.22	2.66	698.694				
700.00	700.00	687.42	687.27	2.28	2.18	-71.76	582.22	-1,766.77	1,860.65	1,857.49	3.15	590.491				
800.00	800.00	871.81	871.28	2.63	2.83	-72.09	571.37	-1,768.44	1,858.99	1,855.13	3.86	481.616				
900.00	900.00	959.38	958.59	2.99	3.14	-72.30	564.64	-1,769.37	1,857.55	1,853.22	4.33	428.603				
1,000.00	1,000.00	1,049.14	1,048.17	3.35	3.46	-72.46	559.17	-1,769.65	1,856.01	1,851.20	4.81	385.519				
1,100.00	1,100.00	1,155.74	1,154.61	3.71	3.84	-72.65	553.19	-1,770.18	1,854.82	1,849.48	5.34	347.394				
1,200.00	1,200.00	1,245.23	1,243.99	4.07	4.16	-72.77	548.92	-1,770.15	1,853.39	1,847.57	5.82	318.451				
1,300.00	1,300.00	1,337.64	1,336.35	4.43	4.49	-72.87	545.59	-1,770.40	1,852.59	1,846.28	6.31	293.699				
1,400.00	1,400.00	1,425.00	1,423.68	4.79	4.68	-72.93	543.72	-1,770.75	1,852.35	1,845.65	6.69	276.790				
1,408.59	1,408.59	1,436.18	1,434.86	4.82	4.68	-72.94	543.52	-1,770.80	1,852.34	1,845.62	6.72	275.801				
1,500.00	1,500.00	1,507.12	1,505.79	5.14	4.70	-72.96	542.81	-1,771.44	1,852.85	1,845.89	6.97	265.966				
1,600.00	1,600.00	1,600.96	1,599.63	5.50	4.74	-72.96	543.34	-1,772.61	1,854.20	1,846.94	7.26	255.352				
1,700.00	1,700.00	1,698.36	1,697.00	5.86	4.80	-72.91	545.14	-1,773.60	1,855.72	1,848.15	7.58	244.933				
1,800.00	1,800.00	1,798.97	1,797.58	6.22	4.89	-72.86	547.42	-1,774.57	1,857.31	1,849.39	7.91	234.748				
1,900.00	1,900.00	1,902.23	1,900.81	6.58	5.01	-72.80	549.75	-1,775.45	1,858.79	1,850.52	8.27	224.824				
2,000.00	2,000.00	2,014.68	2,013.23	6.94	5.17	-72.72	552.32	-1,775.86	1,859.82	1,851.17	8.65	215.052				
2,100.00	2,099.99	2,121.55	2,120.07	7.29	5.34	6.16	555.02	-1,775.59	1,859.02	1,849.99	9.03	205.828				
2,200.00	2,199.91	2,224.67	2,223.15	7.63	5.52	6.27	557.91	-1,774.94	1,855.36	1,845.94	9.42	196.980				
2,300.00	2,299.69	2,324.32	2,322.75	7.98	5.71	6.40	560.89	-1,774.16	1,849.01	1,839.20	9.81	188.416				
2,400.00	2,399.27	2,423.70	2,422.07	8.34	5.92	6.55	564.11	-1,773.36	1,840.14	1,829.92	10.22	180.101				
2,500.00	2,498.57	2,543.81	2,542.12	8.69	6.19	6.74	567.40	-1,772.06	1,828.30	1,817.64	10.66	171.579				
2,600.00	2,597.54	2,652.72	2,651.00	9.06	6.45	6.89	569.12	-1,770.05	1,812.79	1,801.71	11.09	163.501				
2,616.45	2,613.78	2,665.52	2,663.80	9.12	6.48	6.92	569.31	-1,769.81	1,809.98	1,798.83	11.15	162.285				
2,700.00	2,696.24	2,732.78	2,731.05	9.43	6.64	6.98	569.72	-1,769.05	1,795.92	1,784.44	11.48	156.378				
2,800.00	2,794.94	2,824.87	2,823.15	9.81	6.87	7.03	569.37	-1,768.94	1,779.74	1,767.84	11.90	149.566				
2,900.00	2,893.64	2,933.31	2,931.59	10.19	7.14	7.10	569.28	-1,768.61	1,763.49	1,751.14	12.34	142.856				
3,000.00	2,992.34	3,055.38	3,053.63	10.58	7.47	7.23	570.15	-1,766.55	1,746.16	1,733.34	12.82	136.226				
3,100.00	3,091.04	3,153.31	3,151.53	10.97	7.75	7.34	570.77	-1,764.07	1,728.05	1,714.78	13.26	130.296				
3,200.00	3,189.74	3,236.18	3,234.39	11.37	7.98	7.39	570.04	-1,763.11	1,710.72	1,697.04	13.69	124.974				
3,300.00	3,288.45	3,335.87	3,333.99	11.77	8.26	7.32	565.99	-1,763.22	1,693.62	1,679.48	14.14	119.773				
3,400.00	3,387.15	3,406.00	3,403.95	12.17	8.46	7.21	561.26	-1,764.12	1,676.97	1,662.41	14.55	115.224				
3,500.00	3,485.85	3,500.00	3,497.57	12.58	8.73	6.98	553.56	-1,767.40	1,661.76	1,646.75	15.01	110.736				
3,600.00	3,584.55	3,558.11	3,555.38	12.98	8.91	6.82	548.60	-1,770.71	1,648.29	1,632.89	15.41	106.992				
3,700.00	3,683.25	3,640.17	3,636.98	13.39	9.16	6.60	542.08	-1,776.28	1,636.32	1,620.47	15.84	103.273				
3,800.00	3,781.95	3,727.66	3,724.09	13.80	9.43	6.40	536.57	-1,782.41	1,625.09	1,608.79	16.30	99.729				
3,900.00	3,880.65	3,816.38	3,812.47	14.22	9.70	6.25	532.52	-1,788.89	1,614.67	1,597.92	16.75	96.398				
4,000.00	3,979.35	3,924.06	3,919.60	14.63	10.05	6.00	525.93	-1,797.52	1,604.50	1,587.26	17.25	93.040				
4,100.00	4,078.05	4,037.61	4,032.20	15.05	10.42	5.57	514.48	-1,806.66	1,593.25	1,575.49	17.76	89.723				
4,200.00	4,176.75	4,141.08	4,134.80	15.47	10.77	5.17	503.74	-1,814.60	1,581.64	1,563.38	18.25	86.645				
4,300.00	4,275.45	4,231.94	4,225.11	15.89	11.08	4.89	496.18	-1,821.06	1,570.12	1,551.40	18.73	83.835				
4,400.00	4,374.15	4,366.10	4,358.68	16.31	11.53	4.53	486.70	-1,829.33	1,558.15	1,538.87	19.28	80.803				
4,500.00	4,472.85	4,481.37	4,473.68	16.73	11.92	4.31	480.26	-1,833.72	1,544.28	1,524.48	19.80	77.992				
4,600.00	4,571.55	4,585.46	4,577.53	17.15	12.27	4.10	473.98	-1,836.89	1,529.57	1,509.27	20.30	75.346				
4,700.00	4,670.25	4,676.52	4,668.24	17.57	12.58	3.84	466.80	-1,840.30	1,515.09	1,494.30	20.78	72.899				
4,800.00	4,768.95	4,768.52	4,759.89	18.00	12.90	3.58	459.76	-1,844.26	1,501.22	1,479.95	21.27	70.580				
4,900.00	4,867.65	4,865.25	4,856.25	18.42	13.24	3.30	452.53	-1,848.59	1,487.61	1,465.84	21.77	68.347				

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 103H
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 103H	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	4,966.35	4,959.66	4,950.26	18.85	13.58	3.01	445.17	-1,853.07	1,474.22	1,451.96	22.26	66.230				
5,100.00	5,065.05	5,052.27	5,042.43	19.28	13.91	2.70	437.55	-1,857.95	1,461.27	1,438.51	22.75	64.227				
5,200.00	5,163.76	5,149.21	5,138.93	19.70	14.25	2.39	429.98	-1,863.31	1,448.71	1,425.46	23.25	62.302				
5,300.00	5,262.46	5,265.25	5,254.24	20.13	14.68	1.92	418.77	-1,869.74	1,435.83	1,412.04	23.79	60.350				
5,400.00	5,361.16	5,371.35	5,359.43	20.56	15.07	1.38	405.88	-1,874.87	1,421.76	1,397.45	24.32	58.468				
5,500.00	5,459.86	5,474.91	5,462.13	20.99	15.46	0.86	393.40	-1,879.57	1,407.56	1,382.72	24.84	56.667				
5,600.00	5,558.56	5,582.67	5,569.07	21.42	15.86	0.32	380.87	-1,883.76	1,392.92	1,367.55	25.37	54.908				
5,700.00	5,657.26	5,658.47	5,644.32	21.85	16.14	-0.06	372.33	-1,887.06	1,378.88	1,353.03	25.85	53.347				
5,800.00	5,755.96	5,748.84	5,734.01	22.28	16.48	-0.51	362.45	-1,891.98	1,366.06	1,339.71	26.35	51.843				
5,900.00	5,854.66	5,858.09	5,842.55	22.71	16.89	-1.02	351.40	-1,897.66	1,353.28	1,326.39	26.88	50.337				
6,000.00	5,953.36	5,963.02	5,946.94	23.14	17.28	-1.48	341.76	-1,902.15	1,339.82	1,312.41	27.41	48.881				
6,100.00	6,052.06	6,062.42	6,045.86	23.57	17.65	-1.91	332.89	-1,906.12	1,326.20	1,298.28	27.93	47.490				
6,200.00	6,150.76	6,161.16	6,144.16	24.01	18.02	-2.32	324.43	-1,909.84	1,312.49	1,284.05	28.44	46.148				
6,300.00	6,249.46	6,244.56	6,227.15	24.44	18.33	-2.70	317.07	-1,913.61	1,299.55	1,270.62	28.93	44.916				
6,400.00	6,348.16	6,332.42	6,314.47	24.87	18.66	-3.13	308.70	-1,918.56	1,287.68	1,258.25	29.43	43.750				
6,500.00	6,446.86	6,433.33	6,414.72	25.30	19.05	-3.65	298.84	-1,924.61	1,276.23	1,246.28	29.96	42.600				
6,600.00	6,545.56	6,535.11	6,515.82	25.74	19.44	-4.19	288.73	-1,930.52	1,264.68	1,234.19	30.49	41.483				
6,700.00	6,644.26	6,637.20	6,617.26	26.17	19.83	-4.74	278.63	-1,936.20	1,253.00	1,221.98	31.02	40.399				
6,804.31	6,747.22	6,744.96	6,724.44	26.62	20.24	-5.28	268.95	-1,941.65	1,240.51	1,208.94	31.57	39.297				
6,900.00	6,841.85	6,838.30	6,817.35	27.03	20.59	-5.71	261.25	-1,946.16	1,230.18	1,198.12	32.06	38.369				
7,000.00	6,941.09	6,929.80	6,908.48	27.44	20.94	-6.09	254.46	-1,950.84	1,222.36	1,189.79	32.56	37.537				
7,100.00	7,040.61	7,021.87	7,000.23	27.83	21.28	-6.40	248.95	-1,956.22	1,218.01	1,184.95	33.06	36.841				
7,200.00	7,140.36	7,125.87	7,103.92	28.20	21.66	-6.71	243.71	-1,962.21	1,216.32	1,182.74	33.58	36.227				
7,225.62	7,165.94	7,152.78	7,130.76	28.29	21.76	-6.78	242.39	-1,963.70	1,216.24	1,182.54	33.71	36.084 CC, ES				
7,300.00	7,240.26	7,230.03	7,207.81	28.55	22.04	-6.99	238.68	-1,967.80	1,216.87	1,182.79	34.08	35.702				
7,400.00	7,340.24	7,328.58	7,306.14	28.88	22.40	-7.22	234.45	-1,972.86	1,219.86	1,185.28	34.58	35.277				
7,420.77	7,361.00	7,348.29	7,325.81	28.95	22.47	-86.07	233.65	-1,973.91	1,220.84	1,186.16	34.68	35.203				
7,500.00	7,440.24	7,435.10	7,412.43	29.20	22.78	-86.24	230.22	-1,978.37	1,224.71	1,189.63	35.08	34.912				
7,600.00	7,540.24	7,548.39	7,525.56	29.52	23.19	-86.44	226.30	-1,983.02	1,228.58	1,192.99	35.59	34.522				
7,700.00	7,640.24	7,675.39	7,652.50	29.84	23.62	-86.53	224.51	-1,986.01	1,230.85	1,194.75	36.10	34.097				
7,800.00	7,740.24	7,789.50	7,766.60	30.16	23.99	-86.50	225.12	-1,986.43	1,231.23	1,194.65	36.58	33.663				
7,900.00	7,840.24	7,894.23	7,871.33	30.48	24.32	-86.48	225.50	-1,986.28	1,231.10	1,194.06	37.04	33.234				
7,966.81	7,907.04	7,966.31	7,943.41	30.69	24.55	-86.49	225.45	-1,985.86	1,230.71	1,193.35	37.36	32.943				
8,000.00	7,940.22	8,002.27	7,979.37	30.79	24.66	94.15	225.37	-1,985.53	1,230.48	1,192.97	37.51	32.801				
8,050.00	7,989.94	8,056.06	8,033.16	30.94	24.83	94.42	225.19	-1,984.90	1,230.26	1,192.52	37.74	32.599				
8,075.50	8,015.08	8,083.21	8,060.31	31.01	24.92	94.63	225.07	-1,984.52	1,230.23	1,192.37	37.85	32.500				
8,100.00	8,039.04	8,109.10	8,086.19	31.08	25.00	94.87	224.94	-1,984.11	1,230.26	1,192.30	37.96	32.408				
8,150.00	8,087.13	8,158.82	8,135.90	31.21	25.16	95.45	224.64	-1,983.25	1,230.62	1,192.44	38.18	32.234				
8,200.00	8,133.85	8,206.24	8,183.32	31.33	25.32	96.13	224.36	-1,982.40	1,231.56	1,193.17	38.39	32.079				
8,250.00	8,178.84	8,244.74	8,221.80	31.45	25.44	96.72	224.13	-1,981.77	1,233.35	1,194.75	38.60	31.950				
8,300.00	8,221.77	8,279.11	8,256.17	31.55	25.56	97.22	223.93	-1,981.46	1,236.40	1,197.59	38.81	31.856				
8,350.00	8,262.30	8,312.00	8,289.07	31.65	25.67	97.65	223.73	-1,981.39	1,240.87	1,201.85	39.02	31.800				
8,400.00	8,300.13	8,340.93	8,318.00	31.74	25.76	97.91	223.58	-1,981.52	1,246.93	1,207.70	39.23	31.783				
8,450.00	8,334.96	8,367.87	8,344.93	31.82	25.85	98.01	223.49	-1,981.81	1,254.73	1,215.28	39.45	31.806				
8,500.00	8,366.54	8,392.21	8,369.27	31.89	25.94	97.90	223.45	-1,982.22	1,264.36	1,224.69	39.67	31.871				
8,550.00	8,394.62	8,417.09	8,394.15	31.96	26.02	97.67	223.44	-1,982.76	1,275.92	1,236.02	39.90	31.975				
8,600.00	8,418.99	8,444.94	8,421.99	32.03	26.12	97.40	223.44	-1,983.33	1,289.31	1,249.16	40.15	32.113				
8,650.00	8,439.47	8,468.30	8,445.34	32.11	26.19	96.79	223.46	-1,983.75	1,304.57	1,264.17	40.40	32.291				
8,700.00	8,455.89	8,487.00	8,464.04	32.19	26.26	95.79	223.47	-1,984.04	1,321.73	1,281.08	40.66	32.510				
8,750.00	8,468.13	8,500.91	8,477.95	32.29	26.30	94.36	223.49	-1,984.23	1,340.76	1,299.85	40.91	32.773				
8,800.00	8,476.11	8,509.50	8,486.54	32.40	26.33	92.47	223.50	-1,984.34	1,361.58	1,320.41	41.16	33.078				
8,850.00	8,479.75	8,513.36	8,490.40	32.54	26.35	90.14	223.50	-1,984.39	1,384.02	1,342.61	41.41	33.422				

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 103H
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 103H	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		
8,866.81	8,480.00	8,513.60	8,490.64	32.59	26.35	89.26	223.50	-1,984.39	1,391.90	1,350.41	41.49	33.547		
8,900.00	8,480.00	8,513.54	8,490.58	32.70	26.35	89.26	223.50	-1,984.39	1,407.91	1,366.26	41.65	33.802		
9,000.00	8,480.00	8,513.36	8,490.40	33.09	26.35	89.25	223.50	-1,984.39	1,459.65	1,417.50	42.15	34.631		
9,100.00	8,480.00	8,513.18	8,490.22	33.57	26.35	89.24	223.50	-1,984.38	1,516.23	1,473.58	42.65	35.553		
9,200.00	8,480.00	8,513.00	8,490.04	34.14	26.34	89.23	223.50	-1,984.38	1,577.12	1,533.99	43.13	36.564		
9,300.00	8,480.00	8,512.83	8,489.87	34.79	26.34	89.22	223.50	-1,984.38	1,641.85	1,598.25	43.60	37.657		
9,400.00	8,480.00	8,512.65	8,489.69	35.50	26.34	89.21	223.50	-1,984.38	1,709.98	1,665.94	44.04	38.827		
9,500.00	8,480.00	8,512.48	8,489.52	36.28	26.34	89.21	223.50	-1,984.38	1,781.13	1,736.67	44.45	40.067		
9,600.00	8,480.00	8,512.31	8,489.35	37.11	26.34	89.20	223.50	-1,984.37	1,854.93	1,810.10	44.84	41.371		
9,700.00	8,480.00	8,512.14	8,489.18	38.01	26.34	89.19	223.50	-1,984.37	1,931.10	1,885.91	45.19	42.734		
9,800.00	8,480.00	8,511.97	8,489.01	38.95	26.34	89.18	223.50	-1,984.37	2,009.36	1,963.84	45.51	44.150		
9,900.00	8,480.00	8,511.80	8,488.84	39.94	26.34	89.17	223.50	-1,984.37	2,089.47	2,043.66	45.81	45.612		
10,000.00	8,480.00	8,511.63	8,488.67	40.97	26.34	89.17	223.50	-1,984.36	2,171.23	2,125.15	46.08	47.116		
10,100.00	8,480.00	8,511.46	8,488.50	42.04	26.34	89.16	223.50	-1,984.36	2,254.46	2,208.13	46.33	48.657		
10,200.00	8,480.00	8,511.30	8,488.34	43.14	26.34	89.15	223.50	-1,984.36	2,339.01	2,292.45	46.56	50.231		
10,300.00	8,480.00	8,511.13	8,488.17	44.29	26.34	89.14	223.50	-1,984.36	2,424.74	2,377.96	46.78	51.836		
10,400.00	8,480.00	8,510.97	8,488.01	45.46	26.34	89.14	223.50	-1,984.36	2,511.51	2,464.54	46.97	53.467		
10,500.00	8,480.00	8,510.80	8,487.84	46.66	26.34	89.13	223.50	-1,984.35	2,599.24	2,552.09	47.15	55.124		
10,600.00	8,480.00	8,510.64	8,487.68	47.89	26.34	89.12	223.50	-1,984.35	2,687.83	2,640.51	47.32	56.803		
10,700.00	8,480.00	8,510.48	8,487.52	49.14	26.34	89.11	223.50	-1,984.35	2,777.19	2,729.72	47.47	58.499		
10,800.00	8,480.00	8,510.32	8,487.36	50.42	26.34	89.11	223.50	-1,984.35	2,867.26	2,819.64	47.62	60.215		
10,900.00	8,480.00	8,510.16	8,487.20	51.72	26.34	89.10	223.50	-1,984.35	2,957.96	2,910.21	47.75	61.948		
11,000.00	8,480.00	8,510.00	8,487.04	53.03	26.33	89.09	223.50	-1,984.34	3,049.25	3,001.37	47.87	63.695		
11,100.00	8,480.00	8,509.85	8,486.89	54.37	26.33	89.08	223.50	-1,984.34	3,141.06	3,093.07	47.99	65.454		
11,200.00	8,480.00	8,509.69	8,486.73	55.72	26.33	89.08	223.50	-1,984.34	3,233.36	3,185.27	48.10	67.225		
11,300.00	8,480.00	8,509.53	8,486.57	57.09	26.33	89.07	223.50	-1,984.34	3,326.11	3,277.91	48.20	69.007		
11,400.00	8,480.00	8,509.38	8,486.42	58.47	26.33	89.06	223.50	-1,984.34	3,419.26	3,370.97	48.30	70.797		
11,500.00	8,480.00	8,509.23	8,486.27	59.86	26.33	89.05	223.50	-1,984.34	3,512.80	3,464.41	48.39	72.596		
11,600.00	8,480.00	14,924.68	11,880.77	61.27	71.29	159.87	-3,102.33	-1,961.90	3,594.35	3,541.82	52.53	68.427		
11,700.00	8,480.00	15,024.66	11,882.68	62.69	72.71	159.88	-3,202.29	-1,961.02	3,596.18	3,542.60	53.58	67.119		
11,800.00	8,480.00	15,124.64	11,884.60	64.13	74.14	159.89	-3,302.25	-1,960.15	3,598.02	3,543.37	54.64	65.846		
11,900.00	8,480.00	15,224.63	11,886.51	65.57	75.57	159.90	-3,402.21	-1,959.27	3,599.85	3,544.14	55.72	64.610		
12,000.00	8,480.00	15,300.00	11,887.97	67.02	76.66	159.91	-3,477.57	-1,958.60	3,601.79	3,545.10	56.69	63.537		
12,100.00	8,480.00	15,352.95	11,889.65	68.48	77.42	159.91	-3,530.49	-1,958.14	3,604.88	3,547.32	57.56	62.626		
12,200.00	8,480.00	15,452.87	11,893.67	69.95	78.88	159.93	-3,630.32	-1,957.26	3,608.70	3,550.05	58.65	61.528		
12,300.00	8,480.00	15,552.79	11,897.70	71.42	80.34	159.95	-3,730.16	-1,956.38	3,612.52	3,552.78	59.75	60.465		
12,400.00	8,480.00	15,652.71	11,901.72	72.91	81.81	159.97	-3,829.99	-1,955.51	3,616.35	3,555.50	60.85	59.434		
12,500.00	8,480.00	15,752.62	11,905.74	74.40	83.29	159.99	-3,929.83	-1,954.63	3,620.17	3,558.22	61.95	58.433		
12,600.00	8,480.00	15,852.54	11,909.77	75.90	84.78	160.01	-4,029.66	-1,953.75	3,623.99	3,560.93	63.07	57.462		
12,700.00	8,480.00	15,952.46	11,913.79	77.40	86.27	160.03	-4,129.49	-1,952.87	3,627.82	3,563.63	64.19	56.519		
12,800.00	8,480.00	16,052.38	11,917.82	78.91	87.76	160.05	-4,229.33	-1,952.00	3,631.64	3,566.33	65.31	55.604		
12,900.00	8,480.00	16,152.30	11,921.84	80.43	89.26	160.07	-4,329.16	-1,951.12	3,635.47	3,569.02	66.44	54.715		
13,000.00	8,480.00	16,252.22	11,925.86	81.95	90.77	160.09	-4,429.00	-1,950.24	3,639.29	3,571.71	67.58	53.853		
13,100.00	8,480.00	16,352.14	11,929.89	83.47	92.28	160.11	-4,528.83	-1,949.37	3,643.12	3,574.40	68.72	53.015		
13,200.00	8,480.00	16,452.06	11,933.91	85.00	93.80	160.13	-4,628.66	-1,948.49	3,646.94	3,577.08	69.86	52.202		
13,300.00	8,480.00	16,551.97	11,937.93	86.54	95.32	160.15	-4,728.50	-1,947.61	3,650.77	3,579.76	71.01	51.411		
13,400.00	8,480.00	16,651.89	11,941.96	88.08	96.84	160.17	-4,828.33	-1,946.73	3,654.60	3,582.44	72.16	50.644		
13,500.00	8,480.00	16,751.81	11,945.98	89.62	98.37	160.19	-4,928.16	-1,945.86	3,658.43	3,585.11	73.32	49.898		
13,600.00	8,480.00	16,851.73	11,950.01	91.17	99.90	160.21	-5,028.00	-1,944.98	3,662.25	3,587.78	74.48	49.172		
13,700.00	8,480.00	16,951.65	11,954.03	92.72	101.44	160.23	-5,127.83	-1,944.10	3,666.08	3,590.44	75.64	48.467		
13,800.00	8,480.00	17,051.57	11,958.05	94.27	102.98	160.25	-5,227.67	-1,943.22	3,669.91	3,593.11	76.80	47.783		
13,900.00	8,480.00	17,151.49	11,962.08	95.83	104.52	160.27	-5,327.50	-1,942.35	3,673.74	3,595.77	77.97	47.118		

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 103H
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 103H	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				
14,000.00	8,480.00	17,251.41	11,966.10	97.39	106.07	160.29	-5,427.33	-1,941.47	3,677.57	3,598.43	79.14	46.470				
14,100.00	8,480.00	17,351.33	11,970.13	98.95	107.61	160.31	-5,527.17	-1,940.59	3,681.40	3,601.09	80.31	45.840				
14,200.00	8,480.00	17,451.24	11,974.15	100.52	109.17	160.33	-5,627.00	-1,939.71	3,685.23	3,603.75	81.49	45.226				
14,300.00	8,480.00	17,551.16	11,978.17	102.09	110.72	160.35	-5,726.84	-1,938.84	3,689.06	3,606.40	82.66	44.629				
14,400.00	8,480.00	17,651.08	11,982.20	103.66	112.28	160.37	-5,826.67	-1,937.96	3,692.89	3,609.06	83.84	44.048				
14,500.00	8,480.00	17,751.00	11,986.22	105.23	113.84	160.39	-5,926.50	-1,937.08	3,696.73	3,611.71	85.02	43.482				
14,600.00	8,480.00	17,850.92	11,990.24	106.81	115.40	160.41	-6,026.34	-1,936.21	3,700.56	3,614.36	86.20	42.931				
14,700.00	8,480.00	17,950.84	11,994.27	108.39	116.97	160.43	-6,126.17	-1,935.33	3,704.39	3,617.01	87.38	42.394				
14,800.00	8,480.00	18,050.76	11,998.29	109.97	118.54	160.45	-6,226.01	-1,934.45	3,708.22	3,619.66	88.57	41.870				
14,900.00	8,480.00	18,150.68	12,002.32	111.55	120.11	160.47	-6,325.84	-1,933.57	3,712.06	3,622.30	89.75	41.359				
15,000.00	8,480.00	18,250.59	12,006.34	113.13	121.68	160.48	-6,425.67	-1,932.70	3,715.89	3,624.95	90.94	40.861				
15,100.00	8,480.00	18,350.51	12,010.36	114.72	123.25	160.50	-6,525.51	-1,931.82	3,719.72	3,627.60	92.13	40.375				
15,200.00	8,480.00	18,450.43	12,014.39	116.31	124.83	160.52	-6,625.34	-1,930.94	3,723.56	3,630.24	93.32	39.901				
15,300.00	8,480.00	18,550.35	12,018.41	117.90	126.40	160.54	-6,725.18	-1,930.06	3,727.39	3,632.88	94.51	39.438				
15,400.00	8,480.00	18,650.27	12,022.43	119.49	127.98	160.56	-6,825.01	-1,929.19	3,731.23	3,635.52	95.71	38.986				
15,500.00	8,480.00	18,750.19	12,026.46	121.08	129.57	160.58	-6,924.84	-1,928.31	3,735.07	3,638.17	96.90	38.545				
15,600.00	8,480.00	18,850.11	12,030.48	122.68	131.15	160.60	-7,024.68	-1,927.43	3,738.90	3,640.81	98.09	38.115				
15,700.00	8,480.00	18,950.03	12,034.51	124.27	132.73	160.62	-7,124.51	-1,926.55	3,742.74	3,643.45	99.29	37.696				
15,800.00	8,480.00	19,018.95	12,037.39	125.87	133.83	160.63	-7,193.37	-1,925.95	3,746.81	3,646.50	100.31	37.352				
15,900.00	8,480.00	19,101.32	12,041.80	127.47	135.13	160.65	-7,275.62	-1,925.23	3,751.86	3,650.47	101.40	37.001				
16,000.00	8,480.00	19,201.18	12,047.19	129.07	136.72	160.68	-7,375.33	-1,924.35	3,757.00	3,654.41	102.59	36.622				
16,100.00	8,480.00	19,301.03	12,052.58	130.67	138.31	160.70	-7,475.03	-1,923.47	3,762.13	3,658.35	103.78	36.252				
16,200.00	8,480.00	19,400.88	12,057.97	132.27	139.90	160.73	-7,574.74	-1,922.60	3,767.26	3,662.29	104.97	35.890				
16,300.00	8,480.00	19,500.74	12,063.36	133.88	141.50	160.75	-7,674.44	-1,921.72	3,772.39	3,666.24	106.16	35.536				
16,400.00	8,480.00	19,600.59	12,068.75	135.48	143.09	160.78	-7,774.14	-1,920.85	3,777.53	3,670.18	107.35	35.190				
16,500.00	8,480.00	19,700.45	12,074.14	137.09	144.68	160.80	-7,873.85	-1,919.97	3,782.66	3,674.12	108.54	34.851				
16,600.00	8,480.00	19,800.30	12,079.53	138.70	146.28	160.83	-7,973.55	-1,919.09	3,787.80	3,678.07	109.73	34.520				
16,700.00	8,480.00	19,900.15	12,084.91	140.30	147.88	160.85	-8,073.26	-1,918.22	3,792.93	3,682.01	110.92	34.195				
16,800.00	8,480.00	20,000.01	12,090.30	141.91	149.47	160.88	-8,172.96	-1,917.34	3,798.07	3,685.96	112.11	33.877				
16,900.00	8,480.00	20,099.86	12,095.69	143.52	151.07	160.90	-8,272.67	-1,916.47	3,803.21	3,689.90	113.31	33.566				
17,000.00	8,480.00	20,199.72	12,101.08	145.13	152.67	160.93	-8,372.37	-1,915.59	3,808.35	3,693.85	114.50	33.261				
17,100.00	8,480.00	20,299.57	12,106.47	146.75	154.28	160.95	-8,472.08	-1,914.71	3,813.48	3,697.79	115.69	32.963				
17,200.00	8,480.00	20,399.43	12,111.86	148.36	155.88	160.98	-8,571.78	-1,913.84	3,818.62	3,701.74	116.88	32.671				
17,300.00	8,480.00	20,499.28	12,117.25	149.97	157.48	161.00	-8,671.49	-1,912.96	3,823.76	3,705.69	118.08	32.384				
17,400.00	8,480.00	20,599.13	12,122.64	151.59	159.08	161.03	-8,771.19	-1,912.08	3,828.91	3,709.64	119.27	32.104				
17,500.00	8,480.00	20,698.99	12,128.03	153.20	160.69	161.05	-8,870.90	-1,911.21	3,834.05	3,713.59	120.46	31.829				
17,600.00	8,480.00	20,798.84	12,133.42	154.82	162.30	161.08	-8,970.60	-1,910.33	3,839.19	3,717.54	121.65	31.560				
17,700.00	8,480.00	20,898.70	12,138.80	156.44	163.90	161.10	-9,070.31	-1,909.46	3,844.33	3,721.49	122.84	31.295				
17,800.00	8,480.00	20,998.55	12,144.19	158.05	165.51	161.13	-9,170.01	-1,908.58	3,849.48	3,725.45	124.03	31.036				
17,900.00	8,480.00	21,098.40	12,149.58	159.67	167.12	161.15	-9,269.72	-1,907.70	3,854.62	3,729.40	125.22	30.782				
18,000.00	8,480.00	21,198.26	12,154.97	161.29	168.73	161.18	-9,369.42	-1,906.83	3,859.77	3,733.35	126.42	30.532				
18,100.00	8,480.00	21,298.11	12,160.36	162.91	170.34	161.20	-9,469.13	-1,905.95	3,864.91	3,737.31	127.61	30.287				
18,200.00	8,480.00	21,397.97	12,165.75	164.53	171.95	161.22	-9,568.83	-1,905.07	3,870.06	3,741.26	128.80	30.047				
18,300.00	8,480.00	21,497.82	12,171.14	166.15	173.56	161.25	-9,668.54	-1,904.20	3,875.21	3,745.22	129.99	29.811				
18,400.00	8,480.00	21,597.68	12,176.53	167.77	175.17	161.27	-9,768.24	-1,903.32	3,880.36	3,749.17	131.18	29.580				
18,500.00	8,480.00	21,697.53	12,181.92	169.40	176.78	161.30	-9,867.95	-1,902.45	3,885.50	3,753.13	132.38	29.352				
18,600.00	8,480.00	21,797.80	12,187.30	171.02	178.39	161.31	-9,940.10	-1,901.81	3,890.83	3,757.43	133.40	29.166				
18,700.00	8,480.00	21,800.00	12,187.91	172.64	178.44	161.32	-9,970.24	-1,901.55	3,897.46	3,763.32	134.14	29.055				
18,800.00	8,480.00	21,868.00	12,193.61	174.26	179.54	161.35	-10,038.00	-1,900.95	3,905.46	3,770.35	135.10	28.907				
18,900.00	8,480.00	21,942.10	12,200.69	175.89	180.73	161.38	-10,111.75	-1,900.30	3,914.47	3,778.39	136.08	28.765				
19,000.00	8,480.00	22,041.64	12,210.21	177.51	182.34	161.42	-10,210.83	-1,899.43	3,923.58	3,786.34	137.24	28.589				
19,100.00	8,480.00	22,141.19	12,219.73	179.14	183.95	161.47	-10,309.91	-1,898.56	3,932.68	3,794.29	138.39	28.417				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - OH - Plan #6												Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1425-OWSG (Rev2) MWD, 12083-OWSG (Rev2) MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,200.00	8,480.00	22,240.73	12,229.25	180.76	185.56	161.51	-10,409.00	-1,897.69	3,941.79	3,802.24	139.55	28.247	
19,300.00	8,480.00	22,340.27	12,238.76	182.39	187.17	161.55	-10,508.08	-1,896.82	3,950.90	3,810.19	140.70	28.080	
19,400.00	8,480.00	22,439.81	12,248.28	184.02	188.78	161.59	-10,607.16	-1,895.95	3,960.01	3,818.15	141.85	27.916	
19,500.00	8,480.00	22,539.35	12,257.80	185.64	190.40	161.64	-10,706.24	-1,895.08	3,969.12	3,826.11	143.01	27.755	
19,600.00	8,480.00	22,638.89	12,267.32	187.27	192.01	161.68	-10,805.32	-1,894.21	3,978.23	3,834.07	144.16	27.596	
19,700.00	8,480.00	22,738.44	12,276.83	188.90	193.62	161.72	-10,904.41	-1,893.33	3,987.35	3,842.04	145.31	27.440	
19,800.00	8,480.00	22,837.98	12,286.35	190.53	195.23	161.76	-11,003.49	-1,892.46	3,996.47	3,850.01	146.46	27.286	
19,899.80	8,480.00	22,937.32	12,295.85	192.15	196.84	161.80	-11,102.37	-1,891.59	4,005.57	3,857.96	147.61	27.136 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 103H
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 103H	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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
0.00	0.00	16.00	16.00	0.00	0.00	-72.07	580.03	-1,792.44	1,883.98							
100.00	100.00	100.00	99.98	0.13	0.16	-72.05	580.89	-1,793.27	1,885.19	1,885.00	0.19	9,930.981				
200.00	200.00	202.81	202.77	0.48	0.50	-72.03	582.04	-1,794.66	1,886.83	1,886.14	0.69	2,722.660				
300.00	300.00	300.00	299.95	0.84	0.84	-72.03	582.58	-1,795.98	1,888.29	1,887.10	1.19	1,586.380				
400.00	400.00	384.08	384.01	1.20	1.14	-72.05	582.36	-1,797.63	1,890.08	1,888.43	1.66	1,141.414				
500.00	500.00	474.51	474.41	1.56	1.47	-72.07	582.34	-1,799.94	1,892.51	1,890.38	2.14	884.967				
600.00	600.00	554.07	553.92	1.92	1.75	-72.11	582.01	-1,802.97	1,895.97	1,893.38	2.60	730.536				
700.00	700.00	649.29	649.05	2.28	2.10	-72.16	581.69	-1,806.96	1,899.86	1,896.77	3.09	614.770				
800.00	800.00	784.06	783.72	2.63	2.59	-72.22	581.14	-1,811.85	1,903.25	1,899.56	3.68	516.664				
900.00	900.00	886.36	885.98	2.99	2.96	-72.27	580.30	-1,814.65	1,905.61	1,901.42	4.20	454.104				
1,000.00	1,000.00	996.83	996.41	3.35	3.35	-72.33	578.97	-1,817.15	1,907.39	1,902.66	4.73	403.336				
1,100.00	1,100.00	1,093.99	1,093.54	3.71	3.70	-72.39	577.53	-1,819.19	1,908.94	1,903.72	5.23	365.140				
1,200.00	1,200.00	1,196.03	1,195.54	4.07	4.07	-72.46	575.89	-1,821.69	1,910.80	1,905.06	5.74	332.887				
1,300.00	1,300.00	1,301.73	1,301.22	4.43	4.45	-72.50	574.99	-1,823.59	1,912.26	1,906.00	6.26	305.397				
1,400.00	1,400.00	1,407.33	1,406.80	4.79	4.65	-72.53	574.48	-1,825.09	1,913.47	1,906.81	6.66	287.336				
1,500.00	1,500.00	1,513.44	1,512.91	5.14	4.71	-72.54	574.49	-1,826.05	1,914.34	1,907.38	6.96	275.068				
1,600.00	1,600.00	1,617.17	1,616.64	5.50	4.76	-72.55	574.36	-1,826.75	1,914.95	1,907.68	7.27	263.579				
1,700.00	1,700.00	1,722.01	1,721.48	5.86	4.85	-72.55	574.26	-1,827.20	1,915.32	1,907.73	7.60	252.180				
1,800.00	1,800.00	1,822.36	1,821.82	6.22	4.96	-72.55	574.27	-1,827.45	1,915.56	1,907.62	7.94	241.215				
1,900.00	1,900.00	1,921.97	1,921.43	6.58	5.09	-72.55	574.39	-1,827.70	1,915.84	1,907.54	8.30	230.734				
2,000.00	2,000.00	2,023.67	2,023.14	6.94	5.24	-72.55	574.45	-1,827.89	1,916.03	1,907.35	8.68	220.714				
2,100.00	2,099.99	2,123.00	2,122.46	7.29	5.40	6.26	574.81	-1,827.99	1,914.94	1,905.88	9.06	211.327				
2,200.00	2,199.91	2,224.35	2,223.81	7.63	5.59	6.29	575.34	-1,828.02	1,911.22	1,901.77	9.45	202.274				
2,300.00	2,299.69	2,325.77	2,325.23	7.98	5.79	6.35	575.93	-1,827.92	1,904.80	1,894.96	9.85	193.458				
2,400.00	2,399.27	2,426.33	2,425.79	8.34	6.00	6.42	576.79	-1,827.68	1,895.73	1,885.48	10.25	184.923				
2,500.00	2,498.57	2,527.23	2,526.68	8.69	6.22	6.51	577.72	-1,827.34	1,884.02	1,873.35	10.67	176.648				
2,600.00	2,597.54	2,613.47	2,612.92	9.06	6.43	6.60	578.30	-1,827.27	1,869.90	1,858.83	11.07	168.962				
2,616.45	2,613.78	2,626.69	2,626.14	9.12	6.46	6.61	578.28	-1,827.37	1,867.42	1,856.29	11.13	167.740				
2,700.00	2,696.24	2,691.50	2,690.94	9.43	6.62	6.62	577.75	-1,828.36	1,855.08	1,843.62	11.46	161.847				
2,800.00	2,794.94	2,774.95	2,774.34	9.81	6.83	6.60	576.42	-1,830.80	1,841.37	1,829.50	11.87	155.140				
2,900.00	2,893.64	2,882.35	2,881.68	10.19	7.12	6.59	574.93	-1,834.03	1,827.83	1,815.51	12.32	148.375				
3,000.00	2,992.34	2,979.13	2,978.42	10.58	7.38	6.58	573.47	-1,836.43	1,813.74	1,800.98	12.76	142.159				
3,100.00	3,091.04	3,054.11	3,053.32	10.97	7.59	6.53	571.46	-1,839.25	1,800.56	1,787.39	13.17	136.735				
3,200.00	3,189.74	3,122.00	3,121.03	11.37	7.78	6.45	568.71	-1,843.32	1,789.02	1,775.45	13.57	131.854				
3,300.00	3,288.45	3,184.76	3,183.47	11.77	7.97	6.33	565.34	-1,848.58	1,779.37	1,765.41	13.96	127.456				
3,400.00	3,387.15	3,252.25	3,250.42	12.17	8.18	6.16	560.82	-1,855.90	1,771.70	1,757.34	14.36	123.363				
3,500.00	3,485.85	3,326.91	3,324.21	12.58	8.42	5.92	554.91	-1,865.53	1,765.68	1,750.90	14.78	119.477				
3,600.00	3,584.55	3,420.22	3,416.25	12.98	8.73	5.60	546.79	-1,878.61	1,760.59	1,745.36	15.24	115.530				
3,700.00	3,683.25	3,529.37	3,524.05	13.39	9.10	5.24	538.10	-1,893.30	1,755.22	1,739.48	15.74	111.507				
3,800.00	3,781.95	3,594.00	3,587.91	13.80	9.32	5.04	533.17	-1,901.94	1,750.22	1,734.08	16.14	108.425				
3,900.00	3,880.65	3,689.00	3,681.42	14.22	9.67	4.70	525.32	-1,916.72	1,746.93	1,730.31	16.62	105.116				
4,000.00	3,979.35	3,734.76	3,726.22	14.63	9.84	4.51	521.28	-1,925.09	1,745.75	1,728.78	16.97	102.870				
4,000.06	3,979.41	3,734.80	3,726.26	14.63	9.84	4.51	521.28	-1,925.09	1,745.75	1,728.78	16.97	102.868				
4,100.00	4,078.05	3,803.18	3,792.99	15.05	10.10	4.23	515.26	-1,938.76	1,746.74	1,729.37	17.38	100.522				
4,200.00	4,176.75	3,883.11	3,870.81	15.47	10.42	3.90	508.61	-1,955.73	1,749.19	1,731.38	17.82	98.182				
4,300.00	4,275.45	3,972.93	3,958.17	15.89	10.79	3.55	501.59	-1,975.42	1,752.53	1,734.24	18.29	95.838				
4,400.00	4,374.15	4,092.80	4,074.80	16.31	11.29	3.07	492.32	-2,001.50	1,755.85	1,737.00	18.85	93.124				
4,500.00	4,472.85	4,314.05	4,291.24	16.73	12.21	2.15	471.34	-2,042.06	1,756.03	1,736.32	19.72	89.070				
4,600.00	4,571.55	4,481.74	4,457.36	17.15	12.85	1.63	458.74	-2,060.90	1,748.76	1,728.37	20.39	85.786				
4,700.00	4,670.25	4,577.34	4,552.36	17.57	13.21	1.40	453.20	-2,070.10	1,740.79	1,719.91	20.88	83.369				
4,800.00	4,768.95	4,690.20	4,664.59	18.00	13.63	1.16	447.77	-2,080.77	1,732.92	1,711.50	21.41	80.929				
4,900.00	4,867.65	4,797.29	4,771.22	18.42	14.02	0.97	443.25	-2,089.54	1,723.90	1,701.97	21.93	78.604				

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 103H
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 103H	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									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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			
5,000.00	4,966.35	4,885.65	4,859.15	18.85	14.35	0.78	439.07	-2,097.11	1,715.19	1,692.78	22.41	76.528				
5,100.00	5,065.05	4,999.87	4,972.78	19.28	14.77	0.53	433.39	-2,107.18	1,706.73	1,683.78	22.95	74.368				
5,200.00	5,163.76	5,079.46	5,051.93	19.70	15.07	0.34	428.92	-2,114.33	1,698.27	1,674.85	23.42	72.526				
5,300.00	5,262.46	5,149.33	5,121.24	20.13	15.35	0.13	423.97	-2,121.62	1,691.06	1,667.20	23.86	70.874				
5,400.00	5,361.16	5,199.00	5,170.33	20.56	15.55	-0.05	419.73	-2,127.87	1,686.02	1,661.78	24.25	69.540				
5,500.00	5,459.86	5,294.00	5,263.79	20.99	15.95	-0.46	410.48	-2,142.12	1,682.91	1,658.15	24.75	67.983				
5,600.00	5,558.56	5,366.93	5,335.29	21.42	16.27	-0.79	402.85	-2,154.30	1,681.28	1,656.08	25.20	66.715				
5,700.00	5,657.26	5,463.58	5,429.96	21.85	16.69	-1.25	392.48	-2,170.77	1,680.22	1,654.50	25.72	65.330				
5,800.00	5,755.96	5,569.86	5,534.07	22.28	17.17	-1.76	380.92	-2,188.75	1,679.14	1,652.87	26.27	63.921				
5,900.00	5,854.66	5,663.52	5,625.83	22.71	17.58	-2.21	370.64	-2,204.50	1,678.04	1,651.26	26.78	62.662				
6,000.00	5,953.36	5,762.00	5,722.25	23.14	18.03	-2.69	359.72	-2,221.28	1,677.28	1,649.97	27.31	61.424				
6,100.00	6,052.06	5,891.17	5,848.98	23.57	18.60	-3.29	345.92	-2,242.05	1,675.73	1,647.81	27.93	60.000				
6,200.00	6,150.76	6,013.45	5,969.36	24.01	19.13	-3.83	333.61	-2,259.67	1,672.69	1,644.17	28.52	58.642				
6,300.00	6,249.46	6,123.70	6,077.98	24.44	19.61	-4.34	321.85	-2,274.44	1,668.69	1,639.61	29.08	57.378				
6,400.00	6,348.16	6,232.94	6,185.64	24.87	20.08	-4.85	309.80	-2,288.52	1,664.26	1,634.62	29.64	56.152				
6,500.00	6,446.86	6,331.00	6,282.31	25.30	20.50	-5.32	298.97	-2,300.86	1,659.65	1,629.48	30.16	55.021				
6,600.00	6,545.56	6,428.32	6,378.23	25.74	20.91	-5.79	288.11	-2,313.23	1,655.25	1,624.56	30.69	53.939				
6,700.00	6,644.26	6,537.98	6,486.50	26.17	21.38	-6.27	277.06	-2,326.62	1,650.56	1,619.31	31.24	52.830				
6,804.31	6,747.22	6,633.24	6,580.76	26.62	21.78	-6.63	269.47	-2,338.14	1,645.79	1,614.02	31.77	51.809				
6,900.00	6,841.85	6,721.93	6,668.55	27.03	22.14	-6.92	263.45	-2,349.25	1,643.16	1,610.91	32.25	50.955				
6,966.45	6,907.76	6,794.96	6,740.85	27.30	22.45	-7.15	258.68	-2,358.33	1,642.71	1,610.10	32.61	50.375	CC			
7,000.00	6,941.09	6,835.49	6,780.99	27.44	22.61	-7.27	256.03	-2,363.21	1,642.80	1,609.99	32.80	50.082	ES			
7,100.00	7,040.61	6,956.00	6,900.50	27.83	23.10	-7.63	248.28	-2,376.61	1,643.90	1,610.53	33.37	49.265				
7,200.00	7,140.36	7,074.19	7,017.91	28.20	23.57	-7.94	241.28	-2,388.36	1,646.48	1,612.56	33.92	48.540				
7,300.00	7,240.26	7,164.49	7,107.68	28.55	23.92	-8.14	236.73	-2,396.97	1,651.33	1,616.93	34.40	48.001				
7,400.00	7,340.24	7,260.74	7,203.36	28.88	24.30	-8.33	232.69	-2,406.60	1,659.29	1,624.40	34.89	47.553				
7,420.77	7,361.00	7,282.74	7,225.23	28.95	24.39	-87.17	231.75	-2,408.81	1,661.28	1,626.28	35.00	47.467				
7,500.00	7,440.24	7,379.42	7,321.37	29.20	24.76	-87.33	227.45	-2,417.96	1,668.61	1,633.19	35.43	47.099				
7,600.00	7,540.24	7,501.15	7,442.62	29.52	25.22	-87.50	223.03	-2,427.83	1,676.52	1,640.56	35.96	46.620				
7,700.00	7,640.24	7,611.71	7,552.86	29.84	25.62	-87.59	220.53	-2,435.81	1,683.64	1,647.18	36.47	46.168				
7,800.00	7,740.24	7,734.24	7,675.15	30.16	26.06	-87.65	219.10	-2,443.43	1,689.83	1,652.84	36.99	45.684				
7,900.00	7,840.24	7,867.38	7,808.15	30.48	26.52	-87.71	217.70	-2,449.33	1,694.20	1,656.68	37.52	45.156				
7,966.81	7,907.04	7,948.67	7,889.39	30.69	26.79	-87.75	216.67	-2,451.85	1,696.24	1,658.38	37.86	44.806				
8,000.00	7,940.22	7,991.38	7,932.09	30.79	26.93	92.77	216.41	-2,452.86	1,697.06	1,659.03	38.02	44.631				
8,050.00	7,989.94	8,049.84	7,990.54	30.94	27.12	92.86	216.58	-2,453.85	1,698.16	1,659.89	38.26	44.382				
8,100.00	8,039.04	8,100.17	8,040.86	31.08	27.28	93.07	217.06	-2,454.57	1,699.41	1,660.92	38.49	44.153				
8,150.00	8,087.13	8,149.22	8,089.91	31.21	27.43	93.39	217.74	-2,455.24	1,700.94	1,662.23	38.71	43.937				
8,200.00	8,133.85	8,196.78	8,137.46	31.33	27.58	93.78	218.35	-2,455.85	1,702.87	1,663.93	38.93	43.737				
8,250.00	8,178.84	8,244.27	8,184.94	31.45	27.72	94.25	218.89	-2,456.43	1,705.28	1,666.12	39.16	43.552				
8,300.00	8,221.77	8,290.91	8,231.57	31.55	27.87	94.76	219.31	-2,456.90	1,708.26	1,668.88	39.38	43.381				
8,350.00	8,262.30	8,335.74	8,276.40	31.65	28.01	95.28	219.63	-2,457.25	1,711.94	1,672.34	39.60	43.228				
8,400.00	8,300.13	8,378.23	8,318.89	31.74	28.14	95.76	219.87	-2,457.47	1,716.48	1,676.65	39.83	43.095				
8,450.00	8,334.96	8,417.17	8,357.82	31.82	28.26	96.14	220.04	-2,457.58	1,722.03	1,681.97	40.06	42.986				
8,500.00	8,366.54	8,451.96	8,392.62	31.89	28.36	96.36	220.17	-2,457.60	1,728.77	1,688.47	40.29	42.903				
8,550.00	8,394.62	8,482.90	8,423.55	31.96	28.45	96.40	220.28	-2,457.56	1,736.83	1,696.29	40.54	42.846				
8,600.00	8,418.99	8,509.04	8,449.70	32.03	28.53	96.20	220.37	-2,457.49	1,746.33	1,705.54	40.78	42.818	SF			
8,650.00	8,439.47	8,530.10	8,470.76	32.11	28.59	95.72	220.44	-2,457.41	1,757.36	1,716.32	41.04	42.821				
8,700.00	8,455.89	8,546.96	8,487.62	32.19	28.64	94.96	220.50	-2,457.35	1,769.95	1,728.65	41.30	42.855				
8,750.00	8,468.13	8,559.48	8,500.14	32.29	28.68	93.89	220.54	-2,457.30	1,784.10	1,742.53	41.57	42.921				
8,800.00	8,476.11	8,567.57	8,508.23	32.40	28.70	92.52	220.57	-2,457.26	1,799.75	1,757.91	41.84	43.018				
8,850.00	8,479.75	8,571.17	8,511.83	32.54	28.71	90.82	220.58	-2,457.24	1,816.79	1,774.68	42.11	43.148				
8,866.81	8,480.00	8,571.37	8,512.03	32.59	28.71	90.19	220.58	-2,457.24	1,822.81	1,780.61	42.20	43.199				

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 103H
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 103H	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				
8,900.00	8,480.00	8,571.25	8,511.91	32.70	28.71	90.18	220.58	-2,457.24	1,835.10	1,792.72	42.38	43.305				
9,000.00	8,480.00	8,570.90	8,511.56	33.09	28.71	90.17	220.58	-2,457.25	1,875.18	1,832.23	42.95	43.663				
9,100.00	8,480.00	8,570.55	8,511.20	33.57	28.71	90.16	220.58	-2,457.25	1,919.64	1,876.10	43.54	44.084				
9,200.00	8,480.00	8,570.19	8,510.85	34.14	28.71	90.15	220.58	-2,457.25	1,968.18	1,924.03	44.15	44.574				
9,300.00	8,480.00	8,569.84	8,510.50	34.79	28.71	90.13	220.58	-2,457.25	2,020.51	1,975.75	44.77	45.136				
9,400.00	8,480.00	8,569.49	8,510.14	35.50	28.70	90.12	220.57	-2,457.25	2,076.34	2,030.97	45.37	45.768				
9,500.00	8,480.00	8,569.13	8,509.79	36.28	28.70	90.11	220.57	-2,457.25	2,135.39	2,089.44	45.95	46.470				
9,600.00	8,480.00	8,568.78	8,509.44	37.11	28.70	90.10	220.57	-2,457.26	2,197.41	2,150.90	46.52	47.240				
9,700.00	8,480.00	8,568.43	8,509.08	38.01	28.70	90.09	220.57	-2,457.26	2,262.16	2,215.10	47.06	48.074				
9,800.00	8,480.00	8,568.07	8,508.73	38.95	28.70	90.08	220.57	-2,457.26	2,329.39	2,281.82	47.57	48.968				
9,900.00	8,480.00	8,567.72	8,508.38	39.94	28.70	90.06	220.57	-2,457.26	2,398.91	2,350.86	48.05	49.920				
10,000.00	8,480.00	8,567.37	8,508.03	40.97	28.70	90.05	220.57	-2,457.26	2,470.53	2,422.02	48.51	50.927				
10,100.00	8,480.00	8,567.02	8,507.67	42.04	28.70	90.04	220.57	-2,457.26	2,544.06	2,495.12	48.94	51.986				
10,200.00	8,480.00	8,566.66	8,507.32	43.14	28.70	90.03	220.56	-2,457.26	2,619.34	2,570.00	49.34	53.090				
10,300.00	8,480.00	8,566.31	8,506.97	44.29	28.70	90.02	220.56	-2,457.27	2,696.23	2,646.52	49.71	54.236				
10,400.00	8,480.00	8,565.96	8,506.62	45.46	28.69	90.00	220.56	-2,457.27	2,774.59	2,724.53	50.06	55.421				
10,500.00	8,480.00	8,565.61	8,506.26	46.66	28.69	89.99	220.56	-2,457.27	2,854.31	2,803.92	50.39	56.642				
10,600.00	8,480.00	8,565.25	8,505.91	47.89	28.69	89.98	220.56	-2,457.27	2,935.27	2,884.57	50.70	57.895				
10,700.00	8,480.00	8,564.90	8,505.56	49.14	28.69	89.97	220.56	-2,457.27	3,017.37	2,966.38	50.99	59.179				
10,800.00	8,480.00	8,564.55	8,505.21	50.42	28.69	89.96	220.56	-2,457.27	3,100.52	3,049.27	51.26	60.491				
10,900.00	8,480.00	8,564.20	8,504.85	51.72	28.69	89.94	220.56	-2,457.28	3,184.64	3,133.14	51.51	61.828				
11,000.00	8,480.00	8,563.84	8,504.50	53.03	28.69	89.93	220.56	-2,457.28	3,269.66	3,217.92	51.74	63.191				
11,100.00	8,480.00	8,563.49	8,504.15	54.37	28.69	89.92	220.55	-2,457.28	3,355.50	3,303.54	51.96	64.573				
11,200.00	8,480.00	8,563.14	8,503.80	55.72	28.69	89.91	220.55	-2,457.28	3,442.11	3,389.94	52.17	65.979				
11,300.00	8,480.00	8,562.79	8,503.45	57.09	28.69	89.90	220.55	-2,457.28	3,529.42	3,477.06	52.36	67.402				
11,400.00	8,480.00	8,562.44	8,503.09	58.47	28.68	89.89	220.55	-2,457.28	3,617.39	3,564.85	52.55	68.843				
11,500.00	8,480.00	8,562.08	8,502.74	59.86	28.68	89.87	220.55	-2,457.28	3,705.98	3,653.26	52.72	70.299				
11,600.00	8,480.00	8,561.73	8,502.39	61.27	28.68	89.86	220.55	-2,457.29	3,795.12	3,742.25	52.88	71.769				
11,700.00	8,480.00	8,561.38	8,502.04	62.69	28.68	89.85	220.55	-2,457.29	3,884.80	3,831.77	53.03	73.253				
11,800.00	8,480.00	8,561.03	8,501.69	64.13	28.68	89.84	220.55	-2,457.29	3,974.97	3,921.79	53.18	74.748				
11,900.00	8,480.00	8,560.68	8,501.33	65.57	28.68	89.83	220.54	-2,457.29	4,065.60	4,012.29	53.32	76.255				
12,000.00	8,480.00	8,560.33	8,500.98	67.02	28.68	89.81	220.54	-2,457.29	4,156.66	4,103.21	53.45	77.772				
12,100.00	8,480.00	8,559.97	8,500.63	68.48	28.68	89.80	220.54	-2,457.29	4,248.12	4,194.55	53.57	79.299				
12,200.00	8,480.00	8,559.62	8,500.28	69.95	28.68	89.79	220.54	-2,457.30	4,339.96	4,286.27	53.69	80.834				
12,300.00	8,480.00	8,559.27	8,499.93	71.42	28.68	89.78	220.54	-2,457.30	4,432.15	4,378.35	53.80	82.377				
12,400.00	8,480.00	8,558.92	8,499.58	72.91	28.67	89.77	220.54	-2,457.30	4,524.68	4,470.76	53.91	83.928				
12,500.00	8,480.00	8,558.57	8,499.23	74.40	28.67	89.75	220.54	-2,457.30	4,617.51	4,563.49	54.02	85.485				
12,600.00	8,480.00	8,558.22	8,498.87	75.90	28.67	89.74	220.54	-2,457.30	4,710.64	4,656.52	54.12	87.049				
12,700.00	8,480.00	8,557.87	8,498.52	77.40	28.67	89.73	220.53	-2,457.30	4,804.04	4,749.83	54.21	88.618				
12,800.00	8,480.00	8,557.52	8,498.17	78.91	28.67	89.72	220.53	-2,457.30	4,897.71	4,843.40	54.30	90.193				
12,900.00	8,480.00	8,557.16	8,497.82	80.43	28.67	89.71	220.53	-2,457.31	4,991.62	4,937.23	54.39	91.772				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	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	16.00	16.00	0.00	0.00	-72.07	580.03	-1,792.44	1,883.98							
100.00	100.00	100.00	99.98	0.13	0.16	-72.05	580.89	-1,793.27	1,885.19	1,885.00	0.19	9,930.981				
200.00	200.00	202.81	202.77	0.48	0.50	-72.03	582.04	-1,794.66	1,886.83	1,886.14	0.69	2,722.660				
300.00	300.00	300.00	299.95	0.84	0.84	-72.03	582.58	-1,795.98	1,888.29	1,887.10	1.19	1,586.380				
400.00	400.00	384.08	384.01	1.20	1.14	-72.05	582.36	-1,797.63	1,890.08	1,888.43	1.66	1,141.414				
500.00	500.00	474.51	474.41	1.56	1.47	-72.07	582.34	-1,799.94	1,892.51	1,890.38	2.14	884.967				
600.00	600.00	554.07	553.92	1.92	1.75	-72.11	582.01	-1,802.97	1,895.97	1,893.38	2.60	730.536				
700.00	700.00	649.29	649.05	2.28	2.10	-72.16	581.69	-1,806.96	1,899.86	1,896.77	3.09	614.770				
800.00	800.00	784.06	783.72	2.63	2.59	-72.22	581.14	-1,811.85	1,903.25	1,899.56	3.68	516.664				
900.00	900.00	886.36	885.98	2.99	2.96	-72.27	580.30	-1,814.65	1,905.61	1,901.42	4.20	454.104				
1,000.00	1,000.00	996.83	996.41	3.35	3.35	-72.33	578.97	-1,817.15	1,907.39	1,902.66	4.73	403.336				
1,100.00	1,100.00	1,093.99	1,093.54	3.71	3.70	-72.39	577.53	-1,819.19	1,908.94	1,903.72	5.23	365.140				
1,200.00	1,200.00	1,196.03	1,195.54	4.07	4.07	-72.46	575.89	-1,821.69	1,910.80	1,905.06	5.74	332.887				
1,300.00	1,300.00	1,301.73	1,301.22	4.43	4.45	-72.50	574.99	-1,823.59	1,912.26	1,906.00	6.26	305.397				
1,400.00	1,400.00	1,407.33	1,406.80	4.79	4.65	-72.53	574.48	-1,825.09	1,913.47	1,906.81	6.66	287.336				
1,500.00	1,500.00	1,513.44	1,512.91	5.14	4.71	-72.54	574.49	-1,826.05	1,914.34	1,907.38	6.96	275.068				
1,600.00	1,600.00	1,617.17	1,616.64	5.50	4.76	-72.55	574.36	-1,826.75	1,914.95	1,907.68	7.27	263.579				
1,700.00	1,700.00	1,722.01	1,721.48	5.86	4.85	-72.55	574.26	-1,827.20	1,915.32	1,907.73	7.60	252.180				
1,800.00	1,800.00	1,822.36	1,821.82	6.22	4.96	-72.55	574.27	-1,827.45	1,915.56	1,907.62	7.94	241.215				
1,900.00	1,900.00	1,921.97	1,921.43	6.58	5.09	-72.55	574.39	-1,827.70	1,915.84	1,907.54	8.30	230.734				
2,000.00	2,000.00	2,023.67	2,023.14	6.94	5.24	-72.55	574.45	-1,827.89	1,916.03	1,907.35	8.68	220.714				
2,100.00	2,099.99	2,123.00	2,122.46	7.29	5.40	6.26	574.81	-1,827.99	1,914.94	1,905.88	9.06	211.327				
2,200.00	2,199.91	2,224.35	2,223.81	7.63	5.59	6.29	575.34	-1,828.02	1,911.22	1,901.77	9.45	202.274				
2,300.00	2,299.69	2,325.77	2,325.23	7.98	5.79	6.35	575.93	-1,827.92	1,904.80	1,894.96	9.85	193.458				
2,400.00	2,399.27	2,426.33	2,425.79	8.34	6.00	6.42	576.79	-1,827.68	1,895.73	1,885.48	10.25	184.923				
2,500.00	2,498.57	2,527.23	2,526.68	8.69	6.22	6.51	577.72	-1,827.34	1,884.02	1,873.35	10.67	176.648				
2,600.00	2,597.54	2,613.47	2,612.92	9.06	6.43	6.60	578.30	-1,827.27	1,869.90	1,858.83	11.07	168.962				
2,616.45	2,613.78	2,626.69	2,626.14	9.12	6.46	6.61	578.28	-1,827.37	1,867.42	1,856.29	11.13	167.740				
2,700.00	2,696.24	2,691.50	2,690.94	9.43	6.62	6.62	577.75	-1,828.36	1,855.08	1,843.62	11.46	161.847				
2,800.00	2,794.94	2,774.55	2,773.94	9.81	6.83	6.60	576.40	-1,830.80	1,841.37	1,829.50	11.87	155.153				
2,900.00	2,893.64	2,859.56	2,858.88	10.19	7.05	6.57	574.73	-1,833.82	1,828.18	1,815.90	12.28	148.832				
3,000.00	2,992.34	2,935.01	2,934.20	10.58	7.26	6.51	572.53	-1,837.69	1,816.18	1,803.50	12.69	143.141				
3,100.00	3,091.04	3,000.00	2,998.99	10.97	7.44	6.43	570.02	-1,842.04	1,805.53	1,792.45	13.08	138.072				
3,200.00	3,189.74	3,086.31	3,084.90	11.37	7.70	6.28	565.81	-1,849.29	1,796.11	1,782.61	13.51	132.972				
3,300.00	3,288.45	3,162.05	3,160.10	11.77	7.93	6.11	561.30	-1,857.02	1,788.07	1,774.15	13.92	128.434				
3,400.00	3,387.15	3,237.76	3,235.09	12.17	8.16	5.91	556.02	-1,866.02	1,781.38	1,767.04	14.34	124.236				
3,500.00	3,485.85	3,326.39	3,322.65	12.58	8.45	5.63	549.07	-1,877.85	1,775.86	1,761.08	14.79	120.102				
3,600.00	3,584.55	3,425.76	3,420.79	12.98	8.79	5.31	541.18	-1,891.25	1,770.53	1,755.27	15.26	116.008				
3,700.00	3,683.25	3,525.12	3,518.93	13.39	9.13	4.98	533.30	-1,904.65	1,765.26	1,749.52	15.74	112.130				
3,800.00	3,781.95	3,624.48	3,617.07	13.80	9.48	4.66	525.42	-1,918.06	1,760.04	1,743.82	16.23	108.456				
3,900.00	3,880.65	3,723.85	3,715.21	14.22	9.84	4.34	517.53	-1,931.46	1,754.88	1,738.17	16.72	104.973				
4,000.00	3,979.35	3,823.21	3,813.35	14.63	10.20	4.01	509.65	-1,944.87	1,749.78	1,732.57	17.21	101.672				
4,100.00	4,078.05	3,922.57	3,911.48	15.05	10.57	3.68	501.77	-1,958.27	1,744.74	1,727.03	17.71	98.539				
4,200.00	4,176.75	4,021.94	4,009.62	15.47	10.94	3.35	493.88	-1,971.68	1,739.75	1,721.55	18.20	95.565				
4,300.00	4,275.45	4,121.30	4,107.76	15.89	11.32	3.02	486.00	-1,985.08	1,734.83	1,716.12	18.71	92.740				
4,400.00	4,374.15	4,220.66	4,205.90	16.31	11.70	2.68	478.12	-1,998.48	1,729.96	1,710.75	19.21	90.054				
4,500.00	4,472.85	4,320.02	4,304.04	16.73	12.09	2.34	470.23	-2,011.89	1,725.15	1,705.43	19.72	87.499				
4,600.00	4,571.55	4,419.39	4,402.18	17.15	12.48	2.01	462.35	-2,025.29	1,720.40	1,700.18	20.22	85.067				
4,700.00	4,670.25	4,518.75	4,500.32	17.57	12.87	1.67	454.47	-2,038.70	1,715.72	1,694.98	20.73	82.750				
4,800.00	4,768.95	4,618.11	4,598.46	18.00	13.27	1.32	446.58	-2,052.10	1,711.09	1,689.85	21.24	80.541				
4,900.00	4,867.65	4,717.48	4,696.59	18.42	13.66	0.98	438.70	-2,065.50	1,706.53	1,684.77	21.76	78.434				
5,000.00	4,966.35	4,816.84	4,794.73	18.85	14.06	0.63	430.82	-2,078.91	1,702.03	1,679.76	22.27	76.421				

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 103H
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 103H	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				
5,100.00	5,065.05	4,916.20	4,892.87	19.28	14.47	0.29	422.93	-2,092.31	1,697.59	1,674.80	22.79	74.499				
5,200.00	5,163.76	5,015.57	4,991.01	19.70	14.87	-0.06	415.05	-2,105.72	1,693.21	1,669.91	23.30	72.661				
5,300.00	5,262.46	5,114.93	5,089.15	20.13	15.28	-0.42	407.17	-2,119.12	1,688.90	1,665.08	23.82	70.902				
5,400.00	5,361.16	5,214.29	5,187.29	20.56	15.69	-0.77	399.28	-2,132.52	1,684.66	1,660.32	24.34	69.219				
5,500.00	5,459.86	5,313.66	5,285.43	20.99	16.09	-1.12	391.40	-2,145.93	1,680.48	1,655.62	24.86	67.606				
5,600.00	5,558.56	5,413.02	5,383.57	21.42	16.51	-1.48	383.52	-2,159.33	1,676.36	1,650.98	25.38	66.059				
5,700.00	5,657.26	5,512.38	5,481.70	21.85	16.92	-1.84	375.63	-2,172.74	1,672.31	1,646.41	25.90	64.576				
5,800.00	5,755.96	5,611.74	5,579.84	22.28	17.33	-2.20	367.75	-2,186.14	1,668.33	1,641.91	26.42	63.152				
5,900.00	5,854.66	5,711.11	5,677.98	22.71	17.75	-2.56	359.87	-2,199.54	1,664.41	1,637.47	26.94	61.784				
6,000.00	5,953.36	5,810.47	5,776.12	23.14	18.16	-2.92	351.98	-2,212.95	1,660.56	1,633.10	27.46	60.470				
6,100.00	6,052.06	5,909.83	5,874.26	23.57	18.58	-3.29	344.10	-2,226.35	1,656.77	1,628.79	27.98	59.206				
6,200.00	6,150.76	6,009.20	5,972.40	24.01	19.00	-3.65	336.22	-2,239.76	1,653.06	1,624.55	28.51	57.990				
6,300.00	6,249.46	6,108.56	6,070.54	24.44	19.41	-4.02	328.33	-2,253.16	1,649.41	1,620.39	29.03	56.820				
6,400.00	6,348.16	6,207.92	6,168.67	24.87	19.83	-4.39	320.45	-2,266.56	1,645.84	1,616.29	29.55	55.692				
6,500.00	6,446.86	6,307.29	6,266.81	25.30	20.25	-4.76	312.57	-2,279.97	1,642.33	1,612.26	30.08	54.606				
6,600.00	6,545.56	6,406.65	6,364.95	25.74	20.67	-5.14	304.68	-2,293.37	1,638.89	1,608.29	30.60	53.558				
6,700.00	6,644.26	6,506.01	6,463.09	26.17	21.09	-5.51	296.80	-2,306.78	1,635.53	1,604.40	31.12	52.548				
6,804.31	6,747.22	6,609.66	6,565.46	26.62	21.53	-5.90	288.58	-2,320.76	1,632.09	1,600.42	31.67	51.532				
6,900.00	6,841.85	6,704.78	6,659.41	27.03	21.94	-6.26	281.03	-2,333.59	1,630.20	1,598.03	32.17	50.670				
6,926.22	6,867.83	6,730.85	6,685.16	27.14	22.05	-6.35	278.96	-2,337.11	1,630.11	1,597.80	32.31	50.453 CC, ES				
7,000.00	6,941.09	6,804.23	6,757.64	27.44	22.36	-6.62	273.14	-2,347.01	1,630.83	1,598.14	32.69	49.881				
7,100.00	7,040.61	6,903.67	6,855.85	27.83	22.79	-6.98	265.25	-2,360.42	1,634.13	1,600.92	33.21	49.202				
7,200.00	7,140.36	7,003.01	6,953.97	28.20	23.21	-7.33	257.37	-2,373.82	1,640.09	1,606.36	33.73	48.627				
7,300.00	7,240.26	7,102.20	7,051.93	28.55	23.63	-7.67	249.50	-2,387.20	1,648.68	1,614.44	34.24	48.152				
7,400.00	7,340.24	7,201.16	7,149.68	28.88	24.06	-8.00	241.65	-2,400.55	1,659.92	1,625.17	34.75	47.772				
7,420.77	7,361.00	7,221.68	7,169.94	28.95	24.15	-86.87	240.02	-2,403.32	1,662.58	1,627.73	34.85	47.705				
7,500.00	7,440.24	7,314.64	7,261.79	29.20	24.54	-87.14	232.75	-2,415.68	1,672.85	1,637.56	35.29	47.405				
7,600.00	7,540.24	7,471.82	7,417.71	29.52	25.18	-87.51	222.73	-2,432.72	1,683.41	1,647.48	35.93	46.851				
7,700.00	7,640.24	7,630.38	7,575.69	29.84	25.77	-87.76	215.93	-2,444.29	1,690.53	1,654.00	36.53	46.273				
7,800.00	7,740.24	7,789.79	7,734.94	30.16	26.32	-87.89	212.44	-2,450.21	1,694.16	1,657.07	37.09	45.672				
7,900.00	7,840.24	7,921.59	7,866.74	30.48	26.72	-87.90	211.96	-2,451.03	1,694.66	1,657.08	37.58	45.090				
7,966.81	7,907.04	7,988.40	7,933.54	30.69	26.92	-87.90	211.96	-2,451.03	1,694.66	1,656.77	37.89	44.722				
8,000.00	7,940.22	8,021.58	7,966.72	30.79	27.01	92.69	211.96	-2,451.03	1,694.71	1,656.66	38.04	44.546				
8,050.00	7,989.94	8,071.30	8,016.44	30.94	27.16	92.84	211.96	-2,451.03	1,694.95	1,656.69	38.27	44.292				
8,100.00	8,039.04	8,120.40	8,065.54	31.08	27.30	93.10	211.96	-2,451.03	1,695.45	1,656.96	38.49	44.050				
8,150.00	8,087.13	8,168.49	8,113.63	31.21	27.45	93.46	211.96	-2,451.03	1,696.26	1,657.55	38.71	43.822				
8,200.00	8,133.85	8,215.21	8,160.35	31.33	27.59	93.90	211.96	-2,451.03	1,697.48	1,658.56	38.92	43.610				
8,250.00	8,178.84	8,260.20	8,205.34	31.45	27.72	94.38	211.96	-2,451.03	1,699.23	1,660.09	39.14	43.414				
8,300.00	8,221.77	8,303.13	8,248.27	31.55	27.85	94.88	211.96	-2,451.03	1,701.64	1,662.29	39.36	43.237				
8,350.00	8,262.30	8,343.66	8,288.80	31.65	27.97	95.35	211.96	-2,451.03	1,704.87	1,665.29	39.57	43.081				
8,400.00	8,300.13	8,381.49	8,326.63	31.74	28.08	95.76	211.96	-2,451.03	1,709.05	1,669.25	39.79	42.946				
8,450.00	8,334.96	8,416.32	8,361.46	31.82	28.19	96.07	211.96	-2,451.03	1,714.34	1,674.32	40.02	42.836				
8,500.00	8,366.54	8,447.90	8,393.04	31.89	28.28	96.23	211.96	-2,451.03	1,720.89	1,680.63	40.25	42.751				
8,550.00	8,394.62	8,475.98	8,421.12	31.96	28.37	96.21	211.96	-2,451.03	1,728.80	1,688.31	40.49	42.693				
8,600.00	8,418.99	8,500.35	8,445.49	32.03	28.44	95.97	211.96	-2,451.03	1,738.18	1,697.44	40.74	42.663				
8,650.00	8,439.47	8,520.83	8,465.97	32.11	28.50	95.49	211.96	-2,451.03	1,749.10	1,708.10	41.00	42.664				
8,700.00	8,455.89	8,537.25	8,482.39	32.19	28.55	94.72	211.96	-2,451.03	1,761.57	1,720.31	41.26	42.695				
8,750.00	8,468.13	8,549.49	8,494.63	32.29	28.59	93.67	211.96	-2,451.03	1,775.58	1,734.05	41.53	42.758				
8,800.00	8,476.11	8,557.47	8,502.61	32.40	28.61	92.30	211.96	-2,451.03	1,791.09	1,749.29	41.80	42.853				
8,850.00	8,479.75	8,561.11	8,506.25	32.54	28.62	90.63	211.96	-2,451.03	1,807.99	1,765.92	42.07	42.980				
8,866.81	8,480.00	8,561.36	8,506.50	32.59	28.62	90.00	211.96	-2,451.03	1,813.95	1,771.80	42.16	43.030				
8,900.00	8,480.00	8,561.36	8,506.50	32.70	28.62	90.00	211.96	-2,451.03	1,826.14	1,783.81	42.34	43.135				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #5		Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 2745-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,000.00	8,480.00	8,561.36	8,506.50	33.09	28.62	90.00	211.96	-2,451.03	1,865.95	1,823.05	42.91	43.488				
9,100.00	8,480.00	8,561.36	8,506.50	33.57	28.62	90.00	211.96	-2,451.03	1,910.18	1,866.67	43.51	43.906				
9,200.00	8,480.00	8,561.36	8,506.50	34.14	28.62	90.00	211.96	-2,451.03	1,958.51	1,914.39	44.12	44.393				
9,300.00	8,480.00	8,561.36	8,506.50	34.79	28.62	90.00	211.96	-2,451.03	2,010.66	1,965.93	44.73	44.952				
9,400.00	8,480.00	8,561.36	8,506.50	35.50	28.62	90.00	211.96	-2,451.03	2,066.33	2,021.00	45.33	45.583				
9,500.00	8,480.00	8,561.36	8,506.50	36.28	28.62	90.00	211.96	-2,451.03	2,125.26	2,079.34	45.92	46.284				
9,600.00	8,480.00	8,561.36	8,506.50	37.11	28.62	90.00	211.96	-2,451.03	2,187.17	2,140.68	46.48	47.054				
9,700.00	8,480.00	8,561.36	8,506.50	38.01	28.62	90.00	211.96	-2,451.03	2,251.82	2,204.80	47.02	47.888				
9,800.00	8,480.00	8,561.36	8,506.50	38.95	28.62	90.00	211.96	-2,451.03	2,318.98	2,271.44	47.54	48.784				
9,900.00	8,480.00	8,561.36	8,506.50	39.94	28.62	90.00	211.96	-2,451.03	2,388.44	2,340.42	48.02	49.737				
10,000.00	8,480.00	8,561.36	8,506.50	40.97	28.62	90.00	211.96	-2,451.03	2,460.01	2,411.53	48.48	50.746				
10,100.00	8,480.00	8,561.36	8,506.50	42.04	28.62	90.00	211.96	-2,451.03	2,533.50	2,484.60	48.90	51.806				
10,200.00	8,480.00	8,561.36	8,506.50	43.14	28.62	90.00	211.96	-2,451.03	2,608.76	2,559.45	49.30	52.912				
10,300.00	8,480.00	8,561.36	8,506.50	44.29	28.62	90.00	211.96	-2,451.03	2,685.63	2,635.95	49.68	54.061				
10,400.00	8,480.00	8,561.36	8,506.50	45.46	28.62	90.00	211.96	-2,451.03	2,763.98	2,713.95	50.03	55.249				
10,500.00	8,480.00	8,561.36	8,506.50	46.66	28.62	90.00	211.96	-2,451.03	2,843.69	2,793.33	50.36	56.472				
10,600.00	8,480.00	8,561.36	8,506.50	47.89	28.62	90.00	211.96	-2,451.03	2,924.65	2,873.98	50.66	57.729				
10,700.00	8,480.00	8,561.36	8,506.50	49.14	28.62	90.00	211.96	-2,451.03	3,006.75	2,955.80	50.95	59.015				
10,800.00	8,480.00	8,561.36	8,506.50	50.42	28.62	90.00	211.96	-2,451.03	3,089.91	3,038.69	51.22	60.330				
10,900.00	8,480.00	8,561.36	8,506.50	51.72	28.62	90.00	211.96	-2,451.03	3,174.04	3,122.57	51.47	61.671				
11,000.00	8,480.00	8,561.36	8,506.50	53.03	28.62	90.00	211.96	-2,451.03	3,259.06	3,207.36	51.70	63.036				
11,100.00	8,480.00	8,561.36	8,506.50	54.37	28.62	90.00	211.96	-2,451.03	3,344.92	3,293.00	51.92	64.423				
11,200.00	8,480.00	8,561.36	8,506.50	55.72	28.62	90.00	211.96	-2,451.03	3,431.54	3,379.41	52.13	65.831				
11,300.00	8,480.00	8,561.36	8,506.50	57.09	28.62	90.00	211.96	-2,451.03	3,518.87	3,466.55	52.32	67.258				
11,400.00	8,480.00	8,561.36	8,506.50	58.47	28.62	90.00	211.96	-2,451.03	3,606.86	3,554.36	52.50	68.702				
11,500.00	8,480.00	8,561.36	8,506.50	59.86	28.62	90.00	211.96	-2,451.03	3,695.46	3,642.79	52.67	70.162				
11,600.00	8,480.00	8,561.36	8,506.50	61.27	28.62	90.00	211.96	-2,451.03	3,784.63	3,731.80	52.83	71.635				
11,700.00	8,480.00	8,561.36	8,506.50	62.69	28.62	90.00	211.96	-2,451.03	3,874.32	3,821.34	52.98	73.122				
11,800.00	8,480.00	8,561.36	8,506.50	64.13	28.62	90.00	211.96	-2,451.03	3,964.51	3,911.39	53.13	74.621				
11,900.00	8,480.00	15,497.08	12,092.23	65.57	76.32	154.67	-3,423.81	-2,419.06	3,967.31	3,907.96	59.35	66.846				
12,000.00	8,480.00	15,597.07	12,093.55	67.02	77.74	154.68	-3,523.79	-2,418.18	3,968.55	3,908.03	60.52	65.575				
12,100.00	8,480.00	15,697.06	12,094.86	68.48	79.17	154.69	-3,623.76	-2,417.30	3,969.78	3,908.09	61.70	64.341				
12,200.00	8,480.00	15,797.05	12,096.17	69.95	80.61	154.69	-3,723.74	-2,416.42	3,971.02	3,908.13	62.89	63.145				
12,300.00	8,480.00	15,897.04	12,097.49	71.42	82.05	154.70	-3,823.72	-2,415.54	3,972.26	3,908.17	64.08	61.984				
12,400.00	8,480.00	15,997.03	12,098.80	72.91	83.51	154.71	-3,923.70	-2,414.66	3,973.49	3,908.20	65.29	60.862				
12,500.00	8,480.00	16,097.02	12,100.11	74.40	84.97	154.71	-4,023.68	-2,413.78	3,974.73	3,908.23	66.50	59.774				
12,600.00	8,480.00	16,197.01	12,101.43	75.90	86.43	154.72	-4,123.66	-2,412.90	3,975.96	3,908.25	67.71	58.718				
12,700.00	8,480.00	16,297.01	12,102.74	77.40	87.91	154.73	-4,223.64	-2,412.03	3,977.20	3,908.26	68.94	57.695				
12,800.00	8,480.00	16,397.00	12,104.05	78.91	89.39	154.73	-4,323.62	-2,411.15	3,978.44	3,908.27	70.16	56.702				
12,900.00	8,480.00	16,496.99	12,105.36	80.43	90.87	154.74	-4,423.60	-2,410.27	3,979.67	3,908.27	71.40	55.738				
13,000.00	8,480.00	16,596.98	12,106.68	81.95	92.36	154.75	-4,523.57	-2,409.39	3,980.91	3,908.27	72.64	54.804				
13,100.00	8,480.00	16,696.97	12,107.99	83.47	93.86	154.75	-4,623.55	-2,408.51	3,982.14	3,908.26	73.89	53.896				
13,200.00	8,480.00	16,796.96	12,109.30	85.00	95.36	154.76	-4,723.53	-2,407.63	3,983.38	3,908.24	75.14	53.016				
13,300.00	8,480.00	16,896.95	12,110.62	86.54	96.87	154.77	-4,823.51	-2,406.75	3,984.62	3,908.23	76.39	52.161				
13,400.00	8,480.00	16,996.95	12,111.93	88.08	98.38	154.77	-4,923.49	-2,405.87	3,985.85	3,908.21	77.65	51.334				
13,500.00	8,480.00	17,096.94	12,113.24	89.62	99.90	154.78	-5,023.47	-2,404.99	3,987.09	3,908.18	78.91	50.528				
13,600.00	8,480.00	17,196.93	12,114.56	91.17	101.42	154.79	-5,123.45	-2,404.11	3,988.33	3,908.15	80.17	49.746				
13,700.00	8,480.00	17,296.92	12,115.87	92.72	102.94	154.79	-5,223.43	-2,403.23	3,989.56	3,908.12	81.44	48.986				
13,800.00	8,480.00	17,396.91	12,117.18	94.27	104.47	154.80	-5,323.41	-2,402.35	3,990.80	3,908.08	82.72	48.246				
13,900.00	8,480.00	17,496.90	12,118.50	95.83	106.00	154.81	-5,423.38	-2,401.48	3,992.04	3,908.04	83.99	47.527				
14,000.00	8,480.00	17,596.89	12,119.81	97.39	107.54	154.81	-5,523.36	-2,400.60	3,993.27	3,908.00	85.27	46.829				
14,100.00	8,480.00	17,696.88	12,121.12	98.95	109.07	154.82	-5,623.34	-2,399.72	3,994.51	3,907.95	86.55	46.150				

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 103H
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 103H	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)	Ellipses (usft)	Minimum Separation (usft)		Separation Factor			
14,200.00	8,480.00	17,796.88	12,122.43	100.52	110.62	154.83	-5,723.32	-2,398.84	3,995.75	3,907.91	87.84	45.490				
14,300.00	8,480.00	17,896.87	12,123.75	102.09	112.16	154.83	-5,823.30	-2,397.96	3,996.98	3,907.86	89.12	44.847				
14,400.00	8,480.00	17,996.86	12,125.06	103.66	113.71	154.84	-5,923.28	-2,397.08	3,998.22	3,907.81	90.41	44.222				
14,500.00	8,480.00	18,096.85	12,126.37	105.23	115.26	154.84	-6,023.26	-2,396.20	3,999.46	3,907.75	91.71	43.612				
14,600.00	8,480.00	18,196.84	12,127.69	106.81	116.81	154.85	-6,123.24	-2,395.32	4,000.69	3,907.69	93.00	43.018				
14,700.00	8,480.00	18,296.83	12,129.00	108.39	118.37	154.86	-6,223.21	-2,394.44	4,001.93	3,907.63	94.30	42.440				
14,800.00	8,480.00	18,396.82	12,130.31	109.97	119.93	154.86	-6,323.19	-2,393.56	4,003.17	3,907.57	95.59	41.876				
14,900.00	8,480.00	18,496.81	12,131.63	111.55	121.49	154.87	-6,423.17	-2,392.68	4,004.40	3,907.51	96.90	41.327				
15,000.00	8,480.00	18,596.81	12,132.94	113.13	123.05	154.88	-6,523.15	-2,391.80	4,005.64	3,907.44	98.20	40.791				
15,100.00	8,480.00	18,696.80	12,134.25	114.72	124.62	154.88	-6,623.13	-2,390.93	4,006.88	3,907.38	99.50	40.270				
15,200.00	8,480.00	18,796.79	12,135.57	116.31	126.19	154.89	-6,723.11	-2,390.05	4,008.12	3,907.31	100.80	39.762				
15,300.00	8,480.00	18,896.78	12,136.88	117.90	127.76	154.90	-6,823.09	-2,389.17	4,009.35	3,907.24	102.11	39.266				
15,400.00	8,480.00	18,996.77	12,138.19	119.49	129.33	154.90	-6,923.07	-2,388.29	4,010.59	3,907.17	103.42	38.781				
15,500.00	8,480.00	19,096.76	12,139.50	121.08	130.90	154.91	-7,023.05	-2,387.41	4,011.83	3,907.10	104.73	38.307				
15,600.00	8,480.00	19,196.75	12,140.82	122.68	132.48	154.92	-7,123.02	-2,386.53	4,013.07	3,907.03	106.04	37.845				
15,700.00	8,480.00	19,296.75	12,142.13	124.27	134.06	154.92	-7,223.00	-2,385.65	4,014.30	3,906.95	107.35	37.395				
15,800.00	8,480.00	19,396.74	12,143.44	125.87	135.64	154.93	-7,322.98	-2,384.77	4,015.54	3,906.88	108.66	36.955				
15,900.00	8,480.00	19,496.73	12,144.76	127.47	137.22	154.94	-7,422.96	-2,383.89	4,016.78	3,906.80	109.97	36.525				
16,000.00	8,480.00	19,596.72	12,146.07	129.07	138.80	154.94	-7,522.94	-2,383.01	4,018.02	3,906.73	111.29	36.104				
16,100.00	8,480.00	19,696.71	12,147.38	130.67	140.39	154.95	-7,622.92	-2,382.13	4,019.25	3,906.65	112.60	35.693				
16,200.00	8,480.00	19,796.70	12,148.70	132.27	141.97	154.96	-7,722.90	-2,381.25	4,020.49	3,906.57	113.92	35.292				
16,300.00	8,480.00	19,896.69	12,150.01	133.88	143.56	154.96	-7,822.88	-2,380.38	4,021.73	3,906.49	115.24	34.899				
16,400.00	8,480.00	19,996.68	12,151.32	135.48	145.15	154.97	-7,922.85	-2,379.50	4,022.97	3,906.41	116.56	34.515				
16,500.00	8,480.00	20,096.68	12,152.64	137.09	146.74	154.97	-8,022.83	-2,378.62	4,024.20	3,906.33	117.88	34.139				
16,600.00	8,480.00	20,196.67	12,153.95	138.70	148.33	154.98	-8,122.81	-2,377.74	4,025.44	3,906.24	119.20	33.771				
16,700.00	8,480.00	20,296.66	12,155.26	140.30	149.92	154.99	-8,222.79	-2,376.86	4,026.68	3,906.16	120.52	33.410				
16,800.00	8,480.00	20,396.65	12,156.57	141.91	151.52	154.99	-8,322.77	-2,375.98	4,027.92	3,906.08	121.84	33.059				
16,900.00	8,480.00	20,496.64	12,157.89	143.52	153.11	155.00	-8,422.75	-2,375.10	4,029.16	3,905.99	123.16	32.714				
17,000.00	8,480.00	20,596.63	12,159.20	145.13	154.71	155.01	-8,522.73	-2,374.22	4,030.40	3,905.91	124.48	32.377				
17,100.00	8,480.00	20,696.62	12,160.51	146.75	156.31	155.01	-8,622.71	-2,373.34	4,031.63	3,905.83	125.81	32.046				
17,200.00	8,480.00	20,796.62	12,161.83	148.36	157.90	155.02	-8,722.69	-2,372.46	4,032.87	3,905.74	127.13	31.722				
17,300.00	8,480.00	20,896.61	12,163.14	149.97	159.50	155.03	-8,822.66	-2,371.58	4,034.11	3,905.65	128.46	31.405				
17,400.00	8,480.00	20,996.60	12,164.45	151.59	161.11	155.03	-8,922.64	-2,370.70	4,035.35	3,905.57	129.78	31.094				
17,500.00	8,480.00	21,096.59	12,165.77	153.20	162.71	155.04	-9,022.62	-2,369.83	4,036.59	3,905.48	131.11	30.788				
17,600.00	8,480.00	21,196.58	12,167.08	154.82	164.31	155.05	-9,122.60	-2,368.95	4,037.83	3,905.39	132.43	30.489				
17,700.00	8,480.00	21,296.57	12,168.39	156.44	165.91	155.05	-9,222.58	-2,368.07	4,039.06	3,905.31	133.76	30.197				
17,800.00	8,480.00	21,396.56	12,169.71	158.05	167.52	155.06	-9,322.56	-2,367.19	4,040.30	3,905.22	135.08	29.910				
17,900.00	8,480.00	21,496.55	12,171.02	159.67	169.12	155.06	-9,422.54	-2,366.31	4,041.54	3,905.13	136.41	29.628				
18,000.00	8,480.00	21,596.55	12,172.33	161.29	170.73	155.07	-9,522.52	-2,365.43	4,042.78	3,905.04	137.74	29.351				
18,100.00	8,480.00	21,696.54	12,173.64	162.91	172.34	155.08	-9,622.49	-2,364.55	4,044.02	3,904.95	139.06	29.080				
18,200.00	8,480.00	21,796.53	12,174.96	164.53	173.95	155.08	-9,722.47	-2,363.67	4,045.26	3,904.87	140.39	28.814				
18,300.00	8,480.00	21,896.52	12,176.27	166.15	175.56	155.09	-9,822.45	-2,362.79	4,046.50	3,904.78	141.72	28.553				
18,400.00	8,480.00	21,996.51	12,177.58	167.77	177.16	155.10	-9,922.43	-2,361.91	4,047.74	3,904.69	143.04	28.297				
18,500.00	8,480.00	22,096.50	12,178.90	169.40	178.78	155.10	-10,022.41	-2,361.03	4,048.97	3,904.60	144.37	28.046				
18,600.00	8,480.00	22,196.49	12,180.21	171.02	180.39	155.11	-10,122.39	-2,360.15	4,050.21	3,904.51	145.70	27.798				
18,700.00	8,480.00	22,296.48	12,181.52	172.64	182.00	155.12	-10,222.37	-2,359.28	4,051.45	3,904.42	147.03	27.555				
18,800.00	8,480.00	22,396.48	12,182.84	174.26	183.61	155.12	-10,322.35	-2,358.40	4,052.69	3,904.33	148.36	27.317				
18,900.00	8,480.00	22,496.47	12,184.15	175.89	185.22	155.13	-10,422.33	-2,357.52	4,053.93	3,904.24	149.69	27.082				
19,000.00	8,480.00	22,596.46	12,185.46	177.51	186.84	155.13	-10,522.30	-2,356.64	4,055.17	3,904.15	151.02	26.853				
19,100.00	8,480.00	22,696.45	12,186.78	179.14	188.45	155.14	-10,622.28	-2,355.76	4,056.41	3,904.07	152.34	26.627				
19,200.00	8,480.00	22,796.44	12,188.09	180.76	190.07	155.15	-10,722.26	-2,354.88	4,057.65	3,903.98	153.67	26.405				
19,300.00	8,480.00	22,896.43	12,189.40	182.39	191.68	155.15	-10,822.24	-2,354.00	4,058.89	3,903.89	155.00	26.187				

