

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. [333646]
2. Name of Operator [373910]		9. API Well No. 30-025-50909
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory [98098]
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 12/14/2022

SL

(Continued on page 2)



Approval Date: 11/17/2022

KZ
01/03/2023

*(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 M / 250 FSL / 1308 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.225474 / LONG: -103.376761 (TVD: 0 feet, MD: 0 feet)
PPP: NWNW / 0 FSL / 1300 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.246561 / LONG: -103.376829 (TVD: 12501 feet, MD: 20100 feet)
PPP: SWSW / 0 FSL / 1298 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.239305 / LONG: -103.376817 (TVD: 12501 feet, MD: 17500 feet)
PPP: NENW / 0 FSL / 1297 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.235674 / LONG: -103.376812 (TVD: 12501 feet, MD: 16200 feet)
PPP: SENW / 0 FSL / 1296 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.232043 / LONG: -103.376806 (TVD: 12501 feet, MD: 14900 feet)
PPP: SWSW / 622 FSL / 1297 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.226496 / LONG: -103.376797 (TVD: 12501 feet, MD: 12840 feet)
BHL: LOT 4 / 150 FNL / 1306 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.253418 / LONG: -103.376839 (TVD: 12501 feet, MD: 22635 feet)

BLM Point of Contact

Name: TENILLE ORTIZ
Title: Legal Instruments Examiner
Phone: (575) 234-2224
Email: tortiz@blm.gov

CONFIDENTIAL

Review and Appeal Rights

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

CONFIDENTIAL

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-50909	² Pool Code 98098	³ Pool Name WC-025 G-09 S243532M; WOLFBONE
⁴ Property Code 333646	⁵ Property Name COLORADO FED COM	⁶ Well Number 802H
⁷ OGRID No. 373910	⁸ Operator Name FRANKLIN MOUNTAIN ENERGY LLC	⁹ Elevation 3392.7'

¹⁰ Surface Location

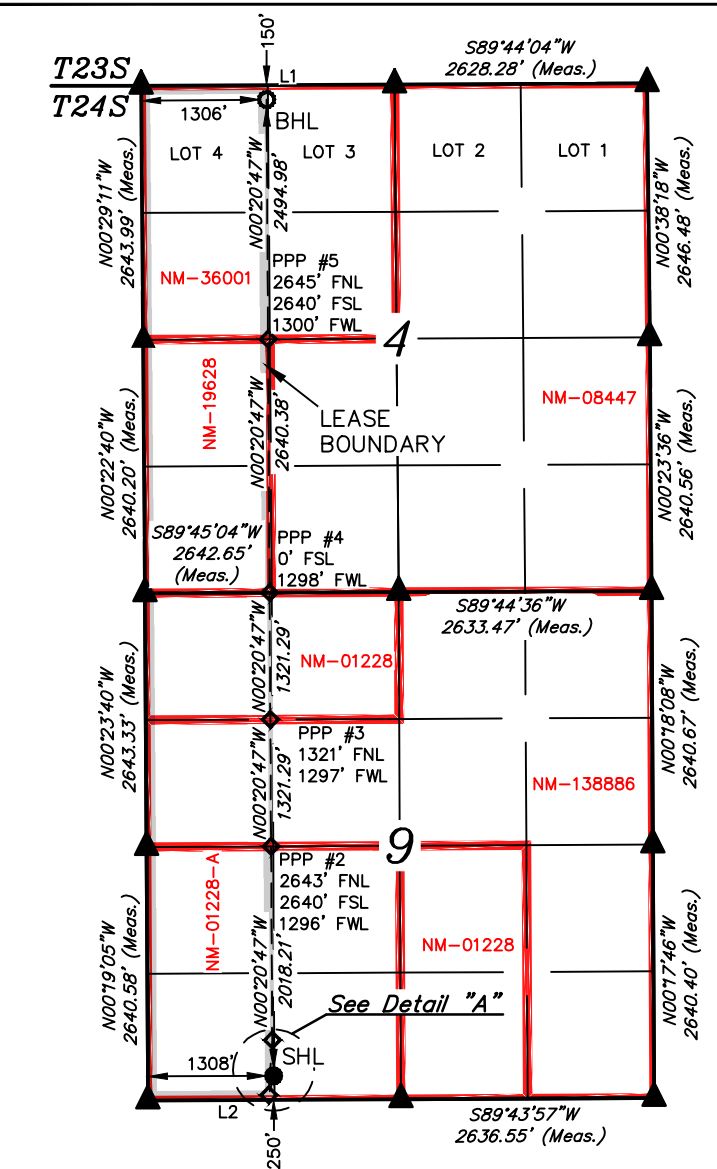
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	9	24S	35E		250	SOUTH	1308	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

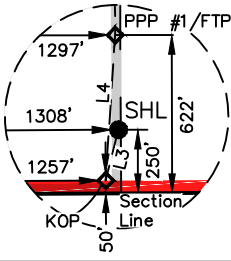
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	4	24S	35E		150	NORTH	1306	WEST	LEA
¹² Dedicated Acres 320.11	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