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 103H
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 103H	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
19,400.00	8,480.00	22,996.42	12,190.71	184.02	193.30	155.16	-10,922.22	-2,353.12	4,060.13	3,903.80	156.33	25.972	
19,500.00	8,480.00	23,096.42	12,192.03	185.64	194.92	155.17	-11,022.20	-2,352.24	4,061.37	3,903.71	157.66	25.761	
19,600.00	8,480.00	23,196.41	12,193.34	187.27	196.54	155.17	-11,122.18	-2,351.36	4,062.61	3,903.62	158.98	25.554	
19,700.00	8,480.00	23,296.40	12,194.65	188.90	198.15	155.18	-11,222.16	-2,350.48	4,063.85	3,903.53	160.31	25.349	
19,800.00	8,480.00	23,396.39	12,195.97	190.53	199.77	155.19	-11,322.13	-2,349.60	4,065.08	3,903.44	161.64	25.149	
19,899.80	8,480.00	23,496.18	12,197.28	192.15	201.39	155.19	-11,421.91	-2,348.73	4,066.32	3,903.35	162.97	24.951 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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND															Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	23.09	23.09	0.00	0.03	-71.00	581.08	-1,687.58	1,784.82							
100.00	100.00	116.51	116.49	0.13	0.17	-70.95	582.84	-1,687.55	1,785.39	1,785.19	0.20	8,883.579				
200.00	200.00	206.73	206.66	0.48	0.49	-70.85	585.90	-1,687.48	1,786.41	1,785.72	0.68	2,611.860				
300.00	300.00	294.63	294.49	0.84	0.80	-70.75	589.40	-1,687.51	1,787.76	1,786.60	1.16	1,537.226				
400.00	400.00	391.02	390.77	1.20	1.15	-70.61	593.99	-1,687.88	1,789.71	1,788.04	1.66	1,075.428				
500.00	500.00	483.50	483.11	1.56	1.49	-70.46	599.06	-1,688.24	1,791.90	1,789.74	2.16	830.796				
600.00	600.00	561.29	560.74	1.92	1.78	-70.32	603.98	-1,689.02	1,794.97	1,792.36	2.61	686.809				
700.00	700.00	739.24	738.53	2.28	2.42	-70.14	610.22	-1,689.80	1,796.64	1,793.32	3.32	541.399				
800.00	800.00	855.43	854.72	2.63	2.82	-70.11	610.91	-1,688.16	1,795.52	1,791.66	3.86	465.556				
900.00	900.00	955.39	954.66	2.99	3.17	-70.07	611.32	-1,686.39	1,793.99	1,789.64	4.35	412.040				
1,000.00	1,000.00	1,066.03	1,065.27	3.35	3.55	-70.05	611.22	-1,684.19	1,792.09	1,787.21	4.88	367.461				
1,100.00	1,100.00	1,172.26	1,171.48	3.71	3.92	-70.02	611.24	-1,681.54	1,789.75	1,784.36	5.39	331.946				
1,200.00	1,200.00	1,272.13	1,271.29	4.07	4.27	-69.97	611.78	-1,678.43	1,787.01	1,781.11	5.89	303.207				
1,300.00	1,300.00	1,352.25	1,351.39	4.43	4.55	-69.94	612.29	-1,676.56	1,785.04	1,778.70	6.35	281.211				
1,400.00	1,400.00	1,439.40	1,438.53	4.79	4.68	-69.92	612.58	-1,675.68	1,784.18	1,777.49	6.69	266.658				
1,500.00	1,500.00	1,540.20	1,539.33	5.14	4.71	-69.90	612.77	-1,674.86	1,783.48	1,776.51	6.97	255.817				
1,600.00	1,600.00	1,640.17	1,639.29	5.50	4.76	-69.89	612.95	-1,674.02	1,782.75	1,775.48	7.28	244.999				
1,700.00	1,700.00	1,738.69	1,737.81	5.86	4.84	-69.89	612.76	-1,673.37	1,782.07	1,774.47	7.60	234.437				
1,800.00	1,800.00	1,835.67	1,834.79	6.22	4.94	-69.89	612.48	-1,672.90	1,781.51	1,773.57	7.94	224.272				
1,900.00	1,900.00	1,929.80	1,928.92	6.58	5.06	-69.89	612.32	-1,672.64	1,781.20	1,772.90	8.30	214.636				
2,000.00	2,000.00	2,028.34	2,027.46	6.94	5.20	-69.89	612.37	-1,672.55	1,781.13	1,772.46	8.67	205.428				
2,100.00	2,099.99	2,152.27	2,151.39	7.29	5.41	8.92	612.18	-1,671.85	1,779.29	1,770.21	9.08	196.058				
2,200.00	2,199.91	2,321.40	2,320.41	7.63	5.74	8.99	610.89	-1,666.44	1,772.21	1,762.67	9.54	185.764				
2,300.00	2,299.69	2,553.40	2,551.24	7.98	6.28	9.03	600.85	-1,646.27	1,755.34	1,745.26	10.08	174.167				
2,400.00	2,399.27	2,654.92	2,651.89	8.34	6.54	9.07	594.55	-1,634.56	1,733.46	1,722.96	10.50	165.121				
2,500.00	2,498.57	2,770.51	2,766.43	8.69	6.87	9.14	587.61	-1,620.65	1,708.73	1,697.79	10.94	156.195				
2,600.00	2,597.54	2,911.69	2,905.91	9.06	7.29	9.26	578.32	-1,600.90	1,679.50	1,668.09	11.41	147.234				
2,616.45	2,613.78	2,936.09	2,929.94	9.12	7.37	9.28	576.48	-1,597.14	1,674.19	1,662.70	11.49	145.748				
2,700.00	2,696.24	3,032.39	3,024.62	9.43	7.69	9.29	568.24	-1,581.61	1,646.17	1,634.31	11.86	138.817				
2,800.00	2,794.94	3,120.58	3,111.30	9.81	7.99	9.27	560.09	-1,567.50	1,612.59	1,600.31	12.29	131.243				
2,900.00	2,893.64	3,203.57	3,192.95	10.19	8.28	9.27	552.85	-1,554.54	1,579.53	1,566.82	12.72	124.209				
3,000.00	2,992.34	3,286.75	3,274.93	10.58	8.57	9.28	546.35	-1,542.04	1,547.29	1,534.13	13.15	117.643				
3,100.00	3,091.04	3,418.41	3,404.57	10.97	9.06	9.29	535.54	-1,521.80	1,514.80	1,501.17	13.63	111.155				
3,200.00	3,189.74	3,558.66	3,541.65	11.37	9.61	9.22	520.54	-1,496.25	1,478.58	1,464.48	14.10	104.843				
3,300.00	3,288.45	3,646.70	3,627.51	11.77	9.98	9.19	510.98	-1,479.30	1,441.56	1,427.00	14.56	99.037				
3,400.00	3,387.15	3,726.44	3,705.39	12.17	10.31	9.17	502.95	-1,464.22	1,405.08	1,390.07	15.01	93.609				
3,500.00	3,485.85	3,802.21	3,779.58	12.58	10.62	9.18	496.00	-1,450.48	1,369.61	1,354.15	15.47	88.552				
3,600.00	3,584.55	3,894.20	3,869.84	12.98	11.01	9.19	488.00	-1,434.65	1,335.12	1,319.19	15.93	83.799				
3,700.00	3,683.25	4,003.23	3,976.63	13.39	11.47	9.16	477.20	-1,415.46	1,299.89	1,283.48	16.40	79.243				
3,800.00	3,781.95	4,096.42	4,067.72	13.80	11.87	9.08	466.85	-1,398.75	1,263.96	1,247.08	16.87	74.903				
3,900.00	3,880.65	4,192.64	4,161.80	14.22	12.30	9.00	456.34	-1,381.55	1,228.13	1,210.79	17.35	70.798				
4,000.00	3,979.35	4,287.05	4,254.08	14.63	12.72	8.95	446.54	-1,364.19	1,192.04	1,174.22	17.82	66.889				
4,100.00	4,078.05	4,380.50	4,345.47	15.05	13.13	8.97	437.94	-1,346.61	1,155.94	1,137.64	18.30	63.176				
4,200.00	4,176.75	4,469.46	4,432.49	15.47	13.53	9.09	431.70	-1,329.27	1,119.96	1,101.18	18.78	59.648				
4,300.00	4,275.45	4,549.77	4,511.17	15.89	13.89	9.29	427.59	-1,313.67	1,084.67	1,065.41	19.26	56.310				
4,400.00	4,374.15	4,625.19	4,585.28	16.31	14.21	9.43	423.21	-1,300.42	1,050.83	1,031.07	19.75	53.195				
4,500.00	4,472.85	4,699.61	4,658.65	16.73	14.53	9.45	417.45	-1,289.40	1,018.81	998.56	20.25	50.318				
4,600.00	4,571.55	4,782.00	4,740.09	17.15	14.87	9.41	410.54	-1,279.00	988.51	967.78	20.74	47.665				
4,700.00	4,670.25	4,874.67	4,831.80	17.57	15.24	9.39	403.35	-1,267.84	958.99	937.76	21.23	45.176				
4,800.00	4,768.95	4,978.34	4,934.34	18.00	15.66	9.45	396.50	-1,254.26	928.90	907.18	21.71	42.782				
4,900.00	4,867.65	5,065.68	5,020.76	18.42	16.02	9.58	391.75	-1,242.52	898.89	876.68	22.21	40.477				
5,000.00	4,966.35	5,173.89	5,127.85	18.85	16.47	9.69	385.09	-1,228.43	869.09	846.41	22.69	38.309				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
5,100.00	5,065.05	5,328.97	5,279.70	19.28	17.18	9.63	369.48	-1,201.34	833.37	810.31	23.06	36.141				
5,200.00	5,163.76	5,424.60	5,372.72	19.70	17.64	9.56	358.59	-1,182.02	795.29	771.76	23.54	33.786				
5,300.00	5,262.46	5,516.64	5,462.27	20.13	18.09	9.53	348.54	-1,163.26	757.23	733.20	24.03	31.511				
5,400.00	5,361.16	5,607.65	5,550.85	20.56	18.53	9.54	339.13	-1,144.62	719.27	694.75	24.53	29.326				
5,500.00	5,459.86	5,700.40	5,641.16	20.99	18.99	9.60	330.08	-1,125.55	681.44	656.42	25.02	27.240				
5,600.00	5,558.56	5,788.14	5,726.65	21.42	19.41	9.70	322.02	-1,107.52	643.82	618.29	25.53	25.218				
5,700.00	5,657.26	5,873.30	5,809.84	21.85	19.82	9.86	314.91	-1,090.70	607.19	581.13	26.06	23.298				
5,800.00	5,755.96	5,964.10	5,898.73	22.28	20.25	10.04	307.55	-1,073.75	571.59	545.02	26.57	21.513				
5,900.00	5,854.66	6,058.55	5,991.18	22.71	20.69	10.31	300.40	-1,055.79	535.89	508.83	27.06	19.805				
6,000.00	5,953.36	6,152.72	6,083.33	23.14	21.14	10.66	293.52	-1,037.65	500.08	472.53	27.55	18.153				
6,100.00	6,052.06	6,240.72	6,169.48	23.57	21.55	11.03	287.10	-1,020.84	464.44	436.36	28.08	16.537				
6,200.00	6,150.76	6,328.08	6,255.30	24.01	21.95	11.32	280.38	-1,006.00	430.53	401.89	28.63	15.036				
6,300.00	6,249.46	6,422.21	6,347.89	24.44	22.38	11.63	273.13	-990.70	397.27	368.14	29.13	13.636				
6,400.00	6,348.16	6,518.19	6,442.23	24.87	22.81	12.00	265.53	-974.72	363.61	334.00	29.62	12.278				
6,500.00	6,446.86	6,613.02	6,535.39	25.30	23.25	12.48	258.13	-958.61	329.72	299.61	30.11	10.951				
6,600.00	6,545.56	6,703.34	6,624.13	25.74	23.66	13.03	251.04	-943.34	295.91	265.25	30.66	9.651				
6,700.00	6,644.26	6,790.31	6,709.94	26.17	24.04	13.37	243.87	-931.22	264.55	233.28	31.26	8.461				
6,804.31	6,747.22	6,883.06	6,801.81	26.62	24.42	13.83	237.21	-920.41	234.40	202.52	31.88	7.353				
6,900.00	6,841.85	6,968.83	6,887.10	27.03	24.75	13.97	231.54	-913.38	211.00	178.56	32.44	6.505				
7,000.00	6,941.09	7,064.17	6,982.08	27.44	25.09	13.89	225.64	-907.50	190.94	157.98	32.96	5.793				
7,100.00	7,040.61	7,161.06	7,078.71	27.83	25.43	14.22	221.77	-901.73	174.51	141.02	33.48	5.212				
7,200.00	7,140.36	7,259.29	7,176.74	28.20	25.77	14.92	219.47	-895.93	161.34	127.35	34.00	4.746				
7,300.00	7,240.26	7,358.60	7,275.88	28.55	26.12	15.46	217.17	-890.34	150.97	116.47	34.50	4.376				
7,400.00	7,340.24	7,457.90	7,374.99	28.88	26.46	15.81	214.91	-884.83	143.21	108.21	35.00	4.091				
7,420.77	7,361.00	7,478.42	7,395.48	28.95	26.53	-62.93	214.50	-883.72	141.97	106.86	35.11	4.044				
7,500.00	7,440.24	7,555.25	7,472.21	29.20	26.79	-62.66	213.31	-879.97	137.97	102.46	35.51	3.885				
7,600.00	7,540.24	7,651.43	7,568.35	29.52	27.09	-62.22	213.15	-877.40	135.52	99.51	36.02	3.763				
7,700.00	7,640.24	7,749.91	7,666.80	29.84	27.37	-61.36	214.79	-876.14	135.18	98.68	36.50	3.703				
7,800.00	7,740.24	7,850.45	7,767.32	30.16	27.67	-60.36	216.77	-874.86	135.03	98.03	37.00	3.650				
7,900.00	7,840.24	7,951.12	7,867.97	30.48	27.97	-59.58	218.00	-873.31	134.30	96.81	37.49	3.582				
7,966.81	7,907.04	8,018.51	7,935.35	30.69	28.17	-59.15	218.49	-872.17	133.58	95.76	37.82	3.532				
7,983.25	7,923.48	8,035.16	7,951.99	30.74	28.22	121.63	218.59	-871.83	133.47	95.56	37.90	3.521 CC, ES				
8,000.00	7,940.22	8,052.10	7,968.93	30.79	28.28	122.00	218.69	-871.46	133.58	95.59	37.99	3.516 SF				
8,050.00	7,989.94	8,102.34	8,019.16	30.94	28.43	124.04	218.92	-870.21	135.43	97.14	38.29	3.537				
8,100.00	8,039.04	8,151.89	8,068.68	31.08	28.59	127.17	218.99	-868.87	139.90	101.24	38.66	3.619				
8,150.00	8,087.13	8,199.59	8,116.37	31.21	28.74	130.93	218.89	-867.60	147.59	108.50	39.09	3.775				
8,200.00	8,133.85	8,245.23	8,162.00	31.33	28.89	134.79	218.80	-866.78	159.40	119.82	39.59	4.027				
8,250.00	8,178.84	8,289.66	8,206.43	31.45	29.03	138.51	218.71	-866.38	175.64	135.54	40.10	4.380				
8,300.00	8,221.77	8,332.65	8,249.41	31.55	29.15	141.84	218.52	-866.21	196.20	155.59	40.61	4.831				
8,350.00	8,262.30	8,373.63	8,290.40	31.65	29.28	144.64	218.23	-866.20	220.95	179.87	41.08	5.378				
8,400.00	8,300.13	8,412.73	8,329.49	31.74	29.39	146.92	217.85	-866.12	249.60	208.09	41.51	6.013				
8,450.00	8,334.96	8,448.96	8,365.72	31.82	29.50	148.58	217.42	-865.92	281.88	240.00	41.89	6.730				
8,500.00	8,366.54	8,479.63	8,396.39	31.89	29.59	149.30	217.04	-865.73	317.60	275.40	42.20	7.526				
8,550.00	8,394.62	8,506.01	8,422.76	31.96	29.67	149.13	216.82	-865.74	356.56	314.10	42.46	8.398				
8,600.00	8,418.99	8,528.66	8,445.41	32.03	29.73	147.96	216.73	-865.89	398.33	355.66	42.67	9.334				
8,650.00	8,439.47	8,551.00	8,467.76	32.11	29.80	146.01	216.71	-866.15	442.46	399.60	42.86	10.324				
8,700.00	8,455.89	8,565.52	8,482.27	32.19	29.84	141.62	216.70	-866.35	488.41	445.41	43.00	11.359				
8,750.00	8,468.13	8,580.13	8,496.88	32.29	29.88	135.02	216.63	-866.51	535.75	492.63	43.12	12.425				
8,800.00	8,476.11	8,590.08	8,506.84	32.40	29.91	123.20	216.55	-866.61	584.11	540.89	43.21	13.516				
8,850.00	8,479.75	8,595.08	8,511.83	32.54	29.92	102.41	216.50	-866.66	633.13	589.84	43.29	14.627				
8,866.81	8,480.00	8,595.60	8,512.35	32.59	29.92	93.09	216.50	-866.66	649.69	606.38	43.30	15.003				
8,900.00	8,480.00	8,596.03	8,512.78	32.70	29.92	93.31	216.49	-866.66	682.44	639.10	43.34	15.747				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,000.00	8,480.00	8,597.40	8,514.15	33.09	29.93	94.03	216.48	-866.67	781.32	737.90	43.42	17.994				
9,100.00	8,480.00	8,598.86	8,515.62	33.57	29.93	94.80	216.46	-866.69	880.46	836.97	43.49	20.247				
9,200.00	8,480.00	8,600.44	8,517.19	34.14	29.94	95.62	216.44	-866.70	979.77	936.23	43.54	22.503				
9,300.00	8,480.00	8,602.13	8,518.88	34.79	29.94	96.51	216.42	-866.71	1,079.20	1,035.62	43.59	24.761				
9,400.00	8,480.00	8,603.95	8,520.70	35.50	29.95	97.45	216.40	-866.72	1,178.73	1,135.11	43.63	27.020				
9,500.00	8,480.00	8,605.92	8,522.67	36.28	29.95	98.47	216.37	-866.74	1,278.33	1,234.67	43.66	29.279				
9,600.00	8,480.00	8,608.06	8,524.81	37.11	29.96	99.57	216.35	-866.75	1,377.99	1,334.29	43.69	31.537				
9,700.00	8,480.00	8,610.40	8,527.15	38.01	29.96	100.76	216.31	-866.77	1,477.69	1,433.96	43.72	33.795				
9,800.00	8,480.00	8,612.95	8,529.69	38.95	29.97	102.05	216.27	-866.78	1,577.42	1,533.67	43.75	36.053				
9,900.00	8,480.00	8,615.74	8,532.49	39.94	29.98	103.46	216.23	-866.80	1,677.19	1,633.41	43.78	38.309				
10,000.00	8,480.00	8,618.83	8,535.58	40.97	29.99	104.98	216.18	-866.82	1,776.98	1,733.17	43.81	40.563				
10,100.00	8,480.00	8,622.25	8,539.00	42.04	30.00	106.65	216.12	-866.83	1,876.79	1,832.95	43.84	42.815				
10,200.00	8,480.00	8,626.07	8,542.81	43.14	30.01	108.48	216.05	-866.85	1,976.61	1,932.75	43.86	45.063				
10,300.00	8,480.00	8,630.34	8,547.09	44.29	30.02	110.48	215.97	-866.87	2,076.45	2,032.56	43.89	47.309				
10,400.00	8,480.00	8,635.17	8,551.92	45.46	30.03	112.67	215.87	-866.88	2,176.30	2,132.38	43.92	49.552				
10,500.00	8,480.00	8,640.67	8,557.42	46.66	30.05	115.09	215.75	-866.90	2,276.16	2,232.21	43.95	51.790				
10,600.00	8,480.00	8,646.99	8,563.73	47.89	30.07	117.76	215.60	-866.91	2,376.02	2,332.04	43.98	54.024				
10,700.00	8,480.00	8,654.32	8,571.06	49.14	30.09	120.70	215.42	-866.92	2,475.89	2,431.87	44.01	56.253				
10,800.00	8,480.00	8,662.94	8,579.68	50.42	30.11	123.93	215.18	-866.91	2,575.76	2,531.71	44.05	58.476				
10,900.00	8,480.00	8,618.82	8,535.57	51.72	29.99	104.99	215.95	-866.70	2,675.54	2,631.54	44.00	60.814				
11,000.00	8,480.00	8,619.94	8,536.69	53.03	29.99	105.54	215.93	-866.71	2,775.45	2,731.44	44.02	63.051				
11,100.00	8,480.00	8,621.06	8,537.81	54.37	29.99	106.09	215.92	-866.71	2,875.38	2,831.33	44.04	65.286				
11,200.00	8,480.00	8,622.18	8,538.93	55.72	30.00	106.63	215.91	-866.72	2,975.30	2,931.23	44.07	67.517				
11,300.00	8,480.00	8,623.30	8,540.05	57.09	30.00	107.17	215.90	-866.73	3,075.23	3,031.14	44.09	69.746				
11,400.00	8,480.00	8,624.42	8,541.17	58.47	30.00	107.71	215.88	-866.74	3,175.16	3,131.05	44.12	71.972				
11,500.00	8,480.00	8,663.77	8,580.50	59.86	30.12	124.22	215.21	-866.96	3,275.10	3,230.89	44.21	74.085				
11,600.00	8,480.00	15,101.00	11,775.07	61.27	74.51	177.50	-3,247.45	-866.24	3,272.92	3,225.08	47.83	68.422				
11,700.00	8,480.00	15,164.30	11,772.95	62.69	75.40	177.50	-3,310.70	-865.60	3,269.99	3,221.44	48.54	67.360				
11,784.01	8,480.00	15,195.00	11,772.69	63.90	75.83	177.50	-3,341.41	-865.52	3,269.31	3,220.27	49.04	66.666				
11,800.00	8,480.00	15,195.00	11,772.69	64.13	75.83	177.50	-3,341.41	-865.52	3,269.35	3,220.24	49.11	66.575				
11,900.00	8,480.00	15,253.18	11,773.19	65.57	76.65	177.48	-3,399.58	-865.77	3,270.35	3,220.53	49.82	65.649				
12,000.00	8,480.00	15,321.56	11,774.85	67.02	77.62	177.46	-3,467.94	-866.62	3,272.80	3,222.22	50.57	64.714				
12,100.00	8,480.00	15,413.26	11,777.18	68.48	78.92	177.42	-3,559.59	-868.00	3,275.46	3,224.01	51.45	63.662				
12,200.00	8,480.00	15,479.00	11,779.44	69.95	79.86	177.39	-3,625.29	-869.08	3,279.00	3,226.79	52.21	62.801				
12,300.00	8,480.00	15,554.30	11,782.70	71.42	80.94	177.36	-3,700.50	-870.30	3,283.44	3,230.42	53.02	61.927				
12,400.00	8,480.00	15,616.97	11,785.93	72.91	81.84	177.34	-3,763.09	-871.14	3,288.73	3,234.95	53.78	61.153				
12,500.00	8,480.00	15,707.88	11,791.82	74.40	83.17	177.32	-3,853.81	-871.40	3,295.21	3,240.54	54.67	60.270				
12,600.00	8,480.00	16,005.04	11,799.35	75.90	87.54	177.39	-4,150.72	-864.88	3,296.27	3,239.66	56.61	58.225				
12,700.00	8,480.00	16,080.72	11,799.84	77.40	88.66	177.39	-4,226.40	-864.18	3,296.90	3,239.46	57.45	57.389				
12,800.00	8,480.00	16,142.00	11,800.47	78.91	89.56	177.37	-4,287.67	-864.50	3,298.17	3,239.96	58.21	56.661				
12,900.00	8,480.00	16,204.04	11,801.81	80.43	90.48	177.35	-4,349.70	-865.17	3,300.59	3,241.61	58.98	55.958				
13,000.00	8,480.00	16,270.80	11,804.46	81.95	91.47	177.33	-4,416.40	-865.70	3,304.54	3,244.76	59.78	55.280				
13,100.00	8,480.00	16,377.31	11,808.84	83.47	93.06	177.31	-4,522.82	-866.52	3,308.74	3,247.94	60.80	54.422				
13,200.00	8,480.00	16,452.31	11,811.88	85.00	94.18	177.29	-4,597.75	-867.02	3,312.95	3,251.30	61.64	53.743				
13,300.00	8,480.00	16,521.00	11,816.00	86.54	95.22	177.29	-4,666.32	-866.61	3,318.72	3,256.27	62.46	53.134				
13,400.00	8,480.00	16,607.97	11,821.84	88.08	96.54	177.31	-4,753.07	-864.86	3,325.29	3,261.92	63.37	52.474				
13,500.00	8,480.00	16,701.94	11,827.76	89.62	97.97	177.35	-4,846.79	-861.50	3,331.48	3,267.15	64.33	51.789				
13,600.00	8,480.00	16,761.58	11,831.97	91.17	98.89	177.40	-4,906.20	-858.28	3,338.36	3,273.28	65.08	51.296				
13,700.00	8,480.00	16,873.63	11,841.14	92.72	100.62	177.53	-5,017.57	-850.09	3,346.34	3,280.21	66.13	50.604				
13,800.00	8,480.00	17,050.14	11,852.12	94.27	103.35	177.70	-5,193.37	-838.99	3,352.33	3,284.79	67.55	49.630				
13,900.00	8,480.00	17,163.03	11,857.15	95.83	105.09	177.76	-5,306.05	-834.62	3,356.63	3,288.01	68.62	48.917				
14,000.00	8,480.00	17,269.96	11,862.02	97.39	106.73	177.76	-5,412.86	-833.33	3,361.18	3,291.52	69.66	48.252				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
14,100.00	8,480.00	17,344.28	11,865.50	98.95	107.88	177.79	-5,487.08	-831.43	3,365.81	3,295.28	70.53	47.724				
14,200.00	8,480.00	17,424.18	11,869.89	100.52	109.12	177.82	-5,566.81	-828.95	3,371.21	3,299.80	71.42	47.204				
14,300.00	8,480.00	17,525.63	11,875.72	102.09	110.69	177.82	-5,668.09	-827.93	3,376.95	3,304.51	72.44	46.614				
14,400.00	8,480.00	17,626.39	11,881.31	103.66	112.25	177.84	-5,768.67	-825.84	3,382.46	3,308.99	73.47	46.040				
14,500.00	8,480.00	17,784.03	11,887.77	105.23	114.68	177.80	-5,926.16	-827.18	3,386.30	3,311.47	74.83	45.252				
14,600.00	8,480.00	17,846.00	11,890.91	106.81	115.64	177.77	-5,988.04	-828.26	3,391.19	3,315.55	75.64	44.831				
14,700.00	8,480.00	17,874.61	11,892.82	108.39	116.08	177.76	-6,016.58	-828.63	3,397.44	3,321.20	76.24	44.564				
14,800.00	8,480.00	17,941.00	11,897.97	109.97	117.11	177.75	-6,082.77	-828.63	3,405.15	3,328.09	77.06	44.187				
14,900.00	8,480.00	18,023.87	11,905.05	111.55	118.41	177.76	-6,165.33	-827.70	3,413.64	3,335.66	77.99	43.773				
15,000.00	8,480.00	18,161.35	11,915.71	113.13	120.56	177.79	-6,302.36	-824.97	3,421.24	3,342.00	79.25	43.172				
15,100.00	8,480.00	18,390.49	11,929.42	114.72	124.18	177.95	-6,530.76	-813.48	3,427.43	3,346.39	81.05	42.290				
15,200.00	8,480.00	18,542.57	11,933.90	116.31	126.58	178.04	-6,682.61	-806.72	3,430.21	3,347.83	82.37	41.642				
15,300.00	8,480.00	18,603.00	11,935.29	117.90	127.53	178.06	-6,743.01	-805.44	3,432.66	3,349.48	83.18	41.268				
15,400.00	8,480.00	18,671.74	11,937.58	119.49	128.62	178.07	-6,811.70	-804.19	3,436.10	3,352.07	84.03	40.890				
15,500.00	8,480.00	18,731.69	11,940.54	121.08	129.56	178.08	-6,871.56	-803.02	3,440.97	3,356.14	84.83	40.563				
15,600.00	8,480.00	18,803.13	11,944.70	122.68	130.69	178.07	-6,942.89	-802.97	3,446.81	3,361.11	85.70	40.219				
15,700.00	8,480.00	18,900.96	11,950.74	124.27	132.22	178.03	-7,040.51	-804.83	3,453.08	3,366.34	86.74	39.811				
15,800.00	8,480.00	18,982.00	11,955.57	125.87	133.48	177.98	-7,121.37	-807.16	3,459.25	3,371.58	87.67	39.457				
15,900.00	8,480.00	19,032.65	11,959.08	127.47	134.28	177.95	-7,171.88	-808.48	3,466.54	3,378.14	88.40	39.213				
16,000.00	8,480.00	19,077.00	11,963.14	129.07	134.97	177.93	-7,216.04	-809.26	3,475.66	3,386.58	89.08	39.019				
16,100.00	8,480.00	19,312.40	11,981.91	130.67	138.69	177.90	-7,450.62	-809.34	3,483.87	3,392.83	91.04	38.269				
16,200.00	8,480.00	19,410.08	11,987.83	132.27	140.24	177.92	-7,548.11	-807.71	3,489.90	3,397.82	92.08	37.903				
16,300.00	8,480.00	19,536.39	11,994.96	133.88	142.24	177.89	-7,674.21	-808.14	3,495.61	3,402.31	93.30	37.465				
16,400.00	8,480.00	19,656.59	12,000.69	135.48	144.13	177.84	-7,794.24	-810.68	3,500.48	3,405.98	94.50	37.043				
16,500.00	8,480.00	19,740.00	12,004.54	137.09	145.45	177.78	-7,877.53	-813.11	3,505.26	3,409.80	95.46	36.719				
16,600.00	8,480.00	19,802.18	12,007.92	138.70	146.43	177.76	-7,939.60	-814.33	3,510.85	3,414.56	96.28	36.464				
16,700.00	8,480.00	20,069.29	12,020.00	140.30	150.67	177.69	-8,206.36	-816.08	3,516.72	3,418.33	98.38	35.745				
16,800.00	8,480.00	20,146.64	12,021.31	141.91	151.90	177.70	-8,283.70	-814.75	3,518.40	3,419.09	99.31	35.428				
16,900.00	8,480.00	20,213.00	12,023.05	143.52	152.96	177.71	-8,350.03	-813.92	3,521.00	3,420.82	100.17	35.149				
17,000.00	8,480.00	20,255.15	12,024.69	145.13	153.63	177.70	-8,392.14	-813.77	3,524.88	3,424.01	100.88	34.942				
17,100.00	8,480.00	20,308.00	12,027.64	146.75	154.48	177.69	-8,444.91	-814.07	3,530.38	3,428.75	101.64	34.735				
17,200.00	8,480.00	20,592.00	12,033.97	148.36	158.99	177.59	-8,728.75	-817.56	3,530.70	3,426.84	103.86	33.995				
17,300.00	8,480.00	20,662.46	12,034.51	149.97	160.11	177.58	-8,799.21	-817.48	3,531.62	3,426.86	104.76	33.712				
17,400.00	8,480.00	20,720.07	12,035.79	151.59	161.04	177.57	-8,856.80	-817.61	3,533.89	3,428.31	105.58	33.472				
17,500.00	8,480.00	20,781.00	12,037.87	153.20	162.01	177.57	-8,917.69	-817.12	3,537.29	3,430.88	106.41	33.243				
17,600.00	8,480.00	20,955.77	12,043.24	154.82	164.79	177.47	-9,092.23	-821.87	3,540.79	3,432.83	107.95	32.799				
17,700.00	8,480.00	21,065.00	12,044.67	156.44	166.51	177.36	-9,201.27	-827.82	3,542.37	3,433.26	109.11	32.466				
17,800.00	8,480.00	21,066.26	12,044.72	158.05	166.53	177.36	-9,202.53	-827.87	3,545.37	3,435.79	109.58	32.354				
17,900.00	8,480.00	21,159.00	12,048.52	159.67	168.00	177.27	-9,295.07	-832.51	3,549.76	3,439.13	110.63	32.088				
18,000.00	8,480.00	21,199.45	12,050.55	161.29	168.64	177.23	-9,335.41	-834.70	3,555.13	3,443.82	111.31	31.938				
18,100.00	8,480.00	21,254.00	12,054.50	162.91	169.50	177.19	-9,389.77	-836.94	3,562.34	3,450.26	112.08	31.784				
18,200.00	8,480.00	21,379.80	12,062.73	164.53	171.51	177.10	-9,515.20	-841.59	3,569.02	3,455.66	113.36	31.483				
18,300.00	8,480.00	21,443.00	12,067.90	166.15	172.52	177.09	-9,578.19	-841.84	3,576.91	3,462.74	114.17	31.329				
18,400.00	8,480.00	21,466.26	12,070.19	167.77	172.89	177.10	-9,601.34	-841.45	3,586.00	3,471.33	114.67	31.273				
18,500.00	8,480.00	21,842.84	12,097.81	169.40	178.99	177.33	-9,976.31	-824.45	3,596.13	3,478.53	117.59	30.581				
18,600.00	8,480.00	22,002.31	12,100.22	171.02	181.58	177.43	-10,135.56	-816.64	3,597.40	3,478.41	118.99	30.233				
18,700.00	8,480.00	22,065.79	12,100.53	172.64	182.61	177.46	-10,198.99	-814.24	3,598.03	3,478.18	119.85	30.021				
18,800.00	8,480.00	22,105.00	12,101.56	174.26	183.24	177.47	-10,238.17	-813.01	3,600.52	3,479.97	120.55	29.867				
18,900.00	8,480.00	22,173.56	12,104.30	175.89	184.36	177.52	-10,306.57	-809.21	3,604.31	3,482.89	121.42	29.685				
19,000.00	8,480.00	22,226.69	12,106.96	177.51	185.23	177.60	-10,359.39	-804.28	3,609.05	3,486.89	122.16	29.544				
19,100.00	8,480.00	22,294.00	12,111.64	179.14	186.33	177.67	-10,426.36	-799.41	3,615.50	3,492.51	122.99	29.397				
19,200.00	8,480.00	22,325.12	12,114.22	180.76	186.83	177.69	-10,457.33	-797.79	3,623.07	3,499.52	123.55	29.324				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 117-OWSG (Rev2) MWD, 1363-OWSG (Rev2) MWD, 23350-BLIND												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.00	8,480.00	22,398.67	12,120.67	182.39	188.03	177.73	-10,530.55	-794.99	3,631.73	3,507.31	124.42	29.189	
19,400.00	8,480.00	22,496.95	12,129.68	184.02	189.62	177.74	-10,628.39	-793.20	3,640.86	3,515.37	125.49	29.014	
19,500.00	8,480.00	22,632.18	12,140.69	185.64	191.80	177.74	-10,763.17	-792.64	3,648.87	3,522.03	126.84	28.767	
19,600.00	8,480.00	22,713.84	12,147.45	187.27	193.12	177.73	-10,844.55	-792.77	3,657.18	3,529.40	127.79	28.620	
19,700.00	8,480.00	22,802.85	12,155.20	188.90	194.55	177.72	-10,933.22	-792.56	3,665.92	3,537.13	128.78	28.466	
19,800.00	8,480.00	22,861.00	12,160.32	190.53	195.49	177.71	-10,991.15	-792.72	3,674.99	3,545.46	129.53	28.372	
19,899.80	8,480.00	22,955.00	12,169.75	192.15	197.01	177.71	-11,084.67	-792.15	3,685.01	3,554.44	130.57	28.223	

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 103H
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 103H	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	25.08	25.08	0.00	0.03	-71.37	580.68	-1,722.59	1,817.83							
100.00	100.00	120.02	120.02	0.13	0.18	-71.37	580.73	-1,722.80	1,818.06	1,817.84	0.22	8,424.848				
200.00	200.00	197.74	197.74	0.48	0.45	-71.38	580.68	-1,723.52	1,818.94	1,818.28	0.66	2,746.992				
300.00	300.00	290.39	290.36	0.84	0.78	-71.43	579.88	-1,725.71	1,820.90	1,819.74	1.15	1,582.651				
400.00	400.00	373.85	373.78	1.20	1.09	-71.47	579.20	-1,728.13	1,823.37	1,821.75	1.62	1,127.026				
500.00	500.00	466.60	466.47	1.56	1.42	-71.52	578.60	-1,731.34	1,826.45	1,824.34	2.11	866.604				
600.00	600.00	566.26	566.05	1.92	1.78	-71.59	577.61	-1,735.08	1,829.70	1,827.09	2.61	699.828				
700.00	700.00	658.00	657.72	2.28	2.12	-71.65	576.69	-1,738.74	1,833.17	1,830.07	3.10	590.896				
800.00	800.00	816.00	815.57	2.63	2.68	-71.73	575.32	-1,743.00	1,835.53	1,831.78	3.75	489.695				
900.00	900.00	857.04	856.57	2.99	2.83	-71.76	574.92	-1,744.74	1,838.35	1,834.24	4.11	447.416				
1,000.00	1,000.00	951.56	950.99	3.35	3.17	-71.83	574.08	-1,749.00	1,842.36	1,837.76	4.60	400.218				
1,100.00	1,100.00	1,069.65	1,068.93	3.71	3.61	-71.96	571.44	-1,754.45	1,846.07	1,840.91	5.16	357.855				
1,200.00	1,200.00	1,155.25	1,154.40	4.07	3.92	-72.07	568.98	-1,758.42	1,849.59	1,843.96	5.63	328.405				
1,300.00	1,300.00	1,259.04	1,258.06	4.43	4.30	-72.18	566.92	-1,763.26	1,853.42	1,847.27	6.15	301.283				
1,400.00	1,400.00	1,320.00	1,318.93	4.79	4.52	-72.24	565.59	-1,766.17	1,857.63	1,851.07	6.56	283.137				
1,500.00	1,500.00	1,408.39	1,407.08	5.14	4.71	-72.38	562.84	-1,771.88	1,862.96	1,856.02	6.94	268.473				
1,600.00	1,600.00	1,499.00	1,497.21	5.50	4.89	-72.57	558.82	-1,780.39	1,870.50	1,863.18	7.32	255.472				
1,700.00	1,700.00	1,558.31	1,556.07	5.86	4.94	-72.73	555.67	-1,786.93	1,879.07	1,871.47	7.60	247.087				
1,800.00	1,800.00	1,759.64	1,756.21	6.22	5.14	-73.23	543.77	-1,804.91	1,886.35	1,878.34	8.01	235.579				
1,900.00	1,900.00	2,082.04	2,077.82	6.58	5.54	-73.70	526.39	-1,799.99	1,881.47	1,872.94	8.53	220.539				
2,000.00	2,000.00	2,193.82	2,189.20	6.94	5.71	-73.75	522.31	-1,791.49	1,873.16	1,864.24	8.92	210.056				
2,100.00	2,099.99	2,315.74	2,310.58	7.29	5.91	5.00	516.88	-1,781.35	1,862.63	1,853.31	9.32	199.825				
2,200.00	2,199.91	2,408.95	2,403.29	7.63	6.09	4.94	511.67	-1,773.34	1,848.94	1,839.23	9.71	190.383				
2,300.00	2,299.69	2,505.07	2,498.94	7.98	6.29	4.89	506.34	-1,765.41	1,833.01	1,822.89	10.11	181.238				
2,400.00	2,399.27	2,605.76	2,599.09	8.34	6.52	4.80	499.72	-1,757.38	1,814.50	1,803.96	10.53	172.308				
2,500.00	2,498.57	2,705.08	2,697.80	8.69	6.77	4.68	491.90	-1,749.72	1,793.31	1,782.35	10.96	163.689				
2,600.00	2,597.54	2,778.10	2,770.42	9.06	6.96	4.61	486.23	-1,744.53	1,770.20	1,758.84	11.36	155.874				
2,616.45	2,613.78	2,801.00	2,793.21	9.12	7.02	4.58	484.64	-1,743.06	1,766.32	1,754.89	11.44	154.447				
2,700.00	2,696.24	2,858.92	2,850.91	9.43	7.17	4.52	480.98	-1,739.52	1,746.62	1,734.86	11.77	148.421				
2,800.00	2,794.94	3,053.67	3,044.53	9.81	7.72	4.39	469.64	-1,722.53	1,721.00	1,708.69	12.31	139.819				
2,900.00	2,893.64	3,159.24	3,149.01	10.19	8.04	4.31	462.30	-1,709.34	1,691.35	1,678.59	12.76	132.594				
3,000.00	2,992.34	3,235.19	3,224.23	10.58	8.27	4.21	456.25	-1,700.84	1,662.71	1,649.52	13.18	126.130				
3,100.00	3,091.04	3,331.96	3,320.09	10.97	8.59	4.02	447.08	-1,691.23	1,634.86	1,621.22	13.64	119.871				
3,200.00	3,189.74	3,424.91	3,412.06	11.37	8.91	3.81	437.42	-1,681.83	1,606.63	1,592.53	14.10	113.974				
3,300.00	3,288.45	3,501.66	3,488.10	11.77	9.17	3.64	430.10	-1,674.50	1,579.18	1,564.63	14.54	108.604				
3,400.00	3,387.15	3,574.02	3,559.92	12.17	9.42	3.49	423.60	-1,668.61	1,553.18	1,538.19	14.98	103.669				
3,500.00	3,485.85	3,649.00	3,634.46	12.58	9.67	3.33	417.23	-1,663.53	1,528.60	1,513.17	15.43	99.079				
3,600.00	3,584.55	3,715.05	3,700.22	12.98	9.90	3.19	412.02	-1,660.13	1,505.72	1,489.86	15.86	94.918				
3,700.00	3,683.25	3,812.85	3,797.73	13.39	10.22	3.01	405.58	-1,656.25	1,484.31	1,467.97	16.34	90.845				
3,800.00	3,781.95	3,962.89	3,947.18	13.80	10.73	2.82	396.82	-1,646.45	1,460.62	1,443.74	16.87	86.560				
3,900.00	3,880.65	4,064.38	4,047.94	14.22	11.10	2.57	387.89	-1,638.29	1,434.83	1,417.47	17.36	82.646				
4,000.00	3,979.35	4,161.76	4,144.67	14.63	11.45	2.33	379.49	-1,630.79	1,409.44	1,391.60	17.85	78.981				
4,100.00	4,078.05	4,265.93	4,248.22	15.05	11.82	2.22	373.79	-1,621.09	1,383.25	1,364.92	18.33	75.467				
4,200.00	4,176.75	4,365.94	4,347.68	15.47	12.16	2.20	370.22	-1,611.24	1,357.02	1,338.21	18.81	72.162				
4,300.00	4,275.45	4,485.06	4,466.02	15.89	12.58	2.18	365.89	-1,598.37	1,329.88	1,310.59	19.29	68.941				
4,400.00	4,374.15	4,574.89	4,555.13	16.31	12.92	2.07	360.49	-1,588.37	1,301.90	1,282.13	19.77	65.853				
4,500.00	4,472.85	4,654.29	4,633.91	16.73	13.21	1.89	354.30	-1,580.64	1,274.82	1,254.57	20.25	62.952				
4,600.00	4,571.55	4,731.08	4,710.20	17.15	13.50	1.70	348.40	-1,574.29	1,249.18	1,228.44	20.73	60.258				
4,700.00	4,670.25	4,814.13	4,792.89	17.57	13.80	1.54	343.28	-1,568.46	1,225.03	1,203.81	21.21	57.749				
4,800.00	4,768.95	4,905.78	4,884.17	18.00	14.13	1.35	337.54	-1,562.54	1,201.44	1,179.73	21.70	55.359				
4,900.00	4,867.65	4,993.25	4,971.30	18.42	14.45	1.14	331.81	-1,557.55	1,178.51	1,156.32	22.19	53.107				
5,000.00	4,966.35	5,081.27	5,059.06	18.85	14.77	0.94	326.47	-1,553.26	1,156.49	1,133.81	22.68	50.991				

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 103H
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 103H	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				
5,100.00	5,065.05	5,178.70	5,156.23	19.28	15.11	0.73	321.09	-1,548.72	1,134.81	1,111.64	23.18	48.963				
5,200.00	5,163.76	5,277.59	5,254.87	19.70	15.47	0.51	315.68	-1,544.10	1,113.15	1,089.47	23.68	47.017				
5,300.00	5,262.46	5,381.08	5,358.07	20.13	15.84	0.27	309.93	-1,538.87	1,091.12	1,066.94	24.18	45.129				
5,400.00	5,361.16	5,504.36	5,480.90	20.56	16.29	-0.02	302.87	-1,531.35	1,068.17	1,043.49	24.68	43.273				
5,500.00	5,459.86	5,605.09	5,581.04	20.99	16.67	-0.34	295.52	-1,523.22	1,042.95	1,017.76	25.19	41.409				
5,600.00	5,558.56	5,696.99	5,672.39	21.42	17.03	-0.69	288.14	-1,516.41	1,018.26	992.57	25.69	39.632				
5,700.00	5,657.26	5,791.40	5,766.23	21.85	17.39	-1.10	280.17	-1,509.81	993.94	967.74	26.20	37.933				
5,800.00	5,755.96	5,887.49	5,861.78	22.28	17.75	-1.50	272.53	-1,503.14	969.82	943.11	26.71	36.307				
5,900.00	5,854.66	5,986.51	5,960.28	22.71	18.13	-1.91	265.14	-1,496.12	945.68	918.46	27.22	34.743				
6,000.00	5,953.36	6,085.23	6,058.47	23.14	18.51	-2.32	257.92	-1,488.84	921.33	893.60	27.73	33.227				
6,100.00	6,052.06	6,184.77	6,157.45	23.57	18.89	-2.76	250.67	-1,481.25	896.79	868.55	28.24	31.760				
6,200.00	6,150.76	6,275.08	6,247.27	24.01	19.23	-3.18	244.07	-1,474.51	872.45	843.70	28.75	30.343				
6,300.00	6,249.46	6,360.18	6,331.96	24.44	19.56	-3.61	237.79	-1,469.07	849.20	819.92	29.27	29.008				
6,400.00	6,348.16	6,444.22	6,415.69	24.87	19.87	-4.03	232.09	-1,464.92	827.47	797.68	29.79	27.774				
6,500.00	6,446.86	6,528.43	6,499.73	25.30	20.17	-4.39	227.62	-1,461.99	807.40	777.09	30.30	26.644				
6,600.00	6,545.56	6,615.57	6,586.81	25.74	20.47	-4.66	224.87	-1,460.14	788.92	758.12	30.81	25.610				
6,700.00	6,644.26	6,709.49	6,680.72	26.17	20.79	-4.80	224.07	-1,458.87	771.49	740.19	31.30	24.647				
6,804.31	6,747.22	6,812.45	6,783.67	26.62	21.13	-4.94	223.51	-1,457.58	753.44	721.62	31.82	23.679				
6,900.00	6,841.85	6,906.62	6,877.82	27.03	21.44	-5.04	223.02	-1,456.39	738.06	705.76	32.29	22.855				
7,000.00	6,941.09	7,005.58	6,976.78	27.44	21.77	-5.14	222.48	-1,455.19	724.56	691.77	32.79	22.098				
7,100.00	7,040.61	7,098.96	7,070.15	27.83	22.08	-5.23	221.88	-1,454.29	713.90	680.62	33.28	21.452				
7,200.00	7,140.36	7,189.01	7,160.20	28.20	22.37	-5.32	221.22	-1,454.60	707.11	673.35	33.76	20.945				
7,300.00	7,240.26	7,283.02	7,254.19	28.55	22.66	-5.43	220.46	-1,456.08	704.14	669.91	34.23	20.569				
7,346.21	7,286.45	7,328.11	7,299.28	28.70	22.80	-5.48	220.03	-1,456.98	703.83	669.38	34.45	20.430 CC				
7,400.00	7,340.24	7,384.66	7,355.81	28.88	22.97	-5.54	219.43	-1,458.03	704.10	669.39	34.71	20.286				
7,420.77	7,361.00	7,406.48	7,377.63	28.95	23.04	-84.36	219.19	-1,458.38	704.35	669.55	34.81	20.235				
7,500.00	7,440.24	7,490.02	7,461.16	29.20	23.30	-84.44	218.27	-1,459.39	705.22	670.04	35.19	20.042				
7,600.00	7,540.24	7,591.25	7,562.38	29.52	23.62	-84.50	217.70	-1,460.09	705.86	670.20	35.66	19.797				
7,700.00	7,640.24	7,694.82	7,665.95	29.84	23.93	-84.48	217.93	-1,460.49	706.27	670.15	36.12	19.554				
7,800.00	7,740.24	7,795.29	7,766.42	30.16	24.25	-84.48	217.91	-1,460.55	706.33	669.74	36.59	19.306				
7,900.00	7,840.24	7,896.75	7,867.88	30.48	24.58	-84.48	217.91	-1,460.50	706.27	669.21	37.06	19.057				
7,966.81	7,907.04	7,965.12	7,936.25	30.69	24.80	-84.49	217.83	-1,460.32	706.09	668.71	37.38	18.889				
7,990.15	7,930.37	7,988.62	7,959.75	30.76	24.88	96.12	217.76	-1,460.23	706.04	668.55	37.49	18.832				
8,000.00	7,940.22	7,997.75	7,968.88	30.79	24.91	96.15	217.73	-1,460.20	706.06	668.52	37.54	18.810 ES				
8,050.00	7,989.94	8,043.86	8,014.99	30.94	25.06	96.47	217.63	-1,460.18	706.60	668.84	37.75	18.715				
8,100.00	8,039.04	8,089.67	8,060.80	31.08	25.21	97.02	217.61	-1,460.40	707.95	669.99	37.96	18.648				
8,150.00	8,087.13	8,135.56	8,106.69	31.21	25.35	97.81	217.76	-1,460.76	710.21	672.05	38.16	18.611				
8,200.00	8,133.85	8,180.72	8,151.84	31.33	25.48	98.78	218.10	-1,461.22	713.55	675.20	38.35	18.604 SF				
8,250.00	8,178.84	8,228.66	8,199.77	31.45	25.63	100.01	218.49	-1,461.63	718.04	679.49	38.55	18.627				
8,300.00	8,221.77	8,274.27	8,245.39	31.55	25.77	101.29	218.81	-1,461.83	723.86	685.12	38.75	18.682				
8,350.00	8,262.30	8,316.38	8,287.50	31.65	25.90	102.47	219.02	-1,461.91	731.40	692.46	38.95	18.778				
8,400.00	8,300.13	8,355.78	8,326.89	31.74	26.03	103.52	219.14	-1,461.90	741.01	701.85	39.16	18.922				
8,450.00	8,334.96	8,390.86	8,361.98	31.82	26.14	104.25	219.20	-1,461.85	752.99	713.61	39.39	19.118				
8,500.00	8,366.54	8,422.42	8,393.54	31.89	26.25	104.64	219.23	-1,461.82	767.63	728.00	39.62	19.373				
8,550.00	8,394.62	8,450.53	8,421.65	31.96	26.34	104.61	219.23	-1,461.80	785.06	745.19	39.87	19.690				
8,600.00	8,418.99	8,479.16	8,450.27	32.03	26.44	104.37	219.21	-1,461.72	805.30	765.17	40.13	20.068				
8,650.00	8,439.47	8,504.68	8,475.79	32.11	26.52	103.65	219.14	-1,461.50	828.27	787.88	40.39	20.507				
8,700.00	8,455.89	8,525.36	8,496.48	32.19	26.59	102.25	219.06	-1,461.20	853.91	813.26	40.65	21.008				
8,750.00	8,468.13	8,541.01	8,512.12	32.29	26.65	100.09	218.97	-1,460.92	882.09	841.19	40.90	21.569				
8,800.00	8,476.11	8,551.42	8,522.53	32.40	26.68	97.10	218.90	-1,460.69	912.58	871.45	41.13	22.186				
8,850.00	8,479.75	8,556.47	8,527.58	32.54	26.70	93.25	218.87	-1,460.58	945.09	903.73	41.35	22.854				
8,866.81	8,480.00	8,556.94	8,528.04	32.59	26.70	91.76	218.86	-1,460.57	956.40	914.97	41.42	23.088				

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 103H
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 103H	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				
8,900.00	8,480.00	8,557.25	8,528.36	32.70	26.70	91.78	218.86	-1,460.56	979.22	937.66	41.56	23.563				
9,000.00	8,480.00	8,558.21	8,529.31	33.09	26.70	91.86	218.85	-1,460.54	1,051.32	1,009.38	41.94	25.067				
9,100.00	8,480.00	8,559.18	8,530.29	33.57	26.71	91.94	218.85	-1,460.51	1,127.68	1,085.39	42.29	26.666				
9,200.00	8,480.00	8,560.17	8,531.28	34.14	26.71	92.02	218.84	-1,460.49	1,207.50	1,164.90	42.60	28.346				
9,300.00	8,480.00	8,561.19	8,532.29	34.79	26.71	92.10	218.83	-1,460.46	1,290.14	1,247.26	42.87	30.092				
9,400.00	8,480.00	8,562.22	8,533.32	35.50	26.72	92.19	218.82	-1,460.44	1,375.08	1,331.97	43.11	31.894				
9,500.00	8,480.00	8,563.27	8,534.37	36.28	26.72	92.27	218.82	-1,460.41	1,461.93	1,418.60	43.32	33.744				
9,600.00	8,480.00	8,564.34	8,535.44	37.11	26.73	92.36	218.81	-1,460.38	1,550.36	1,506.85	43.51	35.632				
9,700.00	8,480.00	8,565.43	8,536.54	38.01	26.73	92.45	218.80	-1,460.36	1,640.13	1,596.45	43.68	37.552				
9,800.00	8,480.00	8,566.55	8,537.65	38.95	26.73	92.54	218.79	-1,460.33	1,731.01	1,687.19	43.82	39.500				
9,900.00	8,480.00	8,567.69	8,538.79	39.94	26.74	92.63	218.78	-1,460.30	1,822.85	1,778.89	43.96	41.470				
10,000.00	8,480.00	8,568.85	8,539.95	40.97	26.74	92.73	218.77	-1,460.27	1,915.51	1,871.43	44.07	43.460				
10,100.00	8,480.00	8,570.03	8,541.14	42.04	26.74	92.82	218.76	-1,460.23	2,008.87	1,964.68	44.18	45.467				
10,200.00	8,480.00	8,571.24	8,542.34	43.14	26.75	92.92	218.75	-1,460.20	2,102.84	2,058.55	44.28	47.488				
10,300.00	8,480.00	8,563.73	8,534.84	44.29	26.72	92.31	218.82	-1,460.43	2,197.37	2,153.00	44.36	49.534				
10,400.00	8,480.00	8,564.28	8,535.39	45.46	26.73	92.36	218.82	-1,460.41	2,292.34	2,247.89	44.44	51.580				
10,500.00	8,480.00	8,564.83	8,535.93	46.66	26.73	92.40	218.81	-1,460.40	2,387.72	2,343.20	44.52	53.635				
10,600.00	8,480.00	8,565.37	8,536.48	47.89	26.73	92.44	218.81	-1,460.39	2,483.46	2,438.87	44.59	55.697				
10,700.00	8,480.00	8,565.91	8,537.02	49.14	26.73	92.49	218.81	-1,460.38	2,579.53	2,534.87	44.65	57.766				
10,800.00	8,480.00	8,566.45	8,537.55	50.42	26.73	92.53	218.80	-1,460.37	2,675.88	2,631.17	44.72	59.840				
10,900.00	8,480.00	8,566.98	8,538.08	51.72	26.73	92.58	218.80	-1,460.36	2,772.50	2,727.72	44.78	61.918				
11,000.00	8,480.00	8,567.51	8,538.61	53.03	26.74	92.62	218.80	-1,460.35	2,869.34	2,824.51	44.83	64.000				
11,100.00	8,480.00	8,568.03	8,539.13	54.37	26.74	92.66	218.79	-1,460.34	2,966.40	2,921.51	44.89	66.087				
11,200.00	8,480.00	8,568.55	8,539.66	55.72	26.74	92.70	218.79	-1,460.33	3,063.64	3,018.70	44.94	68.176				
11,300.00	8,480.00	8,569.07	8,540.17	57.09	26.74	92.75	218.79	-1,460.32	3,161.06	3,116.07	44.99	70.267				
11,400.00	8,480.00	8,569.58	8,540.69	58.47	26.74	92.79	218.78	-1,460.31	3,258.63	3,213.60	45.03	72.360				
11,500.00	8,480.00	8,570.09	8,541.20	59.86	26.75	92.83	218.78	-1,460.30	3,356.34	3,311.26	45.08	74.454				
11,600.00	8,480.00	8,570.60	8,541.71	61.27	26.75	92.87	218.78	-1,460.29	3,454.19	3,409.07	45.12	76.549				
11,700.00	8,480.00	8,571.11	8,542.21	62.69	26.75	92.91	218.77	-1,460.28	3,552.15	3,506.99	45.17	78.644				
11,800.00	8,480.00	8,571.61	8,542.71	64.13	26.75	92.95	218.77	-1,460.27	3,650.23	3,605.02	45.21	80.739				
11,900.00	8,480.00	8,572.11	8,543.21	65.57	26.75	92.99	218.77	-1,460.26	3,748.41	3,703.16	45.25	82.834				
12,000.00	8,480.00	8,572.60	8,543.70	67.02	26.75	93.03	218.77	-1,460.25	3,846.68	3,801.39	45.29	84.929				
12,100.00	8,480.00	8,573.09	8,544.19	68.48	26.76	93.07	218.76	-1,460.24	3,945.04	3,899.70	45.33	87.022				
12,200.00	8,480.00	8,573.58	8,544.68	69.95	26.76	93.11	218.76	-1,460.23	4,043.48	3,998.10	45.37	89.114				
12,300.00	8,480.00	8,574.07	8,545.17	71.42	26.76	93.15	218.76	-1,460.22	4,141.99	4,096.58	45.41	91.205				
12,400.00	8,480.00	8,574.55	8,545.65	72.91	26.76	93.19	218.75	-1,460.21	4,240.57	4,195.12	45.45	93.295				
12,500.00	8,480.00	8,575.03	8,546.13	74.40	26.76	93.23	218.75	-1,460.20	4,339.22	4,293.73	45.49	95.382				
12,600.00	8,480.00	8,575.50	8,546.61	75.90	26.76	93.27	218.75	-1,460.19	4,437.93	4,392.40	45.53	97.468				
12,700.00	8,480.00	8,575.98	8,547.08	77.40	26.77	93.31	218.75	-1,460.18	4,536.69	4,491.12	45.57	99.551				
12,800.00	8,480.00	8,576.45	8,547.55	78.91	26.77	93.35	218.74	-1,460.17	4,635.51	4,589.90	45.61	101.633				
12,900.00	8,480.00	8,576.91	8,548.02	80.43	26.77	93.38	218.74	-1,460.17	4,734.38	4,688.73	45.65	103.711				
13,000.00	8,480.00	8,577.38	8,548.48	81.95	26.77	93.42	218.74	-1,460.16	4,833.29	4,787.60	45.69	105.788				
13,100.00	8,480.00	8,577.84	8,548.94	83.47	26.77	93.46	218.73	-1,460.15	4,932.25	4,886.52	45.73	107.861				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - Plan #9		Offset Site Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1409-OWSG (Rev2) MWD, 11286-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
0.00	0.00	25.08	25.08	0.00	0.03	-71.37	580.68	-1,722.59	1,817.83							
100.00	100.00	120.02	120.02	0.13	0.18	-71.37	580.73	-1,722.80	1,818.06	1,817.84	0.22	8,424.848				
200.00	200.00	197.74	197.74	0.48	0.45	-71.38	580.68	-1,723.52	1,818.94	1,818.28	0.66	2,746.992				
300.00	300.00	290.39	290.36	0.84	0.78	-71.43	579.88	-1,725.71	1,820.90	1,819.74	1.15	1,582.651				
400.00	400.00	373.85	373.78	1.20	1.09	-71.47	579.20	-1,728.13	1,823.37	1,821.75	1.62	1,127.026				
500.00	500.00	466.60	466.47	1.56	1.42	-71.52	578.60	-1,731.34	1,826.45	1,824.34	2.11	866.604				
600.00	600.00	566.26	566.05	1.92	1.78	-71.59	577.61	-1,735.08	1,829.70	1,827.09	2.61	699.828				
700.00	700.00	658.00	657.72	2.28	2.12	-71.65	576.69	-1,738.74	1,833.17	1,830.07	3.10	590.896				
800.00	800.00	816.00	815.57	2.63	2.68	-71.73	575.32	-1,743.00	1,835.53	1,831.78	3.75	489.695				
900.00	900.00	857.04	856.57	2.99	2.83	-71.76	574.92	-1,744.74	1,838.35	1,834.24	4.11	447.416				
1,000.00	1,000.00	951.56	950.99	3.35	3.17	-71.83	574.08	-1,749.00	1,842.36	1,837.76	4.60	400.218				
1,100.00	1,100.00	1,069.65	1,068.93	3.71	3.61	-71.96	571.44	-1,754.45	1,846.07	1,840.91	5.16	357.855				
1,200.00	1,200.00	1,155.25	1,154.40	4.07	3.92	-72.07	568.98	-1,758.42	1,849.59	1,843.96	5.63	328.405				
1,300.00	1,300.00	1,259.04	1,258.06	4.43	4.30	-72.18	566.92	-1,763.26	1,853.42	1,847.27	6.15	301.283				
1,400.00	1,400.00	1,341.82	1,340.71	4.79	4.57	-72.27	565.03	-1,767.34	1,857.44	1,850.85	6.59	281.804				
1,500.00	1,500.00	1,409.00	1,407.71	5.14	4.70	-72.37	562.99	-1,771.87	1,862.96	1,856.02	6.94	268.575				
1,600.00	1,600.00	1,474.71	1,473.10	5.50	4.73	-72.50	560.35	-1,777.74	1,870.26	1,863.05	7.21	259.230				
1,700.00	1,700.00	1,558.32	1,556.10	5.86	4.80	-72.72	556.01	-1,786.81	1,879.07	1,871.55	7.52	249.984				
1,800.00	1,800.00	1,759.66	1,756.25	6.22	5.03	-73.22	544.12	-1,804.80	1,886.34	1,878.41	7.94	237.638				
1,900.00	1,900.00	2,082.02	2,077.82	6.58	5.48	-73.69	526.74	-1,799.87	1,881.46	1,872.98	8.49	221.691				
2,000.00	2,000.00	2,193.80	2,189.20	6.94	5.65	-73.73	522.66	-1,791.38	1,873.15	1,864.27	8.88	210.906				
2,100.00	2,099.99	2,315.73	2,310.59	7.29	5.87	5.01	517.23	-1,781.23	1,862.63	1,853.33	9.29	200.419				
2,200.00	2,199.91	2,408.94	2,403.30	7.63	6.06	4.95	512.02	-1,773.22	1,848.93	1,839.24	9.69	190.809				
2,300.00	2,299.69	2,505.06	2,498.95	7.98	6.27	4.90	506.69	-1,765.29	1,833.00	1,822.90	10.10	181.524				
2,400.00	2,399.27	2,605.75	2,599.10	8.34	6.50	4.81	500.07	-1,757.27	1,814.48	1,803.96	10.52	172.479				
2,500.00	2,498.57	2,705.07	2,697.82	8.69	6.76	4.69	492.25	-1,749.60	1,793.30	1,782.34	10.95	163.769				
2,600.00	2,597.54	2,778.10	2,770.44	9.06	6.95	4.62	486.58	-1,744.41	1,770.18	1,758.83	11.35	155.900				
2,616.45	2,613.78	2,801.00	2,793.24	9.12	7.02	4.60	484.99	-1,742.95	1,766.31	1,754.87	11.44	154.458				
2,700.00	2,696.24	2,858.91	2,850.93	9.43	7.18	4.53	481.33	-1,739.41	1,746.61	1,734.84	11.77	148.400				
2,800.00	2,794.94	3,053.66	3,044.54	9.81	7.73	4.40	469.99	-1,722.41	1,720.99	1,708.67	12.32	139.710				
2,900.00	2,893.64	3,159.24	3,149.03	10.19	8.06	4.32	462.65	-1,709.23	1,691.34	1,678.57	12.77	132.454				
3,000.00	2,992.34	3,235.18	3,224.25	10.58	8.30	4.22	456.60	-1,700.73	1,662.69	1,649.49	13.20	125.980				
3,100.00	3,091.04	3,331.97	3,320.12	10.97	8.62	4.04	447.43	-1,691.11	1,634.84	1,621.18	13.66	119.706				
3,200.00	3,189.74	3,424.92	3,412.08	11.37	8.94	3.82	437.77	-1,681.72	1,606.61	1,592.50	14.12	113.800				
3,300.00	3,288.45	3,501.66	3,488.12	11.77	9.21	3.66	430.45	-1,674.39	1,579.16	1,564.59	14.56	108.428				
3,400.00	3,387.15	3,574.02	3,559.94	12.17	9.46	3.50	423.95	-1,668.50	1,553.16	1,538.15	15.01	103.493				
3,500.00	3,485.85	3,649.00	3,634.48	12.58	9.72	3.34	417.58	-1,663.41	1,528.58	1,513.12	15.46	98.904				
3,600.00	3,584.55	3,715.05	3,700.24	12.98	9.94	3.20	412.37	-1,660.01	1,505.70	1,489.81	15.89	94.746				
3,700.00	3,683.25	3,812.84	3,797.74	13.39	10.27	3.03	405.93	-1,656.14	1,484.28	1,467.91	16.37	90.672				
3,800.00	3,781.95	3,962.89	3,947.19	13.80	10.79	2.83	397.17	-1,646.34	1,460.60	1,443.69	16.91	86.383				
3,900.00	3,880.65	4,064.39	4,047.97	14.22	11.15	2.59	388.23	-1,638.18	1,434.80	1,417.40	17.40	82.472				
4,000.00	3,979.35	4,161.76	4,144.68	14.63	11.51	2.35	379.84	-1,630.68	1,409.42	1,391.53	17.88	78.811				
4,100.00	4,078.05	4,265.91	4,248.22	15.05	11.88	2.24	374.14	-1,620.97	1,383.22	1,364.85	18.37	75.302				
4,200.00	4,176.75	4,365.92	4,347.68	15.47	12.23	2.21	370.57	-1,611.13	1,356.99	1,338.14	18.85	72.002				
4,300.00	4,275.45	4,485.04	4,466.02	15.89	12.65	2.19	366.24	-1,598.25	1,329.86	1,310.52	19.33	68.785				
4,400.00	4,374.15	4,574.89	4,555.14	16.31	12.99	2.08	360.84	-1,588.26	1,301.87	1,282.05	19.81	65.703				
4,500.00	4,472.85	4,654.29	4,633.92	16.73	13.28	1.91	354.65	-1,580.53	1,274.80	1,254.50	20.30	62.809				
4,600.00	4,571.55	4,731.07	4,710.21	17.15	13.57	1.72	348.75	-1,574.18	1,249.14	1,228.37	20.78	60.121				
4,700.00	4,670.25	4,814.13	4,792.90	17.57	13.88	1.56	343.63	-1,568.34	1,224.99	1,203.73	21.26	57.618				
4,800.00	4,768.95	4,905.78	4,884.19	18.00	14.21	1.37	337.89	-1,562.43	1,201.40	1,179.65	21.75	55.233				
4,900.00	4,867.65	4,993.24	4,971.32	18.42	14.53	1.16	332.16	-1,557.43	1,178.48	1,156.24	22.24	52.987				
5,000.00	4,966.35	5,081.27	5,059.08	18.85	14.85	0.96	326.82	-1,553.15	1,156.46	1,133.72	22.73	50.876				

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 103H
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 103H	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				
5,100.00	5,065.05	5,178.69	5,156.24	19.28	15.20	0.75	321.44	-1,548.60	1,134.77	1,111.55	23.23	48.852				
5,200.00	5,163.76	5,277.59	5,254.88	19.70	15.55	0.53	316.03	-1,543.99	1,113.11	1,089.38	23.73	46.910				
5,300.00	5,262.46	5,381.07	5,358.08	20.13	15.93	0.29	310.28	-1,538.76	1,091.08	1,066.85	24.23	45.027				
5,400.00	5,361.16	5,504.34	5,480.91	20.56	16.38	0.00	303.22	-1,531.23	1,068.13	1,043.39	24.74	43.175				
5,500.00	5,459.86	5,605.09	5,581.06	20.99	16.76	-0.32	295.87	-1,523.11	1,042.91	1,017.66	25.24	41.315				
5,600.00	5,558.56	5,696.99	5,672.41	21.42	17.11	-0.67	288.49	-1,516.30	1,018.22	992.47	25.75	39.542				
5,700.00	5,657.26	5,791.40	5,766.25	21.85	17.48	-1.07	280.52	-1,509.69	993.90	967.64	26.26	37.849				
5,800.00	5,755.96	5,887.49	5,861.80	22.28	17.84	-1.48	272.88	-1,503.03	969.77	943.00	26.77	36.226				
5,900.00	5,854.66	5,986.51	5,960.29	22.71	18.22	-1.88	265.49	-1,496.01	945.62	918.34	27.28	34.666				
6,000.00	5,953.36	6,085.23	6,058.48	23.14	18.60	-2.30	258.27	-1,488.73	921.27	893.48	27.79	33.154				
6,100.00	6,052.06	6,184.77	6,157.47	23.57	18.98	-2.74	251.02	-1,481.14	896.73	868.43	28.30	31.691				
6,200.00	6,150.76	6,275.08	6,247.29	24.01	19.33	-3.16	244.42	-1,474.39	872.39	843.57	28.81	30.277				
6,300.00	6,249.46	6,360.18	6,331.98	24.44	19.65	-3.59	238.14	-1,468.96	849.13	819.80	29.34	28.945				
6,400.00	6,348.16	6,444.21	6,415.71	24.87	19.96	-4.01	232.44	-1,464.81	827.41	797.55	29.85	27.714				
6,500.00	6,446.86	6,528.42	6,499.75	25.30	20.27	-4.37	227.97	-1,461.87	807.33	776.96	30.37	26.587				
6,600.00	6,545.56	6,615.56	6,586.82	25.74	20.57	-4.63	225.22	-1,460.02	788.85	757.98	30.87	25.555				
6,700.00	6,644.26	6,709.47	6,680.72	26.17	20.88	-4.77	224.42	-1,458.76	771.41	740.05	31.36	24.595				
6,804.31	6,747.22	6,812.43	6,783.67	26.62	21.23	-4.91	223.86	-1,457.47	753.37	721.48	31.88	23.629				
6,900.00	6,841.85	6,906.59	6,877.82	27.03	21.54	-5.01	223.37	-1,456.27	737.98	705.62	32.36	22.807				
7,000.00	6,941.09	7,005.56	6,976.78	27.44	21.87	-5.11	222.83	-1,455.08	724.49	691.63	32.85	22.052				
7,100.00	7,040.61	7,098.94	7,070.15	27.83	22.18	-5.20	222.23	-1,454.18	713.82	680.48	33.35	21.407				
7,200.00	7,140.36	7,188.99	7,160.21	28.20	22.47	-5.30	221.57	-1,454.48	707.03	673.21	33.83	20.902				
7,300.00	7,240.26	7,283.00	7,254.20	28.55	22.76	-5.40	220.81	-1,455.97	704.06	669.76	34.30	20.527				
7,346.24	7,286.48	7,328.13	7,299.31	28.70	22.90	-5.45	220.38	-1,456.86	703.75	669.24	34.52	20.388	CC			
7,400.00	7,340.24	7,384.64	7,355.81	28.88	23.08	-5.51	219.78	-1,457.92	704.02	669.25	34.78	20.244				
7,420.77	7,361.00	7,406.47	7,377.64	28.95	23.14	-84.33	219.54	-1,458.26	704.27	669.40	34.88	20.193				
7,500.00	7,440.24	7,490.00	7,461.16	29.20	23.41	-84.42	218.62	-1,459.28	705.15	669.89	35.26	20.001				
7,600.00	7,540.24	7,591.23	7,562.38	29.52	23.72	-84.47	218.05	-1,459.98	705.78	670.05	35.73	19.756				
7,700.00	7,640.24	7,694.79	7,665.95	29.84	24.04	-84.45	218.28	-1,460.38	706.19	670.00	36.19	19.514				
7,800.00	7,740.24	7,795.26	7,766.42	30.16	24.36	-84.45	218.26	-1,460.44	706.25	669.59	36.66	19.266				
7,900.00	7,840.24	7,896.73	7,867.88	30.48	24.68	-84.45	218.26	-1,460.39	706.19	669.06	37.13	19.018				
7,966.81	7,907.04	7,965.09	7,936.25	30.69	24.91	-84.46	218.18	-1,460.21	706.01	668.56	37.45	18.850				
7,990.08	7,930.30	7,988.54	7,959.69	30.76	24.99	96.15	218.11	-1,460.11	705.96	668.40	37.56	18.794				
8,000.00	7,940.22	7,997.73	7,968.88	30.79	25.02	96.18	218.08	-1,460.08	705.98	668.37	37.61	18.772	ES			
8,050.00	7,989.94	8,043.84	8,015.00	30.94	25.17	96.50	217.98	-1,460.07	706.52	668.69	37.83	18.678				
8,100.00	8,039.04	8,089.65	8,060.80	31.08	25.32	97.05	217.96	-1,460.28	707.88	669.84	38.04	18.611				
8,150.00	8,087.13	8,135.54	8,106.69	31.21	25.46	97.84	218.10	-1,460.64	710.14	671.91	38.23	18.574				
8,200.00	8,133.85	8,180.70	8,151.84	31.33	25.60	98.81	218.45	-1,461.11	713.49	675.07	38.43	18.567	SF			
8,250.00	8,178.84	8,228.63	8,199.77	31.45	25.74	100.04	218.84	-1,461.52	717.99	679.37	38.62	18.590				
8,300.00	8,221.77	8,274.25	8,245.39	31.55	25.88	101.31	219.16	-1,461.72	723.83	685.01	38.82	18.646				
8,350.00	8,262.30	8,316.35	8,287.49	31.65	26.02	102.50	219.37	-1,461.79	731.39	692.36	39.02	18.742				
8,400.00	8,300.13	8,355.75	8,326.89	31.74	26.14	103.54	219.49	-1,461.79	741.01	701.77	39.24	18.885				
8,450.00	8,334.96	8,390.84	8,361.98	31.82	26.26	104.27	219.55	-1,461.74	753.01	713.55	39.46	19.082				
8,500.00	8,366.54	8,422.40	8,393.54	31.89	26.36	104.65	219.58	-1,461.71	767.66	727.96	39.70	19.337				
8,550.00	8,394.62	8,450.51	8,421.65	31.96	26.45	104.62	219.58	-1,461.68	785.11	745.16	39.95	19.655				
8,600.00	8,418.99	8,479.13	8,450.27	32.03	26.55	104.38	219.56	-1,461.61	805.37	765.17	40.20	20.033				
8,650.00	8,439.47	8,504.65	8,475.79	32.11	26.64	103.66	219.49	-1,461.38	828.35	787.89	40.46	20.471				
8,700.00	8,455.89	8,525.34	8,496.47	32.19	26.71	102.25	219.41	-1,461.09	854.01	813.29	40.72	20.972				
8,750.00	8,468.13	8,540.98	8,512.11	32.29	26.76	100.09	219.32	-1,460.80	882.21	841.24	40.97	21.533				
8,800.00	8,476.11	8,551.40	8,522.53	32.40	26.80	97.11	219.25	-1,460.58	912.72	871.51	41.21	22.149				
8,850.00	8,479.75	8,556.44	8,527.57	32.54	26.81	93.25	219.22	-1,460.46	945.23	903.80	41.43	22.817				
8,866.81	8,480.00	8,556.91	8,528.04	32.59	26.81	91.76	219.21	-1,460.45	956.55	915.05	41.50	23.051				

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 103H
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 103H	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				
8,900.00	8,480.00	8,557.22	8,528.35	32.70	26.82	91.78	219.21	-1,460.45	979.38	937.75	41.63	23.525				
9,000.00	8,480.00	8,558.18	8,529.31	33.09	26.82	91.86	219.20	-1,460.42	1,051.50	1,009.49	42.01	25.027				
9,100.00	8,480.00	8,559.15	8,530.28	33.57	26.82	91.94	219.20	-1,460.40	1,127.88	1,085.52	42.36	26.625				
9,200.00	8,480.00	8,560.15	8,531.27	34.14	26.83	92.02	219.19	-1,460.38	1,207.72	1,165.05	42.67	28.303				
9,300.00	8,480.00	8,561.16	8,532.28	34.79	26.83	92.10	219.18	-1,460.35	1,290.37	1,247.42	42.94	30.048				
9,400.00	8,480.00	8,562.19	8,533.31	35.50	26.83	92.19	219.17	-1,460.32	1,375.32	1,332.14	43.18	31.848				
9,500.00	8,480.00	8,563.24	8,534.36	36.28	26.84	92.27	219.17	-1,460.30	1,462.18	1,418.78	43.39	33.695				
9,600.00	8,480.00	8,564.31	8,535.44	37.11	26.84	92.36	219.16	-1,460.27	1,550.62	1,507.04	43.58	35.580				
9,700.00	8,480.00	8,565.40	8,536.53	38.01	26.84	92.45	219.15	-1,460.24	1,640.39	1,596.64	43.75	37.498				
9,800.00	8,480.00	8,566.52	8,537.64	38.95	26.85	92.54	219.14	-1,460.21	1,731.28	1,687.39	43.89	39.443				
9,900.00	8,480.00	8,567.66	8,538.78	39.94	26.85	92.63	219.13	-1,460.18	1,823.13	1,779.10	44.03	41.411				
10,000.00	8,480.00	8,568.82	8,539.94	40.97	26.85	92.73	219.12	-1,460.15	1,915.79	1,871.64	44.14	43.399				
10,100.00	8,480.00	8,570.00	8,541.13	42.04	26.86	92.82	219.11	-1,460.12	2,009.15	1,964.90	44.25	45.403				
10,200.00	8,480.00	8,571.21	8,542.33	43.14	26.86	92.92	219.10	-1,460.09	2,103.13	2,058.77	44.35	47.421				
10,300.00	8,480.00	8,563.72	8,534.84	44.29	26.84	92.31	219.17	-1,460.31	2,197.66	2,153.23	44.43	49.464				
10,400.00	8,480.00	8,564.27	8,535.39	45.46	26.84	92.36	219.17	-1,460.30	2,292.63	2,248.12	44.51	51.507				
10,500.00	8,480.00	8,564.81	8,535.94	46.66	26.84	92.40	219.16	-1,460.29	2,388.02	2,343.43	44.59	53.559				
10,600.00	8,480.00	8,565.35	8,536.48	47.89	26.84	92.45	219.16	-1,460.28	2,483.76	2,439.11	44.66	55.618				
10,700.00	8,480.00	8,565.89	8,537.02	49.14	26.85	92.49	219.16	-1,460.27	2,579.83	2,535.11	44.72	57.685				
10,800.00	8,480.00	8,566.43	8,537.55	50.42	26.85	92.53	219.15	-1,460.26	2,676.19	2,631.40	44.79	59.755				
10,900.00	8,480.00	8,566.96	8,538.09	51.72	26.85	92.58	219.15	-1,460.25	2,772.81	2,727.96	44.85	61.831				
11,000.00	8,480.00	8,567.49	8,538.61	53.03	26.85	92.62	219.15	-1,460.24	2,869.65	2,824.75	44.90	63.910				
11,100.00	8,480.00	8,568.01	8,539.14	54.37	26.85	92.66	219.14	-1,460.22	2,966.71	2,921.75	44.95	65.993				
11,200.00	8,480.00	8,568.53	8,539.66	55.72	26.85	92.70	219.14	-1,460.21	3,063.95	3,018.95	45.01	68.080				
11,300.00	8,480.00	8,569.05	8,540.18	57.09	26.86	92.75	219.14	-1,460.20	3,161.37	3,116.32	45.05	70.168				
11,400.00	8,480.00	8,569.57	8,540.69	58.47	26.86	92.79	219.13	-1,460.19	3,258.94	3,213.84	45.10	72.258				
11,500.00	8,480.00	8,570.08	8,541.20	59.86	26.86	92.83	219.13	-1,460.18	3,356.66	3,311.51	45.15	74.349				
11,600.00	8,480.00	8,570.58	8,541.71	61.27	26.86	92.87	219.13	-1,460.17	3,454.51	3,409.32	45.19	76.441				
11,700.00	8,480.00	8,571.09	8,542.21	62.69	26.86	92.91	219.12	-1,460.16	3,552.47	3,507.24	45.24	78.533				
11,800.00	8,480.00	15,407.28	12,050.00	64.13	75.37	168.67	-3,362.20	-1,432.97	3,614.00	3,562.79	51.21	70.572				
11,900.00	8,480.00	15,507.28	12,050.00	65.57	76.79	168.66	-3,462.20	-1,432.09	3,614.02	3,561.86	52.16	69.284				
12,000.00	8,480.00	15,607.28	12,050.00	67.02	78.23	168.66	-3,562.20	-1,431.22	3,614.04	3,560.92	53.12	68.032				
12,100.00	8,480.00	15,707.28	12,050.00	68.48	79.68	168.66	-3,662.19	-1,430.34	3,614.06	3,559.97	54.09	66.816				
12,200.00	8,480.00	15,807.28	12,050.00	69.95	81.13	168.66	-3,762.19	-1,429.47	3,614.09	3,559.02	55.07	65.632				
12,300.00	8,480.00	15,907.28	12,050.00	71.42	82.59	168.66	-3,862.18	-1,428.59	3,614.11	3,558.06	56.05	64.481				
12,400.00	8,480.00	16,007.28	12,050.00	72.91	84.06	168.65	-3,962.18	-1,427.71	3,614.13	3,557.09	57.04	63.361				
12,500.00	8,480.00	16,107.28	12,050.00	74.40	85.54	168.65	-4,062.18	-1,426.84	3,614.16	3,556.12	58.04	62.272				
12,600.00	8,480.00	16,207.28	12,050.00	75.90	87.02	168.65	-4,162.17	-1,425.96	3,614.18	3,555.14	59.04	61.213				
12,700.00	8,480.00	16,307.28	12,050.00	77.40	88.51	168.65	-4,262.17	-1,425.09	3,614.20	3,554.15	60.05	60.183				
12,800.00	8,480.00	16,407.28	12,050.00	78.91	90.00	168.65	-4,362.17	-1,424.21	3,614.23	3,553.15	61.07	59.181				
12,900.00	8,480.00	16,507.28	12,050.00	80.43	91.50	168.65	-4,462.16	-1,423.33	3,614.25	3,552.16	62.09	58.208				
13,000.00	8,480.00	16,607.28	12,050.00	81.95	93.00	168.64	-4,562.16	-1,422.46	3,614.27	3,551.15	63.12	57.259				
13,100.00	8,480.00	16,707.28	12,050.00	83.47	94.51	168.64	-4,662.15	-1,421.58	3,614.29	3,550.14	64.16	56.337				
13,200.00	8,480.00	16,807.28	12,050.00	85.00	96.02	168.64	-4,762.15	-1,420.70	3,614.32	3,549.12	65.19	55.440				
13,300.00	8,480.00	16,907.28	12,050.00	86.54	97.54	168.64	-4,862.15	-1,419.83	3,614.34	3,548.10	66.24	54.568				
13,400.00	8,480.00	17,007.28	12,050.00	88.08	99.06	168.64	-4,962.14	-1,418.95	3,614.36	3,547.08	67.28	53.720				
13,500.00	8,480.00	17,107.28	12,050.00	89.62	100.59	168.63	-5,062.14	-1,418.08	3,614.39	3,546.05	68.33	52.895				
13,600.00	8,480.00	17,207.28	12,050.00	91.17	102.12	168.63	-5,162.13	-1,417.20	3,614.41	3,545.02	69.38	52.092				
13,700.00	8,480.00	17,307.28	12,050.00	92.72	103.65	168.63	-5,262.13	-1,416.32	3,614.43	3,543.99	70.44	51.310				
13,800.00	8,480.00	17,407.28	12,050.00	94.27	105.19	168.63	-5,362.13	-1,415.45	3,614.45	3,542.95	71.51	50.548				
13,900.00	8,480.00	17,507.28	12,050.00	95.83	106.73	168.63	-5,462.12	-1,414.57	3,614.48	3,541.91	72.57	49.806				
14,000.00	8,480.00	17,607.28	12,050.00	97.39	108.28	168.63	-5,562.12	-1,413.70	3,614.50	3,540.86	73.64	49.084				

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 103H
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 103H	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				
14,100.00	8,480.00	17,707.28	12,050.00	98.95	109.82	168.62	-5,662.11	-1,412.82	3,614.52	3,539.81	74.71	48.380				
14,200.00	8,480.00	17,807.28	12,050.00	100.52	111.37	168.62	-5,762.11	-1,411.94	3,614.55	3,538.76	75.79	47.694				
14,300.00	8,480.00	17,907.28	12,050.00	102.09	112.93	168.62	-5,862.11	-1,411.07	3,614.57	3,537.70	76.87	47.025				
14,400.00	8,480.00	18,007.28	12,050.00	103.66	114.48	168.62	-5,962.10	-1,410.19	3,614.59	3,536.65	77.95	46.373				
14,500.00	8,480.00	18,107.28	12,050.00	105.23	116.04	168.62	-6,062.10	-1,409.32	3,614.62	3,535.59	79.03	45.737				
14,600.00	8,480.00	18,207.28	12,050.00	106.81	117.60	168.61	-6,162.10	-1,408.44	3,614.64	3,534.52	80.12	45.117				
14,700.00	8,480.00	18,307.28	12,050.00	108.39	119.16	168.61	-6,262.09	-1,407.56	3,614.66	3,533.46	81.20	44.513				
14,800.00	8,480.00	18,407.28	12,050.00	109.97	120.73	168.61	-6,362.09	-1,406.69	3,614.68	3,532.39	82.29	43.924				
14,900.00	8,480.00	18,507.28	12,050.00	111.55	122.30	168.61	-6,462.08	-1,405.81	3,614.71	3,531.32	83.39	43.349				
15,000.00	8,480.00	18,607.28	12,050.00	113.13	123.87	168.61	-6,562.08	-1,404.94	3,614.73	3,530.25	84.48	42.788				
15,100.00	8,480.00	18,707.28	12,050.00	114.72	125.44	168.61	-6,662.08	-1,404.06	3,614.75	3,529.18	85.58	42.241				
15,200.00	8,480.00	18,807.28	12,050.00	116.31	127.01	168.60	-6,762.07	-1,403.18	3,614.78	3,528.10	86.67	41.706				
15,300.00	8,480.00	18,907.28	12,050.00	117.90	128.59	168.60	-6,862.07	-1,402.31	3,614.80	3,527.03	87.77	41.183				
15,400.00	8,480.00	19,007.28	12,050.00	119.49	130.17	168.60	-6,962.06	-1,401.43	3,614.82	3,525.95	88.88	40.673				
15,500.00	8,480.00	19,107.28	12,050.00	121.08	131.75	168.60	-7,062.06	-1,400.55	3,614.85	3,524.87	89.98	40.174				
15,600.00	8,480.00	19,207.28	12,050.00	122.68	133.33	168.60	-7,162.06	-1,399.68	3,614.87	3,523.78	91.09	39.686				
15,700.00	8,480.00	19,307.28	12,050.00	124.27	134.91	168.59	-7,262.05	-1,398.80	3,614.89	3,522.70	92.19	39.210				
15,800.00	8,480.00	19,407.28	12,050.00	125.87	136.50	168.59	-7,362.05	-1,397.93	3,614.91	3,521.61	93.30	38.744				
15,900.00	8,480.00	19,507.28	12,050.00	127.47	138.08	168.59	-7,462.04	-1,397.05	3,614.94	3,520.52	94.41	38.288				
16,000.00	8,480.00	19,607.28	12,050.00	129.07	139.67	168.59	-7,562.04	-1,396.17	3,614.96	3,519.43	95.53	37.842				
16,100.00	8,480.00	19,707.28	12,050.00	130.67	141.26	168.59	-7,662.04	-1,395.30	3,614.98	3,518.34	96.64	37.406				
16,200.00	8,480.00	19,807.28	12,050.00	132.27	142.85	168.59	-7,762.03	-1,394.42	3,615.01	3,517.25	97.76	36.980				
16,300.00	8,480.00	19,907.28	12,050.00	133.88	144.44	168.58	-7,862.03	-1,393.55	3,615.03	3,516.16	98.87	36.562				
16,400.00	8,480.00	20,007.28	12,050.00	135.48	146.04	168.58	-7,962.02	-1,392.67	3,615.05	3,515.06	99.99	36.154				
16,500.00	8,480.00	20,107.28	12,050.00	137.09	147.63	168.58	-8,062.02	-1,391.79	3,615.08	3,513.97	101.11	35.754				
16,600.00	8,480.00	20,207.28	12,050.00	138.70	149.23	168.58	-8,162.02	-1,390.92	3,615.10	3,512.87	102.23	35.362				
16,700.00	8,480.00	20,307.28	12,050.00	140.30	150.82	168.58	-8,262.01	-1,390.04	3,615.12	3,511.77	103.35	34.978				
16,800.00	8,480.00	20,407.28	12,050.00	141.91	152.42	168.57	-8,362.01	-1,389.17	3,615.15	3,510.67	104.48	34.602				
16,900.00	8,480.00	20,507.28	12,050.00	143.52	154.02	168.57	-8,462.01	-1,388.29	3,615.17	3,509.57	105.60	34.234				
17,000.00	8,480.00	20,607.28	12,050.00	145.13	155.62	168.57	-8,562.00	-1,387.41	3,615.19	3,508.46	106.73	33.873				
17,100.00	8,480.00	20,707.28	12,050.00	146.75	157.22	168.57	-8,662.00	-1,386.54	3,615.21	3,507.36	107.85	33.520				
17,200.00	8,480.00	20,807.28	12,050.00	148.36	158.83	168.57	-8,761.99	-1,385.66	3,615.24	3,506.26	108.98	33.174				
17,300.00	8,480.00	20,907.28	12,050.00	149.97	160.43	168.57	-8,861.99	-1,384.79	3,615.26	3,505.16	110.11	32.834				
17,400.00	8,480.00	21,007.28	12,050.00	151.59	162.03	168.56	-8,961.99	-1,383.91	3,615.28	3,504.05	111.23	32.502				
17,500.00	8,480.00	21,107.28	12,050.00	153.20	163.64	168.56	-9,061.98	-1,383.03	3,615.31	3,502.95	112.36	32.176				
17,600.00	8,480.00	21,207.28	12,050.00	154.82	165.25	168.56	-9,161.98	-1,382.16	3,615.33	3,501.84	113.49	31.856				
17,700.00	8,480.00	21,307.28	12,050.00	156.44	166.85	168.56	-9,261.97	-1,381.28	3,615.35	3,500.73	114.62	31.542				
17,800.00	8,480.00	21,407.28	12,050.00	158.05	168.46	168.56	-9,361.97	-1,380.40	3,615.38	3,499.63	115.75	31.234				
17,900.00	8,480.00	21,507.28	12,050.00	159.67	170.07	168.55	-9,461.97	-1,379.53	3,615.40	3,498.52	116.88	30.932				
18,000.00	8,480.00	21,607.28	12,050.00	161.29	171.68	168.55	-9,561.96	-1,378.65	3,615.42	3,497.41	118.01	30.636				
18,100.00	8,480.00	21,707.28	12,050.00	162.91	173.29	168.55	-9,661.96	-1,377.78	3,615.45	3,496.30	119.15	30.344				
18,200.00	8,480.00	21,807.28	12,050.00	164.53	174.90	168.55	-9,761.95	-1,376.90	3,615.47	3,495.19	120.28	30.058				
18,300.00	8,480.00	21,907.28	12,050.00	166.15	176.51	168.55	-9,861.95	-1,376.02	3,615.49	3,494.08	121.42	29.778				
18,400.00	8,480.00	22,007.28	12,050.00	167.77	178.12	168.55	-9,961.95	-1,375.15	3,615.52	3,492.96	122.55	29.502				
18,500.00	8,480.00	22,107.28	12,050.00	169.40	179.74	168.54	-10,061.94	-1,374.27	3,615.54	3,491.85	123.69	29.231				
18,600.00	8,480.00	22,207.28	12,050.00	171.02	181.35	168.54	-10,161.94	-1,373.40	3,615.56	3,490.74	124.82	28.965				
18,700.00	8,480.00	22,307.28	12,050.00	172.64	182.97	168.54	-10,261.93	-1,372.52	3,615.58	3,489.62	125.96	28.704				
18,800.00	8,480.00	22,407.28	12,050.00	174.26	184.58	168.54	-10,361.93	-1,371.64	3,615.61	3,488.51	127.10	28.447				
18,900.00	8,480.00	22,507.28	12,050.00	175.89	186.20	168.54	-10,461.93	-1,370.77	3,615.63	3,487.39	128.24	28.194				
19,000.00	8,480.00	22,607.28	12,050.00	177.51	187.81	168.53	-10,561.92	-1,369.89	3,615.65	3,486.27	129.38	27.946				
19,100.00	8,480.00	22,707.27	12,050.00	179.14	189.43	168.53	-10,661.92	-1,369.02	3,615.68	3,485.16	130.52	27.702				
19,200.00	8,480.00	22,807.27	12,050.00	180.76	191.05	168.53	-10,761.92	-1,368.14	3,615.70	3,484.04	131.66	27.462				

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 103H
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 103H	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 - Plan #9												Offset Well Error:	0.00 usft
Survey Program: 112-OWSG (Rev2) MWD, 1409-OWSG (Rev2) MWD, 11286-OWSG (Rev2) MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,300.00	8,480.00	22,907.27	12,050.00	182.39	192.67	168.53	-10,861.91	-1,367.26	3,615.72	3,482.92	132.80	27.226	
19,400.00	8,480.00	23,007.27	12,050.00	184.02	194.29	168.53	-10,961.91	-1,366.39	3,615.75	3,481.80	133.94	26.994	
19,500.00	8,480.00	23,107.27	12,050.00	185.64	195.91	168.53	-11,061.90	-1,365.51	3,615.77	3,480.68	135.09	26.766	
19,600.00	8,480.00	23,207.27	12,050.00	187.27	197.53	168.52	-11,161.90	-1,364.64	3,615.79	3,479.56	136.23	26.542	
19,700.00	8,480.00	23,307.27	12,050.00	188.90	199.15	168.52	-11,261.90	-1,363.76	3,615.82	3,478.44	137.37	26.321	
19,800.00	8,480.00	23,407.27	12,050.00	190.53	200.75	168.52	-11,361.89	-1,362.88	3,615.84	3,477.34	138.50	26.108	
19,899.80	8,480.00	23,504.65	12,050.00	192.15	202.16	168.52	-11,459.26	-1,362.03	3,615.86	3,476.49	139.37	25.944	