¹⁶	NAD 83 (SURFACE HOLE LOCATION) LATITUDE = 32°13'31.71" (32.225474°) LONGITUDE = 103°22'36.34" (103.376761°) NAD 27 (SURFACE HOLE LOCATION) LATITUDE = 32°13'31.25" (32.225348°) LONGITUDE = 103°22'34.65" (103.376290°) STATE PLANE NAD 83 (N.M. EAST) N: 447077.99' E: 837141.55' STATE PLANE NAD 27 (N.M. EAST) N: 447018.79' E: 795956.36'
	NAD 83 (KOP) LATITUDE = 32°13'29.73" (32.224925°) LONGITUDE = 103°22'36.94" (103.376927°) NAD 27 (KOP) LATITUDE = 32°13'29.28" (32.224800°) LONGITUDE = 103°22'35.24" (103.376456°) STATE PLANE NAD 83 (N.M. EAST) N: 446877.99' E: 837092.05' STATE PLANE NAD 27 (N.M. EAST) N: 446818.80' E: 795906.85'
	NAD 83 (PPP #1/FTP) LATITUDE = 32°13'35.39" (32.226496°) LONGITUDE = 103°22'36.47" (103.376797°) NAD 27 (PPP #1/FTP) LATITUDE = 32°13'34.93" (32.226371°) LONGITUDE = 103°22'34.78" (103.376326°) STATE PLANE NAD 83 (N.M. EAST) N: 447449.88' E: 837127.03' STATE PLANE NAD 27 (N.M. EAST) N: 447390.67' E: 795941.85'
	NAD 83 (PPP #2) LATITUDE = 32°13'55.35" (32.232043°) LONGITUDE = 103°22'36.50" (103.376806°) NAD 27 (PPP #2) LATITUDE = 32°13'54.90" (32.231917°) LONGITUDE = 103°22'34.81" (103.376335°) STATE PLANE NAD 83 (N.M. EAST) N: 449467.68' E: 837106.38' STATE PLANE NAD 27 (N.M. EAST) N: 449408.42' E: 795921.29'
	NAD 83 (PPP #3) LATITUDE = 32°14'08.43" (32.235674°) LONGITUDE = 103°22'36.52" (103.376812°) NAD 27 (PPP #3) LATITUDE = 32°14'07.97" (32.235548°) LONGITUDE = 103°22'34.83" (103.376340°) STATE PLANE NAD 83 (N.M. EAST) N: 450788.71' E: 837092.86' STATE PLANE NAD 27 (N.M. EAST) N: 450729.41' E: 795907.82'
	NAD 83 (PPP #4) LATITUDE = 32°14'21.50" (32.239305°) LONGITUDE = 103°22'36.54" (103.376817°) NAD 27 (PPP #4) LATITUDE = 32°14'21.05" (32.239180°) LONGITUDE = 103°22'34.84" (103.376346°) STATE PLANE NAD 83 (N.M. EAST) N: 452109.73' E: 837079.33' STATE PLANE NAD 27 (N.M. EAST) N: 452050.40' E: 795894.36'
	NAD 83 (PPP #5) LATITUDE = 32°14'47.62" (32.246561°) LONGITUDE = 103°22'36.58" (103.376829°) NAD 27 (PPP #5) LATITUDE = 32°14'47.17" (32.246436°) LONGITUDE = 103°22'34.88" (103.376357°) STATE PLANE NAD 83 (N.M. EAST) N: 454749.57' E: 837052.31' STATE PLANE NAD 27 (N.M. EAST) N: 454690.17' E: 795867.45'
	NAD 83 (BOTTOM HOLE LOCATION) LATITUDE = 32°15'12.31" (32.253418°) LONGITUDE = 103°22'36.62" (103.376839°) NAD 27 (BOTTOM HOLE LOCATION) LATITUDE = 32°15'11.85" (32.253293°) LONGITUDE = 103°22'34.92" (103.376367°) STATE PLANE NAD 83 (N.M. EAST) N: 457244.05' E: 837026.77' STATE PLANE NAD 27 (N.M. EAST) N: 457184.58' E: 795841.99'



LINE TABLE		
LINE	DIRECTION	LENGTH
L2	S89°42'02"W	2634.31'
L3	S14°08'29"W	206.07'
L4	N03°44'25"E	573.05'



SCALE
DRAWN BY: D.J.S. 08-12-21
REV: 1 Z.T. 09-28-21 (ADD
LEASE INFO, KOP & PPP'S)

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

Detail "A"
No Scale

- = SURFACE HOLE LOCATION
- ◆ = KICK OFF POINT/PPP
- = BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED

¹⁷ OPERATOR
CERTIFICATION

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

Signature: *Shelly Albrecht* Date: 10/1/2021

Shelly Albrecht

Printed Name

salbrecht@fmellic.com

E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

MAY 08, 2019

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

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:** 12/13/2022

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: Colorado CTB: (f#) fAPP2125752717 [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

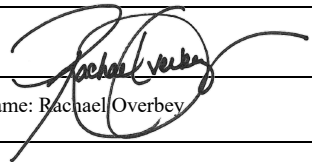
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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: 12/13/2022
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
Colorado Fed Com 101H	TBD	M-9-24S-35E	250 FSL 1203 FWL	750 +/-	1100 +/-	500 +/-
Colorado Fed Com 102H	TBD	M-9-24S-35E	250 FSL 1238 FWL	750 +/-	1100 +/-	500 +/-
Colorado Fed Com 801H	TBD	M-9-24S-35E	250 FSL 1273 FWL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 802H	TBD	M-9-24S-35E	250 FSL 1308 FWL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 803H30-025-50909	TBD	M-9-24S-35E	250 FSL 1343 FWL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 103H	TBD	O-9-24S-35E	400 FSL 1593 FEL	750 +/-	1100 +/-	500 +/-
Colorado Fed Com 104H	TBD	O-9-24S-35E	400 FSL 1568 FEL	750 +/-	1100 +/-	500 +/-
Colorado Fed Com 804H	TBD	O-9-24S-35E	400 FSL 1543 FEL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 805H	TBD	O-9-24S-35E	400 FSL 1518 FEL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 806H	TBD	O-9-24S-35E	400 FSL 1493 FEL	900 +/-	1100 +/-	500 +/-