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	-82.25	500.50	-3,678.35	3,712.24					
100.00	100.00	139.00	139.00	0.13	0.27	-82.25	500.50	-3,678.35	3,712.24	3,711.95	0.29	N/A		
200.00	200.00	239.00	239.00	0.48	0.62	-82.25	500.50	-3,678.35	3,712.24	3,711.46	0.79	4,702.258		
300.00	300.00	339.00	339.00	0.84	0.98	-82.25	500.50	-3,678.35	3,712.24	3,710.95	1.29	2,868.851		
400.00	400.00	439.00	439.00	1.20	1.34	-82.25	500.50	-3,678.35	3,712.24	3,710.45	1.80	2,062.503		
500.00	500.00	539.00	539.00	1.56	1.70	-82.25	500.50	-3,678.35	3,712.24	3,709.94	2.31	1,609.658		
600.00	600.00	639.00	639.00	1.92	2.06	-82.25	500.50	-3,678.35	3,712.24	3,709.43	2.81	1,319.766		
700.00	700.00	739.00	739.00	2.28	2.42	-82.25	500.50	-3,678.35	3,712.24	3,708.93	3.32	1,118.316		
800.00	800.00	839.00	839.00	2.63	2.77	-82.25	500.50	-3,678.35	3,712.24	3,708.42	3.83	970.203		
900.00	900.00	939.00	939.00	2.99	3.13	-82.25	500.50	-3,678.35	3,712.24	3,707.91	4.33	856.726		
1,000.00	1,000.00	1,039.00	1,039.00	3.35	3.49	-82.25	500.50	-3,678.35	3,712.24	3,707.40	4.84	767.009		
1,100.00	1,100.00	1,139.00	1,139.00	3.71	3.85	-82.25	500.50	-3,678.35	3,712.24	3,706.90	5.35	694.298		
1,200.00	1,200.00	1,239.00	1,239.00	4.07	4.21	-82.25	500.50	-3,678.35	3,712.24	3,706.39	5.85	634.178		
1,300.00	1,300.00	1,339.00	1,339.00	4.43	4.57	-82.25	500.50	-3,678.35	3,712.24	3,705.88	6.36	583.638		
1,400.00	1,400.00	1,439.00	1,439.00	4.79	4.93	-82.25	500.50	-3,678.35	3,712.24	3,705.38	6.87	540.559		
1,500.00	1,500.00	1,539.00	1,539.00	5.14	5.28	-82.25	500.50	-3,678.35	3,712.24	3,704.87	7.37	503.401		
1,600.00	1,600.00	1,639.00	1,639.00	5.50	5.64	-82.25	500.50	-3,678.35	3,712.24	3,704.36	7.88	471.023		
1,700.00	1,700.00	1,739.00	1,739.00	5.86	6.00	-82.25	500.50	-3,678.35	3,712.24	3,703.86	8.39	442.558		
1,800.00	1,800.00	1,839.00	1,839.00	6.22	6.36	-82.25	500.50	-3,678.35	3,712.24	3,703.35	8.90	417.337		
1,900.00	1,900.00	1,939.00	1,939.00	6.58	6.72	-82.25	500.50	-3,678.35	3,712.24	3,702.84	9.40	394.835		
2,000.00	2,000.00	2,039.00	2,039.00	6.94	7.08	-82.25	500.50	-3,678.35	3,712.24	3,702.34	9.91	374.636		
2,100.00	2,099.99	2,138.99	2,138.99	7.29	7.43	-3.45	500.50	-3,678.35	3,710.94	3,700.53	10.41	356.453		
2,200.00	2,199.91	2,238.91	2,238.91	7.63	7.79	-3.46	500.50	-3,678.35	3,707.02	3,696.11	10.91	339.841		
2,300.00	2,299.69	2,338.69	2,338.69	7.98	8.15	-3.47	500.50	-3,678.35	3,700.49	3,689.09	11.41	324.441		
2,400.00	2,399.27	2,438.27	2,438.27	8.34	8.51	-3.49	500.50	-3,678.35	3,691.36	3,679.45	11.90	310.111		
2,500.00	2,498.57	2,537.57	2,537.57	8.69	8.86	-3.51	500.50	-3,678.35	3,679.63	3,667.23	12.40	296.731		
2,600.00	2,597.54	2,636.54	2,636.54	9.06	9.22	-3.54	500.50	-3,678.35	3,665.30	3,652.41	12.90	284.196		
2,616.45	2,613.78	2,652.78	2,652.78	9.12	9.28	-3.55	500.50	-3,678.35	3,662.70	3,649.72	12.98	282.193		
2,700.00	2,696.24	2,735.24	2,735.24	9.43	9.57	-3.56	500.50	-3,678.35	3,649.30	3,635.91	13.39	272.478		
2,800.00	2,794.94	2,833.94	2,833.94	9.81	9.93	-3.57	500.50	-3,678.35	3,633.26	3,619.37	13.89	261.589		
2,900.00	2,893.64	2,932.64	2,932.64	10.19	10.28	-3.59	500.50	-3,678.35	3,617.22	3,602.84	14.39	251.431		
3,000.00	2,992.34	3,031.34	3,031.34	10.58	10.63	-3.61	500.50	-3,678.35	3,601.19	3,586.30	14.88	241.934		
3,100.00	3,091.04	3,130.04	3,130.04	10.97	10.99	-3.62	500.50	-3,678.35	3,585.15	3,569.76	15.38	233.038		
3,200.00	3,189.74	3,228.74	3,228.74	11.37	11.34	-3.64	500.50	-3,678.35	3,569.11	3,553.23	15.88	224.688		
3,300.00	3,288.45	3,327.45	3,327.45	11.77	11.69	-3.65	500.50	-3,678.35	3,553.07	3,536.69	16.39	216.837		
3,400.00	3,387.15	3,426.15	3,426.15	12.17	12.05	-3.67	500.50	-3,678.35	3,537.04	3,520.15	16.89	209.443		
3,500.00	3,485.85	3,524.85	3,524.85	12.58	12.40	-3.69	500.50	-3,678.35	3,521.00	3,503.61	17.39	202.469		
3,600.00	3,584.55	3,623.55	3,623.55	12.98	12.76	-3.70	500.50	-3,678.35	3,504.96	3,487.07	17.89	195.879		
3,700.00	3,683.25	3,720.00	3,720.00	13.39	13.10	-3.72	500.50	-3,678.35	3,488.93	3,470.54	18.39	189.700		
3,800.00	3,781.95	3,800.00	3,799.99	13.80	13.37	-3.75	499.73	-3,678.67	3,473.17	3,454.33	18.84	184.345		
3,900.00	3,880.65	3,882.20	3,882.15	14.22	13.64	-3.81	497.31	-3,679.65	3,457.94	3,438.65	19.29	179.306		
4,000.00	3,979.35	3,962.37	3,962.21	14.63	13.90	-3.89	493.39	-3,681.26	3,443.25	3,423.52	19.73	174.549		
4,100.00	4,078.05	4,042.43	4,042.04	15.05	14.16	-4.00	487.91	-3,683.49	3,429.10	3,408.93	20.17	170.020		
4,200.00	4,176.75	4,138.55	4,137.81	15.47	14.48	-4.15	480.18	-3,686.65	3,415.31	3,394.66	20.65	165.399		
4,300.00	4,275.45	4,237.15	4,236.02	15.89	14.80	-4.32	472.23	-3,689.90	3,401.55	3,380.42	21.14	160.931		
4,400.00	4,374.15	4,335.74	4,334.24	16.31	15.13	-4.48	464.28	-3,693.15	3,387.82	3,366.20	21.63	156.650		
4,500.00	4,472.85	4,434.33	4,432.46	16.73	15.46	-4.64	456.33	-3,696.40	3,374.12	3,352.00	22.12	152.546		
4,600.00	4,571.55	4,532.92	4,530.68	17.15	15.80	-4.80	448.39	-3,699.64	3,360.44	3,337.83	22.61	148.609		
4,700.00	4,670.25	4,631.52	4,628.90	17.57	16.13	-4.97	440.44	-3,702.89	3,346.79	3,323.69	23.11	144.831		
4,800.00	4,768.95	4,730.11	4,727.12	18.00	16.47	-5.14	432.49	-3,706.14	3,333.17	3,309.57	23.61	141.203		
4,900.00	4,867.65	4,828.70	4,825.34	18.42	16.81	-5.31	424.55	-3,709.38	3,319.58	3,295.48	24.10	137.716		
5,000.00	4,966.35	4,927.30	4,923.56	18.85	17.15	-5.47	416.60	-3,712.63	3,306.02	3,281.41	24.60	134.365		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	5,065.05	5,025.89	5,021.77	19.28	17.49	-5.65	408.65	-3,715.88	3,292.48	3,267.37	25.11	131.140		
5,200.00	5,163.76	5,124.48	5,119.99	19.70	17.84	-5.82	400.70	-3,719.13	3,278.97	3,253.36	25.61	128.037		
5,300.00	5,262.46	5,223.08	5,218.21	20.13	18.18	-5.99	392.76	-3,722.37	3,265.50	3,239.38	26.11	125.048		
5,400.00	5,361.16	5,321.67	5,316.43	20.56	18.53	-6.17	384.81	-3,725.62	3,252.05	3,225.43	26.62	122.168		
5,500.00	5,459.86	5,420.26	5,414.65	20.99	18.88	-6.34	376.86	-3,728.87	3,238.64	3,211.51	27.13	119.392		
5,600.00	5,558.56	5,518.86	5,512.87	21.42	19.23	-6.52	368.92	-3,732.11	3,225.25	3,197.62	27.63	116.714		
5,700.00	5,657.26	5,617.45	5,611.09	21.85	19.58	-6.70	360.97	-3,735.36	3,211.90	3,183.76	28.14	114.130		
5,800.00	5,755.96	5,716.04	5,709.30	22.28	19.93	-6.88	353.02	-3,738.61	3,198.58	3,169.92	28.65	111.635		
5,900.00	5,854.66	5,814.64	5,807.52	22.71	20.29	-7.07	345.07	-3,741.85	3,185.29	3,156.12	29.16	109.225		
6,000.00	5,953.36	5,913.23	5,905.74	23.14	20.64	-7.25	337.13	-3,745.10	3,172.03	3,142.35	29.67	106.896		
6,100.00	6,052.06	6,011.82	6,003.96	23.57	20.99	-7.44	329.18	-3,748.35	3,158.80	3,128.62	30.19	104.644		
6,200.00	6,150.76	6,110.42	6,102.18	24.01	21.35	-7.62	321.23	-3,751.60	3,145.61	3,114.91	30.70	102.465		
6,300.00	6,249.46	6,209.01	6,200.40	24.44	21.71	-7.81	313.29	-3,754.84	3,132.45	3,101.24	31.21	100.357		
6,400.00	6,348.16	6,307.60	6,298.62	24.87	22.07	-8.00	305.34	-3,758.09	3,119.33	3,087.60	31.73	98.315		
6,500.00	6,446.86	6,406.20	6,396.84	25.30	22.42	-8.19	297.39	-3,761.34	3,106.24	3,074.00	32.24	96.338		
6,600.00	6,545.56	6,504.79	6,495.05	25.74	22.78	-8.39	289.44	-3,764.58	3,093.19	3,060.43	32.76	94.422		
6,700.00	6,644.26	6,603.38	6,593.27	26.17	23.14	-8.58	281.50	-3,767.83	3,080.17	3,046.89	33.28	92.565		
6,804.31	6,747.22	6,706.23	6,695.73	26.62	23.52	-8.79	273.21	-3,771.22	3,066.62	3,032.81	33.82	90.687		
6,900.00	6,841.85	6,800.73	6,789.87	27.03	23.86	-8.95	265.59	-3,774.33	3,055.41	3,021.10	34.31	89.053		
7,000.00	6,941.09	6,899.80	6,888.56	27.44	24.23	-9.12	257.60	-3,777.59	3,046.24	3,011.42	34.83	87.470		
7,100.00	7,040.61	6,999.11	6,987.49	27.83	24.59	-9.28	249.60	-3,780.86	3,039.68	3,004.34	35.34	86.011		
7,200.00	7,140.36	7,098.59	7,086.60	28.20	24.96	-9.45	241.58	-3,784.14	3,035.73	2,999.88	35.85	84.671		
7,300.00	7,240.26	7,198.18	7,185.82	28.55	25.33	-9.61	233.55	-3,787.42	3,034.39	2,998.03	36.36	83.447		
7,301.44	7,241.69	7,199.61	7,187.24	28.55	25.33	-9.61	233.44	-3,787.47	3,034.39	2,998.02	36.37	83.431 CC, ES		
7,400.00	7,340.24	7,297.81	7,285.07	28.88	25.69	-9.77	225.52	-3,790.70	3,035.66	2,998.79	36.87	82.335		
7,420.77	7,361.00	7,318.50	7,305.68	28.95	25.77	-9.81	223.85	-3,791.38	3,036.25	2,999.27	36.97	82.118		
7,500.00	7,440.24	7,397.44	7,384.31	29.20	26.06	-9.87	217.49	-3,793.98	3,038.72	3,001.35	37.37	81.313		
7,600.00	7,540.24	7,513.73	7,500.20	29.52	26.49	-9.90	208.52	-3,797.65	3,041.74	3,003.83	37.91	80.240		
7,700.00	7,640.24	7,654.05	7,640.31	29.84	27.00	-9.93	201.56	-3,800.49	3,043.68	3,005.19	38.49	79.079		
7,800.00	7,740.24	7,794.73	7,780.96	30.16	27.49	-9.97	193.37	-3,801.39	3,044.29	3,005.23	39.06	77.947		
7,831.98	7,772.21	7,824.98	7,811.21	30.26	27.59	-9.97	193.36	-3,801.39	3,044.29	3,005.08	39.21	77.646		
7,900.00	7,840.24	7,893.00	7,879.24	30.48	27.82	-9.97	193.36	-3,801.39	3,044.29	3,004.75	39.54	77.000		
7,966.81	7,907.04	7,959.81	7,946.04	30.69	28.05	-9.97	193.36	-3,801.39	3,044.29	3,004.43	39.86	76.375		
8,000.00	7,940.22	7,992.98	7,979.22	30.79	28.17	91.51	193.36	-3,801.39	3,044.32	3,004.30	40.02	76.074		
8,050.00	7,989.94	8,042.71	8,028.94	30.94	28.34	91.59	193.36	-3,801.39	3,044.45	3,004.21	40.25	75.642		
8,100.00	8,039.04	8,091.81	8,078.04	31.08	28.50	91.74	193.36	-3,801.39	3,044.73	3,004.26	40.47	75.230		
8,150.00	8,087.13	8,139.90	8,126.13	31.21	28.67	91.94	193.36	-3,801.39	3,045.19	3,004.50	40.69	74.839		
8,200.00	8,133.85	8,186.62	8,172.85	31.33	28.83	92.18	193.36	-3,801.39	3,045.87	3,004.97	40.90	74.470		
8,250.00	8,178.84	8,231.61	8,217.84	31.45	28.98	92.45	193.36	-3,801.39	3,046.85	3,005.75	41.11	74.123		
8,300.00	8,221.77	8,274.54	8,260.77	31.55	29.13	92.73	193.36	-3,801.39	3,048.21	3,006.90	41.30	73.799		
8,350.00	8,262.30	8,315.07	8,301.30	31.65	29.27	93.00	193.36	-3,801.39	3,050.01	3,008.52	41.50	73.497		
8,400.00	8,300.13	8,352.89	8,339.13	31.74	29.40	93.22	193.36	-3,801.39	3,052.36	3,010.67	41.69	73.217		
8,450.00	8,334.96	8,387.73	8,373.96	31.82	29.52	93.40	193.36	-3,801.39	3,055.34	3,013.46	41.88	72.959		
8,500.00	8,366.54	8,419.31	8,405.54	31.89	29.63	93.49	193.36	-3,801.39	3,059.03	3,016.96	42.07	72.721		
8,550.00	8,394.62	8,447.39	8,433.62	31.96	29.72	93.47	193.36	-3,801.39	3,063.50	3,021.24	42.25	72.504		
8,600.00	8,418.99	8,471.76	8,457.99	32.03	29.81	93.34	193.36	-3,801.39	3,068.81	3,026.37	42.44	72.307		
8,650.00	8,439.47	8,492.23	8,478.47	32.11	29.88	93.06	193.36	-3,801.39	3,075.02	3,032.39	42.63	72.129		
8,700.00	8,455.89	8,508.66	8,494.89	32.19	29.93	92.64	193.36	-3,801.39	3,082.14	3,039.32	42.83	71.970		
8,750.00	8,468.13	8,520.90	8,507.13	32.29	29.98	92.04	193.36	-3,801.39	3,090.19	3,047.17	43.02	71.832		
8,800.00	8,476.11	8,528.88	8,515.11	32.40	30.00	91.28	193.36	-3,801.39	3,099.13	3,055.92	43.22	71.713		
8,850.00	8,479.75	8,532.52	8,518.75	32.54	30.02	90.35	193.36	-3,801.39	3,108.94	3,065.53	43.41	71.615		
8,866.81	8,480.00	8,532.77	8,519.00	32.59	30.02	90.00	193.36	-3,801.39	3,112.42	3,068.95	43.48	71.587		

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 103H
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 103H	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		
8,900.00	8,480.00	8,532.77	8,519.00	32.70	30.02	90.00	199.36	-3,801.39	3,119.55	3,075.94	43.61	71.532		
9,000.00	8,480.00	8,532.77	8,519.00	33.09	30.02	90.00	199.36	-3,801.39	3,143.05	3,098.99	44.06	71.338		
9,100.00	8,480.00	8,532.77	8,519.00	33.57	30.02	90.00	199.36	-3,801.39	3,169.53	3,124.96	44.57	71.119		
9,200.00	8,480.00	8,532.77	8,519.00	34.14	30.02	90.00	199.36	-3,801.39	3,198.91	3,153.79	45.13	70.889		
9,300.00	8,480.00	8,532.77	8,519.00	34.79	30.02	90.00	199.36	-3,801.39	3,231.13	3,185.40	45.73	70.658		
9,400.00	8,480.00	8,532.77	8,519.00	35.50	30.02	90.00	199.36	-3,801.39	3,266.09	3,219.72	46.37	70.439		
9,500.00	8,480.00	8,532.77	8,519.00	36.28	30.02	90.00	199.36	-3,801.39	3,303.71	3,256.67	47.04	70.239		
9,600.00	8,480.00	8,532.77	8,519.00	37.11	30.02	90.00	199.36	-3,801.39	3,343.89	3,296.17	47.72	70.067		
9,700.00	8,480.00	8,532.77	8,519.00	38.01	30.02	90.00	199.36	-3,801.39	3,386.56	3,338.13	48.43	69.930		
9,800.00	8,480.00	8,532.77	8,519.00	38.95	30.02	90.00	199.36	-3,801.39	3,431.61	3,382.47	49.14	69.833		
9,900.00	8,480.00	8,532.77	8,519.00	39.94	30.02	90.00	199.36	-3,801.39	3,478.95	3,429.09	49.86	69.779		
10,000.00	8,480.00	8,532.77	8,519.00	40.97	30.02	90.00	199.36	-3,801.39	3,528.49	3,477.91	50.57	69.770		
10,100.00	8,480.00	8,532.77	8,519.00	42.04	30.02	90.00	199.36	-3,801.39	3,580.13	3,528.85	51.28	69.810		
10,200.00	8,480.00	8,532.77	8,519.00	43.14	30.02	90.00	199.36	-3,801.39	3,633.80	3,581.81	51.99	69.898		
10,300.00	8,480.00	8,532.77	8,519.00	44.29	30.02	90.00	199.36	-3,801.39	3,689.40	3,636.72	52.68	70.034		
10,400.00	8,480.00	8,532.77	8,519.00	45.46	30.02	90.00	199.36	-3,801.39	3,746.84	3,693.48	53.36	70.219		
10,500.00	8,480.00	8,532.77	8,519.00	46.66	30.02	90.00	199.36	-3,801.39	3,806.04	3,752.02	54.02	70.454		
10,600.00	8,480.00	8,532.77	8,519.00	47.89	30.02	90.00	199.36	-3,801.39	3,866.92	3,812.26	54.67	70.735		
10,700.00	8,480.00	8,532.77	8,519.00	49.14	30.02	90.00	199.36	-3,801.39	3,929.41	3,874.11	55.30	71.061		
10,800.00	8,480.00	8,532.77	8,519.00	50.42	30.02	90.00	199.36	-3,801.39	3,993.42	3,937.51	55.91	71.432		
10,900.00	8,480.00	8,532.77	8,519.00	51.72	30.02	90.00	199.36	-3,801.39	4,058.88	4,002.39	56.50	71.844		
11,000.00	8,480.00	8,532.77	8,519.00	53.03	30.02	90.00	199.36	-3,801.39	4,125.73	4,068.67	57.07	72.297		
11,100.00	8,480.00	8,532.77	8,519.00	54.37	30.02	90.00	199.36	-3,801.39	4,193.90	4,136.29	57.62	72.787		
11,200.00	8,480.00	8,532.77	8,519.00	55.72	30.02	90.00	199.36	-3,801.39	4,263.33	4,205.18	58.15	73.314		
11,300.00	8,480.00	8,532.77	8,519.00	57.09	30.02	90.00	199.36	-3,801.39	4,333.95	4,275.28	58.67	73.875		
11,400.00	8,480.00	8,532.77	8,519.00	58.47	30.02	90.00	199.36	-3,801.39	4,405.71	4,346.55	59.16	74.470		
11,500.00	8,480.00	8,532.77	8,519.00	59.86	30.02	90.00	199.36	-3,801.39	4,478.55	4,418.91	59.64	75.095		
11,600.00	8,480.00	8,532.77	8,519.00	61.27	30.02	90.00	199.36	-3,801.39	4,552.42	4,492.33	60.10	75.751		
11,700.00	8,480.00	15,175.48	11,994.03	62.69	74.35	138.75	-3,245.01	-3,771.34	4,622.14	4,550.90	71.24	64.883		
11,800.00	8,480.00	15,275.48	11,995.11	64.13	75.73	138.76	-3,345.00	-3,770.47	4,623.03	4,550.35	72.68	63.605		
11,900.00	8,480.00	15,375.47	11,996.19	65.57	77.11	138.77	-3,444.98	-3,769.60	4,623.92	4,549.78	74.14	62.367		
12,000.00	8,480.00	15,475.47	11,997.27	67.02	78.50	138.77	-3,544.97	-3,768.72	4,624.82	4,549.21	75.61	61.167		
12,100.00	8,480.00	15,575.46	11,998.35	68.48	79.91	138.78	-3,644.95	-3,767.85	4,625.71	4,548.62	77.09	60.005		
12,200.00	8,480.00	15,675.45	11,999.43	69.95	81.32	138.79	-3,744.94	-3,766.98	4,626.60	4,548.03	78.58	58.880		
12,300.00	8,480.00	15,775.45	12,000.51	71.42	82.75	138.80	-3,844.92	-3,766.11	4,627.49	4,547.42	80.07	57.792		
12,400.00	8,480.00	15,875.44	12,001.59	72.91	84.18	138.81	-3,944.90	-3,765.23	4,628.39	4,546.81	81.58	56.737		
12,500.00	8,480.00	15,975.44	12,002.67	74.40	85.62	138.81	-4,044.89	-3,764.36	4,629.28	4,546.19	83.09	55.714		
12,600.00	8,480.00	16,075.43	12,003.75	75.90	87.06	138.82	-4,144.87	-3,763.49	4,630.17	4,545.56	84.61	54.723		
12,700.00	8,480.00	16,175.42	12,004.84	77.40	88.52	138.83	-4,244.86	-3,762.62	4,631.06	4,544.93	86.14	53.763		
12,800.00	8,480.00	16,275.42	12,005.92	78.91	89.98	138.84	-4,344.84	-3,761.74	4,631.96	4,544.28	87.67	52.831		
12,900.00	8,480.00	16,375.41	12,007.00	80.43	91.44	138.84	-4,444.83	-3,760.87	4,632.85	4,543.63	89.22	51.928		
13,000.00	8,480.00	16,475.41	12,008.08	81.95	92.92	138.85	-4,544.81	-3,760.00	4,633.74	4,542.98	90.77	51.051		
13,100.00	8,480.00	16,575.40	12,009.16	83.47	94.40	138.86	-4,644.80	-3,759.13	4,634.64	4,542.32	92.32	50.201		
13,200.00	8,480.00	16,675.39	12,010.24	85.00	95.88	138.87	-4,744.78	-3,758.26	4,635.53	4,541.65	93.88	49.376		
13,300.00	8,480.00	16,775.39	12,011.32	86.54	97.37	138.87	-4,844.76	-3,757.38	4,636.42	4,540.98	95.45	48.576		
13,400.00	8,480.00	16,875.38	12,012.40	88.08	98.87	138.88	-4,944.75	-3,756.51	4,637.32	4,540.30	97.02	47.798		
13,500.00	8,480.00	16,975.38	12,013.48	89.62	100.37	138.89	-5,044.73	-3,755.64	4,638.21	4,539.62	98.59	47.044		
13,600.00	8,480.00	17,075.37	12,014.56	91.17	101.87	138.90	-5,144.72	-3,754.77	4,639.10	4,538.93	100.17	46.312		
13,700.00	8,480.00	17,175.37	12,015.64	92.72	103.38	138.90	-5,244.70	-3,753.89	4,640.00	4,538.25	101.75	45.601		
13,800.00	8,480.00	17,275.36	12,016.72	94.27	104.89	138.91	-5,344.69	-3,753.02	4,640.89	4,537.55	103.34	44.909		
13,900.00	8,480.00	17,375.35	12,017.80	95.83	106.41	138.92	-5,444.67	-3,752.15	4,641.79	4,536.85	104.93	44.236		
14,000.00	8,480.00	17,475.35	12,018.88	97.39	107.93	138.93	-5,544.66	-3,751.28	4,642.68	4,536.15	106.53	43.583		

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 103H
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 103H	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	8,480.00	17,575.34	12,019.97	98.95	109.46	138.94	-5,644.64	-3,750.40	4,643.57	4,535.45	108.12	42.948		
14,200.00	8,480.00	17,675.34	12,021.05	100.52	110.99	138.94	-5,744.62	-3,749.53	4,644.47	4,534.75	109.72	42.330		
14,300.00	8,480.00	17,775.33	12,022.13	102.09	112.52	138.95	-5,844.61	-3,748.66	4,645.36	4,534.04	111.32	41.729		
14,400.00	8,480.00	17,875.32	12,023.21	103.66	114.06	138.96	-5,944.59	-3,747.79	4,646.26	4,533.33	112.93	41.144		
14,500.00	8,480.00	17,975.32	12,024.29	105.23	115.59	138.97	-6,044.58	-3,746.92	4,647.15	4,532.61	114.54	40.574		
14,600.00	8,480.00	18,075.31	12,025.37	106.81	117.14	138.97	-6,144.56	-3,746.04	4,648.04	4,531.90	116.15	40.019		
14,700.00	8,480.00	18,175.31	12,026.45	108.39	118.68	138.98	-6,244.55	-3,745.17	4,648.94	4,531.18	117.76	39.478		
14,800.00	8,480.00	18,275.30	12,027.53	109.97	120.23	138.99	-6,344.53	-3,744.30	4,649.83	4,530.46	119.38	38.951		
14,900.00	8,480.00	18,375.29	12,028.61	111.55	121.78	139.00	-6,444.52	-3,743.43	4,650.73	4,529.73	121.00	38.437		
15,000.00	8,480.00	18,475.29	12,029.69	113.13	123.33	139.00	-6,544.50	-3,742.55	4,651.62	4,529.01	122.62	37.936		
15,100.00	8,480.00	18,575.28	12,030.77	114.72	124.89	139.01	-6,644.48	-3,741.68	4,652.52	4,528.28	124.24	37.448		
15,200.00	8,480.00	18,675.28	12,031.85	116.31	126.45	139.02	-6,744.47	-3,740.81	4,653.41	4,527.55	125.87	36.971		
15,300.00	8,480.00	18,775.27	12,032.93	117.90	128.01	139.03	-6,844.45	-3,739.94	4,654.31	4,526.82	127.49	36.507		
15,400.00	8,480.00	18,875.26	12,034.01	119.49	129.57	139.03	-6,944.44	-3,739.06	4,655.20	4,526.08	129.12	36.054		
15,500.00	8,480.00	18,975.26	12,035.10	121.08	131.13	139.04	-7,044.42	-3,738.19	4,656.10	4,525.35	130.75	35.612		
15,600.00	8,480.00	19,075.25	12,036.18	122.68	132.70	139.05	-7,144.41	-3,737.32	4,656.99	4,524.61	132.38	35.180		
15,700.00	8,480.00	19,175.25	12,037.26	124.27	134.27	139.06	-7,244.39	-3,736.45	4,657.89	4,523.88	134.01	34.758		
15,800.00	8,480.00	19,275.24	12,038.34	125.87	135.84	139.06	-7,344.38	-3,735.58	4,658.78	4,523.14	135.64	34.346		
15,900.00	8,480.00	19,375.24	12,039.42	127.47	137.41	139.07	-7,444.36	-3,734.70	4,659.68	4,522.40	137.28	33.944		
16,000.00	8,480.00	19,475.23	12,040.50	129.07	138.99	139.08	-7,544.34	-3,733.83	4,660.57	4,521.66	138.91	33.551		
16,100.00	8,480.00	19,575.22	12,041.58	130.67	140.56	139.09	-7,644.33	-3,732.96	4,661.47	4,520.92	140.55	33.167		
16,200.00	8,480.00	19,675.22	12,042.66	132.27	142.14	139.10	-7,744.31	-3,732.09	4,662.37	4,520.18	142.18	32.791		
16,300.00	8,480.00	19,775.21	12,043.74	133.88	143.72	139.10	-7,844.30	-3,731.21	4,663.26	4,519.44	143.82	32.424		
16,400.00	8,480.00	19,875.21	12,044.82	135.48	145.30	139.11	-7,944.28	-3,730.34	4,664.16	4,518.70	145.46	32.065		
16,500.00	8,480.00	19,975.20	12,045.90	137.09	146.89	139.12	-8,044.27	-3,729.47	4,665.05	4,517.95	147.10	31.713		
16,600.00	8,480.00	20,075.19	12,046.98	138.70	148.47	139.13	-8,144.25	-3,728.60	4,665.95	4,517.21	148.74	31.369		
16,700.00	8,480.00	20,175.19	12,048.06	140.30	150.06	139.13	-8,244.24	-3,727.72	4,666.85	4,516.46	150.39	31.032		
16,800.00	8,480.00	20,275.18	12,049.14	141.91	151.64	139.14	-8,344.22	-3,726.85	4,667.74	4,515.71	152.03	30.703		
16,900.00	8,480.00	20,375.18	12,050.23	143.52	153.23	139.15	-8,444.20	-3,725.98	4,668.64	4,514.96	153.68	30.380		
17,000.00	8,480.00	20,475.17	12,051.31	145.13	154.82	139.16	-8,544.19	-3,725.11	4,669.53	4,514.21	155.32	30.063		
17,100.00	8,480.00	20,575.16	12,052.39	146.75	156.41	139.16	-8,644.17	-3,724.24	4,670.43	4,513.46	156.97	29.754		
17,200.00	8,480.00	20,675.16	12,053.47	148.36	158.01	139.17	-8,744.16	-3,723.36	4,671.33	4,512.72	158.61	29.451		
17,300.00	8,480.00	20,775.15	12,054.55	149.97	159.60	139.18	-8,844.14	-3,722.49	4,672.22	4,511.97	160.26	29.155		
17,400.00	8,480.00	20,875.15	12,055.63	151.59	161.19	139.19	-8,944.13	-3,721.62	4,673.12	4,511.22	161.90	28.864		
17,500.00	8,480.00	20,975.14	12,056.71	153.20	162.79	139.19	-9,044.11	-3,720.75	4,674.02	4,510.47	163.55	28.579		
17,600.00	8,480.00	21,075.13	12,057.79	154.82	164.39	139.20	-9,144.10	-3,719.87	4,674.91	4,509.72	165.20	28.299		
17,700.00	8,480.00	21,175.13	12,058.87	156.44	165.98	139.21	-9,244.08	-3,719.00	4,675.81	4,508.96	166.85	28.025		
17,800.00	8,480.00	21,275.12	12,059.95	158.05	167.58	139.22	-9,344.06	-3,718.13	4,676.71	4,508.21	168.50	27.756		
17,900.00	8,480.00	21,375.12	12,061.03	159.67	169.18	139.22	-9,444.05	-3,717.26	4,677.60	4,507.46	170.15	27.492		
18,000.00	8,480.00	21,475.11	12,062.11	161.29	170.78	139.23	-9,544.03	-3,716.38	4,678.50	4,506.71	171.79	27.233		
18,100.00	8,480.00	21,575.11	12,063.19	162.91	172.39	139.24	-9,644.02	-3,715.51	4,679.40	4,505.96	173.44	26.979		
18,200.00	8,480.00	21,675.10	12,064.27	164.53	173.99	139.25	-9,744.00	-3,714.64	4,680.30	4,505.20	175.09	26.730		
18,300.00	8,480.00	21,775.09	12,065.36	166.15	175.59	139.25	-9,843.99	-3,713.77	4,681.19	4,504.45	176.74	26.486		
18,400.00	8,480.00	21,875.09	12,066.44	167.77	177.20	139.26	-9,943.97	-3,712.90	4,682.09	4,503.70	178.39	26.246		
18,500.00	8,480.00	21,975.08	12,067.52	169.40	178.80	139.27	-10,043.96	-3,712.02	4,682.99	4,502.95	180.04	26.011		
18,600.00	8,480.00	22,075.08	12,068.60	171.02	180.41	139.28	-10,143.94	-3,711.15	4,683.89	4,502.20	181.69	25.779		
18,700.00	8,480.00	22,101.01	12,068.88	172.64	180.83	139.28	-10,169.87	-3,710.92	4,685.37	4,502.56	182.81	25.630		
18,800.00	8,480.00	22,101.01	12,068.88	174.26	180.83	139.28	-10,169.87	-3,710.92	4,688.91	4,505.25	183.67	25.530		
18,900.00	8,480.00	22,101.01	12,068.88	175.89	180.83	139.28	-10,169.87	-3,710.92	4,694.59	4,510.13	184.45	25.451		
19,000.00	8,480.00	22,101.01	12,068.88	177.51	180.83	139.28	-10,169.87	-3,710.92	4,702.38	4,517.21	185.17	25.395		
19,100.00	8,480.00	22,101.01	12,068.88	179.14	180.83	139.28	-10,169.87	-3,710.92	4,712.28	4,526.46	185.82	25.359		
19,200.00	8,480.00	22,101.01	12,068.88	180.76	180.83	139.28	-10,169.87	-3,710.92	4,724.28	4,537.89	186.38	25.347 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 103H
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 103H	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
Judge Baylor Fed Com - Judge Baylor Fed Com 601H - OH - Plan #5												Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,300.00	8,480.00	22,101.01	12,068.88	182.39	180.83	139.28	-10,169.87	-3,710.92	4,738.36	4,551.48	186.88	25.355	
19,400.00	8,480.00	22,101.01	12,068.88	184.02	180.83	139.28	-10,169.87	-3,710.92	4,754.50	4,567.19	187.31	25.383	
19,500.00	8,480.00	22,101.01	12,068.88	185.64	180.83	139.28	-10,169.87	-3,710.92	4,772.68	4,585.02	187.66	25.432	
19,600.00	8,480.00	22,101.01	12,068.88	187.27	180.83	139.28	-10,169.87	-3,710.92	4,792.88	4,604.94	187.94	25.503	
19,700.00	8,480.00	22,101.01	12,068.88	188.90	180.83	139.28	-10,169.87	-3,710.92	4,815.07	4,626.93	188.15	25.592	
19,800.00	8,480.00	22,101.01	12,068.88	190.53	180.83	139.28	-10,169.87	-3,710.92	4,839.23	4,650.94	188.29	25.701	
19,899.80	8,480.00	22,101.01	12,068.88	192.15	180.83	139.28	-10,169.87	-3,710.92	4,865.27	4,676.90	188.37	25.829	

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 103H
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 103H	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	-82.17	500.82	-3,643.36	3,677.62					
100.00	100.00	139.00	139.00	0.13	0.27	-82.17	500.82	-3,643.36	3,677.62	3,677.33	0.29	N/A		
200.00	200.00	239.00	239.00	0.48	0.62	-82.17	500.82	-3,643.36	3,677.62	3,676.83	0.79	4,658.400		
300.00	300.00	339.00	339.00	0.84	0.98	-82.17	500.82	-3,643.36	3,677.62	3,676.33	1.29	2,842.093		
400.00	400.00	439.00	439.00	1.20	1.34	-82.17	500.82	-3,643.36	3,677.62	3,675.82	1.80	2,043.266		
500.00	500.00	539.00	539.00	1.56	1.70	-82.17	500.82	-3,643.36	3,677.62	3,675.31	2.31	1,594.645		
600.00	600.00	639.00	639.00	1.92	2.06	-82.17	500.82	-3,643.36	3,677.62	3,674.81	2.81	1,307.457		
700.00	700.00	739.00	739.00	2.28	2.42	-82.17	500.82	-3,643.36	3,677.62	3,674.30	3.32	1,107.886		
800.00	800.00	839.00	839.00	2.63	2.77	-82.17	500.82	-3,643.36	3,677.62	3,673.79	3.83	961.154		
900.00	900.00	939.00	939.00	2.99	3.13	-82.17	500.82	-3,643.36	3,677.62	3,673.29	4.33	848.735		
1,000.00	1,000.00	1,039.00	1,039.00	3.35	3.49	-82.17	500.82	-3,643.36	3,677.62	3,672.78	4.84	759.855		
1,100.00	1,100.00	1,139.00	1,139.00	3.71	3.85	-82.17	500.82	-3,643.36	3,677.62	3,672.27	5.35	687.823		
1,200.00	1,200.00	1,239.00	1,239.00	4.07	4.21	-82.17	500.82	-3,643.36	3,677.62	3,671.77	5.85	628.263		
1,300.00	1,300.00	1,339.00	1,339.00	4.43	4.57	-82.17	500.82	-3,643.36	3,677.62	3,671.26	6.36	578.195		
1,400.00	1,400.00	1,439.00	1,439.00	4.79	4.93	-82.17	500.82	-3,643.36	3,677.62	3,670.75	6.87	535.517		
1,500.00	1,500.00	1,539.00	1,539.00	5.14	5.28	-82.17	500.82	-3,643.36	3,677.62	3,670.25	7.37	498.706		
1,600.00	1,600.00	1,639.00	1,639.00	5.50	5.64	-82.17	500.82	-3,643.36	3,677.62	3,669.74	7.88	466.630		
1,700.00	1,700.00	1,739.00	1,739.00	5.86	6.00	-82.17	500.82	-3,643.36	3,677.62	3,669.23	8.39	438.430		
1,800.00	1,800.00	1,839.00	1,839.00	6.22	6.36	-82.17	500.82	-3,643.36	3,677.62	3,668.73	8.90	413.444		
1,900.00	1,900.00	1,939.00	1,939.00	6.58	6.72	-82.17	500.82	-3,643.36	3,677.62	3,668.22	9.40	391.153		
2,000.00	2,000.00	2,039.00	2,039.00	6.94	7.08	-82.17	500.82	-3,643.36	3,677.62	3,667.71	9.91	371.142		
2,100.00	2,099.99	2,138.99	2,138.99	7.29	7.43	-3.38	500.82	-3,643.36	3,676.31	3,665.90	10.41	353.127		
2,200.00	2,199.91	2,238.91	2,238.91	7.63	7.79	-3.38	500.82	-3,643.36	3,672.40	3,661.49	10.91	336.667		
2,300.00	2,299.69	2,338.69	2,338.69	7.98	8.15	-3.40	500.82	-3,643.36	3,665.87	3,654.46	11.41	321.405		
2,400.00	2,399.27	2,438.27	2,438.27	8.34	8.51	-3.41	500.82	-3,643.36	3,656.73	3,644.83	11.90	307.202		
2,500.00	2,498.57	2,537.57	2,537.57	8.69	8.86	-3.43	500.82	-3,643.36	3,645.00	3,632.60	12.40	293.939		
2,600.00	2,597.54	2,636.54	2,636.54	9.06	9.22	-3.46	500.82	-3,643.36	3,630.68	3,617.78	12.90	281.511		
2,616.45	2,613.78	2,652.78	2,652.78	9.12	9.28	-3.46	500.82	-3,643.36	3,628.07	3,615.09	12.98	279.525		
2,700.00	2,696.24	2,776.47	2,776.46	9.43	9.71	-3.49	500.14	-3,643.01	3,614.47	3,600.98	13.49	267.980		
2,800.00	2,794.94	2,976.72	2,976.48	9.81	10.36	-3.65	491.90	-3,638.82	3,595.77	3,581.58	14.19	253.386		
2,900.00	2,893.64	3,074.49	3,074.01	10.19	10.69	-3.76	485.83	-3,635.73	3,575.84	3,561.17	14.66	243.863		
3,000.00	2,992.34	3,172.25	3,171.54	10.58	11.01	-3.87	479.75	-3,632.64	3,555.92	3,540.78	15.14	234.888		
3,100.00	3,091.04	3,270.02	3,269.07	10.97	11.34	-3.98	473.68	-3,629.55	3,536.01	3,520.40	15.62	226.420		
3,200.00	3,189.74	3,367.79	3,366.60	11.37	11.67	-4.09	467.60	-3,626.46	3,516.12	3,500.02	16.10	218.422		
3,300.00	3,288.45	3,465.56	3,464.13	11.77	12.00	-4.20	461.53	-3,623.37	3,496.24	3,479.66	16.58	210.858		
3,400.00	3,387.15	3,563.33	3,561.66	12.17	12.34	-4.32	455.46	-3,620.28	3,476.37	3,459.31	17.07	203.697		
3,500.00	3,485.85	3,661.09	3,659.19	12.58	12.68	-4.43	449.38	-3,617.19	3,456.52	3,438.97	17.55	196.911		
3,600.00	3,584.55	3,758.86	3,756.72	12.98	13.01	-4.55	443.31	-3,614.10	3,436.68	3,418.64	18.04	190.473		
3,700.00	3,683.25	3,856.63	3,854.25	13.39	13.35	-4.67	437.23	-3,611.01	3,416.85	3,398.32	18.53	184.358		
3,800.00	3,781.95	3,954.40	3,951.78	13.80	13.70	-4.79	431.16	-3,607.92	3,397.04	3,378.02	19.03	178.545		
3,900.00	3,880.65	4,052.17	4,049.31	14.22	14.04	-4.91	425.08	-3,604.83	3,377.25	3,357.73	19.52	173.013		
4,000.00	3,979.35	4,149.94	4,146.84	14.63	14.38	-5.03	419.01	-3,601.74	3,357.46	3,337.45	20.02	167.743		
4,100.00	4,078.05	4,247.70	4,244.37	15.05	14.73	-5.15	412.93	-3,598.64	3,337.70	3,317.18	20.51	162.718		
4,200.00	4,176.75	4,345.47	4,341.90	15.47	15.08	-5.28	406.86	-3,595.55	3,317.94	3,296.93	21.01	157.922		
4,300.00	4,275.45	4,443.24	4,439.43	15.89	15.42	-5.41	400.78	-3,592.46	3,298.21	3,276.70	21.51	153.341		
4,400.00	4,374.15	4,541.01	4,536.96	16.31	15.77	-5.54	394.71	-3,589.37	3,278.49	3,256.48	22.01	148.961		
4,500.00	4,472.85	4,638.78	4,634.49	16.73	16.12	-5.67	388.63	-3,586.28	3,258.78	3,236.27	22.51	144.770		
4,600.00	4,571.55	4,736.54	4,732.02	17.15	16.47	-5.80	382.56	-3,583.19	3,239.09	3,216.08	23.01	140.757		
4,700.00	4,670.25	4,834.31	4,829.55	17.57	16.82	-5.93	376.48	-3,580.10	3,219.42	3,195.91	23.51	136.910		
4,800.00	4,768.95	4,932.08	4,927.08	18.00	17.17	-6.06	370.41	-3,577.01	3,199.77	3,175.75	24.02	133.220		
4,900.00	4,867.65	5,029.85	5,024.61	18.42	17.53	-6.20	364.33	-3,573.92	3,180.13	3,155.61	24.52	129.678		
5,000.00	4,966.35	5,127.62	5,122.14	18.85	17.88	-6.34	358.26	-3,570.83	3,160.51	3,135.48	25.03	126.276		

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 103H
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 103H	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	5,065.05	5,225.38	5,219.67	19.28	18.23	-6.48	352.18	-3,567.74	3,140.91	3,115.38	25.53	123.006		
5,200.00	5,163.76	5,323.15	5,317.20	19.70	18.59	-6.62	346.11	-3,564.65	3,121.33	3,095.29	26.04	119.860		
5,300.00	5,262.46	5,420.92	5,414.73	20.13	18.94	-6.76	340.03	-3,561.56	3,101.76	3,075.21	26.55	116.832		
5,400.00	5,361.16	5,518.69	5,512.26	20.56	19.30	-6.91	333.96	-3,558.47	3,082.22	3,055.16	27.06	113.916		
5,500.00	5,459.86	5,616.46	5,609.79	20.99	19.65	-7.06	327.89	-3,555.37	3,062.69	3,035.13	27.57	111.105		
5,600.00	5,558.56	5,714.23	5,707.32	21.42	20.01	-7.20	321.81	-3,552.28	3,043.19	3,015.11	28.08	108.394		
5,700.00	5,657.26	5,811.99	5,804.85	21.85	20.36	-7.36	315.74	-3,549.19	3,023.70	2,995.11	28.59	105.779		
5,800.00	5,755.96	5,909.76	5,902.39	22.28	20.72	-7.51	309.66	-3,546.10	3,004.23	2,975.14	29.10	103.254		
5,900.00	5,854.66	6,007.53	5,999.92	22.71	21.08	-7.66	303.59	-3,543.01	2,984.79	2,955.18	29.61	100.814		
6,000.00	5,953.36	6,105.30	6,097.45	23.14	21.44	-7.82	297.51	-3,539.92	2,965.37	2,935.25	30.12	98.457		
6,100.00	6,052.06	6,203.07	6,194.98	23.57	21.80	-7.98	291.44	-3,536.83	2,945.96	2,915.33	30.63	96.177		
6,200.00	6,150.76	6,300.83	6,292.51	24.01	22.15	-8.14	285.36	-3,533.74	2,926.58	2,895.44	31.14	93.971		
6,300.00	6,249.46	6,398.60	6,390.04	24.44	22.51	-8.30	279.29	-3,530.65	2,907.23	2,875.57	31.66	91.837		
6,400.00	6,348.16	6,496.37	6,487.57	24.87	22.87	-8.47	273.21	-3,527.56	2,887.89	2,855.72	32.17	89.769		
6,500.00	6,446.86	6,594.14	6,585.10	25.30	23.23	-8.63	267.14	-3,524.47	2,868.58	2,835.90	32.68	87.766		
6,600.00	6,545.56	6,691.91	6,682.63	25.74	23.59	-8.80	261.06	-3,521.38	2,849.30	2,816.10	33.20	85.824		
6,700.00	6,644.26	6,789.68	6,780.16	26.17	23.95	-8.98	254.99	-3,518.29	2,830.04	2,796.32	33.71	83.942		
6,804.31	6,747.22	6,891.66	6,881.89	26.62	24.33	-9.16	248.65	-3,515.06	2,809.97	2,775.72	34.25	82.038		
6,900.00	6,841.85	6,985.45	6,975.45	27.03	24.67	-9.28	242.82	-3,512.10	2,792.75	2,758.01	34.75	80.377		
7,000.00	6,941.09	7,083.91	7,073.68	27.44	25.04	-9.41	236.71	-3,508.99	2,777.27	2,742.01	35.26	78.765		
7,100.00	7,040.61	7,182.78	7,172.31	27.83	25.40	-9.54	230.56	-3,505.86	2,764.37	2,728.60	35.77	77.272		
7,200.00	7,140.36	7,281.98	7,271.26	28.20	25.77	-9.66	224.40	-3,502.72	2,754.05	2,717.77	36.29	75.897		
7,300.00	7,240.26	7,381.44	7,370.48	28.55	26.13	-9.78	218.22	-3,499.58	2,746.32	2,709.53	36.80	74.634		
7,400.00	7,340.24	7,481.10	7,469.90	28.88	26.50	-9.91	212.03	-3,496.43	2,741.19	2,703.88	37.31	73.480		
7,420.77	7,361.00	7,501.81	7,490.56	28.95	26.58	-88.73	210.74	-3,495.77	2,740.44	2,703.03	37.41	73.255		
7,500.00	7,440.24	7,561.65	7,550.28	29.20	26.80	-88.80	207.40	-3,494.07	2,738.10	2,700.33	37.77	72.492		
7,600.00	7,540.24	7,636.30	7,624.86	29.52	27.07	-88.86	204.39	-3,492.54	2,735.97	2,697.74	38.22	71.583		
7,700.00	7,640.24	7,711.06	7,699.59	29.84	27.34	-88.90	202.69	-3,491.68	2,734.76	2,696.09	38.67	70.728		
7,800.00	7,740.24	7,790.71	7,779.24	30.16	27.61	-88.90	202.26	-3,491.46	2,734.46	2,695.35	39.11	69.915		
7,900.00	7,840.24	7,890.71	7,879.24	30.48	27.94	-88.90	202.26	-3,491.46	2,734.46	2,694.87	39.59	69.067		
7,966.81	7,907.04	7,957.51	7,946.04	30.69	28.17	-88.90	202.26	-3,491.46	2,734.46	2,694.55	39.91	68.511 CC		
8,000.00	7,940.22	7,990.69	7,979.22	30.79	28.28	91.68	202.26	-3,491.46	2,734.49	2,694.42	40.07	68.244		
8,050.00	7,989.94	8,040.42	8,028.94	30.94	28.45	91.77	202.26	-3,491.46	2,734.64	2,694.34	40.30	67.863 ES		
8,100.00	8,039.04	8,089.51	8,078.04	31.08	28.61	91.93	202.26	-3,491.46	2,734.95	2,694.43	40.52	67.500		
8,150.00	8,087.13	8,137.60	8,126.13	31.21	28.78	92.16	202.26	-3,491.46	2,735.46	2,694.73	40.73	67.158		
8,200.00	8,133.85	8,184.32	8,172.85	31.33	28.93	92.43	202.26	-3,491.46	2,736.22	2,695.28	40.94	66.838		
8,250.00	8,178.84	8,229.32	8,217.84	31.45	29.09	92.73	202.26	-3,491.46	2,737.31	2,696.17	41.14	66.540		
8,300.00	8,221.77	8,272.24	8,260.77	31.55	29.23	93.04	202.26	-3,491.46	2,738.81	2,697.48	41.33	66.264		
8,350.00	8,262.30	8,312.77	8,301.30	31.65	29.37	93.33	202.26	-3,491.46	2,740.82	2,699.30	41.52	66.011		
8,400.00	8,300.13	8,350.60	8,339.13	31.74	29.50	93.59	202.26	-3,491.46	2,743.43	2,701.73	41.71	65.780		
8,450.00	8,334.96	8,385.44	8,373.96	31.82	29.61	93.78	202.26	-3,491.46	2,746.74	2,704.85	41.89	65.571		
8,500.00	8,366.54	8,417.01	8,405.54	31.89	29.72	93.88	202.26	-3,491.46	2,750.84	2,708.77	42.07	65.384		
8,550.00	8,394.62	8,445.10	8,433.62	31.96	29.82	93.86	202.26	-3,491.46	2,755.81	2,713.55	42.25	65.219		
8,600.00	8,418.99	8,469.47	8,457.99	32.03	29.90	93.71	202.26	-3,491.46	2,761.71	2,719.27	42.44	65.074		
8,650.00	8,439.47	8,489.94	8,478.47	32.11	29.97	93.41	202.26	-3,491.46	2,768.61	2,725.98	42.63	64.951		
8,700.00	8,455.89	8,506.36	8,494.89	32.19	30.02	92.93	202.26	-3,491.46	2,776.51	2,733.70	42.82	64.848		
8,750.00	8,468.13	8,518.61	8,507.13	32.29	30.07	92.28	202.26	-3,491.46	2,785.44	2,742.43	43.01	64.766		
8,800.00	8,476.11	8,526.58	8,515.11	32.40	30.09	91.43	202.26	-3,491.46	2,795.36	2,752.16	43.20	64.706		
8,850.00	8,479.75	8,530.23	8,518.75	32.54	30.11	90.39	202.26	-3,491.46	2,806.23	2,762.83	43.39	64.667		
8,866.81	8,480.00	8,530.47	8,519.00	32.59	30.11	90.00	202.26	-3,491.46	2,810.08	2,766.62	43.46	64.659		
8,900.00	8,480.00	8,530.47	8,519.00	32.70	30.11	90.00	202.26	-3,491.46	2,817.97	2,774.38	43.59	64.644		
9,000.00	8,480.00	8,530.47	8,519.00	33.09	30.11	90.00	202.26	-3,491.46	2,843.95	2,799.92	44.04	64.583		

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 103H
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 103H	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		
9,100.00	8,480.00	8,530.47	8,519.00	33.57	30.11	90.00	202.26	-3,491.46	2,873.18	2,828.65	44.54	64.512		
9,200.00	8,480.00	8,530.47	8,519.00	34.14	30.11	90.00	202.26	-3,491.46	2,905.56	2,860.47	45.09	64.442		
9,300.00	8,480.00	8,530.47	8,519.00	34.79	30.11	90.00	202.26	-3,491.46	2,940.99	2,895.31	45.68	64.384		
9,400.00	8,480.00	8,530.47	8,519.00	35.50	30.11	90.00	202.26	-3,491.46	2,979.35	2,933.05	46.30	64.347		
9,500.00	8,480.00	8,530.47	8,519.00	36.28	30.11	90.00	202.26	-3,491.46	3,020.53	2,973.59	46.95	64.338		
9,600.00	8,480.00	8,530.47	8,519.00	37.11	30.11	90.00	202.26	-3,491.46	3,064.43	3,016.82	47.61	64.365		
9,700.00	8,480.00	8,530.47	8,519.00	38.01	30.11	90.00	202.26	-3,491.46	3,110.92	3,062.64	48.28	64.433		
9,800.00	8,480.00	8,530.47	8,519.00	38.95	30.11	90.00	202.26	-3,491.46	3,159.90	3,110.94	48.96	64.544		
9,900.00	8,480.00	8,530.47	8,519.00	39.94	30.11	90.00	202.26	-3,491.46	3,211.24	3,161.61	49.63	64.702		
10,000.00	8,480.00	8,530.47	8,519.00	40.97	30.11	90.00	202.26	-3,491.46	3,264.84	3,214.54	50.30	64.907		
10,100.00	8,480.00	8,530.47	8,519.00	42.04	30.11	90.00	202.26	-3,491.46	3,320.59	3,269.63	50.96	65.161		
10,200.00	8,480.00	8,530.47	8,519.00	43.14	30.11	90.00	202.26	-3,491.46	3,378.37	3,326.77	51.61	65.464		
10,300.00	8,480.00	8,530.47	8,519.00	44.29	30.11	90.00	202.26	-3,491.46	3,438.10	3,385.86	52.24	65.814		
10,400.00	8,480.00	8,530.47	8,519.00	45.46	30.11	90.00	202.26	-3,491.46	3,499.66	3,446.81	52.85	66.215		
10,500.00	8,480.00	8,530.47	8,519.00	46.66	30.11	90.00	202.26	-3,491.46	3,562.97	3,509.52	53.45	66.660		
10,600.00	8,480.00	8,530.47	8,519.00	47.89	30.11	90.00	202.26	-3,491.46	3,627.93	3,573.90	54.03	67.149		
10,700.00	8,480.00	8,530.47	8,519.00	49.14	30.11	90.00	202.26	-3,491.46	3,694.45	3,639.86	54.59	67.682		
10,800.00	8,480.00	8,530.47	8,519.00	50.42	30.11	90.00	202.26	-3,491.46	3,762.46	3,707.33	55.12	68.255		
10,900.00	8,480.00	8,530.47	8,519.00	51.72	30.11	90.00	202.26	-3,491.46	3,831.86	3,776.22	55.64	68.866		
11,000.00	8,480.00	8,530.47	8,519.00	53.03	30.11	90.00	202.26	-3,491.46	3,902.60	3,846.46	56.14	69.514		
11,100.00	8,480.00	8,530.47	8,519.00	54.37	30.11	90.00	202.26	-3,491.46	3,974.59	3,917.97	56.62	70.197		
11,200.00	8,480.00	8,530.47	8,519.00	55.72	30.11	90.00	202.26	-3,491.46	4,047.78	3,990.70	57.08	70.913		
11,300.00	8,480.00	8,530.47	8,519.00	57.09	30.11	90.00	202.26	-3,491.46	4,122.09	4,064.57	57.52	71.659		
11,400.00	8,480.00	8,530.47	8,519.00	58.47	30.11	90.00	202.26	-3,491.46	4,197.47	4,139.52	57.95	72.437		
11,500.00	8,480.00	8,530.47	8,519.00	59.86	30.11	90.00	202.26	-3,491.46	4,273.86	4,215.50	58.35	73.243		
11,600.00	8,480.00	8,530.47	8,519.00	61.27	30.11	90.00	202.26	-3,491.46	4,351.20	4,292.46	58.74	74.075		
11,700.00	8,480.00	8,530.47	8,519.00	62.69	30.11	90.00	202.26	-3,491.46	4,429.45	4,370.34	59.11	74.930		
11,800.00	8,480.00	8,530.47	8,519.00	64.13	30.11	90.00	202.26	-3,491.46	4,508.57	4,449.10	59.47	75.813		
11,900.00	8,480.00	8,530.47	8,519.00	65.57	30.11	90.00	202.26	-3,491.46	4,588.50	4,528.69	59.81	76.718		
12,000.00	8,480.00	15,763.12	12,290.31	67.02	79.05	144.02	-3,539.02	-3,458.82	4,660.51	4,588.67	71.84	64.876		
12,100.00	8,480.00	15,863.12	12,291.39	68.48	80.45	144.03	-3,639.00	-3,457.94	4,661.45	4,588.25	73.20	63.678		
12,200.00	8,480.00	15,963.11	12,292.47	69.95	81.85	144.04	-3,738.99	-3,457.07	4,662.40	4,587.82	74.58	62.516		
12,300.00	8,480.00	16,063.10	12,293.55	71.42	83.27	144.04	-3,838.97	-3,456.20	4,663.35	4,587.38	75.96	61.389		
12,400.00	8,480.00	16,163.10	12,294.64	72.91	84.69	144.05	-3,938.95	-3,455.33	4,664.30	4,586.94	77.36	60.295		
12,500.00	8,480.00	16,263.09	12,295.72	74.40	86.12	144.06	-4,038.94	-3,454.45	4,665.24	4,586.48	78.76	59.234		
12,600.00	8,480.00	16,363.09	12,296.80	75.90	87.56	144.06	-4,138.92	-3,453.58	4,666.19	4,586.02	80.17	58.204		
12,700.00	8,480.00	16,463.08	12,297.89	77.40	89.00	144.07	-4,238.91	-3,452.71	4,667.14	4,585.55	81.59	57.204		
12,800.00	8,480.00	16,563.08	12,298.97	78.91	90.45	144.07	-4,338.89	-3,451.84	4,668.08	4,585.07	83.01	56.234		
12,900.00	8,480.00	16,663.07	12,300.05	80.43	91.91	144.08	-4,438.88	-3,450.96	4,669.03	4,584.59	84.44	55.292		
13,000.00	8,480.00	16,763.06	12,301.13	81.95	93.38	144.09	-4,538.86	-3,450.09	4,669.98	4,584.10	85.88	54.377		
13,100.00	8,480.00	16,863.06	12,302.22	83.47	94.85	144.09	-4,638.84	-3,449.22	4,670.93	4,583.60	87.32	53.489		
13,200.00	8,480.00	16,963.05	12,303.30	85.00	96.33	144.10	-4,738.83	-3,448.35	4,671.88	4,583.10	88.77	52.626		
13,300.00	8,480.00	17,063.05	12,304.38	86.54	97.81	144.11	-4,838.81	-3,447.47	4,672.82	4,582.59	90.23	51.788		
13,400.00	8,480.00	17,163.04	12,305.47	88.08	99.30	144.11	-4,938.80	-3,446.60	4,673.77	4,582.08	91.69	50.974		
13,500.00	8,480.00	17,263.03	12,306.55	89.62	100.79	144.12	-5,038.78	-3,445.73	4,674.72	4,581.57	93.15	50.183		
13,600.00	8,480.00	17,363.03	12,307.63	91.17	102.29	144.13	-5,138.77	-3,444.86	4,675.67	4,581.04	94.62	49.413		
13,700.00	8,480.00	17,463.02	12,308.71	92.72	103.80	144.13	-5,238.75	-3,443.99	4,676.62	4,580.52	96.10	48.666		
13,800.00	8,480.00	17,563.02	12,309.80	94.27	105.30	144.14	-5,338.74	-3,443.11	4,677.56	4,579.99	97.57	47.940		
13,900.00	8,480.00	17,663.01	12,310.88	95.83	106.81	144.15	-5,438.72	-3,442.24	4,678.51	4,579.46	99.05	47.234		
14,000.00	8,480.00	17,763.00	12,311.96	97.39	108.33	144.15	-5,538.70	-3,441.37	4,679.46	4,578.93	100.53	46.548		
14,100.00	8,480.00	17,863.00	12,313.05	98.95	109.85	144.16	-5,638.69	-3,440.50	4,680.41	4,578.39	102.01	45.880		
14,200.00	8,480.00	17,962.99	12,314.13	100.52	111.37	144.17	-5,738.67	-3,439.62	4,681.36	4,577.85	103.50	45.229		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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		
14,300.00	8,480.00	18,062.99	12,315.21	102.09	112.90	144.17	-5,838.66	-3,438.75	4,682.31	4,577.31	104.99	44.596		
14,400.00	8,480.00	18,162.98	12,316.30	103.66	114.43	144.18	-5,938.64	-3,437.88	4,683.25	4,576.77	106.49	43.979		
14,500.00	8,480.00	18,262.97	12,317.38	105.23	115.97	144.19	-6,038.63	-3,437.01	4,684.20	4,576.22	107.99	43.378		
14,600.00	8,480.00	18,362.97	12,318.46	106.81	117.50	144.19	-6,138.61	-3,436.13	4,685.15	4,575.67	109.49	42.792		
14,700.00	8,480.00	18,462.96	12,319.54	108.39	119.04	144.20	-6,238.60	-3,435.26	4,686.10	4,575.11	110.99	42.222		
14,800.00	8,480.00	18,562.96	12,320.63	109.97	120.59	144.21	-6,338.58	-3,434.39	4,687.05	4,574.55	112.49	41.665		
14,900.00	8,480.00	18,662.95	12,321.71	111.55	122.13	144.21	-6,438.56	-3,433.52	4,688.00	4,574.00	114.00	41.122		
15,000.00	8,480.00	18,762.94	12,322.79	113.13	123.68	144.22	-6,538.55	-3,432.64	4,688.95	4,573.43	115.51	40.593		
15,100.00	8,480.00	18,862.94	12,323.88	114.72	125.23	144.23	-6,638.53	-3,431.77	4,689.90	4,572.87	117.03	40.076		
15,200.00	8,480.00	18,962.93	12,324.96	116.31	126.78	144.23	-6,738.52	-3,430.90	4,690.84	4,572.30	118.54	39.572		
15,300.00	8,480.00	19,062.93	12,326.04	117.90	128.34	144.24	-6,838.50	-3,430.03	4,691.79	4,571.74	120.06	39.080		
15,400.00	8,480.00	19,162.92	12,327.12	119.49	129.90	144.25	-6,938.49	-3,429.15	4,692.74	4,571.17	121.58	38.599		
15,500.00	8,480.00	19,262.92	12,328.21	121.08	131.46	144.25	-7,038.47	-3,428.28	4,693.69	4,570.60	123.10	38.131		
15,600.00	8,480.00	19,362.91	12,329.29	122.68	133.02	144.26	-7,138.45	-3,427.41	4,694.64	4,570.03	124.61	37.673		
15,700.00	8,480.00	19,462.90	12,330.37	124.27	134.59	144.27	-7,238.44	-3,426.54	4,695.59	4,569.46	126.13	37.227		
15,800.00	8,480.00	19,562.90	12,331.46	125.87	136.16	144.27	-7,338.42	-3,425.66	4,696.54	4,568.89	127.65	36.791		
15,900.00	8,480.00	19,662.89	12,332.54	127.47	137.72	144.28	-7,438.41	-3,424.79	4,697.49	4,568.31	129.18	36.365		
16,000.00	8,480.00	19,762.89	12,333.62	129.07	139.30	144.28	-7,538.39	-3,423.92	4,698.44	4,567.74	130.70	35.948		
16,100.00	8,480.00	19,862.88	12,334.70	130.67	140.87	144.29	-7,638.38	-3,423.05	4,699.39	4,567.16	132.23	35.540		
16,200.00	8,480.00	19,962.87	12,335.79	132.27	142.44	144.30	-7,738.36	-3,422.18	4,700.34	4,566.58	133.75	35.142		
16,300.00	8,480.00	20,062.87	12,336.87	133.88	144.02	144.30	-7,838.35	-3,421.30	4,701.29	4,566.01	135.28	34.752		
16,400.00	8,480.00	20,162.86	12,337.95	135.48	145.60	144.31	-7,938.33	-3,420.43	4,702.24	4,565.43	136.81	34.370		
16,500.00	8,480.00	20,262.86	12,339.04	137.09	147.18	144.32	-8,038.31	-3,419.56	4,703.19	4,564.84	138.34	33.997		
16,600.00	8,480.00	20,362.85	12,340.12	138.70	148.76	144.32	-8,138.30	-3,418.69	4,704.14	4,564.26	139.87	33.631		
16,700.00	8,480.00	20,462.84	12,341.20	140.30	150.34	144.33	-8,238.28	-3,417.81	4,705.09	4,563.68	141.41	33.273		
16,800.00	8,480.00	20,562.84	12,342.28	141.91	151.93	144.34	-8,338.27	-3,416.94	4,706.04	4,563.09	142.94	32.923		
16,900.00	8,480.00	20,662.83	12,343.37	143.52	153.51	144.34	-8,438.25	-3,416.07	4,706.99	4,562.51	144.48	32.579		
17,000.00	8,480.00	20,762.83	12,344.45	145.13	155.10	144.35	-8,538.24	-3,415.20	4,707.94	4,561.92	146.01	32.243		
17,100.00	8,480.00	20,862.82	12,345.53	146.75	156.69	144.36	-8,638.22	-3,414.32	4,708.89	4,561.34	147.55	31.913		
17,200.00	8,480.00	20,962.81	12,346.62	148.36	158.28	144.36	-8,738.21	-3,413.45	4,709.84	4,560.75	149.09	31.591		
17,300.00	8,480.00	21,062.81	12,347.70	149.97	159.87	144.37	-8,838.19	-3,412.58	4,710.79	4,560.16	150.63	31.275		
17,400.00	8,480.00	21,162.80	12,348.78	151.59	161.46	144.38	-8,938.17	-3,411.71	4,711.74	4,559.58	152.16	30.965		
17,500.00	8,480.00	21,262.80	12,349.86	153.20	163.05	144.38	-9,038.16	-3,410.83	4,712.69	4,558.99	153.70	30.662		
17,600.00	8,480.00	21,362.79	12,350.95	154.82	164.65	144.39	-9,138.14	-3,409.96	4,713.64	4,558.40	155.24	30.364		
17,700.00	8,480.00	21,462.78	12,352.03	156.44	166.24	144.40	-9,238.13	-3,409.09	4,714.59	4,557.81	156.78	30.072		
17,800.00	8,480.00	21,562.78	12,353.11	158.05	167.84	144.40	-9,338.11	-3,408.22	4,715.54	4,557.22	158.32	29.786		
17,900.00	8,480.00	21,662.77	12,354.20	159.67	169.44	144.41	-9,438.10	-3,407.34	4,716.49	4,556.64	159.86	29.505		
18,000.00	8,480.00	21,762.77	12,355.28	161.29	171.03	144.41	-9,538.08	-3,406.47	4,717.44	4,556.05	161.40	29.229		
18,100.00	8,480.00	21,862.76	12,356.36	162.91	172.63	144.42	-9,638.06	-3,405.60	4,718.39	4,555.45	162.94	28.958		
18,200.00	8,480.00	21,962.75	12,357.44	164.53	174.23	144.43	-9,738.05	-3,404.73	4,719.34	4,554.87	164.48	28.693		
18,300.00	8,480.00	22,062.75	12,358.53	166.15	175.84	144.43	-9,838.03	-3,403.85	4,720.29	4,554.28	166.02	28.432		
18,400.00	8,480.00	22,162.74	12,359.61	167.77	177.44	144.44	-9,938.02	-3,402.98	4,721.25	4,553.69	167.56	28.177		
18,500.00	8,480.00	22,262.74	12,360.69	169.40	179.04	144.45	-10,038.00	-3,402.11	4,722.20	4,553.10	169.10	27.925		
18,600.00	8,480.00	22,362.73	12,361.78	171.02	180.65	144.45	-10,137.99	-3,401.24	4,723.15	4,552.51	170.64	27.679		
18,700.00	8,480.00	22,390.61	12,362.08	172.64	181.09	144.46	-10,165.86	-3,400.99	4,724.65	4,553.00	171.65	27.526		
18,800.00	8,480.00	22,390.61	12,362.08	174.26	181.09	144.46	-10,165.86	-3,400.99	4,728.18	4,555.78	172.40	27.426		
18,900.00	8,480.00	22,390.61	12,362.08	175.89	181.09	144.46	-10,165.86	-3,400.99	4,733.83	4,560.75	173.08	27.350		
19,000.00	8,480.00	22,390.61	12,362.08	177.51	181.09	144.46	-10,165.86	-3,400.99	4,741.58	4,567.87	173.71	27.296		
19,100.00	8,480.00	22,390.61	12,362.08	179.14	181.09	144.46	-10,165.86	-3,400.99	4,751.42	4,577.15	174.26	27.266		
19,200.00	8,480.00	22,390.61	12,362.08	180.76	181.09	144.46	-10,165.86	-3,400.99	4,763.33	4,588.58	174.75	27.258 SF		
19,300.00	8,480.00	22,390.61	12,362.08	182.39	181.09	144.46	-10,165.86	-3,400.99	4,777.32	4,602.14	175.18	27.271		
19,400.00	8,480.00	22,390.61	12,362.08	184.02	181.09	144.46	-10,165.86	-3,400.99	4,793.35	4,617.80	175.55	27.305		

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 103H
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 103H	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
Judge Baylor Fed Com - Judge Baylor Fed Com 701H - OH - Plan #5												Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,500.00	8,480.00	22,390.61	12,362.08	185.64	181.09	144.46	-10,165.86	-3,400.99	4,811.40	4,635.56	175.84	27.362	
19,600.00	8,480.00	22,390.61	12,362.08	187.27	181.09	144.46	-10,165.86	-3,400.99	4,831.46	4,655.39	176.07	27.440	
19,700.00	8,480.00	22,390.61	12,362.08	188.90	181.09	144.46	-10,165.86	-3,400.99	4,853.49	4,677.25	176.25	27.538	
19,800.00	8,480.00	22,390.61	12,362.08	190.53	181.09	144.46	-10,165.86	-3,400.99	4,877.48	4,701.12	176.36	27.657	
19,899.80	8,480.00	22,390.61	12,362.08	192.15	181.09	144.46	-10,165.86	-3,400.99	4,903.34	4,726.92	176.41	27.795	

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 604H - OH - OH		Offset Site Error:	0.00 usft
Survey Program:													190-MWD, 1393-OWSG (Rev2) MWD, 21860-BLIND		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	0.50	0.50	0.00	0.00	47.82	540.37	596.32	804.73							
100.00	100.00	100.50	100.50	0.13	0.15	47.82	540.37	596.32	804.73	804.54	0.20	4,087.982				
200.00	200.00	201.40	201.40	0.48	0.33	47.82	540.37	596.32	804.73	804.15	0.58	1,378.694				
300.00	300.00	308.86	308.85	0.84	0.70	47.82	539.91	595.83	804.10	803.01	1.10	734.221				
400.00	400.00	413.06	413.05	1.20	1.07	47.80	539.18	594.64	802.79	801.18	1.61	500.062				
500.00	500.00	518.16	518.13	1.56	1.44	47.75	538.40	592.73	800.95	798.83	2.12	377.473				
600.00	600.00	629.50	629.42	1.92	1.84	47.69	536.86	589.90	798.15	795.49	2.66	300.599				
700.00	700.00	731.43	731.27	2.28	2.21	47.66	534.58	586.61	794.25	791.09	3.17	250.893				
800.00	800.00	831.06	830.83	2.63	2.57	47.63	532.29	583.51	790.40	786.73	3.67	215.319				
900.00	900.00	927.66	927.36	2.99	2.92	47.64	529.69	580.94	786.63	782.46	4.17	188.715				
1,000.00	1,000.00	1,031.29	1,030.92	3.35	3.29	47.64	527.38	578.33	783.28	778.59	4.68	167.243				
1,100.00	1,100.00	1,131.02	1,130.57	3.71	3.66	47.57	525.32	574.79	779.26	774.07	5.19	150.153				
1,200.00	1,200.00	1,229.62	1,229.10	4.07	4.01	47.51	523.57	571.53	775.62	769.93	5.69	136.229				
1,300.00	1,300.00	1,330.84	1,330.24	4.43	4.38	47.41	521.88	567.84	771.81	765.60	6.20	124.413				
1,400.00	1,400.00	1,427.41	1,426.74	4.79	4.53	47.31	520.54	564.39	768.24	761.67	6.56	117.059				
1,500.00	1,500.00	1,526.72	1,525.98	5.14	4.57	47.20	519.36	560.84	764.80	757.95	6.85	111.663				
1,600.00	1,600.00	1,626.20	1,625.40	5.50	4.63	47.09	518.26	557.47	761.57	754.41	7.16	106.368				
1,700.00	1,700.00	1,724.08	1,723.22	5.86	4.72	46.98	517.17	554.19	758.35	750.86	7.49	101.238				
1,800.00	1,800.00	1,821.55	1,820.64	6.22	4.84	46.88	516.27	551.28	755.55	747.71	7.84	96.374				
1,900.00	1,900.00	1,921.05	1,920.09	6.58	4.97	46.80	515.25	548.67	752.94	744.73	8.21	91.756				
2,000.00	2,000.00	2,020.49	2,019.51	6.94	5.13	46.80	513.46	546.85	750.36	741.78	8.59	87.402				
2,100.00	2,099.99	2,118.82	2,117.81	7.29	5.30	125.76	511.29	545.60	748.70	739.73	8.97	83.472				
2,131.21	2,131.18	2,147.76	2,146.73	7.40	5.36	125.83	510.69	545.31	748.57	739.48	9.09	82.361 CC, ES				
2,200.00	2,199.91	2,210.56	2,209.52	7.63	5.48	126.03	509.61	544.92	749.21	739.86	9.35	80.111				
2,300.00	2,299.69	2,305.10	2,304.05	7.98	5.67	126.43	508.57	544.79	752.24	742.49	9.75	77.179				
2,400.00	2,399.27	2,401.91	2,400.86	8.34	5.88	126.95	507.94	544.96	757.40	747.25	10.15	74.607				
2,500.00	2,498.57	2,496.59	2,495.55	8.69	6.08	127.58	507.53	545.50	764.70	754.14	10.56	72.410				
2,600.00	2,597.54	2,591.60	2,590.55	9.06	6.30	128.32	507.45	546.46	774.30	763.33	10.98	70.540				
2,616.45	2,613.78	2,609.53	2,608.48	9.12	6.34	128.48	507.45	546.67	776.08	765.03	11.05	70.231				
2,700.00	2,696.24	2,705.92	2,704.86	9.43	6.57	129.46	506.40	547.39	784.50	773.07	11.43	68.607				
2,800.00	2,794.94	2,818.52	2,817.34	9.81	6.87	130.78	501.52	548.15	792.72	780.82	11.90	66.611				
2,900.00	2,893.64	2,911.15	2,909.78	10.19	7.12	131.98	495.72	549.54	800.84	788.49	12.35	64.870				
3,000.00	2,992.34	3,001.58	3,000.04	10.58	7.38	133.12	490.77	551.96	810.69	797.90	12.79	63.383				
3,100.00	3,091.04	3,120.17	3,118.39	10.97	7.72	134.59	483.61	554.17	820.02	806.73	13.29	61.709				
3,200.00	3,189.74	3,260.60	3,258.30	11.37	8.15	136.32	471.78	552.59	826.03	812.21	13.82	59.792				
3,300.00	3,288.45	3,351.00	3,348.23	11.77	8.44	137.40	463.14	549.42	829.77	815.48	14.29	58.083				
3,400.00	3,387.15	3,445.00	3,441.85	12.17	8.74	138.46	455.21	546.56	834.80	820.04	14.76	56.548				
3,500.00	3,485.85	3,529.00	3,525.62	12.58	9.01	139.36	449.32	544.87	841.67	826.44	15.23	55.280				
3,600.00	3,584.55	3,643.36	3,639.73	12.98	9.38	140.45	442.56	541.42	848.54	832.80	15.74	53.926				
3,700.00	3,683.25	3,738.06	3,734.22	13.39	9.69	141.20	438.45	536.85	854.76	838.54	16.22	52.712				
3,800.00	3,781.95	3,823.00	3,819.07	13.80	9.96	141.78	436.51	533.46	862.73	846.05	16.68	51.728				
3,900.00	3,880.65	3,904.59	3,900.62	14.22	10.22	142.34	435.14	531.62	872.61	855.48	17.13	50.937				
4,000.00	3,979.35	4,019.30	4,015.21	14.63	10.60	143.32	430.23	530.23	882.56	864.90	17.66	49.987				
4,100.00	4,078.05	4,124.11	4,119.70	15.05	10.96	144.40	422.16	528.76	891.07	872.91	18.16	49.058				
4,200.00	4,176.75	4,211.13	4,206.48	15.47	11.26	145.27	415.73	527.92	900.39	881.75	18.64	48.314				
4,300.00	4,275.45	4,307.74	4,302.94	15.89	11.58	146.11	410.50	527.03	910.76	891.63	19.13	47.614				
4,400.00	4,374.15	4,425.28	4,420.32	16.31	11.99	147.01	405.07	524.21	920.27	900.60	19.67	46.797				
4,500.00	4,472.85	4,528.97	4,523.80	16.73	12.34	147.76	400.20	519.93	928.29	908.12	20.17	46.018				
4,600.00	4,571.55	4,616.46	4,611.17	17.15	12.64	148.33	397.02	516.56	937.11	916.47	20.65	45.389				
4,700.00	4,670.25	4,702.97	4,697.60	17.57	12.93	148.89	394.23	514.44	947.47	926.35	21.12	44.871				
4,800.00	4,768.95	4,794.85	4,789.43	18.00	13.25	149.47	391.44	513.06	958.90	937.30	21.60	44.402				
4,900.00	4,867.65	4,889.76	4,884.31	18.42	13.57	150.04	389.17	512.00	971.00	948.92	22.08	43.970				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
5,000.00	4,966.35	4,986.25	4,980.78	18.85	13.90	150.58	387.33	510.99	983.43	960.86	22.58	43.563				
5,100.00	5,065.05	5,090.68	5,085.18	19.28	14.25	151.16	385.14	510.00	995.98	972.89	23.09	43.135				
5,200.00	5,163.76	5,245.30	5,239.51	19.70	14.79	152.16	377.69	505.12	1,005.92	982.20	23.72	42.408				
5,300.00	5,262.46	5,344.00	5,337.79	20.13	15.15	152.90	370.34	499.81	1,012.97	988.74	24.23	41.812				
5,400.00	5,361.16	5,439.35	5,432.72	20.56	15.50	153.61	362.91	494.78	1,020.19	995.47	24.73	41.258				
5,500.00	5,459.86	5,535.46	5,528.41	20.99	15.85	154.34	355.28	490.12	1,027.96	1,002.73	25.23	40.744				
5,600.00	5,558.56	5,635.98	5,628.46	21.42	16.23	155.11	346.86	485.22	1,035.77	1,010.03	25.74	40.237				
5,700.00	5,657.26	5,727.37	5,719.46	21.85	16.56	155.80	339.45	481.07	1,044.14	1,017.91	26.23	39.800				
5,800.00	5,755.96	5,822.79	5,814.51	22.28	16.92	156.49	332.00	477.32	1,053.34	1,026.60	26.74	39.397				
5,900.00	5,854.66	5,934.01	5,925.19	22.71	17.33	157.33	322.23	472.48	1,062.09	1,034.82	27.28	38.938				
6,000.00	5,953.36	6,036.44	6,026.97	23.14	17.72	158.16	311.94	467.34	1,070.14	1,042.34	27.80	38.496				
6,100.00	6,052.06	6,134.58	6,124.49	23.57	18.09	158.94	302.04	462.49	1,078.48	1,050.16	28.31	38.092				
6,200.00	6,150.76	6,234.28	6,223.53	24.01	18.47	159.74	291.72	457.47	1,086.87	1,058.04	28.83	37.699				
6,300.00	6,249.46	6,325.66	6,314.29	24.44	18.82	160.46	282.15	453.05	1,095.66	1,066.33	29.33	37.357				
6,400.00	6,348.16	6,417.24	6,405.40	24.87	19.17	161.13	273.70	449.26	1,105.49	1,075.66	29.83	37.064				
6,500.00	6,446.86	6,509.99	6,497.81	25.30	19.51	161.72	266.52	445.61	1,115.88	1,085.55	30.32	36.800				
6,600.00	6,545.56	6,600.97	6,588.59	25.74	19.85	162.19	261.51	442.43	1,127.08	1,096.27	30.81	36.580				
6,700.00	6,644.26	6,693.86	6,681.33	26.17	20.18	162.63	257.00	439.69	1,138.98	1,107.67	31.30	36.386				
6,804.31	6,747.22	6,793.32	6,780.64	26.62	20.54	163.10	252.04	437.20	1,151.91	1,120.09	31.82	36.197				
6,900.00	6,841.85	6,882.65	6,869.83	27.03	20.86	163.56	247.51	435.21	1,162.96	1,130.67	32.29	36.013				
7,000.00	6,941.09	6,978.19	6,965.24	27.44	21.21	163.98	242.79	433.67	1,172.74	1,139.95	32.79	35.768				
7,100.00	7,040.61	7,082.85	7,069.79	27.83	21.58	164.35	238.40	431.70	1,179.86	1,146.55	33.31	35.423				
7,200.00	7,140.36	7,177.64	7,164.50	28.20	21.92	164.61	235.11	429.67	1,184.31	1,150.51	33.79	35.048				
7,300.00	7,240.26	7,264.60	7,251.43	28.55	22.22	164.76	233.13	428.53	1,187.14	1,152.90	34.24	34.671				
7,400.00	7,340.24	7,354.87	7,341.68	28.88	22.54	164.86	231.64	428.29	1,188.54	1,153.85	34.69	34.258				
7,420.77	7,361.00	7,374.74	7,361.55	28.95	22.60	86.08	231.33	428.30	1,188.59	1,153.80	34.79	34.164				
7,421.98	7,362.21	7,375.90	7,362.71	28.95	22.61	86.08	231.31	428.31	1,188.59	1,153.79	34.80	34.158				
7,500.00	7,440.24	7,450.79	7,437.60	29.20	22.86	86.13	230.15	428.49	1,188.70	1,153.54	35.16	33.808				
7,600.00	7,540.24	7,549.20	7,536.00	29.52	23.20	86.21	228.69	428.96	1,189.08	1,153.44	35.64	33.368				
7,700.00	7,640.24	7,647.07	7,633.85	29.84	23.53	86.28	227.22	429.48	1,189.51	1,153.40	36.11	32.943				
7,800.00	7,740.24	7,743.01	7,729.77	30.16	23.86	86.35	225.82	430.30	1,190.27	1,153.70	36.57	32.546				
7,900.00	7,840.24	7,837.69	7,824.44	30.48	24.17	86.40	224.77	431.42	1,191.38	1,154.35	37.03	32.175				
7,966.81	7,907.04	7,901.42	7,888.16	30.69	24.38	86.43	224.17	432.44	1,192.41	1,155.07	37.33	31.939				
8,000.00	7,940.22	7,934.60	7,921.33	30.79	24.49	-92.97	223.92	433.00	1,193.00	1,155.51	37.49	31.823				
8,050.00	7,989.94	7,983.81	7,970.54	30.94	24.65	-93.08	223.63	433.82	1,194.08	1,156.37	37.71	31.663				
8,100.00	8,039.04	8,030.40	8,017.12	31.08	24.80	-93.35	223.42	434.66	1,195.52	1,157.60	37.92	31.527				
8,150.00	8,087.13	8,076.42	8,063.13	31.21	24.95	-93.75	223.27	435.58	1,197.42	1,159.30	38.12	31.409				
8,200.00	8,133.85	8,122.82	8,109.52	31.33	25.10	-94.28	223.22	436.55	1,199.86	1,161.53	38.33	31.307				
8,250.00	8,178.84	8,167.17	8,153.87	31.45	25.24	-94.89	223.29	437.47	1,202.95	1,164.44	38.52	31.232				
8,300.00	8,221.77	8,207.70	8,194.38	31.55	25.36	-95.48	223.47	438.35	1,206.94	1,168.25	38.69	31.194				
8,350.00	8,262.30	8,245.79	8,232.46	31.65	25.48	-96.03	223.75	439.23	1,212.04	1,173.18	38.86	31.193				
8,400.00	8,300.13	8,284.38	8,271.04	31.74	25.61	-96.60	224.13	440.15	1,218.41	1,179.39	39.02	31.223				
8,450.00	8,334.96	8,321.14	8,307.79	31.82	25.72	-97.07	224.54	440.94	1,226.16	1,186.98	39.19	31.292				
8,500.00	8,366.54	8,353.93	8,340.57	31.89	25.82	-97.33	224.94	441.58	1,235.48	1,196.15	39.33	31.411				
8,550.00	8,394.62	8,379.98	8,366.61	31.96	25.90	-97.21	225.30	442.08	1,246.59	1,207.13	39.45	31.597				
8,600.00	8,418.99	8,402.40	8,389.03	32.03	25.97	-96.80	225.63	442.53	1,259.61	1,220.05	39.56	31.840				
8,650.00	8,439.47	8,421.04	8,407.66	32.11	26.03	-96.04	225.92	442.92	1,274.59	1,234.94	39.65	32.142				
8,700.00	8,455.89	8,435.77	8,422.38	32.19	26.08	-94.91	226.16	443.24	1,291.54	1,251.81	39.73	32.505				
8,750.00	8,468.13	8,446.00	8,432.61	32.29	26.11	-93.35	226.33	443.46	1,310.38	1,270.59	39.79	32.930				
8,800.00	8,476.11	8,453.28	8,439.88	32.40	26.13	-91.43	226.46	443.62	1,331.00	1,291.16	39.84	33.407				
8,850.00	8,479.75	8,455.93	8,442.53	32.54	26.14	-89.07	226.51	443.68	1,353.23	1,313.36	39.87	33.939				
8,866.81	8,480.00	8,455.89	8,442.50	32.59	26.14	-88.19	226.51	443.68	1,361.03	1,321.15	39.88	34.130				

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 103H
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 103H	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				
8,900.00	8,480.00	8,455.35	8,441.96	32.70	26.14	-88.16	226.50	443.67	1,376.89	1,337.00	39.89	34.518				
9,000.00	8,480.00	8,453.73	8,440.34	33.09	26.13	-88.09	226.47	443.63	1,428.28	1,388.35	39.93	35.772				
9,100.00	8,480.00	8,452.12	8,438.72	33.57	26.13	-88.01	226.44	443.59	1,484.62	1,444.65	39.97	37.141				
9,200.00	8,480.00	8,450.50	8,437.11	34.14	26.12	-87.93	226.41	443.56	1,545.39	1,505.37	40.02	38.614				
9,300.00	8,480.00	8,448.89	8,435.50	34.79	26.12	-87.86	226.38	443.52	1,610.08	1,570.01	40.07	40.180				
9,400.00	8,480.00	8,446.00	8,432.61	35.50	26.11	-87.72	226.33	443.46	1,678.24	1,638.12	40.12	41.832				
9,500.00	8,480.00	8,446.00	8,432.61	36.28	26.11	-87.72	226.33	443.46	1,749.46	1,709.28	40.18	43.544				
9,600.00	8,480.00	8,446.00	8,432.61	37.11	26.11	-87.72	226.33	443.46	1,823.38	1,783.14	40.23	45.320				
9,700.00	8,480.00	8,446.00	8,432.61	38.01	26.11	-87.72	226.33	443.46	1,899.69	1,859.40	40.29	47.152				
9,800.00	8,480.00	8,441.11	8,427.72	38.95	26.09	-87.48	226.25	443.35	1,978.11	1,937.78	40.32	49.054				
9,900.00	8,480.00	8,439.60	8,426.22	39.94	26.09	-87.41	226.23	443.32	2,058.40	2,018.02	40.37	50.986				
10,000.00	8,480.00	8,438.12	8,424.73	40.97	26.08	-87.34	226.20	443.29	2,140.35	2,099.93	40.42	52.956				
10,100.00	8,480.00	8,436.64	8,423.25	42.04	26.08	-87.27	226.18	443.25	2,223.77	2,183.31	40.46	54.962				
10,200.00	8,480.00	8,435.18	8,421.79	43.14	26.08	-87.20	226.15	443.22	2,308.52	2,268.01	40.50	56.997				
10,300.00	8,480.00	8,433.72	8,420.34	44.29	26.07	-87.13	226.13	443.19	2,394.43	2,353.89	40.54	59.059				
10,400.00	8,480.00	8,432.28	8,418.90	45.46	26.07	-87.06	226.10	443.16	2,481.41	2,440.83	40.58	61.145				
10,500.00	8,480.00	8,430.85	8,417.47	46.66	26.06	-87.00	226.08	443.13	2,569.33	2,528.71	40.62	63.252				
10,600.00	8,480.00	8,429.43	8,416.05	47.89	26.06	-86.93	226.06	443.10	2,658.10	2,617.45	40.66	65.378				
10,700.00	8,480.00	8,428.03	8,414.64	49.14	26.05	-86.86	226.03	443.07	2,747.65	2,706.95	40.69	67.520				
10,800.00	8,480.00	8,426.63	8,413.25	50.42	26.05	-86.80	226.01	443.04	2,837.89	2,797.16	40.73	69.676				
10,900.00	8,480.00	8,425.25	8,411.86	51.72	26.04	-86.73	225.99	443.01	2,928.76	2,888.00	40.76	71.845				
11,000.00	8,480.00	8,423.87	8,410.49	53.03	26.04	-86.66	225.96	442.98	3,020.22	2,979.42	40.80	74.026				
11,100.00	8,480.00	8,422.51	8,409.13	54.37	26.04	-86.60	225.94	442.95	3,112.19	3,071.36	40.83	76.217				
11,200.00	8,480.00	8,421.16	8,407.77	55.72	26.03	-86.54	225.92	442.92	3,204.65	3,163.78	40.87	78.417				
11,300.00	8,480.00	8,419.81	8,406.43	57.09	26.03	-86.47	225.90	442.89	3,297.54	3,256.64	40.90	80.624				
11,400.00	8,480.00	8,418.48	8,405.10	58.47	26.02	-86.41	225.88	442.87	3,390.84	3,349.91	40.93	82.838				
11,500.00	8,480.00	8,417.16	8,403.78	59.86	26.02	-86.35	225.86	442.84	3,484.51	3,443.55	40.97	85.057				
11,600.00	8,480.00	8,415.85	8,402.47	61.27	26.02	-86.28	225.84	442.81	3,578.53	3,537.53	41.00	87.281				
11,700.00	8,480.00	14,661.74	11,869.28	62.69	68.83	-160.27	-2,950.02	488.38	3,612.00	3,557.59	54.41	66.389				
11,800.00	8,480.00	14,728.00	11,875.01	64.13	69.76	-160.30	-3,016.02	489.57	3,620.47	3,565.25	55.22	65.563				
11,900.00	8,480.00	14,780.20	11,880.07	65.57	70.50	-160.32	-3,067.95	490.67	3,630.08	3,574.13	55.95	64.878				
12,000.00	8,480.00	15,106.00	11,903.49	67.02	75.15	-160.50	-3,392.70	489.95	3,634.44	3,576.06	58.38	62.256				
12,100.00	8,480.00	15,157.21	11,905.89	68.48	75.89	-160.53	-3,443.85	489.40	3,638.72	3,579.60	59.11	61.557				
12,200.00	8,480.00	15,200.00	11,908.98	69.95	76.51	-160.54	-3,486.52	490.03	3,645.29	3,585.49	59.80	60.962				
12,300.00	8,480.00	15,564.19	11,919.39	71.42	81.82	-160.56	-3,850.34	495.78	3,646.73	3,584.06	62.67	58.194				
12,400.00	8,480.00	15,666.57	11,919.67	72.91	83.33	-160.58	-3,952.72	495.49	3,646.56	3,582.79	63.77	57.183				
12,432.29	8,480.00	15,689.91	11,919.87	73.39	83.67	-160.60	-3,976.05	495.05	3,646.51	3,582.45	64.06	56.923				
12,500.00	8,480.00	15,818.83	11,921.67	74.40	85.58	-160.70	-4,104.84	490.05	3,646.64	3,581.50	65.14	55.985				
12,600.00	8,480.00	15,862.00	11,921.79	75.90	86.21	-160.74	-4,147.96	487.98	3,645.42	3,579.58	65.84	55.368				
12,679.60	8,480.00	15,901.73	11,921.76	77.09	86.81	-160.77	-4,187.64	486.32	3,644.89	3,578.45	66.44	54.862				
12,700.00	8,480.00	15,905.09	11,921.85	77.40	86.86	-160.77	-4,191.00	486.22	3,645.14	3,578.59	66.55	54.776				
12,800.00	8,480.00	15,956.00	11,924.98	78.91	87.62	-160.80	-4,241.80	485.43	3,648.72	3,581.42	67.30	54.219				
12,900.00	8,480.00	15,956.00	11,924.98	80.43	87.62	-160.80	-4,241.80	485.43	3,652.89	3,585.18	67.71	53.948				
13,000.00	8,480.00	15,956.00	11,924.98	81.95	87.62	-160.80	-4,241.80	485.43	3,659.79	3,591.69	68.10	53.741				
13,100.00	8,480.00	16,429.00	11,943.29	83.47	94.75	-160.95	-4,713.67	486.24	3,663.98	3,592.20	71.77	51.049				
13,200.00	8,480.00	16,468.16	11,942.87	85.00	95.35	-160.96	-4,752.83	486.46	3,662.87	3,590.37	72.50	50.519				
13,213.89	8,480.00	16,473.27	11,942.86	85.22	95.43	-160.96	-4,757.93	486.51	3,662.86	3,590.25	72.60	50.450				
13,300.00	8,480.00	16,523.00	11,943.38	86.54	96.18	-160.95	-4,807.66	487.30	3,663.62	3,590.28	73.34	49.956				
13,400.00	8,480.00	16,523.00	11,943.38	88.08	96.18	-160.95	-4,807.66	487.30	3,665.97	3,592.21	73.76	49.701				
13,500.00	8,480.00	16,577.84	11,945.21	89.62	97.02	-160.95	-4,862.45	488.64	3,669.93	3,595.35	74.58	49.207				
13,600.00	8,480.00	16,618.00	11,947.44	91.17	97.64	-160.95	-4,902.53	489.87	3,675.75	3,600.46	75.28	48.825				
13,700.00	8,480.00	16,806.00	11,956.05	92.72	100.52	-160.95	-5,090.26	494.54	3,680.07	3,602.96	77.11	47.723				

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 103H
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 103H	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				
13,800.00	8,480.00	16,900.00	11,959.57	94.27	101.97	-160.94	-5,184.14	497.65	3,684.37	3,606.12	78.25	47.085				
13,900.00	8,480.00	16,949.12	11,961.69	95.83	102.73	-160.93	-5,233.18	499.71	3,689.44	3,610.40	79.04	46.676				
14,000.00	8,480.00	17,013.20	11,965.30	97.39	103.72	-160.91	-5,297.10	502.45	3,695.77	3,615.82	79.95	46.226				
14,100.00	8,480.00	17,232.46	11,974.37	98.95	107.12	-160.79	-5,515.70	515.98	3,702.03	3,619.85	82.18	45.046				
14,200.00	8,480.00	17,324.77	11,976.83	100.52	108.56	-160.79	-5,607.94	517.82	3,704.93	3,621.62	83.31	44.473				
14,300.00	8,480.00	17,372.00	11,979.10	102.09	109.29	-160.79	-5,655.09	519.02	3,709.62	3,625.54	84.08	44.119				
14,400.00	8,480.00	17,423.37	11,982.14	103.66	110.09	-160.79	-5,706.34	520.78	3,715.70	3,630.82	84.89	43.772				
14,500.00	8,480.00	17,511.17	11,987.39	105.23	111.46	-160.79	-5,793.93	523.84	3,722.17	3,636.19	85.99	43.288				
14,600.00	8,480.00	17,692.18	11,997.36	106.81	114.29	-160.82	-5,974.59	526.60	3,727.36	3,639.58	87.78	42.461				
14,700.00	8,480.00	17,750.00	12,000.61	108.39	115.20	-160.83	-6,032.31	527.66	3,732.74	3,644.12	88.63	42.117				
14,800.00	8,480.00	17,978.29	12,012.20	109.97	118.77	-160.95	-6,260.23	525.44	3,737.16	3,646.49	90.68	41.214				
14,900.00	8,480.00	18,081.50	12,016.48	111.55	120.37	-161.07	-6,363.21	520.21	3,739.11	3,647.36	91.76	40.750				
15,000.00	8,480.00	18,127.00	12,018.55	113.13	121.08	-161.12	-6,408.61	517.93	3,741.76	3,649.29	92.47	40.464				
15,100.00	8,480.00	18,174.63	12,021.27	114.72	121.83	-161.16	-6,456.11	516.00	3,745.82	3,652.63	93.19	40.195				
15,200.00	8,480.00	18,257.99	12,027.47	116.31	123.14	-161.24	-6,539.21	513.83	3,751.60	3,657.44	94.16	39.843				
15,300.00	8,480.00	18,542.42	12,040.05	117.90	127.59	-161.52	-6,822.98	501.73	3,753.23	3,656.80	96.43	38.922				
15,400.00	8,480.00	18,598.00	12,041.65	119.49	128.47	-161.52	-6,878.52	502.58	3,755.36	3,658.08	97.29	38.601				
15,500.00	8,480.00	18,598.00	12,041.65	121.08	128.47	-161.52	-6,878.52	502.58	3,758.44	3,660.73	97.71	38.467				
15,600.00	8,480.00	18,640.89	12,043.67	122.68	129.15	-161.51	-6,921.31	504.54	3,763.78	3,665.32	98.46	38.227				
15,700.00	8,480.00	18,692.00	12,046.24	124.27	129.96	-161.48	-6,972.28	507.50	3,770.21	3,670.94	99.27	37.979				
15,800.00	8,480.00	18,744.65	12,049.30	125.87	130.80	-161.45	-7,024.69	511.42	3,777.90	3,677.80	100.11	37.739				
15,900.00	8,480.00	18,978.32	12,062.58	127.47	134.52	-161.33	-7,257.42	526.51	3,785.64	3,683.03	102.62	36.891				
16,000.00	8,480.00	19,198.62	12,071.39	129.07	138.02	-161.37	-7,477.40	529.14	3,790.13	3,685.40	104.73	36.191				
16,100.00	8,480.00	19,259.00	12,073.62	130.67	138.98	-161.40	-7,537.72	527.83	3,792.53	3,686.95	105.57	35.924				
16,200.00	8,480.00	19,353.00	12,076.57	132.27	140.47	-161.45	-7,631.66	526.51	3,794.78	3,688.12	106.67	35.576				
16,300.00	8,480.00	19,406.47	12,078.43	133.88	141.32	-161.47	-7,685.10	526.06	3,797.89	3,690.42	107.47	35.338				
16,400.00	8,480.00	19,448.00	12,080.88	135.48	141.98	-161.49	-7,726.56	526.10	3,802.99	3,694.82	108.17	35.156				
16,500.00	8,480.00	19,865.23	12,084.17	137.09	148.65	-161.43	-8,143.34	535.83	3,802.98	3,691.10	111.88	33.992				
16,600.00	8,480.00	20,053.30	12,076.83	138.70	151.64	-161.44	-8,331.25	534.14	3,798.22	3,684.59	113.63	33.426				
16,700.00	8,480.00	20,109.00	12,074.78	140.30	152.53	-161.45	-8,386.91	533.78	3,794.06	3,679.50	114.56	33.120				
16,800.00	8,480.00	20,147.13	12,073.88	141.91	153.14	-161.45	-8,425.02	533.72	3,791.23	3,675.88	115.36	32.866				
16,900.00	8,480.00	20,204.00	12,073.12	143.52	154.05	-161.45	-8,481.89	533.94	3,789.73	3,673.46	116.27	32.595				
16,971.07	8,480.00	20,236.94	12,072.97	144.67	154.58	-161.45	-8,514.83	534.32	3,789.41	3,672.55	116.86	32.426				
17,000.00	8,480.00	20,252.41	12,072.96	145.13	154.83	-161.44	-8,530.30	534.61	3,789.46	3,672.34	117.12	32.355				
17,100.00	8,480.00	20,315.86	12,073.23	146.75	155.84	-161.43	-8,593.72	536.44	3,790.41	3,672.33	118.08	32.099				
17,200.00	8,480.00	20,444.26	12,073.28	148.36	157.91	-161.37	-8,722.02	541.57	3,791.42	3,671.82	119.61	31.699				
17,300.00	8,480.00	20,540.33	12,073.25	149.97	159.45	-161.35	-8,818.06	543.94	3,791.86	3,671.04	120.83	31.383				
17,400.00	8,480.00	20,821.88	12,067.66	151.59	163.98	-161.27	-9,099.41	550.76	3,790.97	3,667.55	123.43	30.714				
17,500.00	8,480.00	20,864.00	12,065.42	153.20	164.65	-161.24	-9,141.45	552.21	3,787.25	3,662.93	124.32	30.464				
17,600.00	8,480.00	20,924.90	12,062.88	154.82	165.64	-161.20	-9,202.24	554.68	3,784.64	3,659.30	125.34	30.195				
17,700.00	8,480.00	20,969.37	12,062.09	156.44	166.35	-161.18	-9,246.66	556.63	3,783.92	3,657.71	126.21	29.982				
17,800.00	8,480.00	21,187.52	12,058.31	158.05	169.86	-161.16	-9,464.73	558.93	3,782.33	3,654.04	128.29	29.483				
17,900.00	8,480.00	21,241.00	12,056.96	159.67	170.72	-161.17	-9,518.20	558.38	3,779.50	3,650.32	129.18	29.257				
18,000.00	8,480.00	21,294.55	12,056.27	161.29	171.58	-161.18	-9,571.74	557.94	3,777.90	3,647.84	130.06	29.046				
18,030.35	8,480.00	21,306.73	12,056.27	161.78	171.78	-161.18	-9,583.91	557.90	3,777.75	3,647.45	130.30	28.992				
18,100.00	8,480.00	21,336.00	12,056.47	162.91	172.25	-161.19	-9,613.19	557.89	3,777.95	3,647.11	130.84	28.874				
18,200.00	8,480.00	21,451.09	12,057.51	164.53	174.10	-161.20	-9,728.27	558.21	3,778.58	3,646.43	132.16	28.592				
18,300.00	8,480.00	21,580.87	12,057.83	166.15	176.19	-161.21	-9,858.05	559.16	3,778.77	3,645.18	133.59	28.286				
18,400.00	8,480.00	21,721.07	12,055.89	167.77	178.46	-161.18	-9,998.21	561.97	3,777.77	3,642.60	135.16	27.950				
18,500.00	8,480.00	21,804.00	12,054.08	169.40	179.80	-161.13	-10,081.03	565.61	3,776.75	3,640.40	136.36	27.697				
18,593.44	8,480.00	21,860.00	12,052.81	170.91	186.65	-161.08	-10,136.92	568.84	3,776.23	3,637.03	139.20	27.128				
18,600.00	8,480.00	21,860.00	12,052.81	171.02	186.65	-161.08	-10,136.92	568.84	3,776.23	3,637.00	139.24	27.121				