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
Colorado Fed Com 101H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 102H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 801H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 802H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 803H30-025-50909	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 103H	TBD	6/15/2023	10/5/2023	10/20/2023	10/30/2023	11/1/2023
Colorado Fed Com 104H	TBD	6/15/2023	10/5/2023	10/20/2023	10/30/2023	11/1/2023
Colorado Fed Com 804H	TBD	6/15/2023	10/5/2023	10/20/2023	10/30/2023	11/1/2023
Colorado Fed Com 805H	TBD	6/15/2023	10/5/2023	10/20/2023	10/30/2023	11/1/2023
Colorado Fed Com 806H	TBD	6/15/2023	10/5/2023	10/20/2023	10/30/2023	11/1/2023



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.

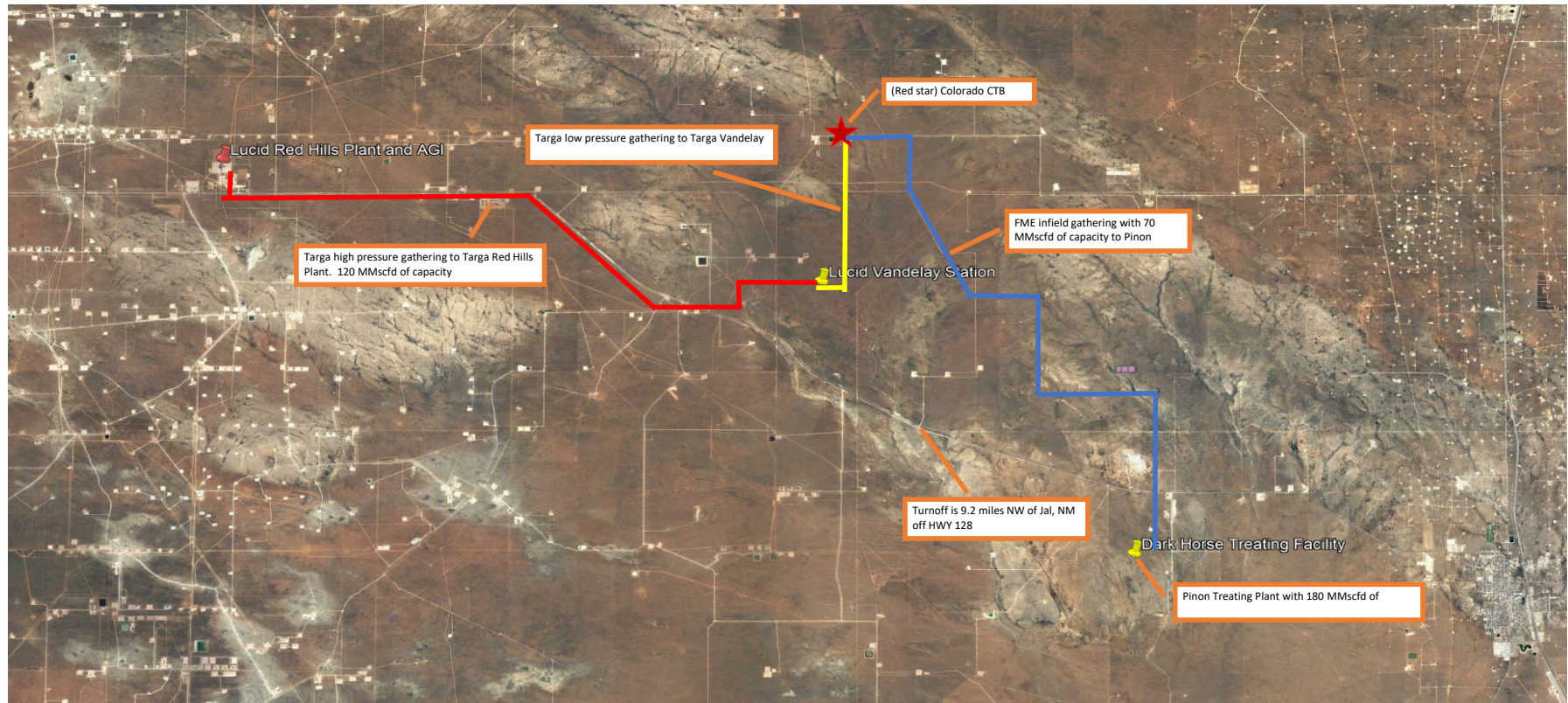
VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- 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.