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 103H
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 103H	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
LHS Wildcat Fed Com - LHS Wildcat Fed Com 604H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 190-MWD, 1393-OWSG (Rev2) MWD, 21860-BLIND													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,700.00	8,480.00	21,860.00	12,052.81	172.64	186.65	-161.08	-10,136.92	568.84	3,777.73	3,637.99	139.74	27.034	
18,800.00	8,480.00	21,860.00	12,052.81	174.26	186.65	-161.08	-10,136.92	568.84	3,781.87	3,641.71	140.16	26.982	
18,900.00	8,480.00	21,860.00	12,052.81	175.89	186.65	-161.08	-10,136.92	568.84	3,788.65	3,648.14	140.51	26.964 SF	
19,000.00	8,480.00	21,860.00	12,052.81	177.51	186.65	-161.08	-10,136.92	568.84	3,798.05	3,657.28	140.77	26.981	
19,100.00	8,480.00	21,860.00	12,052.81	179.14	186.65	-161.08	-10,136.92	568.84	3,810.05	3,669.10	140.96	27.030	
19,200.00	8,480.00	21,860.00	12,052.81	180.76	186.65	-161.08	-10,136.92	568.84	3,824.63	3,683.58	141.06	27.114	
19,300.00	8,480.00	21,860.00	12,052.81	182.39	186.65	-161.08	-10,136.92	568.84	3,841.76	3,700.68	141.08	27.231	
19,400.00	8,480.00	21,860.00	12,052.81	184.02	186.65	-161.08	-10,136.92	568.84	3,861.41	3,720.37	141.03	27.379	
19,500.00	8,480.00	21,860.00	12,052.81	185.64	186.65	-161.08	-10,136.92	568.84	3,883.53	3,742.62	140.91	27.561	
19,600.00	8,480.00	21,860.00	12,052.81	187.27	186.65	-161.08	-10,136.92	568.84	3,908.08	3,767.36	140.72	27.772	
19,700.00	8,480.00	21,860.00	12,052.81	188.90	186.65	-161.08	-10,136.92	568.84	3,935.02	3,794.56	140.46	28.015	
19,800.00	8,480.00	21,860.00	12,052.81	190.53	186.65	-161.08	-10,136.92	568.84	3,964.30	3,824.16	140.14	28.288	
19,899.80	8,480.00	21,860.00	12,052.81	192.15	186.65	-161.08	-10,136.92	568.84	3,995.81	3,856.05	139.76	28.591	

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	0.94	0.94	0.00	0.00	49.42	540.68	631.32	831.20							
100.00	100.00	105.50	105.50	0.13	0.15	49.38	540.94	630.71	830.92	830.73	0.19	4,295.646				
200.00	200.00	201.69	201.68	0.48	0.43	49.33	541.16	629.92	830.46	829.81	0.65	1,285.719				
300.00	300.00	305.06	305.05	0.84	0.80	49.28	541.60	629.19	830.20	829.04	1.16	715.840				
400.00	400.00	405.35	405.34	1.20	1.16	49.23	541.84	628.47	829.81	828.14	1.67	497.694				
500.00	500.00	508.64	508.61	1.56	1.53	49.15	542.30	627.07	829.07	826.89	2.18	379.869				
600.00	600.00	615.59	615.55	1.92	1.91	49.04	542.63	625.01	827.83	825.12	2.71	305.807				
700.00	700.00	723.05	722.96	2.28	2.30	48.91	542.38	621.95	825.52	822.29	3.23	255.386				
800.00	800.00	824.80	824.64	2.63	2.67	48.75	542.16	618.31	822.68	818.94	3.74	219.736				
900.00	900.00	928.07	927.84	2.99	3.04	48.60	541.75	614.58	819.71	815.45	4.26	192.453				
1,000.00	1,000.00	1,032.99	1,032.66	3.35	3.42	48.41	541.29	609.96	816.12	811.34	4.78	170.767				
1,100.00	1,100.00	1,129.08	1,128.66	3.71	3.77	48.24	540.75	605.72	812.45	807.17	5.28	153.951				
1,200.00	1,200.00	1,227.94	1,227.44	4.07	4.13	48.11	539.89	601.86	808.96	803.18	5.78	139.915				
1,300.00	1,300.00	1,324.13	1,323.57	4.43	4.48	47.99	539.12	598.55	805.87	799.59	6.28	128.330				
1,400.00	1,400.00	1,420.63	1,420.00	4.79	4.65	47.81	539.27	594.95	803.21	796.56	6.65	120.714				
1,500.00	1,500.00	1,514.66	1,513.97	5.14	4.68	47.64	539.62	591.88	801.05	794.12	6.94	115.500				
1,589.03	1,589.03	1,590.62	1,589.93	5.46	4.72	47.59	539.76	590.82	800.26	793.06	7.20	111.146 CC				
1,600.00	1,600.00	1,599.39	1,598.70	5.50	4.72	47.58	539.78	590.82	800.27	793.04	7.23	110.634 ES				
1,700.00	1,700.00	1,681.04	1,680.33	5.86	4.78	47.63	540.16	592.17	801.78	794.24	7.54	106.311				
1,800.00	1,800.00	1,771.21	1,770.44	6.22	4.85	47.76	540.82	595.55	805.04	797.17	7.87	102.311				
1,900.00	1,900.00	1,869.19	1,868.32	6.58	4.96	47.90	541.90	599.79	808.99	800.77	8.22	98.436				
2,000.00	2,000.00	1,971.90	1,970.93	6.94	5.09	48.02	543.38	603.90	812.93	804.34	8.59	94.644				
2,100.00	2,099.99	2,081.16	2,080.08	7.29	5.26	127.09	543.21	608.72	816.91	807.93	8.98	91.008				
2,200.00	2,199.91	2,188.15	2,186.86	7.63	5.44	127.72	539.73	614.64	821.30	811.93	9.37	87.675				
2,300.00	2,299.69	2,287.76	2,286.17	7.98	5.64	128.53	535.15	620.72	826.99	817.23	9.76	84.710				
2,400.00	2,399.27	2,379.16	2,377.29	8.34	5.83	129.35	531.13	626.58	834.90	824.75	10.16	82.192				
2,500.00	2,498.57	2,475.76	2,473.61	8.69	6.04	130.30	527.58	633.18	845.51	834.94	10.57	79.980				
2,600.00	2,597.54	2,576.78	2,574.30	9.06	6.28	131.40	523.46	640.09	857.91	846.91	11.00	77.974				
2,616.45	2,613.78	2,593.42	2,590.89	9.12	6.32	131.59	522.76	641.19	860.11	849.04	11.07	77.663				
2,700.00	2,696.24	2,694.45	2,691.65	9.43	6.58	132.87	518.03	646.79	870.65	859.18	11.47	75.893				
2,800.00	2,794.94	2,805.81	2,802.78	9.81	6.88	134.19	512.00	650.64	881.51	869.57	11.94	73.840				
2,900.00	2,893.64	2,898.00	2,894.80	10.19	7.13	135.23	507.06	653.40	892.41	880.03	12.38	72.084				
3,000.00	2,992.34	2,984.02	2,980.69	10.58	7.37	136.15	503.45	656.44	904.69	891.87	12.81	70.596				
3,100.00	3,091.04	3,074.61	3,071.16	10.97	7.63	137.04	500.86	660.04	918.30	905.04	13.26	69.248				
3,200.00	3,189.74	3,177.16	3,173.54	11.37	7.94	138.08	497.16	664.62	932.22	918.49	13.74	67.862				
3,300.00	3,288.45	3,275.28	3,271.38	11.77	8.24	139.16	491.83	669.83	946.27	932.06	14.21	66.597				
3,400.00	3,387.15	3,393.15	3,388.88	12.17	8.60	140.46	484.50	675.54	959.96	945.23	14.73	65.183				
3,500.00	3,485.85	3,519.38	3,514.84	12.58	8.99	141.68	476.48	677.12	970.62	955.36	15.26	63.618				
3,600.00	3,584.55	3,612.81	3,608.12	12.98	9.28	142.49	471.29	676.78	980.57	964.85	15.73	62.353				
3,700.00	3,683.25	3,700.34	3,695.57	13.39	9.55	143.18	467.59	676.87	991.70	975.51	16.18	61.273				
3,800.00	3,781.95	3,785.31	3,780.50	13.80	9.82	143.80	465.11	677.55	1,004.18	987.54	16.64	60.355				
3,900.00	3,880.65	3,889.05	3,884.14	14.22	10.16	144.61	461.16	679.80	1,017.70	1,000.56	17.14	59.391				
4,000.00	3,979.35	4,014.87	4,009.63	14.63	10.57	145.77	452.17	681.62	1,029.46	1,011.77	17.68	58.216				
4,100.00	4,078.05	4,106.00	4,100.51	15.05	10.87	146.57	445.54	682.13	1,040.59	1,022.43	18.16	57.304				
4,200.00	4,176.75	4,186.96	4,181.35	15.47	11.14	147.20	441.15	682.95	1,053.02	1,034.41	18.61	56.583				
4,300.00	4,275.45	4,288.76	4,283.04	15.89	11.48	147.92	436.88	684.19	1,066.28	1,047.17	19.11	55.799				
4,400.00	4,374.15	4,394.47	4,388.60	16.31	11.84	148.70	431.34	685.12	1,079.02	1,059.40	19.62	54.998				
4,500.00	4,472.85	4,484.00	4,477.97	16.73	12.14	149.38	426.00	686.21	1,092.00	1,071.91	20.09	54.350				
4,600.00	4,571.55	4,578.00	4,571.83	17.15	12.46	150.05	421.10	687.80	1,105.84	1,085.27	20.58	53.745				
4,700.00	4,670.25	4,677.57	4,671.25	17.57	12.80	150.74	416.01	689.62	1,120.01	1,098.94	21.07	53.145				
4,800.00	4,768.95	4,787.25	4,780.71	18.00	13.18	151.52	409.32	691.14	1,133.62	1,112.02	21.60	52.479				
4,900.00	4,867.65	4,892.02	4,885.27	18.42	13.54	152.25	402.69	691.71	1,146.55	1,124.44	22.12	51.845				

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 103H
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 103H	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	4,966.35	4,990.09	4,983.17	18.85	13.88	152.90	396.83	691.94	1,159.45	1,136.83	22.61	51.276				
5,100.00	5,065.05	5,092.92	5,085.84	19.28	14.23	153.54	391.20	691.97	1,172.42	1,149.30	23.12	50.708				
5,200.00	5,163.76	5,180.82	5,173.61	19.70	14.54	154.06	386.47	691.71	1,185.28	1,161.69	23.59	50.242				
5,300.00	5,262.46	5,257.62	5,250.28	20.13	14.81	154.54	382.29	693.08	1,200.13	1,176.10	24.03	49.946				
5,400.00	5,361.16	5,351.71	5,344.17	20.56	15.14	155.14	376.59	695.72	1,216.00	1,191.48	24.52	49.600				
5,500.00	5,459.86	5,449.42	5,441.65	20.99	15.49	155.76	370.57	698.65	1,232.17	1,207.15	25.02	49.256				
5,600.00	5,558.56	5,541.49	5,533.49	21.42	15.82	156.33	364.79	701.40	1,248.46	1,222.97	25.50	48.964				
5,700.00	5,657.26	5,616.63	5,608.41	21.85	16.09	156.79	360.16	704.72	1,266.25	1,240.33	25.92	48.854				
5,800.00	5,755.96	5,712.58	5,704.05	22.28	16.43	157.37	354.38	709.79	1,285.05	1,258.63	26.41	48.652				
5,900.00	5,854.66	5,808.85	5,800.03	22.71	16.78	157.92	348.88	714.94	1,304.08	1,277.17	26.91	48.465				
6,000.00	5,953.36	5,909.48	5,900.38	23.14	17.14	158.47	343.35	720.18	1,323.13	1,295.71	27.42	48.255				
6,100.00	6,052.06	6,007.01	5,997.61	23.57	17.50	159.00	337.72	725.17	1,342.16	1,314.24	27.92	48.073				
6,200.00	6,150.76	6,103.76	6,094.08	24.01	17.85	159.50	332.29	730.15	1,361.35	1,332.94	28.42	47.906				
6,300.00	6,249.46	6,202.19	6,192.23	24.44	18.21	160.00	326.86	735.15	1,380.60	1,351.68	28.92	47.736				
6,400.00	6,348.16	6,297.45	6,287.22	24.87	18.55	160.46	321.63	740.03	1,399.98	1,370.56	29.41	47.596				
6,500.00	6,446.86	6,391.17	6,380.67	25.30	18.89	160.91	316.42	745.08	1,419.70	1,389.80	29.90	47.480				
6,600.00	6,545.56	6,487.86	6,477.06	25.74	19.25	161.36	311.03	750.41	1,439.63	1,409.23	30.40	47.357				
6,700.00	6,644.26	6,585.24	6,574.14	26.17	19.60	161.79	305.79	755.81	1,459.70	1,428.79	30.90	47.239				
6,804.31	6,747.22	6,703.64	6,692.22	26.62	20.03	162.30	299.44	761.96	1,480.40	1,448.91	31.49	47.015				
6,900.00	6,841.85	6,858.16	6,846.61	27.03	20.57	162.82	295.04	765.11	1,495.59	1,463.42	32.17	46.492				
7,000.00	6,941.09	6,958.96	6,947.40	27.44	20.90	162.99	295.64	764.71	1,507.01	1,474.35	32.66	46.147				
7,100.00	7,040.61	7,056.59	7,045.02	27.83	21.20	163.07	297.24	764.27	1,515.99	1,482.87	33.13	45.764				
7,200.00	7,140.36	7,153.48	7,141.90	28.20	21.50	163.11	298.88	763.94	1,522.60	1,489.01	33.59	45.327				
7,300.00	7,240.26	7,249.86	7,238.27	28.55	21.80	163.13	300.28	763.93	1,527.01	1,492.96	34.05	44.842				
7,400.00	7,340.24	7,350.49	7,338.89	28.88	22.12	163.11	301.52	763.94	1,528.91	1,494.39	34.53	44.283				
7,420.77	7,361.00	7,370.77	7,359.17	28.95	22.18	84.31	301.73	763.95	1,529.00	1,494.38	34.62	44.164				
7,500.00	7,440.24	7,446.75	7,435.15	29.20	22.42	84.28	302.37	764.09	1,529.21	1,494.23	34.98	43.715				
7,600.00	7,540.24	7,543.04	7,531.43	29.52	22.74	84.27	302.81	764.58	1,529.76	1,494.32	35.44	43.164				
7,700.00	7,640.24	7,639.88	7,628.27	29.84	23.06	84.26	303.07	765.23	1,530.46	1,494.55	35.91	42.623				
7,800.00	7,740.24	7,733.27	7,721.65	30.16	23.38	84.26	303.16	766.20	1,531.50	1,495.14	36.36	42.117				
7,900.00	7,840.24	7,824.46	7,812.83	30.48	23.69	84.25	303.47	767.57	1,533.04	1,496.23	36.81	41.644				
7,966.81	7,907.04	7,884.74	7,873.11	30.69	23.90	84.25	303.72	768.80	1,534.42	1,497.31	37.11	41.347				
8,000.00	7,940.22	7,916.98	7,905.33	30.79	24.01	-95.13	303.85	769.54	1,535.27	1,498.01	37.26	41.200				
8,050.00	7,989.94	7,965.28	7,953.62	30.94	24.17	-95.15	304.05	770.67	1,536.92	1,499.43	37.49	40.997				
8,100.00	8,039.04	8,013.45	8,001.77	31.08	24.33	-95.28	304.29	771.83	1,539.04	1,501.33	37.71	40.813				
8,150.00	8,087.13	8,060.66	8,048.97	31.21	24.50	-95.51	304.64	772.98	1,541.67	1,503.75	37.92	40.651				
8,200.00	8,133.85	8,106.44	8,094.73	31.33	24.65	-95.79	305.09	774.11	1,544.92	1,506.78	38.13	40.514				
8,250.00	8,178.84	8,150.43	8,138.71	31.45	24.80	-96.12	305.58	775.20	1,548.88	1,510.54	38.33	40.406				
8,300.00	8,221.77	8,191.11	8,179.37	31.55	24.94	-96.42	306.09	776.24	1,553.70	1,515.18	38.52	40.336				
8,350.00	8,262.30	8,228.86	8,217.10	31.65	25.06	-96.65	306.66	777.24	1,559.56	1,520.87	38.69	40.304				
8,400.00	8,300.13	8,264.46	8,252.68	31.74	25.18	-96.82	307.27	778.22	1,566.60	1,527.73	38.86	40.311				
8,450.00	8,334.96	8,299.22	8,287.42	31.82	25.30	-96.91	307.91	779.18	1,574.89	1,535.86	39.03	40.352				
8,500.00	8,366.54	8,330.56	8,318.74	31.89	25.41	-96.83	308.51	780.02	1,584.55	1,545.36	39.18	40.439				
8,550.00	8,394.62	8,358.58	8,346.75	31.96	25.50	-96.55	309.07	780.77	1,595.68	1,556.35	39.33	40.575				
8,600.00	8,418.99	8,383.59	8,371.75	32.03	25.58	-96.06	309.56	781.41	1,608.35	1,568.89	39.46	40.758				
8,650.00	8,439.47	8,404.45	8,392.60	32.11	25.65	-95.28	309.97	781.93	1,622.59	1,583.01	39.58	40.995				
8,700.00	8,455.89	8,421.00	8,409.14	32.19	25.71	-94.20	310.28	782.33	1,638.40	1,598.72	39.68	41.286				
8,750.00	8,468.13	8,433.09	8,421.22	32.29	25.75	-92.79	310.51	782.62	1,655.76	1,615.99	39.77	41.632				
8,800.00	8,476.11	8,440.62	8,428.75	32.40	25.77	-91.04	310.65	782.80	1,674.57	1,634.73	39.84	42.031				
8,850.00	8,479.75	8,443.53	8,431.66	32.54	25.78	-88.94	310.71	782.86	1,694.69	1,654.80	39.89	42.481				
8,866.81	8,480.00	8,443.46	8,431.59	32.59	25.78	-88.17	310.71	782.86	1,701.73	1,661.82	39.91	42.644				
8,900.00	8,480.00	8,442.81	8,430.94	32.70	25.78	-88.14	310.69	782.85	1,716.00	1,676.07	39.93	42.975				

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 103H
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 103H	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				
9,000.00	8,480.00	8,440.84	8,428.97	33.09	25.77	-88.07	310.66	782.80	1,762.09	1,722.08	40.01	44.038				
9,100.00	8,480.00	8,438.86	8,426.99	33.57	25.77	-88.00	310.62	782.75	1,812.53	1,772.43	40.10	45.196				
9,200.00	8,480.00	8,436.88	8,425.01	34.14	25.76	-87.92	310.58	782.71	1,866.97	1,826.76	40.20	46.441				
9,300.00	8,480.00	8,434.89	8,423.02	34.79	25.75	-87.85	310.55	782.66	1,925.06	1,884.76	40.30	47.766				
9,400.00	8,480.00	8,432.89	8,421.02	35.50	25.75	-87.78	310.51	782.61	1,986.48	1,946.08	40.40	49.166				
9,500.00	8,480.00	8,430.88	8,419.02	36.28	25.74	-87.70	310.47	782.57	2,050.95	2,010.44	40.50	50.635				
9,600.00	8,480.00	8,428.87	8,417.01	37.11	25.73	-87.63	310.43	782.52	2,118.17	2,077.57	40.60	52.166				
9,700.00	8,480.00	8,426.86	8,415.00	38.01	25.73	-87.55	310.39	782.47	2,187.90	2,147.20	40.70	53.754				
9,800.00	8,480.00	8,424.83	8,412.97	38.95	25.72	-87.48	310.36	782.42	2,259.90	2,219.10	40.80	55.394				
9,900.00	8,480.00	8,422.80	8,410.94	39.94	25.71	-87.40	310.32	782.38	2,333.96	2,293.08	40.89	57.083				
10,000.00	8,480.00	8,420.77	8,408.91	40.97	25.71	-87.33	310.28	782.33	2,409.90	2,368.93	40.97	58.815				
10,100.00	8,480.00	8,418.73	8,406.87	42.04	25.70	-87.25	310.24	782.28	2,487.54	2,446.48	41.06	60.586				
10,200.00	8,480.00	8,416.68	8,404.82	43.14	25.69	-87.17	310.20	782.23	2,566.72	2,525.58	41.14	62.392				
10,300.00	8,480.00	8,414.62	8,402.76	44.29	25.69	-87.10	310.16	782.18	2,647.31	2,606.10	41.22	64.231				
10,400.00	8,480.00	8,412.56	8,400.70	45.46	25.68	-87.02	310.12	782.13	2,729.19	2,687.90	41.29	66.099				
10,500.00	8,480.00	8,410.49	8,398.63	46.66	25.67	-86.94	310.08	782.08	2,812.23	2,770.87	41.36	67.994				
10,600.00	8,480.00	8,408.41	8,396.56	47.89	25.67	-86.87	310.04	782.03	2,896.35	2,854.92	41.43	69.914				
10,700.00	8,480.00	8,406.33	8,394.47	49.14	25.66	-86.79	310.00	781.98	2,981.45	2,939.95	41.49	71.855				
10,800.00	8,480.00	8,404.23	8,392.38	50.42	25.65	-86.71	309.96	781.92	3,067.44	3,025.88	41.56	73.816				
10,900.00	8,480.00	8,402.14	8,390.29	51.72	25.65	-86.63	309.92	781.87	3,154.26	3,112.64	41.62	75.795				
11,000.00	8,480.00	8,400.03	8,388.18	53.03	25.64	-86.56	309.88	781.82	3,241.84	3,200.16	41.67	77.791				
11,100.00	8,480.00	8,397.92	8,386.07	54.37	25.63	-86.48	309.84	781.77	3,330.11	3,288.38	41.73	79.801				
11,200.00	8,480.00	8,395.80	8,383.96	55.72	25.62	-86.40	309.80	781.72	3,419.03	3,377.25	41.78	81.825				
11,300.00	8,480.00	8,393.68	8,381.83	57.09	25.62	-86.32	309.76	781.66	3,508.55	3,466.71	41.84	83.862				
11,400.00	8,480.00	8,391.54	8,379.70	58.47	25.61	-86.24	309.72	781.61	3,598.62	3,556.73	41.89	85.909				
11,500.00	8,480.00	8,389.40	8,377.56	59.86	25.60	-86.16	309.68	781.56	3,689.19	3,647.25	41.94	87.966				
11,600.00	8,480.00	8,387.26	8,375.42	61.27	25.60	-86.08	309.63	781.50	3,780.24	3,738.26	41.99	90.032				
11,700.00	8,480.00	15,294.00	12,021.39	62.69	74.36	-156.41	-3,312.88	823.22	3,864.09	3,804.59	59.50	64.939				
11,800.00	8,480.00	15,388.00	12,021.39	64.13	75.69	-156.47	-3,406.81	819.86	3,862.26	3,801.72	60.54	63.792				
11,900.00	8,480.00	15,445.10	12,021.35	65.57	76.50	-156.52	-3,463.82	816.77	3,860.27	3,798.91	61.36	62.909				
11,907.52	8,480.00	15,447.11	12,021.38	65.68	76.53	-156.52	-3,465.83	816.68	3,860.23	3,798.82	61.41	62.859				
12,000.00	8,480.00	15,483.00	12,022.38	67.02	77.04	-156.54	-3,501.68	815.47	3,860.68	3,798.61	62.07	62.196				
12,100.00	8,480.00	15,514.20	12,023.63	68.48	77.49	-156.56	-3,532.85	814.81	3,862.75	3,800.00	62.75	61.560				
12,200.00	8,480.00	15,578.00	12,026.52	69.95	78.41	-156.60	-3,596.58	814.39	3,866.17	3,802.55	63.63	60.763				
12,300.00	8,480.00	15,767.00	12,032.62	71.42	81.15	-156.67	-3,785.46	813.65	3,868.43	3,803.10	65.33	59.210				
12,400.00	8,480.00	15,767.00	12,032.62	72.91	81.15	-156.67	-3,785.46	813.65	3,871.15	3,805.34	65.81	58.819				
12,500.00	8,480.00	15,861.00	12,036.80	74.40	82.53	-156.69	-3,879.34	814.63	3,875.26	3,808.33	66.92	57.906				
12,600.00	8,480.00	15,861.00	12,036.80	75.90	82.53	-156.69	-3,879.34	814.63	3,880.71	3,813.32	67.39	57.589				
12,700.00	8,480.00	15,949.24	12,043.81	77.40	83.84	-156.72	-3,967.28	816.31	3,888.29	3,819.83	68.46	56.798				
12,800.00	8,480.00	16,001.23	12,047.92	78.91	84.61	-156.74	-4,019.10	817.17	3,895.86	3,826.59	69.27	56.238				
12,900.00	8,480.00	16,050.00	12,052.04	80.43	85.33	-156.74	-4,067.65	819.14	3,904.80	3,834.73	70.07	55.724				
13,000.00	8,480.00	16,088.19	12,055.55	81.95	85.91	-156.74	-4,105.61	821.39	3,915.16	3,844.36	70.80	55.300				
13,100.00	8,480.00	16,144.00	12,061.37	83.47	86.74	-156.72	-4,160.96	825.58	3,927.10	3,855.43	71.67	54.797				
13,200.00	8,480.00	16,806.00	12,102.11	85.00	96.68	-157.08	-4,820.16	822.76	3,932.30	3,855.64	76.66	51.297				
13,279.45	8,480.00	16,806.00	12,102.11	86.22	96.68	-157.08	-4,820.16	822.76	3,931.49	3,854.42	77.07	51.009				
13,300.00	8,480.00	16,806.00	12,102.11	86.54	96.68	-157.08	-4,820.16	822.76	3,931.55	3,854.37	77.18	50.941				
13,400.00	8,480.00	16,849.51	12,103.72	88.08	97.34	-157.13	-4,863.56	820.15	3,932.55	3,854.61	77.94	50.455				
13,500.00	8,480.00	16,900.00	12,106.54	89.62	98.10	-157.18	-4,913.94	818.41	3,935.57	3,856.82	78.74	49.979				
13,600.00	8,480.00	16,900.00	12,106.54	91.17	98.10	-157.18	-4,913.94	818.41	3,940.06	3,860.85	79.21	49.742				
13,700.00	8,480.00	16,994.00	12,113.43	92.72	99.53	-157.25	-5,007.68	817.02	3,945.86	3,865.55	80.31	49.133				
13,800.00	8,480.00	17,028.32	12,116.31	94.27	100.05	-157.27	-5,041.87	816.80	3,952.73	3,871.73	81.00	48.801				
13,900.00	8,480.00	17,088.00	12,121.95	95.83	100.97	-157.31	-5,101.29	816.78	3,960.95	3,879.09	81.86	48.387				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
14,000.00	8,480.00	17,182.00	12,131.53	97.39	102.41	-157.39	-5,194.79	815.63	3,969.53	3,886.58	82.95	47.855				
14,100.00	8,480.00	17,241.41	12,138.12	98.95	103.32	-157.46	-5,253.81	814.08	3,978.56	3,894.79	83.77	47.495				
14,200.00	8,480.00	17,276.00	12,142.41	100.52	103.85	-157.50	-5,288.12	813.27	3,988.99	3,904.58	84.40	47.261				
14,300.00	8,480.00	17,340.56	12,151.22	102.09	104.84	-157.57	-5,352.06	811.90	4,000.56	3,915.31	85.24	46.931				
14,400.00	8,480.00	17,371.00	12,155.72	103.66	105.30	-157.61	-5,382.16	811.30	4,013.48	3,927.66	85.82	46.768				
14,500.00	8,480.00	17,465.00	12,170.75	105.23	106.75	-157.72	-5,474.94	810.01	4,027.42	3,940.56	86.86	46.367				
14,600.00	8,480.00	17,691.90	12,200.43	106.81	110.26	-157.90	-5,699.83	811.16	4,038.69	3,949.69	89.00	45.376				
14,700.00	8,480.00	17,755.72	12,207.32	108.39	111.26	-157.90	-5,763.20	814.15	4,050.08	3,960.15	89.92	45.040				
14,800.00	8,480.00	17,989.42	12,228.73	109.97	114.92	-157.89	-5,995.56	826.55	4,060.14	3,967.81	92.33	43.972				
14,900.00	8,480.00	18,048.00	12,233.53	111.55	115.84	-157.88	-6,053.87	829.41	4,069.18	3,975.95	93.23	43.645				
15,000.00	8,480.00	18,351.16	12,252.58	113.13	120.60	-157.82	-6,355.92	844.74	4,077.22	3,980.99	96.23	42.371				
15,100.00	8,480.00	18,630.55	12,260.61	114.72	124.98	-157.88	-6,635.13	846.29	4,080.03	3,981.29	98.73	41.323				
15,200.00	8,480.00	18,691.00	12,261.11	116.31	125.93	-157.88	-6,695.58	846.80	4,080.70	3,981.00	99.70	40.929				
15,300.00	8,480.00	18,733.71	12,261.90	117.90	126.61	-157.89	-6,738.27	847.43	4,082.54	3,982.02	100.52	40.612				
15,400.00	8,480.00	18,786.00	12,263.60	119.49	127.43	-157.89	-6,790.53	848.29	4,085.72	3,984.31	101.41	40.290				
15,500.00	8,480.00	18,786.00	12,263.60	121.08	127.43	-157.89	-6,790.53	848.29	4,090.61	3,988.74	101.87	40.156				
15,600.00	8,480.00	18,838.85	12,266.52	122.68	128.27	-157.90	-6,843.28	849.52	4,096.74	3,994.00	102.73	39.878				
15,700.00	8,480.00	18,880.00	12,269.91	124.27	128.92	-157.90	-6,884.27	850.91	4,104.93	4,001.46	103.47	39.671				
15,800.00	8,480.00	19,674.89	12,268.41	125.87	141.51	-157.82	-7,677.09	864.25	4,103.95	3,994.14	109.80	37.375				
15,900.00	8,480.00	19,731.00	12,264.12	127.47	142.40	-157.81	-7,733.03	864.06	4,096.32	3,985.49	110.84	36.959				
16,000.00	8,480.00	19,818.45	12,258.02	129.07	143.79	-157.79	-7,820.27	863.89	4,089.41	3,977.35	112.05	36.495				
16,100.00	8,480.00	19,825.00	12,257.56	130.67	143.89	-157.79	-7,826.80	863.89	4,083.63	3,970.86	112.76	36.214				
16,200.00	8,480.00	19,865.21	12,255.54	132.27	144.53	-157.78	-7,866.96	863.95	4,079.34	3,965.68	113.66	35.892				
16,300.00	8,480.00	19,920.00	12,255.33	133.88	145.40	-157.78	-7,921.74	864.22	4,077.88	3,963.27	114.62	35.578				
16,381.29	8,480.00	19,920.00	12,255.33	135.18	145.40	-157.78	-7,921.74	864.22	4,077.07	3,961.99	115.08	35.427				
16,400.00	8,480.00	19,920.00	12,255.33	135.48	145.40	-157.78	-7,921.74	864.22	4,077.11	3,961.93	115.19	35.396				
16,500.00	8,480.00	20,101.52	12,254.40	137.09	148.29	-157.77	-8,103.23	866.64	4,076.93	3,959.87	117.05	34.829				
16,600.00	8,480.00	20,203.00	12,252.03	138.70	149.91	-157.74	-8,204.65	868.91	4,075.24	3,956.85	118.39	34.424				
16,697.84	8,480.00	20,236.62	12,251.35	140.27	150.45	-157.73	-8,238.24	870.11	4,074.43	3,955.22	119.21	34.180				
16,700.00	8,480.00	20,237.30	12,251.34	140.30	150.46	-157.73	-8,238.92	870.14	4,074.43	3,955.21	119.22	34.175				
16,800.00	8,480.00	20,297.00	12,251.13	141.91	151.42	-157.69	-8,298.51	873.83	4,075.62	3,955.35	120.28	33.886				
16,900.00	8,480.00	20,297.00	12,251.13	143.52	151.42	-157.69	-8,298.51	873.83	4,077.88	3,957.11	120.77	33.765				
17,000.00	8,480.00	20,355.92	12,251.89	145.13	152.37	-157.64	-8,357.23	878.55	4,081.79	3,959.99	121.80	33.512				
17,100.00	8,480.00	20,833.10	12,250.79	146.75	160.01	-157.53	-8,833.82	890.75	4,084.11	3,958.13	125.98	32.419				
17,200.00	8,480.00	20,943.40	12,246.11	148.36	161.77	-157.55	-8,944.00	888.96	4,079.18	3,951.89	127.30	32.045				
17,300.00	8,480.00	21,052.00	12,241.46	149.97	163.50	-157.57	-9,052.48	886.43	4,073.95	3,945.36	128.59	31.683				
17,400.00	8,480.00	21,092.28	12,240.06	151.59	164.14	-157.58	-9,092.71	885.34	4,069.41	3,939.92	129.48	31.428				
17,500.00	8,480.00	21,146.00	12,239.08	153.20	165.00	-157.59	-9,146.42	884.63	4,066.56	3,936.11	130.45	31.174				
17,600.00	8,480.00	21,146.00	12,239.08	154.82	165.00	-157.59	-9,146.42	884.63	4,065.18	3,934.14	131.03	31.024				
17,700.00	8,480.00	21,509.54	12,231.16	156.44	170.81	-157.71	-9,509.62	875.81	4,062.05	3,928.27	133.78	30.363				
17,800.00	8,480.00	21,618.00	12,224.36	158.05	172.54	-157.72	-9,617.84	873.37	4,054.99	3,919.91	135.09	30.017				
17,900.00	8,480.00	21,668.04	12,221.28	159.67	173.34	-157.72	-9,667.78	872.72	4,048.60	3,912.51	136.09	29.749				
18,000.00	8,480.00	21,713.00	12,219.22	161.29	174.06	-157.72	-9,712.69	872.54	4,043.74	3,906.69	137.05	29.507				
18,100.00	8,480.00	21,792.49	12,216.05	162.91	175.34	-157.70	-9,792.11	873.01	4,039.86	3,901.64	138.22	29.227				
18,200.00	8,480.00	21,861.96	12,213.20	164.53	176.46	-157.68	-9,861.51	874.35	4,036.44	3,897.09	139.36	28.964				
18,300.00	8,480.00	21,932.44	12,210.48	166.15	177.60	-157.64	-9,931.90	876.91	4,033.85	3,893.33	140.52	28.706				
18,400.00	8,480.00	22,030.88	12,206.73	167.77	179.19	-157.57	-10,030.15	881.69	4,031.80	3,889.86	141.94	28.406				
18,500.00	8,480.00	22,217.19	12,195.82	169.40	186.37	-157.38	-10,215.78	893.13	4,028.22	3,882.65	145.58	27.671				
18,600.00	8,480.00	22,230.00	12,194.93	171.02	187.87	-157.37	-10,228.53	893.96	4,024.81	3,877.98	146.83	27.412				
18,688.26	8,480.00	22,230.00	12,194.93	172.45	187.87	-157.37	-10,228.53	893.96	4,023.84	3,876.45	147.40	27.300				
18,700.00	8,480.00	22,230.00	12,194.93	172.64	187.87	-157.37	-10,228.53	893.96	4,023.86	3,876.39	147.47	27.287				
18,800.00	8,480.00	22,230.00	12,194.93	174.26	187.87	-157.37	-10,228.53	893.96	4,025.39	3,877.37	148.02	27.195				

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 103H
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 103H	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
LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 133-MWD, 1394-OWSG (Rev2) MWD, 22230-BLIND													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,900.00	8,480.00	22,230.00	12,194.93	175.89	187.87	-157.37	-10,228.53	893.96	4,029.41	3,880.90	148.51	27.132	
19,000.00	8,480.00	22,230.00	12,194.93	177.51	187.87	-157.37	-10,228.53	893.96	4,035.90	3,886.98	148.92	27.101 SF	
19,100.00	8,480.00	22,230.00	12,194.93	179.14	187.87	-157.37	-10,228.53	893.96	4,044.85	3,895.60	149.25	27.101	
19,200.00	8,480.00	22,230.00	12,194.93	180.76	187.87	-157.37	-10,228.53	893.96	4,056.25	3,906.75	149.50	27.131	
19,300.00	8,480.00	22,230.00	12,194.93	182.39	187.87	-157.37	-10,228.53	893.96	4,070.08	3,920.40	149.68	27.192	
19,400.00	8,480.00	22,230.00	12,194.93	184.02	187.87	-157.37	-10,228.53	893.96	4,086.31	3,936.52	149.79	27.281	
19,500.00	8,480.00	22,230.00	12,194.93	185.64	187.87	-157.37	-10,228.53	893.96	4,104.90	3,955.09	149.81	27.400	
19,600.00	8,480.00	22,230.00	12,194.93	187.27	187.87	-157.37	-10,228.53	893.96	4,125.84	3,976.07	149.77	27.548	
19,700.00	8,480.00	22,230.00	12,194.93	188.90	187.87	-157.37	-10,228.53	893.96	4,149.09	3,999.43	149.66	27.723	
19,800.00	8,480.00	22,230.00	12,194.93	190.53	187.87	-157.37	-10,228.53	893.96	4,174.60	4,025.11	149.49	27.926	
19,899.80	8,480.00	22,230.00	12,194.93	192.15	187.87	-157.37	-10,228.53	893.96	4,202.28	4,053.03	149.25	28.156	

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 103H
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 103H	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 +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	0.71	74.96	74.96							
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.71	74.96	74.96	74.78	0.18	422.473				
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.71	74.96	74.96	74.28	0.68	109.530				
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.71	74.96	74.96	73.77	1.19	62.922				
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.71	74.96	74.96	73.26	1.70	44.139				
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.71	74.96	74.96	72.76	2.21	33.992				
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.71	74.96	74.96	72.25	2.71	27.638				
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.71	74.96	74.96	71.74	3.22	23.286				
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.71	74.96	74.96	71.24	3.73	20.118				
900.00	900.00	900.00	900.00	2.99	2.99	89.46	0.71	74.96	74.96	70.73	4.23	17.708				
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	89.46	0.71	74.96	74.96	70.22	4.74	15.815				
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	89.46	0.71	74.96	74.96	69.71	5.25	14.287				
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	89.46	0.71	74.96	74.96	69.21	5.75	13.028				
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	89.46	0.71	74.96	74.96	68.70	6.26	11.973				
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	89.46	0.71	74.96	74.96	68.19	6.77	11.076				
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.46	0.71	74.96	74.96	67.69	7.27	10.304				
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	89.46	0.71	74.96	74.96	67.18	7.78	9.633				
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	89.46	0.71	74.96	74.96	66.67	8.29	9.044				
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	89.46	0.71	74.96	74.96	66.17	8.80	8.523				
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	89.46	0.71	74.96	74.96	65.66	9.30	8.058				
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	89.46	0.71	74.96	74.96	65.15	9.81	7.642 CC, ES				
2,100.00	2,099.99	2,099.99	2,099.99	7.29	7.29	168.46	0.71	74.96	76.24	65.93	10.31	7.394				
2,200.00	2,199.91	2,197.89	2,197.88	7.63	7.64	168.78	1.00	76.18	81.34	70.54	10.80	7.534				
2,300.00	2,299.69	2,295.24	2,295.15	7.98	7.98	168.98	1.88	79.81	91.47	80.20	11.27	8.117				
2,400.00	2,399.27	2,391.66	2,391.38	8.34	8.31	169.06	3.32	85.78	106.60	94.86	11.73	9.085				
2,500.00	2,498.57	2,486.81	2,486.15	8.69	8.65	169.04	5.30	93.98	126.65	114.46	12.19	10.392				
2,600.00	2,597.54	2,580.36	2,579.09	9.06	8.98	168.97	7.78	104.28	151.54	138.91	12.63	11.998				
2,616.45	2,613.78	2,595.57	2,594.18	9.12	9.04	168.95	8.24	106.16	156.10	143.39	12.70	12.287				
2,700.00	2,696.24	2,673.14	2,671.00	9.43	9.32	168.88	10.76	116.63	180.27	167.20	13.07	13.789				
2,800.00	2,794.94	2,768.71	2,765.57	9.81	9.67	168.78	14.00	130.03	209.72	196.17	13.55	15.478				
2,900.00	2,893.64	2,864.27	2,860.13	10.19	10.02	168.71	17.23	143.43	239.17	225.15	14.03	17.050				
3,000.00	2,992.34	2,959.83	2,954.69	10.58	10.38	168.65	20.47	156.83	268.63	254.12	14.51	18.515				
3,100.00	3,091.04	3,055.40	3,049.26	10.97	10.75	168.60	23.70	170.23	298.08	283.09	14.99	19.883				
3,200.00	3,189.74	3,150.96	3,143.82	11.37	11.11	168.56	26.94	183.63	327.54	312.06	15.48	21.164				
3,300.00	3,288.45	3,246.52	3,238.39	11.77	11.48	168.53	30.17	197.03	356.99	341.03	15.96	22.365				
3,400.00	3,387.15	3,342.09	3,332.95	12.17	11.85	168.50	33.41	210.43	386.44	369.99	16.45	23.493				
3,500.00	3,485.85	3,437.65	3,427.52	12.58	12.22	168.47	36.64	223.83	415.90	398.96	16.94	24.554				
3,600.00	3,584.55	3,533.22	3,522.08	12.98	12.60	168.45	39.87	237.23	445.35	427.92	17.43	25.553				
3,700.00	3,683.25	3,628.78	3,616.64	13.39	12.98	168.43	43.11	250.62	474.81	456.89	17.92	26.496				
3,800.00	3,781.95	3,724.34	3,711.21	13.80	13.35	168.42	46.34	264.02	504.26	485.85	18.41	27.388				
3,900.00	3,880.65	3,819.91	3,805.77	14.22	13.73	168.40	49.58	277.42	533.71	514.81	18.91	28.231				
4,000.00	3,979.35	3,915.47	3,900.34	14.63	14.12	168.39	52.81	290.82	563.17	543.77	19.40	29.030				
4,100.00	4,078.05	4,011.03	3,994.90	15.05	14.50	168.38	56.05	304.22	592.62	572.73	19.90	29.787				
4,200.00	4,176.75	4,106.60	4,089.47	15.47	14.88	168.37	59.28	317.62	622.08	601.69	20.39	30.507				
4,300.00	4,275.45	4,202.16	4,184.03	15.89	15.27	168.36	62.52	331.02	651.53	630.64	20.89	31.192				
4,400.00	4,374.15	4,297.73	4,278.59	16.31	15.66	168.35	65.75	344.42	680.99	659.60	21.39	31.843				
4,500.00	4,472.85	4,393.29	4,373.16	16.73	16.04	168.34	68.98	357.82	710.44	688.56	21.88	32.464				
4,600.00	4,571.55	4,488.85	4,467.72	17.15	16.43	168.34	72.22	371.22	739.89	717.51	22.38	33.057				
4,700.00	4,670.25	4,584.42	4,562.29	17.57	16.82	168.33	75.45	384.62	769.35	746.47	22.88	33.623				
4,800.00	4,768.95	4,679.98	4,656.85	18.00	17.21	168.32	78.69	398.02	798.80	775.42	23.38	34.163				
4,900.00	4,867.65	4,775.54	4,751.42	18.42	17.60	168.32	81.92	411.42	828.26	804.38	23.88	34.681				
5,000.00	4,966.35	4,871.11	4,845.98	18.85	17.99	168.31	85.16	424.82	857.71	833.33	24.38	35.176				

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 103H
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 103H	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	5,065.05	4,966.67	4,940.55	19.28	18.39	168.31	88.39	438.22	887.17	862.28	24.88	35.651		
5,200.00	5,163.76	5,062.24	5,035.11	19.70	18.78	168.30	91.63	451.62	916.62	891.23	25.39	36.106		
5,300.00	5,262.46	5,157.80	5,129.67	20.13	19.17	168.30	94.86	465.02	946.08	920.19	25.89	36.543		
5,400.00	5,361.16	5,253.36	5,224.24	20.56	19.57	168.29	98.09	478.42	975.53	949.14	26.39	36.963		
5,500.00	5,459.86	5,348.93	5,318.80	20.99	19.96	168.29	101.33	491.82	1,004.98	978.09	26.90	37.367		
5,600.00	5,558.56	5,444.49	5,413.37	21.42	20.36	168.29	104.56	505.22	1,034.44	1,007.04	27.40	37.755		
5,700.00	5,657.26	5,540.05	5,507.93	21.85	20.75	168.28	107.80	518.62	1,063.89	1,035.99	27.90	38.129		
5,800.00	5,755.96	5,635.62	5,602.50	22.28	21.15	168.28	111.03	532.02	1,093.35	1,064.94	28.41	38.489		
5,900.00	5,854.66	5,731.18	5,697.06	22.71	21.54	168.28	114.27	545.42	1,122.80	1,093.89	28.91	38.836		
6,000.00	5,953.36	5,826.75	5,791.62	23.14	21.94	168.27	117.50	558.82	1,152.26	1,122.84	29.42	39.170		
6,100.00	6,052.06	5,922.31	5,886.19	23.57	22.34	168.27	120.74	572.22	1,181.71	1,151.79	29.92	39.493		
6,200.00	6,150.76	6,017.87	5,980.75	24.01	22.73	168.27	123.97	585.62	1,211.17	1,180.74	30.43	39.805		
6,300.00	6,249.46	6,113.44	6,075.32	24.44	23.13	168.26	127.20	599.02	1,240.62	1,209.69	30.93	40.107		
6,400.00	6,348.16	6,209.00	6,169.88	24.87	23.53	168.26	130.44	612.42	1,270.08	1,238.64	31.44	40.398		
6,500.00	6,446.86	6,304.56	6,264.45	25.30	23.93	168.26	133.67	625.82	1,299.53	1,267.58	31.95	40.680		
6,600.00	6,545.56	6,400.13	6,359.01	25.74	24.33	168.26	136.91	639.22	1,328.98	1,296.53	32.45	40.952		
6,700.00	6,644.26	6,495.69	6,453.57	26.17	24.72	168.26	140.14	652.62	1,358.44	1,325.48	32.96	41.216		
6,804.31	6,747.22	6,595.38	6,552.22	26.62	25.14	168.25	143.52	666.60	1,389.16	1,355.68	33.49	41.482		
6,900.00	6,841.85	6,687.16	6,643.04	27.03	25.52	168.33	146.62	679.46	1,416.22	1,382.25	33.97	41.686		
7,000.00	6,941.09	6,783.75	6,738.62	27.44	25.93	168.37	149.89	693.01	1,442.09	1,407.61	34.48	41.823		
7,100.00	7,040.61	6,895.90	6,849.63	27.83	26.40	168.39	153.64	708.53	1,465.34	1,430.27	35.07	41.784		
7,200.00	7,140.36	7,053.51	7,006.21	28.20	27.02	168.37	157.83	725.91	1,483.26	1,447.39	35.87	41.352		
7,300.00	7,240.26	7,213.65	7,165.92	28.55	27.62	168.36	160.54	737.11	1,494.63	1,458.01	36.62	40.817		
7,400.00	7,340.24	7,375.20	7,327.38	28.88	28.17	168.35	161.67	741.81	1,499.36	1,462.05	37.31	40.186		
7,420.77	7,361.00	7,408.81	7,361.00	28.95	28.29	89.55	161.71	741.96	1,499.50	1,462.06	37.45	40.044		
7,500.00	7,440.24	7,488.05	7,440.24	29.20	28.54	89.55	161.71	741.96	1,499.50	1,461.68	37.83	39.639		
7,600.00	7,540.24	7,588.05	7,540.24	29.52	28.87	89.55	161.71	741.96	1,499.50	1,461.19	38.31	39.139		
7,700.00	7,640.24	7,688.05	7,640.24	29.84	29.20	89.55	161.71	741.96	1,499.50	1,460.71	38.80	38.651		
7,800.00	7,740.24	7,788.05	7,740.24	30.16	29.52	89.55	161.71	741.96	1,499.50	1,460.22	39.28	38.174		
7,900.00	7,840.24	7,888.05	7,840.24	30.48	29.85	89.55	161.71	741.96	1,499.50	1,459.74	39.77	37.708		
7,966.81	7,907.04	7,954.30	7,906.38	30.69	30.05	89.67	158.63	741.99	1,499.51	1,459.44	40.08	37.415		
8,000.00	7,940.22	7,986.86	7,938.65	30.79	30.15	-89.63	154.34	742.03	1,499.53	1,459.31	40.23	37.278		
8,050.00	7,989.94	8,035.55	7,986.33	30.94	30.29	-89.44	144.52	742.13	1,499.57	1,459.14	40.44	37.084		
8,100.00	8,039.04	8,083.84	8,032.62	31.08	30.41	-89.25	130.82	742.27	1,499.63	1,458.99	40.64	36.901		
8,150.00	8,087.13	8,131.76	8,077.25	31.21	30.53	-89.07	113.43	742.44	1,499.70	1,458.87	40.83	36.729		
8,200.00	8,133.85	8,179.32	8,119.96	31.33	30.65	-88.89	92.53	742.65	1,499.79	1,458.77	41.02	36.566		
8,250.00	8,178.84	8,226.54	8,160.51	31.45	30.75	-88.73	68.35	742.89	1,499.88	1,458.68	41.19	36.411		
8,300.00	8,221.77	8,273.46	8,198.69	31.55	30.84	-88.57	41.11	743.16	1,499.98	1,458.61	41.37	36.261		
8,350.00	8,262.30	8,320.10	8,234.31	31.65	30.93	-88.42	11.02	743.46	1,500.08	1,458.54	41.54	36.114		
8,400.00	8,300.13	8,366.48	8,267.18	31.74	31.01	-88.29	-21.68	743.79	1,500.18	1,458.47	41.71	35.969		
8,450.00	8,334.96	8,412.63	8,297.16	31.82	31.08	-88.17	-56.74	744.14	1,500.28	1,458.40	41.88	35.822		
8,500.00	8,366.54	8,458.57	8,324.11	31.89	31.15	-88.06	-93.93	744.51	1,500.38	1,458.32	42.06	35.673		
8,550.00	8,394.62	8,504.34	8,347.91	31.96	31.22	-87.96	-133.01	744.90	1,500.47	1,458.22	42.25	35.518		
8,600.00	8,418.99	8,550.00	8,368.47	32.03	31.30	-87.88	-173.77	745.31	1,500.55	1,458.11	42.44	35.357		
8,650.00	8,439.47	8,595.44	8,385.65	32.11	31.38	-87.82	-215.82	745.73	1,500.61	1,457.97	42.65	35.188		
8,700.00	8,455.89	8,640.84	8,399.42	32.19	31.48	-87.76	-259.06	746.16	1,500.67	1,457.80	42.86	35.010		
8,750.00	8,468.13	8,686.16	8,409.72	32.29	31.59	-87.73	-303.18	746.60	1,500.70	1,457.61	43.09	34.824		
8,800.00	8,476.11	8,731.43	8,416.49	32.40	31.72	-87.71	-347.93	747.05	1,500.73	1,457.39	43.34	34.631		
8,850.00	8,479.75	8,776.69	8,419.71	32.54	31.86	-87.71	-393.06	747.50	1,500.73	1,457.15	43.59	34.430		
8,866.81	8,480.00	8,791.90	8,419.99	32.59	31.92	-87.71	-408.27	747.65	1,500.73	1,457.06	43.67	34.362		
8,869.99	8,480.00	8,794.85	8,420.00	32.60	31.93	-87.71	-411.22	747.68	1,500.73	1,457.04	43.69	34.349		
8,900.00	8,480.00	8,824.78	8,420.00	32.70	32.04	-87.71	-441.15	747.98	1,500.73	1,456.87	43.87	34.211		

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 103H
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 103H	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		
9,000.00	8,480.00	9,924.78	8,420.00	33.09	32.47	-87.71	-541.15	748.98	1,500.74	1,456.23	44.51	33.715		
9,100.00	8,480.00	9,024.78	8,420.00	33.57	32.98	-87.71	-641.14	749.97	1,500.74	1,455.48	45.27	33.151		
9,200.00	8,480.00	9,124.78	8,420.00	34.14	33.58	-87.71	-741.14	750.97	1,500.75	1,454.62	46.13	32.531		
9,300.00	8,480.00	9,224.78	8,420.00	34.79	34.24	-87.71	-841.13	751.97	1,500.76	1,453.66	47.10	31.866		
9,400.00	8,480.00	9,324.78	8,420.00	35.50	34.97	-87.71	-941.13	752.97	1,500.76	1,452.61	48.15	31.167		
9,500.00	8,480.00	9,424.78	8,420.00	36.28	35.77	-87.71	-1,041.12	753.97	1,500.77	1,451.47	49.30	30.443		
9,600.00	8,480.00	9,524.78	8,420.00	37.11	36.62	-87.71	-1,141.12	754.97	1,500.77	1,450.25	50.52	29.704		
9,700.00	8,480.00	9,624.78	8,420.00	38.01	37.52	-87.71	-1,241.11	755.97	1,500.78	1,448.95	51.83	28.957		
9,800.00	8,480.00	9,724.78	8,420.00	38.95	38.48	-87.71	-1,341.11	756.96	1,500.78	1,447.58	53.20	28.209		
9,900.00	8,480.00	9,824.78	8,420.00	39.94	39.48	-87.71	-1,441.10	757.96	1,500.79	1,446.15	54.64	27.467		
10,000.00	8,480.00	9,924.78	8,420.00	40.97	40.52	-87.71	-1,541.10	758.96	1,500.79	1,444.66	56.14	26.733		
10,100.00	8,480.00	10,024.78	8,420.00	42.04	41.60	-87.71	-1,641.09	759.96	1,500.80	1,443.11	57.69	26.013		
10,200.00	8,480.00	10,124.78	8,420.00	43.14	42.72	-87.71	-1,741.09	760.96	1,500.81	1,441.51	59.30	25.309		
10,300.00	8,480.00	10,224.78	8,420.00	44.29	43.87	-87.71	-1,841.08	761.96	1,500.81	1,439.86	60.95	24.623		
10,400.00	8,480.00	10,324.78	8,420.00	45.46	45.05	-87.71	-1,941.08	762.95	1,500.82	1,438.17	62.65	23.956		
10,500.00	8,480.00	10,424.78	8,420.00	46.66	46.26	-87.71	-2,041.07	763.95	1,500.82	1,436.44	64.38	23.310		
10,600.00	8,480.00	10,524.78	8,420.00	47.89	47.50	-87.71	-2,141.07	764.95	1,500.83	1,434.67	66.16	22.686		
10,700.00	8,480.00	10,624.78	8,420.00	49.14	48.76	-87.71	-2,241.06	765.95	1,500.83	1,432.87	67.96	22.083		
10,800.00	8,480.00	10,724.78	8,420.00	50.42	50.04	-87.71	-2,341.06	766.95	1,500.84	1,431.04	69.80	21.501		
10,900.00	8,480.00	10,824.78	8,420.00	51.72	51.35	-87.71	-2,441.05	767.95	1,500.84	1,429.18	71.67	20.941		
11,000.00	8,480.00	10,924.78	8,420.00	53.03	52.67	-87.71	-2,541.05	768.95	1,500.85	1,427.29	73.56	20.402		
11,100.00	8,480.00	11,024.78	8,420.00	54.37	54.02	-87.71	-2,641.04	769.94	1,500.86	1,425.37	75.48	19.884		
11,200.00	8,480.00	11,124.78	8,420.00	55.72	55.37	-87.71	-2,741.04	770.94	1,500.86	1,423.44	77.42	19.385		
11,300.00	8,480.00	11,224.78	8,420.00	57.09	56.75	-87.71	-2,841.03	771.94	1,500.87	1,421.48	79.39	18.906		
11,400.00	8,480.00	11,324.78	8,420.00	58.47	58.14	-87.71	-2,941.03	772.94	1,500.87	1,419.51	81.37	18.446		
11,500.00	8,480.00	11,424.78	8,420.00	59.86	59.54	-87.71	-3,041.02	773.94	1,500.88	1,417.51	83.37	18.003		
11,600.00	8,480.00	11,524.78	8,420.00	61.27	60.96	-87.71	-3,141.02	774.94	1,500.88	1,415.50	85.38	17.578		
11,700.00	8,480.00	11,624.78	8,420.00	62.69	62.38	-87.71	-3,241.01	775.93	1,500.89	1,413.47	87.42	17.169		
11,800.00	8,480.00	11,724.78	8,420.00	64.13	63.82	-87.71	-3,341.01	776.93	1,500.89	1,411.43	89.46	16.776		
11,900.00	8,480.00	11,824.78	8,420.00	65.57	65.27	-87.71	-3,441.00	777.93	1,500.90	1,409.37	91.53	16.399		
12,000.00	8,480.00	11,924.78	8,420.00	67.02	66.72	-87.71	-3,541.00	778.93	1,500.91	1,407.31	93.60	16.035		
12,100.00	8,480.00	12,024.78	8,420.00	68.48	68.19	-87.71	-3,640.99	779.93	1,500.91	1,405.23	95.69	15.686		
12,200.00	8,480.00	12,124.78	8,420.00	69.95	69.66	-87.71	-3,740.99	780.93	1,500.92	1,403.13	97.78	15.349		
12,300.00	8,480.00	12,224.78	8,420.00	71.42	71.14	-87.71	-3,840.98	781.93	1,500.92	1,401.03	99.89	15.026		
12,400.00	8,480.00	12,324.78	8,420.00	72.91	72.63	-87.71	-3,940.98	782.92	1,500.93	1,398.92	102.01	14.714		
12,500.00	8,480.00	12,424.78	8,420.00	74.40	74.13	-87.71	-4,040.97	783.92	1,500.93	1,396.80	104.14	14.413		
12,600.00	8,480.00	12,524.78	8,420.00	75.90	75.63	-87.71	-4,140.97	784.92	1,500.94	1,394.67	106.27	14.124		
12,700.00	8,480.00	12,624.78	8,420.00	77.40	77.14	-87.71	-4,240.96	785.92	1,500.94	1,392.53	108.41	13.844		
12,800.00	8,480.00	12,724.78	8,420.00	78.91	78.65	-87.71	-4,340.96	786.92	1,500.95	1,390.38	110.57	13.575		
12,900.00	8,480.00	12,824.78	8,420.00	80.43	80.17	-87.71	-4,440.95	787.92	1,500.96	1,388.23	112.72	13.315		
13,000.00	8,480.00	12,924.78	8,420.00	81.95	81.70	-87.71	-4,540.95	788.91	1,500.96	1,386.07	114.89	13.064		
13,100.00	8,480.00	13,024.78	8,420.00	83.47	83.23	-87.71	-4,640.94	789.91	1,500.97	1,383.90	117.06	12.822		
13,200.00	8,480.00	13,124.78	8,420.00	85.00	84.76	-87.71	-4,740.94	790.91	1,500.97	1,381.73	119.24	12.588		
13,300.00	8,480.00	13,224.78	8,420.00	86.54	86.30	-87.71	-4,840.93	791.91	1,500.98	1,379.55	121.42	12.361		
13,400.00	8,480.00	13,324.78	8,420.00	88.08	87.84	-87.71	-4,940.93	792.91	1,500.98	1,377.37	123.61	12.143		
13,500.00	8,480.00	13,424.78	8,420.00	89.62	89.39	-87.71	-5,040.92	793.91	1,500.99	1,375.18	125.81	11.931		
13,600.00	8,480.00	13,524.78	8,420.00	91.17	90.94	-87.71	-5,140.92	794.90	1,500.99	1,372.99	128.01	11.726		
13,700.00	8,480.00	13,624.78	8,420.00	92.72	92.49	-87.71	-5,240.91	795.90	1,501.00	1,370.79	130.21	11.527		
13,800.00	8,480.00	13,724.78	8,420.00	94.27	94.05	-87.71	-5,340.91	796.90	1,501.01	1,368.59	132.42	11.335		
13,900.00	8,480.00	13,824.78	8,420.00	95.83	95.61	-87.71	-5,440.90	797.90	1,501.01	1,366.38	134.63	11.149		
14,000.00	8,480.00	13,924.78	8,420.00	97.39	97.17	-87.71	-5,540.90	798.90	1,501.02	1,364.17	136.85	10.968		
14,100.00	8,480.00	14,024.78	8,420.00	98.95	98.74	-87.71	-5,640.89	799.90	1,501.02	1,361.95	139.07	10.793		

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 103H
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 103H	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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
14,200.00	8,480.00	14,124.78	8,420.00	100.52	100.30	-87.71	-5,740.89	800.90	1,501.03	1,359.73	141.29	10.623				
14,300.00	8,480.00	14,224.78	8,420.00	102.09	101.88	-87.71	-5,840.88	801.89	1,501.03	1,357.51	143.52	10.459				
14,400.00	8,480.00	14,324.78	8,420.00	103.66	103.45	-87.71	-5,940.88	802.89	1,501.04	1,355.29	145.75	10.299				
14,500.00	8,480.00	14,424.78	8,420.00	105.23	105.03	-87.71	-6,040.87	803.89	1,501.04	1,353.06	147.99	10.143				
14,600.00	8,480.00	14,524.78	8,420.00	106.81	106.60	-87.71	-6,140.87	804.89	1,501.05	1,350.83	150.22	9.992				
14,700.00	8,480.00	14,624.78	8,420.00	108.39	108.18	-87.71	-6,240.86	805.89	1,501.06	1,348.59	152.46	9.845				
14,800.00	8,480.00	14,724.78	8,420.00	109.97	109.77	-87.71	-6,340.86	806.89	1,501.06	1,346.35	154.71	9.703				
14,900.00	8,480.00	14,824.78	8,420.00	111.55	111.35	-87.71	-6,440.85	807.88	1,501.07	1,344.11	156.95	9.564				
15,000.00	8,480.00	14,924.78	8,420.00	113.13	112.94	-87.71	-6,540.85	808.88	1,501.07	1,341.87	159.20	9.429				
15,100.00	8,480.00	15,024.78	8,420.00	114.72	114.53	-87.71	-6,640.84	809.88	1,501.08	1,339.63	161.45	9.297				
15,200.00	8,480.00	15,124.78	8,420.00	116.31	116.12	-87.71	-6,740.84	810.88	1,501.08	1,337.38	163.70	9.169				
15,300.00	8,480.00	15,224.78	8,420.00	117.90	117.71	-87.71	-6,840.83	811.88	1,501.09	1,335.13	165.96	9.045				
15,400.00	8,480.00	15,324.78	8,420.00	119.49	119.30	-87.71	-6,940.83	812.88	1,501.09	1,332.88	168.22	8.924				
15,500.00	8,480.00	15,424.78	8,420.00	121.08	120.90	-87.71	-7,040.82	813.88	1,501.10	1,330.62	170.48	8.805				
15,600.00	8,480.00	15,524.78	8,420.00	122.68	122.49	-87.71	-7,140.82	814.87	1,501.11	1,328.37	172.74	8.690				
15,700.00	8,480.00	15,624.78	8,420.00	124.27	124.09	-87.71	-7,240.81	815.87	1,501.11	1,326.11	175.00	8.578				
15,800.00	8,480.00	15,724.78	8,420.00	125.87	125.69	-87.71	-7,340.81	816.87	1,501.12	1,323.85	177.27	8.468				
15,900.00	8,480.00	15,824.78	8,420.00	127.47	127.29	-87.71	-7,440.80	817.87	1,501.12	1,321.59	179.53	8.361				
16,000.00	8,480.00	15,924.78	8,420.00	129.07	128.89	-87.71	-7,540.80	818.87	1,501.13	1,319.33	181.80	8.257				
16,100.00	8,480.00	16,024.78	8,420.00	130.67	130.50	-87.71	-7,640.79	819.87	1,501.13	1,317.06	184.07	8.155				
16,200.00	8,480.00	16,124.78	8,420.00	132.27	132.10	-87.71	-7,740.79	820.86	1,501.14	1,314.80	186.34	8.056				
16,300.00	8,480.00	16,224.78	8,420.00	133.88	133.71	-87.71	-7,840.78	821.86	1,501.14	1,312.53	188.62	7.959				
16,400.00	8,480.00	16,324.78	8,420.00	135.48	135.31	-87.71	-7,940.78	822.86	1,501.15	1,310.26	190.89	7.864				
16,500.00	8,480.00	16,424.78	8,420.00	137.09	136.92	-87.71	-8,040.77	823.86	1,501.16	1,307.99	193.17	7.771				
16,600.00	8,480.00	16,524.78	8,420.00	138.70	138.53	-87.71	-8,140.77	824.86	1,501.16	1,305.72	195.44	7.681				
16,700.00	8,480.00	16,624.78	8,420.00	140.30	140.14	-87.71	-8,240.76	825.86	1,501.17	1,303.44	197.72	7.592				
16,800.00	8,480.00	16,724.78	8,420.00	141.91	141.75	-87.71	-8,340.76	826.86	1,501.17	1,301.17	200.00	7.506				
16,900.00	8,480.00	16,824.78	8,420.00	143.52	143.36	-87.71	-8,440.75	827.85	1,501.18	1,298.89	202.28	7.421				
17,000.00	8,480.00	16,924.78	8,420.00	145.13	144.97	-87.71	-8,540.75	828.85	1,501.18	1,296.62	204.57	7.338				
17,100.00	8,480.00	17,024.78	8,420.00	146.75	146.59	-87.71	-8,640.74	829.85	1,501.19	1,294.34	206.85	7.257				
17,200.00	8,480.00	17,124.78	8,420.00	148.36	148.20	-87.71	-8,740.74	830.85	1,501.19	1,292.06	209.13	7.178				
17,300.00	8,480.00	17,224.78	8,420.00	149.97	149.82	-87.71	-8,840.73	831.85	1,501.20	1,289.78	211.42	7.101				
17,400.00	8,480.00	17,324.78	8,420.00	151.59	151.43	-87.71	-8,940.73	832.85	1,501.21	1,287.50	213.71	7.025				
17,500.00	8,480.00	17,424.78	8,420.00	153.20	153.05	-87.71	-9,040.72	833.84	1,501.21	1,285.22	216.00	6.950				
17,600.00	8,480.00	17,524.78	8,420.00	154.82	154.67	-87.71	-9,140.72	834.84	1,501.22	1,282.93	218.28	6.877				
17,700.00	8,480.00	17,624.78	8,420.00	156.44	156.28	-87.71	-9,240.71	835.84	1,501.22	1,280.65	220.57	6.806				
17,800.00	8,480.00	17,724.78	8,420.00	158.05	157.90	-87.71	-9,340.71	836.84	1,501.23	1,278.36	222.86	6.736				
17,900.00	8,480.00	17,824.78	8,420.00	159.67	159.52	-87.71	-9,440.70	837.84	1,501.23	1,276.08	225.16	6.668				
18,000.00	8,480.00	17,924.78	8,420.00	161.29	161.14	-87.71	-9,540.70	838.84	1,501.24	1,273.79	227.45	6.600				
18,100.00	8,480.00	18,024.78	8,420.00	162.91	162.76	-87.71	-9,640.69	839.84	1,501.24	1,271.50	229.74	6.534				
18,200.00	8,480.00	18,124.78	8,420.00	164.53	164.38	-87.71	-9,740.69	840.83	1,501.25	1,269.21	232.04	6.470				
18,300.00	8,480.00	18,224.78	8,420.00	166.15	166.01	-87.71	-9,840.68	841.83	1,501.26	1,266.93	234.33	6.407				
18,400.00	8,480.00	18,324.78	8,420.00	167.77	167.63	-87.71	-9,940.68	842.83	1,501.26	1,264.64	236.63	6.344				
18,500.00	8,480.00	18,424.78	8,420.00	169.40	169.25	-87.71	-10,040.67	843.83	1,501.27	1,262.34	238.92	6.283				
18,505.55	8,480.00	18,430.33	8,420.00	169.49	169.34	-87.71	-10,046.22	843.88	1,501.27	1,262.22	239.05	6.280				
18,600.00	8,480.00	18,511.34	8,420.00	171.02	170.66	-87.71	-10,127.23	844.69	1,501.33	1,260.28	241.05	6.228 SF				
18,700.00	8,480.00	18,511.34	8,420.00	172.64	170.66	-87.71	-10,127.23	844.69	1,505.56	1,264.18	241.38	6.237				
18,800.00	8,480.00	18,511.34	8,420.00	174.26	170.66	-87.71	-10,127.23	844.69	1,516.38	1,275.86	240.52	6.305				
18,900.00	8,480.00	18,511.34	8,420.00	175.89	170.66	-87.71	-10,127.23	844.69	1,533.66	1,295.12	238.54	6.429				
19,000.00	8,480.00	18,511.34	8,420.00	177.51	170.66	-87.71	-10,127.23	844.69	1,557.18	1,321.63	235.56	6.611				
19,100.00	8,480.00	18,511.34	8,420.00	179.14	170.66	-87.71	-10,127.23	844.69	1,586.67	1,354.96	231.71	6.848				
19,200.00	8,480.00	18,511.34	8,420.00	180.76	170.66	-87.71	-10,127.23	844.69	1,621.80	1,394.62	227.18	7.139				

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 103H
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 103H	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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.00	8,480.00	18,511.34	8,420.00	182.39	170.66	-87.71	-10,127.23	844.69	1,662.21	1,440.09	222.12	7.483	
19,400.00	8,480.00	18,511.34	8,420.00	184.02	170.66	-87.71	-10,127.23	844.69	1,707.52	1,490.84	216.68	7.880	
19,500.00	8,480.00	18,511.34	8,420.00	185.64	170.66	-87.71	-10,127.23	844.69	1,757.37	1,546.35	211.01	8.328	
19,600.00	8,480.00	18,511.34	8,420.00	187.27	170.66	-87.71	-10,127.23	844.69	1,811.37	1,606.13	205.24	8.826	
19,700.00	8,480.00	18,511.34	8,420.00	188.90	170.66	-87.71	-10,127.23	844.69	1,869.16	1,669.72	199.44	9.372	
19,800.00	8,480.00	18,511.34	8,420.00	190.53	170.66	-87.71	-10,127.23	844.69	1,930.40	1,736.70	193.70	9.966	
19,899.80	8,480.00	18,511.34	8,420.00	192.15	170.66	-87.71	-10,127.23	844.69	1,994.65	1,806.55	188.10	10.604	

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 103H
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 103H	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	89.46	0.23	24.78	24.78				
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.23	24.78	24.78	24.60	0.18	139.661	
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.23	24.78	24.78	24.10	0.68	36.208	
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.23	24.78	24.78	23.59	1.19	20.801	
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.23	24.78	24.78	23.08	1.70	14.591	
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.23	24.78	24.78	22.58	2.21	11.237	
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.23	24.78	24.78	22.07	2.71	9.137	
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.23	24.78	24.78	21.56	3.22	7.698	
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.23	24.78	24.78	21.05	3.73	6.651	
900.00	900.00	900.00	900.00	2.99	2.99	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	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	89.46	0.23	24.78	24.78	14.97	9.81	2.526 CC, ES	
2,100.00	2,099.99	2,099.99	2,099.99	7.29	7.29	168.84	0.23	24.78	26.06	15.75	10.31	2.528	
2,200.00	2,199.91	2,200.65	2,200.64	7.63	7.65	169.63	0.60	23.51	28.65	17.85	10.80	2.653	
2,300.00	2,299.69	2,301.38	2,301.28	7.98	8.00	169.87	1.71	19.68	31.28	20.00	11.28	2.773	
2,400.00	2,399.27	2,402.17	2,401.86	8.34	8.35	169.68	3.56	13.31	33.93	22.18	11.75	2.888	
2,500.00	2,498.57	2,503.03	2,502.29	8.69	8.71	169.16	6.15	4.38	36.62	24.41	12.22	2.998	
2,600.00	2,597.54	2,603.96	2,602.50	9.06	9.07	168.39	9.48	-7.10	39.34	26.67	12.67	3.104	
2,616.45	2,613.78	2,620.57	2,618.96	9.12	9.13	168.24	10.10	-9.24	39.79	27.04	12.75	3.121	
2,700.00	2,696.24	2,704.96	2,702.43	9.43	9.44	167.13	13.54	-21.14	41.21	28.08	13.13	3.139	
2,800.00	2,794.94	2,805.63	2,801.65	9.81	9.82	164.85	18.29	-37.50	40.78	27.19	13.60	3.000	
2,900.00	2,893.64	2,905.61	2,900.08	10.19	10.20	162.23	23.16	-54.30	39.89	25.78	14.11	2.828	
3,000.00	2,992.34	3,005.58	2,998.52	10.58	10.58	159.50	28.03	-71.10	39.07	24.45	14.62	2.672	
3,100.00	3,091.04	3,105.56	3,096.96	10.97	10.98	156.65	32.90	-87.90	38.36	23.21	15.15	2.532	
3,200.00	3,189.74	3,205.54	3,195.39	11.37	11.37	153.71	37.77	-104.71	37.74	22.06	15.68	2.407	
3,300.00	3,288.45	3,305.52	3,293.83	11.77	11.77	150.67	42.64	-121.51	37.22	21.00	16.22	2.294	
3,400.00	3,387.15	3,405.50	3,392.27	12.17	12.18	147.56	47.51	-138.31	36.81	20.03	16.77	2.194	
3,500.00	3,485.85	3,505.48	3,490.70	12.58	12.59	144.39	52.39	-155.11	36.51	19.17	17.34	2.106	
3,600.00	3,584.55	3,605.46	3,589.14	12.98	13.00	141.17	57.26	-171.91	36.32	18.41	17.91	2.028	
3,700.00	3,683.25	3,705.44	3,687.58	13.39	13.41	137.94	62.13	-188.71	36.25	17.75	18.50	1.960	
3,710.77	3,693.88	3,716.20	3,698.18	13.44	13.46	137.59	62.65	-190.52	36.25	17.69	18.56	1.953	
3,800.00	3,781.95	3,805.42	3,786.01	13.80	13.83	134.70	67.00	-205.51	36.30	17.20	19.09	1.901	
3,900.00	3,880.65	3,905.39	3,884.45	14.22	14.25	131.48	71.87	-222.31	36.46	16.76	19.70	1.851	
4,000.00	3,979.35	4,005.37	3,982.89	14.63	14.67	128.29	76.74	-239.12	36.73	16.42	20.32	1.808	
4,100.00	4,078.05	4,105.35	4,081.32	15.05	15.10	125.17	81.61	-255.92	37.12	16.18	20.94	1.773	
4,200.00	4,176.75	4,205.33	4,179.76	15.47	15.52	122.11	86.48	-272.72	37.61	16.04	21.57	1.744	
4,300.00	4,275.45	4,305.31	4,278.20	15.89	15.95	119.15	91.35	-289.52	38.21	16.01	22.20	1.721	
4,400.00	4,374.15	4,405.29	4,376.63	16.31	16.38	116.28	96.22	-306.32	38.91	16.07	22.84	1.703	
4,500.00	4,472.85	4,505.27	4,475.07	16.73	16.81	113.52	101.09	-323.12	39.70	16.22	23.48	1.691	
4,600.00	4,571.55	4,605.25	4,573.51	17.15	17.24	110.88	105.97	-339.92	40.58	16.46	24.12	1.682	
4,700.00	4,670.25	4,705.23	4,671.94	17.57	17.67	108.35	110.84	-356.73	41.55	16.78	24.76	1.678	
4,800.00	4,768.95	4,805.21	4,770.38	18.00	18.11	105.94	115.71	-373.53	42.59	17.18	25.40	1.677 SF	
4,900.00	4,867.65	4,905.18	4,868.82	18.42	18.54	103.65	120.58	-390.33	43.70	17.66	26.04	1.678	

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
5,000.00	4,966.35	5,005.16	4,967.25	18.85	18.98	101.48	125.45	-407.13	44.88	18.20	26.67	1.682				
5,100.00	5,065.05	5,105.14	5,065.69	19.28	19.41	99.42	130.32	-423.93	46.11	18.81	27.30	1.689				
5,200.00	5,163.76	5,205.12	5,164.13	19.70	19.85	97.47	135.19	-440.73	47.41	19.48	27.93	1.697				
5,300.00	5,262.46	5,305.10	5,262.56	20.13	20.29	95.62	140.06	-457.53	48.76	20.20	28.56	1.707				
5,400.00	5,361.16	5,405.08	5,361.00	20.56	20.73	93.88	144.93	-474.34	50.15	20.97	29.18	1.719				
5,500.00	5,459.86	5,505.06	5,459.44	20.99	21.17	92.23	149.80	-491.14	51.59	21.79	29.80	1.731				
5,600.00	5,558.56	5,605.04	5,557.87	21.42	21.61	90.68	154.67	-507.94	53.07	22.65	30.42	1.745				
5,700.00	5,657.26	5,705.02	5,656.31	21.85	22.05	89.21	159.55	-524.74	54.59	23.55	31.03	1.759				
5,800.00	5,755.96	5,804.99	5,754.75	22.28	22.49	87.81	164.42	-541.54	56.14	24.49	31.65	1.774				
5,900.00	5,854.66	5,904.97	5,853.18	22.71	22.93	86.50	169.29	-558.34	57.72	25.46	32.26	1.789				
6,000.00	5,953.36	6,004.95	5,951.62	23.14	23.38	85.25	174.16	-575.14	59.33	26.47	32.86	1.805				
6,100.00	6,052.06	6,104.93	6,050.06	23.57	23.82	84.08	179.03	-591.95	60.97	27.50	33.47	1.822				
6,200.00	6,150.76	6,204.91	6,148.49	24.01	24.26	82.96	183.90	-608.75	62.63	28.56	34.07	1.838				
6,300.00	6,249.46	6,304.89	6,246.93	24.44	24.71	81.90	188.77	-625.55	64.31	29.64	34.68	1.855				
6,400.00	6,348.16	6,404.87	6,345.37	24.87	25.15	80.90	193.64	-642.35	66.02	30.74	35.28	1.871				
6,500.00	6,446.86	6,504.85	6,443.80	25.30	25.60	79.95	198.51	-659.15	67.74	31.87	35.88	1.888				
6,600.00	6,545.56	6,604.83	6,542.24	25.74	26.04	79.04	203.38	-675.95	69.48	33.01	36.47	1.905				
6,700.00	6,644.26	6,704.81	6,640.68	26.17	26.49	78.18	208.25	-692.75	71.24	34.17	37.07	1.922				
6,804.31	6,747.22	6,809.39	6,743.71	26.62	26.95	77.59	213.25	-710.00	72.99	35.29	37.70	1.936				
6,900.00	6,841.85	6,905.62	6,838.86	27.03	27.36	77.79	217.25	-723.78	74.20	35.92	38.29	1.938				
7,000.00	6,941.09	7,006.19	6,938.66	27.44	27.77	77.96	220.71	-735.73	75.25	36.39	38.87	1.936				
7,100.00	7,040.61	7,106.77	7,038.75	27.83	28.16	78.09	223.44	-745.14	76.08	36.66	39.42	1.930				
7,200.00	7,140.36	7,207.35	7,139.07	28.20	28.53	78.18	225.44	-752.02	76.69	36.75	39.94	1.920				
7,300.00	7,240.26	7,307.93	7,239.55	28.55	28.88	78.24	226.70	-756.37	77.07	36.64	40.43	1.906				
7,400.00	7,340.24	7,408.52	7,340.11	28.88	29.22	78.26	227.22	-758.17	77.23	36.34	40.90	1.889				
7,420.77	7,361.00	7,429.40	7,361.00	28.95	29.28	-0.53	227.23	-758.22	77.24	36.25	40.99	1.884				
7,500.00	7,440.24	7,508.64	7,440.24	29.20	29.53	-0.53	227.23	-758.22	77.24	35.89	41.34	1.868				
7,600.00	7,540.24	7,608.64	7,540.24	29.52	29.85	-0.53	227.23	-758.22	77.24	35.44	41.79	1.848				
7,700.00	7,640.24	7,708.64	7,640.24	29.84	30.16	-0.53	227.23	-758.22	77.24	34.99	42.25	1.828				
7,800.00	7,740.24	7,808.64	7,740.24	30.16	30.48	-0.53	227.23	-758.22	77.24	34.54	42.70	1.809				
7,900.00	7,840.24	7,908.64	7,840.24	30.48	30.80	-0.53	227.23	-758.22	77.24	34.09	43.15	1.790				
7,966.81	7,907.04	7,975.44	7,907.04	30.69	31.01	-0.53	227.23	-758.22	77.24	33.78	43.46	1.777				
8,000.00	7,940.22	8,008.62	7,940.22	30.79	31.12	-179.97	227.23	-758.22	78.20	34.59	43.60	1.793				
8,050.00	7,989.94	8,058.34	7,989.94	30.94	31.28	-179.97	227.23	-758.22	83.27	39.44	43.82	1.900				
8,100.00	8,039.04	8,107.44	8,039.04	31.08	31.44	-179.97	227.23	-758.22	92.65	48.61	44.04	2.104				
8,150.00	8,087.13	8,155.53	8,087.13	31.21	31.59	-179.97	227.23	-758.22	106.28	62.02	44.25	2.401				
8,200.00	8,133.85	8,202.25	8,133.85	31.33	31.74	-179.98	227.23	-758.22	124.04	79.58	44.46	2.790				
8,250.00	8,178.84	8,247.25	8,178.84	31.45	31.89	-179.98	227.23	-758.22	145.81	101.16	44.65	3.266				
8,300.00	8,221.77	8,290.17	8,221.77	31.55	32.02	-179.98	227.23	-758.22	171.42	126.59	44.83	3.824				
8,350.00	8,262.30	8,330.70	8,262.30	31.65	32.15	-179.98	227.23	-758.22	200.67	155.67	45.00	4.459				
8,400.00	8,300.13	8,368.53	8,300.13	31.74	32.28	-179.98	227.23	-758.22	233.35	188.19	45.15	5.168				
8,450.00	8,334.96	8,403.36	8,334.96	31.82	32.39	-179.99	227.23	-758.22	269.19	223.90	45.29	5.943				
8,500.00	8,366.54	8,434.94	8,366.54	31.89	32.49	-179.99	227.23	-758.22	307.94	262.52	45.41	6.781				
8,550.00	8,394.62	8,463.02	8,394.62	31.96	32.58	-179.99	227.23	-758.22	349.29	303.77	45.52	7.673				
8,600.00	8,418.99	8,487.39	8,418.99	32.03	32.66	-179.98	227.23	-758.22	392.93	347.32	45.61	8.615				
8,650.00	8,439.47	8,507.87	8,439.47	32.11	32.73	-179.98	227.23	-758.22	438.53	392.84	45.68	9.599				
8,700.00	8,455.89	8,524.29	8,455.89	32.19	32.78	-179.98	227.23	-758.22	485.74	440.00	45.74	10.619				
8,750.00	8,468.13	8,536.53	8,468.13	32.29	32.82	-179.98	227.23	-758.22	534.20	488.42	45.78	11.668				
8,800.00	8,476.11	8,544.51	8,476.11	32.40	32.85	-179.96	227.23	-758.22	583.54	537.73	45.81	12.739				
8,850.00	8,479.75	8,548.15	8,479.75	32.54	32.86	-179.86	227.23	-758.22	633.39	587.57	45.82	13.823				
8,866.81	8,480.00	8,548.40	8,480.00	32.59	32.86	-90.16	227.23	-758.22	650.19	604.37	45.82	14.190				
8,900.00	8,480.00	8,548.40	8,480.00	32.70	32.86	-90.17	227.23	-758.22	683.39	637.57	45.82	14.914				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	
9,000.00	8,480.00	8,548.40	8,480.00	33.09	32.86	-90.19	227.23	-758.22	783.39	737.56	45.83	17.094		
9,100.00	8,480.00	8,548.40	8,480.00	33.57	32.86	-90.22	227.23	-758.22	883.39	837.56	45.83	19.274		
9,200.00	8,480.00	8,548.40	8,480.00	34.14	32.86	-90.24	227.23	-758.22	983.39	937.55	45.84	21.454		
9,300.00	8,480.00	8,548.40	8,480.00	34.79	32.86	-90.27	227.23	-758.22	1,083.39	1,037.55	45.84	23.632		
9,400.00	8,480.00	8,548.40	8,480.00	35.50	32.86	-90.29	227.23	-758.22	1,183.39	1,137.54	45.85	25.810		
9,500.00	8,480.00	8,548.40	8,480.00	36.28	32.86	-90.32	227.23	-758.22	1,283.39	1,237.53	45.86	27.987		
9,600.00	8,480.00	8,548.40	8,480.00	37.11	32.86	-90.34	227.23	-758.22	1,383.39	1,337.53	45.86	30.163		
9,700.00	8,480.00	8,548.40	8,480.00	38.01	32.86	-90.37	227.23	-758.22	1,483.39	1,437.52	45.87	32.337		
9,800.00	8,480.00	8,548.40	8,480.00	38.95	32.86	-90.39	227.23	-758.22	1,583.39	1,537.51	45.88	34.511		
9,900.00	8,480.00	8,548.40	8,480.00	39.94	32.86	-90.41	227.23	-758.22	1,683.39	1,637.50	45.89	36.683		
10,000.00	8,480.00	8,548.40	8,480.00	40.97	32.86	-90.44	227.23	-758.22	1,783.39	1,737.49	45.90	38.853		
10,100.00	8,480.00	8,548.40	8,480.00	42.04	32.86	-90.46	227.23	-758.22	1,883.39	1,837.48	45.91	41.022		
10,200.00	8,480.00	12,223.87	10,418.00	43.14	48.24	-180.00	-1,756.06	-738.54	1,938.00	1,904.92	33.08	58.588		
10,300.00	8,480.00	12,323.87	10,418.00	44.29	49.27	-180.00	-1,856.05	-737.54	1,938.00	1,904.19	33.81	57.314		
10,400.00	8,480.00	12,423.87	10,418.00	45.46	50.33	-180.00	-1,956.05	-736.55	1,938.00	1,903.43	34.57	56.061		
10,500.00	8,480.00	12,523.87	10,418.00	46.66	51.43	-180.00	-2,056.04	-735.56	1,938.00	1,902.66	35.34	54.834		
10,600.00	8,480.00	12,623.87	10,418.00	47.89	52.55	-180.00	-2,156.04	-734.57	1,938.00	1,901.87	36.13	53.632		
10,700.00	8,480.00	12,723.87	10,418.00	49.14	53.70	-180.00	-2,256.03	-733.57	1,938.00	1,901.06	36.94	52.459		
10,800.00	8,480.00	12,823.87	10,418.00	50.42	54.87	-180.00	-2,356.03	-732.58	1,938.00	1,900.23	37.77	51.316		
10,900.00	8,480.00	12,923.87	10,418.00	51.72	56.07	-180.00	-2,456.02	-731.59	1,938.00	1,899.40	38.60	50.202		
11,000.00	8,480.00	13,023.87	10,418.00	53.03	57.30	-180.00	-2,556.02	-730.60	1,938.00	1,898.54	39.46	49.119		
11,100.00	8,480.00	13,123.87	10,418.00	54.37	58.54	-180.00	-2,656.01	-729.60	1,938.00	1,897.68	40.32	48.067		
11,200.00	8,480.00	13,223.87	10,418.00	55.72	59.80	-180.00	-2,756.01	-728.61	1,938.00	1,896.81	41.19	47.045		
11,300.00	8,480.00	13,323.87	10,418.00	57.09	61.08	-180.00	-2,856.00	-727.62	1,938.00	1,895.92	42.08	46.054		
11,400.00	8,480.00	13,423.87	10,418.00	58.47	62.38	-180.00	-2,956.00	-726.63	1,938.00	1,895.02	42.98	45.093		
11,500.00	8,480.00	13,523.87	10,418.00	59.86	63.70	-180.00	-3,055.99	-725.63	1,938.00	1,894.12	43.88	44.161		
11,600.00	8,480.00	13,623.87	10,418.00	61.27	65.03	-180.00	-3,155.99	-724.64	1,938.00	1,893.20	44.80	43.258		
11,700.00	8,480.00	13,723.87	10,418.00	62.69	66.37	-180.00	-3,255.98	-723.65	1,938.00	1,892.28	45.72	42.384		
11,800.00	8,480.00	13,823.87	10,418.00	64.13	67.73	-180.00	-3,355.98	-722.66	1,938.00	1,891.34	46.66	41.537		
11,900.00	8,480.00	13,923.87	10,418.00	65.57	69.10	-180.00	-3,455.97	-721.66	1,938.00	1,890.40	47.60	40.716		
12,000.00	8,480.00	14,023.87	10,418.00	67.02	70.48	-180.00	-3,555.97	-720.67	1,938.00	1,889.46	48.55	39.922		
12,100.00	8,480.00	14,123.87	10,418.00	68.48	71.88	-180.00	-3,655.96	-719.68	1,938.00	1,888.50	49.50	39.152		
12,200.00	8,480.00	14,223.87	10,418.00	69.95	73.28	-180.00	-3,755.96	-718.69	1,938.00	1,887.54	50.46	38.407		
12,300.00	8,480.00	14,323.87	10,418.00	71.42	74.70	-180.00	-3,855.95	-717.69	1,938.00	1,886.57	51.43	37.685		
12,400.00	8,480.00	14,423.87	10,418.00	72.91	76.12	-180.00	-3,955.95	-716.70	1,938.00	1,885.60	52.40	36.986		
12,500.00	8,480.00	14,523.87	10,418.00	74.40	77.55	-180.00	-4,055.94	-715.71	1,938.00	1,884.62	53.38	36.309		
12,600.00	8,480.00	14,623.87	10,418.00	75.90	79.00	-180.00	-4,155.94	-714.72	1,938.00	1,883.64	54.36	35.652		
12,700.00	8,480.00	14,723.87	10,418.00	77.40	80.45	-180.00	-4,255.94	-713.72	1,938.00	1,882.65	55.35	35.016		
12,800.00	8,480.00	14,823.87	10,418.00	78.91	81.90	-180.00	-4,355.93	-712.73	1,938.00	1,881.66	56.34	34.400		
12,900.00	8,480.00	14,923.87	10,418.00	80.43	83.37	-180.00	-4,455.93	-711.74	1,938.00	1,880.67	57.33	33.802		
13,000.00	8,480.00	15,023.87	10,418.00	81.95	84.84	-180.00	-4,555.92	-710.75	1,938.00	1,879.67	58.33	33.222		
13,100.00	8,480.00	15,123.87	10,418.00	83.47	86.32	-180.00	-4,655.92	-709.75	1,938.00	1,878.66	59.34	32.660		
13,200.00	8,480.00	15,223.87	10,418.00	85.00	87.80	-180.00	-4,755.91	-708.76	1,938.00	1,877.65	60.35	32.114		
13,300.00	8,480.00	15,323.87	10,418.00	86.54	89.29	-180.00	-4,855.91	-707.77	1,938.00	1,876.64	61.36	31.585		
13,400.00	8,480.00	15,423.87	10,418.00	88.08	90.79	-180.00	-4,955.90	-706.78	1,938.00	1,875.63	62.37	31.071		
13,500.00	8,480.00	15,523.87	10,418.00	89.62	92.29	-180.00	-5,055.90	-705.78	1,938.00	1,874.61	63.39	30.572		
13,600.00	8,480.00	15,623.87	10,418.00	91.17	93.79	-180.00	-5,155.89	-704.79	1,938.00	1,873.59	64.41	30.087		
13,700.00	8,480.00	15,723.87	10,418.00	92.72	95.31	-180.00	-5,255.89	-703.80	1,938.00	1,872.56	65.44	29.616		
13,800.00	8,480.00	15,823.87	10,418.00	94.27	96.82	-180.00	-5,355.88	-702.81	1,938.00	1,871.54	66.46	29.159		
13,900.00	8,480.00	15,923.87	10,418.00	95.83	98.34	-180.00	-5,455.88	-701.81	1,938.00	1,870.51	67.49	28.714		
14,000.00	8,480.00	16,023.87	10,418.00	97.39	99.86	-180.00	-5,555.87	-700.82	1,938.00	1,869.48	68.52	28.282		
14,100.00	8,480.00	16,123.87	10,418.00	98.95	101.39	-180.00	-5,655.87	-699.83	1,938.00	1,868.44	69.56	27.861		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1		Offset Site Error: 0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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			
14,200.00	8,480.00	16,223.87	10,418.00	100.52	102.92	-180.00	-5,755.86	-698.84	1,938.00	1,867.40	70.60	27.452				
14,300.00	8,480.00	16,323.87	10,418.00	102.09	104.46	-180.00	-5,855.86	-697.84	1,938.00	1,866.37	71.63	27.054				
14,400.00	8,480.00	16,423.87	10,418.00	103.66	106.00	-180.00	-5,955.85	-696.85	1,938.00	1,865.32	72.68	26.667				
14,500.00	8,480.00	16,523.87	10,418.00	105.23	107.54	-180.00	-6,055.85	-695.86	1,938.00	1,864.28	73.72	26.289				
14,600.00	8,480.00	16,623.87	10,418.00	106.81	109.09	-180.00	-6,155.84	-694.87	1,938.00	1,863.24	74.76	25.922				
14,700.00	8,480.00	16,723.87	10,418.00	108.39	110.63	-180.00	-6,255.84	-693.87	1,938.00	1,862.19	75.81	25.564				
14,800.00	8,480.00	16,823.87	10,418.00	109.97	112.18	-180.00	-6,355.83	-692.88	1,938.00	1,861.14	76.86	25.215				
14,900.00	8,480.00	16,923.87	10,418.00	111.55	113.74	-180.00	-6,455.83	-691.89	1,938.00	1,860.09	77.91	24.875				
15,000.00	8,480.00	17,023.87	10,418.00	113.13	115.30	-180.00	-6,555.82	-690.90	1,938.00	1,859.04	78.96	24.544				
15,100.00	8,480.00	17,123.87	10,418.00	114.72	116.86	-180.00	-6,655.82	-689.90	1,938.00	1,857.99	80.01	24.221				
15,200.00	8,480.00	17,223.87	10,418.00	116.31	118.42	-180.00	-6,755.81	-688.91	1,938.00	1,856.93	81.07	23.906				
15,300.00	8,480.00	17,323.87	10,418.00	117.90	119.98	-180.00	-6,855.81	-687.92	1,938.00	1,855.88	82.12	23.598				
15,400.00	8,480.00	17,423.87	10,418.00	119.49	121.55	-180.00	-6,955.80	-686.93	1,938.00	1,854.82	83.18	23.298				
15,500.00	8,480.00	17,523.87	10,418.00	121.08	123.12	-180.00	-7,055.80	-685.93	1,938.00	1,853.76	84.24	23.005				
15,600.00	8,480.00	17,623.87	10,418.00	122.68	124.69	-180.00	-7,155.79	-684.94	1,938.00	1,852.70	85.30	22.719				
15,700.00	8,480.00	17,723.87	10,418.00	124.27	126.26	-180.00	-7,255.79	-683.95	1,938.00	1,851.64	86.36	22.440				
15,800.00	8,480.00	17,823.87	10,418.00	125.87	127.84	-180.00	-7,355.78	-682.96	1,938.00	1,850.57	87.43	22.167				
15,900.00	8,480.00	17,923.87	10,418.00	127.47	129.41	-180.00	-7,455.78	-681.96	1,938.00	1,849.51	88.49	21.901				
16,000.00	8,480.00	18,023.87	10,418.00	129.07	130.99	-180.00	-7,555.77	-680.97	1,938.00	1,848.44	89.56	21.640				
16,100.00	8,480.00	18,123.87	10,418.00	130.67	132.57	-180.00	-7,655.77	-679.98	1,938.00	1,847.38	90.62	21.386				
16,200.00	8,480.00	18,223.87	10,418.00	132.27	134.15	-180.00	-7,755.76	-678.99	1,938.00	1,846.31	91.69	21.137				
16,300.00	8,480.00	18,323.87	10,418.00	133.88	135.74	-180.00	-7,855.76	-677.99	1,938.00	1,845.24	92.76	20.893				
16,400.00	8,480.00	18,423.87	10,418.00	135.48	137.32	-180.00	-7,955.75	-677.00	1,938.00	1,844.17	93.83	20.655				
16,500.00	8,480.00	18,523.87	10,418.00	137.09	138.91	-180.00	-8,055.75	-676.01	1,938.00	1,843.10	94.90	20.422				
16,600.00	8,480.00	18,623.87	10,418.00	138.70	140.50	-180.00	-8,155.74	-675.02	1,938.00	1,842.03	95.97	20.194				
16,700.00	8,480.00	18,723.87	10,418.00	140.30	142.09	-180.00	-8,255.74	-674.02	1,938.00	1,840.96	97.04	19.971				
16,800.00	8,480.00	18,823.87	10,418.00	141.91	143.68	-180.00	-8,355.73	-673.03	1,938.00	1,839.89	98.11	19.753				
16,900.00	8,480.00	18,923.87	10,418.00	143.52	145.27	-180.00	-8,455.73	-672.04	1,938.00	1,838.81	99.19	19.539				
17,000.00	8,480.00	19,023.87	10,418.00	145.13	146.87	-180.00	-8,555.72	-671.05	1,938.00	1,837.74	100.26	19.330				
17,100.00	8,480.00	19,123.87	10,418.00	146.75	148.46	-180.00	-8,655.72	-670.05	1,938.00	1,836.67	101.33	19.125				
17,200.00	8,480.00	19,223.87	10,418.00	148.36	150.06	-180.00	-8,755.71	-669.06	1,938.00	1,835.59	102.41	18.924				
17,300.00	8,480.00	19,323.87	10,418.00	149.97	151.66	-180.00	-8,855.71	-668.07	1,938.00	1,834.51	103.49	18.727				
17,400.00	8,480.00	19,423.87	10,418.00	151.59	153.25	-180.00	-8,955.70	-667.08	1,938.00	1,833.44	104.56	18.534				
17,500.00	8,480.00	19,523.87	10,418.00	153.20	154.85	-180.00	-9,055.70	-666.08	1,938.00	1,832.36	105.64	18.345				
17,600.00	8,480.00	19,623.87	10,418.00	154.82	156.45	-180.00	-9,155.69	-665.09	1,938.00	1,831.28	106.72	18.160				
17,700.00	8,480.00	19,723.87	10,418.00	156.44	158.06	-180.00	-9,255.69	-664.10	1,938.00	1,830.20	107.80	17.978				
17,800.00	8,480.00	19,823.87	10,418.00	158.05	159.66	-180.00	-9,355.68	-663.11	1,938.00	1,829.12	108.88	17.799				
17,900.00	8,480.00	19,923.87	10,418.00	159.67	161.26	-180.00	-9,455.68	-662.11	1,938.00	1,828.04	109.96	17.625				
18,000.00	8,480.00	20,023.87	10,418.00	161.29	162.87	-180.00	-9,555.67	-661.12	1,938.00	1,826.96	111.04	17.453				
18,100.00	8,480.00	20,123.87	10,418.00	162.91	164.47	-180.00	-9,655.67	-660.13	1,938.00	1,825.88	112.12	17.285				
18,200.00	8,480.00	20,223.87	10,418.00	164.53	166.08	-180.00	-9,755.66	-659.14	1,938.00	1,824.80	113.20	17.119				
18,300.00	8,480.00	20,323.87	10,418.00	166.15	167.69	-180.00	-9,855.66	-658.14	1,938.00	1,823.71	114.29	16.957				
18,400.00	8,480.00	20,423.87	10,418.00	167.77	169.30	-180.00	-9,955.65	-657.15	1,938.00	1,822.63	115.37	16.798				
18,500.00	8,480.00	20,523.87	10,418.00	169.40	170.91	-180.00	-10,055.65	-656.16	1,938.00	1,821.55	116.45	16.642				
18,600.00	8,480.00	20,623.87	10,418.00	171.02	172.52	-180.00	-10,155.64	-655.17	1,938.00	1,820.46	117.54	16.488				
18,700.00	8,480.00	20,723.87	10,418.00	172.64	174.13	-180.00	-10,255.64	-654.17	1,938.00	1,819.38	118.62	16.337				
18,800.00	8,480.00	20,823.87	10,418.00	174.26	175.74	-180.00	-10,355.63	-653.18	1,938.00	1,818.29	119.71	16.189				
18,900.00	8,480.00	20,923.87	10,418.00	175.89	177.35	-180.00	-10,455.63	-652.19	1,938.00	1,817.21	120.79	16.044				
19,000.00	8,480.00	21,023.87	10,418.00	177.51	178.96	-180.00	-10,555.62	-651.20	1,938.00	1,816.12	121.88	15.901				
19,100.00	8,480.00	21,123.87	10,418.00	179.14	180.58	-180.00	-10,655.62	-650.20	1,938.00	1,815.03	122.97	15.760				
19,200.00	8,480.00	21,223.87	10,418.00	180.76	182.19	-180.00	-10,755.62	-649.21	1,938.00	1,813.95	124.05	15.622				
19,300.00	8,480.00	21,323.87	10,418.00	182.39	183.81	-180.00	-10,855.61	-648.22	1,938.00	1,812.86	125.14	15.487				

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 503H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,400.00	8,480.00	21,423.87	10,418.00	184.02	185.42	-180.00	-10,955.61	-647.23	1,938.00	1,811.77	126.23	15.353	
19,500.00	8,480.00	21,523.87	10,418.00	185.64	187.04	-180.00	-11,055.60	-646.23	1,938.00	1,810.68	127.32	15.222	
19,600.00	8,480.00	21,623.87	10,418.00	187.27	188.65	-180.00	-11,155.60	-645.24	1,938.00	1,809.60	128.40	15.093	
19,700.00	8,480.00	21,723.87	10,418.00	188.90	190.27	-180.00	-11,255.59	-644.25	1,938.00	1,808.51	129.49	14.966	
19,800.00	8,480.00	21,823.87	10,418.00	190.53	191.89	-180.00	-11,355.59	-643.26	1,938.00	1,807.42	130.58	14.841	
19,899.80	8,480.00	21,923.67	10,418.00	192.15	193.51	-180.00	-11,455.38	-642.26	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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	49.87	49.87					
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.47	49.87	49.87	49.69	0.18	281.067		
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.47	49.87	49.87	49.19	0.68	72.869		
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.47	49.87	49.87	48.68	1.19	41.861		
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.47	49.87	49.87	48.17	1.70	29.365		
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.47	49.87	49.87	47.67	2.21	22.615		
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.47	49.87	49.87	47.16	2.71	18.388		
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.47	49.87	49.87	46.65	3.22	15.492		
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.47	49.87	49.87	46.14	3.73	13.384		
900.00	900.00	900.00	900.00	2.99	2.99	89.46	0.47	49.87	49.87	45.64	4.23	11.781		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	89.46	0.47	49.87	49.87	45.13	4.74	10.521		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	89.46	0.47	49.87	49.87	44.62	5.25	9.505		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	89.46	0.47	49.87	49.87	44.12	5.75	8.667		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	89.46	0.47	49.87	49.87	43.61	6.26	7.965		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	89.46	0.47	49.87	49.87	43.10	6.77	7.369		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.46	0.47	49.87	49.87	42.60	7.27	6.855		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	89.46	0.47	49.87	49.87	42.09	7.78	6.409		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	89.46	0.47	49.87	49.87	41.58	8.29	6.017		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	89.46	0.47	49.87	49.87	41.08	8.80	5.670		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	89.46	0.47	49.87	49.87	40.57	9.30	5.361		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	89.46	0.47	49.87	49.87	40.06	9.81	5.084 CC, ES		
2,100.00	2,099.99	2,099.99	2,099.99	7.29	7.29	168.55	0.47	49.87	51.15	40.84	10.31	4.961 SF		
2,200.00	2,199.91	2,199.91	2,199.91	7.63	7.65	169.35	0.47	49.87	55.01	44.20	10.81	5.089		
2,300.00	2,299.69	2,298.19	2,298.18	7.98	8.00	170.03	0.89	51.06	62.64	51.35	11.30	5.546		
2,400.00	2,399.27	2,395.75	2,395.66	8.34	8.34	170.18	2.12	54.60	75.24	63.47	11.77	6.393		
2,500.00	2,498.57	2,492.22	2,491.94	8.69	8.68	169.98	4.15	60.42	92.74	80.50	12.24	7.580		
2,600.00	2,597.54	2,587.27	2,586.61	9.06	9.01	169.62	6.93	68.39	115.06	102.37	12.69	9.067		
2,616.45	2,613.78	2,602.75	2,602.01	9.12	9.07	169.56	7.46	69.90	119.19	106.43	12.76	9.338		
2,700.00	2,696.24	2,680.83	2,679.56	9.43	9.35	169.20	10.42	78.41	141.27	128.13	13.13	10.757		
2,800.00	2,794.94	2,773.14	2,771.00	9.81	9.68	168.66	14.60	90.39	169.72	156.15	13.56	12.512		
2,900.00	2,893.64	2,866.56	2,863.24	10.19	10.03	168.07	19.46	104.33	200.04	186.02	14.02	14.271		
3,000.00	2,992.34	2,961.76	2,957.20	10.58	10.38	167.61	24.50	118.75	230.61	216.12	14.50	15.909		
3,100.00	3,091.04	3,056.95	3,051.17	10.97	10.74	167.26	29.53	133.18	261.20	246.22	14.98	17.440		
3,200.00	3,189.74	3,152.15	3,145.13	11.37	11.11	166.98	34.56	147.60	291.79	276.33	15.46	18.874		
3,300.00	3,288.45	3,247.35	3,239.09	11.77	11.48	166.76	39.59	162.03	322.38	306.44	15.94	20.219		
3,400.00	3,387.15	3,342.55	3,333.06	12.17	11.85	166.57	44.62	176.46	352.98	336.55	16.43	21.482		
3,500.00	3,485.85	3,437.75	3,427.02	12.58	12.22	166.41	49.65	190.88	383.58	366.66	16.92	22.671		
3,600.00	3,584.55	3,532.94	3,520.98	12.98	12.60	166.28	54.68	205.31	414.19	396.78	17.41	23.791		
3,700.00	3,683.25	3,628.14	3,614.95	13.39	12.98	166.16	59.71	219.73	444.79	426.89	17.90	24.848		
3,800.00	3,781.95	3,723.34	3,708.91	13.80	13.36	166.06	64.74	234.16	475.40	457.01	18.39	25.847		
3,900.00	3,880.65	3,818.54	3,802.88	14.22	13.75	165.98	69.78	248.58	506.01	487.12	18.89	26.792		
4,000.00	3,979.35	3,913.73	3,896.84	14.63	14.13	165.90	74.81	263.01	536.62	517.24	19.38	27.688		
4,100.00	4,078.05	4,008.93	3,990.80	15.05	14.52	165.83	79.84	277.43	567.23	547.35	19.88	28.538		
4,200.00	4,176.75	4,104.13	4,084.77	15.47	14.91	165.77	84.87	291.86	597.84	577.47	20.37	29.345		
4,300.00	4,275.45	4,199.33	4,178.73	15.89	15.30	165.71	89.90	306.28	628.45	607.58	20.87	30.112		
4,400.00	4,374.15	4,294.52	4,272.69	16.31	15.70	165.66	94.93	320.71	659.07	637.70	21.37	30.842		
4,500.00	4,472.85	4,389.72	4,366.66	16.73	16.09	165.61	99.96	335.14	689.68	667.81	21.87	31.538		
4,600.00	4,571.55	4,484.92	4,460.62	17.15	16.49	165.57	104.99	349.56	720.29	697.92	22.37	32.202		
4,700.00	4,670.25	4,580.12	4,554.59	17.57	16.88	165.53	110.03	363.99	750.90	728.04	22.87	32.836		
4,800.00	4,768.95	4,675.31	4,648.55	18.00	17.28	165.49	115.06	378.41	781.52	758.15	23.37	33.442		
4,900.00	4,867.65	4,770.51	4,742.51	18.42	17.68	165.46	120.09	392.84	812.13	788.26	23.87	34.022		
5,000.00	4,966.35	4,865.71	4,836.48	18.85	18.08	165.43	125.12	407.26	842.75	818.37	24.37	34.577		

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 103H
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 103H	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	5,065.05	4,960.91	4,930.44	19.28	18.48	165.40	130.15	421.69	873.36	848.48	24.88	35.109		
5,200.00	5,163.76	5,056.11	5,024.40	19.70	18.88	165.37	135.18	436.11	903.98	878.60	25.38	35.619		
5,300.00	5,262.46	5,151.30	5,118.37	20.13	19.28	165.35	140.21	450.54	934.59	908.71	25.88	36.108		
5,400.00	5,361.16	5,246.50	5,212.33	20.56	19.68	165.32	145.24	464.96	965.21	938.82	26.39	36.578		
5,500.00	5,459.86	5,341.70	5,306.30	20.99	20.09	165.30	150.27	479.39	995.82	968.93	26.89	37.030		
5,600.00	5,558.56	5,436.90	5,400.26	21.42	20.49	165.28	155.31	493.82	1,026.44	999.04	27.40	37.465		
5,700.00	5,657.26	5,532.09	5,494.22	21.85	20.90	165.26	160.34	508.24	1,057.05	1,029.15	27.90	37.883		
5,800.00	5,755.96	5,627.29	5,588.19	22.28	21.30	165.24	165.37	522.67	1,087.67	1,059.26	28.41	38.286		
5,900.00	5,854.66	5,722.49	5,682.15	22.71	21.71	165.23	170.40	537.09	1,118.28	1,089.37	28.92	38.674		
6,000.00	5,953.36	5,817.69	5,776.11	23.14	22.11	165.21	175.43	551.52	1,148.90	1,119.47	29.42	39.049		
6,100.00	6,052.06	5,912.88	5,870.08	23.57	22.52	165.19	180.46	565.94	1,179.51	1,149.58	29.93	39.410		
6,200.00	6,150.76	6,008.08	5,964.04	24.01	22.93	165.18	185.49	580.37	1,210.13	1,179.69	30.44	39.759		
6,300.00	6,249.46	6,103.28	6,058.01	24.44	23.33	165.16	190.52	594.79	1,240.74	1,209.80	30.94	40.096		
6,400.00	6,348.16	6,198.48	6,151.97	24.87	23.74	165.15	195.55	609.22	1,271.36	1,239.91	31.45	40.422		
6,500.00	6,446.86	6,293.67	6,245.93	25.30	24.15	165.14	200.59	623.64	1,301.98	1,270.01	31.96	40.737		
6,600.00	6,545.56	6,388.87	6,339.90	25.74	24.56	165.13	205.62	638.07	1,332.59	1,300.12	32.47	41.042		
6,700.00	6,644.26	6,484.07	6,433.86	26.17	24.97	165.11	210.65	652.50	1,363.21	1,330.23	32.98	41.337		
6,804.31	6,747.22	6,583.37	6,531.87	26.62	25.39	165.10	215.90	667.54	1,395.14	1,361.63	33.51	41.634		
6,900.00	6,841.85	6,674.81	6,622.13	27.03	25.79	165.19	220.73	681.40	1,423.33	1,389.34	34.00	41.867		
7,000.00	6,941.09	6,778.14	6,724.12	27.44	26.23	165.25	226.17	697.01	1,450.39	1,415.84	34.55	41.984		
7,100.00	7,040.61	6,932.43	6,876.98	27.83	26.87	165.26	233.06	716.75	1,472.67	1,437.32	35.36	41.651		
7,200.00	7,140.36	7,089.90	7,033.73	28.20	27.48	165.27	237.98	730.87	1,488.62	1,452.49	36.12	41.208		
7,300.00	7,240.26	7,249.52	7,193.11	28.55	28.05	165.29	240.80	738.94	1,498.09	1,461.25	36.84	40.664		
7,400.00	7,340.24	7,396.67	7,340.24	28.88	28.54	165.31	241.47	740.87	1,501.10	1,463.64	37.47	40.065		
7,420.77	7,361.00	7,417.43	7,361.00	28.95	28.60	86.51	241.47	740.87	1,501.16	1,463.59	37.57	39.959		
7,500.00	7,440.24	7,496.67	7,440.24	29.20	28.86	86.51	241.47	740.87	1,501.16	1,463.21	37.95	39.557		
7,600.00	7,540.24	7,596.67	7,540.24	29.52	29.18	86.51	241.47	740.87	1,501.16	1,462.73	38.43	39.060		
7,700.00	7,640.24	7,696.67	7,640.24	29.84	29.50	86.51	241.47	740.87	1,501.16	1,462.24	38.91	38.575		
7,800.00	7,740.24	7,796.67	7,740.24	30.16	29.83	86.51	241.47	740.87	1,501.16	1,461.76	39.40	38.102		
7,900.00	7,840.24	7,896.67	7,840.24	30.48	30.16	86.51	241.47	740.87	1,501.16	1,461.27	39.88	37.639		
7,966.81	7,907.04	7,963.47	7,907.04	30.69	30.37	86.51	241.47	740.87	1,501.16	1,460.95	40.21	37.336		
8,000.00	7,940.22	7,996.65	7,940.22	30.79	30.48	-92.96	241.47	740.87	1,501.21	1,460.84	40.37	37.191		
8,050.00	7,989.94	8,046.38	7,989.94	30.94	30.64	-93.12	241.47	740.87	1,501.48	1,460.88	40.60	36.986		
8,100.00	8,039.04	8,095.47	8,039.04	31.08	30.80	-93.42	241.47	740.87	1,502.02	1,461.20	40.82	36.797		
8,150.00	8,087.13	8,143.56	8,087.13	31.21	30.96	-93.83	241.47	740.87	1,502.92	1,461.88	41.03	36.625		
8,200.00	8,133.85	8,190.28	8,133.85	31.33	31.12	-94.32	241.47	740.87	1,504.27	1,463.03	41.24	36.474		
8,250.00	8,178.84	8,235.28	8,178.84	31.45	31.26	-94.87	241.47	740.87	1,506.21	1,464.77	41.44	36.346		
8,300.00	8,221.77	8,278.20	8,221.77	31.55	31.40	-95.44	241.47	740.87	1,508.90	1,467.27	41.63	36.245		
8,350.00	8,262.30	8,318.73	8,262.30	31.65	31.54	-95.98	241.47	740.87	1,512.49	1,470.68	41.81	36.174		
8,400.00	8,300.13	8,356.56	8,300.13	31.74	31.66	-96.44	241.47	740.87	1,517.15	1,475.17	41.98	36.138		
8,450.00	8,334.96	8,391.40	8,334.96	31.82	31.78	-96.79	241.47	740.87	1,523.06	1,480.92	42.14	36.139		
8,500.00	8,366.54	8,422.97	8,366.54	31.89	31.88	-96.98	241.47	740.87	1,530.37	1,488.07	42.30	36.182		
8,550.00	8,394.62	8,451.05	8,394.62	31.96	31.97	-96.96	241.47	740.87	1,539.21	1,496.77	42.44	36.269		
8,600.00	8,418.99	8,475.42	8,418.99	32.03	32.05	-96.70	241.47	740.87	1,549.68	1,507.11	42.57	36.403		
8,650.00	8,439.47	8,495.90	8,439.47	32.11	32.12	-96.16	241.47	740.87	1,561.84	1,519.15	42.69	36.586		
8,700.00	8,455.89	8,512.32	8,455.89	32.19	32.17	-95.31	241.47	740.87	1,575.73	1,532.93	42.80	36.819		
8,750.00	8,468.13	8,524.57	8,468.13	32.29	32.22	-94.12	241.47	740.87	1,591.32	1,548.42	42.89	37.102		
8,800.00	8,476.11	8,532.54	8,476.11	32.40	32.24	-92.59	241.47	740.87	1,608.53	1,565.56	42.97	37.434		
8,850.00	8,479.75	8,536.18	8,479.75	32.54	32.25	-90.71	241.47	740.87	1,627.26	1,584.23	43.03	37.814		
8,866.81	8,480.00	8,536.43	8,480.00	32.59	32.25	-90.00	241.47	740.87	1,633.87	1,590.82	43.05	37.952		
8,900.00	8,480.00	8,536.43	8,480.00	32.70	32.25	-90.00	241.47	740.87	1,647.35	1,604.26	43.08	38.235		
9,000.00	8,480.00	8,536.43	8,480.00	33.09	32.25	-90.00	241.47	740.87	1,691.24	1,648.04	43.20	39.150		

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 103H
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 103H	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		
9,100.00	8,480.00	8,536.43	8,480.00	33.57	32.25	-90.00	241.47	740.87	1,739.78	1,696.45	43.33	40.154		
9,200.00	8,480.00	8,536.43	8,480.00	34.14	32.25	-90.00	241.47	740.87	1,792.59	1,749.13	43.46	41.243		
9,300.00	8,480.00	8,536.43	8,480.00	34.79	32.25	-90.00	241.47	740.87	1,849.31	1,805.70	43.61	42.410		
9,400.00	8,480.00	8,536.43	8,480.00	35.50	32.25	-90.00	241.47	740.87	1,909.58	1,865.83	43.75	43.649		
9,500.00	8,480.00	8,536.43	8,480.00	36.28	32.25	-90.00	241.47	740.87	1,973.08	1,929.19	43.89	44.954		
9,600.00	8,480.00	8,536.43	8,480.00	37.11	32.25	-90.00	241.47	740.87	2,039.51	1,995.47	44.03	46.319		
9,700.00	8,480.00	8,536.43	8,480.00	38.01	32.25	-90.00	241.47	740.87	2,108.59	2,064.42	44.17	47.740		
9,800.00	8,480.00	8,536.43	8,480.00	38.95	32.25	-90.00	241.47	740.87	2,180.06	2,135.76	44.30	49.211		
9,900.00	8,480.00	8,536.43	8,480.00	39.94	32.25	-90.00	241.47	740.87	2,253.71	2,209.29	44.43	50.728		
10,000.00	8,480.00	8,536.43	8,480.00	40.97	32.25	-90.00	241.47	740.87	2,329.33	2,284.78	44.55	52.287		
10,100.00	8,480.00	12,043.13	10,350.00	42.04	46.81	-141.28	-1,641.05	759.72	2,396.87	2,351.09	45.78	52.351		
10,200.00	8,480.00	12,143.13	10,350.00	43.14	47.81	-141.28	-1,741.05	760.72	2,396.87	2,350.00	46.87	51.134		
10,300.00	8,480.00	12,243.13	10,350.00	44.29	48.85	-141.28	-1,841.04	761.72	2,396.88	2,348.88	48.00	49.936		
10,400.00	8,480.00	12,343.13	10,350.00	45.46	49.92	-141.28	-1,941.04	762.72	2,396.89	2,347.73	49.16	48.761		
10,500.00	8,480.00	12,443.13	10,350.00	46.66	51.02	-141.28	-2,041.03	763.72	2,396.89	2,346.55	50.34	47.613		
10,600.00	8,480.00	12,543.13	10,350.00	47.89	52.15	-141.28	-2,141.03	764.73	2,396.90	2,345.34	51.56	46.492		
10,700.00	8,480.00	12,643.13	10,350.00	49.14	53.31	-141.28	-2,241.02	765.73	2,396.90	2,344.11	52.79	45.400		
10,800.00	8,480.00	12,743.13	10,350.00	50.42	54.49	-141.28	-2,341.02	766.73	2,396.91	2,342.85	54.06	44.339		
10,900.00	8,480.00	12,843.13	10,350.00	51.72	55.69	-141.28	-2,441.01	767.73	2,396.91	2,341.57	55.34	43.311		
11,000.00	8,480.00	12,943.13	10,350.00	53.03	56.92	-141.28	-2,541.01	768.73	2,396.92	2,340.27	56.65	42.313		
11,100.00	8,480.00	13,043.13	10,350.00	54.37	58.17	-141.28	-2,641.00	769.73	2,396.92	2,338.95	57.97	41.346		
11,200.00	8,480.00	13,143.13	10,350.00	55.72	59.44	-141.28	-2,741.00	770.73	2,396.93	2,337.62	59.31	40.412		
11,300.00	8,480.00	13,243.13	10,350.00	57.09	60.73	-141.28	-2,840.99	771.73	2,396.93	2,336.26	60.67	39.509		
11,400.00	8,480.00	13,343.13	10,350.00	58.47	62.03	-141.28	-2,940.99	772.74	2,396.94	2,334.90	62.04	38.635		
11,500.00	8,480.00	13,443.13	10,350.00	59.86	63.35	-141.28	-3,040.98	773.74	2,396.94	2,333.51	63.43	37.790		
11,600.00	8,480.00	13,543.13	10,350.00	61.27	64.69	-141.28	-3,140.98	774.74	2,396.95	2,332.12	64.83	36.973		
11,700.00	8,480.00	13,643.13	10,350.00	62.69	66.04	-141.27	-3,240.97	775.74	2,396.95	2,330.71	66.24	36.184		
11,800.00	8,480.00	13,743.13	10,350.00	64.13	67.40	-141.27	-3,340.97	776.74	2,396.96	2,329.29	67.67	35.422		
11,900.00	8,480.00	13,843.13	10,350.00	65.57	68.78	-141.27	-3,440.96	777.74	2,396.96	2,327.86	69.10	34.686		
12,000.00	8,480.00	13,943.13	10,350.00	67.02	70.16	-141.27	-3,540.96	778.74	2,396.97	2,326.42	70.55	33.976		
12,100.00	8,480.00	14,043.13	10,350.00	68.48	71.56	-141.27	-3,640.95	779.74	2,396.97	2,324.97	72.01	33.289		
12,200.00	8,480.00	14,143.13	10,350.00	69.95	72.97	-141.27	-3,740.95	780.75	2,396.98	2,323.51	73.47	32.626		
12,300.00	8,480.00	14,243.13	10,350.00	71.42	74.39	-141.27	-3,840.94	781.75	2,396.98	2,322.05	74.94	31.986		
12,400.00	8,480.00	14,343.13	10,350.00	72.91	75.82	-141.27	-3,940.94	782.75	2,396.99	2,320.57	76.42	31.366		
12,500.00	8,480.00	14,443.13	10,350.00	74.40	77.26	-141.27	-4,040.93	783.75	2,397.00	2,319.09	77.91	30.768		
12,600.00	8,480.00	14,543.13	10,350.00	75.90	78.70	-141.27	-4,140.93	784.75	2,397.00	2,317.60	79.40	30.189		
12,700.00	8,480.00	14,643.13	10,350.00	77.40	80.16	-141.27	-4,240.92	785.75	2,397.01	2,316.10	80.90	29.628		
12,800.00	8,480.00	14,743.13	10,350.00	78.91	81.62	-141.27	-4,340.92	786.75	2,397.01	2,314.60	82.41	29.086		
12,900.00	8,480.00	14,843.13	10,350.00	80.43	83.09	-141.27	-4,440.91	787.75	2,397.02	2,313.09	83.92	28.563		
13,000.00	8,480.00	14,943.13	10,350.00	81.95	84.56	-141.27	-4,540.91	788.76	2,397.02	2,311.58	85.44	28.056		
13,100.00	8,480.00	15,043.13	10,350.00	83.47	86.04	-141.27	-4,640.90	789.76	2,397.03	2,310.07	86.96	27.564		
13,200.00	8,480.00	15,143.13	10,350.00	85.00	87.53	-141.27	-4,740.90	790.76	2,397.03	2,308.54	88.49	27.088		
13,300.00	8,480.00	15,243.13	10,350.00	86.54	89.02	-141.27	-4,840.89	791.76	2,397.04	2,307.01	90.02	26.627		
13,400.00	8,480.00	15,343.13	10,350.00	88.08	90.52	-141.27	-4,940.89	792.76	2,397.04	2,305.49	91.56	26.181		
13,500.00	8,480.00	15,443.13	10,350.00	89.62	92.03	-141.27	-5,040.88	793.76	2,397.05	2,303.95	93.10	25.747		
13,600.00	8,480.00	15,543.13	10,350.00	91.17	93.53	-141.27	-5,140.88	794.76	2,397.05	2,302.41	94.64	25.327		
13,700.00	8,480.00	15,643.13	10,350.00	92.72	95.05	-141.27	-5,240.87	795.77	2,397.06	2,300.87	96.19	24.920		
13,800.00	8,480.00	15,743.13	10,350.00	94.27	96.57	-141.27	-5,340.87	796.77	2,397.06	2,299.32	97.74	24.525		
13,900.00	8,480.00	15,843.13	10,350.00	95.83	98.09	-141.27	-5,440.86	797.77	2,397.07	2,297.77	99.29	24.141		
14,000.00	8,480.00	15,943.13	10,350.00	97.39	99.62	-141.27	-5,540.86	798.77	2,397.07	2,296.22	100.85	23.768		
14,100.00	8,480.00	16,043.13	10,350.00	98.95	101.15	-141.27	-5,640.85	799.77	2,397.08	2,294.67	102.41	23.407		
14,200.00	8,480.00	16,143.13	10,350.00	100.52	102.68	-141.27	-5,740.85	800.77	2,397.08	2,293.11	103.97	23.055		

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 103H
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 103H	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				
14,300.00	8,480.00	16,243.13	10,350.00	102.09	104.22	-141.27	-5,840.84	801.77	2,397.09	2,291.55	105.54	22.713				
14,400.00	8,480.00	16,343.13	10,350.00	103.66	105.76	-141.27	-5,940.84	802.77	2,397.09	2,289.99	107.10	22.381				
14,500.00	8,480.00	16,443.13	10,350.00	105.23	107.30	-141.27	-6,040.83	803.78	2,397.10	2,288.43	108.67	22.058				
14,600.00	8,480.00	16,543.13	10,350.00	106.81	108.85	-141.27	-6,140.83	804.78	2,397.11	2,286.86	110.25	21.743				
14,700.00	8,480.00	16,643.13	10,350.00	108.39	110.40	-141.27	-6,240.82	805.78	2,397.11	2,285.29	111.82	21.437				
14,800.00	8,480.00	16,743.13	10,350.00	109.97	111.96	-141.27	-6,340.82	806.78	2,397.12	2,283.72	113.39	21.140				
14,900.00	8,480.00	16,843.13	10,350.00	111.55	113.51	-141.27	-6,440.81	807.78	2,397.12	2,282.15	114.97	20.850				
15,000.00	8,480.00	16,943.13	10,350.00	113.13	115.07	-141.27	-6,540.81	808.78	2,397.13	2,280.58	116.55	20.567				
15,100.00	8,480.00	17,043.13	10,350.00	114.72	116.63	-141.27	-6,640.80	809.78	2,397.13	2,279.00	118.13	20.292				
15,200.00	8,480.00	17,143.13	10,350.00	116.31	118.20	-141.27	-6,740.80	810.78	2,397.14	2,277.42	119.71	20.024				
15,300.00	8,480.00	17,243.13	10,350.00	117.90	119.76	-141.27	-6,840.79	811.79	2,397.14	2,275.85	121.30	19.763				
15,400.00	8,480.00	17,343.13	10,350.00	119.49	121.33	-141.27	-6,940.79	812.79	2,397.15	2,274.27	122.88	19.508				
15,500.00	8,480.00	17,443.13	10,350.00	121.08	122.90	-141.27	-7,040.78	813.79	2,397.15	2,272.69	124.47	19.259				
15,600.00	8,480.00	17,543.13	10,350.00	122.68	124.48	-141.27	-7,140.78	814.79	2,397.16	2,271.10	126.05	19.017				
15,700.00	8,480.00	17,643.13	10,350.00	124.27	126.05	-141.27	-7,240.77	815.79	2,397.16	2,269.52	127.64	18.780				
15,800.00	8,480.00	17,743.13	10,350.00	125.87	127.63	-141.27	-7,340.77	816.79	2,397.17	2,267.94	129.23	18.549				
15,900.00	8,480.00	17,843.13	10,350.00	127.47	129.21	-141.27	-7,440.76	817.79	2,397.17	2,266.35	130.82	18.324				
16,000.00	8,480.00	17,943.13	10,350.00	129.07	130.79	-141.27	-7,540.76	818.79	2,397.18	2,264.77	132.41	18.104				
16,100.00	8,480.00	18,043.13	10,350.00	130.67	132.37	-141.27	-7,640.75	819.80	2,397.18	2,263.18	134.00	17.889				
16,200.00	8,480.00	18,143.13	10,350.00	132.27	133.95	-141.27	-7,740.74	820.80	2,397.19	2,261.59	135.60	17.679				
16,300.00	8,480.00	18,243.13	10,350.00	133.88	135.54	-141.27	-7,840.74	821.80	2,397.19	2,260.00	137.19	17.473				
16,400.00	8,480.00	18,343.13	10,350.00	135.48	137.12	-141.27	-7,940.73	822.80	2,397.20	2,258.41	138.79	17.273				
16,500.00	8,480.00	18,443.13	10,350.00	137.09	138.71	-141.27	-8,040.73	823.80	2,397.21	2,256.82	140.38	17.077				
16,600.00	8,480.00	18,543.13	10,350.00	138.70	140.30	-141.27	-8,140.72	824.80	2,397.21	2,255.23	141.98	16.885				
16,700.00	8,480.00	18,643.13	10,350.00	140.30	141.89	-141.27	-8,240.72	825.80	2,397.22	2,253.64	143.57	16.697				
16,800.00	8,480.00	18,743.13	10,350.00	141.91	143.49	-141.27	-8,340.71	826.80	2,397.22	2,252.05	145.17	16.513				
16,900.00	8,480.00	18,843.13	10,350.00	143.52	145.08	-141.27	-8,440.71	827.81	2,397.23	2,250.46	146.77	16.334				
17,000.00	8,480.00	18,943.13	10,350.00	145.13	146.68	-141.27	-8,540.70	828.81	2,397.23	2,248.87	148.36	16.158				
17,100.00	8,480.00	19,043.13	10,350.00	146.75	148.27	-141.27	-8,640.70	829.81	2,397.24	2,247.27	149.96	15.985				
17,200.00	8,480.00	19,143.13	10,350.00	148.36	149.87	-141.27	-8,740.69	830.81	2,397.24	2,245.68	151.56	15.817				
17,300.00	8,480.00	19,243.13	10,350.00	149.97	151.47	-141.27	-8,840.69	831.81	2,397.25	2,244.09	153.16	15.652				
17,400.00	8,480.00	19,343.13	10,350.00	151.59	153.07	-141.27	-8,940.68	832.81	2,397.25	2,242.49	154.76	15.490				
17,500.00	8,480.00	19,443.13	10,350.00	153.20	154.67	-141.27	-9,040.68	833.81	2,397.26	2,240.90	156.36	15.332				
17,600.00	8,480.00	19,543.13	10,350.00	154.82	156.27	-141.27	-9,140.67	834.81	2,397.26	2,239.30	157.96	15.176				
17,700.00	8,480.00	19,643.13	10,350.00	156.44	157.88	-141.27	-9,240.67	835.82	2,397.27	2,237.71	159.56	15.024				
17,800.00	8,480.00	19,743.13	10,350.00	158.05	159.48	-141.27	-9,340.66	836.82	2,397.27	2,236.11	161.16	14.875				
17,900.00	8,480.00	19,843.13	10,350.00	159.67	161.09	-141.27	-9,440.66	837.82	2,397.28	2,234.52	162.76	14.729				
18,000.00	8,480.00	19,943.13	10,350.00	161.29	162.69	-141.27	-9,540.65	838.82	2,397.28	2,232.92	164.36	14.585				
18,100.00	8,480.00	20,043.13	10,350.00	162.91	164.30	-141.26	-9,640.65	839.82	2,397.29	2,231.33	165.96	14.445				
18,200.00	8,480.00	20,143.13	10,350.00	164.53	165.91	-141.26	-9,740.64	840.82	2,397.29	2,229.73	167.56	14.307				
18,300.00	8,480.00	20,243.13	10,350.00	166.15	167.51	-141.26	-9,840.64	841.82	2,397.30	2,228.14	169.16	14.171				
18,400.00	8,480.00	20,343.13	10,350.00	167.77	169.12	-141.26	-9,940.63	842.83	2,397.30	2,226.54	170.77	14.038				
18,500.00	8,480.00	20,443.13	10,350.00	169.40	170.73	-141.26	-10,040.63	843.83	2,397.31	2,224.94	172.37	13.908				
18,505.37	8,480.00	20,448.50	10,350.00	169.48	170.82	-141.26	-10,046.00	843.88	2,397.31	2,224.86	172.45	13.901				
18,600.00	8,480.00	20,529.73	10,350.00	171.02	172.13	-141.26	-10,127.23	844.69	2,397.35	2,223.51	173.84	13.790				
18,700.00	8,480.00	20,529.73	10,350.00	172.64	172.13	-141.26	-10,127.23	844.69	2,400.00	2,225.67	174.34	13.767				
18,800.00	8,480.00	20,529.73	10,350.00	174.26	172.13	-141.26	-10,127.23	844.69	2,406.80	2,232.26	174.54	13.789				
18,900.00	8,480.00	20,529.73	10,350.00	175.89	172.13	-141.26	-10,127.23	844.69	2,417.73	2,243.27	174.46	13.858				
19,000.00	8,480.00	20,529.73	10,350.00	177.51	172.13	-141.26	-10,127.23	844.69	2,432.72	2,258.62	174.10	13.973				
19,100.00	8,480.00	20,529.73	10,350.00	179.14	172.13	-141.26	-10,127.23	844.69	2,451.70	2,278.22	173.48	14.133				
19,200.00	8,480.00	20,529.73	10,350.00	180.76	172.13	-141.26	-10,127.23	844.69	2,474.58	2,301.97	172.61	14.336				
19,300.00	8,480.00	20,529.73	10,350.00	182.39	172.13	-141.26	-10,127.23	844.69	2,501.25	2,329.74	171.51	14.584				

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 103H
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 103H	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
PF Fed Com - Paul Foster Fed Com 504H - OH - Plan #1												Offset Well Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,400.00	8,480.00	20,529.73	10,350.00	184.02	172.13	-141.26	-10,127.23	844.69	2,531.59	2,361.39	170.19	14.875	
19,500.00	8,480.00	20,529.73	10,350.00	185.64	172.13	-141.26	-10,127.23	844.69	2,565.47	2,396.77	168.71	15.207	
19,600.00	8,480.00	20,529.73	10,350.00	187.27	172.13	-141.26	-10,127.23	844.69	2,602.76	2,435.71	167.05	15.581	
19,700.00	8,480.00	20,529.73	10,350.00	188.90	172.13	-141.26	-10,127.23	844.69	2,643.30	2,478.04	165.26	15.995	
19,800.00	8,480.00	20,529.73	10,350.00	190.53	172.13	-141.26	-10,127.23	844.69	2,686.96	2,523.60	163.36	16.448	
19,899.80	8,480.00	20,529.73	10,350.00	192.15	172.13	-141.26	-10,127.23	844.69	2,733.48	2,572.11	161.37	16.939	



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													PF Fed Com - Paul Foster Fed Com 804H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth	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	8.85	75.06	11.68	75.96							
100.00	100.00	100.00	100.00	0.13	0.13	8.85	75.06	11.68	75.96	75.79	0.18	428.118				
200.00	200.00	200.00	200.00	0.48	0.48	8.85	75.06	11.68	75.96	75.28	0.68	110.994				
300.00	300.00	300.00	300.00	0.84	0.84	8.85	75.06	11.68	75.96	74.77	1.19	63.762				
400.00	400.00	400.00	400.00	1.20	1.20	8.85	75.06	11.68	75.96	74.26	1.70	44.729				
500.00	500.00	500.00	500.00	1.56	1.56	8.85	75.06	11.68	75.96	73.76	2.21	34.446				
600.00	600.00	600.00	600.00	1.92	1.92	8.85	75.06	11.68	75.96	73.25	2.71	28.008				
700.00	700.00	700.00	700.00	2.28	2.28	8.85	75.06	11.68	75.96	72.74	3.22	23.597				
800.00	800.00	800.00	800.00	2.63	2.63	8.85	75.06	11.68	75.96	72.24	3.73	20.387				
900.00	900.00	900.00	900.00	2.99	2.99	8.85	75.06	11.68	75.96	71.73	4.23	17.945				
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	8.85	75.06	11.68	75.96	71.22	4.74	16.026				
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	8.85	75.06	11.68	75.96	70.72	5.25	14.477				
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	8.85	75.06	11.68	75.96	70.21	5.75	13.202				
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	8.85	75.06	11.68	75.96	69.70	6.26	12.133				
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	8.85	75.06	11.68	75.96	69.20	6.77	11.224				
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	8.85	75.06	11.68	75.96	68.69	7.27	10.442				
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	8.85	75.06	11.68	75.96	68.18	7.78	9.762				
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	8.85	75.06	11.68	75.96	67.67	8.29	9.165				
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	8.85	75.06	11.68	75.96	67.17	8.80	8.636				
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	8.85	75.06	11.68	75.96	66.66	9.30	8.166				
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	8.85	75.06	11.68	75.96	66.15	9.81	7.744 CC				
2,100.00	2,099.99	2,099.77	2,099.76	7.29	7.29	87.65	75.41	10.43	76.06	65.75	10.31	7.380				
2,200.00	2,199.91	2,199.55	2,199.46	7.63	7.63	87.67	76.44	6.66	76.34	65.55	10.80	7.071				
2,300.00	2,299.69	2,299.32	2,299.01	7.98	7.98	87.70	78.17	0.38	76.82	65.53	11.29	6.804 ES				
2,400.00	2,399.27	2,399.09	2,398.36	8.34	8.34	87.75	80.59	-8.40	77.49	65.70	11.79	6.573				
2,500.00	2,498.57	2,498.95	2,497.56	8.69	8.69	87.96	83.64	-19.49	78.32	66.02	12.29	6.370				
2,600.00	2,597.54	2,598.91	2,596.80	9.06	9.06	89.72	86.82	-31.03	79.15	66.34	12.81	6.179				
2,616.45	2,613.78	2,615.35	2,613.12	9.12	9.12	90.18	87.35	-32.93	79.29	66.40	12.89	6.149				
2,700.00	2,696.24	2,698.83	2,695.99	9.43	9.42	92.67	90.00	-42.57	80.11	66.78	13.33	6.010				
2,800.00	2,794.94	2,798.73	2,795.18	9.81	9.79	95.57	93.18	-54.11	81.29	67.43	13.86	5.866				
2,900.00	2,893.64	2,898.64	2,894.37	10.19	10.16	98.38	96.36	-65.65	82.66	68.27	14.39	5.745				
3,000.00	2,992.34	2,998.55	2,993.56	10.58	10.54	101.09	99.54	-77.19	84.23	69.31	14.92	5.645				
3,100.00	3,091.04	3,098.46	3,092.75	10.97	10.91	103.70	102.72	-88.73	85.98	70.53	15.46	5.562				
3,200.00	3,189.74	3,198.37	3,191.94	11.37	11.29	106.20	105.89	-100.27	87.91	71.91	16.00	5.496				
3,300.00	3,288.45	3,298.28	3,291.13	11.77	11.67	108.58	109.07	-111.81	89.99	73.46	16.53	5.443				
3,400.00	3,387.15	3,398.19	3,390.32	12.17	12.05	110.86	112.25	-123.34	92.22	75.15	17.07	5.402				
3,500.00	3,485.85	3,498.10	3,489.51	12.58	12.44	113.02	115.43	-134.88	94.59	76.98	17.61	5.372				
3,600.00	3,584.55	3,598.01	3,588.70	12.98	12.82	115.08	118.61	-146.42	97.09	78.94	18.15	5.351				
3,700.00	3,683.25	3,697.92	3,687.89	13.39	13.21	117.03	121.79	-157.96	99.71	81.03	18.68	5.337				
3,800.00	3,781.95	3,797.83	3,787.09	13.80	13.60	118.88	124.96	-169.50	102.43	83.22	19.22	5.330				
3,900.00	3,880.65	3,897.74	3,886.28	14.22	13.98	120.63	128.14	-181.04	105.26	85.51	19.75	5.329				
4,000.00	3,979.35	3,997.65	3,985.47	14.63	14.37	122.29	131.32	-192.58	108.18	87.90	20.29	5.333				
4,100.00	4,078.05	4,097.56	4,084.66	15.05	14.76	123.86	134.50	-204.12	111.19	90.37	20.82	5.341				
4,200.00	4,176.75	4,197.47	4,183.85	15.47	15.15	125.35	137.68	-215.66	114.28	92.93	21.35	5.352				
4,300.00	4,275.45	4,297.38	4,283.04	15.89	15.55	126.76	140.86	-227.20	117.44	95.56	21.88	5.367				
4,400.00	4,374.15	4,397.29	4,382.23	16.31	15.94	128.09	144.03	-238.73	120.66	98.25	22.41	5.384				
4,500.00	4,472.85	4,497.20	4,481.42	16.73	16.33	129.35	147.21	-250.27	123.95	101.01	22.94	5.403				
4,600.00	4,571.55	4,597.11	4,580.61	17.15	16.72	130.55	150.39	-261.81	127.30	103.83	23.47	5.423				
4,700.00	4,670.25	4,697.02	4,679.80	17.57	17.12	131.69	153.57	-273.35	130.70	106.70	24.00	5.446				
4,800.00	4,768.95	4,796.93	4,778.99	18.00	17.51	132.77	156.75	-284.89	134.14	109.62	24.53	5.469				
4,900.00	4,867.65	4,896.84	4,878.18	18.42	17.91	133.79	159.93	-296.43	137.64	112.58	25.06	5.493				
5,000.00	4,966.35	4,996.74	4,977.37	18.85	18.30	134.76	163.10	-307.97	141.17	115.59	25.58	5.518				

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 103H
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 103H	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	5,065.05	5,096.65	5,076.56	19.28	18.70	135.69	166.28	-319.51	144.74	118.63	26.11	5.543		
5,200.00	5,163.76	5,196.56	5,175.75	19.70	19.10	136.57	169.46	-331.05	148.35	121.71	26.64	5.569		
5,300.00	5,262.46	5,296.47	5,274.94	20.13	19.49	137.40	172.64	-342.59	151.99	124.83	27.16	5.596		
5,400.00	5,361.16	5,396.38	5,374.13	20.56	19.89	138.20	175.82	-354.12	155.67	127.98	27.69	5.622		
5,500.00	5,459.86	5,496.29	5,473.32	20.99	20.29	138.96	178.99	-365.66	159.37	131.15	28.21	5.648		
5,600.00	5,558.56	5,596.20	5,572.51	21.42	20.69	139.69	182.17	-377.20	163.10	134.36	28.74	5.675		
5,700.00	5,657.26	5,696.11	5,671.70	21.85	21.08	140.39	185.35	-388.74	166.85	137.58	29.27	5.701		
5,800.00	5,755.96	5,796.02	5,770.89	22.28	21.48	141.05	188.53	-400.28	170.63	140.83	29.79	5.727		
5,900.00	5,854.66	5,895.93	5,870.08	22.71	21.88	141.69	191.71	-411.82	174.42	144.11	30.32	5.754		
6,000.00	5,953.36	5,995.84	5,969.27	23.14	22.28	142.29	194.89	-423.36	178.24	147.40	30.84	5.779		
6,100.00	6,052.06	6,095.75	6,068.46	23.57	22.68	142.88	198.06	-434.90	182.08	150.72	31.37	5.805		
6,200.00	6,150.76	6,195.66	6,167.65	24.01	23.08	143.43	201.24	-446.44	185.94	154.05	31.89	5.830		
6,300.00	6,249.46	6,295.57	6,266.84	24.44	23.48	143.97	204.42	-457.98	189.81	157.40	32.42	5.856		
6,400.00	6,348.16	6,395.48	6,366.03	24.87	23.88	144.48	207.60	-469.51	193.70	160.76	32.94	5.880		
6,500.00	6,446.86	6,495.39	6,465.22	25.30	24.28	144.98	210.78	-481.05	197.61	164.14	33.47	5.905		
6,600.00	6,545.56	6,595.30	6,564.41	25.74	24.68	145.45	213.96	-492.59	201.52	167.53	33.99	5.929		
6,700.00	6,644.26	6,695.21	6,663.60	26.17	25.08	145.91	217.13	-504.13	205.45	170.94	34.52	5.953		
6,804.31	6,747.22	6,799.42	6,767.06	26.62	25.50	146.37	220.45	-516.17	209.57	174.51	35.06	5.977		
6,900.00	6,841.85	6,895.07	6,862.02	27.03	25.88	146.62	223.49	-527.21	212.35	176.78	35.57	5.970		
7,000.00	6,941.09	6,992.50	6,958.80	27.44	26.27	146.56	226.48	-538.05	213.49	177.39	36.10	5.913		
7,100.00	7,040.61	7,088.26	7,054.14	27.83	26.64	146.49	228.82	-546.57	214.27	177.65	36.62	5.852		
7,200.00	7,140.36	7,184.00	7,149.67	28.20	26.99	146.44	230.53	-552.78	214.85	177.75	37.10	5.790		
7,300.00	7,240.26	7,279.74	7,245.32	28.55	27.33	146.41	231.61	-556.69	215.23	177.66	37.57	5.729		
7,400.00	7,340.24	7,375.47	7,341.04	28.88	27.66	146.41	232.05	-558.28	215.41	177.41	38.01	5.668		
7,420.77	7,361.00	7,395.44	7,361.00	28.95	27.73	67.61	232.06	-558.32	215.42	177.33	38.09	5.655		
7,500.00	7,440.24	7,474.67	7,440.24	29.20	27.99	67.61	232.06	-558.32	215.42	176.95	38.47	5.599		
7,600.00	7,540.24	7,574.67	7,540.24	29.52	28.32	67.61	232.06	-558.32	215.42	176.47	38.95	5.531		
7,700.00	7,640.24	7,674.67	7,640.24	29.84	28.66	67.61	232.06	-558.32	215.42	176.00	39.43	5.464		
7,800.00	7,740.24	7,774.67	7,740.24	30.16	28.99	67.61	232.06	-558.32	215.42	175.52	39.91	5.398		
7,900.00	7,840.24	7,874.67	7,840.24	30.48	29.32	67.61	232.06	-558.32	215.42	175.04	40.39	5.334		
7,966.81	7,907.04	7,941.48	7,907.04	30.69	29.55	67.61	232.06	-558.32	215.42	174.72	40.71	5.292		
8,000.00	7,940.22	7,974.65	7,940.22	30.79	29.66	-112.03	232.06	-558.32	215.78	174.91	40.87	5.279 SF		
8,050.00	7,989.94	8,024.38	7,989.94	30.94	29.82	-113.08	232.06	-558.32	217.74	176.59	41.15	5.291		
8,100.00	8,039.04	8,073.48	8,039.04	31.08	29.99	-114.92	232.06	-558.32	221.62	180.16	41.46	5.345		
8,150.00	8,087.13	8,121.57	8,087.13	31.21	30.15	-117.38	232.06	-558.32	227.82	186.02	41.80	5.451		
8,200.00	8,133.85	8,168.29	8,133.85	31.33	30.31	-120.23	232.06	-558.32	236.84	194.69	42.15	5.618		
8,250.00	8,178.84	8,213.28	8,178.84	31.45	30.46	-123.20	232.06	-558.32	249.18	206.67	42.52	5.861		
8,300.00	8,221.77	8,256.21	8,221.77	31.55	30.60	-126.06	232.06	-558.32	265.26	222.39	42.87	6.188		
8,350.00	8,262.30	8,296.74	8,262.30	31.65	30.74	-128.60	232.06	-558.32	285.33	242.14	43.19	6.606		
8,400.00	8,300.13	8,334.56	8,300.13	31.74	30.87	-130.67	232.06	-558.32	309.48	266.00	43.49	7.117		
8,450.00	8,334.96	8,369.40	8,334.96	31.82	30.98	-132.13	232.06	-558.32	337.63	293.90	43.74	7.720		
8,500.00	8,366.54	8,400.98	8,366.54	31.89	31.09	-132.87	232.06	-558.32	369.56	325.62	43.95	8.409		
8,550.00	8,394.62	8,429.06	8,394.62	31.96	31.18	-132.76	232.06	-558.32	404.96	360.84	44.12	9.179		
8,600.00	8,418.99	8,453.43	8,418.99	32.03	31.27	-131.62	232.06	-558.32	443.43	399.17	44.26	10.020		
8,650.00	8,439.47	8,473.90	8,439.47	32.11	31.34	-129.19	232.06	-558.32	484.56	440.20	44.36	10.923		
8,700.00	8,455.89	8,490.33	8,455.89	32.19	31.39	-125.04	232.06	-558.32	527.92	483.49	44.44	11.881		
8,750.00	8,468.13	8,502.57	8,468.13	32.29	31.43	-118.53	232.06	-558.32	573.07	528.58	44.49	12.882		
8,800.00	8,476.11	8,510.54	8,476.11	32.40	31.46	-108.83	232.06	-558.32	619.55	575.03	44.52	13.917		
8,850.00	8,479.75	8,514.19	8,479.75	32.54	31.47	-95.33	232.06	-558.32	666.92	622.40	44.53	14.978		
8,866.81	8,480.00	8,514.44	8,480.00	32.59	31.47	-90.00	232.06	-558.32	682.97	638.44	44.53	15.338		
8,900.00	8,480.00	8,514.44	8,480.00	32.70	31.47	-90.00	232.06	-558.32	714.78	670.25	44.52	16.054		
9,000.00	8,480.00	8,514.44	8,480.00	33.09	31.47	-90.00	232.06	-558.32	811.27	766.75	44.52	18.224		

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 103H
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 103H	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		
9,100.00	8,480.00	8,514.44	8,480.00	33.57	31.47	-90.00	232.06	-558.32	908.51	864.01	44.51	20.412		
9,200.00	8,480.00	8,514.44	8,480.00	34.14	31.47	-90.00	232.06	-558.32	1,006.30	961.80	44.50	22.613		
9,300.00	8,480.00	8,514.44	8,480.00	34.79	31.47	-90.00	232.06	-558.32	1,104.49	1,059.99	44.50	24.822		
9,400.00	8,480.00	8,514.44	8,480.00	35.50	31.47	-90.00	232.06	-558.32	1,202.97	1,158.48	44.49	27.038		
9,500.00	8,480.00	8,514.44	8,480.00	36.28	31.47	-90.00	232.06	-558.32	1,301.68	1,257.20	44.49	29.258		
9,600.00	8,480.00	8,514.44	8,480.00	37.11	31.47	-90.00	232.06	-558.32	1,400.58	1,356.09	44.49	31.481		
9,700.00	8,480.00	8,514.44	8,480.00	38.01	31.47	-90.00	232.06	-558.32	1,499.63	1,455.14	44.49	33.707		
9,800.00	8,480.00	8,514.44	8,480.00	38.95	31.47	-90.00	232.06	-558.32	1,598.79	1,554.30	44.49	35.934		
9,900.00	8,480.00	8,514.44	8,480.00	39.94	31.47	-90.00	232.06	-558.32	1,698.05	1,653.55	44.50	38.162		
10,000.00	8,480.00	8,514.44	8,480.00	40.97	31.47	-90.00	232.06	-558.32	1,797.39	1,752.89	44.50	40.390		
10,100.00	8,480.00	8,514.44	8,480.00	42.04	31.47	-90.00	232.06	-558.32	1,896.80	1,852.30	44.51	42.619		
10,200.00	8,480.00	8,514.44	8,480.00	43.14	31.47	-90.00	232.06	-558.32	1,996.27	1,951.76	44.51	44.846		
10,300.00	8,480.00	8,514.44	8,480.00	44.29	31.47	-90.00	232.06	-558.32	2,095.79	2,051.27	44.52	47.074		
10,400.00	8,480.00	8,514.44	8,480.00	45.46	31.47	-90.00	232.06	-558.32	2,195.36	2,150.83	44.53	49.300		
10,500.00	8,480.00	8,514.44	8,480.00	46.66	31.47	-90.00	232.06	-558.32	2,294.96	2,250.42	44.54	51.525		
10,600.00	8,480.00	8,514.44	8,480.00	47.89	31.47	-90.00	232.06	-558.32	2,394.60	2,350.04	44.55	53.749		
10,700.00	8,480.00	8,514.44	8,480.00	49.14	31.47	-90.00	232.06	-558.32	2,494.26	2,449.70	44.56	55.971		
10,800.00	8,480.00	8,514.44	8,480.00	50.42	31.47	-90.00	232.06	-558.32	2,593.95	2,549.37	44.58	58.191		
10,900.00	8,480.00	8,514.44	8,480.00	51.72	31.47	-90.00	232.06	-558.32	2,693.66	2,649.07	44.59	60.410		
11,000.00	8,480.00	8,514.44	8,480.00	53.03	31.47	-90.00	232.06	-558.32	2,793.40	2,748.79	44.60	62.626		
11,100.00	8,480.00	8,514.44	8,480.00	54.37	31.47	-90.00	232.06	-558.32	2,893.15	2,848.53	44.62	64.840		
11,200.00	8,480.00	8,514.44	8,480.00	55.72	31.47	-90.00	232.06	-558.32	2,992.92	2,948.28	44.64	67.052		
11,300.00	8,480.00	8,514.44	8,480.00	57.09	31.47	-90.00	232.06	-558.32	3,092.70	3,048.05	44.65	69.262		
11,400.00	8,480.00	8,514.44	8,480.00	58.47	31.47	-90.00	232.06	-558.32	3,192.50	3,147.83	44.67	71.468		
11,500.00	8,480.00	8,514.44	8,480.00	59.86	31.47	-90.00	232.06	-558.32	3,292.31	3,247.62	44.69	73.672		
11,600.00	8,480.00	8,514.44	8,480.00	61.27	31.47	-90.00	232.06	-558.32	3,392.13	3,347.42	44.71	75.874		
11,700.00	8,480.00	8,514.44	8,480.00	62.69	31.47	-90.00	232.06	-558.32	3,491.96	3,447.23	44.73	78.072		
11,800.00	8,480.00	8,514.44	8,480.00	64.13	31.47	-90.00	232.06	-558.32	3,591.80	3,547.05	44.75	80.267		
11,900.00	8,480.00	8,514.44	8,480.00	65.57	31.47	-90.00	232.06	-558.32	3,691.65	3,646.88	44.77	82.459		
12,000.00	8,480.00	8,514.44	8,480.00	67.02	31.47	-90.00	232.06	-558.32	3,791.51	3,746.72	44.79	84.647		
12,100.00	8,480.00	8,514.44	8,480.00	68.48	31.47	-90.00	232.06	-558.32	3,891.37	3,846.56	44.81	86.833		
12,200.00	8,480.00	16,173.75	12,399.00	69.95	77.33	-177.08	-3,753.97	-518.68	3,924.10	3,870.22	53.88	72.826		
12,300.00	8,480.00	16,273.75	12,399.00	71.42	78.68	-177.08	-3,853.97	-517.68	3,924.10	3,869.31	54.80	71.613		
12,400.00	8,480.00	16,373.75	12,399.00	72.91	80.05	-177.08	-3,953.96	-516.69	3,924.10	3,868.39	55.72	70.430		
12,500.00	8,480.00	16,473.75	12,399.00	74.40	81.43	-177.08	-4,053.96	-515.69	3,924.10	3,867.46	56.64	69.277		
12,600.00	8,480.00	16,573.75	12,399.00	75.90	82.82	-177.08	-4,153.95	-514.70	3,924.10	3,866.53	57.58	68.154		
12,700.00	8,480.00	16,673.75	12,399.00	77.40	84.22	-177.08	-4,253.95	-513.70	3,924.10	3,865.59	58.52	67.059		
12,800.00	8,480.00	16,773.75	12,399.00	78.91	85.63	-177.08	-4,353.94	-512.71	3,924.10	3,864.64	59.46	65.992		
12,900.00	8,480.00	16,873.75	12,399.00	80.43	87.05	-177.08	-4,453.94	-511.71	3,924.10	3,863.69	60.42	64.952		
13,000.00	8,480.00	16,973.75	12,399.00	81.95	88.47	-177.08	-4,553.93	-510.72	3,924.10	3,862.73	61.37	63.939		
13,100.00	8,480.00	17,073.75	12,399.00	83.47	89.90	-177.08	-4,653.93	-509.72	3,924.10	3,861.77	62.33	62.952		
13,200.00	8,480.00	17,173.75	12,399.00	85.00	91.35	-177.08	-4,753.92	-508.73	3,924.10	3,860.80	63.30	61.990		
13,300.00	8,480.00	17,273.75	12,399.00	86.54	92.79	-177.08	-4,853.92	-507.74	3,924.10	3,859.83	64.27	61.052		
13,400.00	8,480.00	17,373.75	12,399.00	88.08	94.25	-177.08	-4,953.91	-506.74	3,924.10	3,858.85	65.25	60.138		
13,500.00	8,480.00	17,473.75	12,399.00	89.62	95.71	-177.08	-5,053.91	-505.75	3,924.10	3,857.87	66.23	59.248		
13,600.00	8,480.00	17,573.75	12,399.00	91.17	97.17	-177.08	-5,153.90	-504.75	3,924.10	3,856.89	67.22	58.379		
13,700.00	8,480.00	17,673.75	12,399.00	92.72	98.64	-177.08	-5,253.90	-503.76	3,924.10	3,855.90	68.21	57.533		
13,800.00	8,480.00	17,773.75	12,399.00	94.27	100.12	-177.08	-5,353.89	-502.76	3,924.10	3,854.90	69.20	56.707		
13,900.00	8,480.00	17,873.75	12,399.00	95.83	101.61	-177.08	-5,453.89	-501.77	3,924.10	3,853.91	70.20	55.902		
14,000.00	8,480.00	17,973.75	12,399.00	97.39	103.09	-177.08	-5,553.88	-500.77	3,924.10	3,852.91	71.20	55.117		
14,100.00	8,480.00	18,073.75	12,399.00	98.95	104.59	-177.08	-5,653.88	-499.78	3,924.10	3,851.90	72.20	54.351		
14,200.00	8,480.00	18,173.75	12,399.00	100.52	106.08	-177.08	-5,753.87	-498.79	3,924.10	3,850.90	73.20	53.605		

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 103H
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 103H	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		
14,300.00	8,480.00	18,273.75	12,399.00	102.09	107.59	-177.08	-5,853.87	-497.79	3,924.10	3,849.89	74.21	52.875		
14,400.00	8,480.00	18,373.75	12,399.00	103.66	109.09	-177.08	-5,953.86	-496.80	3,924.10	3,848.88	75.23	52.163		
14,500.00	8,480.00	18,473.75	12,399.00	105.23	110.60	-177.08	-6,053.86	-495.80	3,924.10	3,847.86	76.24	51.468		
14,600.00	8,480.00	18,573.75	12,399.00	106.81	112.12	-177.08	-6,153.85	-494.81	3,924.10	3,846.84	77.26	50.790		
14,700.00	8,480.00	18,673.75	12,399.00	108.39	113.64	-177.08	-6,253.85	-493.81	3,924.10	3,845.82	78.28	50.128		
14,800.00	8,480.00	18,773.75	12,399.00	109.97	115.16	-177.08	-6,353.84	-492.82	3,924.10	3,844.80	79.31	49.481		
14,900.00	8,480.00	18,873.75	12,399.00	111.55	116.69	-177.08	-6,453.84	-491.82	3,924.10	3,843.77	80.33	48.849		
15,000.00	8,480.00	18,973.75	12,399.00	113.13	118.21	-177.08	-6,553.83	-490.83	3,924.10	3,842.75	81.36	48.232		
15,100.00	8,480.00	19,073.75	12,399.00	114.72	119.75	-177.08	-6,653.83	-489.84	3,924.11	3,841.71	82.39	47.628		
15,200.00	8,480.00	19,173.75	12,399.00	116.31	121.28	-177.08	-6,753.82	-488.84	3,924.11	3,840.68	83.42	47.039		
15,300.00	8,480.00	19,273.75	12,399.00	117.90	122.82	-177.08	-6,853.82	-487.85	3,924.11	3,839.65	84.46	46.463		
15,400.00	8,480.00	19,373.75	12,399.00	119.49	124.36	-177.08	-6,953.81	-486.85	3,924.11	3,838.61	85.49	45.899		
15,500.00	8,480.00	19,473.75	12,399.00	121.08	125.91	-177.08	-7,053.81	-485.86	3,924.11	3,837.57	86.53	45.348		
15,600.00	8,480.00	19,573.75	12,399.00	122.68	127.45	-177.08	-7,153.80	-484.86	3,924.11	3,836.53	87.57	44.810		
15,700.00	8,480.00	19,673.75	12,399.00	124.27	129.00	-177.08	-7,253.80	-483.87	3,924.11	3,835.49	88.62	44.283		
15,800.00	8,480.00	19,773.75	12,399.00	125.87	130.55	-177.08	-7,353.79	-482.87	3,924.11	3,834.45	89.66	43.767		
15,900.00	8,480.00	19,873.75	12,399.00	127.47	132.11	-177.08	-7,453.79	-481.88	3,924.11	3,833.40	90.70	43.262		
16,000.00	8,480.00	19,973.75	12,399.00	129.07	133.67	-177.08	-7,553.78	-480.89	3,924.11	3,832.35	91.75	42.769		
16,100.00	8,480.00	20,073.75	12,399.00	130.67	135.22	-177.08	-7,653.78	-479.89	3,924.11	3,831.31	92.80	42.285		
16,200.00	8,480.00	20,173.75	12,399.00	132.27	136.79	-177.08	-7,753.77	-478.90	3,924.11	3,830.26	93.85	41.812		
16,300.00	8,480.00	20,273.75	12,399.00	133.88	138.35	-177.08	-7,853.77	-477.90	3,924.11	3,829.20	94.90	41.349		
16,400.00	8,480.00	20,373.75	12,399.00	135.48	139.91	-177.08	-7,953.76	-476.91	3,924.11	3,828.15	95.95	40.896		
16,500.00	8,480.00	20,473.75	12,399.00	137.09	141.48	-177.08	-8,053.76	-475.91	3,924.11	3,827.10	97.01	40.451		
16,600.00	8,480.00	20,573.75	12,399.00	138.70	143.05	-177.08	-8,153.75	-474.92	3,924.11	3,826.04	98.06	40.016		
16,700.00	8,480.00	20,673.75	12,399.00	140.30	144.62	-177.08	-8,253.75	-473.92	3,924.11	3,824.99	99.12	39.589		
16,800.00	8,480.00	20,773.75	12,399.00	141.91	146.19	-177.08	-8,353.74	-472.93	3,924.11	3,823.93	100.18	39.171		
16,900.00	8,480.00	20,873.75	12,399.00	143.52	147.77	-177.08	-8,453.74	-471.93	3,924.11	3,822.87	101.24	38.762		
17,000.00	8,480.00	20,973.75	12,399.00	145.13	149.34	-177.08	-8,553.73	-470.94	3,924.11	3,821.81	102.30	38.360		
17,100.00	8,480.00	21,073.75	12,399.00	146.75	150.92	-177.08	-8,653.73	-469.95	3,924.11	3,820.75	103.36	37.966		
17,200.00	8,480.00	21,173.75	12,399.00	148.36	152.50	-177.08	-8,753.72	-468.95	3,924.11	3,819.69	104.42	37.580		
17,300.00	8,480.00	21,273.75	12,399.00	149.97	154.08	-177.08	-8,853.72	-467.96	3,924.11	3,818.62	105.48	37.201		
17,400.00	8,480.00	21,373.75	12,399.00	151.59	155.66	-177.08	-8,953.71	-466.96	3,924.11	3,817.56	106.55	36.829		
17,500.00	8,480.00	21,473.75	12,399.00	153.20	157.25	-177.08	-9,053.71	-465.97	3,924.11	3,816.49	107.61	36.465		
17,600.00	8,480.00	21,573.75	12,399.00	154.82	158.83	-177.08	-9,153.70	-464.97	3,924.11	3,815.43	108.68	36.107		
17,700.00	8,480.00	21,673.75	12,399.00	156.44	160.42	-177.08	-9,253.70	-463.98	3,924.11	3,814.36	109.75	35.756		
17,800.00	8,480.00	21,773.75	12,399.00	158.05	162.01	-177.08	-9,353.69	-462.98	3,924.11	3,813.29	110.82	35.411		
17,900.00	8,480.00	21,873.75	12,399.00	159.67	163.60	-177.08	-9,453.69	-461.99	3,924.11	3,812.22	111.88	35.073		
18,000.00	8,480.00	21,973.75	12,399.00	161.29	165.19	-177.08	-9,553.68	-461.00	3,924.11	3,811.15	112.95	34.741		
18,100.00	8,480.00	22,073.75	12,399.00	162.91	166.78	-177.08	-9,653.68	-460.00	3,924.11	3,810.08	114.03	34.414		
18,200.00	8,480.00	22,173.75	12,399.00	164.53	168.37	-177.08	-9,753.67	-459.01	3,924.11	3,809.01	115.10	34.094		
18,300.00	8,480.00	22,273.75	12,399.00	166.15	169.96	-177.08	-9,853.67	-458.01	3,924.11	3,807.94	116.17	33.779		
18,400.00	8,480.00	22,373.75	12,399.00	167.77	171.56	-177.08	-9,953.66	-457.02	3,924.11	3,806.87	117.24	33.470		
18,500.00	8,480.00	22,473.75	12,399.00	169.40	173.15	-177.08	-10,053.66	-456.02	3,924.11	3,805.79	118.32	33.166		
18,600.00	8,480.00	22,573.75	12,399.00	171.02	174.75	-177.08	-10,153.65	-455.03	3,924.11	3,804.72	119.39	32.868		
18,700.00	8,480.00	22,673.75	12,399.00	172.64	176.35	-177.08	-10,253.65	-454.03	3,924.11	3,803.64	120.47	32.574		
18,800.00	8,480.00	22,773.75	12,399.00	174.26	177.95	-177.08	-10,353.64	-453.04	3,924.11	3,802.57	121.54	32.286		
18,900.00	8,480.00	22,873.75	12,399.00	175.89	179.55	-177.08	-10,453.64	-452.05	3,924.11	3,801.49	122.62	32.002		
19,000.00	8,480.00	22,973.75	12,399.00	177.51	181.15	-177.08	-10,553.63	-451.05	3,924.11	3,800.41	123.70	31.724		
19,100.00	8,480.00	23,073.75	12,399.00	179.14	182.75	-177.08	-10,653.63	-450.06	3,924.11	3,799.33	124.77	31.450		
19,200.00	8,480.00	23,173.75	12,399.00	180.76	184.35	-177.08	-10,753.62	-449.06	3,924.11	3,798.26	125.85	31.180		
19,300.00	8,480.00	23,273.75	12,399.00	182.39	185.95	-177.08	-10,853.62	-448.07	3,924.11	3,797.18	126.93	30.915		
19,400.00	8,480.00	23,373.75	12,399.00	184.02	187.56	-177.08	-10,953.61	-447.07	3,924.11	3,796.10	128.01	30.654		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - Paul Foster Fed Com 804H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,500.00	8,480.00	23,473.75	12,399.00	185.64	189.16	-177.08	-11,053.61	-446.08	3,924.11	3,795.02	129.09	30.398	
19,600.00	8,480.00	23,573.75	12,399.00	187.27	190.77	-177.08	-11,153.60	-445.08	3,924.11	3,793.94	130.17	30.145	
19,700.00	8,480.00	23,673.75	12,399.00	188.90	192.38	-177.08	-11,253.60	-444.09	3,924.11	3,792.85	131.25	29.897	
19,800.00	8,480.00	23,773.75	12,399.00	190.53	193.98	-177.08	-11,353.59	-443.10	3,924.11	3,791.77	132.34	29.652	
19,899.80	8,480.00	23,873.55	12,399.00	192.15	195.59	-177.08	-11,453.39	-442.10	3,924.11	3,790.69	133.42	29.412	

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 103H
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 103H	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		
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 CC			
2,100.00	2,099.99	2,099.99	2,099.99	7.29	7.29	105.69	75.30	36.77	84.14	73.83	10.31	8.160 ES			
2,200.00	2,199.91	2,199.91	2,199.91	7.63	7.65	108.21	75.30	36.77	85.29	74.48	10.81	7.890			
2,300.00	2,299.69	2,297.70	2,297.69	7.98	8.00	112.53	75.88	37.87	88.68	77.38	11.30	7.849 SF			
2,400.00	2,399.27	2,394.81	2,394.72	8.34	8.34	118.39	77.64	41.15	96.11	84.34	11.78	8.162			
2,500.00	2,498.57	2,491.43	2,491.15	8.69	8.68	124.80	80.51	46.53	108.31	96.06	12.25	8.841			
2,600.00	2,597.54	2,589.35	2,588.83	9.06	9.03	130.89	83.79	52.66	124.13	111.39	12.74	9.743			
2,616.45	2,613.78	2,605.41	2,604.85	9.12	9.08	131.82	84.32	53.67	127.02	114.20	12.82	9.907			
2,700.00	2,696.24	2,686.93	2,686.16	9.43	9.37	136.17	87.05	58.77	142.30	129.07	13.23	10.756			
2,800.00	2,794.94	2,784.50	2,783.48	9.81	9.72	140.27	90.32	64.88	161.42	147.70	13.72	11.765			
2,900.00	2,893.64	2,882.07	2,880.80	10.19	10.07	143.50	93.58	70.99	181.17	166.96	14.21	12.748			
3,000.00	2,992.34	2,979.64	2,978.12	10.58	10.42	146.09	96.85	77.10	201.38	186.67	14.70	13.695			
3,100.00	3,091.04	3,077.20	3,075.45	10.97	10.77	148.21	100.12	83.22	221.91	206.71	15.20	14.602			
3,200.00	3,189.74	3,174.77	3,172.77	11.37	11.12	149.97	103.38	89.33	242.68	226.99	15.69	15.465			
3,300.00	3,288.45	3,272.34	3,270.09	11.77	11.48	151.46	106.65	95.44	263.63	247.45	16.19	16.286			
3,400.00	3,387.15	3,369.91	3,367.41	12.17	11.83	152.72	109.91	101.55	284.74	268.05	16.68	17.067			
3,500.00	3,485.85	3,467.48	3,464.73	12.58	12.19	153.81	113.18	107.66	305.95	288.77	17.18	17.807			
3,600.00	3,584.55	3,565.05	3,562.06	12.98	12.54	154.76	116.45	113.77	327.26	309.58	17.68	18.511			
3,700.00	3,683.25	3,662.62	3,659.38	13.39	12.90	155.59	119.71	119.88	348.65	330.47	18.18	19.179			
3,800.00	3,781.95	3,760.18	3,756.70	13.80	13.25	156.33	122.98	125.99	370.09	351.41	18.68	19.814			
3,900.00	3,880.65	3,857.75	3,854.02	14.22	13.61	156.99	126.24	132.10	391.59	372.41	19.18	20.418			
4,000.00	3,979.35	3,955.32	3,951.35	14.63	13.97	157.58	129.51	138.21	413.13	393.45	19.68	20.993			
4,100.00	4,078.05	4,052.89	4,048.67	15.05	14.32	158.11	132.77	144.32	434.71	414.53	20.18	21.540			
4,200.00	4,176.75	4,150.46	4,145.99	15.47	14.68	158.59	136.04	150.44	456.33	435.64	20.68	22.062			
4,300.00	4,275.45	4,248.03	4,243.31	15.89	15.04	159.02	139.31	156.55	477.97	456.78	21.19	22.560			
4,400.00	4,374.15	4,345.60	4,340.63	16.31	15.40	159.42	142.57	162.66	499.63	477.94	21.69	23.035			
4,500.00	4,472.85	4,443.16	4,437.96	16.73	15.76	159.79	145.84	168.77	521.32	499.12	22.19	23.489			
4,600.00	4,571.55	4,540.73	4,535.28	17.15	16.12	160.12	149.10	174.88	543.02	520.32	22.70	23.924			
4,700.00	4,670.25	4,638.30	4,632.60	17.57	16.48	160.43	152.37	180.99	564.74	541.54	23.20	24.339			
4,800.00	4,768.95	4,735.87	4,729.92	18.00	16.84	160.72	155.64	187.10	586.48	562.77	23.71	24.738			
4,900.00	4,867.65	4,833.44	4,827.25	18.42	17.20	160.99	158.90	193.21	608.23	584.01	24.21	25.120			
5,000.00	4,966.35	4,931.01	4,924.57	18.85	17.56	161.24	162.17	199.32	629.99	605.27	24.72	25.486			

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 103H
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 103H	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	
5,100.00	5,065.05	5,028.58	5,021.89	19.28	17.92	161.47	165.43	205.43	651.76	626.53	25.23	25.838		
5,200.00	5,163.76	5,126.14	5,119.21	19.70	18.28	161.68	168.70	211.55	673.54	647.81	25.73	26.175		
5,300.00	5,262.46	5,223.71	5,216.53	20.13	18.64	161.89	171.96	217.66	695.33	669.09	26.24	26.500		
5,400.00	5,361.16	5,321.28	5,313.86	20.56	19.00	162.08	175.23	223.77	717.12	690.38	26.75	26.813		
5,500.00	5,459.86	5,418.85	5,411.18	20.99	19.36	162.26	178.50	229.88	738.93	711.67	27.25	27.114		
5,600.00	5,558.56	5,516.42	5,508.50	21.42	19.72	162.43	181.76	235.99	760.74	732.98	27.76	27.404		
5,700.00	5,657.26	5,613.99	5,605.82	21.85	20.08	162.59	185.03	242.10	782.55	754.28	28.27	27.683		
5,800.00	5,755.96	5,711.56	5,703.15	22.28	20.45	162.74	188.29	248.21	804.37	775.60	28.78	27.953		
5,900.00	5,854.66	5,809.12	5,800.47	22.71	20.81	162.88	191.56	254.32	826.20	796.92	29.28	28.213		
6,000.00	5,953.36	5,906.69	5,897.79	23.14	21.17	163.02	194.83	260.43	848.03	818.24	29.79	28.464		
6,100.00	6,052.06	6,004.26	5,995.11	23.57	21.53	163.15	198.09	266.54	869.87	839.57	30.30	28.707		
6,200.00	6,150.76	6,101.83	6,092.43	24.01	21.89	163.27	201.36	272.65	891.71	860.90	30.81	28.941		
6,300.00	6,249.46	6,199.40	6,189.76	24.44	22.26	163.39	204.62	278.77	913.55	882.23	31.32	29.168		
6,400.00	6,348.16	6,296.97	6,287.08	24.87	22.62	163.50	207.89	284.88	935.40	903.57	31.83	29.388		
6,500.00	6,446.86	6,394.53	6,384.40	25.30	22.98	163.61	211.15	290.99	957.25	924.91	32.34	29.600		
6,600.00	6,545.56	6,492.10	6,481.72	25.74	23.34	163.71	214.42	297.10	979.10	946.25	32.85	29.806		
6,700.00	6,644.26	6,589.67	6,579.05	26.17	23.71	163.80	217.69	303.21	1,000.96	967.60	33.36	30.006		
6,804.31	6,747.22	6,691.45	6,680.56	26.62	24.08	163.90	221.09	309.58	1,023.76	989.87	33.89	30.208		
6,900.00	6,841.85	6,785.06	6,773.94	27.03	24.43	164.05	224.23	315.45	1,043.55	1,009.17	34.38	30.355		
7,000.00	6,941.09	6,883.37	6,872.00	27.44	24.80	164.16	227.52	321.60	1,061.82	1,026.93	34.89	30.436		
7,100.00	7,040.61	6,982.11	6,970.50	27.83	25.17	164.21	230.82	327.79	1,077.61	1,042.21	35.40	30.445		
7,200.00	7,140.36	7,085.34	7,073.47	28.20	25.55	164.22	234.26	334.23	1,090.88	1,054.96	35.92	30.367		
7,300.00	7,240.26	7,220.48	7,208.43	28.55	26.04	164.20	237.40	340.09	1,099.69	1,063.10	36.59	30.054		
7,400.00	7,340.24	7,352.30	7,340.24	28.88	26.51	164.21	238.30	341.77	1,102.76	1,065.55	37.21	29.639		
7,420.77	7,361.00	7,373.07	7,361.00	28.95	26.58	85.41	238.30	341.77	1,102.81	1,065.51	37.31	29.560		
7,500.00	7,440.24	7,452.30	7,440.24	29.20	26.86	85.41	238.30	341.77	1,102.81	1,065.12	37.69	29.257		
7,600.00	7,540.24	7,552.30	7,540.24	29.52	27.20	85.41	238.30	341.77	1,102.81	1,064.63	38.18	28.883		
7,700.00	7,640.24	7,652.30	7,640.24	29.84	27.55	85.41	238.30	341.77	1,102.81	1,064.14	38.67	28.517		
7,800.00	7,740.24	7,752.30	7,740.24	30.16	27.90	85.41	238.30	341.77	1,102.81	1,063.65	39.16	28.161		
7,900.00	7,840.24	7,852.30	7,840.24	30.48	28.25	85.41	238.30	341.77	1,102.81	1,063.16	39.65	27.813		
7,966.81	7,907.04	7,919.11	7,907.04	30.69	28.48	85.41	238.30	341.77	1,102.81	1,062.83	39.98	27.585		
8,000.00	7,940.22	7,952.28	7,940.22	30.79	28.59	-94.07	238.30	341.77	1,102.88	1,062.74	40.14	27.477		
8,050.00	7,989.94	8,002.01	7,989.94	30.94	28.77	-94.29	238.30	341.77	1,103.25	1,062.88	40.37	27.326		
8,100.00	8,039.04	8,051.11	8,039.04	31.08	28.94	-94.69	238.30	341.77	1,104.00	1,063.40	40.60	27.190		
8,150.00	8,087.13	8,099.20	8,087.13	31.21	29.11	-95.25	238.30	341.77	1,105.23	1,064.40	40.83	27.071		
8,200.00	8,133.85	8,145.92	8,133.85	31.33	29.27	-95.92	238.30	341.77	1,107.08	1,066.04	41.04	26.973		
8,250.00	8,178.84	8,190.91	8,178.84	31.45	29.43	-96.66	238.30	341.77	1,109.73	1,068.48	41.25	26.900		
8,300.00	8,221.77	8,233.84	8,221.77	31.55	29.58	-97.42	238.30	341.77	1,113.39	1,071.94	41.45	26.859		
8,350.00	8,262.30	8,274.37	8,262.30	31.65	29.72	-98.15	238.30	341.77	1,118.27	1,076.63	41.65	26.852		
8,400.00	8,300.13	8,312.19	8,300.13	31.74	29.85	-98.78	238.30	341.77	1,124.60	1,082.77	41.83	26.887		
8,450.00	8,334.96	8,347.03	8,334.96	31.82	29.97	-99.25	238.30	341.77	1,132.58	1,090.59	42.00	26.968		
8,500.00	8,366.54	8,378.61	8,366.54	31.89	30.08	-99.50	238.30	341.77	1,142.42	1,100.26	42.16	27.099		
8,550.00	8,394.62	8,406.69	8,394.62	31.96	30.18	-99.47	238.30	341.77	1,154.26	1,111.95	42.30	27.286		
8,600.00	8,418.99	8,431.06	8,418.99	32.03	30.27	-99.11	238.30	341.77	1,168.21	1,125.77	42.43	27.529		
8,650.00	8,439.47	8,451.53	8,439.47	32.11	30.34	-98.38	238.30	341.77	1,184.33	1,141.78	42.55	27.833		
8,700.00	8,455.89	8,467.95	8,455.89	32.19	30.39	-97.23	238.30	341.77	1,202.62	1,159.96	42.65	28.197		
8,750.00	8,468.13	8,480.20	8,468.13	32.29	30.44	-95.62	238.30	341.77	1,223.00	1,180.27	42.73	28.620		
8,800.00	8,476.11	8,488.17	8,476.11	32.40	30.46	-93.53	238.30	341.77	1,245.35	1,202.55	42.79	29.100		
8,850.00	8,479.75	8,491.82	8,479.75	32.54	30.48	-90.97	238.30	341.77	1,269.48	1,226.64	42.84	29.635		
8,866.81	8,480.00	8,492.06	8,480.00	32.59	30.48	-90.00	238.30	341.77	1,277.95	1,235.10	42.85	29.826		
8,900.00	8,480.00	8,492.06	8,480.00	32.70	30.48	-90.00	238.30	341.77	1,295.15	1,252.29	42.86	30.215		
9,000.00	8,480.00	8,492.06	8,480.00	33.09	30.48	-90.00	238.30	341.77	1,350.60	1,307.68	42.92	31.468		

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 103H
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 103H	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		
9,100.00	8,480.00	8,492.06	8,480.00	33.57	30.48	-90.00	238.30	341.77	1,410.97	1,367.99	42.98	32.830		
9,200.00	8,480.00	8,492.06	8,480.00	34.14	30.48	-90.00	238.30	341.77	1,475.65	1,432.61	43.04	34.288		
9,300.00	8,480.00	8,492.06	8,480.00	34.79	30.48	-90.00	238.30	341.77	1,544.10	1,501.01	43.09	35.831		
9,400.00	8,480.00	8,492.06	8,480.00	35.50	30.48	-90.00	238.30	341.77	1,615.84	1,572.69	43.15	37.447		
9,500.00	8,480.00	8,492.06	8,480.00	36.28	30.48	-90.00	238.30	341.77	1,690.46	1,647.26	43.20	39.127		
9,600.00	8,480.00	8,492.06	8,480.00	37.11	30.48	-90.00	238.30	341.77	1,767.59	1,724.33	43.26	40.864		
9,700.00	8,480.00	8,492.06	8,480.00	38.01	30.48	-90.00	238.30	341.77	1,846.91	1,803.60	43.30	42.650		
9,800.00	8,480.00	8,492.06	8,480.00	38.95	30.48	-90.00	238.30	341.77	1,928.15	1,884.80	43.35	44.478		
9,900.00	8,480.00	8,492.06	8,480.00	39.94	30.48	-90.00	238.30	341.77	2,011.09	1,967.69	43.39	46.344		
10,000.00	8,480.00	8,492.06	8,480.00	40.97	30.48	-90.00	238.30	341.77	2,095.52	2,052.08	43.44	48.243		
10,100.00	8,480.00	8,492.06	8,480.00	42.04	30.48	-90.00	238.30	341.77	2,181.26	2,137.78	43.48	50.170		
10,200.00	8,480.00	8,492.06	8,480.00	43.14	30.48	-90.00	238.30	341.77	2,268.17	2,224.65	43.52	52.123		
10,300.00	8,480.00	8,492.06	8,480.00	44.29	30.48	-90.00	238.30	341.77	2,356.12	2,312.57	43.55	54.098		
10,400.00	8,480.00	8,492.06	8,480.00	45.46	30.48	-90.00	238.30	341.77	2,445.00	2,401.41	43.59	56.092		
10,500.00	8,480.00	8,492.06	8,480.00	46.66	30.48	-90.00	238.30	341.77	2,534.70	2,491.08	43.62	58.103		
10,600.00	8,480.00	8,492.06	8,480.00	47.89	30.48	-90.00	238.30	341.77	2,625.15	2,581.49	43.66	60.130		
10,700.00	8,480.00	8,492.06	8,480.00	49.14	30.48	-90.00	238.30	341.77	2,716.27	2,672.58	43.69	62.170		
10,800.00	8,480.00	8,492.06	8,480.00	50.42	30.48	-90.00	238.30	341.77	2,807.99	2,764.27	43.72	64.221		
10,900.00	8,480.00	8,492.06	8,480.00	51.72	30.48	-90.00	238.30	341.77	2,900.27	2,856.51	43.76	66.284		
11,000.00	8,480.00	8,492.06	8,480.00	53.03	30.48	-90.00	238.30	341.77	2,993.03	2,949.25	43.79	68.356		
11,100.00	8,480.00	8,492.06	8,480.00	54.37	30.48	-90.00	238.30	341.77	3,086.25	3,042.44	43.82	70.435		
11,200.00	8,480.00	8,492.06	8,480.00	55.72	30.48	-90.00	238.30	341.77	3,179.88	3,136.04	43.85	72.521		
11,300.00	8,480.00	8,492.06	8,480.00	57.09	30.48	-90.00	238.30	341.77	3,273.89	3,230.01	43.88	74.614		
11,400.00	8,480.00	8,492.06	8,480.00	58.47	30.48	-90.00	238.30	341.77	3,368.24	3,324.34	43.91	76.711		
11,500.00	8,480.00	8,492.06	8,480.00	59.86	30.48	-90.00	238.30	341.77	3,462.91	3,418.98	43.94	78.813		
11,600.00	8,480.00	8,492.06	8,480.00	61.27	30.48	-90.00	238.30	341.77	3,557.88	3,513.91	43.97	80.918		
11,700.00	8,480.00	8,492.06	8,480.00	62.69	30.48	-90.00	238.30	341.77	3,653.11	3,609.11	44.00	83.027		
11,800.00	8,480.00	8,492.06	8,480.00	64.13	30.48	-90.00	238.30	341.77	3,748.59	3,704.56	44.03	85.138		
11,900.00	8,480.00	8,492.06	8,480.00	65.57	30.48	-90.00	238.30	341.77	3,844.29	3,800.23	44.06	87.250		
12,000.00	8,480.00	8,492.06	8,480.00	67.02	30.48	-90.00	238.30	341.77	3,940.22	3,896.13	44.09	89.365		
12,100.00	8,480.00	8,492.06	8,480.00	68.48	30.48	-90.00	238.30	341.77	4,036.34	3,992.21	44.12	91.480		
12,200.00	8,480.00	8,492.06	8,480.00	69.95	30.48	-90.00	238.30	341.77	4,132.64	4,088.49	44.15	93.596		
12,300.00	8,480.00	8,492.06	8,480.00	71.42	30.48	-90.00	238.30	341.77	4,229.12	4,184.93	44.19	95.712		
12,400.00	8,480.00	8,492.06	8,480.00	72.91	30.48	-90.00	238.30	341.77	4,325.75	4,281.53	44.22	97.829		
12,500.00	8,480.00	16,789.68	12,740.00	74.40	81.82	-165.52	-4,045.03	384.29	4,399.75	4,338.16	61.59	71.434		
12,600.00	8,480.00	16,889.68	12,740.00	75.90	83.20	-165.52	-4,145.02	385.28	4,399.75	4,337.14	62.61	70.272		
12,700.00	8,480.00	16,989.68	12,740.00	77.40	84.59	-165.52	-4,245.02	386.27	4,399.75	4,336.11	63.63	69.142		
12,800.00	8,480.00	17,089.68	12,740.00	78.91	85.99	-165.52	-4,345.01	387.26	4,399.75	4,335.08	64.66	68.041		
12,900.00	8,480.00	17,189.68	12,740.00	80.43	87.40	-165.52	-4,445.01	388.26	4,399.75	4,334.05	65.70	66.967		
13,000.00	8,480.00	17,289.68	12,740.00	81.95	88.82	-165.52	-4,545.00	389.25	4,399.75	4,333.00	66.74	65.922		
13,100.00	8,480.00	17,389.68	12,740.00	83.47	90.25	-165.52	-4,645.00	390.24	4,399.75	4,331.96	67.79	64.902		
13,200.00	8,480.00	17,489.68	12,740.00	85.00	91.68	-165.52	-4,744.99	391.23	4,399.75	4,330.90	68.85	63.907		
13,300.00	8,480.00	17,589.68	12,740.00	86.54	93.12	-165.52	-4,844.99	392.23	4,399.75	4,329.84	69.91	62.937		
13,400.00	8,480.00	17,689.68	12,740.00	88.08	94.57	-165.52	-4,944.98	393.22	4,399.75	4,328.77	70.97	61.993		
13,500.00	8,480.00	17,789.68	12,740.00	89.62	96.02	-165.52	-5,044.98	394.21	4,399.75	4,327.70	72.04	61.072		
13,600.00	8,480.00	17,889.68	12,740.00	91.17	97.48	-165.52	-5,144.97	395.20	4,399.75	4,326.63	73.12	60.175		
13,700.00	8,480.00	17,989.68	12,740.00	92.72	98.95	-165.52	-5,244.97	396.20	4,399.75	4,325.55	74.19	59.301		
13,800.00	8,480.00	18,089.68	12,740.00	94.27	100.42	-165.52	-5,344.96	397.19	4,399.75	4,324.47	75.27	58.450		
13,900.00	8,480.00	18,189.68	12,740.00	95.83	101.90	-165.52	-5,444.96	398.18	4,399.75	4,323.39	76.36	57.620		
14,000.00	8,480.00	18,289.68	12,740.00	97.39	103.38	-165.52	-5,544.95	399.17	4,399.75	4,322.30	77.45	56.810		
14,100.00	8,480.00	18,389.68	12,740.00	98.95	104.87	-165.52	-5,644.95	400.17	4,399.75	4,321.21	78.54	56.020		
14,200.00	8,480.00	18,489.68	12,740.00	100.52	106.37	-165.52	-5,744.94	401.16	4,399.75	4,320.11	79.64	55.249		

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 103H
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 103H	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				
14,300.00	8,480.00	18,589.68	12,740.00	102.09	107.86	-165.52	-5,844.94	402.15	4,399.75	4,319.01	80.73	54.496				
14,400.00	8,480.00	18,689.68	12,740.00	103.66	109.37	-165.52	-5,944.93	403.14	4,399.75	4,317.91	81.84	53.762				
14,500.00	8,480.00	18,789.68	12,740.00	105.23	110.87	-165.52	-6,044.93	404.14	4,399.75	4,316.80	82.94	53.046				
14,600.00	8,480.00	18,889.68	12,740.00	106.81	112.38	-165.52	-6,144.92	405.13	4,399.74	4,315.69	84.05	52.346				
14,700.00	8,480.00	18,989.68	12,740.00	108.39	113.90	-165.52	-6,244.92	406.12	4,399.74	4,314.58	85.16	51.663				
14,800.00	8,480.00	19,089.68	12,740.00	109.97	115.41	-165.52	-6,344.91	407.11	4,399.74	4,313.47	86.28	50.995				
14,900.00	8,480.00	19,189.68	12,740.00	111.55	116.94	-165.52	-6,444.91	408.11	4,399.74	4,312.35	87.39	50.343				
15,000.00	8,480.00	19,289.68	12,740.00	113.13	118.46	-165.52	-6,544.90	409.10	4,399.74	4,311.23	88.51	49.708				
15,100.00	8,480.00	19,389.68	12,740.00	114.72	119.99	-165.52	-6,644.90	410.09	4,399.74	4,310.11	89.63	49.086				
15,200.00	8,480.00	19,489.68	12,740.00	116.31	121.52	-165.52	-6,744.89	411.08	4,399.74	4,308.99	90.75	48.479				
15,300.00	8,480.00	19,589.68	12,740.00	117.90	123.06	-165.52	-6,844.89	412.08	4,399.74	4,307.86	91.88	47.886				
15,400.00	8,480.00	19,689.68	12,740.00	119.49	124.59	-165.52	-6,944.88	413.07	4,399.74	4,306.74	93.01	47.306				
15,500.00	8,480.00	19,789.68	12,740.00	121.08	126.13	-165.52	-7,044.88	414.06	4,399.74	4,305.61	94.14	46.738				
15,600.00	8,480.00	19,889.68	12,740.00	122.68	127.68	-165.52	-7,144.87	415.05	4,399.74	4,304.48	95.27	46.184				
15,700.00	8,480.00	19,989.68	12,740.00	124.27	129.22	-165.52	-7,244.87	416.05	4,399.74	4,303.34	96.40	45.641				
15,800.00	8,480.00	20,089.68	12,740.00	125.87	130.77	-165.52	-7,344.86	417.04	4,399.74	4,302.21	97.53	45.110				
15,900.00	8,480.00	20,189.68	12,740.00	127.47	132.32	-165.52	-7,444.86	418.03	4,399.74	4,301.07	98.67	44.590				
16,000.00	8,480.00	20,289.68	12,740.00	129.07	133.88	-165.52	-7,544.85	419.02	4,399.74	4,299.93	99.81	44.082				
16,100.00	8,480.00	20,389.68	12,740.00	130.67	135.43	-165.52	-7,644.85	420.02	4,399.74	4,298.79	100.95	43.584				
16,200.00	8,480.00	20,489.68	12,740.00	132.27	136.99	-165.52	-7,744.84	421.01	4,399.74	4,297.65	102.09	43.095				
16,300.00	8,480.00	20,589.68	12,740.00	133.88	138.55	-165.52	-7,844.84	422.00	4,399.74	4,296.51	103.23	42.619				
16,400.00	8,480.00	20,689.68	12,740.00	135.48	140.11	-165.52	-7,944.83	422.99	4,399.74	4,295.37	104.38	42.152				
16,500.00	8,480.00	20,789.68	12,740.00	137.09	141.68	-165.52	-8,044.83	423.99	4,399.74	4,294.22	105.52	41.695				
16,600.00	8,480.00	20,889.68	12,740.00	138.70	143.24	-165.52	-8,144.82	424.98	4,399.74	4,293.07	106.67	41.247				
16,700.00	8,480.00	20,989.68	12,740.00	140.30	144.81	-165.52	-8,244.82	425.97	4,399.74	4,291.93	107.82	40.808				
16,800.00	8,480.00	21,089.68	12,740.00	141.91	146.38	-165.52	-8,344.81	426.96	4,399.74	4,290.78	108.96	40.378				
16,900.00	8,480.00	21,189.68	12,740.00	143.52	147.95	-165.52	-8,444.81	427.96	4,399.74	4,289.63	110.12	39.956				
17,000.00	8,480.00	21,289.68	12,740.00	145.13	149.53	-165.52	-8,544.80	428.95	4,399.74	4,288.48	111.27	39.542				
17,100.00	8,480.00	21,389.68	12,740.00	146.75	151.10	-165.52	-8,644.80	429.94	4,399.74	4,287.32	112.42	39.137				
17,200.00	8,480.00	21,489.68	12,740.00	148.36	152.68	-165.52	-8,744.79	430.93	4,399.74	4,286.17	113.57	38.739				
17,300.00	8,480.00	21,589.68	12,740.00	149.97	154.26	-165.52	-8,844.79	431.93	4,399.74	4,285.01	114.73	38.349				
17,400.00	8,480.00	21,689.68	12,740.00	151.59	155.84	-165.52	-8,944.79	432.92	4,399.74	4,283.86	115.88	37.967				
17,500.00	8,480.00	21,789.68	12,740.00	153.20	157.42	-165.52	-9,044.78	433.91	4,399.74	4,282.70	117.04	37.591				
17,600.00	8,480.00	21,889.68	12,740.00	154.82	159.00	-165.52	-9,144.78	434.90	4,399.74	4,281.54	118.20	37.223				
17,700.00	8,480.00	21,989.68	12,740.00	156.44	160.59	-165.52	-9,244.77	435.90	4,399.74	4,280.38	119.36	36.862				
17,800.00	8,480.00	22,089.68	12,740.00	158.05	162.17	-165.52	-9,344.77	436.89	4,399.74	4,279.23	120.52	36.508				
17,900.00	8,480.00	22,189.68	12,740.00	159.67	163.76	-165.52	-9,444.76	437.88	4,399.74	4,278.07	121.68	36.160				
18,000.00	8,480.00	22,289.68	12,740.00	161.29	165.35	-165.52	-9,544.76	438.87	4,399.74	4,276.91	122.84	35.818				
18,100.00	8,480.00	22,389.68	12,740.00	162.91	166.94	-165.52	-9,644.75	439.87	4,399.74	4,275.74	124.00	35.483				
18,200.00	8,480.00	22,489.68	12,740.00	164.53	168.53	-165.52	-9,744.75	440.86	4,399.74	4,274.58	125.16	35.153				
18,300.00	8,480.00	22,589.68	12,740.00	166.15	170.12	-165.52	-9,844.74	441.85	4,399.74	4,273.42	126.32	34.829				
18,400.00	8,480.00	22,689.68	12,740.00	167.77	171.71	-165.52	-9,944.74	442.84	4,399.74	4,272.25	127.49	34.511				
18,500.00	8,480.00	22,789.68	12,740.00	169.40	173.30	-165.52	-10,044.73	443.84	4,399.74	4,271.09	128.65	34.199				
18,584.05	8,480.00	22,873.73	12,740.00	170.76	174.64	-165.52	-10,128.78	444.67	4,399.74	4,270.11	129.63	33.941				
18,600.00	8,480.00	22,874.14	12,740.00	171.02	174.65	-165.52	-10,129.18	444.68	4,399.77	4,270.07	129.70	33.923				
18,700.00	8,480.00	22,874.14	12,740.00	172.64	174.65	-165.52	-10,129.18	444.68	4,401.26	4,271.17	130.09	33.833				
18,800.00	8,480.00	22,874.14	12,740.00	174.26	174.65	-165.52	-10,129.18	444.68	4,405.02	4,274.60	130.42	33.776				
18,900.00	8,480.00	22,874.14	12,740.00	175.89	174.65	-165.52	-10,129.18	444.68	4,411.04	4,280.34	130.70	33.748				
19,000.00	8,480.00	22,874.14	12,740.00	177.51	174.65	-165.52	-10,129.18	444.68	4,419.32	4,288.38	130.94	33.752				
19,100.00	8,480.00	22,874.14	12,740.00	179.14	174.65	-165.52	-10,129.18	444.68	4,429.84	4,298.72	131.12	33.785				
19,200.00	8,480.00	22,874.14	12,740.00	180.76	174.65	-165.52	-10,129.18	444.68	4,442.59	4,311.34	131.25	33.847				
19,300.00	8,480.00	22,874.14	12,740.00	182.39	174.65	-165.52	-10,129.18	444.68	4,457.55	4,326.22	131.33	33.941				