Colorado NGMP Map

Dec 2022

- Capacities reflected are FME's understanding of 3rd party midstream system capacities





Colorado Fed Com 802H

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)	3,392'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,554'	868'			Carbonates
Salado	2,223'	1,199'			Salt, Carbonate & Clastics
Base Salt	611'	2,811'			Shaley Carbonate & Shale
Lamar	-1,833'	5,255'			Carbonate & Clastics
Bell Canyon	-1,914'	5,336'			Sandstone - oil/gas/water
Cherry Canyon	-2,852'	6,274'			Sandstone - oil/gas/water
Brushy Canyon	-4,185'	7,607'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,525'	8,947'			Shale/Carbonates - oil/gas
Avalon	-5,553'	8,975'			Shale/Carbonates - oil/gas
Chert Zone	-5,744'	9,166'			Carbonate/Chert
First Bone Spring Sand	-6,626'	10,048'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,825'	10,247'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,205'	10,627'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,754'	11,176'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,203'	11,625'			Sandstone - oil/gas/water
Wolfcamp	-8,571'	11,993'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,608'	12,030'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,851'	12,273'			Overpressure Shale - Oil/Gas
HZ Target	-9,079'	12,501'			Overpressure Shale - Oil/Gas
Wolfcamp C	-9,143'	12,565'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,336'	Oil
Bone Spring	10,048'	Oil
Wolfcamp	11,993'	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	5280	1.75	1.71	2.94	3.35
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	11900	1.12	1.28	1.82	1.24
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	22635 12501	1.32	1.37	1.17	0.98 1.56



7 5/8" casing will be set at 11,900' MD/11,887' TVD at 0° Inc. Stress calculations on 5 1/2" casing performed assuming 23,929' depth. Actual max vertical depth is 12,446'.

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	803	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	331	Tail, 14.8 ppg, Class C,	1.349	6.51	1000	100%
Int1	12.25	9.625	5280	1551	0.125pps Poly-E-Flake Lead, 12.8 ppg, Class C 5% Salt,	1.79	9.74	0	154	1% CaCl ₂ , 0.125pps Celo-Flake Tail, 14.8 ppg, Class C,	1.33	6.37	4980	100%
Int2	8.75	7.625	11900	355	0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.13	5.97	4025	94	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl ₂	1.33	6.29	10900	50%
Prod	6.75	5.5	22635	875	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	10900						20%

5. Minimum Specifications for Pressure Control:

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

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

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

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

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



6. Types and characteristics of the proposed mud system:

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

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,300'	Fresh - Gel	8.6-8.8	28-34	N/c
1,300' – 11,900'	Brine	8.8-10.2	28-34	N/c
11,900' – 22,635' Lateral	Oil Base	11.0-12.5	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 11-12 ppg. In order to maintain hole stability, mud weights up to 13 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 12,501' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 8,450 psig (based on 13 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.

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Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Colorado Fed Com
Well: Colorado Fed Com 802H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.51°
Magnetic North: 5.92°

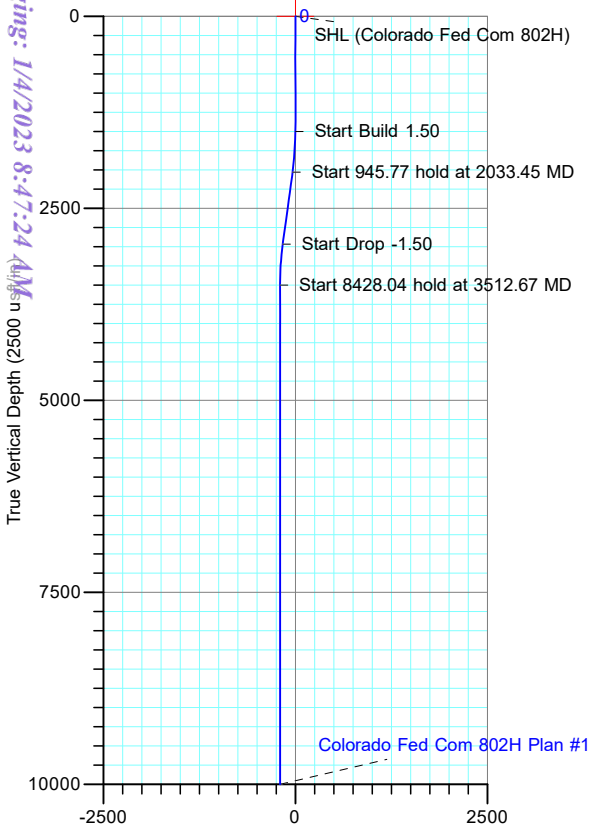
Magnetic Field
Strength: 47492.4nT
Dip Angle: 59.92°
Date: 8/31/2021
Model: IGRF2020