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 103H
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 103H	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	
19,400.00	8,480.00	22,874.14	12,740.00	184.02	174.65	-165.52	-10,129.18	444.68	4,474.69	4,343.32	131.37	34.062	
19,500.00	8,480.00	22,874.14	12,740.00	185.64	174.65	-165.52	-10,129.18	444.68	4,493.99	4,362.63	131.35	34.213	
19,600.00	8,480.00	22,874.14	12,740.00	187.27	174.65	-165.52	-10,129.18	444.68	4,515.42	4,384.13	131.29	34.392	
19,700.00	8,480.00	22,874.14	12,740.00	188.90	174.65	-165.52	-10,129.18	444.68	4,538.96	4,407.78	131.18	34.600	
19,800.00	8,480.00	22,874.14	12,740.00	190.53	174.65	-165.52	-10,129.18	444.68	4,564.57	4,433.54	131.03	34.837	
19,899.80	8,480.00	22,874.14	12,740.00	192.15	174.65	-165.52	-10,129.18	444.68	4,592.15	4,461.31	130.84	35.098	

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 103H
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 103H	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)					
0.00	0.00	0.00	0.00	0.00	0.00	39.18	75.53	61.55	97.43							
100.00	100.00	100.00	100.00	0.13	0.13	39.18	75.53	61.55	97.43	97.26	0.18	549.124				
200.00	200.00	200.00	200.00	0.48	0.48	39.18	75.53	61.55	97.43	96.75	0.68	142.366				
300.00	300.00	300.00	300.00	0.84	0.84	39.18	75.53	61.55	97.43	96.24	1.19	81.785				
400.00	400.00	400.00	400.00	1.20	1.20	39.18	75.53	61.55	97.43	95.74	1.70	57.371				
500.00	500.00	500.00	500.00	1.56	1.56	39.18	75.53	61.55	97.43	95.23	2.21	44.182				
600.00	600.00	600.00	600.00	1.92	1.92	39.18	75.53	61.55	97.43	94.72	2.71	35.924				
700.00	700.00	700.00	700.00	2.28	2.28	39.18	75.53	61.55	97.43	94.21	3.22	30.267				
800.00	800.00	800.00	800.00	2.63	2.63	39.18	75.53	61.55	97.43	93.71	3.73	26.149				
900.00	900.00	900.00	900.00	2.99	2.99	39.18	75.53	61.55	97.43	93.20	4.23	23.017				
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	39.18	75.53	61.55	97.43	92.69	4.74	20.555				
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	39.18	75.53	61.55	97.43	92.19	5.25	18.569				
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	39.18	75.53	61.55	97.43	91.68	5.75	16.933				
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	39.18	75.53	61.55	97.43	91.17	6.26	15.562				
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	39.18	75.53	61.55	97.43	90.67	6.77	14.397				
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	39.18	75.53	61.55	97.43	90.16	7.27	13.393				
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	39.18	75.53	61.55	97.43	89.65	7.78	12.521				
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	39.18	75.53	61.55	97.43	89.14	8.29	11.755				
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	39.18	75.53	61.55	97.43	88.64	8.80	11.077				
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	39.18	75.53	61.55	97.43	88.13	9.30	10.474				
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	39.18	75.53	61.55	97.43	87.62	9.81	9.932 CC, ES				
2,100.00	2,099.99	2,099.99	2,099.99	7.29	7.29	118.64	75.53	61.55	98.05	87.74	10.31	9.509				
2,200.00	2,199.91	2,197.73	2,197.72	7.63	7.64	120.92	75.86	62.76	101.07	90.28	10.80	9.361 SF				
2,300.00	2,299.69	2,294.93	2,294.84	7.98	7.98	124.80	76.86	66.34	107.94	96.67	11.27	9.575				
2,400.00	2,399.27	2,391.21	2,390.92	8.34	8.31	129.58	78.49	72.25	119.23	107.49	11.74	10.154				
2,500.00	2,498.57	2,486.23	2,485.57	8.69	8.65	134.54	80.73	80.36	135.42	123.22	12.20	11.101				
2,600.00	2,597.54	2,579.66	2,578.40	9.06	8.98	139.16	83.55	90.54	156.79	144.15	12.64	12.401				
2,616.45	2,613.78	2,594.86	2,593.48	9.12	9.04	139.86	84.07	92.40	160.81	148.09	12.72	12.646				
2,700.00	2,696.24	2,674.78	2,672.71	9.43	9.33	143.30	86.85	102.48	182.01	168.90	13.11	13.881				
2,800.00	2,794.94	2,770.75	2,767.85	9.81	9.68	146.51	90.20	114.58	208.03	194.44	13.59	15.306				
2,900.00	2,893.64	2,866.72	2,863.00	10.19	10.03	149.01	93.55	126.69	234.53	220.46	14.07	16.665				
3,000.00	2,992.34	2,962.69	2,958.15	10.58	10.39	151.00	96.90	138.79	261.37	246.81	14.56	17.955				
3,100.00	3,091.04	3,058.67	3,053.30	10.97	10.75	152.62	100.25	150.90	288.44	273.40	15.04	19.176				
3,200.00	3,189.74	3,154.64	3,148.44	11.37	11.11	153.97	103.60	163.01	315.70	300.17	15.53	20.330				
3,300.00	3,288.45	3,250.61	3,243.59	11.77	11.48	155.10	106.95	175.11	343.08	327.07	16.02	21.420				
3,400.00	3,387.15	3,346.58	3,338.74	12.17	11.84	156.06	110.30	187.22	370.58	354.07	16.51	22.451				
3,500.00	3,485.85	3,442.56	3,433.88	12.58	12.21	156.89	113.65	199.32	398.16	381.16	17.00	23.425				
3,600.00	3,584.55	3,538.53	3,529.03	12.98	12.58	157.61	116.99	211.43	425.80	408.31	17.49	24.347				
3,700.00	3,683.25	3,634.50	3,624.18	13.39	12.96	158.25	120.34	223.53	453.50	435.52	17.98	25.220				
3,800.00	3,781.95	3,730.47	3,719.32	13.80	13.33	158.81	123.69	235.64	481.25	462.77	18.48	26.047				
3,900.00	3,880.65	3,826.45	3,814.47	14.22	13.71	159.31	127.04	247.74	509.04	490.06	18.97	26.832				
4,000.00	3,979.35	3,922.42	3,909.62	14.63	14.08	159.76	130.39	259.85	536.85	517.39	19.47	27.578				
4,100.00	4,078.05	4,018.39	4,004.76	15.05	14.46	160.17	133.74	271.95	564.70	544.73	19.96	28.287				
4,200.00	4,176.75	4,114.36	4,099.91	15.47	14.84	160.53	137.09	284.06	592.56	572.10	20.46	28.961				
4,300.00	4,275.45	4,210.33	4,195.06	15.89	15.22	160.87	140.44	296.16	620.45	599.49	20.96	29.604				
4,400.00	4,374.15	4,306.31	4,290.21	16.31	15.60	161.17	143.79	308.27	648.36	626.90	21.46	30.216				
4,500.00	4,472.85	4,402.28	4,385.35	16.73	15.98	161.45	147.14	320.37	676.28	654.33	21.96	30.801				
4,600.00	4,571.55	4,498.25	4,480.50	17.15	16.36	161.71	150.49	332.48	704.22	681.76	22.46	31.359				
4,700.00	4,670.25	4,594.22	4,575.65	17.57	16.74	161.95	153.84	344.59	732.17	709.21	22.96	31.893				
4,800.00	4,768.95	4,690.20	4,670.79	18.00	17.13	162.17	157.18	356.69	760.12	736.67	23.46	32.404				
4,900.00	4,867.65	4,786.17	4,765.94	18.42	17.51	162.37	160.53	368.80	788.09	764.13	23.96	32.893				
5,000.00	4,966.35	4,882.14	4,861.09	18.85	17.89	162.56	163.88	380.90	816.07	791.61	24.46	33.362				

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 103H
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 103H	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	5,065.05	4,978.11	4,956.23	19.28	18.28	162.74	167.23	393.01	844.05	819.09	24.96	33.811		
5,200.00	5,163.76	5,074.09	5,051.38	19.70	18.66	162.91	170.58	405.11	872.05	846.58	25.47	34.243		
5,300.00	5,262.46	5,170.06	5,146.53	20.13	19.05	163.07	173.93	417.22	900.04	874.07	25.97	34.658		
5,400.00	5,361.16	5,266.03	5,241.67	20.56	19.44	163.21	177.28	429.32	928.05	901.58	26.47	35.056		
5,500.00	5,459.86	5,362.00	5,336.82	20.99	19.82	163.35	180.63	441.43	956.06	929.08	26.98	35.439		
5,600.00	5,558.56	5,457.98	5,431.97	21.42	20.21	163.48	183.98	453.53	984.07	956.59	27.48	35.808		
5,700.00	5,657.26	5,553.95	5,527.12	21.85	20.60	163.61	187.33	465.64	1,012.09	984.10	27.99	36.164		
5,800.00	5,755.96	5,649.92	5,622.26	22.28	20.99	163.72	190.68	477.74	1,040.11	1,011.62	28.49	36.507		
5,900.00	5,854.66	5,745.89	5,717.41	22.71	21.38	163.83	194.03	489.85	1,068.14	1,039.14	29.00	36.837		
6,000.00	5,953.36	5,841.86	5,812.56	23.14	21.76	163.94	197.37	501.96	1,096.17	1,066.67	29.50	37.156		
6,100.00	6,052.06	5,937.84	5,907.70	23.57	22.15	164.04	200.72	514.06	1,124.20	1,094.20	30.01	37.464		
6,200.00	6,150.76	6,033.81	6,002.85	24.01	22.54	164.13	204.07	526.17	1,152.24	1,121.73	30.51	37.761		
6,300.00	6,249.46	6,129.78	6,098.00	24.44	22.93	164.22	207.42	538.27	1,180.28	1,149.26	31.02	38.048		
6,400.00	6,348.16	6,225.75	6,193.14	24.87	23.32	164.31	210.77	550.38	1,208.32	1,176.79	31.53	38.326		
6,500.00	6,446.86	6,321.73	6,288.29	25.30	23.71	164.39	214.12	562.48	1,236.36	1,204.33	32.03	38.595		
6,600.00	6,545.56	6,417.70	6,383.44	25.74	24.10	164.47	217.47	574.59	1,264.41	1,231.87	32.54	38.856		
6,700.00	6,644.26	6,513.67	6,478.58	26.17	24.49	164.55	220.82	586.69	1,292.46	1,259.41	33.05	39.108		
6,804.31	6,747.22	6,613.78	6,577.83	26.62	24.90	164.62	224.31	599.32	1,321.72	1,288.14	33.58	39.362		
6,900.00	6,841.85	6,705.94	6,669.20	27.03	25.27	164.78	227.53	610.94	1,347.45	1,313.39	34.06	39.557		
7,000.00	6,941.09	6,802.88	6,765.31	27.44	25.67	164.90	230.91	623.17	1,371.95	1,337.38	34.57	39.685		
7,100.00	7,040.61	6,925.03	6,886.48	27.83	26.16	164.98	235.01	637.98	1,393.60	1,358.39	35.21	39.580		
7,200.00	7,140.36	7,079.11	7,039.89	28.20	26.76	165.04	238.83	651.78	1,409.50	1,373.52	35.97	39.180		
7,300.00	7,240.26	7,235.27	7,195.82	28.55	27.32	165.08	241.01	659.67	1,418.94	1,382.25	36.69	38.673		
7,400.00	7,340.24	7,379.71	7,340.24	28.88	27.81	165.11	241.53	661.55	1,421.95	1,384.63	37.32	38.103		
7,420.77	7,361.00	7,400.47	7,361.00	28.95	27.88	86.31	241.53	661.55	1,422.00	1,384.58	37.42	38.002		
7,500.00	7,440.24	7,479.71	7,440.24	29.20	28.14	86.31	241.53	661.55	1,422.00	1,384.20	37.80	37.616		
7,600.00	7,540.24	7,579.71	7,540.24	29.52	28.47	86.31	241.53	661.55	1,422.00	1,383.71	38.29	37.140		
7,700.00	7,640.24	7,679.71	7,640.24	29.84	28.80	86.31	241.53	661.55	1,422.00	1,383.23	38.77	36.676		
7,800.00	7,740.24	7,779.71	7,740.24	30.16	29.13	86.31	241.53	661.55	1,422.00	1,382.74	39.26	36.222		
7,900.00	7,840.24	7,879.71	7,840.24	30.48	29.47	86.31	241.53	661.55	1,422.00	1,382.26	39.74	35.779		
7,966.81	7,907.04	7,946.51	7,907.04	30.69	29.69	86.31	241.53	661.55	1,422.00	1,381.93	40.07	35.489		
8,000.00	7,940.22	7,979.69	7,940.22	30.79	29.80	-93.15	241.53	661.55	1,422.05	1,381.83	40.23	35.350		
8,050.00	7,989.94	8,029.41	7,989.94	30.94	29.96	-93.33	241.53	661.55	1,422.34	1,381.88	40.46	35.155		
8,100.00	8,039.04	8,078.51	8,039.04	31.08	30.13	-93.64	241.53	661.55	1,422.92	1,382.24	40.69	34.973		
8,150.00	8,087.13	8,126.60	8,087.13	31.21	30.29	-94.07	241.53	661.55	1,423.88	1,382.97	40.91	34.809		
8,200.00	8,133.85	8,173.32	8,133.85	31.33	30.45	-94.59	241.53	661.55	1,425.32	1,384.20	41.12	34.664		
8,250.00	8,178.84	8,218.32	8,178.84	31.45	30.60	-95.17	241.53	661.55	1,427.38	1,386.06	41.32	34.543		
8,300.00	8,221.77	8,261.24	8,221.77	31.55	30.74	-95.77	241.53	661.55	1,430.22	1,388.71	41.52	34.449		
8,350.00	8,262.30	8,301.77	8,262.30	31.65	30.87	-96.33	241.53	661.55	1,434.03	1,392.32	41.70	34.386		
8,400.00	8,300.13	8,339.60	8,300.13	31.74	31.00	-96.82	241.53	661.55	1,438.97	1,397.09	41.88	34.358		
8,450.00	8,334.96	8,374.43	8,334.96	31.82	31.12	-97.19	241.53	661.55	1,445.22	1,403.17	42.05	34.369		
8,500.00	8,366.54	8,406.01	8,366.54	31.89	31.22	-97.39	241.53	661.55	1,452.94	1,410.73	42.21	34.423		
8,550.00	8,394.62	8,434.09	8,394.62	31.96	31.32	-97.37	241.53	661.55	1,462.27	1,419.91	42.36	34.522		
8,600.00	8,418.99	8,458.46	8,418.99	32.03	31.40	-97.09	241.53	661.55	1,473.31	1,430.81	42.49	34.671		
8,650.00	8,439.47	8,478.94	8,439.47	32.11	31.47	-96.51	241.53	661.55	1,486.13	1,443.51	42.62	34.870		
8,700.00	8,455.89	8,495.36	8,455.89	32.19	31.52	-95.61	241.53	661.55	1,500.74	1,458.01	42.73	35.122		
8,750.00	8,468.13	8,507.60	8,468.13	32.29	31.57	-94.36	241.53	661.55	1,517.12	1,474.30	42.83	35.425		
8,800.00	8,476.11	8,515.58	8,476.11	32.40	31.59	-92.74	241.53	661.55	1,535.20	1,492.29	42.91	35.780		
8,850.00	8,479.75	8,519.22	8,479.75	32.54	31.60	-90.75	241.53	661.55	1,554.84	1,511.87	42.97	36.184		
8,866.81	8,480.00	8,519.47	8,480.00	32.59	31.61	-90.00	241.53	661.55	1,561.76	1,518.77	42.99	36.330		
8,900.00	8,480.00	8,519.47	8,480.00	32.70	31.61	-90.00	241.53	661.55	1,575.88	1,532.85	43.02	36.631		
9,000.00	8,480.00	8,519.47	8,480.00	33.09	31.61	-90.00	241.53	661.55	1,621.76	1,578.63	43.13	37.601		

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 103H
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 103H	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		
9,100.00	8,480.00	8,519.47	8,480.00	33.57	31.61	-90.00	241.53	661.55	1,672.37	1,629.12	43.25	38.667		
9,200.00	8,480.00	8,519.47	8,480.00	34.14	31.61	-90.00	241.53	661.55	1,727.29	1,683.92	43.37	39.823		
9,300.00	8,480.00	8,519.47	8,480.00	34.79	31.61	-90.00	241.53	661.55	1,786.13	1,742.63	43.50	41.059		
9,400.00	8,480.00	8,519.47	8,480.00	35.50	31.61	-90.00	241.53	661.55	1,848.50	1,804.88	43.63	42.370		
9,500.00	8,480.00	8,519.47	8,480.00	36.28	31.61	-90.00	241.53	661.55	1,914.08	1,870.32	43.75	43.749		
9,600.00	8,480.00	8,519.47	8,480.00	37.11	31.61	-90.00	241.53	661.55	1,982.53	1,938.65	43.87	45.189		
9,700.00	8,480.00	8,519.47	8,480.00	38.01	31.61	-90.00	241.53	661.55	2,053.56	2,009.57	43.99	46.684		
9,800.00	8,480.00	8,519.47	8,480.00	38.95	31.61	-90.00	241.53	661.55	2,126.93	2,082.83	44.10	48.229		
9,900.00	8,480.00	8,519.47	8,480.00	39.94	31.61	-90.00	241.53	661.55	2,202.40	2,158.19	44.21	49.820		
10,000.00	8,480.00	8,519.47	8,480.00	40.97	31.61	-90.00	241.53	661.55	2,279.75	2,235.45	44.31	51.452		
10,100.00	8,480.00	8,519.47	8,480.00	42.04	31.61	-90.00	241.53	661.55	2,358.81	2,314.41	44.40	53.121		
10,200.00	8,480.00	8,519.47	8,480.00	43.14	31.61	-90.00	241.53	661.55	2,439.41	2,394.91	44.50	54.823		
10,300.00	8,480.00	8,519.47	8,480.00	44.29	31.61	-90.00	241.53	661.55	2,521.39	2,476.81	44.58	56.557		
10,400.00	8,480.00	8,519.47	8,480.00	45.46	31.61	-90.00	241.53	661.55	2,604.64	2,559.98	44.66	58.317		
10,500.00	8,480.00	8,519.47	8,480.00	46.66	31.61	-90.00	241.53	661.55	2,689.03	2,644.29	44.74	60.103		
10,600.00	8,480.00	8,519.47	8,480.00	47.89	31.61	-90.00	241.53	661.55	2,774.45	2,729.64	44.81	61.910		
10,700.00	8,480.00	8,519.47	8,480.00	49.14	31.61	-90.00	241.53	661.55	2,860.82	2,815.94	44.89	63.736		
10,800.00	8,480.00	8,519.47	8,480.00	50.42	31.61	-90.00	241.53	661.55	2,948.05	2,903.10	44.95	65.581		
10,900.00	8,480.00	8,519.47	8,480.00	51.72	31.61	-90.00	241.53	661.55	3,036.07	2,991.05	45.02	67.442		
11,000.00	8,480.00	8,519.47	8,480.00	53.03	31.61	-90.00	241.53	661.55	3,124.81	3,079.73	45.08	69.317		
11,100.00	8,480.00	8,519.47	8,480.00	54.37	31.61	-90.00	241.53	661.55	3,214.21	3,169.07	45.14	71.205		
11,200.00	8,480.00	8,519.47	8,480.00	55.72	31.61	-90.00	241.53	661.55	3,304.22	3,259.02	45.20	73.106		
11,300.00	8,480.00	8,519.47	8,480.00	57.09	31.61	-90.00	241.53	661.55	3,394.79	3,349.54	45.25	75.017		
11,400.00	8,480.00	8,519.47	8,480.00	58.47	31.61	-90.00	241.53	661.55	3,485.87	3,440.57	45.31	76.937		
11,500.00	8,480.00	8,519.47	8,480.00	59.86	31.61	-90.00	241.53	661.55	3,577.43	3,532.07	45.36	78.866		
11,600.00	8,480.00	8,519.47	8,480.00	61.27	31.61	-90.00	241.53	661.55	3,669.44	3,624.02	45.41	80.803		
11,700.00	8,480.00	8,519.47	8,480.00	62.69	31.61	-90.00	241.53	661.55	3,761.84	3,716.38	45.46	82.747		
11,800.00	8,480.00	8,519.47	8,480.00	64.13	31.61	-90.00	241.53	661.55	3,854.63	3,809.12	45.51	84.697		
11,900.00	8,480.00	8,519.47	8,480.00	65.57	31.61	-90.00	241.53	661.55	3,947.77	3,902.21	45.56	86.652		
12,000.00	8,480.00	8,519.47	8,480.00	67.02	31.61	-90.00	241.53	661.55	4,041.24	3,995.63	45.61	88.611		
12,100.00	8,480.00	8,519.47	8,480.00	68.48	31.61	-90.00	241.53	661.55	4,135.01	4,089.36	45.65	90.575		
12,200.00	8,480.00	16,161.35	12,380.00	69.95	77.62	-158.96	-3,741.14	781.60	4,178.66	4,116.61	62.05	67.346		
12,300.00	8,480.00	16,261.35	12,380.00	71.42	78.97	-158.96	-3,841.13	782.59	4,178.65	4,115.51	63.15	66.170		
12,400.00	8,480.00	16,361.35	12,380.00	72.91	80.34	-158.96	-3,941.13	783.58	4,178.65	4,114.39	64.26	65.027		
12,500.00	8,480.00	16,461.35	12,380.00	74.40	81.72	-158.96	-4,041.12	784.56	4,178.65	4,113.27	65.38	63.914		
12,600.00	8,480.00	16,561.35	12,380.00	75.90	83.11	-158.96	-4,141.12	785.55	4,178.65	4,112.14	66.51	62.831		
12,700.00	8,480.00	16,661.35	12,380.00	77.40	84.50	-158.96	-4,241.11	786.54	4,178.65	4,111.01	67.64	61.777		
12,800.00	8,480.00	16,761.35	12,380.00	78.91	85.91	-158.96	-4,341.11	787.53	4,178.65	4,109.86	68.78	60.753		
12,900.00	8,480.00	16,861.35	12,380.00	80.43	87.32	-158.96	-4,441.10	788.52	4,178.64	4,108.72	69.93	59.756		
13,000.00	8,480.00	16,961.35	12,380.00	81.95	88.74	-158.96	-4,541.10	789.50	4,178.64	4,107.56	71.08	58.787		
13,100.00	8,480.00	17,061.35	12,380.00	83.47	90.17	-158.96	-4,641.09	790.49	4,178.64	4,106.40	72.24	57.847		
13,200.00	8,480.00	17,161.35	12,380.00	85.00	91.61	-158.96	-4,741.09	791.48	4,178.64	4,105.24	73.40	56.931		
13,300.00	8,480.00	17,261.35	12,380.00	86.54	93.06	-158.96	-4,841.08	792.47	4,178.64	4,104.07	74.56	56.041		
13,400.00	8,480.00	17,361.35	12,380.00	88.08	94.51	-158.96	-4,941.08	793.46	4,178.64	4,102.90	75.74	55.174		
13,500.00	8,480.00	17,461.35	12,380.00	89.62	95.97	-158.96	-5,041.07	794.44	4,178.63	4,101.72	76.91	54.330		
13,600.00	8,480.00	17,561.35	12,380.00	91.17	97.43	-158.96	-5,141.07	795.43	4,178.63	4,100.54	78.09	53.508		
13,700.00	8,480.00	17,661.35	12,380.00	92.72	98.90	-158.96	-5,241.06	796.42	4,178.63	4,099.35	79.28	52.708		
13,800.00	8,480.00	17,761.35	12,380.00	94.27	100.38	-158.96	-5,341.06	797.41	4,178.63	4,098.16	80.47	51.929		
13,900.00	8,480.00	17,861.35	12,380.00	95.83	101.86	-158.96	-5,441.05	798.40	4,178.63	4,096.97	81.66	51.170		
14,000.00	8,480.00	17,961.35	12,380.00	97.39	103.34	-158.96	-5,541.05	799.38	4,178.62	4,095.77	82.86	50.431		
14,100.00	8,480.00	18,061.35	12,380.00	98.95	104.83	-158.96	-5,641.04	800.37	4,178.62	4,094.56	84.06	49.711		
14,200.00	8,480.00	18,161.35	12,380.00	100.52	106.33	-158.96	-5,741.04	801.36	4,178.62	4,093.36	85.26	49.009		

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 103H
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 103H	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			
14,300.00	8,480.00	18,261.35	12,380.00	102.09	107.83	-158.96	-5,841.03	802.35	4,178.62	4,092.15	86.47	48.324			
14,400.00	8,480.00	18,361.35	12,380.00	103.66	109.34	-158.96	-5,941.03	803.34	4,178.62	4,090.94	87.68	47.658			
14,500.00	8,480.00	18,461.35	12,380.00	105.23	110.85	-158.96	-6,041.02	804.32	4,178.62	4,089.73	88.89	47.009			
14,600.00	8,480.00	18,561.35	12,380.00	106.81	112.36	-158.96	-6,141.02	805.31	4,178.61	4,088.51	90.10	46.376			
14,700.00	8,480.00	18,661.35	12,380.00	108.39	113.88	-158.96	-6,241.01	806.30	4,178.61	4,087.29	91.32	45.757			
14,800.00	8,480.00	18,761.35	12,380.00	109.97	115.40	-158.96	-6,341.01	807.29	4,178.61	4,086.07	92.54	45.154			
14,900.00	8,480.00	18,861.35	12,380.00	111.55	116.92	-158.96	-6,441.01	808.27	4,178.61	4,084.84	93.77	44.564			
15,000.00	8,480.00	18,961.35	12,380.00	113.13	118.45	-158.96	-6,541.00	809.26	4,178.61	4,083.62	94.99	43.991			
15,100.00	8,480.00	19,061.35	12,380.00	114.72	119.98	-158.96	-6,641.00	810.25	4,178.60	4,082.39	96.21	43.430			
15,200.00	8,480.00	19,161.35	12,380.00	116.31	121.51	-158.96	-6,740.99	811.24	4,178.60	4,081.16	97.44	42.883			
15,300.00	8,480.00	19,261.35	12,380.00	117.90	123.05	-158.96	-6,840.99	812.23	4,178.60	4,079.93	98.67	42.349			
15,400.00	8,480.00	19,361.35	12,380.00	119.49	124.59	-158.96	-6,940.98	813.21	4,178.60	4,078.70	99.90	41.826			
15,500.00	8,480.00	19,461.35	12,380.00	121.08	126.13	-158.96	-7,040.98	814.20	4,178.60	4,077.46	101.14	41.316			
15,600.00	8,480.00	19,561.35	12,380.00	122.68	127.68	-158.96	-7,140.97	815.19	4,178.60	4,076.22	102.37	40.817			
15,700.00	8,480.00	19,661.35	12,380.00	124.27	129.23	-158.96	-7,240.97	816.18	4,178.59	4,074.98	103.61	40.330			
15,800.00	8,480.00	19,761.35	12,380.00	125.87	130.78	-158.96	-7,340.96	817.17	4,178.59	4,073.74	104.85	39.853			
15,900.00	8,480.00	19,861.35	12,380.00	127.47	132.33	-158.96	-7,440.96	818.15	4,178.59	4,072.50	106.09	39.386			
16,000.00	8,480.00	19,961.35	12,380.00	129.07	133.88	-158.96	-7,540.95	819.14	4,178.59	4,071.25	107.34	38.930			
16,100.00	8,480.00	20,061.35	12,380.00	130.67	135.44	-158.96	-7,640.95	820.13	4,178.59	4,070.01	108.58	38.484			
16,200.00	8,480.00	20,161.35	12,380.00	132.27	137.00	-158.96	-7,740.94	821.12	4,178.59	4,068.76	109.83	38.047			
16,300.00	8,480.00	20,261.35	12,380.00	133.88	138.56	-158.96	-7,840.94	822.11	4,178.58	4,067.51	111.07	37.620			
16,400.00	8,480.00	20,361.35	12,380.00	135.48	140.13	-158.96	-7,940.93	823.09	4,178.58	4,066.26	112.32	37.203			
16,500.00	8,480.00	20,461.35	12,380.00	137.09	141.69	-158.96	-8,040.93	824.08	4,178.58	4,065.01	113.57	36.794			
16,600.00	8,480.00	20,561.35	12,380.00	138.70	143.26	-158.96	-8,140.92	825.07	4,178.58	4,063.76	114.82	36.394			
16,700.00	8,480.00	20,661.35	12,380.00	140.30	144.83	-158.96	-8,240.92	826.06	4,178.58	4,062.51	116.07	36.000			
16,800.00	8,480.00	20,761.35	12,380.00	141.91	146.40	-158.96	-8,340.91	827.05	4,178.57	4,061.25	117.32	35.616			
16,900.00	8,480.00	20,861.35	12,380.00	143.52	147.98	-158.96	-8,440.91	828.03	4,178.57	4,060.00	118.58	35.240			
17,000.00	8,480.00	20,961.35	12,380.00	145.13	149.55	-158.96	-8,540.90	829.02	4,178.57	4,058.74	119.83	34.871			
17,100.00	8,480.00	21,061.35	12,380.00	146.75	151.13	-158.96	-8,640.90	830.01	4,178.57	4,057.49	121.08	34.510			
17,200.00	8,480.00	21,161.35	12,380.00	148.36	152.71	-158.96	-8,740.89	831.00	4,178.57	4,056.23	122.34	34.156			
17,300.00	8,480.00	21,261.35	12,380.00	149.97	154.29	-158.96	-8,840.89	831.98	4,178.57	4,054.97	123.59	33.809			
17,400.00	8,480.00	21,361.35	12,380.00	151.59	155.87	-158.96	-8,940.88	832.97	4,178.56	4,053.71	124.85	33.468			
17,500.00	8,480.00	21,461.35	12,380.00	153.20	157.45	-158.96	-9,040.88	833.96	4,178.56	4,052.45	126.11	33.134			
17,600.00	8,480.00	21,561.35	12,380.00	154.82	159.03	-158.96	-9,140.87	834.95	4,178.56	4,051.19	127.37	32.806			
17,700.00	8,480.00	21,661.35	12,380.00	156.44	160.62	-158.96	-9,240.87	835.94	4,178.56	4,049.93	128.63	32.485			
17,800.00	8,480.00	21,761.35	12,380.00	158.05	162.21	-158.96	-9,340.86	836.92	4,178.56	4,048.66	129.89	32.169			
17,900.00	8,480.00	21,861.35	12,380.00	159.67	163.79	-158.96	-9,440.86	837.91	4,178.55	4,047.40	131.16	31.860			
18,000.00	8,480.00	21,961.35	12,380.00	161.29	165.38	-158.96	-9,540.85	838.90	4,178.55	4,046.13	132.42	31.556			
18,100.00	8,480.00	22,061.35	12,380.00	162.91	166.97	-158.96	-9,640.85	839.89	4,178.55	4,044.87	133.68	31.257			
18,200.00	8,480.00	22,161.35	12,380.00	164.53	168.57	-158.96	-9,740.84	840.88	4,178.55	4,043.60	134.94	30.965			
18,300.00	8,480.00	22,261.35	12,380.00	166.15	170.16	-158.96	-9,840.84	841.86	4,178.55	4,042.34	136.21	30.678			
18,400.00	8,480.00	22,361.35	12,380.00	167.77	171.75	-158.96	-9,940.83	842.85	4,178.55	4,041.08	137.47	30.396			
18,500.00	8,480.00	22,461.35	12,380.00	169.40	173.35	-158.96	-10,040.83	843.84	4,178.54	4,039.81	138.74	30.119			
18,586.18	8,480.00	22,547.53	12,380.00	170.79	174.72	-158.96	-10,127.00	844.69	4,178.54	4,038.72	139.83	29.884			
18,600.00	8,480.00	22,548.65	12,380.00	171.02	174.75	-158.96	-10,128.13	844.70	4,178.56	4,038.65	139.91	29.865			
18,700.00	8,480.00	22,548.65	12,380.00	172.64	174.75	-158.96	-10,128.13	844.70	4,180.06	4,039.61	140.45	29.761			
18,800.00	8,480.00	22,548.65	12,380.00	174.26	174.75	-158.96	-10,128.13	844.70	4,183.95	4,043.01	140.94	29.686			
18,900.00	8,480.00	22,548.65	12,380.00	175.89	174.75	-158.96	-10,128.13	844.70	4,190.22	4,048.86	141.36	29.643			
19,000.00	8,480.00	22,548.65	12,380.00	177.51	174.75	-158.96	-10,128.13	844.70	4,198.87	4,057.16	141.71	29.630			
19,100.00	8,480.00	22,548.65	12,380.00	179.14	174.75	-158.96	-10,128.13	844.70	4,209.87	4,067.88	141.99	29.648			
19,200.00	8,480.00	22,548.65	12,380.00	180.76	174.75	-158.96	-10,128.13	844.70	4,223.21	4,080.99	142.22	29.695			
19,300.00	8,480.00	22,548.65	12,380.00	182.39	174.75	-158.96	-10,128.13	844.70	4,238.87	4,096.49	142.38	29.772			

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	
19,400.00	8,480.00	22,548.65	12,380.00	184.02	174.75	-158.96	-10,128.13	844.70	4,256.83	4,114.34	142.49	29.875	
19,500.00	8,480.00	22,548.65	12,380.00	185.64	174.75	-158.96	-10,128.13	844.70	4,277.04	4,134.52	142.52	30.009	
19,600.00	8,480.00	22,548.65	12,380.00	187.27	174.75	-158.96	-10,128.13	844.70	4,299.49	4,156.98	142.51	30.170	
19,700.00	8,480.00	22,548.65	12,380.00	188.90	174.75	-158.96	-10,128.13	844.70	4,324.14	4,181.69	142.44	30.357	
19,800.00	8,480.00	22,548.65	12,380.00	190.53	174.75	-158.96	-10,128.13	844.70	4,350.94	4,208.63	142.31	30.574	
19,899.80	8,480.00	22,548.65	12,380.00	192.15	174.75	-158.96	-10,128.13	844.70	4,379.80	4,237.67	142.13	30.815	

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 103H
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 103H	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		
1,907.27	1,907.27	1,929.27	1,929.27	6.60	6.68	-97.73	-392.01	-2,886.81	2,913.31	2,903.91	9.40	310.078		
2,000.00	2,000.00	2,016.09	2,016.09	6.94	6.99	-97.73	-391.98	-2,886.83	2,913.33	2,903.48	9.85	295.764		
2,100.00	2,099.99	2,100.00	2,099.99	7.29	7.29	-18.92	-390.96	-2,887.59	2,912.78	2,902.47	10.31	282.529		
2,200.00	2,199.91	2,162.29	2,162.24	7.63	7.51	-18.91	-389.24	-2,888.86	2,910.63	2,899.92	10.71	271.806		
2,300.00	2,299.69	2,235.33	2,235.18	7.98	7.78	-18.89	-386.19	-2,891.13	2,906.95	2,895.82	11.13	261.068		
2,400.00	2,399.27	2,300.00	2,299.69	8.34	8.01	-18.88	-382.55	-2,893.82	2,901.74	2,890.20	11.54	251.451		
2,500.00	2,498.57	2,381.16	2,380.53	8.69	8.30	-18.85	-376.74	-2,898.13	2,894.95	2,882.96	11.99	241.472		
2,600.00	2,597.54	2,453.92	2,452.85	9.06	8.56	-18.82	-370.37	-2,902.85	2,886.63	2,874.22	12.42	232.475		
2,616.45	2,613.78	2,465.88	2,464.72	9.12	8.60	-18.81	-369.21	-2,903.71	2,885.12	2,872.63	12.49	231.033		
2,700.00	2,696.24	2,541.13	2,539.37	9.43	8.88	-18.72	-361.57	-2,909.37	2,877.51	2,864.62	12.89	223.313		
2,800.00	2,794.94	2,640.54	2,637.98	9.81	9.24	-18.60	-351.42	-2,916.90	2,868.46	2,855.07	13.39	214.229		
2,900.00	2,893.64	2,739.95	2,736.58	10.19	9.61	-18.48	-341.26	-2,924.43	2,859.42	2,845.52	13.90	205.755		
3,000.00	2,992.34	2,839.36	2,835.18	10.58	9.98	-18.36	-331.10	-2,931.95	2,850.39	2,835.98	14.41	197.839		
3,100.00	3,091.04	2,938.77	2,933.79	10.97	10.35	-18.24	-320.94	-2,939.48	2,841.38	2,826.46	14.92	190.432		
3,200.00	3,189.74	3,038.19	3,032.39	11.37	10.73	-18.12	-310.79	-2,947.01	2,832.38	2,816.94	15.44	183.490		
3,300.00	3,288.45	3,137.60	3,131.00	11.77	11.11	-18.00	-300.63	-2,954.54	2,823.39	2,807.44	15.95	176.974		
3,400.00	3,387.15	3,237.01	3,229.60	12.17	11.49	-17.87	-290.47	-2,962.06	2,814.41	2,797.94	16.47	170.849		
3,500.00	3,485.85	3,336.42	3,328.21	12.58	11.87	-17.75	-280.32	-2,969.59	2,805.45	2,788.46	16.99	165.082		
3,600.00	3,584.55	3,435.83	3,426.81	12.98	12.26	-17.62	-270.16	-2,977.12	2,796.50	2,778.99	17.52	159.646		
3,700.00	3,683.25	3,535.24	3,525.42	13.39	12.64	-17.50	-260.00	-2,984.64	2,787.57	2,769.53	18.04	154.514		
3,800.00	3,781.95	3,634.66	3,624.02	13.80	13.03	-17.37	-249.85	-2,992.17	2,778.65	2,760.08	18.57	149.662		
3,900.00	3,880.65	3,734.07	3,722.62	14.22	13.42	-17.24	-239.69	-2,999.70	2,769.74	2,750.64	19.09	145.069		
4,000.00	3,979.35	3,833.48	3,821.23	14.63	13.80	-17.12	-229.53	-3,007.23	2,760.84	2,741.22	19.62	140.717		
4,100.00	4,078.05	3,932.89	3,919.83	15.05	14.19	-16.99	-219.37	-3,014.75	2,751.96	2,731.81	20.15	136.586		
4,200.00	4,176.75	4,032.30	4,018.44	15.47	14.58	-16.86	-209.22	-3,022.28	2,743.09	2,722.42	20.68	132.663		
4,300.00	4,275.45	4,131.71	4,117.04	15.89	14.98	-16.73	-199.06	-3,029.81	2,734.24	2,713.04	21.21	128.931		
4,400.00	4,374.15	4,231.13	4,215.65	16.31	15.37	-16.59	-188.90	-3,037.34	2,725.40	2,703.67	21.74	125.378		
4,500.00	4,472.85	4,330.54	4,314.25	16.73	15.76	-16.46	-178.75	-3,044.86	2,716.58	2,694.31	22.27	121.991		
4,600.00	4,571.55	4,429.95	4,412.86	17.15	16.16	-16.33	-168.59	-3,052.39	2,707.77	2,684.97	22.80	118.760		
4,700.00	4,670.25	4,529.36	4,511.46	17.57	16.55	-16.19	-158.43	-3,059.92	2,698.98	2,675.64	23.33	115.675		
4,800.00	4,768.95	4,628.77	4,610.06	18.00	16.94	-16.06	-148.28	-3,067.45	2,690.20	2,666.33	23.87	112.725		
4,900.00	4,867.65	4,728.18	4,708.67	18.42	17.34	-15.92	-138.12	-3,074.97	2,681.43	2,657.03	24.40	109.904		

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 103H
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 103H	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	4,966.35	4,827.60	4,807.27	18.85	17.74	-15.79	-127.96	-3,082.50	2,672.68	2,647.75	24.93	107.202		
5,100.00	5,065.05	4,927.01	4,905.88	19.28	18.13	-15.65	-117.80	-3,090.03	2,663.95	2,638.48	25.46	104.612		
5,200.00	5,163.76	5,026.42	5,004.48	19.70	18.53	-15.51	-107.65	-3,097.56	2,655.23	2,629.23	26.00	102.128		
5,300.00	5,262.46	5,125.83	5,103.09	20.13	18.93	-15.37	-97.49	-3,105.08	2,646.53	2,619.99	26.53	99.744		
5,400.00	5,361.16	5,225.24	5,201.69	20.56	19.32	-15.23	-87.33	-3,112.61	2,637.84	2,610.77	27.07	97.454		
5,500.00	5,459.86	5,324.65	5,300.30	20.99	19.72	-15.09	-77.18	-3,120.14	2,629.17	2,601.56	27.60	95.252		
5,600.00	5,558.56	5,424.07	5,398.90	21.42	20.12	-14.95	-67.02	-3,127.67	2,620.51	2,592.37	28.14	93.134		
5,700.00	5,657.26	5,523.48	5,497.51	21.85	20.52	-14.80	-56.86	-3,135.19	2,611.87	2,583.20	28.67	91.095		
5,800.00	5,755.96	5,622.89	5,596.11	22.28	20.92	-14.66	-46.71	-3,142.72	2,603.25	2,574.04	29.21	89.131		
5,900.00	5,854.66	5,722.30	5,694.71	22.71	21.32	-14.51	-36.55	-3,150.25	2,594.64	2,564.90	29.74	87.238		
6,000.00	5,953.36	5,821.71	5,793.32	23.14	21.72	-14.37	-26.39	-3,157.78	2,586.05	2,555.78	30.28	85.412		
6,100.00	6,052.06	5,921.12	5,891.92	23.57	22.12	-14.22	-16.23	-3,165.30	2,577.48	2,546.67	30.81	83.650		
6,200.00	6,150.76	6,020.54	5,990.53	24.01	22.52	-14.07	-6.08	-3,172.83	2,568.93	2,537.58	31.35	81.948		
6,300.00	6,249.46	6,119.95	6,089.13	24.44	22.92	-13.92	4.08	-3,180.36	2,560.39	2,528.50	31.88	80.305		
6,400.00	6,348.16	6,219.36	6,187.74	24.87	23.32	-13.77	14.24	-3,187.89	2,551.87	2,519.45	32.42	78.715		
6,500.00	6,446.86	6,318.77	6,286.34	25.30	23.72	-13.62	24.39	-3,195.41	2,543.36	2,510.41	32.95	77.178		
6,600.00	6,545.56	6,418.18	6,384.95	25.74	24.12	-13.47	34.55	-3,202.94	2,534.88	2,501.39	33.49	75.691		
6,700.00	6,644.26	6,517.59	6,483.55	26.17	24.52	-13.32	44.71	-3,210.47	2,526.41	2,492.39	34.03	74.251		
6,804.31	6,747.22	6,621.29	6,586.41	26.62	24.94	-13.15	55.30	-3,218.32	2,517.60	2,483.01	34.58	72.797		
6,900.00	6,841.85	6,716.49	6,680.83	27.03	25.32	-12.98	65.03	-3,225.53	2,510.69	2,475.60	35.09	71.540		
7,000.00	6,941.09	6,816.08	6,779.61	27.44	25.72	-12.79	75.20	-3,233.07	2,505.99	2,470.37	35.63	70.342		
7,100.00	7,040.61	6,915.71	6,878.43	27.83	26.13	-12.59	85.38	-3,240.61	2,503.87	2,467.72	36.15	69.256		
7,132.22	7,072.73	6,947.80	6,910.26	27.95	26.26	-12.53	88.66	-3,243.04	2,503.74	2,467.41	36.32	68.930 CC		
7,200.00	7,140.36	7,054.39	7,016.15	28.20	26.68	-12.33	98.45	-3,250.30	2,503.83	2,467.06	36.78	68.083		
7,300.00	7,240.26	7,153.83	7,117.07	28.55	27.29	-12.13	108.76	-3,257.94	2,504.09	2,466.66	37.43	66.907		
7,400.00	7,340.24	7,277.71	7,338.82	28.88	27.86	-12.03	113.59	-3,261.52	2,504.45	2,466.41	38.04	65.838		
7,420.77	7,361.00	7,411.34	7,372.46	28.95	27.98	-90.83	113.91	-3,261.75	2,504.54	2,466.37	38.16	65.629		
7,500.00	7,440.24	7,501.12	7,462.24	29.20	28.28	-90.82	113.99	-3,261.81	2,504.57	2,466.01	38.56	64.955		
7,600.00	7,540.24	7,601.12	7,562.24	29.52	28.61	-90.82	113.99	-3,261.81	2,504.57	2,465.53	39.04	64.156		
7,700.00	7,640.24	7,701.12	7,662.24	29.84	28.94	-90.82	113.99	-3,261.81	2,504.57	2,465.05	39.52	63.375		
7,800.00	7,740.24	7,801.12	7,762.24	30.16	29.28	-90.82	113.99	-3,261.81	2,504.57	2,464.57	40.00	62.613		
7,900.00	7,840.24	7,901.12	7,862.24	30.48	29.61	-90.82	113.99	-3,261.81	2,504.57	2,464.09	40.48	61.867		
7,966.81	7,907.04	7,967.93	7,929.04	30.69	29.84	-90.82	113.99	-3,261.81	2,504.57	2,463.77	40.81	61.378		
8,000.00	7,940.22	8,001.10	7,962.22	30.79	29.95	89.77	113.99	-3,261.81	2,504.57	2,463.60	40.96	61.143		
8,050.00	7,989.94	8,050.64	8,011.75	30.94	30.11	89.88	113.65	-3,261.81	2,504.55	2,463.37	41.19	60.811		
8,096.59	8,035.72	8,096.69	8,057.65	31.07	30.24	89.99	110.22	-3,261.78	2,504.55	2,463.17	41.37	60.536		
8,100.00	8,039.04	8,100.07	8,061.02	31.08	30.25	90.00	109.82	-3,261.77	2,504.55	2,463.16	41.39	60.516		
8,150.00	8,087.13	8,149.99	8,110.25	31.21	30.37	90.13	101.66	-3,261.69	2,504.55	2,462.98	41.57	60.246		
8,200.00	8,133.85	8,200.40	8,159.05	31.33	30.48	90.26	89.11	-3,261.57	2,504.57	2,462.83	41.74	60.002		
8,250.00	8,178.84	8,251.31	8,207.03	31.45	30.58	90.38	72.13	-3,261.40	2,504.61	2,462.71	41.90	59.779		
8,300.00	8,221.77	8,302.75	8,253.78	31.55	30.66	90.50	50.72	-3,261.19	2,504.65	2,462.61	42.04	59.577		
8,350.00	8,262.30	8,354.69	8,298.85	31.65	30.72	90.62	24.92	-3,260.94	2,504.71	2,462.53	42.17	59.390		
8,400.00	8,300.13	8,407.16	8,341.81	31.74	30.77	90.74	-5.16	-3,260.64	2,504.77	2,462.47	42.30	59.216		
8,450.00	8,334.96	8,460.13	8,382.21	31.82	30.80	90.85	-39.38	-3,260.31	2,504.84	2,462.42	42.42	59.049		
8,500.00	8,366.54	8,513.60	8,419.61	31.89	30.82	90.95	-77.56	-3,259.93	2,504.92	2,462.38	42.54	58.884		
8,550.00	8,394.62	8,567.54	8,453.57	31.96	30.83	91.05	-119.45	-3,259.52	2,505.00	2,462.33	42.66	58.717		
8,600.00	8,418.99	8,621.93	8,483.68	32.03	30.83	91.14	-164.72	-3,259.08	2,505.07	2,462.28	42.79	58.544		
8,650.00	8,439.47	8,676.74	8,509.53	32.11	30.82	91.22	-213.02	-3,258.60	2,505.15	2,462.23	42.92	58.362		
8,700.00	8,455.89	8,731.92	8,530.78	32.19	30.81	91.29	-263.92	-3,258.10	2,505.22	2,462.15	43.07	58.166		
8,750.00	8,468.13	8,787.43	8,547.12	32.29	30.79	91.35	-316.95	-3,257.58	2,505.29	2,462.06	43.23	57.955		
8,800.00	8,476.11	8,843.22	8,558.30	32.40	30.79	91.39	-371.58	-3,257.04	2,505.34	2,461.94	43.40	57.728		
8,850.00	8,479.75	8,899.23	8,564.12	32.54	30.80	91.43	-427.26	-3,256.50	2,505.39	2,461.80	43.58	57.486		

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 103H
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 103H	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		
8,866.81	8,480.00	8,918.10	8,564.85	32.59	30.81	91.44	-446.11	-3,256.31	2,505.40	2,461.75	43.65	57.401		
8,900.00	8,480.00	8,952.70	8,565.00	32.70	30.85	91.44	-480.71	-3,255.97	2,505.40	2,461.62	43.78	57.223		
9,000.00	8,480.00	9,052.70	8,565.00	33.09	31.09	91.44	-580.71	-3,254.99	2,505.42	2,461.15	44.27	56.594		
9,100.00	8,480.00	9,152.70	8,565.00	33.57	31.44	91.44	-680.70	-3,254.01	2,505.43	2,460.56	44.87	55.839		
9,200.00	8,480.00	9,252.70	8,565.00	34.14	31.87	91.44	-780.70	-3,253.03	2,505.44	2,459.86	45.58	54.970		
9,300.00	8,480.00	9,352.70	8,565.00	34.79	32.37	91.44	-880.69	-3,252.05	2,505.45	2,459.05	46.39	54.003		
9,400.00	8,480.00	9,452.70	8,565.00	35.50	32.94	91.44	-980.69	-3,251.06	2,505.46	2,458.15	47.31	52.956		
9,500.00	8,480.00	9,552.70	8,565.00	36.28	33.58	91.44	-1,080.68	-3,250.08	2,505.47	2,457.15	48.33	51.846		
9,600.00	8,480.00	9,652.70	8,565.00	37.11	34.29	91.44	-1,180.68	-3,249.10	2,505.48	2,456.05	49.43	50.689		
9,700.00	8,480.00	9,752.70	8,565.00	38.01	35.06	91.44	-1,280.67	-3,248.12	2,505.49	2,454.88	50.62	49.500		
9,800.00	8,480.00	9,852.70	8,565.00	38.95	35.88	91.44	-1,380.67	-3,247.14	2,505.50	2,453.62	51.88	48.295		
9,900.00	8,480.00	9,952.70	8,565.00	39.94	36.76	91.44	-1,480.67	-3,246.16	2,505.52	2,452.30	53.22	47.082		
10,000.00	8,480.00	10,052.70	8,565.00	40.97	37.69	91.44	-1,580.66	-3,245.17	2,505.53	2,450.91	54.62	45.873		
10,100.00	8,480.00	10,152.70	8,565.00	42.04	38.67	91.44	-1,680.66	-3,244.19	2,505.54	2,449.45	56.09	44.674		
10,200.00	8,480.00	10,252.70	8,565.00	43.14	39.69	91.44	-1,780.65	-3,243.21	2,505.55	2,447.94	57.61	43.493		
10,300.00	8,480.00	10,352.70	8,565.00	44.29	40.75	91.44	-1,880.65	-3,242.23	2,505.56	2,446.38	59.18	42.335		
10,400.00	8,480.00	10,452.70	8,565.00	45.46	41.85	91.44	-1,980.64	-3,241.25	2,505.57	2,444.76	60.81	41.204		
10,500.00	8,480.00	10,552.70	8,565.00	46.66	42.99	91.44	-2,080.64	-3,240.26	2,505.58	2,443.10	62.48	40.103		
10,600.00	8,480.00	10,652.70	8,565.00	47.89	44.15	91.44	-2,180.63	-3,239.28	2,505.59	2,441.40	64.19	39.034		
10,700.00	8,480.00	10,752.70	8,565.00	49.14	45.35	91.44	-2,280.63	-3,238.30	2,505.60	2,439.66	65.94	37.998		
10,800.00	8,480.00	10,852.70	8,565.00	50.42	46.57	91.44	-2,380.62	-3,237.32	2,505.62	2,437.89	67.73	36.997		
10,900.00	8,480.00	10,952.70	8,565.00	51.72	47.82	91.44	-2,480.62	-3,236.34	2,505.63	2,436.08	69.54	36.030		
11,000.00	8,480.00	11,052.70	8,565.00	53.03	49.10	91.44	-2,580.61	-3,235.36	2,505.64	2,434.25	71.39	35.098		
11,100.00	8,480.00	11,152.70	8,565.00	54.37	50.39	91.44	-2,680.61	-3,234.37	2,505.65	2,432.38	73.27	34.199		
11,200.00	8,480.00	11,252.70	8,565.00	55.72	51.71	91.44	-2,780.60	-3,233.39	2,505.66	2,430.49	75.17	33.334		
11,300.00	8,480.00	11,352.70	8,565.00	57.09	53.04	91.44	-2,880.60	-3,232.41	2,505.67	2,428.58	77.09	32.502		
11,400.00	8,480.00	11,452.70	8,565.00	58.47	54.40	91.44	-2,980.59	-3,231.43	2,505.68	2,426.64	79.04	31.702		
11,500.00	8,480.00	11,552.70	8,565.00	59.86	55.76	91.44	-3,080.59	-3,230.45	2,505.69	2,424.69	81.01	30.932		
11,600.00	8,480.00	11,652.70	8,565.00	61.27	57.15	91.44	-3,180.58	-3,229.46	2,505.70	2,422.71	82.99	30.191		
11,700.00	8,480.00	11,752.70	8,565.00	62.69	58.54	91.44	-3,280.58	-3,228.48	2,505.72	2,420.72	85.00	29.479		
11,800.00	8,480.00	11,852.70	8,565.00	64.13	59.95	91.44	-3,380.57	-3,227.50	2,505.73	2,418.71	87.02	28.795		
11,900.00	8,480.00	11,952.70	8,565.00	65.57	61.37	91.44	-3,480.57	-3,226.52	2,505.74	2,416.68	89.06	28.137		
12,000.00	8,480.00	12,052.70	8,565.00	67.02	62.80	91.44	-3,580.56	-3,225.54	2,505.75	2,414.64	91.11	27.503		
12,100.00	8,480.00	12,152.70	8,565.00	68.48	64.25	91.44	-3,680.56	-3,224.56	2,505.76	2,412.59	93.17	26.894		
12,200.00	8,480.00	12,252.70	8,565.00	69.95	65.70	91.44	-3,780.55	-3,223.57	2,505.77	2,410.52	95.25	26.308		
12,300.00	8,480.00	12,352.70	8,565.00	71.42	67.16	91.44	-3,880.55	-3,222.59	2,505.78	2,408.45	97.34	25.744		
12,400.00	8,480.00	12,452.70	8,565.00	72.91	68.63	91.44	-3,980.54	-3,221.61	2,505.79	2,406.36	99.43	25.200		
12,500.00	8,480.00	12,552.70	8,565.00	74.40	70.11	91.44	-4,080.54	-3,220.63	2,505.80	2,404.26	101.54	24.677		
12,600.00	8,480.00	12,652.70	8,565.00	75.90	71.60	91.44	-4,180.54	-3,219.65	2,505.81	2,402.15	103.66	24.173		
12,700.00	8,480.00	12,752.70	8,565.00	77.40	73.09	91.44	-4,280.53	-3,218.66	2,505.83	2,400.03	105.79	23.686		
12,800.00	8,480.00	12,852.70	8,565.00	78.91	74.59	91.44	-4,380.53	-3,217.68	2,505.84	2,397.91	107.93	23.218		
12,900.00	8,480.00	12,952.70	8,565.00	80.43	76.10	91.44	-4,480.52	-3,216.70	2,505.85	2,395.77	110.07	22.765		
13,000.00	8,480.00	13,052.70	8,565.00	81.95	77.61	91.44	-4,580.52	-3,215.72	2,505.86	2,393.63	112.23	22.329		
13,100.00	8,480.00	13,152.70	8,565.00	83.47	79.13	91.44	-4,680.51	-3,214.74	2,505.87	2,391.48	114.39	21.907		
13,200.00	8,480.00	13,252.70	8,565.00	85.00	80.65	91.44	-4,780.51	-3,213.76	2,505.88	2,389.33	116.55	21.500		
13,300.00	8,480.00	13,352.70	8,565.00	86.54	82.18	91.44	-4,880.50	-3,212.77	2,505.89	2,387.17	118.72	21.107		
13,400.00	8,480.00	13,452.70	8,565.00	88.08	83.71	91.44	-4,980.50	-3,211.79	2,505.90	2,385.00	120.90	20.726		
13,500.00	8,480.00	13,552.70	8,565.00	89.62	85.25	91.44	-5,080.49	-3,210.81	2,505.91	2,382.83	123.09	20.359		
13,600.00	8,480.00	13,652.70	8,565.00	91.17	86.79	91.44	-5,180.49	-3,209.83	2,505.93	2,380.65	125.28	20.003		
13,700.00	8,480.00	13,752.70	8,565.00	92.72	88.33	91.44	-5,280.48	-3,208.85	2,505.94	2,378.46	127.47	19.659		
13,800.00	8,480.00	13,852.70	8,565.00	94.27	89.88	91.44	-5,380.48	-3,207.86	2,505.95	2,376.27	129.67	19.325		
13,900.00	8,480.00	13,952.70	8,565.00	95.83	91.43	91.44	-5,480.47	-3,206.88	2,505.96	2,374.08	131.88	19.002		

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 103H
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 103H	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	8,480.00	14,052.70	8,565.00	97.39	92.99	91.44	-5,580.47	-3,205.90	2,505.97	2,371.88	134.09	18.689		
14,100.00	8,480.00	14,152.70	8,565.00	98.95	94.55	91.44	-5,680.46	-3,204.92	2,505.98	2,369.68	136.30	18.386		
14,200.00	8,480.00	14,252.70	8,565.00	100.52	96.11	91.44	-5,780.46	-3,203.94	2,505.99	2,367.48	138.52	18.092		
14,300.00	8,480.00	14,352.70	8,565.00	102.09	97.68	91.44	-5,880.45	-3,202.96	2,506.00	2,365.27	140.74	17.806		
14,400.00	8,480.00	14,452.70	8,565.00	103.66	99.24	91.44	-5,980.45	-3,201.97	2,506.01	2,363.05	142.96	17.529		
14,500.00	8,480.00	14,552.70	8,565.00	105.23	100.81	91.44	-6,080.44	-3,200.99	2,506.03	2,360.83	145.19	17.260		
14,600.00	8,480.00	14,652.70	8,565.00	106.81	102.39	91.44	-6,180.44	-3,200.01	2,506.04	2,358.61	147.42	16.999		
14,700.00	8,480.00	14,752.70	8,565.00	108.39	103.96	91.44	-6,280.43	-3,199.03	2,506.05	2,356.39	149.66	16.745		
14,800.00	8,480.00	14,852.70	8,565.00	109.97	105.54	91.44	-6,380.43	-3,198.05	2,506.06	2,354.16	151.89	16.499		
14,900.00	8,480.00	14,952.70	8,565.00	111.55	107.12	91.44	-6,480.42	-3,197.06	2,506.07	2,351.94	154.14	16.259		
15,000.00	8,480.00	15,052.70	8,565.00	113.13	108.70	91.44	-6,580.42	-3,196.08	2,506.08	2,349.70	156.38	16.026		
15,100.00	8,480.00	15,152.70	8,565.00	114.72	110.29	91.44	-6,680.41	-3,195.10	2,506.09	2,347.47	158.62	15.799		
15,200.00	8,480.00	15,252.70	8,565.00	116.31	111.87	91.44	-6,780.41	-3,194.12	2,506.10	2,345.23	160.87	15.578		
15,300.00	8,480.00	15,352.70	8,565.00	117.90	113.46	91.44	-6,880.40	-3,193.14	2,506.11	2,342.99	163.12	15.363		
15,400.00	8,480.00	15,452.70	8,565.00	119.49	115.05	91.44	-6,980.40	-3,192.16	2,506.13	2,340.75	165.38	15.154		
15,500.00	8,480.00	15,552.70	8,565.00	121.08	116.64	91.44	-7,080.40	-3,191.17	2,506.14	2,338.50	167.63	14.950		
15,600.00	8,480.00	15,652.70	8,565.00	122.68	118.23	91.44	-7,180.39	-3,190.19	2,506.15	2,336.26	169.89	14.752		
15,700.00	8,480.00	15,752.70	8,565.00	124.27	119.83	91.44	-7,280.39	-3,189.21	2,506.16	2,334.01	172.15	14.558		
15,800.00	8,480.00	15,852.70	8,565.00	125.87	121.43	91.44	-7,380.38	-3,188.23	2,506.17	2,331.76	174.41	14.369		
15,900.00	8,480.00	15,952.70	8,565.00	127.47	123.02	91.44	-7,480.38	-3,187.25	2,506.18	2,329.51	176.67	14.185		
16,000.00	8,480.00	16,052.70	8,565.00	129.07	124.62	91.44	-7,580.37	-3,186.27	2,506.19	2,327.25	178.94	14.006		
16,100.00	8,480.00	16,152.70	8,565.00	130.67	126.22	91.44	-7,680.37	-3,185.28	2,506.20	2,325.00	181.21	13.831		
16,200.00	8,480.00	16,252.70	8,565.00	132.27	127.82	91.44	-7,780.36	-3,184.30	2,506.21	2,322.74	183.48	13.660		
16,300.00	8,480.00	16,352.70	8,565.00	133.88	129.43	91.44	-7,880.36	-3,183.32	2,506.23	2,320.48	185.75	13.493		
16,400.00	8,480.00	16,452.70	8,565.00	135.48	131.03	91.44	-7,980.35	-3,182.34	2,506.24	2,318.22	188.02	13.330		
16,500.00	8,480.00	16,552.70	8,565.00	137.09	132.64	91.44	-8,080.35	-3,181.36	2,506.25	2,315.96	190.29	13.171		
16,600.00	8,480.00	16,652.70	8,565.00	138.70	134.24	91.44	-8,180.34	-3,180.37	2,506.26	2,313.69	192.57	13.015		
16,700.00	8,480.00	16,752.70	8,565.00	140.30	135.85	91.44	-8,280.34	-3,179.39	2,506.27	2,311.43	194.84	12.863		
16,800.00	8,480.00	16,852.70	8,565.00	141.91	137.46	91.44	-8,380.33	-3,178.41	2,506.28	2,309.16	197.12	12.714		
16,900.00	8,480.00	16,952.70	8,565.00	143.52	139.07	91.44	-8,480.33	-3,177.43	2,506.29	2,306.89	199.40	12.569		
17,000.00	8,480.00	17,052.70	8,565.00	145.13	140.68	91.44	-8,580.32	-3,176.45	2,506.30	2,304.62	201.68	12.427		
17,100.00	8,480.00	17,152.70	8,565.00	146.75	142.29	91.44	-8,680.32	-3,175.47	2,506.31	2,302.35	203.96	12.288		
17,200.00	8,480.00	17,252.70	8,565.00	148.36	143.90	91.44	-8,780.31	-3,174.48	2,506.33	2,300.08	206.24	12.152		
17,300.00	8,480.00	17,352.70	8,565.00	149.97	145.52	91.44	-8,880.31	-3,173.50	2,506.34	2,297.81	208.53	12.019		
17,400.00	8,480.00	17,452.70	8,565.00	151.59	147.13	91.44	-8,980.30	-3,172.52	2,506.35	2,295.53	210.81	11.889		
17,500.00	8,480.00	17,552.70	8,565.00	153.20	148.75	91.44	-9,080.30	-3,171.54	2,506.36	2,293.26	213.10	11.761		
17,600.00	8,480.00	17,652.70	8,565.00	154.82	150.36	91.44	-9,180.29	-3,170.56	2,506.37	2,290.98	215.39	11.637		
17,700.00	8,480.00	17,752.70	8,565.00	156.44	151.98	91.44	-9,280.29	-3,169.57	2,506.38	2,288.71	217.68	11.514		
17,800.00	8,480.00	17,852.70	8,565.00	158.05	153.59	91.44	-9,380.28	-3,168.59	2,506.39	2,286.43	219.96	11.395		
17,900.00	8,480.00	17,952.70	8,565.00	159.67	155.21	91.44	-9,480.28	-3,167.61	2,506.40	2,284.15	222.25	11.277		
18,000.00	8,480.00	18,052.70	8,565.00	161.29	156.83	91.44	-9,580.27	-3,166.63	2,506.41	2,281.87	224.55	11.162		
18,100.00	8,480.00	18,152.70	8,565.00	162.91	158.45	91.44	-9,680.27	-3,165.65	2,506.43	2,279.59	226.84	11.049		
18,200.00	8,480.00	18,252.70	8,565.00	164.53	160.07	91.44	-9,780.27	-3,164.67	2,506.44	2,277.31	229.13	10.939		
18,300.00	8,480.00	18,352.70	8,565.00	166.15	161.69	91.44	-9,880.26	-3,163.68	2,506.45	2,275.02	231.42	10.831		
18,400.00	8,480.00	18,452.70	8,565.00	167.77	163.31	91.44	-9,980.26	-3,162.70	2,506.46	2,272.74	233.72	10.724		
18,500.00	8,480.00	18,552.70	8,565.00	169.40	164.93	91.44	-10,080.25	-3,161.72	2,506.47	2,270.46	236.01	10.620		
18,502.73	8,480.00	18,555.43	8,565.00	169.44	164.98	91.44	-10,082.98	-3,161.69	2,506.47	2,270.39	236.08	10.617		
18,600.00	8,480.00	18,634.72	8,565.00	171.02	166.26	91.44	-10,162.26	-3,160.91	2,506.55	2,268.37	238.18	10.524 ES		
18,700.00	8,480.00	18,634.72	8,565.00	172.64	166.26	91.44	-10,162.26	-3,160.91	2,509.27	2,269.77	239.50	10.477		
18,800.00	8,480.00	18,634.72	8,565.00	174.26	166.26	91.44	-10,162.26	-3,160.91	2,515.96	2,275.53	240.43	10.464 SF		
18,900.00	8,480.00	18,634.72	8,565.00	175.89	166.26	91.44	-10,162.26	-3,160.91	2,526.60	2,285.64	240.96	10.485		
19,000.00	8,480.00	18,634.72	8,565.00	177.51	166.26	91.44	-10,162.26	-3,160.91	2,541.14	2,300.03	241.11	10.539		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 101H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,100.00	8,480.00	18,634.72	8,565.00	179.14	166.26	91.44	-10,162.26	-3,160.91	2,559.50	2,318.62	240.88	10.626	
19,200.00	8,480.00	18,634.72	8,565.00	180.76	166.26	91.44	-10,162.26	-3,160.91	2,581.60	2,341.31	240.29	10.744	
19,300.00	8,480.00	18,634.72	8,565.00	182.39	166.26	91.44	-10,162.26	-3,160.91	2,607.36	2,367.99	239.37	10.893	
19,400.00	8,480.00	18,634.72	8,565.00	184.02	166.26	91.44	-10,162.26	-3,160.91	2,636.66	2,398.52	238.14	11.072	
19,500.00	8,480.00	18,634.72	8,565.00	185.64	166.26	91.44	-10,162.26	-3,160.91	2,669.39	2,432.76	236.62	11.281	
19,600.00	8,480.00	18,634.72	8,565.00	187.27	166.26	91.44	-10,162.26	-3,160.91	2,705.42	2,470.56	234.86	11.519	
19,700.00	8,480.00	18,634.72	8,565.00	188.90	166.26	91.44	-10,162.26	-3,160.91	2,744.62	2,511.74	232.88	11.786	
19,800.00	8,480.00	18,634.72	8,565.00	190.53	166.26	91.44	-10,162.26	-3,160.91	2,786.86	2,556.16	230.70	12.080	
19,899.80	8,480.00	18,634.72	8,565.00	192.15	166.26	91.44	-10,162.26	-3,160.91	2,831.91	2,603.55	228.37	12.401	



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	-97.92	-391.31	-2,811.85	2,838.95					
100.00	100.00	122.00	122.00	0.13	0.20	-97.92	-391.31	-2,811.85	2,838.95	2,838.71	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.92	-391.31	-2,811.85	2,838.95	2,838.21	0.74	3,824.777		
300.00	300.00	322.00	322.00	0.84	0.92	-97.92	-391.31	-2,811.85	2,838.95	2,837.70	1.25	2,274.151		
400.00	400.00	422.00	422.00	1.20	1.28	-97.92	-391.31	-2,811.85	2,838.95	2,837.20	1.75	1,617.680		
500.00	500.00	522.00	522.00	1.56	1.64	-97.92	-391.31	-2,811.85	2,838.95	2,836.69	2.26	1,255.224		
600.00	600.00	622.00	622.00	1.92	2.00	-97.92	-391.31	-2,811.85	2,838.95	2,836.18	2.77	1,025.433		
700.00	700.00	722.00	722.00	2.28	2.36	-97.92	-391.31	-2,811.85	2,838.95	2,835.68	3.28	866.748		
800.00	800.00	822.00	822.00	2.63	2.71	-97.92	-391.31	-2,811.85	2,838.95	2,835.17	3.78	750.589		
900.00	900.00	922.00	922.00	2.99	3.07	-97.92	-391.31	-2,811.85	2,838.95	2,834.66	4.29	661.883		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.92	-391.31	-2,811.85	2,838.95	2,834.16	4.80	591.926		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.92	-391.31	-2,811.85	2,838.95	2,833.65	5.30	535.344		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.92	-391.31	-2,811.85	2,838.95	2,833.14	5.81	488.634		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.92	-391.31	-2,811.85	2,838.95	2,832.63	6.32	449.421		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.92	-391.31	-2,811.85	2,838.95	2,832.13	6.82	416.034		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.92	-391.31	-2,811.85	2,838.95	2,831.62	7.33	387.264		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.92	-391.31	-2,811.85	2,838.95	2,831.11	7.84	362.216		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.92	-391.31	-2,811.85	2,838.95	2,830.61	8.34	340.211		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.92	-391.31	-2,811.85	2,838.95	2,830.10	8.85	320.727		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.92	-391.31	-2,811.85	2,838.95	2,829.59	9.36	303.353		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.92	-391.31	-2,811.85	2,838.95	2,829.09	9.87	287.765		
2,100.00	2,099.99	2,121.99	2,121.99	7.29	7.37	-19.14	-391.31	-2,811.85	2,837.71	2,827.35	10.37	273.718		
2,200.00	2,199.91	2,264.88	2,264.88	7.63	7.88	-19.19	-391.00	-2,811.40	2,833.84	2,822.87	10.97	258.279		
2,300.00	2,299.69	2,558.12	2,557.59	7.98	8.92	-19.23	-381.75	-2,798.07	2,822.73	2,810.80	11.93	236.611		
2,400.00	2,399.27	2,843.71	2,840.67	8.34	9.96	-19.16	-360.48	-2,767.38	2,802.50	2,789.66	12.84	218.278		
2,500.00	2,498.57	3,011.26	3,005.27	8.69	10.59	-19.13	-342.65	-2,741.67	2,774.66	2,761.19	13.47	205.928		
2,600.00	2,597.54	3,106.35	3,098.51	9.06	10.96	-19.20	-332.04	-2,726.36	2,743.98	2,730.03	13.95	196.635		
2,616.45	2,613.78	3,121.93	3,113.79	9.12	11.02	-19.21	-330.30	-2,723.85	2,738.71	2,724.68	14.04	195.133		
2,700.00	2,696.24	3,200.96	3,191.29	9.43	11.34	-19.15	-321.47	-2,711.13	2,711.78	2,697.35	14.44	187.854		
2,800.00	2,794.94	3,295.56	3,284.05	9.81	11.72	-19.07	-310.91	-2,695.89	2,679.55	2,664.63	14.92	179.620		
2,900.00	2,893.64	3,390.16	3,376.81	10.19	12.10	-18.99	-300.35	-2,680.66	2,647.33	2,631.92	15.40	171.868		
3,000.00	2,992.34	3,484.75	3,469.58	10.58	12.49	-18.90	-289.79	-2,665.43	2,615.10	2,599.21	15.89	164.561		
3,100.00	3,091.04	3,579.35	3,562.34	10.97	12.88	-18.82	-279.23	-2,650.19	2,582.89	2,566.51	16.38	157.666		
3,200.00	3,189.74	3,673.95	3,655.10	11.37	13.28	-18.73	-268.67	-2,634.96	2,550.68	2,533.80	16.88	151.151		
3,300.00	3,288.45	3,768.54	3,747.87	11.77	13.68	-18.64	-258.10	-2,619.73	2,518.47	2,501.10	17.37	144.988		
3,400.00	3,387.15	3,863.14	3,840.63	12.17	14.08	-18.55	-247.54	-2,604.49	2,486.28	2,468.41	17.87	139.151		
3,500.00	3,485.85	3,957.74	3,933.39	12.58	14.48	-18.45	-236.98	-2,589.26	2,454.08	2,435.72	18.37	133.618		
3,600.00	3,584.55	4,052.34	4,026.16	12.98	14.89	-18.36	-226.42	-2,574.03	2,421.90	2,403.03	18.87	128.365		
3,700.00	3,683.25	4,146.93	4,118.92	13.39	15.30	-18.26	-215.86	-2,558.80	2,389.72	2,370.35	19.37	123.375		
3,800.00	3,781.95	4,241.53	4,211.68	13.80	15.71	-18.15	-205.30	-2,543.56	2,357.54	2,337.67	19.87	118.628		
3,900.00	3,880.65	4,336.13	4,304.45	14.22	16.13	-18.05	-194.73	-2,528.33	2,325.37	2,305.00	20.38	114.108		
4,000.00	3,979.35	4,430.73	4,397.21	14.63	16.54	-17.94	-184.17	-2,513.10	2,293.22	2,272.33	20.89	109.800		
4,100.00	4,078.05	4,525.32	4,489.97	15.05	16.96	-17.83	-173.61	-2,497.86	2,261.06	2,239.67	21.39	105.691		
4,200.00	4,176.75	4,619.92	4,582.74	15.47	17.38	-17.71	-163.05	-2,482.63	2,228.92	2,207.02	21.90	101.767		
4,300.00	4,275.45	4,714.52	4,675.50	15.89	17.80	-17.60	-152.49	-2,467.40	2,196.78	2,174.37	22.41	98.016		
4,400.00	4,374.15	4,809.12	4,768.26	16.31	18.22	-17.47	-141.93	-2,452.16	2,164.66	2,141.73	22.92	94.428		
4,500.00	4,472.85	4,903.71	4,861.03	16.73	18.64	-17.35	-131.36	-2,436.93	2,132.54	2,109.10	23.44	90.994		
4,600.00	4,571.55	4,998.31	4,953.79	17.15	19.07	-17.22	-120.80	-2,421.70	2,100.43	2,076.48	23.95	87.703		
4,700.00	4,670.25	5,092.91	5,046.55	17.57	19.49	-17.09	-110.24	-2,406.46	2,068.33	2,043.87	24.46	84.547		
4,800.00	4,768.95	5,187.50	5,139.32	18.00	19.92	-16.95	-99.68	-2,391.23	2,036.24	2,011.26	24.98	81.518		
4,900.00	4,867.65	5,282.10	5,232.08	18.42	20.35	-16.81	-89.12	-2,376.00	2,004.16	1,978.67	25.50	78.609		
5,000.00	4,966.35	5,376.70	5,324.85	18.85	20.77	-16.66	-78.56	-2,360.77	1,972.10	1,946.09	26.01	75.814		

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 103H
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 103H	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	5,065.05	5,471.30	5,417.61	19.28	21.20	-16.51	-68.00	-2,345.53	1,940.04	1,913.51	26.53	73.126		
5,200.00	5,163.76	5,565.89	5,510.37	19.70	21.63	-16.36	-57.43	-2,330.30	1,908.00	1,880.95	27.05	70.539		
5,300.00	5,262.46	5,660.49	5,603.14	20.13	22.06	-16.20	-46.87	-2,315.07	1,875.97	1,848.40	27.57	68.047		
5,400.00	5,361.16	5,755.09	5,695.90	20.56	22.49	-16.03	-36.31	-2,299.83	1,843.96	1,815.87	28.09	65.648		
5,500.00	5,459.86	5,849.69	5,788.66	20.99	22.93	-15.86	-25.75	-2,284.60	1,811.96	1,783.35	28.61	63.334		
5,600.00	5,558.56	5,944.28	5,881.43	21.42	23.36	-15.68	-15.19	-2,269.37	1,779.97	1,750.84	29.13	61.102		
5,700.00	5,657.26	6,038.88	5,974.19	21.85	23.79	-15.49	-4.63	-2,254.13	1,748.00	1,718.35	29.65	58.947		
5,800.00	5,755.96	6,133.48	6,066.95	22.28	24.22	-15.30	5.94	-2,238.90	1,716.05	1,685.87	30.18	56.865		
5,900.00	5,854.66	6,228.08	6,159.72	22.71	24.66	-15.10	16.50	-2,223.67	1,684.12	1,653.41	30.70	54.854		
6,000.00	5,953.36	6,322.67	6,252.48	23.14	25.09	-14.89	27.06	-2,208.43	1,652.20	1,620.97	31.23	52.909		
6,100.00	6,052.06	6,417.27	6,345.24	23.57	25.53	-14.68	37.62	-2,193.20	1,620.31	1,588.55	31.75	51.029		
6,200.00	6,150.76	6,511.87	6,438.01	24.01	25.96	-14.45	48.18	-2,177.97	1,588.43	1,556.15	32.28	49.209		
6,300.00	6,249.46	6,606.46	6,530.77	24.44	26.40	-14.22	58.74	-2,162.74	1,556.58	1,523.78	32.81	47.446		
6,400.00	6,348.16	6,701.06	6,623.53	24.87	26.84	-13.98	69.31	-2,147.50	1,524.76	1,491.42	33.34	45.739		
6,500.00	6,446.86	6,795.66	6,716.30	25.30	27.27	-13.72	79.87	-2,132.27	1,492.96	1,459.09	33.87	44.084		
6,600.00	6,545.56	6,881.67	6,800.65	25.74	27.67	-13.49	89.42	-2,118.49	1,461.29	1,426.89	34.40	42.484		
6,700.00	6,644.26	6,953.76	6,871.57	26.17	27.99	-13.31	96.80	-2,107.84	1,430.85	1,395.93	34.92	40.972		
6,804.31	6,747.22	7,029.81	6,946.63	26.62	28.32	-13.14	103.77	-2,097.79	1,400.75	1,365.28	35.46	39.497		
6,900.00	6,841.85	7,100.00	7,016.11	27.03	28.62	-12.92	109.44	-2,089.62	1,375.75	1,339.80	35.96	38.263		
7,000.00	6,941.09	7,175.54	7,091.08	27.44	28.92	-12.72	114.73	-2,081.99	1,353.61	1,317.15	36.46	37.126		
7,100.00	7,040.61	7,251.50	7,166.63	27.83	29.22	-12.54	119.20	-2,075.54	1,335.60	1,298.65	36.96	36.140		
7,200.00	7,140.36	7,328.23	7,243.09	28.20	29.51	-12.39	122.84	-2,070.29	1,321.77	1,284.33	37.44	35.304		
7,300.00	7,240.26	7,400.00	7,314.72	28.55	29.77	-12.28	125.45	-2,066.52	1,312.17	1,274.27	37.90	34.620		
7,400.00	7,340.24	7,483.21	7,397.84	28.88	30.05	-12.19	127.52	-2,063.54	1,306.77	1,268.41	38.37	34.060		
7,420.77	7,361.00	7,500.00	7,414.63	28.95	30.11	-90.97	127.81	-2,063.12	1,306.19	1,267.73	38.46	33.962		
7,500.00	7,440.24	7,561.06	7,475.67	29.20	30.30	-90.94	128.52	-2,062.09	1,304.84	1,266.04	38.80	33.627		
7,584.95	7,525.19	7,632.58	7,547.19	29.47	30.53	-90.94	128.69	-2,061.85	1,304.53	1,265.35	39.18	33.298		
7,600.00	7,540.24	7,647.62	7,562.24	29.52	30.58	-90.94	128.69	-2,061.85	1,304.53	1,265.28	39.25	33.237		
7,700.00	7,640.24	7,747.62	7,662.24	29.84	30.89	-90.94	128.69	-2,061.85	1,304.53	1,264.80	39.72	32.840		
7,800.00	7,740.24	7,847.62	7,762.24	30.16	31.20	-90.94	128.69	-2,061.85	1,304.53	1,264.33	40.20	32.451		
7,900.00	7,840.24	7,947.62	7,862.24	30.48	31.51	-90.94	128.69	-2,061.85	1,304.53	1,263.85	40.68	32.071		
7,966.81	7,907.04	8,014.43	7,929.04	30.69	31.72	-90.94	128.69	-2,061.85	1,304.53	1,263.53	40.99	31.822		
8,000.00	7,940.22	8,047.60	7,962.22	30.79	31.83	-89.68	128.69	-2,061.85	1,304.52	1,263.37	41.15	31.700		
8,050.00	7,989.94	8,097.33	8,011.94	30.94	31.99	-89.90	128.69	-2,061.85	1,304.50	1,263.12	41.38	31.522		
8,064.55	8,004.31	8,111.70	8,026.31	30.98	32.03	-90.00	128.69	-2,061.85	1,304.50	1,263.05	41.45	31.471 CC		
8,100.00	8,039.04	8,146.43	8,061.04	31.08	32.14	-90.30	128.69	-2,061.85	1,304.52	1,262.90	41.62	31.347		
8,150.00	8,087.13	8,195.90	8,110.48	31.21	32.29	-90.82	127.26	-2,061.84	1,304.64	1,262.80	41.84	31.181		
8,200.00	8,133.85	8,246.60	8,160.83	31.33	32.42	-91.34	121.45	-2,061.78	1,304.88	1,262.84	42.05	31.033		
8,250.00	8,178.84	8,298.49	8,211.62	31.45	32.53	-91.87	110.92	-2,061.68	1,305.24	1,263.00	42.24	30.899		
8,300.00	8,221.77	8,351.64	8,262.44	31.55	32.63	-92.38	95.42	-2,061.53	1,305.70	1,263.28	42.42	30.781		
8,350.00	8,262.30	8,406.11	8,312.80	31.65	32.71	-92.88	74.72	-2,061.32	1,306.25	1,263.67	42.58	30.678		
8,400.00	8,300.13	8,461.94	8,362.14	31.74	32.78	-93.37	48.64	-2,061.07	1,306.88	1,264.16	42.72	30.589		
8,450.00	8,334.96	8,519.17	8,409.84	31.82	32.82	-93.83	17.06	-2,060.76	1,307.57	1,264.71	42.85	30.512		
8,500.00	8,366.54	8,577.80	8,455.19	31.89	32.85	-94.27	-20.06	-2,060.40	1,308.29	1,265.32	42.97	30.447		
8,550.00	8,394.62	8,637.83	8,497.43	31.96	32.85	-94.68	-62.66	-2,059.98	1,309.03	1,265.95	43.08	30.389		
8,600.00	8,418.99	8,699.20	8,535.78	32.03	32.84	-95.05	-110.54	-2,059.51	1,309.74	1,266.57	43.18	30.335		
8,650.00	8,439.47	8,761.82	8,569.40	32.11	32.81	-95.38	-163.33	-2,058.99	1,310.41	1,267.14	43.28	30.280		
8,700.00	8,455.89	8,825.58	8,597.51	32.19	32.76	-95.66	-220.52	-2,058.43	1,311.01	1,267.63	43.38	30.219		
8,750.00	8,468.13	8,890.31	8,619.37	32.29	32.71	-95.88	-281.40	-2,057.84	1,311.51	1,268.00	43.51	30.146		
8,800.00	8,476.11	8,955.80	8,634.36	32.40	32.65	-96.04	-345.12	-2,057.21	1,311.88	1,268.24	43.65	30.057		
8,850.00	8,479.75	9,021.84	8,642.01	32.54	32.60	-96.14	-410.67	-2,056.57	1,312.12	1,268.31	43.81	29.949		
8,866.81	8,480.00	9,044.11	8,642.89	32.59	32.59	-96.16	-432.92	-2,056.35	1,312.17	1,268.29	43.87	29.909		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 102H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
8,900.00	8,480.00	9,080.09	8,643.00	32.70	32.58	96.17	-468.90	-2,056.00	1,312.18	1,268.18	44.00	29.820		
9,000.00	8,480.00	9,180.09	8,643.00	33.09	32.62	96.17	-568.89	-2,055.02	1,312.19	1,267.71	44.48	29.502		
9,100.00	8,480.00	9,280.09	8,643.00	33.57	32.79	96.17	-668.89	-2,054.04	1,312.21	1,267.14	45.07	29.117		
9,200.00	8,480.00	9,380.09	8,643.00	34.14	33.11	96.17	-768.88	-2,053.06	1,312.22	1,266.46	45.76	28.673		
9,300.00	8,480.00	9,480.09	8,643.00	34.79	33.55	96.17	-868.88	-2,052.08	1,312.23	1,265.66	46.57	28.178		
9,400.00	8,480.00	9,580.09	8,643.00	35.50	34.08	96.17	-968.88	-2,051.10	1,312.25	1,264.77	47.47	27.642		
9,500.00	8,480.00	9,680.09	8,643.00	36.28	34.69	96.17	-1,068.87	-2,050.12	1,312.26	1,263.79	48.47	27.072		
9,600.00	8,480.00	9,780.09	8,643.00	37.11	35.37	96.17	-1,168.87	-2,049.15	1,312.27	1,262.71	49.56	26.478		
9,700.00	8,480.00	9,880.09	8,643.00	38.01	36.11	96.17	-1,268.86	-2,048.17	1,312.29	1,261.56	50.73	25.867		
9,800.00	8,480.00	9,980.09	8,643.00	38.95	36.92	96.17	-1,368.86	-2,047.19	1,312.30	1,260.32	51.98	25.246		
9,900.00	8,480.00	10,080.09	8,643.00	39.94	37.77	96.17	-1,468.85	-2,046.21	1,312.31	1,259.01	53.30	24.621		
10,000.00	8,480.00	10,180.09	8,643.00	40.97	38.68	96.17	-1,568.85	-2,045.23	1,312.33	1,257.64	54.69	23.996		
10,100.00	8,480.00	10,280.09	8,643.00	42.04	39.63	96.17	-1,668.84	-2,044.25	1,312.34	1,256.20	56.14	23.376		
10,200.00	8,480.00	10,380.09	8,643.00	43.14	40.63	96.17	-1,768.84	-2,043.27	1,312.35	1,254.71	57.65	22.766		
10,300.00	8,480.00	10,480.09	8,643.00	44.29	41.67	96.17	-1,868.83	-2,042.29	1,312.37	1,253.16	59.21	22.166		
10,400.00	8,480.00	10,580.09	8,643.00	45.46	42.74	96.17	-1,968.83	-2,041.31	1,312.38	1,251.57	60.82	21.580		
10,500.00	8,480.00	10,680.09	8,643.00	46.66	43.85	96.17	-2,068.82	-2,040.33	1,312.40	1,249.93	62.47	21.008		
10,600.00	8,480.00	10,780.09	8,643.00	47.89	44.99	96.17	-2,168.82	-2,039.35	1,312.41	1,248.24	64.17	20.454		
10,700.00	8,480.00	10,880.09	8,643.00	49.14	46.17	96.17	-2,268.81	-2,038.37	1,312.42	1,246.52	65.90	19.916		
10,800.00	8,480.00	10,980.09	8,643.00	50.42	47.37	96.17	-2,368.81	-2,037.39	1,312.44	1,244.77	67.67	19.395		
10,900.00	8,480.00	11,080.09	8,643.00	51.72	48.59	96.17	-2,468.80	-2,036.41	1,312.45	1,242.98	69.47	18.892		
11,000.00	8,480.00	11,180.09	8,643.00	53.03	49.85	96.17	-2,568.80	-2,035.43	1,312.46	1,241.16	71.30	18.407		
11,100.00	8,480.00	11,280.09	8,643.00	54.37	51.12	96.17	-2,668.79	-2,034.46	1,312.48	1,239.31	73.16	17.939		
11,200.00	8,480.00	11,380.09	8,643.00	55.72	52.41	96.17	-2,768.79	-2,033.48	1,312.49	1,237.44	75.05	17.488		
11,300.00	8,480.00	11,480.09	8,643.00	57.09	53.73	96.17	-2,868.78	-2,032.50	1,312.50	1,235.54	76.96	17.054		
11,400.00	8,480.00	11,580.09	8,643.00	58.47	55.06	96.17	-2,968.78	-2,031.52	1,312.52	1,233.62	78.89	16.637		
11,500.00	8,480.00	11,680.09	8,643.00	59.86	56.40	96.17	-3,068.77	-2,030.54	1,312.53	1,231.68	80.85	16.235		
11,600.00	8,480.00	11,780.09	8,643.00	61.27	57.77	96.17	-3,168.77	-2,029.56	1,312.54	1,229.73	82.82	15.849		
11,700.00	8,480.00	11,880.09	8,643.00	62.69	59.15	96.17	-3,268.76	-2,028.58	1,312.56	1,227.75	84.81	15.477		
11,800.00	8,480.00	11,980.09	8,643.00	64.13	60.54	96.17	-3,368.76	-2,027.60	1,312.57	1,225.76	86.81	15.119		
11,900.00	8,480.00	12,080.09	8,643.00	65.57	61.94	96.17	-3,468.76	-2,026.62	1,312.58	1,223.75	88.84	14.775		
12,000.00	8,480.00	12,180.09	8,643.00	67.02	63.36	96.17	-3,568.75	-2,025.64	1,312.60	1,221.72	90.87	14.444		
12,100.00	8,480.00	12,280.09	8,643.00	68.48	64.78	96.17	-3,668.75	-2,024.66	1,312.61	1,219.69	92.92	14.126		
12,200.00	8,480.00	12,380.09	8,643.00	69.95	66.22	96.17	-3,768.74	-2,023.68	1,312.62	1,217.64	94.99	13.819		
12,300.00	8,480.00	12,480.09	8,643.00	71.42	67.67	96.17	-3,868.74	-2,022.70	1,312.64	1,215.58	97.06	13.524		
12,400.00	8,480.00	12,580.09	8,643.00	72.91	69.12	96.17	-3,968.73	-2,021.72	1,312.65	1,213.51	99.15	13.240		
12,500.00	8,480.00	12,680.09	8,643.00	74.40	70.59	96.17	-4,068.73	-2,020.75	1,312.67	1,211.42	101.24	12.966		
12,600.00	8,480.00	12,780.09	8,643.00	75.90	72.06	96.17	-4,168.72	-2,019.77	1,312.68	1,209.33	103.35	12.702		
12,700.00	8,480.00	12,880.09	8,643.00	77.40	73.54	96.17	-4,268.72	-2,018.79	1,312.69	1,207.23	105.46	12.447		
12,800.00	8,480.00	12,980.09	8,643.00	78.91	75.03	96.17	-4,368.71	-2,017.81	1,312.71	1,205.12	107.58	12.202		
12,900.00	8,480.00	13,080.09	8,643.00	80.43	76.52	96.17	-4,468.71	-2,016.83	1,312.72	1,203.00	109.72	11.965		
13,000.00	8,480.00	13,180.09	8,643.00	81.95	78.02	96.17	-4,568.70	-2,015.85	1,312.73	1,200.88	111.85	11.736		
13,100.00	8,480.00	13,280.09	8,643.00	83.47	79.53	96.17	-4,668.70	-2,014.87	1,312.75	1,198.75	114.00	11.515		
13,200.00	8,480.00	13,380.09	8,643.00	85.00	81.04	96.17	-4,768.69	-2,013.89	1,312.76	1,196.61	116.15	11.302		
13,300.00	8,480.00	13,480.09	8,643.00	86.54	82.56	96.17	-4,868.69	-2,012.91	1,312.77	1,194.46	118.31	11.096		
13,400.00	8,480.00	13,580.09	8,643.00	88.08	84.08	96.17	-4,968.68	-2,011.93	1,312.79	1,192.31	120.48	10.896		
13,500.00	8,480.00	13,680.09	8,643.00	89.62	85.60	96.17	-5,068.68	-2,010.95	1,312.80	1,190.15	122.65	10.704		
13,600.00	8,480.00	13,780.09	8,643.00	91.17	87.14	96.17	-5,168.67	-2,009.97	1,312.81	1,187.99	124.83	10.517		
13,700.00	8,480.00	13,880.09	8,643.00	92.72	88.67	96.17	-5,268.67	-2,008.99	1,312.83	1,185.82	127.01	10.336		
13,800.00	8,480.00	13,980.09	8,643.00	94.27	90.21	96.17	-5,368.66	-2,008.01	1,312.84	1,183.64	129.20	10.162		
13,900.00	8,480.00	14,080.09	8,643.00	95.83	91.75	96.17	-5,468.66	-2,007.03	1,312.85	1,181.47	131.39	9.992		
14,000.00	8,480.00	14,180.09	8,643.00	97.39	93.30	96.17	-5,568.65	-2,006.06	1,312.87	1,179.28	133.58	9.828		

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 103H
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 103H	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		
14,100.00	8,480.00	14,280.09	8,643.00	98.95	94.85	96.17	-5,668.65	-2,005.08	1,312.88	1,177.10	135.78	9.669		
14,200.00	8,480.00	14,380.09	8,643.00	100.52	96.41	96.17	-5,768.64	-2,004.10	1,312.89	1,174.91	137.99	9.515		
14,300.00	8,480.00	14,480.09	8,643.00	102.09	97.96	96.17	-5,868.64	-2,003.12	1,312.91	1,172.71	140.19	9.365		
14,400.00	8,480.00	14,580.09	8,643.00	103.66	99.52	96.17	-5,968.64	-2,002.14	1,312.92	1,170.52	142.41	9.220		
14,500.00	8,480.00	14,680.09	8,643.00	105.23	101.09	96.17	-6,068.63	-2,001.16	1,312.94	1,168.31	144.62	9.078		
14,600.00	8,480.00	14,780.09	8,643.00	106.81	102.65	96.16	-6,168.63	-2,000.18	1,312.95	1,166.11	146.84	8.941		
14,700.00	8,480.00	14,880.09	8,643.00	108.39	104.22	96.16	-6,268.62	-1,999.20	1,312.96	1,163.90	149.06	8.808		
14,800.00	8,480.00	14,980.09	8,643.00	109.97	105.79	96.16	-6,368.62	-1,998.22	1,312.98	1,161.69	151.29	8.679		
14,900.00	8,480.00	15,080.09	8,643.00	111.55	107.37	96.16	-6,468.61	-1,997.24	1,312.99	1,159.48	153.51	8.553		
15,000.00	8,480.00	15,180.09	8,643.00	113.13	108.94	96.16	-6,568.61	-1,996.26	1,313.00	1,157.26	155.74	8.431		
15,100.00	8,480.00	15,280.09	8,643.00	114.72	110.52	96.16	-6,668.60	-1,995.28	1,313.02	1,155.04	157.98	8.311		
15,200.00	8,480.00	15,380.09	8,643.00	116.31	112.10	96.16	-6,768.60	-1,994.30	1,313.03	1,152.82	160.21	8.196		
15,300.00	8,480.00	15,480.09	8,643.00	117.90	113.68	96.16	-6,868.59	-1,993.32	1,313.04	1,150.59	162.45	8.083		
15,400.00	8,480.00	15,580.09	8,643.00	119.49	115.26	96.16	-6,968.59	-1,992.34	1,313.06	1,148.37	164.69	7.973		
15,500.00	8,480.00	15,680.09	8,643.00	121.08	116.85	96.16	-7,068.58	-1,991.37	1,313.07	1,146.14	166.93	7.866		
15,600.00	8,480.00	15,780.09	8,643.00	122.68	118.44	96.16	-7,168.58	-1,990.39	1,313.08	1,143.91	169.18	7.762		
15,700.00	8,480.00	15,880.09	8,643.00	124.27	120.03	96.16	-7,268.57	-1,989.41	1,313.10	1,141.67	171.42	7.660		
15,800.00	8,480.00	15,980.09	8,643.00	125.87	121.62	96.16	-7,368.57	-1,988.43	1,313.11	1,139.44	173.67	7.561		
15,900.00	8,480.00	16,080.09	8,643.00	127.47	123.21	96.16	-7,468.56	-1,987.45	1,313.12	1,137.20	175.92	7.464		
16,000.00	8,480.00	16,180.09	8,643.00	129.07	124.80	96.16	-7,568.56	-1,986.47	1,313.14	1,134.96	178.17	7.370		
16,100.00	8,480.00	16,280.09	8,643.00	130.67	126.40	96.16	-7,668.55	-1,985.49	1,313.15	1,132.72	180.43	7.278		
16,200.00	8,480.00	16,380.09	8,643.00	132.27	128.00	96.16	-7,768.55	-1,984.51	1,313.16	1,130.48	182.68	7.188		
16,300.00	8,480.00	16,480.09	8,643.00	133.88	129.59	96.16	-7,868.54	-1,983.53	1,313.18	1,128.24	184.94	7.101		
16,400.00	8,480.00	16,580.09	8,643.00	135.48	131.19	96.16	-7,968.54	-1,982.55	1,313.19	1,125.99	187.20	7.015		
16,500.00	8,480.00	16,680.09	8,643.00	137.09	132.80	96.16	-8,068.53	-1,981.57	1,313.20	1,123.75	189.46	6.931		
16,600.00	8,480.00	16,780.09	8,643.00	138.70	134.40	96.16	-8,168.53	-1,980.59	1,313.22	1,121.50	191.72	6.850		
16,700.00	8,480.00	16,880.09	8,643.00	140.30	136.00	96.16	-8,268.53	-1,979.61	1,313.23	1,119.25	193.98	6.770		
16,800.00	8,480.00	16,980.09	8,643.00	141.91	137.60	96.16	-8,368.52	-1,978.63	1,313.25	1,117.00	196.25	6.692		
16,900.00	8,480.00	17,080.09	8,643.00	143.52	139.21	96.16	-8,468.52	-1,977.65	1,313.26	1,114.74	198.51	6.615		
17,000.00	8,480.00	17,180.09	8,643.00	145.13	140.82	96.16	-8,568.51	-1,976.68	1,313.27	1,112.49	200.78	6.541		
17,100.00	8,480.00	17,280.09	8,643.00	146.75	142.42	96.16	-8,668.51	-1,975.70	1,313.29	1,110.24	203.05	6.468		
17,200.00	8,480.00	17,380.09	8,643.00	148.36	144.03	96.16	-8,768.50	-1,974.72	1,313.30	1,107.98	205.32	6.396		
17,300.00	8,480.00	17,480.09	8,643.00	149.97	145.64	96.16	-8,868.50	-1,973.74	1,313.31	1,105.72	207.59	6.326		
17,400.00	8,480.00	17,580.09	8,643.00	151.59	147.25	96.16	-8,968.49	-1,972.76	1,313.33	1,103.46	209.86	6.258		
17,500.00	8,480.00	17,680.09	8,643.00	153.20	148.86	96.16	-9,068.49	-1,971.78	1,313.34	1,101.20	212.14	6.191		
17,600.00	8,480.00	17,780.09	8,643.00	154.82	150.48	96.16	-9,168.48	-1,970.80	1,313.35	1,098.94	214.41	6.125		
17,700.00	8,480.00	17,880.09	8,643.00	156.44	152.09	96.16	-9,268.48	-1,969.82	1,313.37	1,096.68	216.68	6.061		
17,800.00	8,480.00	17,980.09	8,643.00	158.05	153.70	96.16	-9,368.47	-1,968.84	1,313.38	1,094.42	218.96	5.998		
17,900.00	8,480.00	18,080.09	8,643.00	159.67	155.32	96.16	-9,468.47	-1,967.86	1,313.39	1,092.16	221.24	5.937		
18,000.00	8,480.00	18,180.09	8,643.00	161.29	156.93	96.16	-9,568.46	-1,966.88	1,313.41	1,089.89	223.51	5.876		
18,100.00	8,480.00	18,280.09	8,643.00	162.91	158.55	96.16	-9,668.46	-1,965.90	1,313.42	1,087.63	225.79	5.817		
18,200.00	8,480.00	18,380.09	8,643.00	164.53	160.17	96.16	-9,768.45	-1,964.92	1,313.43	1,085.36	228.07	5.759		
18,300.00	8,480.00	18,480.09	8,643.00	166.15	161.78	96.16	-9,868.45	-1,963.94	1,313.45	1,083.10	230.35	5.702		
18,400.00	8,480.00	18,580.09	8,643.00	167.77	163.40	96.16	-9,968.44	-1,962.96	1,313.46	1,080.83	232.63	5.646		
18,500.00	8,480.00	18,680.09	8,643.00	169.40	165.02	96.16	-10,068.44	-1,961.99	1,313.47	1,078.56	234.91	5.591		
18,600.00	8,480.00	18,780.09	8,643.00	171.02	166.64	96.16	-10,168.43	-1,961.01	1,313.49	1,076.29	237.19	5.538		
18,700.00	8,480.00	18,880.09	8,643.00	172.64	168.26	96.16	-10,268.43	-1,960.03	1,313.50	1,074.02	239.48	5.485		
18,800.00	8,480.00	18,980.09	8,643.00	174.26	169.88	96.16	-10,368.42	-1,959.05	1,313.52	1,071.75	241.76	5.433		
18,900.00	8,480.00	19,080.09	8,643.00	175.89	171.50	96.16	-10,468.42	-1,958.07	1,313.53	1,069.48	244.05	5.382		
19,000.00	8,480.00	19,180.09	8,643.00	177.51	173.12	96.16	-10,568.41	-1,957.09	1,313.54	1,067.21	246.33	5.332		
19,100.00	8,480.00	19,280.09	8,643.00	179.14	174.75	96.16	-10,668.41	-1,956.11	1,313.56	1,064.94	248.62	5.283		
19,200.00	8,480.00	19,380.09	8,643.00	180.76	176.37	96.16	-10,768.41	-1,955.13	1,313.57	1,062.67	250.90	5.235		

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 103H
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 103H	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	8,480.00	19,480.09	8,643.00	182.39	177.99	96.16	-10,868.40	-1,954.15	1,313.58	1,060.39	253.19	5.188	
19,400.00	8,480.00	19,580.09	8,643.00	184.02	179.62	96.16	-10,968.40	-1,953.17	1,313.60	1,058.12	255.48	5.142	
19,500.00	8,480.00	19,680.09	8,643.00	185.64	181.24	96.16	-11,068.39	-1,952.19	1,313.61	1,055.84	257.77	5.096	
19,600.00	8,480.00	19,780.09	8,643.00	187.27	182.87	96.16	-11,168.39	-1,951.21	1,313.62	1,053.57	260.05	5.051	
19,700.00	8,480.00	19,880.09	8,643.00	188.90	184.49	96.16	-11,268.38	-1,950.23	1,313.64	1,051.29	262.34	5.007	
19,800.00	8,480.00	19,980.09	8,643.00	190.53	186.12	96.16	-11,368.38	-1,949.25	1,313.65	1,049.02	264.63	4.964	
19,804.48	8,480.00	19,984.56	8,643.00	190.60	186.19	96.16	-11,372.85	-1,949.21	1,313.65	1,048.91	264.74	4.962	
19,899.80	8,480.00	20,078.25	8,643.00	192.15	187.71	96.16	-11,466.54	-1,948.29	1,313.66	1,046.76	266.90	4.922 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 103H
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 103H	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	-97.79	-391.78	-2,862.03	2,888.72					
100.00	100.00	122.00	122.00	0.13	0.20	-97.79	-391.78	-2,862.03	2,888.72	2,888.48	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.79	-391.78	-2,862.03	2,888.72	2,887.98	0.74	3,891.832		
300.00	300.00	322.00	322.00	0.84	0.92	-97.79	-391.78	-2,862.03	2,888.72	2,887.47	1.25	2,314.021		
400.00	400.00	422.00	422.00	1.20	1.28	-97.79	-391.78	-2,862.03	2,888.72	2,886.97	1.75	1,646.041		
500.00	500.00	522.00	522.00	1.56	1.64	-97.79	-391.78	-2,862.03	2,888.72	2,886.46	2.26	1,277.231		
600.00	600.00	622.00	622.00	1.92	2.00	-97.79	-391.78	-2,862.03	2,888.72	2,885.95	2.77	1,043.411		
700.00	700.00	722.00	722.00	2.28	2.36	-97.79	-391.78	-2,862.03	2,888.72	2,885.45	3.28	881.943		
800.00	800.00	822.00	822.00	2.63	2.71	-97.79	-391.78	-2,862.03	2,888.72	2,884.94	3.78	763.748		
900.00	900.00	922.00	922.00	2.99	3.07	-97.79	-391.78	-2,862.03	2,888.72	2,884.43	4.29	673.487		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.79	-391.78	-2,862.03	2,888.72	2,883.93	4.80	602.304		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.79	-391.78	-2,862.03	2,888.72	2,883.42	5.30	544.729		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.79	-391.78	-2,862.03	2,888.72	2,882.91	5.81	497.201		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.79	-391.78	-2,862.03	2,888.72	2,882.41	6.32	457.300		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.79	-391.78	-2,862.03	2,888.72	2,881.90	6.82	423.328		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.79	-391.78	-2,862.03	2,888.72	2,881.39	7.33	394.054		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.79	-391.78	-2,862.03	2,888.72	2,880.89	7.84	368.566		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.79	-391.78	-2,862.03	2,888.72	2,880.38	8.34	346.176		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.79	-391.78	-2,862.03	2,888.72	2,879.87	8.85	326.350		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.79	-391.78	-2,862.03	2,888.72	2,879.36	9.36	308.672		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.79	-391.78	-2,862.03	2,888.72	2,878.86	9.87	292.810		
2,100.00	2,099.99	2,116.51	2,116.51	7.29	7.35	-19.01	-391.75	-2,862.05	2,887.51	2,877.15	10.35	278.903		
2,200.00	2,199.91	2,200.00	2,199.99	7.63	7.65	-19.02	-390.69	-2,862.76	2,884.43	2,873.62	10.81	266.897		
2,300.00	2,299.69	2,266.55	2,266.50	7.98	7.89	-19.03	-388.77	-2,864.06	2,879.71	2,868.50	11.22	256.710		
2,400.00	2,399.27	2,341.51	2,341.34	8.34	8.16	-19.04	-385.44	-2,866.29	2,873.40	2,861.75	11.65	246.645		
2,500.00	2,498.57	2,416.37	2,416.01	8.69	8.42	-19.04	-380.91	-2,869.33	2,865.49	2,853.41	12.08	237.160		
2,600.00	2,597.54	2,500.00	2,499.27	9.06	8.72	-19.02	-374.41	-2,873.69	2,855.99	2,843.45	12.54	227.769		
2,616.45	2,613.78	2,500.00	2,499.27	9.12	8.72	-19.03	-374.41	-2,873.69	2,854.25	2,841.68	12.58	226.914		
2,700.00	2,696.24	2,565.80	2,564.64	9.43	8.96	-18.96	-368.23	-2,877.84	2,845.72	2,832.77	12.95	219.740		
2,800.00	2,794.94	2,640.44	2,638.64	9.81	9.23	-18.86	-360.09	-2,883.30	2,836.30	2,822.91	13.39	211.877		
2,900.00	2,893.64	2,727.92	2,725.15	10.19	9.55	-18.72	-349.31	-2,890.54	2,827.65	2,813.79	13.86	204.008		
3,000.00	2,992.34	2,827.21	2,823.31	10.58	9.92	-18.55	-336.92	-2,898.85	2,819.13	2,804.76	14.37	196.176		
3,100.00	3,091.04	2,926.50	2,921.48	10.97	10.30	-18.38	-324.53	-2,907.16	2,810.63	2,795.74	14.88	188.837		
3,200.00	3,189.74	3,025.79	3,019.64	11.37	10.68	-18.21	-312.15	-2,915.48	2,802.15	2,786.75	15.40	181.951		
3,300.00	3,288.45	3,125.08	3,117.80	11.77	11.06	-18.04	-299.76	-2,923.79	2,793.70	2,777.78	15.92	175.483		
3,400.00	3,387.15	3,224.37	3,215.96	12.17	11.44	-17.87	-287.37	-2,932.11	2,785.27	2,768.83	16.44	169.399		
3,500.00	3,485.85	3,323.66	3,314.12	12.58	11.83	-17.69	-274.98	-2,940.42	2,776.87	2,759.91	16.97	163.670		
3,600.00	3,584.55	3,422.95	3,412.29	12.98	12.22	-17.52	-262.60	-2,948.73	2,768.50	2,751.01	17.49	158.266		
3,700.00	3,683.25	3,522.24	3,510.45	13.39	12.61	-17.34	-250.21	-2,957.05	2,760.15	2,742.13	18.02	153.165		
3,800.00	3,781.95	3,621.52	3,608.61	13.80	13.01	-17.16	-237.82	-2,965.36	2,751.83	2,733.28	18.55	148.342		
3,900.00	3,880.65	3,720.81	3,706.77	14.22	13.40	-16.99	-225.43	-2,973.68	2,743.53	2,724.45	19.08	143.777		
4,000.00	3,979.35	3,820.10	3,804.93	14.63	13.80	-16.81	-213.04	-2,981.99	2,735.26	2,715.65	19.61	139.452		
4,100.00	4,078.05	3,919.39	3,903.10	15.05	14.20	-16.63	-200.66	-2,990.30	2,727.02	2,706.87	20.15	135.348		
4,200.00	4,176.75	4,018.68	4,001.26	15.47	14.60	-16.45	-188.27	-2,998.62	2,718.80	2,698.12	20.68	131.451		
4,300.00	4,275.45	4,117.97	4,099.42	15.89	15.00	-16.26	-175.88	-3,006.93	2,710.62	2,689.40	21.22	127.746		
4,400.00	4,374.15	4,217.26	4,197.58	16.31	15.41	-16.08	-163.49	-3,015.24	2,702.45	2,680.70	21.76	124.220		
4,500.00	4,472.85	4,316.55	4,295.74	16.73	15.81	-15.90	-151.11	-3,023.56	2,694.32	2,672.03	22.29	120.861		
4,600.00	4,571.55	4,415.84	4,393.91	17.15	16.22	-15.71	-138.72	-3,031.87	2,686.22	2,663.39	22.83	117.657		
4,700.00	4,670.25	4,515.13	4,492.07	17.57	16.62	-15.52	-126.33	-3,040.19	2,678.14	2,654.77	23.37	114.599		
4,800.00	4,768.95	4,614.42	4,590.23	18.00	17.03	-15.34	-113.94	-3,048.50	2,670.09	2,646.18	23.91	111.678		
4,900.00	4,867.65	4,713.71	4,688.39	18.42	17.44	-15.15	-101.55	-3,056.81	2,662.07	2,637.63	24.45	108.885		
5,000.00	4,966.35	4,813.00	4,786.55	18.85	17.85	-14.96	-89.17	-3,065.13	2,654.08	2,629.10	24.99	106.211		

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 103H
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 103H	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	5,065.05	4,912.29	4,884.72	19.28	18.26	-14.77	-76.78	-3,073.44	2,646.12	2,620.59	25.53	103.651		
5,200.00	5,163.76	5,011.57	4,982.88	19.70	18.67	-14.57	-64.39	-3,081.76	2,638.19	2,612.12	26.07	101.196		
5,300.00	5,262.46	5,110.86	5,081.04	20.13	19.08	-14.38	-52.00	-3,090.07	2,630.29	2,603.68	26.61	98.841		
5,400.00	5,361.16	5,210.15	5,179.20	20.56	19.49	-14.19	-39.62	-3,098.38	2,622.42	2,595.27	27.15	96.581		
5,500.00	5,459.86	5,309.44	5,277.36	20.99	19.90	-13.99	-27.23	-3,106.70	2,614.58	2,586.89	27.69	94.409		
5,600.00	5,558.56	5,408.73	5,375.53	21.42	20.31	-13.79	-14.84	-3,115.01	2,606.77	2,578.54	28.24	92.321		
5,700.00	5,657.26	5,508.02	5,473.69	21.85	20.73	-13.60	-2.45	-3,123.33	2,598.99	2,570.22	28.78	90.312		
5,800.00	5,755.96	5,607.31	5,571.85	22.28	21.14	-13.40	9.93	-3,131.64	2,591.25	2,561.93	29.32	88.378		
5,900.00	5,854.66	5,706.60	5,670.01	22.71	21.55	-13.20	22.32	-3,139.95	2,583.53	2,553.67	29.86	86.516		
6,000.00	5,953.36	5,805.89	5,768.17	23.14	21.97	-12.99	34.71	-3,148.27	2,575.85	2,545.44	30.40	84.720		
6,100.00	6,052.06	5,905.18	5,866.34	23.57	22.38	-12.79	47.10	-3,156.58	2,568.20	2,537.25	30.95	82.988		
6,200.00	6,150.76	6,004.47	5,964.50	24.01	22.80	-12.59	59.49	-3,164.90	2,560.58	2,529.09	31.49	81.317		
6,300.00	6,249.46	6,103.76	6,062.66	24.44	23.21	-12.38	71.87	-3,173.21	2,552.99	2,520.96	32.03	79.704		
6,400.00	6,348.16	6,203.05	6,160.82	24.87	23.63	-12.18	84.26	-3,181.52	2,545.44	2,512.87	32.57	78.145		
6,500.00	6,446.86	6,302.34	6,258.98	25.30	24.05	-11.97	96.65	-3,189.84	2,537.92	2,504.80	33.12	76.639		
6,600.00	6,545.56	6,401.62	6,357.15	25.74	24.46	-11.76	109.04	-3,198.15	2,530.43	2,496.78	33.66	75.182		
6,700.00	6,644.26	6,500.91	6,455.31	26.17	24.88	-11.55	121.42	-3,206.47	2,522.98	2,488.78	34.20	73.773		
6,804.31	6,747.22	6,604.48	6,557.70	26.62	25.31	-11.33	134.35	-3,215.14	2,515.24	2,480.48	34.76	72.350		
6,900.00	6,841.85	6,699.55	6,651.69	27.03	25.71	-11.10	146.21	-3,223.10	2,509.35	2,474.07	35.28	71.123		
7,000.00	6,941.09	6,798.97	6,749.98	27.44	26.13	-10.86	158.61	-3,231.42	2,505.75	2,469.93	35.82	69.954		
7,100.00	7,040.61	6,891.79	6,861.54	27.83	26.60	-10.59	172.55	-3,240.78	2,504.69	2,468.30	36.39	68.826		
7,192.72	7,133.10	7,059.42	7,008.06	28.17	27.20	-10.29	187.48	-3,250.80	2,504.59	2,467.57	37.02	67.649 CC		
7,200.00	7,140.36	7,071.03	7,019.62	28.20	27.24	-10.27	188.45	-3,251.45	2,504.59	2,467.52	37.07	67.561		
7,300.00	7,240.26	7,231.00	7,179.08	28.55	27.85	-10.07	198.91	-3,258.47	2,504.71	2,466.99	37.72	66.411		
7,400.00	7,340.24	7,391.41	7,339.37	28.88	28.41	-9.97	203.82	-3,261.76	2,505.00	2,466.68	38.32	65.370		
7,420.77	7,361.00	7,424.75	7,372.71	28.95	28.52	-88.76	204.14	-3,261.98	2,505.08	2,466.64	38.44	65.168		
7,500.00	7,440.24	7,514.28	7,462.24	29.20	28.81	-88.76	204.22	-3,262.03	2,505.12	2,466.29	38.83	64.509		
7,600.00	7,540.24	7,614.28	7,562.24	29.52	29.14	-88.76	204.22	-3,262.03	2,505.12	2,465.81	39.31	63.727		
7,700.00	7,640.24	7,714.28	7,662.24	29.84	29.47	-88.76	204.22	-3,262.03	2,505.12	2,465.33	39.79	62.962		
7,800.00	7,740.24	7,814.28	7,762.24	30.16	29.80	-88.76	204.22	-3,262.03	2,505.12	2,464.85	40.27	62.214		
7,900.00	7,840.24	7,914.28	7,862.24	30.48	30.13	-88.76	204.22	-3,262.03	2,505.12	2,464.37	40.74	61.483		
7,966.81	7,907.04	7,981.09	7,929.04	30.69	30.35	-88.76	204.22	-3,262.03	2,505.12	2,464.05	41.06	61.004		
8,000.00	7,940.22	8,014.26	7,962.22	30.79	30.46	91.83	204.22	-3,262.03	2,505.15	2,463.93	41.22	60.774		
8,050.00	7,989.94	8,063.99	8,011.94	30.94	30.62	91.93	204.22	-3,262.03	2,505.32	2,463.87	41.45	60.448 ES		
8,100.00	8,039.04	8,113.08	8,061.04	31.08	30.78	92.10	204.22	-3,262.03	2,505.65	2,463.99	41.66	60.141		
8,150.00	8,087.13	8,161.17	8,109.13	31.21	30.94	92.35	204.22	-3,262.03	2,506.20	2,464.33	41.87	59.855		
8,200.00	8,133.85	8,207.90	8,155.85	31.33	31.10	92.64	204.22	-3,262.03	2,507.03	2,464.96	42.07	59.590		
8,250.00	8,178.84	8,252.89	8,200.84	31.45	31.25	92.97	204.22	-3,262.03	2,508.22	2,465.96	42.26	59.348		
8,300.00	8,221.77	8,295.82	8,243.77	31.55	31.39	93.31	204.22	-3,262.03	2,509.86	2,467.41	42.45	59.130		
8,350.00	8,262.30	8,336.35	8,284.30	31.65	31.52	93.63	204.22	-3,262.03	2,512.05	2,469.42	42.62	58.934		
8,400.00	8,300.13	8,374.17	8,322.13	31.74	31.65	93.91	204.22	-3,262.03	2,514.89	2,472.09	42.80	58.762		
8,450.00	8,334.96	8,409.01	8,356.96	31.82	31.77	94.12	204.22	-3,262.03	2,518.50	2,475.53	42.97	58.613		
8,500.00	8,366.54	8,440.59	8,388.54	31.89	31.87	94.23	204.22	-3,262.03	2,522.96	2,479.82	43.14	58.487		
8,550.00	8,394.62	8,468.67	8,416.62	31.96	31.97	94.21	204.22	-3,262.03	2,528.37	2,485.07	43.31	58.385		
8,600.00	8,418.99	8,493.04	8,440.99	32.03	32.05	94.05	204.22	-3,262.03	2,534.80	2,491.33	43.47	58.306		
8,650.00	8,439.47	8,513.51	8,461.47	32.11	32.11	93.72	204.22	-3,262.03	2,542.30	2,498.66	43.65	58.249		
8,700.00	8,455.89	8,529.93	8,477.89	32.19	32.17	93.20	204.22	-3,262.03	2,550.90	2,507.08	43.82	58.215		
8,750.00	8,468.13	8,542.18	8,490.13	32.29	32.21	92.48	204.22	-3,262.03	2,560.61	2,516.61	43.99	58.204		
8,800.00	8,476.11	8,550.15	8,498.11	32.40	32.24	91.56	204.22	-3,262.03	2,571.39	2,527.22	44.17	58.215		
8,850.00	8,479.75	8,553.80	8,501.75	32.54	32.25	90.43	204.22	-3,262.03	2,583.20	2,538.85	44.35	58.249		
8,866.81	8,480.00	8,554.04	8,502.00	32.59	32.25	90.00	204.22	-3,262.03	2,587.38	2,542.97	44.41	58.265		
8,900.00	8,480.00	8,554.04	8,502.00	32.70	32.25	90.00	204.22	-3,262.03	2,595.94	2,551.42	44.53	58.300		

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 103H
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 103H	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	
9,000.00	8,480.00	8,554.04	8,502.00	33.09	32.25	90.00	204.22	-3,262.03	2,624.11	2,579.18	44.94	58.396		
9,100.00	8,480.00	8,554.04	8,502.00	33.57	32.25	90.00	204.22	-3,262.03	2,655.75	2,610.35	45.40	58.494		
9,200.00	8,480.00	8,554.04	8,502.00	34.14	32.25	90.00	204.22	-3,262.03	2,690.74	2,644.82	45.92	58.602		
9,300.00	8,480.00	8,554.04	8,502.00	34.79	32.25	90.00	204.22	-3,262.03	2,728.94	2,682.47	46.47	58.730		
9,400.00	8,480.00	8,554.04	8,502.00	35.50	32.25	90.00	204.22	-3,262.03	2,770.23	2,723.18	47.05	58.883		
9,500.00	8,480.00	8,554.04	8,502.00	36.28	32.25	90.00	204.22	-3,262.03	2,814.46	2,766.82	47.65	59.069		
9,600.00	8,480.00	8,554.04	8,502.00	37.11	32.25	90.00	204.22	-3,262.03	2,861.51	2,813.25	48.26	59.293		
9,700.00	8,480.00	8,554.04	8,502.00	38.01	32.25	90.00	204.22	-3,262.03	2,911.24	2,862.36	48.88	59.558		
9,800.00	8,480.00	8,554.04	8,502.00	38.95	32.25	90.00	204.22	-3,262.03	2,963.50	2,914.00	49.50	59.866		
9,900.00	8,480.00	8,554.04	8,502.00	39.94	32.25	90.00	204.22	-3,262.03	3,018.18	2,968.06	50.12	60.219		
10,000.00	8,480.00	8,554.04	8,502.00	40.97	32.25	90.00	204.22	-3,262.03	3,075.13	3,024.40	50.73	60.618		
10,100.00	8,480.00	8,554.04	8,502.00	42.04	32.25	90.00	204.22	-3,262.03	3,134.24	3,082.92	51.33	61.063		
10,200.00	8,480.00	8,554.04	8,502.00	43.14	32.25	90.00	204.22	-3,262.03	3,195.39	3,143.48	51.91	61.553		
10,300.00	8,480.00	8,554.04	8,502.00	44.29	32.25	90.00	204.22	-3,262.03	3,258.46	3,205.99	52.48	62.091		
10,400.00	8,480.00	12,609.93	10,619.00	45.46	47.69	130.21	-1,980.47	-3,240.72	3,279.17	3,227.02	52.16	62.873		
10,500.00	8,480.00	12,709.93	10,619.00	46.66	48.70	130.21	-2,080.47	-3,239.75	3,279.19	3,225.75	53.44	61.361		
10,600.00	8,480.00	12,809.93	10,619.00	47.89	49.74	130.21	-2,180.47	-3,238.77	3,279.20	3,224.44	54.76	59.880		
10,700.00	8,480.00	12,909.93	10,619.00	49.14	50.82	130.21	-2,280.46	-3,237.80	3,279.21	3,223.09	56.12	58.434		
10,800.00	8,480.00	13,009.93	10,619.00	50.42	51.93	130.21	-2,380.46	-3,236.82	3,279.23	3,221.72	57.50	57.026		
10,900.00	8,480.00	13,109.93	10,619.00	51.72	53.06	130.21	-2,480.45	-3,235.85	3,279.24	3,220.32	58.92	55.657		
11,000.00	8,480.00	13,209.93	10,619.00	53.03	54.22	130.21	-2,580.45	-3,234.87	3,279.25	3,218.89	60.36	54.327		
11,100.00	8,480.00	13,309.93	10,619.00	54.37	55.41	130.21	-2,680.44	-3,233.89	3,279.27	3,217.44	61.83	53.037		
11,200.00	8,480.00	13,409.93	10,619.00	55.72	56.62	130.21	-2,780.44	-3,232.92	3,279.28	3,215.96	63.32	51.787		
11,300.00	8,480.00	13,509.93	10,619.00	57.09	57.85	130.21	-2,880.43	-3,231.94	3,279.29	3,214.46	64.84	50.578		
11,400.00	8,480.00	13,609.93	10,619.00	58.47	59.10	130.21	-2,980.43	-3,230.97	3,279.31	3,212.94	66.37	49.409		
11,500.00	8,480.00	13,709.93	10,619.00	59.86	60.37	130.21	-3,080.42	-3,229.99	3,279.32	3,211.40	67.92	48.279		
11,600.00	8,480.00	13,809.93	10,619.00	61.27	61.66	130.21	-3,180.42	-3,229.02	3,279.33	3,209.84	69.50	47.187		
11,700.00	8,480.00	13,909.93	10,619.00	62.69	62.96	130.21	-3,280.41	-3,228.04	3,279.35	3,208.26	71.08	46.134		
11,800.00	8,480.00	14,009.93	10,619.00	64.13	64.28	130.21	-3,380.41	-3,227.07	3,279.36	3,206.68	72.68	45.118		
11,900.00	8,480.00	14,109.93	10,619.00	65.57	65.62	130.21	-3,480.40	-3,226.09	3,279.37	3,205.07	74.30	44.137		
12,000.00	8,480.00	14,209.93	10,619.00	67.02	66.97	130.21	-3,580.40	-3,225.12	3,279.39	3,203.46	75.93	43.189		
12,100.00	8,480.00	14,309.93	10,619.00	68.48	68.33	130.21	-3,680.39	-3,224.14	3,279.40	3,201.83	77.57	42.275		
12,200.00	8,480.00	14,409.93	10,619.00	69.95	69.71	130.21	-3,780.39	-3,223.17	3,279.41	3,200.19	79.23	41.392		
12,300.00	8,480.00	14,509.93	10,619.00	71.42	71.10	130.21	-3,880.38	-3,222.19	3,279.43	3,198.53	80.89	40.540		
12,400.00	8,480.00	14,609.93	10,619.00	72.91	72.49	130.21	-3,980.38	-3,221.21	3,279.44	3,196.87	82.57	39.717		
12,500.00	8,480.00	14,709.93	10,619.00	74.40	73.90	130.21	-4,080.37	-3,220.24	3,279.45	3,195.20	84.25	38.923		
12,600.00	8,480.00	14,809.93	10,619.00	75.90	75.32	130.21	-4,180.37	-3,219.26	3,279.47	3,193.52	85.95	38.157		
12,700.00	8,480.00	14,909.93	10,619.00	77.40	76.75	130.21	-4,280.37	-3,218.29	3,279.48	3,191.83	87.65	37.416		
12,800.00	8,480.00	15,009.93	10,619.00	78.91	78.19	130.21	-4,380.36	-3,217.31	3,279.49	3,190.13	89.36	36.699		
12,900.00	8,480.00	15,109.93	10,619.00	80.43	79.63	130.20	-4,480.36	-3,216.34	3,279.51	3,188.43	91.08	36.007		
13,000.00	8,480.00	15,209.93	10,619.00	81.95	81.08	130.20	-4,580.35	-3,215.36	3,279.52	3,186.72	92.81	35.338		
13,100.00	8,480.00	15,309.93	10,619.00	83.47	82.54	130.20	-4,680.35	-3,214.39	3,279.53	3,185.00	94.54	34.690		
13,200.00	8,480.00	15,409.93	10,619.00	85.00	84.01	130.20	-4,780.34	-3,213.41	3,279.55	3,183.27	96.28	34.064		
13,300.00	8,480.00	15,509.93	10,619.00	86.54	85.48	130.20	-4,880.34	-3,212.44	3,279.56	3,181.54	98.02	33.459		
13,400.00	8,480.00	15,609.93	10,619.00	88.08	86.97	130.20	-4,980.33	-3,211.46	3,279.57	3,179.81	99.77	32.872		
13,500.00	8,480.00	15,709.93	10,619.00	89.62	88.45	130.20	-5,080.33	-3,210.49	3,279.59	3,178.06	101.52	32.304		
13,600.00	8,480.00	15,809.93	10,619.00	91.17	89.94	130.20	-5,180.32	-3,209.51	3,279.60	3,176.32	103.28	31.754		
13,700.00	8,480.00	15,909.93	10,619.00	92.72	91.44	130.20	-5,280.32	-3,208.53	3,279.61	3,174.57	105.05	31.220		
13,800.00	8,480.00	16,009.93	10,619.00	94.27	92.94	130.20	-5,380.31	-3,207.56	3,279.63	3,172.81	106.82	30.703		
13,900.00	8,480.00	16,109.93	10,619.00	95.83	94.45	130.20	-5,480.31	-3,206.58	3,279.64	3,171.05	108.59	30.202		
14,000.00	8,480.00	16,209.93	10,619.00	97.39	95.96	130.20	-5,580.30	-3,205.61	3,279.65	3,169.29	110.37	29.716		
14,100.00	8,480.00	16,309.93	10,619.00	98.95	97.48	130.20	-5,680.30	-3,204.63	3,279.67	3,167.52	112.15	29.244		

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 103H
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 103H	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				
14,200.00	8,480.00	16,409.93	10,619.00	100.52	99.00	130.20	-5,780.29	-3,203.66	3,279.68	3,165.75	113.93	28.786				
14,300.00	8,480.00	16,509.93	10,619.00	102.09	100.53	130.20	-5,880.29	-3,202.68	3,279.69	3,163.97	115.72	28.341				
14,400.00	8,480.00	16,609.93	10,619.00	103.66	102.06	130.20	-5,980.28	-3,201.71	3,279.71	3,162.19	117.51	27.909				
14,500.00	8,480.00	16,709.93	10,619.00	105.23	103.59	130.20	-6,080.28	-3,200.73	3,279.72	3,160.41	119.31	27.489				
14,600.00	8,480.00	16,809.93	10,619.00	106.81	105.13	130.20	-6,180.27	-3,199.76	3,279.73	3,158.63	121.11	27.082				
14,700.00	8,480.00	16,909.93	10,619.00	108.39	106.67	130.20	-6,280.27	-3,198.78	3,279.75	3,156.84	122.90	26.685				
14,800.00	8,480.00	17,009.93	10,619.00	109.97	108.21	130.20	-6,380.27	-3,197.81	3,279.76	3,155.05	124.71	26.300				
14,900.00	8,480.00	17,109.93	10,619.00	111.55	109.76	130.20	-6,480.26	-3,196.83	3,279.77	3,153.26	126.51	25.925				
15,000.00	8,480.00	17,209.93	10,619.00	113.13	111.31	130.20	-6,580.26	-3,195.85	3,279.79	3,151.47	128.32	25.559				
15,100.00	8,480.00	17,309.93	10,619.00	114.72	112.86	130.20	-6,680.25	-3,194.88	3,279.80	3,149.67	130.13	25.204				
15,200.00	8,480.00	17,409.93	10,619.00	116.31	114.41	130.20	-6,780.25	-3,193.90	3,279.82	3,147.87	131.94	24.858				
15,300.00	8,480.00	17,509.93	10,619.00	117.90	115.97	130.20	-6,880.24	-3,192.93	3,279.83	3,146.07	133.76	24.521				
15,400.00	8,480.00	17,609.93	10,619.00	119.49	117.53	130.20	-6,980.24	-3,191.95	3,279.84	3,144.27	135.57	24.192				
15,500.00	8,480.00	17,709.93	10,619.00	121.08	119.09	130.20	-7,080.23	-3,190.98	3,279.86	3,142.46	137.39	23.872				
15,600.00	8,480.00	17,809.93	10,619.00	122.68	120.66	130.20	-7,180.23	-3,190.00	3,279.87	3,140.66	139.21	23.560				
15,700.00	8,480.00	17,909.93	10,619.00	124.27	122.23	130.20	-7,280.22	-3,189.03	3,279.88	3,138.85	141.03	23.256				
15,800.00	8,480.00	18,009.93	10,619.00	125.87	123.80	130.20	-7,380.22	-3,188.05	3,279.90	3,137.04	142.86	22.959				
15,900.00	8,480.00	18,109.93	10,619.00	127.47	125.37	130.20	-7,480.21	-3,187.08	3,279.91	3,135.23	144.68	22.670				
16,000.00	8,480.00	18,209.93	10,619.00	129.07	126.94	130.20	-7,580.21	-3,186.10	3,279.92	3,133.42	146.50	22.388				
16,100.00	8,480.00	18,309.93	10,619.00	130.67	128.52	130.20	-7,680.20	-3,185.13	3,279.94	3,131.60	148.33	22.112				
16,200.00	8,480.00	18,409.93	10,619.00	132.27	130.09	130.20	-7,780.20	-3,184.15	3,279.95	3,129.79	150.16	21.843				
16,300.00	8,480.00	18,509.93	10,619.00	133.88	131.67	130.20	-7,880.19	-3,183.17	3,279.96	3,127.97	151.99	21.580				
16,400.00	8,480.00	18,609.93	10,619.00	135.48	133.26	130.20	-7,980.19	-3,182.20	3,279.98	3,126.15	153.82	21.323				
16,500.00	8,480.00	18,709.93	10,619.00	137.09	134.84	130.20	-8,080.18	-3,181.22	3,279.99	3,124.33	155.66	21.072				
16,600.00	8,480.00	18,809.93	10,619.00	138.70	136.42	130.20	-8,180.18	-3,180.25	3,280.00	3,122.51	157.49	20.827				
16,700.00	8,480.00	18,909.93	10,619.00	140.30	138.01	130.20	-8,280.18	-3,179.27	3,280.02	3,120.69	159.32	20.587				
16,800.00	8,480.00	19,009.93	10,619.00	141.91	139.60	130.20	-8,380.17	-3,178.30	3,280.03	3,118.87	161.16	20.353				
16,900.00	8,480.00	19,109.93	10,619.00	143.52	141.18	130.20	-8,480.17	-3,177.32	3,280.04	3,117.05	163.00	20.123				
17,000.00	8,480.00	19,209.93	10,619.00	145.13	142.77	130.20	-8,580.16	-3,176.35	3,280.06	3,115.22	164.83	19.899				
17,100.00	8,480.00	19,309.93	10,619.00	146.75	144.37	130.20	-8,680.16	-3,175.37	3,280.07	3,113.40	166.67	19.680				
17,200.00	8,480.00	19,409.93	10,619.00	148.36	145.96	130.20	-8,780.15	-3,174.40	3,280.08	3,111.57	168.51	19.465				
17,300.00	8,480.00	19,509.93	10,619.00	149.97	147.55	130.20	-8,880.15	-3,173.42	3,280.10	3,109.74	170.35	19.255				
17,400.00	8,480.00	19,609.93	10,619.00	151.59	149.15	130.20	-8,980.14	-3,172.45	3,280.11	3,107.92	172.19	19.049				
17,500.00	8,480.00	19,709.93	10,619.00	153.20	150.75	130.20	-9,080.14	-3,171.47	3,280.12	3,106.09	174.03	18.848				
17,600.00	8,480.00	19,809.93	10,619.00	154.82	152.34	130.20	-9,180.13	-3,170.49	3,280.14	3,104.26	175.88	18.650				
17,700.00	8,480.00	19,909.93	10,619.00	156.44	153.94	130.20	-9,280.13	-3,169.52	3,280.15	3,102.43	177.72	18.457				
17,800.00	8,480.00	20,009.93	10,619.00	158.05	155.54	130.20	-9,380.12	-3,168.54	3,280.16	3,100.60	179.56	18.267				
17,900.00	8,480.00	20,109.93	10,619.00	159.67	157.14	130.20	-9,480.12	-3,167.57	3,280.18	3,098.77	181.41	18.082				
18,000.00	8,480.00	20,209.93	10,619.00	161.29	158.75	130.19	-9,580.11	-3,166.59	3,280.19	3,096.94	183.25	17.900				
18,100.00	8,480.00	20,309.93	10,619.00	162.91	160.35	130.19	-9,680.11	-3,165.62	3,280.20	3,095.11	185.10	17.722				
18,200.00	8,480.00	20,409.93	10,619.00	164.53	161.95	130.19	-9,780.10	-3,164.64	3,280.22	3,093.28	186.94	17.547				
18,300.00	8,480.00	20,509.93	10,619.00	166.15	163.56	130.19	-9,880.10	-3,163.67	3,280.23	3,091.44	188.79	17.375				
18,400.00	8,480.00	20,609.93	10,619.00	167.77	165.17	130.19	-9,980.09	-3,162.69	3,280.24	3,089.61	190.63	17.207				
18,500.00	8,480.00	20,709.93	10,619.00	169.40	166.75	130.19	-10,080.09	-3,161.72	3,280.26	3,087.79	192.46	17.043				
18,502.16	8,480.00	20,712.08	10,619.00	169.43	166.78	130.19	-10,082.25	-3,161.70	3,280.26	3,087.76	192.50	17.040				
18,600.00	8,480.00	20,792.10	10,619.00	171.02	167.92	130.19	-10,162.26	-3,160.91	3,280.32	3,086.27	194.05	16.904				
18,700.00	8,480.00	20,792.10	10,619.00	172.64	167.92	130.19	-10,162.26	-3,160.91	3,282.40	3,087.29	195.11	16.824				
18,800.00	8,480.00	20,792.10	10,619.00	174.26	167.92	130.19	-10,162.26	-3,160.91	3,287.52	3,091.53	195.99	16.774				
18,900.00	8,480.00	20,792.10	10,619.00	175.89	167.92	130.19	-10,162.26	-3,160.91	3,295.67	3,098.96	196.71	16.754 SF				
19,000.00	8,480.00	20,792.10	10,619.00	177.51	167.92	130.19	-10,162.26	-3,160.91	3,306.83	3,109.58	197.25	16.765				
19,100.00	8,480.00	20,792.10	10,619.00	179.14	167.92	130.19	-10,162.26	-3,160.91	3,320.96	3,123.33	197.63	16.804				
19,200.00	8,480.00	20,792.10	10,619.00	180.76	167.92	130.19	-10,162.26	-3,160.91	3,338.02	3,140.18	197.84	16.872				

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 103H
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 103H	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		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
19,300.00	8,480.00	20,792.10	10,619.00	182.39	167.92	130.19	-10,162.26	-3,160.91	3,357.98	3,160.09	197.89	16.969	
19,400.00	8,480.00	20,792.10	10,619.00	184.02	167.92	130.19	-10,162.26	-3,160.91	3,380.78	3,183.00	197.78	17.093	
19,500.00	8,480.00	20,792.10	10,619.00	185.64	167.92	130.19	-10,162.26	-3,160.91	3,406.37	3,208.83	197.54	17.244	
19,600.00	8,480.00	20,792.10	10,619.00	187.27	167.92	130.19	-10,162.26	-3,160.91	3,434.68	3,237.53	197.14	17.422	
19,700.00	8,480.00	20,792.10	10,619.00	188.90	167.92	130.19	-10,162.26	-3,160.91	3,465.64	3,269.02	196.62	17.626	
19,800.00	8,480.00	20,792.10	10,619.00	190.53	167.92	130.19	-10,162.26	-3,160.91	3,499.19	3,303.22	195.97	17.856	
19,899.80	8,480.00	20,792.10	10,619.00	192.15	167.92	130.19	-10,162.26	-3,160.91	3,535.17	3,339.96	195.21	18.109	

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 103H
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 103H	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	-391.55	-2,836.94	2,863.84					
100.00	100.00	122.00	122.00	0.13	0.20	-97.86	-391.55	-2,836.94	2,863.84	2,863.60	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-97.86	-391.55	-2,836.94	2,863.84	2,863.09	0.74	3,858.302		
300.00	300.00	322.00	322.00	0.84	0.92	-97.86	-391.55	-2,836.94	2,863.84	2,862.59	1.25	2,294.085		
400.00	400.00	422.00	422.00	1.20	1.28	-97.86	-391.55	-2,836.94	2,863.84	2,862.08	1.75	1,631.860		
500.00	500.00	522.00	522.00	1.56	1.64	-97.86	-391.55	-2,836.94	2,863.84	2,861.57	2.26	1,266.227		
600.00	600.00	622.00	622.00	1.92	2.00	-97.86	-391.55	-2,836.94	2,863.84	2,861.07	2.77	1,034.422		
700.00	700.00	722.00	722.00	2.28	2.36	-97.86	-391.55	-2,836.94	2,863.84	2,860.56	3.28	874.345		
800.00	800.00	822.00	822.00	2.63	2.71	-97.86	-391.55	-2,836.94	2,863.84	2,860.05	3.78	757.168		
900.00	900.00	922.00	922.00	2.99	3.07	-97.86	-391.55	-2,836.94	2,863.84	2,859.55	4.29	667.684		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-97.86	-391.55	-2,836.94	2,863.84	2,859.04	4.80	597.115		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-97.86	-391.55	-2,836.94	2,863.84	2,858.53	5.30	540.036		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-97.86	-391.55	-2,836.94	2,863.84	2,858.03	5.81	492.917		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-97.86	-391.55	-2,836.94	2,863.84	2,857.52	6.32	453.360		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-97.86	-391.55	-2,836.94	2,863.84	2,857.01	6.82	419.681		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-97.86	-391.55	-2,836.94	2,863.84	2,856.50	7.33	390.659		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-97.86	-391.55	-2,836.94	2,863.84	2,856.00	7.84	365.391		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-97.86	-391.55	-2,836.94	2,863.84	2,855.49	8.34	343.193		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-97.86	-391.55	-2,836.94	2,863.84	2,854.98	8.85	323.538		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-97.86	-391.55	-2,836.94	2,863.84	2,854.48	9.36	306.012		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-97.86	-391.55	-2,836.94	2,863.84	2,853.97	9.87	290.288		
2,100.00	2,099.99	2,121.99	2,121.99	7.29	7.37	-19.07	-391.55	-2,836.94	2,862.60	2,852.23	10.37	276.118		
2,200.00	2,199.91	2,221.91	2,221.91	7.63	7.73	-19.12	-391.55	-2,836.94	2,858.89	2,848.02	10.86	263.137		
2,300.00	2,299.69	2,360.02	2,360.02	7.98	8.23	-19.21	-391.25	-2,836.58	2,852.56	2,841.10	11.46	248.952		
2,400.00	2,399.27	2,633.32	2,632.90	8.34	9.19	-19.29	-382.37	-2,825.67	2,839.54	2,827.17	12.37	229.539		
2,500.00	2,498.57	2,899.57	2,897.11	8.69	10.15	-19.26	-361.89	-2,800.53	2,818.13	2,804.89	13.24	212.869		
2,600.00	2,597.54	3,142.96	3,136.14	9.06	11.07	-19.15	-333.05	-2,765.12	2,788.70	2,774.67	14.03	198.707		
2,616.45	2,613.78	3,158.46	3,151.26	9.12	11.13	-19.15	-330.92	-2,762.51	2,783.26	2,769.15	14.11	197.194		
2,700.00	2,696.24	3,237.10	3,228.03	9.43	11.44	-19.05	-320.15	-2,749.29	2,755.47	2,740.96	14.51	189.851		
2,800.00	2,794.94	3,331.22	3,319.91	9.81	11.82	-18.92	-307.25	-2,733.45	2,722.22	2,707.23	15.00	181.536		
2,900.00	2,893.64	3,425.35	3,411.80	10.19	12.21	-18.78	-294.35	-2,717.62	2,688.98	2,673.50	15.48	173.697		
3,000.00	2,992.34	3,519.47	3,503.68	10.58	12.60	-18.65	-281.46	-2,701.78	2,655.76	2,639.79	15.97	166.299		
3,100.00	3,091.04	3,613.60	3,595.56	10.97	12.99	-18.51	-268.56	-2,685.95	2,622.55	2,606.09	16.46	159.310		
3,200.00	3,189.74	3,707.72	3,687.44	11.37	13.39	-18.36	-255.66	-2,670.11	2,589.35	2,572.39	16.96	152.701		
3,300.00	3,288.45	3,801.85	3,779.33	11.77	13.80	-18.21	-242.76	-2,654.28	2,556.17	2,538.72	17.45	146.445		
3,400.00	3,387.15	3,895.97	3,871.21	12.17	14.21	-18.06	-229.87	-2,638.44	2,523.00	2,505.05	17.96	140.516		
3,500.00	3,485.85	3,990.10	3,963.09	12.58	14.62	-17.91	-216.97	-2,622.61	2,489.86	2,471.40	18.46	134.892		
3,600.00	3,584.55	4,084.22	4,054.98	12.98	15.03	-17.75	-204.07	-2,606.78	2,456.72	2,437.76	18.96	129.551		
3,700.00	3,683.25	4,178.35	4,146.86	13.39	15.45	-17.58	-191.17	-2,590.94	2,423.61	2,404.14	19.47	124.475		
3,800.00	3,781.95	4,272.47	4,238.74	13.80	15.87	-17.41	-178.28	-2,575.11	2,390.51	2,370.53	19.98	119.646		
3,900.00	3,880.65	4,366.60	4,330.63	14.22	16.29	-17.24	-165.38	-2,559.27	2,357.43	2,336.94	20.49	115.047		
4,000.00	3,979.35	4,460.72	4,422.51	14.63	16.72	-17.06	-152.48	-2,543.44	2,324.38	2,303.37	21.00	110.664		
4,100.00	4,078.05	4,554.85	4,514.39	15.05	17.15	-16.88	-139.58	-2,527.60	2,291.34	2,269.82	21.52	106.482		
4,200.00	4,176.75	4,648.98	4,606.28	15.47	17.58	-16.69	-126.69	-2,511.77	2,258.32	2,236.29	22.03	102.489		
4,300.00	4,275.45	4,743.10	4,698.16	15.89	18.01	-16.49	-113.79	-2,495.94	2,225.33	2,202.78	22.55	98.672		
4,400.00	4,374.15	4,837.23	4,790.04	16.31	18.44	-16.29	-100.89	-2,480.10	2,192.36	2,169.29	23.07	95.022		
4,500.00	4,472.85	4,931.35	4,881.92	16.73	18.88	-16.09	-87.99	-2,464.27	2,159.42	2,135.83	23.59	91.527		
4,600.00	4,571.55	5,025.48	4,973.81	17.15	19.31	-15.87	-75.10	-2,448.43	2,126.50	2,102.39	24.12	88.179		
4,700.00	4,670.25	5,119.60	5,065.69	17.57	19.75	-15.65	-62.20	-2,432.60	2,093.61	2,068.97	24.64	84.970		
4,800.00	4,768.95	5,213.73	5,157.57	18.00	20.19	-15.43	-49.30	-2,416.76	2,060.75	2,035.58	25.16	81.890		
4,900.00	4,867.65	5,307.85	5,249.46	18.42	20.63	-15.19	-36.41	-2,400.93	2,027.92	2,002.22	25.69	78.933		
5,000.00	4,966.35	5,401.98	5,341.34	18.85	21.07	-14.95	-23.51	-2,385.09	1,995.11	1,968.90	26.22	76.093		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
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 103H	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	5,065.05	5,496.10	5,433.22	19.28	21.52	-14.70	-10.61	-2,369.26	1,962.35	1,935.60	26.75	73.361		
5,200.00	5,163.76	5,590.23	5,525.11	19.70	21.96	-14.45	2.29	-2,353.43	1,929.61	1,902.33	27.28	70.735		
5,300.00	5,262.46	5,684.35	5,616.99	20.13	22.40	-14.18	15.18	-2,337.59	1,896.92	1,869.10	27.81	68.207		
5,400.00	5,361.16	5,778.48	5,708.87	20.56	22.85	-13.90	28.08	-2,321.76	1,864.26	1,835.91	28.34	65.771		
5,500.00	5,459.86	5,872.60	5,800.76	20.99	23.30	-13.62	40.98	-2,305.92	1,831.64	1,802.76	28.88	63.424		
5,600.00	5,558.56	5,966.73	5,892.64	21.42	23.74	-13.32	53.88	-2,290.09	1,799.06	1,769.64	29.42	61.160		
5,700.00	5,657.26	6,060.86	5,984.52	21.85	24.19	-13.02	66.77	-2,274.25	1,766.53	1,736.57	29.95	58.975		
5,800.00	5,755.96	6,154.98	6,076.41	22.28	24.64	-12.70	79.67	-2,258.42	1,734.04	1,703.55	30.49	56.866		
5,900.00	5,854.66	6,249.11	6,168.29	22.71	25.09	-12.37	92.57	-2,242.58	1,701.61	1,670.58	31.03	54.830		
6,000.00	5,953.36	6,343.23	6,260.17	23.14	25.54	-12.03	105.47	-2,226.75	1,669.23	1,637.65	31.58	52.862		
6,100.00	6,052.06	6,437.36	6,352.05	23.57	25.99	-11.67	118.36	-2,210.92	1,636.90	1,604.78	32.12	50.959		
6,200.00	6,150.76	6,531.48	6,443.94	24.01	26.44	-11.30	131.26	-2,195.08	1,604.64	1,571.97	32.67	49.119		
6,300.00	6,249.46	6,625.61	6,535.82	24.44	26.89	-10.91	144.16	-2,179.25	1,572.44	1,539.22	33.22	47.339		
6,400.00	6,348.16	6,719.26	6,627.24	24.87	27.34	-10.52	156.99	-2,163.49	1,540.30	1,506.53	33.77	45.617		
6,500.00	6,446.86	6,800.00	6,706.24	25.30	27.73	-10.18	167.53	-2,150.56	1,508.95	1,474.64	34.31	43.980		
6,600.00	6,545.56	6,865.00	6,770.08	25.74	28.02	-9.93	175.24	-2,141.09	1,478.99	1,444.15	34.84	42.452		
6,700.00	6,644.26	6,938.95	6,842.95	26.17	28.35	-9.68	183.18	-2,131.34	1,450.51	1,415.14	35.37	41.014		
6,804.31	6,747.22	7,016.92	6,920.03	26.62	28.68	-9.45	190.59	-2,122.24	1,422.34	1,386.44	35.91	39.611		
6,900.00	6,841.85	7,100.00	7,002.41	27.03	29.02	-9.17	197.39	-2,113.90	1,399.10	1,362.70	36.41	38.429		
7,000.00	6,941.09	7,166.13	7,068.14	27.44	29.28	-8.97	201.99	-2,108.25	1,378.63	1,341.73	36.90	37.362		
7,100.00	7,040.61	7,243.80	7,145.48	27.83	29.58	-8.79	206.47	-2,102.75	1,362.26	1,324.87	37.39	36.434		
7,200.00	7,140.36	7,322.17	7,223.66	28.20	29.86	-8.64	209.99	-2,098.43	1,349.97	1,312.10	37.87	35.649		
7,300.00	7,240.26	7,400.00	7,301.38	28.55	30.13	-8.53	212.48	-2,095.37	1,341.79	1,303.46	38.33	35.005		
7,400.00	7,340.24	7,480.28	7,381.62	28.88	30.39	-8.46	214.00	-2,093.50	1,337.73	1,298.95	38.78	34.495		
7,420.77	7,361.00	7,500.00	7,401.34	28.95	30.46	-87.25	214.21	-2,093.25	1,337.41	1,298.54	38.88	34.400		
7,500.00	7,440.24	7,560.90	7,462.24	29.20	30.65	-87.24	214.45	-2,092.94	1,337.00	1,297.79	39.21	34.097		
7,600.00	7,540.24	7,660.90	7,562.24	29.52	30.95	-87.24	214.45	-2,092.94	1,337.00	1,297.32	39.68	33.693		
7,700.00	7,640.24	7,760.90	7,662.24	29.84	31.26	-87.24	214.45	-2,092.94	1,337.00	1,296.85	40.15	33.298		
7,800.00	7,740.24	7,860.90	7,762.24	30.16	31.57	-87.24	214.45	-2,092.94	1,337.00	1,296.37	40.62	32.912		
7,900.00	7,840.24	7,960.90	7,862.24	30.48	31.88	-87.24	214.45	-2,092.94	1,337.00	1,295.90	41.10	32.534		
7,966.81	7,907.04	8,027.70	7,929.04	30.69	32.09	-87.24	214.45	-2,092.94	1,337.00	1,295.59	41.41	32.286 CC		
8,000.00	7,940.22	8,060.88	7,962.22	30.79	32.19	93.37	214.45	-2,092.94	1,337.05	1,295.49	41.57	32.166 ES		
8,050.00	7,989.94	8,110.60	8,011.94	30.94	32.35	93.55	214.45	-2,092.94	1,337.36	1,295.56	41.80	31.994		
8,100.00	8,039.04	8,159.70	8,061.04	31.08	32.50	93.88	214.45	-2,092.94	1,337.98	1,295.95	42.04	31.829		
8,150.00	8,087.13	8,207.79	8,109.13	31.21	32.65	94.34	214.45	-2,092.94	1,339.00	1,296.73	42.27	31.675		
8,200.00	8,133.85	8,254.51	8,155.85	31.33	32.80	94.90	214.45	-2,092.94	1,340.53	1,298.02	42.51	31.533		
8,250.00	8,178.84	8,299.51	8,200.84	31.45	32.94	95.51	214.45	-2,092.94	1,342.73	1,299.98	42.75	31.407		
8,300.00	8,221.77	8,342.43	8,243.77	31.55	33.07	96.14	214.45	-2,092.94	1,345.76	1,302.76	43.00	31.299		
8,350.00	8,262.30	8,382.96	8,284.30	31.65	33.20	96.74	214.45	-2,092.94	1,349.81	1,306.56	43.25	31.213		
8,400.00	8,300.13	8,420.79	8,322.13	31.74	33.32	97.26	214.45	-2,092.94	1,355.06	1,311.56	43.50	31.151		
8,450.00	8,334.96	8,455.62	8,356.96	31.82	33.43	97.65	214.45	-2,092.94	1,361.71	1,317.95	43.76	31.117		
8,500.00	8,366.54	8,487.20	8,388.54	31.89	33.53	97.86	214.45	-2,092.94	1,369.91	1,325.88	44.03	31.114		
8,550.00	8,394.62	8,515.28	8,416.62	31.96	33.62	97.84	214.45	-2,092.94	1,379.80	1,335.50	44.30	31.144		
8,600.00	8,418.99	8,539.65	8,440.99	32.03	33.70	97.54	214.45	-2,092.94	1,391.51	1,346.92	44.59	31.209		
8,650.00	8,439.47	8,560.13	8,461.47	32.11	33.76	96.93	214.45	-2,092.94	1,405.08	1,360.20	44.87	31.312		
8,700.00	8,455.89	8,576.55	8,477.89	32.19	33.81	95.97	214.45	-2,092.94	1,420.54	1,375.37	45.16	31.454		
8,750.00	8,468.13	8,588.79	8,490.13	32.29	33.85	94.64	214.45	-2,092.94	1,437.84	1,392.39	45.45	31.635		
8,800.00	8,476.11	8,596.77	8,498.11	32.40	33.88	92.91	214.45	-2,092.94	1,456.91	1,411.18	45.74	31.854		
8,850.00	8,479.75	8,600.41	8,501.75	32.54	33.89	90.80	214.45	-2,092.94	1,477.60	1,431.59	46.02	32.111		
8,866.81	8,480.00	8,600.66	8,502.00	32.59	33.89	90.00	214.45	-2,092.94	1,484.89	1,438.78	46.11	32.205		
8,900.00	8,480.00	8,600.66	8,502.00	32.70	33.89	90.00	214.45	-2,092.94	1,499.73	1,453.44	46.29	32.401		
9,000.00	8,480.00	8,600.66	8,502.00	33.09	33.89	90.00	214.45	-2,092.94	1,547.89	1,501.05	46.84	33.049		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 502H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,100.00	8,480.00	8,600.66	8,502.00	33.57	33.89	90.00	214.45	-2,092.94	1,600.86	1,553.47	47.38	33.786		
9,200.00	8,480.00	8,600.66	8,502.00	34.14	33.89	90.00	214.45	-2,092.94	1,658.16	1,610.25	47.91	34.608		
9,300.00	8,480.00	8,600.66	8,502.00	34.79	33.89	90.00	214.45	-2,092.94	1,719.38	1,670.96	48.42	35.509		
9,400.00	8,480.00	8,600.66	8,502.00	35.50	33.89	90.00	214.45	-2,092.94	1,784.11	1,735.21	48.90	36.485		
9,500.00	8,480.00	8,600.66	8,502.00	36.28	33.89	90.00	214.45	-2,092.94	1,851.98	1,802.63	49.35	37.529		
9,600.00	8,480.00	8,600.66	8,502.00	37.11	33.89	90.00	214.45	-2,092.94	1,922.65	1,872.89	49.76	38.635		
9,700.00	8,480.00	8,600.66	8,502.00	38.01	33.89	90.00	214.45	-2,092.94	1,995.84	1,945.69	50.15	39.798		
9,800.00	8,480.00	8,600.66	8,502.00	38.95	33.89	90.00	214.45	-2,092.94	2,071.27	2,020.77	50.50	41.014		
9,900.00	8,480.00	8,600.66	8,502.00	39.94	33.89	90.00	214.45	-2,092.94	2,148.70	2,097.88	50.82	42.277		
10,000.00	8,480.00	8,600.66	8,502.00	40.97	33.89	90.00	214.45	-2,092.94	2,227.93	2,176.81	51.12	43.582		
10,100.00	8,480.00	8,600.66	8,502.00	42.04	33.89	90.00	214.45	-2,092.94	2,308.78	2,257.39	51.39	44.926		
10,200.00	8,480.00	8,600.66	8,502.00	43.14	33.89	90.00	214.45	-2,092.94	2,391.07	2,339.44	51.64	46.303		
10,300.00	8,480.00	12,448.08	10,511.00	44.29	46.99	147.00	-1,868.78	-2,041.94	2,395.33	2,350.47	44.86	53.398		
10,400.00	8,480.00	12,548.08	10,511.00	45.46	47.96	147.00	-1,968.78	-2,040.96	2,395.34	2,349.44	45.89	52.195		
10,500.00	8,480.00	12,648.08	10,511.00	46.66	48.96	147.00	-2,068.77	-2,039.99	2,395.35	2,348.39	46.95	51.014		
10,600.00	8,480.00	12,748.08	10,511.00	47.89	50.00	147.00	-2,168.77	-2,039.01	2,395.36	2,347.31	48.05	49.856		
10,700.00	8,480.00	12,848.08	10,511.00	49.14	51.07	147.00	-2,268.76	-2,038.04	2,395.36	2,346.20	49.16	48.725		
10,800.00	8,480.00	12,948.08	10,511.00	50.42	52.17	147.00	-2,368.76	-2,037.06	2,395.37	2,345.07	50.30	47.621		
10,900.00	8,480.00	13,048.08	10,511.00	51.72	53.29	147.00	-2,468.75	-2,036.08	2,395.38	2,343.92	51.46	46.547		
11,000.00	8,480.00	13,148.08	10,511.00	53.03	54.45	147.00	-2,568.75	-2,035.11	2,395.39	2,342.75	52.64	45.501		
11,100.00	8,480.00	13,248.08	10,511.00	54.37	55.63	147.00	-2,668.74	-2,034.13	2,395.40	2,341.56	53.85	44.487		
11,200.00	8,480.00	13,348.08	10,511.00	55.72	56.83	147.00	-2,768.74	-2,033.16	2,395.41	2,340.35	55.06	43.504		
11,300.00	8,480.00	13,448.08	10,511.00	57.09	58.05	147.00	-2,868.73	-2,032.18	2,395.42	2,339.12	56.30	42.550		
11,400.00	8,480.00	13,548.08	10,511.00	58.47	59.29	147.00	-2,968.73	-2,031.21	2,395.43	2,337.88	57.55	41.625		
11,500.00	8,480.00	13,648.08	10,511.00	59.86	60.56	147.00	-3,068.72	-2,030.23	2,395.44	2,336.63	58.81	40.730		
11,600.00	8,480.00	13,748.08	10,511.00	61.27	61.84	147.00	-3,168.72	-2,029.25	2,395.45	2,335.36	60.09	39.864		
11,700.00	8,480.00	13,848.08	10,511.00	62.69	63.13	147.00	-3,268.71	-2,028.28	2,395.46	2,334.08	61.38	39.027		
11,800.00	8,480.00	13,948.08	10,511.00	64.13	64.45	147.00	-3,368.71	-2,027.30	2,395.47	2,332.79	62.68	38.216		
11,900.00	8,480.00	14,048.08	10,511.00	65.57	65.78	147.00	-3,468.70	-2,026.33	2,395.48	2,331.48	64.00	37.432		
12,000.00	8,480.00	14,148.08	10,511.00	67.02	67.12	147.00	-3,568.70	-2,025.35	2,395.49	2,330.17	65.32	36.673		
12,100.00	8,480.00	14,248.08	10,511.00	68.48	68.48	147.00	-3,668.69	-2,024.38	2,395.50	2,328.84	66.65	35.939		
12,200.00	8,480.00	14,348.08	10,511.00	69.95	69.84	147.00	-3,768.69	-2,023.40	2,395.51	2,327.51	67.99	35.231		
12,300.00	8,480.00	14,448.08	10,511.00	71.42	71.23	147.00	-3,868.69	-2,022.43	2,395.51	2,326.17	69.34	34.545		
12,400.00	8,480.00	14,548.08	10,511.00	72.91	72.62	147.00	-3,968.68	-2,021.45	2,395.52	2,324.82	70.70	33.882		
12,500.00	8,480.00	14,648.08	10,511.00	74.40	74.02	147.00	-4,068.68	-2,020.47	2,395.53	2,323.46	72.07	33.239		
12,600.00	8,480.00	14,748.08	10,511.00	75.90	75.43	147.00	-4,168.67	-2,019.50	2,395.54	2,322.10	73.44	32.618		
12,700.00	8,480.00	14,848.08	10,511.00	77.40	76.85	147.00	-4,268.67	-2,018.52	2,395.55	2,320.73	74.82	32.017		
12,800.00	8,480.00	14,948.08	10,511.00	78.91	78.29	147.00	-4,368.66	-2,017.55	2,395.56	2,319.36	76.21	31.435		
12,900.00	8,480.00	15,048.08	10,511.00	80.43	79.72	147.00	-4,468.66	-2,016.57	2,395.57	2,317.97	77.60	30.872		
13,000.00	8,480.00	15,148.08	10,511.00	81.95	81.17	147.00	-4,568.65	-2,015.60	2,395.58	2,316.59	79.00	30.325		
13,100.00	8,480.00	15,248.08	10,511.00	83.47	82.63	147.00	-4,668.65	-2,014.62	2,395.59	2,315.19	80.40	29.797		
13,200.00	8,480.00	15,348.08	10,511.00	85.00	84.09	146.99	-4,768.64	-2,013.64	2,395.60	2,313.80	81.80	29.285		
13,300.00	8,480.00	15,448.08	10,511.00	86.54	85.56	146.99	-4,868.64	-2,012.67	2,395.61	2,312.39	83.21	28.788		
13,400.00	8,480.00	15,548.08	10,511.00	88.08	87.03	146.99	-4,968.63	-2,011.69	2,395.62	2,310.99	84.63	28.307		
13,500.00	8,480.00	15,648.08	10,511.00	89.62	88.52	146.99	-5,068.63	-2,010.72	2,395.63	2,309.58	86.05	27.840		
13,600.00	8,480.00	15,748.08	10,511.00	91.17	90.00	146.99	-5,168.62	-2,009.74	2,395.64	2,308.16	87.47	27.387		
13,700.00	8,480.00	15,848.08	10,511.00	92.72	91.50	146.99	-5,268.62	-2,008.77	2,395.65	2,306.75	88.90	26.948		
13,800.00	8,480.00	15,948.08	10,511.00	94.27	92.99	146.99	-5,368.61	-2,007.79	2,395.66	2,305.33	90.33	26.521		
13,900.00	8,480.00	16,048.08	10,511.00	95.83	94.50	146.99	-5,468.61	-2,006.81	2,395.67	2,303.90	91.77	26.106		
14,000.00	8,480.00	16,148.08	10,511.00	97.39	96.01	146.99	-5,568.60	-2,005.84	2,395.67	2,302.47	93.20	25.704		
14,100.00	8,480.00	16,248.08	10,511.00	98.95	97.52	146.99	-5,668.60	-2,004.86	2,395.68	2,301.04	94.64	25.313		
14,200.00	8,480.00	16,348.08	10,511.00	100.52	99.04	146.99	-5,768.59	-2,003.89	2,395.69	2,299.61	96.08	24.933		

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 103H
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 103H	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		
14,300.00	8,480.00	16,448.08	10,511.00	102.09	100.56	146.99	-5,868.59	-2,002.91	2,395.70	2,298.17	97.53	24.564		
14,400.00	8,480.00	16,548.08	10,511.00	103.66	102.08	146.99	-5,968.59	-2,001.94	2,395.71	2,296.73	98.98	24.204		
14,500.00	8,480.00	16,648.08	10,511.00	105.23	103.61	146.99	-6,068.58	-2,000.96	2,395.72	2,295.29	100.43	23.855		
14,600.00	8,480.00	16,748.08	10,511.00	106.81	105.15	146.99	-6,168.58	-1,999.99	2,395.73	2,293.85	101.88	23.516		
14,700.00	8,480.00	16,848.08	10,511.00	108.39	106.68	146.99	-6,268.57	-1,999.01	2,395.74	2,292.41	103.33	23.185		
14,800.00	8,480.00	16,948.08	10,511.00	109.97	108.22	146.99	-6,368.57	-1,998.03	2,395.75	2,290.96	104.79	22.863		
14,900.00	8,480.00	17,048.08	10,511.00	111.55	109.77	146.99	-6,468.56	-1,997.06	2,395.76	2,289.51	106.25	22.549		
15,000.00	8,480.00	17,148.08	10,511.00	113.13	111.31	146.99	-6,568.56	-1,996.08	2,395.77	2,288.06	107.71	22.244		
15,100.00	8,480.00	17,248.08	10,511.00	114.72	112.86	146.99	-6,668.55	-1,995.11	2,395.78	2,286.61	109.17	21.946		
15,200.00	8,480.00	17,348.08	10,511.00	116.31	114.41	146.99	-6,768.55	-1,994.13	2,395.79	2,285.16	110.63	21.656		
15,300.00	8,480.00	17,448.08	10,511.00	117.90	115.97	146.99	-6,868.54	-1,993.16	2,395.80	2,283.70	112.09	21.373		
15,400.00	8,480.00	17,548.08	10,511.00	119.49	117.53	146.99	-6,968.54	-1,992.18	2,395.81	2,282.25	113.56	21.097		
15,500.00	8,480.00	17,648.08	10,511.00	121.08	119.09	146.99	-7,068.53	-1,991.20	2,395.82	2,280.79	115.02	20.829		
15,600.00	8,480.00	17,748.08	10,511.00	122.68	120.65	146.99	-7,168.53	-1,990.23	2,395.82	2,279.33	116.49	20.567		
15,700.00	8,480.00	17,848.08	10,511.00	124.27	122.21	146.99	-7,268.52	-1,989.25	2,395.83	2,277.87	117.96	20.310		
15,800.00	8,480.00	17,948.08	10,511.00	125.87	123.78	146.99	-7,368.52	-1,988.28	2,395.84	2,276.41	119.43	20.060		
15,900.00	8,480.00	18,048.08	10,511.00	127.47	125.35	146.99	-7,468.51	-1,987.30	2,395.85	2,274.95	120.90	19.816		
16,000.00	8,480.00	18,148.08	10,511.00	129.07	126.92	146.99	-7,568.51	-1,986.33	2,395.86	2,273.49	122.38	19.578		
16,100.00	8,480.00	18,248.08	10,511.00	130.67	128.49	146.98	-7,668.50	-1,985.35	2,395.87	2,272.02	123.85	19.345		
16,200.00	8,480.00	18,348.08	10,511.00	132.27	130.07	146.98	-7,768.50	-1,984.37	2,395.88	2,270.56	125.32	19.117		
16,300.00	8,480.00	18,448.08	10,511.00	133.88	131.65	146.98	-7,868.49	-1,983.40	2,395.89	2,269.09	126.80	18.895		
16,400.00	8,480.00	18,548.08	10,511.00	135.48	133.22	146.98	-7,968.49	-1,982.42	2,395.90	2,267.63	128.27	18.678		
16,500.00	8,480.00	18,648.08	10,511.00	137.09	134.80	146.98	-8,068.49	-1,981.45	2,395.91	2,266.16	129.75	18.465		
16,600.00	8,480.00	18,748.08	10,511.00	138.70	136.39	146.98	-8,168.48	-1,980.47	2,395.92	2,264.69	131.23	18.258		
16,700.00	8,480.00	18,848.08	10,511.00	140.30	137.97	146.98	-8,268.48	-1,979.50	2,395.93	2,263.22	132.71	18.054		
16,800.00	8,480.00	18,948.08	10,511.00	141.91	139.56	146.98	-8,368.47	-1,978.52	2,395.94	2,261.75	134.18	17.856		
16,900.00	8,480.00	19,048.08	10,511.00	143.52	141.14	146.98	-8,468.47	-1,977.55	2,395.95	2,260.28	135.66	17.661		
17,000.00	8,480.00	19,148.08	10,511.00	145.13	142.73	146.98	-8,568.46	-1,976.57	2,395.96	2,258.81	137.14	17.471		
17,100.00	8,480.00	19,248.08	10,511.00	146.75	144.32	146.98	-8,668.46	-1,975.59	2,395.97	2,257.34	138.62	17.284		
17,200.00	8,480.00	19,348.08	10,511.00	148.36	145.91	146.98	-8,768.45	-1,974.62	2,395.98	2,255.87	140.10	17.101		
17,300.00	8,480.00	19,448.08	10,511.00	149.97	147.50	146.98	-8,868.45	-1,973.64	2,395.98	2,254.40	141.58	16.923		
17,400.00	8,480.00	19,548.08	10,511.00	151.59	149.10	146.98	-8,968.44	-1,972.67	2,395.99	2,252.93	143.06	16.748		
17,500.00	8,480.00	19,648.08	10,511.00	153.20	150.69	146.98	-9,068.44	-1,971.69	2,396.00	2,251.46	144.55	16.576		
17,600.00	8,480.00	19,748.08	10,511.00	154.82	152.29	146.98	-9,168.43	-1,970.72	2,396.01	2,249.98	146.03	16.408		
17,700.00	8,480.00	19,848.08	10,511.00	156.44	153.89	146.98	-9,268.43	-1,969.74	2,396.02	2,248.51	147.51	16.243		
17,800.00	8,480.00	19,948.08	10,511.00	158.05	155.49	146.98	-9,368.42	-1,968.76	2,396.03	2,247.04	148.99	16.082		
17,900.00	8,480.00	20,048.08	10,511.00	159.67	157.08	146.98	-9,468.42	-1,967.79	2,396.04	2,245.57	150.48	15.923		
18,000.00	8,480.00	20,148.08	10,511.00	161.29	158.69	146.98	-9,568.41	-1,966.81	2,396.05	2,244.09	151.96	15.768		
18,100.00	8,480.00	20,248.08	10,511.00	162.91	160.29	146.98	-9,668.41	-1,965.84	2,396.06	2,242.62	153.44	15.615		
18,200.00	8,480.00	20,348.08	10,511.00	164.53	161.89	146.98	-9,768.40	-1,964.86	2,396.07	2,241.14	154.92	15.466		
18,300.00	8,480.00	20,448.08	10,511.00	166.15	163.49	146.98	-9,868.40	-1,963.89	2,396.08	2,239.67	156.41	15.319		
18,400.00	8,480.00	20,548.08	10,511.00	167.77	165.10	146.98	-9,968.39	-1,962.91	2,396.09	2,238.20	157.89	15.176		
18,500.00	8,480.00	20,648.08	10,511.00	169.40	166.70	146.98	-10,068.39	-1,961.93	2,396.10	2,236.72	159.38	15.034		
18,600.00	8,480.00	20,748.08	10,511.00	171.02	168.31	146.98	-10,168.39	-1,960.96	2,396.11	2,235.25	160.86	14.896		
18,700.00	8,480.00	20,848.08	10,511.00	172.64	169.92	146.98	-10,268.38	-1,959.98	2,396.12	2,233.77	162.34	14.760		
18,800.00	8,480.00	20,948.08	10,511.00	174.26	171.52	146.98	-10,368.38	-1,959.01	2,396.13	2,232.30	163.83	14.626		
18,900.00	8,480.00	21,048.08	10,511.00	175.89	173.13	146.98	-10,468.37	-1,958.03	2,396.13	2,230.82	165.31	14.495		
19,000.00	8,480.00	21,148.08	10,511.00	177.51	174.74	146.97	-10,568.37	-1,957.06	2,396.14	2,229.35	166.79	14.366		
19,100.00	8,480.00	21,248.08	10,511.00	179.14	176.35	146.97	-10,668.36	-1,956.08	2,396.15	2,227.88	168.28	14.239		
19,200.00	8,480.00	21,348.08	10,511.00	180.76	177.96	146.97	-10,768.36	-1,955.10	2,396.16	2,226.40	169.76	14.115		
19,300.00	8,480.00	21,448.08	10,511.00	182.39	179.58	146.97	-10,868.35	-1,954.13	2,396.17	2,224.93	171.25	13.993		
19,400.00	8,480.00	21,548.08	10,511.00	184.02	181.19	146.97	-10,968.35	-1,953.15	2,396.18	2,223.45	172.73	13.872		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 502H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,500.00	8,480.00	21,648.08	10,511.00	185.64	182.80	146.97	-11,068.34	-1,952.18	2,396.19	2,221.98	174.21	13.754		
19,600.00	8,480.00	21,748.08	10,511.00	187.27	184.42	146.97	-11,168.34	-1,951.20	2,396.20	2,220.50	175.70	13.638		
19,700.00	8,480.00	21,848.08	10,511.00	188.90	186.03	146.97	-11,268.33	-1,950.23	2,396.21	2,219.03	177.18	13.524		
19,800.00	8,480.00	21,948.08	10,511.00	190.53	187.65	146.97	-11,368.33	-1,949.25	2,396.22	2,217.56	178.66	13.412		
19,802.31	8,480.00	21,950.39	10,511.00	190.56	187.68	146.97	-11,370.64	-1,949.23	2,396.22	2,217.52	178.70	13.409		
19,899.80	8,480.00	22,046.30	10,511.00	192.15	189.23	146.97	-11,466.54	-1,948.29	2,396.23	2,216.10	180.13	13.303 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 103H
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 103H	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	-2,875.12	2,892.54					
100.00	100.00	122.00	122.00	0.13	0.20	-96.29	-316.95	-2,875.12	2,892.54	2,892.30	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.29	-316.95	-2,875.12	2,892.54	2,891.80	0.74	3,896.974		
300.00	300.00	322.00	322.00	0.84	0.92	-96.29	-316.95	-2,875.12	2,892.54	2,891.29	1.25	2,317.079		
400.00	400.00	422.00	422.00	1.20	1.28	-96.29	-316.95	-2,875.12	2,892.54	2,890.79	1.75	1,648.216		
500.00	500.00	522.00	522.00	1.56	1.64	-96.29	-316.95	-2,875.12	2,892.54	2,890.28	2.26	1,278.918		
600.00	600.00	622.00	622.00	1.92	2.00	-96.29	-316.95	-2,875.12	2,892.54	2,889.77	2.77	1,044.790		
700.00	700.00	722.00	722.00	2.28	2.36	-96.29	-316.95	-2,875.12	2,892.54	2,889.26	3.28	883.109		
800.00	800.00	822.00	822.00	2.63	2.71	-96.29	-316.95	-2,875.12	2,892.54	2,888.76	3.78	764.757		
900.00	900.00	922.00	922.00	2.99	3.07	-96.29	-316.95	-2,875.12	2,892.54	2,888.25	4.29	674.377		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.29	-316.95	-2,875.12	2,892.54	2,887.74	4.80	603.100		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.29	-316.95	-2,875.12	2,892.54	2,887.24	5.30	545.449		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.29	-316.95	-2,875.12	2,892.54	2,886.73	5.81	497.858		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.29	-316.95	-2,875.12	2,892.54	2,886.22	6.32	457.904		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.29	-316.95	-2,875.12	2,892.54	2,885.72	6.82	423.887		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.29	-316.95	-2,875.12	2,892.54	2,885.21	7.33	394.574		
1,600.00	1,600.00	1,622.00	1,622.00	5.50	5.58	-96.29	-316.95	-2,875.12	2,892.54	2,884.70	7.84	369.053		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-96.29	-316.95	-2,875.12	2,892.54	2,884.20	8.34	346.633		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-96.29	-316.95	-2,875.12	2,892.54	2,883.69	8.85	326.781		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-96.29	-316.95	-2,875.12	2,892.54	2,883.18	9.36	309.080		
1,907.26	1,907.26	1,929.26	1,929.26	6.60	6.68	-96.29	-316.95	-2,875.12	2,892.54	2,883.14	9.40	307.868		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-96.29	-316.95	-2,875.12	2,892.62	2,882.81	9.81	294.884		
2,100.00	2,099.99	2,083.90	2,083.90	7.29	7.24	-17.48	-316.28	-2,875.75	2,892.10	2,881.83	10.27	281.653		
2,200.00	2,199.91	2,152.66	2,152.66	7.63	7.48	-17.48	-314.73	-2,877.21	2,890.21	2,879.52	10.68	270.543		
2,300.00	2,299.69	2,221.39	2,221.26	7.98	7.72	-17.46	-312.27	-2,879.51	2,886.90	2,875.80	11.10	260.140		
2,400.00	2,399.27	2,300.00	2,299.69	8.34	8.00	-17.44	-308.36	-2,883.17	2,882.21	2,870.67	11.54	249.805		
2,500.00	2,498.57	2,358.70	2,358.17	8.69	8.21	-17.43	-304.67	-2,886.63	2,876.05	2,864.13	11.93	241.135		
2,600.00	2,597.54	2,427.26	2,426.37	9.06	8.46	-17.41	-299.53	-2,891.44	2,868.51	2,856.17	12.34	232.408		
2,616.45	2,613.78	2,438.54	2,437.57	9.12	8.50	-17.41	-298.60	-2,892.31	2,867.14	2,854.73	12.41	231.008		
2,700.00	2,696.24	2,500.00	2,498.57	9.43	8.72	-17.35	-293.10	-2,897.46	2,860.44	2,847.67	12.77	223.993		
2,800.00	2,794.94	2,566.29	2,564.21	9.81	8.97	-17.26	-286.37	-2,903.76	2,853.42	2,840.23	13.18	216.462		
2,900.00	2,893.64	2,665.83	2,662.70	10.19	9.33	-17.12	-275.76	-2,913.70	2,846.88	2,833.20	13.69	207.987		
3,000.00	2,992.34	2,765.38	2,761.18	10.58	9.71	-16.99	-265.15	-2,923.64	2,840.37	2,826.17	14.20	200.070		
3,100.00	3,091.04	2,864.93	2,859.66	10.97	10.08	-16.85	-254.53	-2,933.58	2,833.87	2,819.16	14.71	192.661		
3,200.00	3,189.74	2,964.48	2,958.14	11.37	10.47	-16.71	-243.92	-2,943.52	2,827.39	2,812.16	15.22	185.719		
3,300.00	3,288.45	3,064.03	3,056.62	11.77	10.85	-16.56	-233.31	-2,953.46	2,820.92	2,805.18	15.74	179.204		
3,400.00	3,387.15	3,163.58	3,155.10	12.17	11.24	-16.42	-222.69	-2,963.40	2,814.48	2,798.22	16.26	173.081		
3,500.00	3,485.85	3,263.13	3,253.58	12.58	11.63	-16.28	-212.08	-2,973.34	2,808.05	2,791.27	16.78	167.319		
3,600.00	3,584.55	3,362.67	3,352.06	12.98	12.02	-16.14	-201.47	-2,983.28	2,801.64	2,784.33	17.31	161.889		
3,700.00	3,683.25	3,462.22	3,450.54	13.39	12.41	-15.99	-190.85	-2,993.22	2,795.24	2,777.41	17.83	156.765		
3,800.00	3,781.95	3,561.77	3,549.02	13.80	12.81	-15.85	-180.24	-3,003.16	2,788.86	2,770.51	18.36	151.923		
3,900.00	3,880.65	3,661.32	3,647.50	14.22	13.20	-15.71	-169.63	-3,013.10	2,782.50	2,763.62	18.88	147.343		
4,000.00	3,979.35	3,760.87	3,745.98	14.63	13.60	-15.56	-159.01	-3,023.04	2,776.16	2,756.75	19.41	143.003		
4,100.00	4,078.05	3,860.42	3,844.47	15.05	14.00	-15.41	-148.40	-3,032.98	2,769.84	2,749.90	19.94	138.888		
4,200.00	4,176.75	3,959.97	3,942.95	15.47	14.40	-15.27	-137.79	-3,042.92	2,763.53	2,743.06	20.47	134.980		
4,300.00	4,275.45	4,059.51	4,041.43	15.89	14.81	-15.12	-127.17	-3,052.86	2,757.25	2,736.24	21.01	131.266		
4,400.00	4,374.15	4,159.06	4,139.91	16.31	15.21	-14.97	-116.56	-3,062.80	2,750.98	2,729.44	21.54	127.731		
4,500.00	4,472.85	4,258.61	4,238.39	16.73	15.61	-14.82	-105.95	-3,072.74	2,744.73	2,722.66	22.07	124.364		
4,600.00	4,571.55	4,358.16	4,336.87	17.15	16.02	-14.67	-95.33	-3,082.68	2,738.50	2,715.89	22.60	121.153		
4,700.00	4,670.25	4,457.71	4,435.35	17.57	16.43	-14.52	-84.72	-3,092.62	2,732.28	2,709.14	23.14	118.088		
4,800.00	4,768.95	4,557.26	4,533.83	18.00	16.83	-14.37	-74.11	-3,102.56	2,726.09	2,702.42	23.67	115.160		
4,900.00	4,867.65	4,656.81	4,632.31	18.42	17.24	-14.22	-63.49	-3,112.50	2,719.91	2,695.71	24.21	112.360		

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 103H
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 103H	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	4,966.35	4,756.35	4,730.79	18.85	17.65	-14.07	-52.88	-3,122.44	2,713.76	2,689.02	24.74	109.681		
5,100.00	5,065.05	4,855.90	4,829.27	19.28	18.06	-13.92	-42.27	-3,132.38	2,707.62	2,682.34	25.28	107.114		
5,200.00	5,163.76	4,955.45	4,927.75	19.70	18.47	-13.76	-31.65	-3,142.32	2,701.50	2,675.69	25.81	104.653		
5,300.00	5,262.46	5,055.00	5,026.24	20.13	18.88	-13.61	-21.04	-3,152.26	2,695.41	2,669.06	26.35	102.292		
5,400.00	5,361.16	5,154.55	5,124.72	20.56	19.29	-13.45	-10.43	-3,162.20	2,689.33	2,662.44	26.89	100.025		
5,500.00	5,459.86	5,254.10	5,223.20	20.99	19.70	-13.30	0.19	-3,172.14	2,683.27	2,655.85	27.42	97.847		
5,600.00	5,558.56	5,353.65	5,321.68	21.42	20.12	-13.14	10.80	-3,182.08	2,677.23	2,649.27	27.96	95.753		
5,700.00	5,657.26	5,453.19	5,420.16	21.85	20.53	-12.98	21.41	-3,192.02	2,671.21	2,642.72	28.50	93.737		
5,800.00	5,755.96	5,552.74	5,518.64	22.28	20.94	-12.83	32.03	-3,201.96	2,665.22	2,636.18	29.03	91.797		
5,900.00	5,854.66	5,652.29	5,617.12	22.71	21.36	-12.67	42.64	-3,211.90	2,659.24	2,629.67	29.57	89.927		
6,000.00	5,953.36	5,751.84	5,715.60	23.14	21.77	-12.51	53.25	-3,221.84	2,653.28	2,623.17	30.11	88.125		
6,100.00	6,052.06	5,851.39	5,814.08	23.57	22.18	-12.35	63.87	-3,231.78	2,647.34	2,616.70	30.65	86.387		
6,200.00	6,150.76	5,950.94	5,912.56	24.01	22.60	-12.19	74.48	-3,241.72	2,641.43	2,610.25	31.18	84.708		
6,300.00	6,249.46	6,050.49	6,011.04	24.44	23.01	-12.03	85.09	-3,251.65	2,635.53	2,603.81	31.72	83.088		
6,400.00	6,348.16	6,150.03	6,109.52	24.87	23.43	-11.86	95.71	-3,261.59	2,629.66	2,597.40	32.26	81.522		
6,500.00	6,446.86	6,249.58	6,208.01	25.30	23.84	-11.70	106.32	-3,271.53	2,623.81	2,591.01	32.79	80.008		
6,600.00	6,545.56	6,349.13	6,306.49	25.74	24.26	-11.54	116.93	-3,281.47	2,617.98	2,584.64	33.33	78.543		
6,700.00	6,644.26	6,448.68	6,404.97	26.17	24.67	-11.37	127.55	-3,291.41	2,612.17	2,578.30	33.87	77.126		
6,804.31	6,747.22	6,552.52	6,507.69	26.62	25.11	-11.20	138.62	-3,301.78	2,606.13	2,571.70	34.43	75.695		
6,900.00	6,841.85	6,647.82	6,601.97	27.03	25.51	-11.02	148.78	-3,311.30	2,601.79	2,566.84	34.94	74.460		
7,000.00	6,941.09	6,747.45	6,700.53	27.44	25.92	-10.84	159.40	-3,321.25	2,599.79	2,564.31	35.47	73.285		
7,027.01	6,967.94	6,774.36	6,727.15	27.54	26.04	-10.79	162.27	-3,323.93	2,599.69	2,564.07	35.62	72.989 CC, ES		
7,100.00	7,040.61	6,847.06	6,799.07	27.83	26.34	-10.65	170.02	-3,331.19	2,600.38	2,564.38	36.00	72.225		
7,200.00	7,140.36	7,009.97	6,960.55	28.20	27.01	-10.36	185.70	-3,345.88	2,602.73	2,566.03	36.70	70.915		
7,300.00	7,240.26	7,200.15	7,150.00	28.55	27.73	-10.13	197.72	-3,357.13	2,604.37	2,566.95	37.42	69.594		
7,400.00	7,340.24	7,390.93	7,340.63	28.88	28.40	-10.04	202.85	-3,361.94	2,605.12	2,567.04	38.08	68.406		
7,420.77	7,361.00	7,430.58	7,380.27	28.95	28.53	-88.83	203.04	-3,362.12	2,605.16	2,566.95	38.21	68.175		
7,500.00	7,440.24	7,512.54	7,462.24	29.20	28.80	-88.83	203.05	-3,362.12	2,605.16	2,566.57	38.60	67.499		
7,600.00	7,540.24	7,612.54	7,562.24	29.52	29.13	-88.83	203.05	-3,362.12	2,605.16	2,566.09	39.07	66.672		
7,700.00	7,640.24	7,712.54	7,662.24	29.84	29.45	-88.83	203.05	-3,362.12	2,605.16	2,565.61	39.55	65.864		
7,800.00	7,740.24	7,812.54	7,762.24	30.16	29.78	-88.83	203.05	-3,362.12	2,605.16	2,565.13	40.03	65.074		
7,900.00	7,840.24	7,912.54	7,862.24	30.48	30.11	-88.83	203.05	-3,362.12	2,605.16	2,564.65	40.51	64.302		
7,966.81	7,907.04	7,979.34	7,929.04	30.69	30.33	-88.83	203.05	-3,362.12	2,605.16	2,564.33	40.84	63.796		
8,000.00	7,940.22	8,012.52	7,962.22	30.79	30.44	91.75	203.05	-3,362.12	2,605.19	2,564.20	40.99	63.553		
8,050.00	7,989.94	8,062.25	8,011.94	30.94	30.61	91.85	203.05	-3,362.12	2,605.35	2,564.13	41.22	63.208		
8,100.00	8,039.04	8,111.34	8,061.04	31.08	30.77	92.02	203.05	-3,362.12	2,605.67	2,564.24	41.44	62.883		
8,150.00	8,087.13	8,159.43	8,109.13	31.21	30.93	92.25	203.05	-3,362.12	2,606.20	2,564.56	41.65	62.580		
8,200.00	8,133.85	8,206.15	8,155.85	31.33	31.08	92.54	203.05	-3,362.12	2,607.00	2,565.15	41.85	62.300		
8,250.00	8,178.84	8,251.15	8,200.84	31.45	31.23	92.85	203.05	-3,362.12	2,608.14	2,566.10	42.04	62.042		
8,300.00	8,221.77	8,294.07	8,243.77	31.55	31.38	93.18	203.05	-3,362.12	2,609.71	2,567.49	42.22	61.808		
8,350.00	8,262.30	8,334.60	8,284.30	31.65	31.51	93.49	203.05	-3,362.12	2,611.82	2,569.42	42.40	61.597		
8,400.00	8,300.13	8,372.43	8,322.13	31.74	31.64	93.76	203.05	-3,362.12	2,614.55	2,571.98	42.58	61.409		
8,450.00	8,334.96	8,407.27	8,356.96	31.82	31.75	93.96	203.05	-3,362.12	2,618.02	2,575.27	42.75	61.245		
8,500.00	8,366.54	8,438.84	8,388.54	31.89	31.86	94.06	203.05	-3,362.12	2,622.31	2,579.39	42.92	61.103		
8,550.00	8,394.62	8,466.93	8,416.62	31.96	31.95	94.05	203.05	-3,362.12	2,627.51	2,584.43	43.09	60.984		
8,600.00	8,418.99	8,491.30	8,440.99	32.03	32.03	93.89	203.05	-3,362.12	2,633.70	2,590.44	43.26	60.887		
8,650.00	8,439.47	8,511.77	8,461.47	32.11	32.10	93.57	203.05	-3,362.12	2,640.91	2,597.49	43.43	60.813		
8,700.00	8,455.89	8,528.19	8,477.89	32.19	32.15	93.08	203.05	-3,362.12	2,649.19	2,605.59	43.60	60.759		
8,750.00	8,468.13	8,540.44	8,490.13	32.29	32.20	92.39	203.05	-3,362.12	2,658.53	2,614.76	43.78	60.728		
8,800.00	8,476.11	8,548.41	8,498.11	32.40	32.22	91.50	203.05	-3,362.12	2,668.92	2,624.96	43.96	60.718		
8,850.00	8,479.75	8,552.06	8,501.75	32.54	32.23	90.41	203.05	-3,362.12	2,680.29	2,636.15	44.13	60.730		
8,866.81	8,480.00	8,552.30	8,502.00	32.59	32.24	90.00	203.05	-3,362.12	2,684.32	2,640.13	44.19	60.739		

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 103H
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 103H	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		
8,900.00	8,480.00	8,552.30	8,502.00	32.70	32.24	90.00	203.05	-3,362.12	2,692.57	2,648.26	44.32	60.758		
9,000.00	8,480.00	8,552.30	8,502.00	33.09	32.24	90.00	203.05	-3,362.12	2,719.74	2,675.01	44.73	60.803		
9,100.00	8,480.00	8,552.30	8,502.00	33.57	32.24	90.00	203.05	-3,362.12	2,750.27	2,705.06	45.20	60.842		
9,200.00	8,480.00	8,552.30	8,502.00	34.14	32.24	90.00	203.05	-3,362.12	2,784.06	2,738.33	45.73	60.886		
9,300.00	8,480.00	8,552.30	8,502.00	34.79	32.24	90.00	203.05	-3,362.12	2,820.99	2,774.70	46.29	60.944		
9,400.00	8,480.00	8,552.30	8,502.00	35.50	32.24	90.00	203.05	-3,362.12	2,860.95	2,814.06	46.88	61.024		
9,500.00	8,480.00	8,552.30	8,502.00	36.28	32.24	90.00	203.05	-3,362.12	2,903.79	2,856.29	47.50	61.133		
9,600.00	8,480.00	8,552.30	8,502.00	37.11	32.24	90.00	203.05	-3,362.12	2,949.41	2,901.28	48.13	61.277		
9,700.00	8,480.00	8,552.30	8,502.00	38.01	32.24	90.00	203.05	-3,362.12	2,997.67	2,948.90	48.77	61.460		
9,800.00	8,480.00	8,552.30	8,502.00	38.95	32.24	90.00	203.05	-3,362.12	3,048.45	2,999.03	49.42	61.686		
9,900.00	8,480.00	8,552.30	8,502.00	39.94	32.24	90.00	203.05	-3,362.12	3,101.62	3,051.56	50.06	61.956		
10,000.00	8,480.00	8,552.30	8,502.00	40.97	32.24	90.00	203.05	-3,362.12	3,157.07	3,106.37	50.70	62.272		
10,100.00	8,480.00	8,552.30	8,502.00	42.04	32.24	90.00	203.05	-3,362.12	3,214.67	3,163.34	51.32	62.634		
10,200.00	8,480.00	8,552.30	8,502.00	43.14	32.24	90.00	203.05	-3,362.12	3,274.31	3,222.37	51.94	63.041		
10,300.00	8,480.00	8,552.30	8,502.00	44.29	32.24	90.00	203.05	-3,362.12	3,335.88	3,283.35	52.54	63.496		
10,400.00	8,480.00	8,552.30	8,502.00	45.46	32.24	90.00	203.05	-3,362.12	3,399.28	3,346.17	53.12	63.997		
10,500.00	8,480.00	8,552.30	8,502.00	46.66	32.24	90.00	203.05	-3,362.12	3,464.41	3,410.73	53.68	64.540		
10,600.00	8,480.00	8,552.30	8,502.00	47.89	32.24	90.00	203.05	-3,362.12	3,531.17	3,476.95	54.22	65.125		
10,700.00	8,480.00	8,552.30	8,502.00	49.14	32.24	90.00	203.05	-3,362.12	3,599.47	3,544.72	54.75	65.748		
10,800.00	8,480.00	8,552.30	8,502.00	50.42	32.24	90.00	203.05	-3,362.12	3,669.22	3,613.97	55.25	66.410		
10,900.00	8,480.00	8,552.30	8,502.00	51.72	32.24	90.00	203.05	-3,362.12	3,740.35	3,684.61	55.74	67.107		
11,000.00	8,480.00	8,552.30	8,502.00	53.03	32.24	90.00	203.05	-3,362.12	3,812.77	3,756.56	56.20	67.838		
11,100.00	8,480.00	8,552.30	8,502.00	54.37	32.24	90.00	203.05	-3,362.12	3,886.41	3,829.76	56.65	68.601		
11,200.00	8,480.00	8,552.30	8,502.00	55.72	32.24	90.00	203.05	-3,362.12	3,961.21	3,904.13	57.08	69.394		
11,300.00	8,480.00	8,552.30	8,502.00	57.09	32.24	90.00	203.05	-3,362.12	4,037.11	3,979.61	57.49	70.217		
11,400.00	8,480.00	8,552.30	8,502.00	58.47	32.24	90.00	203.05	-3,362.12	4,114.03	4,056.14	57.89	71.066		
11,500.00	8,480.00	8,552.30	8,502.00	59.86	32.24	90.00	203.05	-3,362.12	4,191.93	4,133.66	58.27	71.941		
11,600.00	8,480.00	8,552.30	8,502.00	61.27	32.24	90.00	203.05	-3,362.12	4,270.75	4,212.11	58.63	72.842		
11,700.00	8,480.00	8,552.30	8,502.00	62.69	32.24	90.00	203.05	-3,362.12	4,350.43	4,291.46	58.98	73.766		
11,800.00	8,480.00	8,552.30	8,502.00	64.13	32.24	90.00	203.05	-3,362.12	4,430.95	4,371.64	59.31	74.714		
11,900.00	8,480.00	8,552.30	8,502.00	65.57	32.24	90.00	203.05	-3,362.12	4,512.24	4,452.62	59.62	75.682		
12,000.00	8,480.00	8,552.30	8,502.00	67.02	32.24	90.00	203.05	-3,362.12	4,594.27	4,534.35	59.92	76.670		
12,100.00	8,480.00	8,552.30	8,502.00	68.48	32.24	90.00	203.05	-3,362.12	4,677.00	4,616.79	60.21	77.675		
12,200.00	8,480.00	8,552.30	8,502.00	69.95	32.24	90.00	203.05	-3,362.12	4,760.39	4,699.90	60.49	78.698		
12,300.00	8,480.00	16,432.99	12,544.00	71.42	75.51	147.20	-3,881.36	-3,322.28	4,808.55	4,739.00	69.55	69.138		
12,400.00	8,480.00	16,532.99	12,544.00	72.91	76.84	147.20	-3,981.36	-3,321.30	4,808.55	4,737.69	70.87	67.855		
12,500.00	8,480.00	16,632.99	12,544.00	74.40	78.19	147.20	-4,081.35	-3,320.33	4,808.56	4,736.37	72.19	66.610		
12,600.00	8,480.00	16,732.99	12,544.00	75.90	79.54	147.20	-4,181.35	-3,319.35	4,808.57	4,735.05	73.52	65.402		
12,700.00	8,480.00	16,832.99	12,544.00	77.40	80.91	147.20	-4,281.34	-3,318.37	4,808.58	4,733.72	74.87	64.229		
12,800.00	8,480.00	16,932.99	12,544.00	78.91	82.29	147.20	-4,381.34	-3,317.40	4,808.59	4,732.37	76.22	63.090		
12,900.00	8,480.00	17,032.99	12,544.00	80.43	83.68	147.20	-4,481.34	-3,316.42	4,808.60	4,731.03	77.58	61.985		
13,000.00	8,480.00	17,132.99	12,544.00	81.95	85.07	147.20	-4,581.33	-3,315.45	4,808.61	4,729.67	78.94	60.913		
13,100.00	8,480.00	17,232.99	12,544.00	83.47	86.48	147.20	-4,681.33	-3,314.47	4,808.62	4,728.31	80.31	59.874		
13,200.00	8,480.00	17,332.99	12,544.00	85.00	87.90	147.20	-4,781.32	-3,313.50	4,808.63	4,726.94	81.69	58.865		
13,300.00	8,480.00	17,432.99	12,544.00	86.54	89.32	147.20	-4,881.32	-3,312.52	4,808.64	4,725.57	83.07	57.885		
13,400.00	8,480.00	17,532.99	12,544.00	88.08	90.75	147.20	-4,981.31	-3,311.55	4,808.65	4,724.19	84.46	56.934		
13,500.00	8,480.00	17,632.99	12,544.00	89.62	92.19	147.20	-5,081.31	-3,310.57	4,808.66	4,722.80	85.86	56.009		
13,600.00	8,480.00	17,732.99	12,544.00	91.17	93.63	147.20	-5,181.30	-3,309.59	4,808.67	4,721.41	87.26	55.110		
13,700.00	8,480.00	17,832.99	12,544.00	92.72	95.08	147.20	-5,281.30	-3,308.62	4,808.68	4,720.02	88.66	54.236		
13,800.00	8,480.00	17,932.99	12,544.00	94.27	96.54	147.20	-5,381.29	-3,307.64	4,808.69	4,718.61	90.07	53.387		
13,900.00	8,480.00	18,032.99	12,544.00	95.83	98.01	147.20	-5,481.29	-3,306.67	4,808.70	4,717.21	91.49	52.561		
14,000.00	8,480.00	18,132.99	12,544.00	97.39	99.48	147.20	-5,581.28	-3,305.69	4,808.71	4,715.80	92.91	51.758		