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



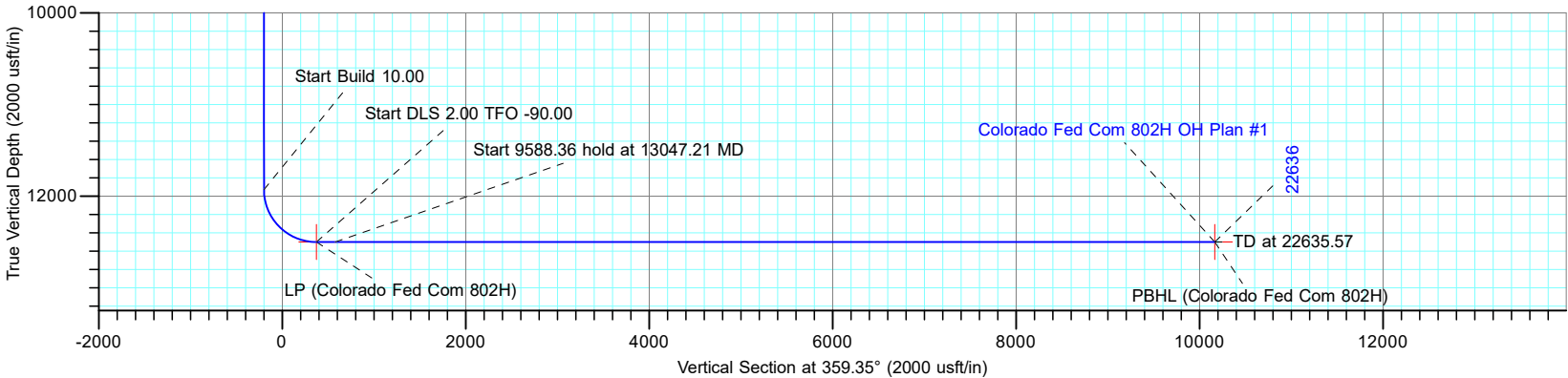
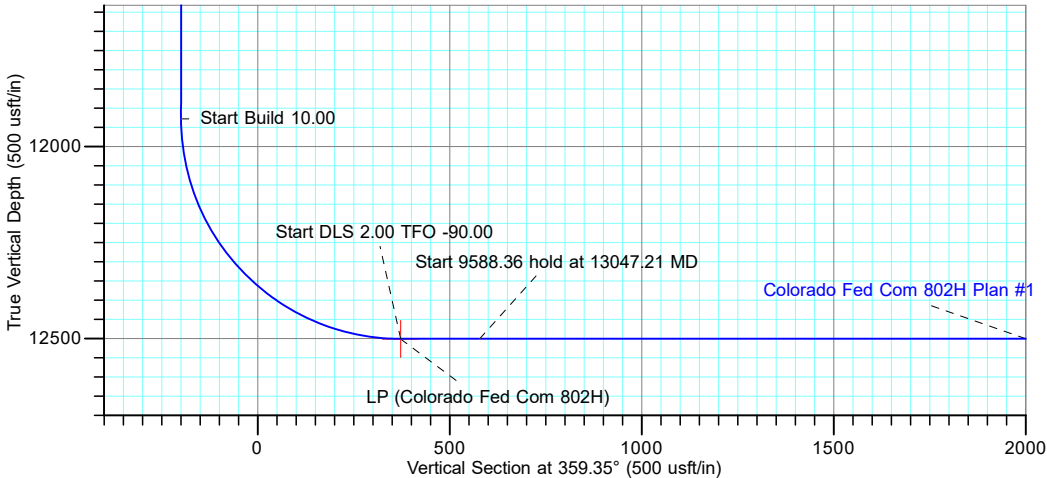
Received by OCD: 12/14/2022 9:18:19 AM



3392.7' GE + 30' KB @ 3422.70usft

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	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2033.45	8.00	193.90	2031.72	-36.10	-8.93	1.50	193.90	-36.00	Start 945.77 hold at 2033.45 MD
2979.22	8.00	193.90	2968.28	-163.90	-40.57	0.00	0.00	-163.43	Start Drop -1.50
3512.67	0.00	0.00	3500.00	-200.00	-49.50	1.50	180.00	-199.43	Start 8428.04 hold at 3512.67 MD
11940.71	0.00	0.00	11928.04	-200.00	-49.50	0.00	0.00	-199.43	Start Build 10.00
12840.71	90.00	3.50	12501.00	371.89	-14.52	10.00	3.50	372.03	Start DLS 2.00 TFO -90.00
13047.21	90.00	359.37	12501.00	578.28	-9.35	2.00	-90.00	578.35	Start 9588.36 hold at 13047.21 MD
22635.57	90.00	359.37	12501.00	10166.06	-114.78	0.00	0.00	10166.71	TD at 22635.57

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (Colorado Fed Com 802H)	12501.00	371.89	-14.52	32.226496	-103.376797
PBHL (Colorado Fed Com 802H)	12501.00	10166.06	-114.78	32.253418	-103.376839
SHL (Colorado Fed Com 802H)	0.00	0.00	0.00	32.225474	-103.376761



TOTAL DIRECTIONAL SERVICES LLC

Plan: Plan #1 (Colorado Fed Com 802H/OH)
Created By: Dustin Ault
Date: 17:01, August 31 2022
Approved: _____ Date: _____

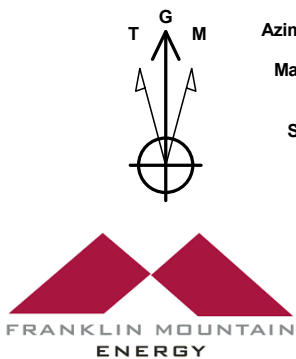
Page 19 of 111

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Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Colorado Fed Com
Well: Colorado Fed Com 802H
Wellbore: OH
Design: Plan #1