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 103H
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 103H	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	8,480.00	18,232.99	12,544.00	98.95	100.95	147.20	-5,681.28	-3,304.72	4,808.71	4,714.38	94.33	50.977		
14,200.00	8,480.00	18,332.99	12,544.00	100.52	102.43	147.20	-5,781.27	-3,303.74	4,808.72	4,712.96	95.76	50.216		
14,300.00	8,480.00	18,432.99	12,544.00	102.09	103.92	147.20	-5,881.27	-3,302.77	4,808.73	4,711.54	97.19	49.476		
14,400.00	8,480.00	18,532.99	12,544.00	103.66	105.41	147.20	-5,981.26	-3,301.79	4,808.74	4,710.11	98.63	48.756		
14,500.00	8,480.00	18,632.99	12,544.00	105.23	106.91	147.20	-6,081.26	-3,300.81	4,808.75	4,708.68	100.07	48.054		
14,600.00	8,480.00	18,732.99	12,544.00	106.81	108.41	147.20	-6,181.25	-3,299.84	4,808.76	4,707.25	101.51	47.373		
14,700.00	8,480.00	18,832.99	12,544.00	108.39	109.91	147.20	-6,281.25	-3,298.86	4,808.77	4,705.82	102.95	46.709		
14,800.00	8,480.00	18,932.99	12,544.00	109.97	111.42	147.20	-6,381.24	-3,297.89	4,808.78	4,704.38	104.40	46.061		
14,900.00	8,480.00	19,032.99	12,544.00	111.55	112.93	147.20	-6,481.24	-3,296.91	4,808.79	4,702.94	105.85	45.430		
15,000.00	8,480.00	19,132.99	12,544.00	113.13	114.45	147.20	-6,581.24	-3,295.94	4,808.80	4,701.50	107.30	44.816		
15,100.00	8,480.00	19,232.99	12,544.00	114.72	115.97	147.20	-6,681.23	-3,294.96	4,808.81	4,700.06	108.75	44.217		
15,200.00	8,480.00	19,332.99	12,544.00	116.31	117.49	147.20	-6,781.23	-3,293.99	4,808.82	4,698.61	110.21	43.633		
15,300.00	8,480.00	19,432.99	12,544.00	117.90	119.02	147.20	-6,881.22	-3,293.01	4,808.83	4,697.16	111.67	43.063		
15,400.00	8,480.00	19,532.99	12,544.00	119.49	120.55	147.20	-6,981.22	-3,292.03	4,808.84	4,695.71	113.13	42.507		
15,500.00	8,480.00	19,632.99	12,544.00	121.08	122.09	147.20	-7,081.21	-3,291.06	4,808.85	4,694.25	114.59	41.964		
15,600.00	8,480.00	19,732.99	12,544.00	122.68	123.62	147.20	-7,181.21	-3,290.08	4,808.86	4,692.80	116.06	41.434		
15,700.00	8,480.00	19,832.99	12,544.00	124.27	125.16	147.20	-7,281.20	-3,289.11	4,808.87	4,691.34	117.53	40.917		
15,800.00	8,480.00	19,932.99	12,544.00	125.87	126.70	147.20	-7,381.20	-3,288.13	4,808.87	4,689.88	119.00	40.411		
15,900.00	8,480.00	20,032.99	12,544.00	127.47	128.25	147.20	-7,481.19	-3,287.16	4,808.88	4,688.41	120.47	39.918		
16,000.00	8,480.00	20,132.99	12,544.00	129.07	129.80	147.20	-7,581.19	-3,286.18	4,808.89	4,686.95	121.94	39.435		
16,100.00	8,480.00	20,232.99	12,544.00	130.67	131.35	147.20	-7,681.18	-3,285.21	4,808.90	4,685.48	123.42	38.964		
16,200.00	8,480.00	20,332.99	12,544.00	132.27	132.90	147.20	-7,781.18	-3,284.23	4,808.91	4,684.01	124.90	38.503		
16,300.00	8,480.00	20,432.99	12,544.00	133.88	134.46	147.20	-7,881.17	-3,283.26	4,808.92	4,682.54	126.38	38.052		
16,400.00	8,480.00	20,532.99	12,544.00	135.48	136.01	147.20	-7,981.17	-3,282.28	4,808.93	4,681.07	127.86	37.612		
16,500.00	8,480.00	20,632.99	12,544.00	137.09	137.57	147.19	-8,081.16	-3,281.30	4,808.94	4,679.60	129.34	37.182		
16,600.00	8,480.00	20,732.99	12,544.00	138.70	139.13	147.19	-8,181.16	-3,280.33	4,808.95	4,678.13	130.82	36.760		
16,700.00	8,480.00	20,832.99	12,544.00	140.30	140.70	147.19	-8,281.15	-3,279.35	4,808.96	4,676.66	132.30	36.348		
16,800.00	8,480.00	20,932.99	12,544.00	141.91	142.26	147.19	-8,381.15	-3,278.38	4,808.97	4,675.18	133.78	35.946		
16,900.00	8,480.00	21,032.99	12,544.00	143.52	143.83	147.19	-8,481.14	-3,277.40	4,808.98	4,673.71	135.27	35.551		
17,000.00	8,480.00	21,132.99	12,544.00	145.13	145.40	147.19	-8,581.14	-3,276.43	4,808.99	4,672.23	136.75	35.165		
17,100.00	8,480.00	21,232.99	12,544.00	146.75	146.97	147.19	-8,681.14	-3,275.45	4,809.00	4,670.76	138.24	34.787		
17,200.00	8,480.00	21,332.99	12,544.00	148.36	148.54	147.19	-8,781.13	-3,274.48	4,809.01	4,669.28	139.73	34.417		
17,300.00	8,480.00	21,432.99	12,544.00	149.97	150.12	147.19	-8,881.13	-3,273.50	4,809.02	4,667.80	141.22	34.054		
17,400.00	8,480.00	21,532.99	12,544.00	151.59	151.70	147.19	-8,981.12	-3,272.52	4,809.03	4,666.32	142.71	33.698		
17,500.00	8,480.00	21,632.99	12,544.00	153.20	153.27	147.19	-9,081.12	-3,271.55	4,809.03	4,664.83	144.20	33.350		
17,600.00	8,480.00	21,732.99	12,544.00	154.82	154.85	147.19	-9,181.11	-3,270.57	4,809.04	4,663.35	145.69	33.008		
17,700.00	8,480.00	21,832.99	12,544.00	156.44	156.43	147.19	-9,281.11	-3,269.60	4,809.05	4,661.87	147.19	32.673		
17,800.00	8,480.00	21,932.99	12,544.00	158.05	158.02	147.19	-9,381.10	-3,268.62	4,809.06	4,660.38	148.68	32.344		
17,900.00	8,480.00	22,032.99	12,544.00	159.67	159.60	147.19	-9,481.10	-3,267.65	4,809.07	4,658.89	150.18	32.022		
18,000.00	8,480.00	22,132.99	12,544.00	161.29	161.18	147.19	-9,581.09	-3,266.67	4,809.08	4,657.41	151.68	31.706		
18,100.00	8,480.00	22,232.99	12,544.00	162.91	162.77	147.19	-9,681.09	-3,265.70	4,809.09	4,655.92	153.17	31.396		
18,200.00	8,480.00	22,332.99	12,544.00	164.53	164.36	147.19	-9,781.08	-3,264.72	4,809.10	4,654.43	154.67	31.093		
18,300.00	8,480.00	22,432.99	12,544.00	166.15	165.95	147.19	-9,881.08	-3,263.74	4,809.11	4,652.94	156.17	30.795		
18,400.00	8,480.00	22,532.99	12,544.00	167.77	167.54	147.19	-9,981.07	-3,262.77	4,809.12	4,651.46	157.66	30.503		
18,500.00	8,480.00	22,632.99	12,544.00	169.40	169.13	147.19	-10,081.07	-3,261.79	4,809.13	4,649.97	159.16	30.216		
18,502.24	8,480.00	22,635.23	12,544.00	169.43	169.16	147.19	-10,083.30	-3,261.77	4,809.13	4,649.94	159.19	30.209		
18,600.00	8,480.00	22,715.49	12,544.00	171.02	170.44	147.19	-10,163.56	-3,260.99	4,809.17	4,648.63	160.54	29.956		
18,700.00	8,480.00	22,715.49	12,544.00	172.64	170.44	147.19	-10,163.56	-3,260.99	4,810.58	4,649.26	161.32	29.820		
18,800.00	8,480.00	22,715.49	12,544.00	174.26	170.44	147.19	-10,163.56	-3,260.99	4,814.07	4,652.03	162.05	29.708		
18,900.00	8,480.00	22,715.49	12,544.00	175.89	170.44	147.19	-10,163.56	-3,260.99	4,819.64	4,656.93	162.71	29.621		
19,000.00	8,480.00	22,715.49	12,544.00	177.51	170.44	147.19	-10,163.56	-3,260.99	4,827.26	4,663.94	163.32	29.557		
19,100.00	8,480.00	22,715.49	12,544.00	179.14	170.44	147.19	-10,163.56	-3,260.99	4,836.95	4,673.08	163.87	29.517		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 801H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,200.00	8,480.00	22,715.49	12,544.00	180.76	170.44	147.19	-10,163.56	-3,260.99	4,848.68	4,684.32	164.36	29.500 SF	
19,300.00	8,480.00	22,715.49	12,544.00	182.39	170.44	147.19	-10,163.56	-3,260.99	4,862.43	4,697.64	164.79	29.507	
19,400.00	8,480.00	22,715.49	12,544.00	184.02	170.44	147.19	-10,163.56	-3,260.99	4,878.20	4,713.04	165.16	29.537	
19,500.00	8,480.00	22,715.49	12,544.00	185.64	170.44	147.19	-10,163.56	-3,260.99	4,895.96	4,730.49	165.47	29.587	
19,600.00	8,480.00	22,715.49	12,544.00	187.27	170.44	147.19	-10,163.56	-3,260.99	4,915.69	4,749.95	165.74	29.659	
19,700.00	8,480.00	22,715.49	12,544.00	188.90	170.44	147.19	-10,163.56	-3,260.99	4,937.37	4,771.44	165.93	29.755	
19,800.00	8,480.00	22,715.49	12,544.00	190.53	170.44	147.19	-10,163.56	-3,260.99	4,960.97	4,794.89	166.08	29.871	
19,899.80	8,480.00	22,715.49	12,544.00	192.15	170.44	147.19	-10,163.56	-3,260.99	4,986.41	4,820.23	166.18	30.007	

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 103H
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 103H	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	1,622.00	1,622.00	5.50	5.58	-96.34	-316.72	-2,850.03	2,867.58	2,859.74	7.84	365.868		
1,700.00	1,700.00	1,722.00	1,722.00	5.86	5.94	-96.34	-316.72	-2,850.03	2,867.58	2,859.23	8.34	343.642		
1,800.00	1,800.00	1,822.00	1,822.00	6.22	6.30	-96.34	-316.72	-2,850.03	2,867.58	2,858.73	8.85	323.961		
1,900.00	1,900.00	1,922.00	1,922.00	6.58	6.66	-96.34	-316.72	-2,850.03	2,867.58	2,858.22	9.36	306.412		
2,000.00	2,000.00	2,022.00	2,022.00	6.94	7.02	-96.34	-316.72	-2,850.03	2,867.58	2,857.71	9.87	290.667		
2,100.00	2,099.99	2,121.99	2,121.99	7.29	7.37	-17.56	-316.72	-2,850.03	2,866.33	2,855.96	10.37	276.478		
2,200.00	2,199.91	2,238.92	2,238.92	7.63	7.79	-17.60	-316.55	-2,849.94	2,862.52	2,851.61	10.91	262.434		
2,300.00	2,299.69	2,415.77	2,415.66	7.98	8.42	-17.61	-311.41	-2,847.05	2,854.35	2,842.75	11.60	246.145		
2,400.00	2,399.27	2,590.86	2,590.18	8.34	9.05	-17.54	-299.30	-2,840.25	2,841.02	2,828.75	12.28	231.438		
2,500.00	2,498.57	2,730.00	2,728.33	8.69	9.55	-17.45	-284.93	-2,832.19	2,822.89	2,810.03	12.87	219.395		
2,600.00	2,597.54	2,827.59	2,825.14	9.06	9.91	-17.42	-274.14	-2,826.13	2,801.94	2,788.58	13.36	209.727		
2,616.45	2,613.78	2,843.61	2,841.02	9.12	9.97	-17.42	-272.37	-2,825.13	2,798.26	2,784.82	13.44	208.171		
2,700.00	2,696.24	2,924.87	2,921.63	9.43	10.27	-17.32	-263.38	-2,820.09	2,779.41	2,765.56	13.85	200.622		
2,800.00	2,794.94	3,022.14	3,018.12	9.81	10.63	-17.20	-252.62	-2,814.05	2,756.86	2,742.51	14.35	192.121		
2,900.00	2,893.64	3,119.41	3,114.60	10.19	10.99	-17.09	-241.86	-2,808.01	2,734.33	2,719.48	14.85	184.155		
3,000.00	2,992.34	3,216.68	3,211.09	10.58	11.35	-16.97	-231.10	-2,801.97	2,711.80	2,696.45	15.35	176.677		
3,100.00	3,091.04	3,313.95	3,307.57	10.97	11.72	-16.84	-220.35	-2,795.93	2,689.28	2,673.43	15.85	169.649		
3,200.00	3,189.74	3,411.22	3,404.05	11.37	12.09	-16.72	-209.59	-2,789.89	2,666.78	2,650.42	16.36	163.034		
3,300.00	3,288.45	3,508.49	3,500.54	11.77	12.46	-16.59	-198.83	-2,783.85	2,644.28	2,627.42	16.86	156.798		
3,400.00	3,387.15	3,605.76	3,597.02	12.17	12.84	-16.46	-188.07	-2,777.81	2,621.80	2,604.43	17.37	150.911		
3,500.00	3,485.85	3,703.03	3,693.51	12.58	13.21	-16.33	-177.32	-2,771.77	2,599.34	2,581.45	17.88	145.348		
3,600.00	3,584.55	3,800.30	3,789.99	12.98	13.58	-16.20	-166.56	-2,765.73	2,576.88	2,558.49	18.40	140.083		
3,700.00	3,683.25	3,897.57	3,886.48	13.39	13.96	-16.07	-155.80	-2,759.69	2,554.44	2,535.53	18.91	135.094		
3,800.00	3,781.95	3,994.84	3,982.96	13.80	14.34	-15.93	-145.04	-2,753.65	2,532.02	2,512.59	19.42	130.361		
3,900.00	3,880.65	4,092.11	4,079.44	14.22	14.72	-15.79	-134.29	-2,747.61	2,509.60	2,489.66	19.94	125.866		
4,000.00	3,979.35	4,189.38	4,175.93	14.63	15.10	-15.65	-123.53	-2,741.57	2,487.20	2,466.75	20.46	121.592		
4,100.00	4,078.05	4,286.65	4,272.41	15.05	15.48	-15.50	-112.77	-2,735.53	2,464.82	2,443.85	20.97	117.523		
4,200.00	4,176.75	4,383.92	4,368.90	15.47	15.86	-15.35	-102.01	-2,729.49	2,442.45	2,420.96	21.49	113.646		
4,300.00	4,275.45	4,481.19	4,465.38	15.89	16.24	-15.20	-91.26	-2,723.45	2,420.10	2,398.09	22.01	109.949		
4,400.00	4,374.15	4,578.46	4,561.87	16.31	16.62	-15.05	-80.50	-2,717.41	2,397.77	2,375.23	22.53	106.418		
4,500.00	4,472.85	4,675.73	4,658.35	16.73	17.01	-14.89	-69.74	-2,711.37	2,375.45	2,352.39	23.05	103.044		
4,600.00	4,571.55	4,773.00	4,754.83	17.15	17.39	-14.73	-58.98	-2,705.33	2,353.15	2,329.57	23.57	99.817		
4,700.00	4,670.25	4,870.27	4,851.32	17.57	17.77	-14.57	-48.23	-2,699.29	2,330.86	2,306.76	24.10	96.728		
4,800.00	4,768.95	4,967.54	4,947.80	18.00	18.16	-14.40	-37.47	-2,693.25	2,308.60	2,283.98	24.62	93.768		
4,900.00	4,867.65	5,064.81	5,044.29	18.42	18.54	-14.24	-26.71	-2,687.21	2,286.35	2,261.20	25.14	90.930		
5,000.00	4,966.35	5,162.08	5,140.77	18.85	18.93	-14.06	-15.95	-2,681.17	2,264.12	2,238.45	25.67	88.206		

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 103H
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 103H	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	5,065.05	5,259.35	5,237.26	19.28	19.32	-13.89	-5.19	-2,675.13	2,241.91	2,215.72	26.19	85.591		
5,200.00	5,163.76	5,356.62	5,333.74	19.70	19.70	-13.71	5.56	-2,669.09	2,219.72	2,193.01	26.72	83.077		
5,300.00	5,262.46	5,453.89	5,430.23	20.13	20.09	-13.53	16.32	-2,663.05	2,197.56	2,170.31	27.25	80.659		
5,400.00	5,361.16	5,551.16	5,526.71	20.56	20.48	-13.34	27.08	-2,657.01	2,175.41	2,147.64	27.77	78.332		
5,500.00	5,459.86	5,648.43	5,623.19	20.99	20.86	-13.15	37.84	-2,650.97	2,153.29	2,124.99	28.30	76.091		
5,600.00	5,558.56	5,745.70	5,719.68	21.42	21.25	-12.96	48.59	-2,644.93	2,131.19	2,102.37	28.83	73.932		
5,700.00	5,657.26	5,842.97	5,816.16	21.85	21.64	-12.76	59.35	-2,638.89	2,109.12	2,079.76	29.35	71.850		
5,800.00	5,755.96	5,940.24	5,912.65	22.28	22.03	-12.56	70.11	-2,632.85	2,087.06	2,057.18	29.88	69.842		
5,900.00	5,854.66	6,037.51	6,009.13	22.71	22.42	-12.35	80.87	-2,626.81	2,065.04	2,034.63	30.41	67.903		
6,000.00	5,953.36	6,134.78	6,105.62	23.14	22.81	-12.14	91.62	-2,620.77	2,043.04	2,012.10	30.94	66.030		
6,100.00	6,052.06	6,232.05	6,202.10	23.57	23.20	-11.93	102.38	-2,614.73	2,021.07	1,989.60	31.47	64.220		
6,200.00	6,150.76	6,329.32	6,298.58	24.01	23.59	-11.71	113.14	-2,608.69	1,999.12	1,967.12	32.00	62.470		
6,300.00	6,249.46	6,426.59	6,395.07	24.44	23.98	-11.48	123.90	-2,602.66	1,977.21	1,944.67	32.53	60.778		
6,400.00	6,348.16	6,523.86	6,491.55	24.87	24.37	-11.25	134.65	-2,596.62	1,955.32	1,922.26	33.06	59.139		
6,500.00	6,446.86	6,621.13	6,588.04	25.30	24.76	-11.02	145.41	-2,590.58	1,933.47	1,899.87	33.59	57.553		
6,600.00	6,545.56	6,718.40	6,684.52	25.74	25.15	-10.78	156.17	-2,584.54	1,911.64	1,877.52	34.13	56.017		
6,700.00	6,644.26	6,815.67	6,781.01	26.17	25.54	-10.53	166.93	-2,578.50	1,889.85	1,855.19	34.66	54.528		
6,804.31	6,747.22	6,917.13	6,881.65	26.62	25.94	-10.27	178.15	-2,572.20	1,867.16	1,831.94	35.21	53.023		
6,900.00	6,841.85	7,000.00	6,963.85	27.03	26.28	-9.99	187.28	-2,567.07	1,847.58	1,811.87	35.71	51.741		
7,000.00	6,941.09	7,085.37	7,048.70	27.44	26.61	-9.74	195.56	-2,562.42	1,830.32	1,794.11	36.22	50.538		
7,100.00	7,040.61	7,166.25	7,129.25	27.83	26.92	-9.54	201.87	-2,558.88	1,816.62	1,779.91	36.71	49.487		
7,200.00	7,140.36	7,247.72	7,210.52	28.20	27.22	-9.39	206.73	-2,556.15	1,806.48	1,769.29	37.19	48.570		
7,300.00	7,240.26	7,329.62	7,292.33	28.55	27.52	-9.29	210.09	-2,554.27	1,799.91	1,762.24	37.67	47.784		
7,400.00	7,340.24	7,411.77	7,374.45	28.88	27.81	-9.23	211.92	-2,553.24	1,796.90	1,758.77	38.13	47.124		
7,420.77	7,361.00	7,428.84	7,391.53	28.95	27.86	-88.02	212.10	-2,553.13	1,796.73	1,758.50	38.23	47.004		
7,487.75	7,427.99	7,487.31	7,449.99	29.16	28.06	-88.01	212.28	-2,553.03	1,796.61	1,758.08	38.53	46.626		
7,500.00	7,440.24	7,499.55	7,462.24	29.20	28.10	-88.01	212.28	-2,553.03	1,796.61	1,758.02	38.59	46.555		
7,600.00	7,540.24	7,599.55	7,562.24	29.52	28.44	-88.01	212.28	-2,553.03	1,796.61	1,757.54	39.07	45.983		
7,700.00	7,640.24	7,699.55	7,662.24	29.84	28.77	-88.01	212.28	-2,553.03	1,796.61	1,757.06	39.55	45.424		
7,800.00	7,740.24	7,799.55	7,762.24	30.16	29.11	-88.01	212.28	-2,553.03	1,796.61	1,756.58	40.03	44.878		
7,900.00	7,840.24	7,899.55	7,862.24	30.48	29.45	-88.01	212.28	-2,553.03	1,796.61	1,756.10	40.52	44.344		
7,966.81	7,907.04	7,966.36	7,929.04	30.69	29.67	-88.01	212.28	-2,553.03	1,796.61	1,755.77	40.84	43.994 CC		
8,000.00	7,940.22	7,999.53	7,962.22	30.79	29.79	92.58	212.28	-2,553.03	1,796.66	1,755.66	41.00	43.826 ES		
8,050.00	7,989.94	8,049.26	8,011.94	30.94	29.95	92.72	212.28	-2,553.03	1,796.89	1,755.66	41.23	43.585		
8,100.00	8,039.04	8,098.36	8,061.04	31.08	30.12	92.96	212.28	-2,553.03	1,797.37	1,755.91	41.45	43.358		
8,150.00	8,087.13	8,146.45	8,109.13	31.21	30.28	93.30	212.28	-2,553.03	1,798.14	1,756.47	41.68	43.145		
8,200.00	8,133.85	8,193.17	8,155.85	31.33	30.44	93.72	212.28	-2,553.03	1,799.31	1,757.41	41.89	42.949		
8,250.00	8,178.84	8,238.16	8,200.84	31.45	30.59	94.17	212.28	-2,553.03	1,800.97	1,758.87	42.11	42.771		
8,300.00	8,221.77	8,281.09	8,243.77	31.55	30.74	94.64	212.28	-2,553.03	1,803.27	1,760.95	42.32	42.613		
8,350.00	8,262.30	8,321.62	8,284.30	31.65	30.88	95.08	212.28	-2,553.03	1,806.33	1,763.81	42.53	42.477		
8,400.00	8,300.13	8,359.44	8,322.13	31.74	31.00	95.47	212.28	-2,553.03	1,810.30	1,767.57	42.73	42.363		
8,450.00	8,334.96	8,394.28	8,356.96	31.82	31.12	95.76	212.28	-2,553.03	1,815.33	1,772.39	42.94	42.275		
8,500.00	8,366.54	8,425.86	8,388.54	31.89	31.23	95.91	212.28	-2,553.03	1,821.54	1,778.39	43.15	42.213		
8,550.00	8,394.62	8,453.94	8,416.62	31.96	31.33	95.88	212.28	-2,553.03	1,829.05	1,785.68	43.36	42.179		
8,600.00	8,418.99	8,478.31	8,440.99	32.03	31.41	95.65	212.28	-2,553.03	1,837.95	1,794.37	43.58	42.174		
8,650.00	8,439.47	8,498.78	8,461.47	32.11	31.48	95.19	212.28	-2,553.03	1,848.30	1,804.50	43.80	42.199		
8,700.00	8,455.89	8,515.21	8,477.89	32.19	31.53	94.47	212.28	-2,553.03	1,860.14	1,816.12	44.02	42.254		
8,750.00	8,468.13	8,527.45	8,490.13	32.29	31.58	93.47	212.28	-2,553.03	1,873.46	1,829.21	44.25	42.340		
8,800.00	8,476.11	8,535.43	8,498.11	32.40	31.60	92.18	212.28	-2,553.03	1,888.19	1,843.72	44.47	42.457		
8,850.00	8,479.75	8,539.07	8,501.75	32.54	31.62	90.60	212.28	-2,553.03	1,904.27	1,859.57	44.70	42.604		
8,866.81	8,480.00	8,539.32	8,502.00	32.59	31.62	90.00	212.28	-2,553.03	1,909.95	1,865.17	44.77	42.660		
8,900.00	8,480.00	8,539.32	8,502.00	32.70	31.62	90.00	212.28	-2,553.03	1,921.55	1,876.63	44.92	42.777		

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 103H
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 103H	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		
9,000.00	8,480.00	8,539.32	8,502.00	33.09	31.62	90.00	212.28	-2,553.03	1,959.49	1,914.09	45.40	43.161		
9,100.00	8,480.00	8,539.32	8,502.00	33.57	31.62	90.00	212.28	-2,553.03	2,001.71	1,955.80	45.91	43.598		
9,200.00	8,480.00	8,539.32	8,502.00	34.14	31.62	90.00	212.28	-2,553.03	2,047.95	2,001.50	46.45	44.092		
9,300.00	8,480.00	8,539.32	8,502.00	34.79	31.62	90.00	212.28	-2,553.03	2,097.94	2,050.95	46.99	44.646		
9,400.00	8,480.00	8,539.32	8,502.00	35.50	31.62	90.00	212.28	-2,553.03	2,151.42	2,103.89	47.53	45.260		
9,500.00	8,480.00	8,539.32	8,502.00	36.28	31.62	90.00	212.28	-2,553.03	2,208.14	2,160.06	48.07	45.934		
9,600.00	8,480.00	8,539.32	8,502.00	37.11	31.62	90.00	212.28	-2,553.03	2,267.84	2,219.25	48.60	46.667		
9,700.00	8,480.00	8,539.32	8,502.00	38.01	31.62	90.00	212.28	-2,553.03	2,330.31	2,281.21	49.10	47.456		
9,800.00	8,480.00	8,539.32	8,502.00	38.95	31.62	90.00	212.28	-2,553.03	2,395.33	2,345.74	49.59	48.300		
9,900.00	8,480.00	8,539.32	8,502.00	39.94	31.62	90.00	212.28	-2,553.03	2,462.70	2,412.64	50.06	49.195		
10,000.00	8,480.00	8,539.32	8,502.00	40.97	31.62	90.00	212.28	-2,553.03	2,532.22	2,481.72	50.50	50.142		
10,100.00	8,480.00	8,539.32	8,502.00	42.04	31.62	90.00	212.28	-2,553.03	2,603.72	2,552.80	50.92	51.135		
10,200.00	8,480.00	8,539.32	8,502.00	43.14	31.62	90.00	212.28	-2,553.03	2,677.06	2,625.74	51.31	52.170		
10,300.00	8,480.00	8,539.32	8,502.00	44.29	31.62	90.00	212.28	-2,553.03	2,752.07	2,700.38	51.69	53.245		
10,400.00	8,480.00	8,539.32	8,502.00	45.46	31.62	90.00	212.28	-2,553.03	2,828.63	2,776.59	52.04	54.357		
10,500.00	8,480.00	8,539.32	8,502.00	46.66	31.62	90.00	212.28	-2,553.03	2,906.61	2,854.24	52.37	55.503		
10,600.00	8,480.00	8,539.32	8,502.00	47.89	31.62	90.00	212.28	-2,553.03	2,985.91	2,933.23	52.68	56.680		
10,700.00	8,480.00	8,539.32	8,502.00	49.14	31.62	90.00	212.28	-2,553.03	3,066.41	3,013.44	52.97	57.886		
10,800.00	8,480.00	8,539.32	8,502.00	50.42	31.62	90.00	212.28	-2,553.03	3,148.04	3,094.79	53.25	59.120		
10,900.00	8,480.00	8,539.32	8,502.00	51.72	31.62	90.00	212.28	-2,553.03	3,230.69	3,177.19	53.51	60.378		
11,000.00	8,480.00	8,539.32	8,502.00	53.03	31.62	90.00	212.28	-2,553.03	3,314.31	3,260.56	53.75	61.660		
11,100.00	8,480.00	8,539.32	8,502.00	54.37	31.62	90.00	212.28	-2,553.03	3,398.81	3,344.83	53.98	62.963		
11,200.00	8,480.00	8,539.32	8,502.00	55.72	31.62	90.00	212.28	-2,553.03	3,484.13	3,429.93	54.20	64.288		
11,300.00	8,480.00	8,539.32	8,502.00	57.09	31.62	90.00	212.28	-2,553.03	3,570.21	3,515.81	54.40	65.632		
11,400.00	8,480.00	8,539.32	8,502.00	58.47	31.62	90.00	212.28	-2,553.03	3,657.00	3,602.41	54.59	66.992		
11,500.00	8,480.00	8,539.32	8,502.00	59.86	31.62	90.00	212.28	-2,553.03	3,744.45	3,689.68	54.77	68.368		
11,600.00	8,480.00	8,539.32	8,502.00	61.27	31.62	90.00	212.28	-2,553.03	3,832.51	3,777.57	54.94	69.759		
11,700.00	8,480.00	8,539.32	8,502.00	62.69	31.62	90.00	212.28	-2,553.03	3,921.15	3,866.05	55.10	71.163		
11,800.00	8,480.00	8,539.32	8,502.00	64.13	31.62	90.00	212.28	-2,553.03	4,010.32	3,955.06	55.25	72.579		
11,900.00	8,480.00	8,539.32	8,502.00	65.57	31.62	90.00	212.28	-2,553.03	4,099.99	4,044.59	55.40	74.006		
12,000.00	8,480.00	8,539.32	8,502.00	67.02	31.62	90.00	212.28	-2,553.03	4,190.13	4,134.59	55.54	75.445		
12,100.00	8,480.00	8,539.32	8,502.00	68.48	31.62	90.00	212.28	-2,553.03	4,280.70	4,225.03	55.67	76.892		
12,200.00	8,480.00	16,230.63	12,446.00	69.95	74.12	156.86	-3,772.54	-2,403.90	4,288.97	4,226.62	62.34	68.796		
12,300.00	8,480.00	16,330.63	12,446.00	71.42	75.45	156.86	-3,872.53	-2,402.91	4,288.97	4,225.50	63.47	67.572		
12,400.00	8,480.00	16,430.63	12,446.00	72.91	76.79	156.86	-3,972.53	-2,401.93	4,288.98	4,224.36	64.61	66.381		
12,500.00	8,480.00	16,530.63	12,446.00	74.40	78.14	156.86	-4,072.52	-2,400.95	4,288.98	4,223.22	65.76	65.224		
12,600.00	8,480.00	16,630.63	12,446.00	75.90	79.50	156.86	-4,172.52	-2,399.96	4,288.98	4,222.07	66.91	64.098		
12,700.00	8,480.00	16,730.63	12,446.00	77.40	80.87	156.86	-4,272.51	-2,398.98	4,288.99	4,220.91	68.08	63.003		
12,800.00	8,480.00	16,830.63	12,446.00	78.91	82.25	156.86	-4,372.51	-2,398.00	4,288.99	4,219.74	69.25	61.938		
12,900.00	8,480.00	16,930.63	12,446.00	80.43	83.64	156.86	-4,472.50	-2,397.01	4,288.99	4,218.57	70.42	60.902		
13,000.00	8,480.00	17,030.63	12,446.00	81.95	85.04	156.86	-4,572.50	-2,396.03	4,289.00	4,217.39	71.61	59.895		
13,100.00	8,480.00	17,130.63	12,446.00	83.47	86.45	156.86	-4,672.49	-2,395.04	4,289.00	4,216.20	72.80	58.915		
13,200.00	8,480.00	17,230.63	12,446.00	85.00	87.87	156.86	-4,772.49	-2,394.06	4,289.00	4,215.01	74.00	57.963		
13,300.00	8,480.00	17,330.63	12,446.00	86.54	89.30	156.86	-4,872.49	-2,393.08	4,289.01	4,213.81	75.19	57.039		
13,400.00	8,480.00	17,430.63	12,446.00	88.08	90.73	156.86	-4,972.48	-2,392.09	4,289.01	4,212.61	76.40	56.140		
13,500.00	8,480.00	17,530.63	12,446.00	89.62	92.17	156.86	-5,072.48	-2,391.11	4,289.02	4,211.41	77.61	55.265		
13,600.00	8,480.00	17,630.63	12,446.00	91.17	93.62	156.86	-5,172.47	-2,390.13	4,289.02	4,210.20	78.82	54.414		
13,700.00	8,480.00	17,730.63	12,446.00	92.72	95.07	156.86	-5,272.47	-2,389.14	4,289.02	4,209.98	80.04	53.585		
13,800.00	8,480.00	17,830.63	12,446.00	94.27	96.53	156.86	-5,372.46	-2,388.16	4,289.03	4,207.76	81.26	52.779		
13,900.00	8,480.00	17,930.63	12,446.00	95.83	98.00	156.86	-5,472.46	-2,387.17	4,289.03	4,206.54	82.49	51.993		
14,000.00	8,480.00	18,030.63	12,446.00	97.39	99.47	156.86	-5,572.45	-2,386.19	4,289.03	4,205.31	83.72	51.229		
14,100.00	8,480.00	18,130.63	12,446.00	98.95	100.95	156.86	-5,672.45	-2,385.21	4,289.04	4,204.08	84.96	50.484		

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 103H
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 103H	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	8,480.00	18,230.63	12,446.00	100.52	102.44	156.86	-5,772.44	-2,384.22	4,289.04	4,202.84	86.20	49.758		
14,300.00	8,480.00	18,330.63	12,446.00	102.09	103.92	156.86	-5,872.44	-2,383.24	4,289.04	4,201.60	87.44	49.051		
14,400.00	8,480.00	18,430.63	12,446.00	103.66	105.42	156.86	-5,972.43	-2,382.26	4,289.05	4,200.36	88.69	48.361		
14,500.00	8,480.00	18,530.63	12,446.00	105.23	106.92	156.86	-6,072.43	-2,381.27	4,289.05	4,199.11	89.94	47.689		
14,600.00	8,480.00	18,630.63	12,446.00	106.81	108.42	156.86	-6,172.42	-2,380.29	4,289.05	4,197.87	91.19	47.035		
14,700.00	8,480.00	18,730.63	12,446.00	108.39	109.93	156.86	-6,272.42	-2,379.30	4,289.06	4,196.62	92.44	46.398		
14,800.00	8,480.00	18,830.63	12,446.00	109.97	111.44	156.86	-6,372.41	-2,378.32	4,289.06	4,195.37	93.70	45.777		
14,900.00	8,480.00	18,930.63	12,446.00	111.55	112.95	156.86	-6,472.41	-2,377.34	4,289.07	4,194.11	94.96	45.169		
15,000.00	8,480.00	19,030.63	12,446.00	113.13	114.47	156.86	-6,572.40	-2,376.35	4,289.07	4,192.85	96.22	44.576		
15,100.00	8,480.00	19,130.63	12,446.00	114.72	115.99	156.86	-6,672.40	-2,375.37	4,289.07	4,191.59	97.48	43.999		
15,200.00	8,480.00	19,230.63	12,446.00	116.31	117.52	156.86	-6,772.39	-2,374.39	4,289.08	4,190.33	98.75	43.436		
15,300.00	8,480.00	19,330.63	12,446.00	117.90	119.05	156.86	-6,872.39	-2,373.40	4,289.08	4,189.07	100.01	42.885		
15,400.00	8,480.00	19,430.63	12,446.00	119.49	120.58	156.86	-6,972.38	-2,372.42	4,289.08	4,187.80	101.28	42.348		
15,500.00	8,480.00	19,530.63	12,446.00	121.08	122.12	156.86	-7,072.38	-2,371.43	4,289.09	4,186.53	102.55	41.823		
15,600.00	8,480.00	19,630.63	12,446.00	122.68	123.65	156.86	-7,172.37	-2,370.45	4,289.09	4,185.26	103.83	41.310		
15,700.00	8,480.00	19,730.63	12,446.00	124.27	125.20	156.86	-7,272.37	-2,369.47	4,289.09	4,183.99	105.10	40.809		
15,800.00	8,480.00	19,830.63	12,446.00	125.87	126.74	156.86	-7,372.36	-2,368.48	4,289.10	4,182.72	106.38	40.319		
15,900.00	8,480.00	19,930.63	12,446.00	127.47	128.29	156.86	-7,472.36	-2,367.50	4,289.10	4,181.44	107.66	39.840		
16,000.00	8,480.00	20,030.63	12,446.00	129.07	129.84	156.86	-7,572.35	-2,366.52	4,289.11	4,180.17	108.94	39.372		
16,100.00	8,480.00	20,130.63	12,446.00	130.67	131.39	156.86	-7,672.35	-2,365.53	4,289.11	4,178.89	110.22	38.913		
16,200.00	8,480.00	20,230.63	12,446.00	132.27	132.94	156.86	-7,772.34	-2,364.55	4,289.11	4,177.61	111.51	38.465		
16,300.00	8,480.00	20,330.63	12,446.00	133.88	134.50	156.86	-7,872.34	-2,363.56	4,289.12	4,176.32	112.79	38.027		
16,400.00	8,480.00	20,430.63	12,446.00	135.48	136.06	156.86	-7,972.34	-2,362.58	4,289.12	4,175.04	114.08	37.598		
16,500.00	8,480.00	20,530.63	12,446.00	137.09	137.62	156.86	-8,072.33	-2,361.60	4,289.12	4,173.76	115.36	37.179		
16,600.00	8,480.00	20,630.63	12,446.00	138.70	139.18	156.86	-8,172.33	-2,360.61	4,289.13	4,172.48	116.65	36.769		
16,700.00	8,480.00	20,730.63	12,446.00	140.30	140.75	156.86	-8,272.32	-2,359.63	4,289.13	4,171.19	117.94	36.366		
16,800.00	8,480.00	20,830.63	12,446.00	141.91	142.31	156.86	-8,372.32	-2,358.65	4,289.13	4,169.90	119.23	35.972		
16,900.00	8,480.00	20,930.63	12,446.00	143.52	143.88	156.86	-8,472.31	-2,357.66	4,289.14	4,168.61	120.53	35.587		
17,000.00	8,480.00	21,030.63	12,446.00	145.13	145.45	156.86	-8,572.31	-2,356.68	4,289.14	4,167.32	121.82	35.209		
17,100.00	8,480.00	21,130.63	12,446.00	146.75	147.02	156.86	-8,672.30	-2,355.69	4,289.14	4,166.03	123.11	34.840		
17,200.00	8,480.00	21,230.63	12,446.00	148.36	148.60	156.86	-8,772.30	-2,354.71	4,289.15	4,164.74	124.40	34.477		
17,300.00	8,480.00	21,330.63	12,446.00	149.97	150.17	156.86	-8,872.29	-2,353.73	4,289.15	4,163.45	125.70	34.122		
17,400.00	8,480.00	21,430.63	12,446.00	151.59	151.75	156.86	-8,972.29	-2,352.74	4,289.16	4,162.16	127.00	33.774		
17,500.00	8,480.00	21,530.63	12,446.00	153.20	153.33	156.86	-9,072.28	-2,351.76	4,289.16	4,160.87	128.29	33.432		
17,600.00	8,480.00	21,630.63	12,446.00	154.82	154.91	156.86	-9,172.28	-2,350.78	4,289.16	4,159.57	129.59	33.098		
17,700.00	8,480.00	21,730.63	12,446.00	156.44	156.49	156.86	-9,272.27	-2,349.79	4,289.17	4,158.28	130.89	32.769		
17,800.00	8,480.00	21,830.63	12,446.00	158.05	158.08	156.86	-9,372.27	-2,348.81	4,289.17	4,156.98	132.19	32.447		
17,900.00	8,480.00	21,930.63	12,446.00	159.67	159.66	156.86	-9,472.26	-2,347.82	4,289.17	4,155.68	133.49	32.130		
18,000.00	8,480.00	22,030.63	12,446.00	161.29	161.25	156.86	-9,572.26	-2,346.84	4,289.18	4,154.38	134.80	31.820		
18,100.00	8,480.00	22,130.63	12,446.00	162.91	162.84	156.86	-9,672.25	-2,345.86	4,289.18	4,153.08	136.10	31.515		
18,200.00	8,480.00	22,230.63	12,446.00	164.53	164.42	156.86	-9,772.25	-2,344.87	4,289.18	4,151.78	137.40	31.216		
18,300.00	8,480.00	22,330.63	12,446.00	166.15	166.01	156.86	-9,872.24	-2,343.89	4,289.19	4,150.48	138.70	30.923		
18,400.00	8,480.00	22,430.63	12,446.00	167.77	167.60	156.86	-9,972.24	-2,342.91	4,289.19	4,149.19	140.01	30.636		
18,500.00	8,480.00	22,530.63	12,446.00	169.40	169.20	156.86	-10,072.23	-2,341.92	4,289.19	4,147.89	141.31	30.353		
18,600.00	8,480.00	22,630.63	12,446.00	171.02	170.79	156.86	-10,172.23	-2,340.94	4,289.20	4,146.59	142.61	30.076		
18,700.00	8,480.00	22,730.63	12,446.00	172.64	172.39	156.86	-10,272.22	-2,339.95	4,289.20	4,145.28	143.92	29.803		
18,800.00	8,480.00	22,830.63	12,446.00	174.26	173.98	156.86	-10,372.22	-2,338.97	4,289.21	4,143.98	145.23	29.535		
18,900.00	8,480.00	22,930.63	12,446.00	175.89	175.58	156.86	-10,472.21	-2,337.99	4,289.21	4,142.68	146.53	29.271		
19,000.00	8,480.00	23,030.63	12,446.00	177.51	177.17	156.86	-10,572.21	-2,337.00	4,289.21	4,141.37	147.84	29.012		
19,100.00	8,480.00	23,130.63	12,446.00	179.14	178.77	156.86	-10,672.20	-2,336.02	4,289.22	4,140.07	149.15	28.758		
19,200.00	8,480.00	23,230.63	12,446.00	180.76	180.37	156.86	-10,772.20	-2,335.04	4,289.22	4,138.76	150.46	28.508		
19,300.00	8,480.00	23,330.63	12,446.00	182.39	181.97	156.86	-10,872.19	-2,334.05	4,289.22	4,137.46	151.76	28.263		

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 103H
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 103H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design PF Fed Com - PF Fed Com 802H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,400.00	8,480.00	23,430.63	12,446.00	184.02	183.57	156.85	-10,972.19	-2,333.07	4,289.23	4,136.16	153.07	28.021	
19,500.00	8,480.00	23,530.63	12,446.00	185.64	185.18	156.85	-11,072.19	-2,332.08	4,289.23	4,134.85	154.38	27.783	
19,600.00	8,480.00	23,630.63	12,446.00	187.27	186.78	156.85	-11,172.18	-2,331.10	4,289.23	4,133.54	155.69	27.549	
19,700.00	8,480.00	23,730.63	12,446.00	188.90	188.38	156.85	-11,272.18	-2,330.12	4,289.24	4,132.24	157.00	27.320	
19,800.00	8,480.00	23,830.63	12,446.00	190.53	189.99	156.85	-11,372.17	-2,329.13	4,289.24	4,130.93	158.31	27.094	
19,800.04	8,480.00	23,830.67	12,446.00	190.53	189.99	156.85	-11,372.21	-2,329.13	4,289.24	4,130.93	158.31	27.094	
19,899.80	8,480.00	23,929.64	12,446.00	192.15	191.58	156.85	-11,471.18	-2,328.16	4,289.25	4,129.63	159.61	26.873 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 103H
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 103H	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	-96.39	-316.49	-2,825.25	2,842.92					
100.00	100.00	122.00	122.00	0.13	0.20	-96.39	-316.49	-2,825.25	2,842.92	2,842.68	0.24	N/A		
200.00	200.00	222.00	222.00	0.48	0.56	-96.39	-316.49	-2,825.25	2,842.92	2,842.18	0.74	3,830.130		
300.00	300.00	322.00	322.00	0.84	0.92	-96.39	-316.49	-2,825.25	2,842.92	2,841.68	1.25	2,277.334		
400.00	400.00	422.00	422.00	1.20	1.28	-96.39	-316.49	-2,825.25	2,842.92	2,841.17	1.75	1,619.944		
500.00	500.00	522.00	522.00	1.56	1.64	-96.39	-316.49	-2,825.25	2,842.92	2,840.66	2.26	1,256.981		
600.00	600.00	622.00	622.00	1.92	2.00	-96.39	-316.49	-2,825.25	2,842.92	2,840.16	2.77	1,026.869		
700.00	700.00	722.00	722.00	2.28	2.36	-96.39	-316.49	-2,825.25	2,842.92	2,839.65	3.28	867.961		
800.00	800.00	822.00	822.00	2.63	2.71	-96.39	-316.49	-2,825.25	2,842.92	2,839.14	3.78	751.640		
900.00	900.00	922.00	922.00	2.99	3.07	-96.39	-316.49	-2,825.25	2,842.92	2,838.64	4.29	662.809		
1,000.00	1,000.00	1,022.00	1,022.00	3.35	3.43	-96.39	-316.49	-2,825.25	2,842.92	2,838.13	4.80	592.755		
1,100.00	1,100.00	1,122.00	1,122.00	3.71	3.79	-96.39	-316.49	-2,825.25	2,842.92	2,837.62	5.30	536.093		
1,200.00	1,200.00	1,222.00	1,222.00	4.07	4.15	-96.39	-316.49	-2,825.25	2,842.92	2,837.11	5.81	489.318		
1,300.00	1,300.00	1,322.00	1,322.00	4.43	4.51	-96.39	-316.49	-2,825.25	2,842.92	2,836.61	6.32	450.050		
1,400.00	1,400.00	1,422.00	1,422.00	4.79	4.86	-96.39	-316.49	-2,825.25	2,842.92	2,836.10	6.82	416.616		
1,500.00	1,500.00	1,522.00	1,522.00	5.14	5.22	-96.39	-316.49	-2,825.25	2,842.92	2,835.59	7.33	387.806		
1,600.00	1,600.00	1,954.29	1,953.33	5.50	6.76	-96.26	-307.68	-2,804.76	2,840.97	2,832.31	8.66	328.100		
1,700.00	1,700.00	2,437.24	2,425.68	5.86	8.65	-95.66	-268.97	-2,714.63	2,817.22	2,807.15	10.07	279.725		
1,800.00	1,800.00	2,533.77	2,518.86	6.22	9.08	-95.50	-259.01	-2,691.47	2,792.25	2,781.69	10.56	264.364		
1,900.00	1,900.00	2,630.30	2,612.03	6.58	9.51	-95.33	-249.06	-2,668.30	2,767.31	2,756.25	11.06	250.277		
2,000.00	2,000.00	2,726.83	2,705.21	6.94	9.96	-95.17	-239.11	-2,645.13	2,742.38	2,730.83	11.56	237.323		
2,100.00	2,099.99	2,823.06	2,798.10	7.29	10.41	-16.32	-229.19	-2,622.04	2,716.27	2,704.22	12.05	225.361		
2,200.00	2,199.91	2,918.67	2,890.39	7.63	10.87	-16.29	-219.33	-2,599.09	2,687.75	2,675.21	12.55	214.200		
2,300.00	2,299.69	3,013.58	2,982.01	7.98	11.33	-16.29	-209.54	-2,576.31	2,656.86	2,643.81	13.04	203.712		
2,400.00	2,399.27	3,107.73	3,072.89	8.34	11.80	-16.32	-199.83	-2,553.72	2,623.59	2,610.05	13.54	193.832		
2,500.00	2,498.57	3,201.05	3,162.97	8.69	12.26	-16.37	-190.21	-2,531.32	2,587.98	2,573.95	14.03	184.501		
2,600.00	2,597.54	3,293.49	3,252.20	9.06	12.72	-16.45	-180.68	-2,509.13	2,550.03	2,535.52	14.52	175.666		
2,616.45	2,613.78	3,308.61	3,266.79	9.12	12.80	-16.47	-179.12	-2,505.50	2,543.57	2,528.97	14.60	174.241		
2,700.00	2,696.24	3,385.32	3,340.83	9.43	13.19	-16.39	-171.21	-2,487.09	2,510.59	2,495.58	15.00	167.327		
2,800.00	2,794.94	3,477.13	3,429.46	9.81	13.66	-16.31	-161.75	-2,465.06	2,471.11	2,455.62	15.49	159.507		
2,900.00	2,893.64	3,568.94	3,518.08	10.19	14.13	-16.22	-152.28	-2,443.02	2,431.65	2,415.66	15.98	152.141		
3,000.00	2,992.34	3,660.75	3,606.71	10.58	14.60	-16.12	-142.82	-2,420.99	2,392.18	2,375.71	16.48	145.195		
3,100.00	3,091.04	3,752.57	3,695.33	10.97	15.08	-16.03	-133.35	-2,398.95	2,352.73	2,335.76	16.97	138.635		
3,200.00	3,189.74	3,844.38	3,783.96	11.37	15.55	-15.92	-123.88	-2,376.92	2,313.28	2,295.81	17.47	132.433		
3,300.00	3,288.45	3,936.19	3,872.58	11.77	16.03	-15.82	-114.42	-2,354.88	2,273.83	2,255.87	17.97	126.561		
3,400.00	3,387.15	4,028.00	3,961.21	12.17	16.52	-15.71	-104.95	-2,332.85	2,234.39	2,215.93	18.47	120.995		
3,500.00	3,485.85	4,119.82	4,049.83	12.58	17.00	-15.60	-95.48	-2,310.81	2,194.96	2,175.99	18.97	115.713		
3,600.00	3,584.55	4,211.63	4,138.46	12.98	17.49	-15.49	-86.02	-2,288.78	2,155.54	2,136.07	19.47	110.695		
3,700.00	3,683.25	4,303.44	4,227.08	13.39	17.97	-15.37	-76.55	-2,266.74	2,116.12	2,096.14	19.98	105.923		
3,800.00	3,781.95	4,395.25	4,315.71	13.80	18.46	-15.24	-67.08	-2,244.71	2,076.71	2,056.23	20.48	101.379		
3,900.00	3,880.65	4,487.07	4,404.33	14.22	18.95	-15.11	-57.62	-2,222.67	2,037.31	2,016.32	20.99	97.049		
4,000.00	3,979.35	4,578.88	4,492.96	14.63	19.44	-14.98	-48.15	-2,200.64	1,997.92	1,976.42	21.50	92.918		
4,100.00	4,078.05	4,670.69	4,581.58	15.05	19.93	-14.84	-38.69	-2,178.60	1,958.54	1,936.53	22.01	88.973		
4,200.00	4,176.75	4,762.50	4,670.21	15.47	20.42	-14.70	-29.22	-2,156.57	1,919.17	1,896.65	22.52	85.205		
4,300.00	4,275.45	4,854.32	4,758.83	15.89	20.92	-14.55	-19.75	-2,134.53	1,879.81	1,856.78	23.04	81.600		
4,400.00	4,374.15	4,946.13	4,847.46	16.31	21.41	-14.39	-10.29	-2,112.50	1,840.46	1,816.91	23.55	78.149		
4,500.00	4,472.85	5,037.94	4,936.08	16.73	21.91	-14.22	-0.82	-2,090.46	1,801.13	1,777.06	24.07	74.842		
4,600.00	4,571.55	5,129.75	5,024.71	17.15	22.40	-14.05	8.65	-2,068.43	1,761.80	1,737.22	24.58	71.670		
4,700.00	4,670.25	5,221.57	5,113.33	17.57	22.90	-13.87	18.11	-2,046.39	1,722.50	1,697.40	25.10	68.625		
4,800.00	4,768.95	5,313.38	5,201.96	18.00	23.39	-13.68	27.58	-2,024.35	1,683.20	1,657.58	25.62	65.700		
4,900.00	4,867.65	5,405.19	5,290.58	18.42	23.89	-13.49	37.04	-2,002.32	1,643.92	1,617.78	26.14	62.889		
5,000.00	4,966.35	5,497.00	5,379.21	18.85	24.39	-13.28	46.51	-1,980.28	1,604.66	1,578.00	26.66	60.185		

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 103H
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 103H	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	5,065.05	5,588.82	5,467.83	19.28	24.89	-13.06	55.98	-1,958.25	1,565.42	1,538.24	27.19	57.583		
5,200.00	5,163.76	5,680.63	5,556.46	19.70	25.39	-12.84	65.44	-1,936.21	1,526.20	1,498.49	27.71	55.077		
5,300.00	5,262.46	5,772.44	5,645.08	20.13	25.89	-12.60	74.91	-1,914.18	1,487.00	1,458.76	28.24	52.662		
5,400.00	5,361.16	5,864.25	5,733.71	20.56	26.39	-12.34	84.38	-1,892.14	1,447.82	1,419.06	28.76	50.334		
5,500.00	5,459.86	5,956.07	5,822.33	20.99	26.89	-12.08	93.84	-1,870.11	1,408.67	1,379.38	29.29	48.088		
5,600.00	5,558.56	6,047.88	5,910.96	21.42	27.39	-11.79	103.31	-1,848.07	1,369.55	1,339.72	29.82	45.920		
5,700.00	5,657.26	6,139.69	5,999.58	21.85	27.89	-11.50	112.78	-1,826.04	1,330.45	1,300.09	30.36	43.825		
5,800.00	5,755.96	6,231.50	6,088.21	22.28	28.39	-11.18	122.24	-1,804.00	1,291.39	1,260.50	30.89	41.801		
5,900.00	5,854.66	6,323.32	6,176.83	22.71	28.89	-10.84	131.71	-1,781.97	1,252.37	1,220.93	31.43	39.845		
6,000.00	5,953.36	6,415.13	6,265.46	23.14	29.39	-10.49	141.17	-1,759.93	1,213.38	1,181.41	31.97	37.953		
6,100.00	6,052.06	6,506.94	6,354.08	23.57	29.90	-10.11	150.64	-1,737.90	1,174.43	1,141.92	32.51	36.122		
6,200.00	6,150.76	6,598.75	6,442.71	24.01	30.40	-9.70	160.11	-1,715.86	1,135.54	1,102.48	33.06	34.348		
6,300.00	6,249.46	6,690.57	6,531.33	24.44	30.90	-9.26	169.57	-1,693.83	1,096.69	1,063.08	33.61	32.630		
6,400.00	6,348.16	6,782.38	6,619.96	24.87	31.41	-8.80	179.04	-1,671.79	1,057.91	1,023.74	34.16	30.967		
6,500.00	6,446.86	6,874.19	6,708.23	25.30	31.91	-8.40	188.56	-1,650.29	1,019.78	985.03	34.74	29.352		
6,600.00	6,545.56	6,966.00	6,796.94	25.74	32.42	-8.05	198.07	-1,629.27	983.69	948.36	35.32	27.848		
6,700.00	6,644.26	7,057.81	6,885.63	26.17	32.93	-7.73	207.58	-1,608.25	949.74	913.84	35.89	26.461		
6,804.31	6,742.97	7,149.62	6,976.34	26.62	33.44	-7.43	217.09	-1,587.23	916.65	880.18	36.47	25.137		
6,900.00	6,841.85	7,241.43	7,068.05	27.03	33.95	-7.12	226.60	-1,566.21	889.56	852.58	36.98	24.055		
7,000.00	6,941.09	7,333.24	7,160.26	27.44	34.46	-6.84	236.11	-1,545.19	865.94	828.44	37.50	23.092		
7,100.00	7,040.61	7,425.05	7,252.07	27.83	34.97	-6.62	245.62	-1,524.17	847.21	809.21	38.00	22.297		
7,200.00	7,140.36	7,516.86	7,343.88	28.20	35.48	-6.44	255.13	-1,503.15	833.43	794.95	38.47	21.664		
7,300.00	7,240.26	7,608.67	7,435.69	28.55	35.99	-6.33	264.64	-1,482.13	824.66	785.74	38.91	21.192		
7,400.00	7,340.24	7,699.48	7,527.50	28.88	36.50	-6.28	274.15	-1,461.11	820.93	781.60	39.33	20.874		
7,420.77	7,361.00	7,700.29	7,548.31	28.95	36.59	-85.07	220.51	-1,575.25	820.81	781.38	39.43	20.819		
7,449.34	7,389.58	7,753.52	7,611.58	29.04	36.66	-85.07	220.51	-1,575.25	820.79	781.25	39.54	20.761		
7,500.00	7,440.24	7,845.33	7,703.39	29.20	36.79	-85.07	220.51	-1,575.25	820.79	781.02	39.77	20.640		
7,600.00	7,540.24	7,937.14	7,801.40	29.52	37.06	-85.07	220.51	-1,575.25	820.79	780.56	40.23	20.404		
7,700.00	7,640.24	8,028.95	7,893.41	29.84	37.33	-85.07	220.51	-1,575.25	820.79	780.10	40.69	20.174		
7,800.00	7,740.24	8,120.76	7,985.22	30.16	37.61	-85.07	220.51	-1,575.25	820.79	779.64	41.15	19.948		
7,900.00	7,840.24	8,212.57	8,077.03	30.48	37.88	-85.07	220.51	-1,575.25	820.79	779.18	41.61	19.727		
7,966.81	7,907.04	8,100.99	7,929.04	30.69	36.07	-85.07	220.51	-1,575.25	820.79	778.87	41.92	19.581 CC		
8,000.00	7,940.22	8,134.17	7,962.22	30.79	36.16	95.55	220.51	-1,575.25	820.88	778.81	42.07	19.511 ES		
8,050.00	7,989.94	8,183.89	8,011.94	30.94	36.30	95.85	220.51	-1,575.25	821.39	779.07	42.32	19.410		
8,100.00	8,039.04	8,232.99	8,061.04	31.08	36.43	96.39	220.51	-1,575.25	822.41	779.83	42.58	19.314		
8,150.00	8,087.13	8,281.08	8,109.13	31.21	36.57	97.13	220.51	-1,575.25	824.08	781.22	42.86	19.227		
8,200.00	8,133.85	8,327.80	8,155.85	31.33	36.70	98.02	220.51	-1,575.25	826.59	783.43	43.16	19.152		
8,250.00	8,178.84	8,372.79	8,200.84	31.45	36.82	99.01	220.51	-1,575.25	830.17	786.69	43.48	19.093		
8,300.00	8,221.77	8,415.72	8,243.77	31.55	36.94	100.02	220.51	-1,575.25	835.09	791.27	43.82	19.057		
8,350.00	8,262.30	8,456.25	8,284.30	31.65	37.06	100.98	220.51	-1,575.25	841.63	797.44	44.19	19.048 SF		
8,400.00	8,300.13	8,494.08	8,322.13	31.74	37.16	101.81	220.51	-1,575.25	850.07	805.49	44.57	19.071		
8,450.00	8,334.96	8,528.91	8,356.96	31.82	37.26	102.42	220.51	-1,575.25	860.65	815.67	44.98	19.132		
8,500.00	8,366.54	8,560.49	8,388.54	31.89	37.35	102.74	220.51	-1,575.25	873.61	828.20	45.41	19.237		
8,550.00	8,394.62	8,588.57	8,416.62	31.96	37.43	102.70	220.51	-1,575.25	889.09	843.24	45.86	19.389		
8,600.00	8,418.99	8,612.94	8,440.99	32.03	37.50	102.23	220.51	-1,575.25	907.19	860.89	46.31	19.592		
8,650.00	8,439.47	8,633.42	8,461.47	32.11	37.56	101.25	220.51	-1,575.25	927.92	881.17	46.75	19.847		
8,700.00	8,455.89	8,649.84	8,477.89	32.19	37.60	99.71	220.51	-1,575.25	951.21	904.02	47.19	20.157		
8,750.00	8,468.13	8,662.08	8,490.13	32.29	37.64	97.56	220.51	-1,575.25	976.92	929.30	47.61	20.518		
8,800.00	8,476.11	8,670.06	8,498.11	32.40	37.66	94.76	220.51	-1,575.25	1,004.82	956.81	48.01	20.930		
8,850.00	8,479.75	8,673.70	8,501.75	32.54	37.67	91.31	220.51	-1,575.25	1,034.63	986.25	48.38	21.387		
8,866.81	8,480.00	8,673.95	8,502.00	32.59	37.67	90.00	220.51	-1,575.25	1,045.02	996.53	48.49	21.550		
8,900.00	8,480.00	8,673.95	8,502.00	32.70	37.67	90.00	220.51	-1,575.25	1,066.04	1,017.32	48.71	21.883		

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 103H
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 103H	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 (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
9,000.00	8,480.00	8,673.95	8,502.00	33.09	37.67	90.00	220.51	-1,575.25	1,132.87	1,083.54	49.33	22.965			
9,100.00	8,480.00	8,673.95	8,502.00	33.57	37.67	90.00	220.51	-1,575.25	1,204.30	1,154.44	49.86	24.152			
9,200.00	8,480.00	8,673.95	8,502.00	34.14	37.67	90.00	220.51	-1,575.25	1,279.57	1,229.25	50.32	25.427			
9,300.00	8,480.00	8,673.95	8,502.00	34.79	37.67	90.00	220.51	-1,575.25	1,358.04	1,307.32	50.71	26.778			
9,400.00	8,480.00	8,673.95	8,502.00	35.50	37.67	90.00	220.51	-1,575.25	1,439.17	1,388.12	51.05	28.192			
9,500.00	8,480.00	8,673.95	8,502.00	36.28	37.67	90.00	220.51	-1,575.25	1,522.55	1,471.22	51.33	29.660			
9,600.00	8,480.00	8,673.95	8,502.00	37.11	37.67	90.00	220.51	-1,575.25	1,607.83	1,556.25	51.58	31.172			
9,700.00	8,480.00	8,673.95	8,502.00	38.01	37.67	90.00	220.51	-1,575.25	1,694.72	1,642.93	51.79	32.724			
9,800.00	8,480.00	8,673.95	8,502.00	38.95	37.67	90.00	220.51	-1,575.25	1,782.99	1,731.02	51.97	34.308			
9,900.00	8,480.00	8,673.95	8,502.00	39.94	37.67	90.00	220.51	-1,575.25	1,872.43	1,820.31	52.13	35.922			
10,000.00	8,480.00	8,673.95	8,502.00	40.97	37.67	90.00	220.51	-1,575.25	1,962.89	1,910.63	52.26	37.559			
10,100.00	8,480.00	8,673.95	8,502.00	42.04	37.67	90.00	220.51	-1,575.25	2,054.24	2,001.86	52.38	39.217			
10,200.00	8,480.00	8,673.95	8,502.00	43.14	37.67	90.00	220.51	-1,575.25	2,146.36	2,093.87	52.49	40.893			
10,300.00	8,480.00	8,673.95	8,502.00	44.29	37.67	90.00	220.51	-1,575.25	2,239.16	2,186.58	52.58	42.585			
10,400.00	8,480.00	8,673.95	8,502.00	45.46	37.67	90.00	220.51	-1,575.25	2,332.55	2,279.88	52.67	44.290			
10,500.00	8,480.00	8,673.95	8,502.00	46.66	37.67	90.00	220.51	-1,575.25	2,426.47	2,373.72	52.74	46.007			
10,600.00	8,480.00	8,673.95	8,502.00	47.89	37.67	90.00	220.51	-1,575.25	2,520.85	2,468.04	52.81	47.734			
10,700.00	8,480.00	8,673.95	8,502.00	49.14	37.67	90.00	220.51	-1,575.25	2,615.65	2,562.78	52.87	49.471			
10,800.00	8,480.00	8,673.95	8,502.00	50.42	37.67	90.00	220.51	-1,575.25	2,710.83	2,657.90	52.93	51.215			
10,900.00	8,480.00	8,673.95	8,502.00	51.72	37.67	90.00	220.51	-1,575.25	2,806.34	2,753.36	52.98	52.967			
11,000.00	8,480.00	8,673.95	8,502.00	53.03	37.67	90.00	220.51	-1,575.25	2,902.16	2,849.13	53.03	54.725			
11,100.00	8,480.00	8,673.95	8,502.00	54.37	37.67	90.00	220.51	-1,575.25	2,998.24	2,945.17	53.08	56.488			
11,200.00	8,480.00	8,673.95	8,502.00	55.72	37.67	90.00	220.51	-1,575.25	3,094.58	3,041.46	53.12	58.256			
11,300.00	8,480.00	8,673.95	8,502.00	57.09	37.67	90.00	220.51	-1,575.25	3,191.14	3,137.98	53.16	60.027			
11,400.00	8,480.00	8,673.95	8,502.00	58.47	37.67	90.00	220.51	-1,575.25	3,287.91	3,234.71	53.20	61.803			
11,500.00	8,480.00	8,673.95	8,502.00	59.86	37.67	90.00	220.51	-1,575.25	3,384.86	3,331.63	53.24	63.582			
11,600.00	8,480.00	8,673.95	8,502.00	61.27	37.67	90.00	220.51	-1,575.25	3,481.99	3,428.72	53.27	65.363			
11,700.00	8,480.00	8,673.95	8,502.00	62.69	37.67	90.00	220.51	-1,575.25	3,579.28	3,525.97	53.31	67.147			
11,800.00	8,480.00	8,673.95	8,502.00	64.13	37.67	90.00	220.51	-1,575.25	3,676.71	3,623.37	53.34	68.932			
11,900.00	8,480.00	8,673.95	8,502.00	65.57	37.67	90.00	220.51	-1,575.25	3,774.27	3,720.90	53.37	70.719			
12,000.00	8,480.00	8,673.95	8,502.00	67.02	37.67	90.00	220.51	-1,575.25	3,871.96	3,818.56	53.40	72.507			
12,100.00	8,480.00	8,673.95	8,502.00	68.48	37.67	90.00	220.51	-1,575.25	3,969.77	3,916.33	53.43	74.296			
12,200.00	8,480.00	8,673.95	8,502.00	69.95	37.67	90.00	220.51	-1,575.25	4,067.68	4,014.22	53.46	76.086			
12,300.00	8,480.00	16,533.60	12,517.00	71.42	77.32	169.85	-3,863.03	-1,436.82	4,078.89	4,020.36	58.54	69.680			
12,400.00	8,480.00	16,633.60	12,517.00	72.91	78.62	169.85	-3,963.03	-1,435.84	4,078.90	4,019.39	59.50	68.551			
12,500.00	8,480.00	16,733.60	12,517.00	74.40	79.93	169.85	-4,063.02	-1,434.85	4,078.90	4,018.42	60.47	67.450			
12,600.00	8,480.00	16,833.60	12,517.00	75.90	81.25	169.85	-4,163.02	-1,433.87	4,078.90	4,017.45	61.45	66.377			
12,700.00	8,480.00	16,933.60	12,517.00	77.40	82.59	169.84	-4,263.01	-1,432.88	4,078.90	4,016.47	62.44	65.330			
12,800.00	8,480.00	17,033.60	12,517.00	78.91	83.94	169.84	-4,363.01	-1,431.90	4,078.90	4,015.48	63.43	64.310			
12,900.00	8,480.00	17,133.60	12,517.00	80.43	85.29	169.84	-4,463.00	-1,430.92	4,078.90	4,014.48	64.42	63.316			
13,000.00	8,480.00	17,233.60	12,517.00	81.95	86.66	169.84	-4,563.00	-1,429.93	4,078.90	4,013.48	65.42	62.346			
13,100.00	8,480.00	17,333.60	12,517.00	83.47	88.04	169.84	-4,662.99	-1,428.95	4,078.91	4,012.48	66.43	61.401			
13,200.00	8,480.00	17,433.60	12,517.00	85.00	89.43	169.84	-4,762.99	-1,427.96	4,078.91	4,011.47	67.44	60.480			
13,300.00	8,480.00	17,533.60	12,517.00	86.54	90.82	169.84	-4,862.98	-1,426.98	4,078.91	4,010.45	68.46	59.581			
13,400.00	8,480.00	17,633.60	12,517.00	88.08	92.23	169.84	-4,962.98	-1,426.00	4,078.91	4,009.43	69.48	58.705			
13,500.00	8,480.00	17,733.60	12,517.00	89.62	93.64	169.84	-5,062.97	-1,425.01	4,078.91	4,008.41	70.51	57.851			
13,600.00	8,480.00	17,833.60	12,517.00	91.17	95.06	169.84	-5,162.97	-1,424.03	4,078.91	4,007.38	71.54	57.018			
13,700.00	8,480.00	17,933.60	12,517.00	92.72	96.49	169.84	-5,262.96	-1,423.04	4,078.92	4,006.34	72.57	56.205			
13,800.00	8,480.00	18,033.60	12,517.00	94.27	97.92	169.84	-5,362.96	-1,422.06	4,078.92	4,005.31	73.61	55.413			
13,900.00	8,480.00	18,133.60	12,517.00	95.83	99.36	169.84	-5,462.95	-1,421.08	4,078.92	4,004.27	74.65	54.640			
14,000.00	8,480.00	18,233.60	12,517.00	97.39	100.81	169.84	-5,562.95	-1,420.09	4,078.92	4,003.22	75.70	53.885			
14,100.00	8,480.00	18,333.60	12,517.00	98.95	102.27	169.84	-5,662.94	-1,419.11	4,078.92	4,002.18	76.75	53.149			

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 103H
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 103H	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	
14,200.00	8,480.00	18,433.60	12,517.00	100.52	103.72	169.84	-5,762.94	-1,418.12	4,078.92	4,001.13	77.80	52.431		
14,300.00	8,480.00	18,533.60	12,517.00	102.09	105.19	169.84	-5,862.93	-1,417.14	4,078.93	4,000.08	78.85	51.731		
14,400.00	8,480.00	18,633.60	12,517.00	103.66	106.66	169.84	-5,962.93	-1,416.16	4,078.93	3,999.02	79.91	51.047		
14,500.00	8,480.00	18,733.60	12,517.00	105.23	108.14	169.84	-6,062.92	-1,415.17	4,078.93	3,997.96	80.96	50.379		
14,600.00	8,480.00	18,833.60	12,517.00	106.81	109.62	169.84	-6,162.92	-1,414.19	4,078.93	3,996.90	82.03	49.727		
14,700.00	8,480.00	18,933.60	12,517.00	108.39	111.10	169.84	-6,262.91	-1,413.20	4,078.93	3,995.84	83.09	49.090		
14,800.00	8,480.00	19,033.60	12,517.00	109.97	112.59	169.84	-6,362.91	-1,412.22	4,078.93	3,994.77	84.16	48.467		
14,900.00	8,480.00	19,133.60	12,517.00	111.55	114.09	169.84	-6,462.90	-1,411.24	4,078.93	3,993.70	85.23	47.858		
15,000.00	8,480.00	19,233.60	12,517.00	113.13	115.59	169.84	-6,562.90	-1,410.25	4,078.94	3,992.63	86.30	47.262		
15,100.00	8,480.00	19,333.60	12,517.00	114.72	117.09	169.84	-6,662.89	-1,409.27	4,078.94	3,991.56	87.38	46.681		
15,200.00	8,480.00	19,433.60	12,517.00	116.31	118.60	169.84	-6,762.89	-1,408.28	4,078.94	3,990.48	88.46	46.112		
15,300.00	8,480.00	19,533.60	12,517.00	117.90	120.11	169.84	-6,862.89	-1,407.30	4,078.94	3,989.40	89.54	45.556		
15,400.00	8,480.00	19,633.60	12,517.00	119.49	121.62	169.84	-6,962.88	-1,406.32	4,078.94	3,988.32	90.62	45.012		
15,500.00	8,480.00	19,733.60	12,517.00	121.08	123.14	169.84	-7,062.88	-1,405.33	4,078.94	3,987.24	91.70	44.481		
15,600.00	8,480.00	19,833.60	12,517.00	122.68	124.66	169.84	-7,162.87	-1,404.35	4,078.95	3,986.16	92.78	43.962		
15,700.00	8,480.00	19,933.60	12,517.00	124.27	126.19	169.84	-7,262.87	-1,403.37	4,078.95	3,985.08	93.87	43.453		
15,800.00	8,480.00	20,033.60	12,517.00	125.87	127.72	169.84	-7,362.86	-1,402.38	4,078.95	3,983.99	94.96	42.955		
15,900.00	8,480.00	20,133.60	12,517.00	127.47	129.25	169.84	-7,462.86	-1,401.40	4,078.95	3,982.90	96.05	42.468		
16,000.00	8,480.00	20,233.60	12,517.00	129.07	130.78	169.84	-7,562.85	-1,400.41	4,078.95	3,981.81	97.14	41.991		
16,100.00	8,480.00	20,333.60	12,517.00	130.67	132.32	169.84	-7,662.85	-1,399.43	4,078.95	3,980.72	98.23	41.524		
16,200.00	8,480.00	20,433.60	12,517.00	132.27	133.86	169.84	-7,762.84	-1,398.45	4,078.96	3,979.63	99.33	41.067		
16,300.00	8,480.00	20,533.60	12,517.00	133.88	135.40	169.84	-7,862.84	-1,397.46	4,078.96	3,978.54	100.42	40.619		
16,400.00	8,480.00	20,633.60	12,517.00	135.48	136.94	169.84	-7,962.83	-1,396.48	4,078.96	3,977.44	101.52	40.180		
16,500.00	8,480.00	20,733.60	12,517.00	137.09	138.49	169.84	-8,062.83	-1,395.49	4,078.96	3,976.34	102.62	39.749		
16,600.00	8,480.00	20,833.60	12,517.00	138.70	140.04	169.84	-8,162.82	-1,394.51	4,078.96	3,975.24	103.72	39.328		
16,700.00	8,480.00	20,933.60	12,517.00	140.30	141.59	169.84	-8,262.82	-1,393.53	4,078.96	3,974.15	104.82	38.915		
16,800.00	8,480.00	21,033.60	12,517.00	141.91	143.14	169.84	-8,362.81	-1,392.54	4,078.96	3,973.04	105.92	38.510		
16,900.00	8,480.00	21,133.60	12,517.00	143.52	144.70	169.84	-8,462.81	-1,391.56	4,078.97	3,971.94	107.02	38.112		
17,000.00	8,480.00	21,233.60	12,517.00	145.13	146.26	169.84	-8,562.80	-1,390.57	4,078.97	3,970.84	108.13	37.723		
17,100.00	8,480.00	21,333.60	12,517.00	146.75	147.82	169.84	-8,662.80	-1,389.59	4,078.97	3,969.73	109.24	37.341		
17,200.00	8,480.00	21,433.60	12,517.00	148.36	149.38	169.84	-8,762.79	-1,388.61	4,078.97	3,968.63	110.34	36.966		
17,300.00	8,480.00	21,533.60	12,517.00	149.97	150.94	169.84	-8,862.79	-1,387.62	4,078.97	3,967.52	111.45	36.599		
17,400.00	8,480.00	21,633.60	12,517.00	151.59	152.51	169.84	-8,962.78	-1,386.64	4,078.97	3,966.41	112.56	36.238		
17,500.00	8,480.00	21,733.60	12,517.00	153.20	154.08	169.84	-9,062.78	-1,385.65	4,078.98	3,965.30	113.67	35.884		
17,600.00	8,480.00	21,833.60	12,517.00	154.82	155.65	169.84	-9,162.77	-1,384.67	4,078.98	3,964.20	114.78	35.537		
17,700.00	8,480.00	21,933.60	12,517.00	156.44	157.22	169.84	-9,262.77	-1,383.69	4,078.98	3,963.09	115.89	35.196		
17,800.00	8,480.00	22,033.60	12,517.00	158.05	158.79	169.84	-9,362.76	-1,382.70	4,078.98	3,961.98	117.00	34.863		
17,900.00	8,480.00	22,133.60	12,517.00	159.67	160.36	169.84	-9,462.76	-1,381.72	4,078.98	3,960.87	118.12	34.534		
18,000.00	8,480.00	22,233.60	12,517.00	161.29	161.94	169.84	-9,562.75	-1,380.73	4,078.98	3,959.75	119.23	34.211		
18,100.00	8,480.00	22,333.60	12,517.00	162.91	163.52	169.84	-9,662.75	-1,379.75	4,078.99	3,958.64	120.34	33.894		
18,200.00	8,480.00	22,433.60	12,517.00	164.53	165.10	169.84	-9,762.74	-1,378.77	4,078.99	3,957.53	121.46	33.583		
18,300.00	8,480.00	22,533.60	12,517.00	166.15	166.68	169.84	-9,862.74	-1,377.78	4,078.99	3,956.41	122.58	33.277		
18,400.00	8,480.00	22,633.60	12,517.00	167.77	168.26	169.84	-9,962.74	-1,376.80	4,078.99	3,955.30	123.70	32.976		
18,500.00	8,480.00	22,733.60	12,517.00	169.40	169.84	169.84	-10,062.73	-1,375.81	4,078.99	3,954.18	124.81	32.681		
18,600.00	8,480.00	22,833.60	12,517.00	171.02	171.42	169.84	-10,162.73	-1,374.83	4,078.99	3,953.06	125.93	32.390		
18,700.00	8,480.00	22,933.60	12,517.00	172.64	173.01	169.84	-10,262.72	-1,373.85	4,079.00	3,951.94	127.05	32.105		
18,800.00	8,480.00	23,033.60	12,517.00	174.26	174.60	169.84	-10,362.72	-1,372.86	4,079.00	3,950.83	128.17	31.825		
18,900.00	8,480.00	23,133.60	12,517.00	175.89	176.18	169.84	-10,462.71	-1,371.88	4,079.00	3,949.71	129.29	31.549		
19,000.00	8,480.00	23,233.60	12,517.00	177.51	177.77	169.84	-10,562.71	-1,370.90	4,079.00	3,948.59	130.41	31.278		
19,100.00	8,480.00	23,333.60	12,517.00	179.14	179.36	169.84	-10,662.70	-1,369.91	4,079.00	3,947.47	131.53	31.011		
19,200.00	8,480.00	23,433.60	12,517.00	180.76	180.95	169.84	-10,762.70	-1,368.93	4,079.00	3,946.35	132.65	30.749		
19,300.00	8,480.00	23,533.60	12,517.00	182.39	182.55	169.84	-10,862.69	-1,367.94	4,079.00	3,945.23	133.78	30.491		

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 103H
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 103H	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 (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	8,480.00	23,633.60	12,517.00	184.02	184.14	169.84	-10,962.69	-1,366.96	4,079.01	3,944.11	134.90	30.237	
19,500.00	8,480.00	23,733.60	12,517.00	185.64	185.73	169.84	-11,062.68	-1,365.98	4,079.01	3,942.98	136.02	29.988	
19,600.00	8,480.00	23,833.60	12,517.00	187.27	187.33	169.84	-11,162.68	-1,364.99	4,079.01	3,941.86	137.15	29.742	
19,700.00	8,480.00	23,933.60	12,517.00	188.90	188.93	169.84	-11,262.67	-1,364.01	4,079.01	3,940.74	138.27	29.500	
19,800.00	8,480.00	24,033.60	12,517.00	190.53	190.52	169.84	-11,362.67	-1,363.02	4,079.01	3,939.62	139.40	29.262	
19,808.97	8,480.00	24,042.57	12,517.00	190.67	190.67	169.84	-11,371.63	-1,362.94	4,079.01	3,939.51	139.50	29.241	
19,899.80	8,480.00	24,130.17	12,517.00	192.15	192.05	169.84	-11,459.23	-1,362.07	4,079.02	3,938.59	140.42	29.048	

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 103H
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 103H	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

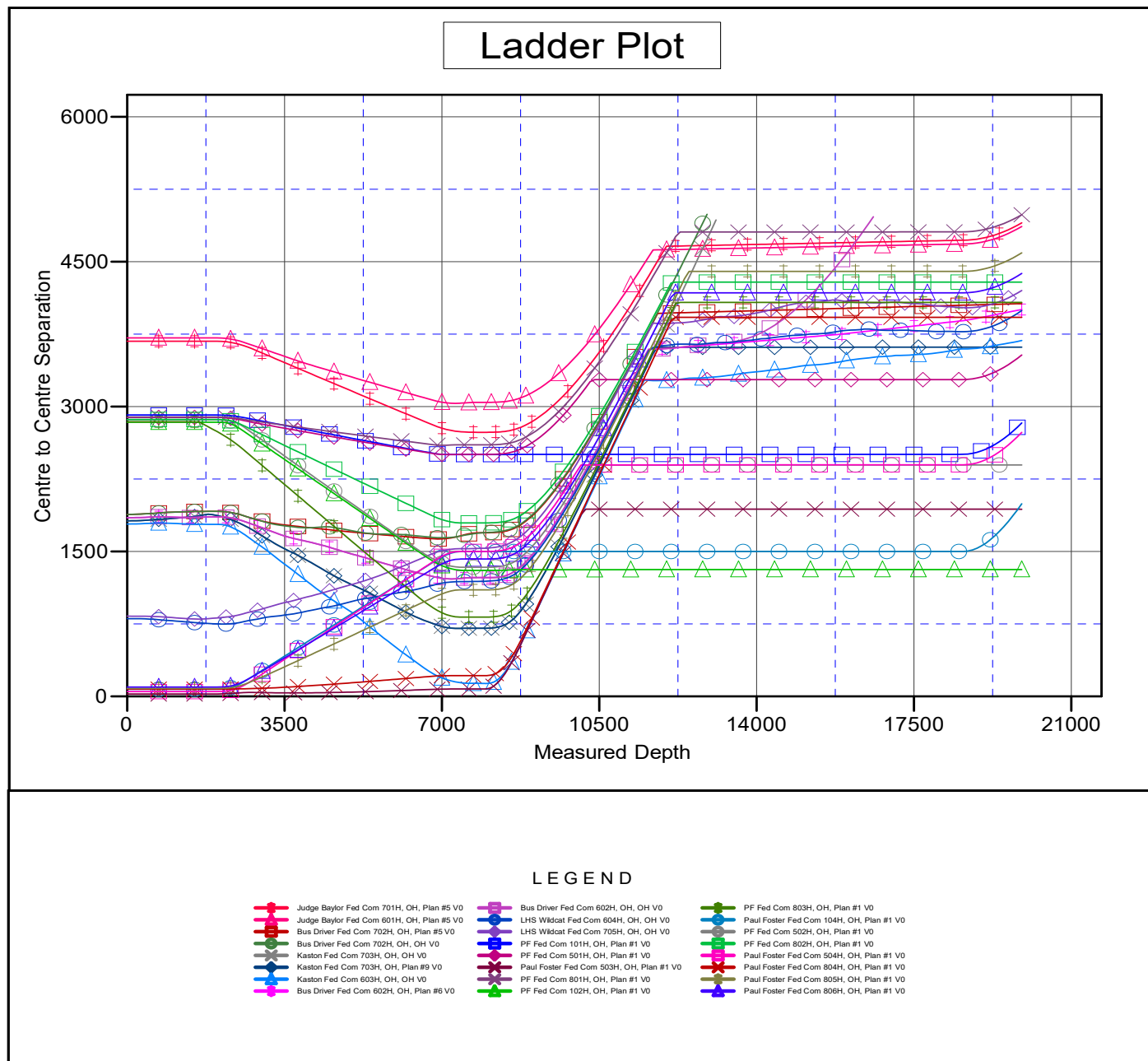
Offset Depths are relative to Offset Datum

Central Meridian is -104.333334

Coordinates are relative to: Paul Foster Fed Com 103H

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

Grid Convergence at Surface is: 0.54°



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



Total Directional Services

Anticollision Report

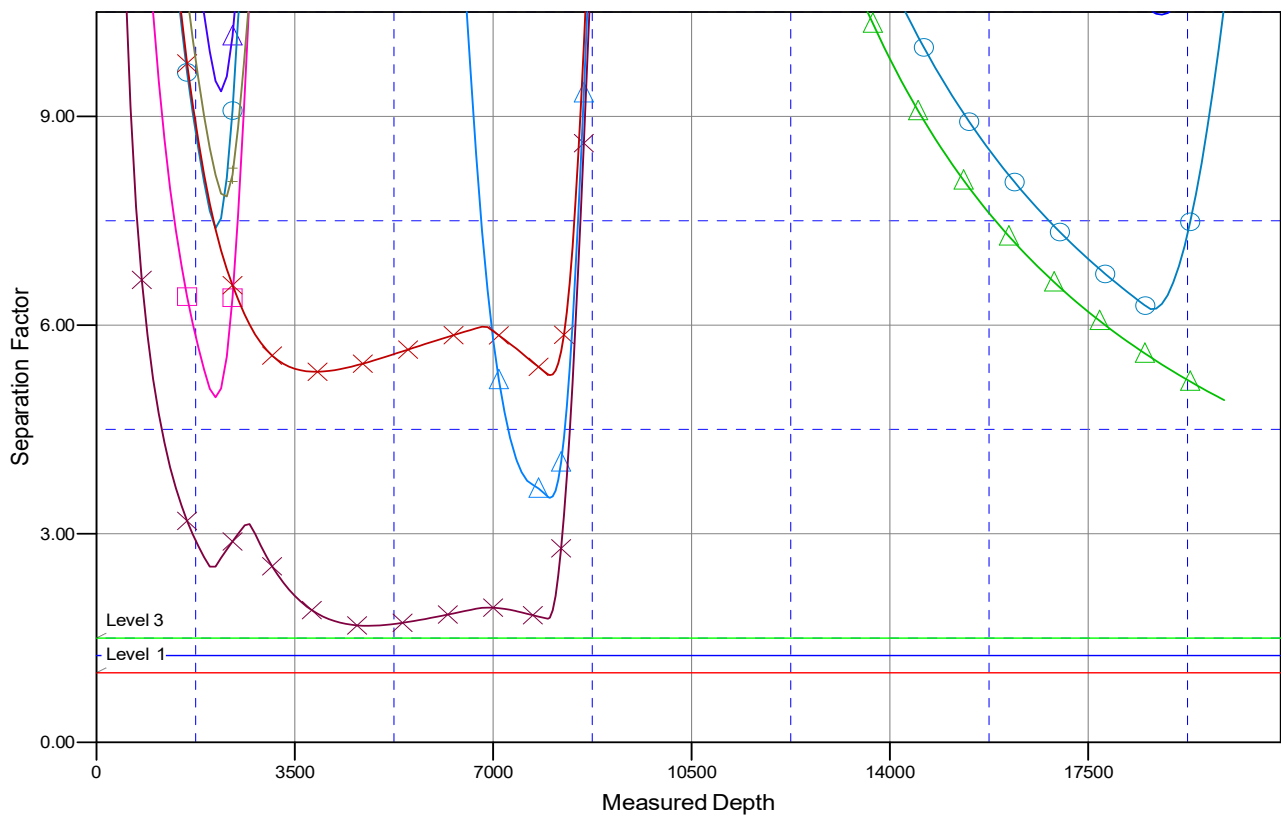


Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Paul Foster Fed Com 103H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031' GE + 30' KB @ 3061.00usft
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Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	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 103H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.54°

Separation Factor Plot



LEGEND

Judge Baylor Fed Com 701H, OH, Plan #5 V0	Bus Driver Fed Com 602H, OH, OH V0	PF Fed Com 803H, 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 104H, OH, Plan #1 V0
Bus Driver Fed Com 702H, OH, Plan #5 V0	LHS Wildcat Fed Com 705H, OH, OH V0	PF Fed Com 602H, 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
Kastori Fed Com 703H, OH, OH V0	PF Fed Com 501H, OH, Plan #1 V0	Paul Foster Fed Com 504H, OH, Plan #1 V0
Kastori Fed Com 703H, OH, Plan #9 V0	Paul Foster Fed Com 503H, OH, Plan #1 V0	Paul Foster Fed Com 804H, OH, Plan #1 V0
Kastori Fed Com 603H, OH, OH V0	PF Fed Com 801H, OH, Plan #1 V0	Paul Foster Fed Com 805H, OH, Plan #1 V0
Bus Driver Fed Com 602H, OH, Plan #6 V0	PF Fed Com 102H, OH, Plan #1 V0	Paul Foster Fed Com 806H, OH, Plan #1 V0

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

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

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

Wells:

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

TABLE OF CONTENTS

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

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

OR

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

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

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

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

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Watershed:

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

BURIED/SURFACE LINE(S):

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

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

ELECTRIC LINE(S):

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

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

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

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

Timing Limitation Exceptions:

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

Ground-level Abandoned Well Marker to avoid raptor perching:

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

VRM IV:

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

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

VI. CONSTRUCTION**A. NOTIFICATION**

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

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

G. ON LEASE ACCESS ROADS**Road Width**

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

Surfacing

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

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

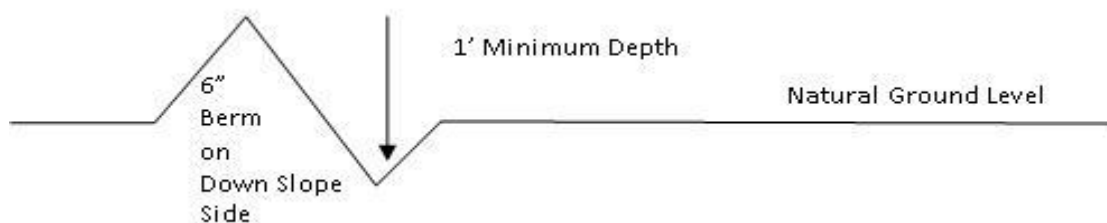
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

Fence Requirement

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

Public Access

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

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

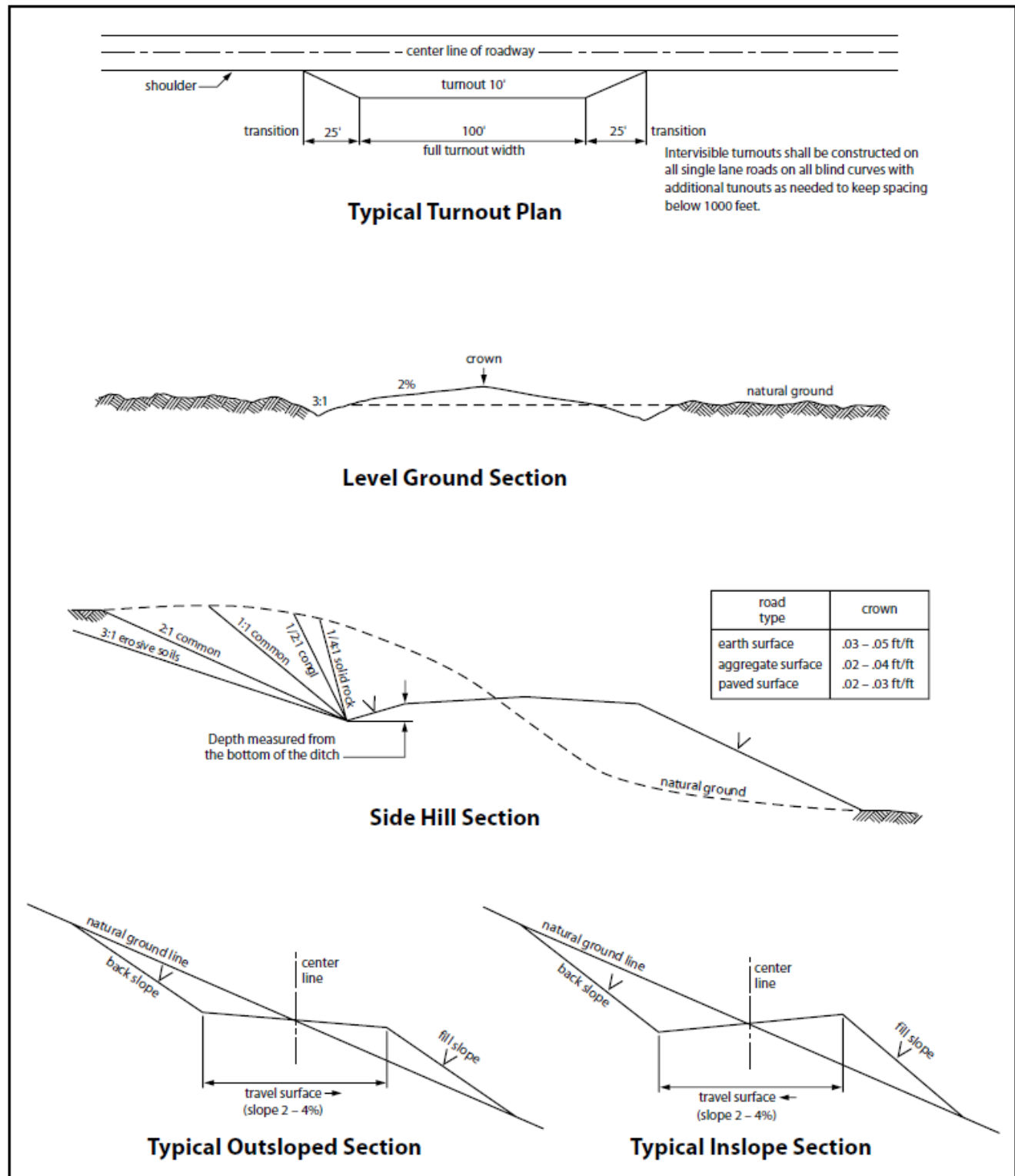


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Exclosure Netting (Open-top Tanks)

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

Chemical and Fuel Secondary Containment and Exclosure Screening

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

Open-Vent Exhaust Stack Exclosures

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

Containment Structures

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

Painting Requirement

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

B. PIPELINES

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

BURIED PIPELINE STIPULATIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- ☐Seed Mixture 1
- ☐Seed Mixture 2
- ☐Seed Mixture 2/LPC
- ☐Seed Mixture 3
- ☐Seed Mixture 4
- ☐Seed Mixture Aplomado Falcon Mixture

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

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

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

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

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

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

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

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

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

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

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

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

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

Seed Mixture 2, for Sandy Sites

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

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

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

Species

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

*Pounds of pure live seed:

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

**PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL**

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

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

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

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

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

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

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

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

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

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

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

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

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

COA

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

A. HYDROGEN SULFIDE

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

B. CASING

1. The 13-3/8 inch surface casing shall be set at approximately **970 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature

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

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

Option 1 (Single Stage):

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

Option 2:

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

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

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

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

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

C. PRESSURE CONTROL

1.

Option 1:

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

Option 2:

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

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

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

☒ Lea County

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

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

A. CASING

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

B. PRESSURE CONTROL

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 88434

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 88434
	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