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



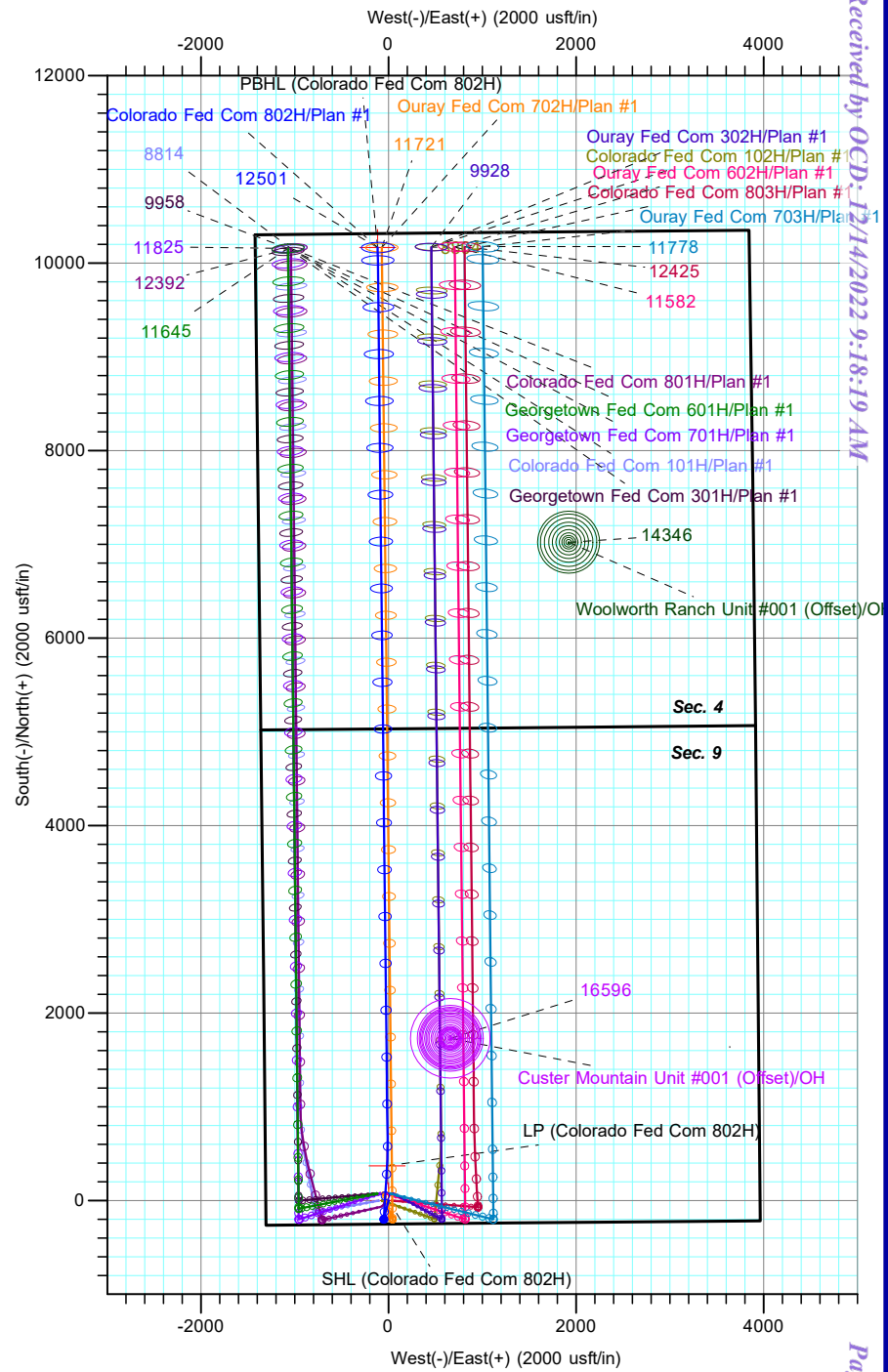
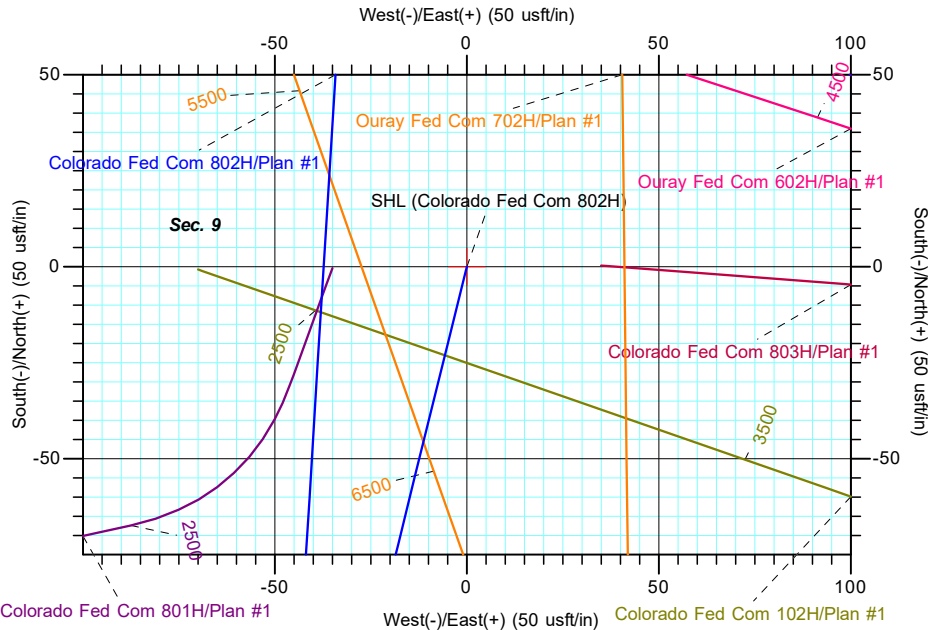
Azimuths to Grid North
True North: -0.51°
Magnetic North: 5.92°
Magnetic Field
Strength: 47492.4nT
Dip Angle: 59.92°
Date: 8/31/2021
Model: IGRF2020

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (Colorado Fed Com 802H)	12501.00	371.89	-14.52	447449.88	837127.03	32.226496	-103.376797
PBHL (Colorado Fed Com 802H)	12501.00	10166.06	-114.78	457244.05	837026.77	32.253418	-103.376839
SHL (Colorado Fed Com 802H)	0.00	0.00	0.00	447077.99	837141.55	32.225474	-103.376761

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	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2033.45	8.00	193.90	2031.72	-36.10	-8.93	1.50	193.90	-36.00	Start 945.77 hold at 2033.45 MD
2979.22	8.00	193.90	2968.28	-163.90	-40.57	0.00	0.00	-163.43	Start Drop -1.50
3512.67	0.00	0.00	3500.00	-200.00	-49.50	1.50	180.00	-199.43	Start 8428.04 hold at 3512.67 MD
11940.71	0.00	0.00	11928.04	-200.00	-49.50	0.00	0.00	-199.43	Start Build 10.00
12840.71	90.00	3.50	12501.00	371.89	-14.52	10.00	3.50	372.03	Start DLS 2.00 TFO -90.00
13047.21	90.00	359.37	12501.00	578.28	-9.35	2.00	-90.00	578.35	Start 9588.36 hold at 13047.21 MD
22635.57	90.00	359.37	12501.00	10166.06	-114.78	0.00	0.00	10166.71	TD at 22635.57



TOTAL DIRECTIONAL SERVICES LLC

Received by OCD: 12/14/2022 9:18:19 AM



Franklin Mountain Energy

Lea County, NM (NAD83)

Colorado Fed Com

Colorado Fed Com 802H

OH

Plan: Plan #1

Standard Planning Report

31 August, 2021





Total Directional Services Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Company:	Franklin Mountain Energy	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 802H	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	Colorado Fed Com				
Site Position:		Northing:	447,076.97 usft	Latitude:	32.225474
From:	Map	Easting:	837,036.57 usft	Longitude:	-103.377101
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51

Well	Colorado Fed Com 802H					
Well Position	+N/-S	1.02 usft	Northing:	447,077.99 usft	Latitude:	32.225474
	+E/-W	104.98 usft	Easting:	837,141.55 usft	Longitude:	-103.376761
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,392.70 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/31/2021	6.43	59.92	47,492.40199812

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	359.35

Plan Survey Tool Program	Date	8/31/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	22,635.57 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	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,033.45	8.00	193.90	2,031.72	-36.10	-8.93	1.50	1.50	0.00	193.90	
2,979.22	8.00	193.90	2,968.28	-163.90	-40.57	0.00	0.00	0.00	0.00	
3,512.67	0.00	0.00	3,500.00	-200.00	-49.50	1.50	-1.50	0.00	180.00	
11,940.71	0.00	0.00	11,928.04	-200.00	-49.50	0.00	0.00	0.00	0.00	
12,840.71	90.00	3.50	12,501.00	371.89	-14.52	10.00	10.00	0.00	3.50	
13,047.21	90.00	359.37	12,501.00	578.28	-9.35	2.00	0.00	-2.00	-90.00	
22,635.57	90.00	359.37	12,501.00	10,166.06	-114.78	0.00	0.00	0.00	0.00	PBHL (Colorado Fed



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Company:	Franklin Mountain Energy	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 802H	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 (Colorado Fed Com 802H)									
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
Start Build 1.50									
1,600.00	1.50	193.90	1,599.99	-1.27	-0.31	-1.27	1.50	1.50	0.00
1,700.00	3.00	193.90	1,699.91	-5.08	-1.26	-5.07	1.50	1.50	0.00
1,800.00	4.50	193.90	1,799.69	-11.43	-2.83	-11.40	1.50	1.50	0.00
1,900.00	6.00	193.90	1,899.27	-20.31	-5.03	-20.25	1.50	1.50	0.00
2,000.00	7.50	193.90	1,998.57	-31.72	-7.85	-31.63	1.50	1.50	0.00
2,033.45	8.00	193.90	2,031.72	-36.10	-8.93	-36.00	1.50	1.50	0.00
Start 945.77 hold at 2033.45 MD									
2,100.00	8.00	193.90	2,097.62	-45.09	-11.16	-44.96	0.00	0.00	0.00
2,200.00	8.00	193.90	2,196.65	-58.61	-14.50	-58.44	0.00	0.00	0.00
2,300.00	8.00	193.90	2,295.67	-72.12	-17.85	-71.91	0.00	0.00	0.00
2,400.00	8.00	193.90	2,394.70	-85.63	-21.19	-85.39	0.00	0.00	0.00
2,500.00	8.00	193.90	2,493.73	-99.14	-24.54	-98.86	0.00	0.00	0.00
2,600.00	8.00	193.90	2,592.75	-112.66	-27.88	-112.33	0.00	0.00	0.00
2,700.00	8.00	193.90	2,691.78	-126.17	-31.23	-125.81	0.00	0.00	0.00
2,800.00	8.00	193.90	2,790.80	-139.68	-34.57	-139.28	0.00	0.00	0.00
2,900.00	8.00	193.90	2,889.83	-153.19	-37.92	-152.76	0.00	0.00	0.00
2,979.22	8.00	193.90	2,968.28	-163.90	-40.57	-163.43	0.00	0.00	0.00
Start Drop -1.50									
3,000.00	7.69	193.90	2,988.86	-166.65	-41.25	-166.18	1.50	-1.50	0.00
3,100.00	6.19	193.90	3,088.13	-178.38	-44.15	-177.87	1.50	-1.50	0.00
3,200.00	4.69	193.90	3,187.68	-187.58	-46.43	-187.05	1.50	-1.50	0.00
3,300.00	3.19	193.90	3,287.44	-194.25	-48.08	-193.70	1.50	-1.50	0.00
3,400.00	1.69	193.90	3,387.34	-198.39	-49.10	-197.82	1.50	-1.50	0.00
3,500.00	0.19	193.90	3,487.33	-199.98	-49.49	-199.41	1.50	-1.50	0.00
3,512.67	0.00	0.00	3,500.00	-200.00	-49.50	-199.43	1.50	-1.50	0.00
Start 8428.04 hold at 3512.67 MD									
3,600.00	0.00	0.00	3,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
3,700.00	0.00	0.00	3,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
3,800.00	0.00	0.00	3,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
3,900.00	0.00	0.00	3,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,000.00	0.00	0.00	3,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,100.00	0.00	0.00	4,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,200.00	0.00	0.00	4,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,300.00	0.00	0.00	4,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,400.00	0.00	0.00	4,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Company:	Franklin Mountain Energy	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 802H	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)
4,500.00	0.00	0.00	4,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,600.00	0.00	0.00	4,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,700.00	0.00	0.00	4,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,800.00	0.00	0.00	4,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
4,900.00	0.00	0.00	4,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,000.00	0.00	0.00	4,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,100.00	0.00	0.00	5,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,200.00	0.00	0.00	5,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,300.00	0.00	0.00	5,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,400.00	0.00	0.00	5,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,500.00	0.00	0.00	5,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,600.00	0.00	0.00	5,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,700.00	0.00	0.00	5,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,800.00	0.00	0.00	5,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
5,900.00	0.00	0.00	5,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,000.00	0.00	0.00	5,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,100.00	0.00	0.00	6,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,200.00	0.00	0.00	6,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,300.00	0.00	0.00	6,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,400.00	0.00	0.00	6,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,500.00	0.00	0.00	6,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,600.00	0.00	0.00	6,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,700.00	0.00	0.00	6,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,800.00	0.00	0.00	6,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
6,900.00	0.00	0.00	6,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,000.00	0.00	0.00	6,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,100.00	0.00	0.00	7,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,200.00	0.00	0.00	7,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,300.00	0.00	0.00	7,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,400.00	0.00	0.00	7,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,500.00	0.00	0.00	7,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,600.00	0.00	0.00	7,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,700.00	0.00	0.00	7,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,800.00	0.00	0.00	7,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
7,900.00	0.00	0.00	7,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,000.00	0.00	0.00	7,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,100.00	0.00	0.00	8,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,200.00	0.00	0.00	8,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,300.00	0.00	0.00	8,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,400.00	0.00	0.00	8,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,500.00	0.00	0.00	8,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,600.00	0.00	0.00	8,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,700.00	0.00	0.00	8,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,800.00	0.00	0.00	8,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
8,900.00	0.00	0.00	8,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,000.00	0.00	0.00	8,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,100.00	0.00	0.00	9,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,200.00	0.00	0.00	9,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,300.00	0.00	0.00	9,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,400.00	0.00	0.00	9,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,500.00	0.00	0.00	9,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,600.00	0.00	0.00	9,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,700.00	0.00	0.00	9,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
9,800.00	0.00	0.00	9,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00



Total Directional Services

Planning Report



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Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,900.00	0.00	0.00	9,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,000.00	0.00	0.00	9,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,100.00	0.00	0.00	10,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,200.00	0.00	0.00	10,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,300.00	0.00	0.00	10,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,400.00	0.00	0.00	10,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,500.00	0.00	0.00	10,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,600.00	0.00	0.00	10,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,700.00	0.00	0.00	10,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,800.00	0.00	0.00	10,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
10,900.00	0.00	0.00	10,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,000.00	0.00	0.00	10,987.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,100.00	0.00	0.00	11,087.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,200.00	0.00	0.00	11,187.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,300.00	0.00	0.00	11,287.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,400.00	0.00	0.00	11,387.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,500.00	0.00	0.00	11,487.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,600.00	0.00	0.00	11,587.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,700.00	0.00	0.00	11,687.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,800.00	0.00	0.00	11,787.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,900.00	0.00	0.00	11,887.33	-200.00	-49.50	-199.43	0.00	0.00	0.00
11,940.71	0.00	0.00	11,928.04	-200.00	-49.50	-199.43	0.00	0.00	0.00
Start Build 10.00									
11,950.00	0.93	3.50	11,937.33	-199.92	-49.50	-199.35	10.00	10.00	0.00
12,000.00	5.93	3.50	11,987.22	-196.94	-49.31	-196.37	10.00	10.00	0.00
12,050.00	10.93	3.50	12,036.67	-189.63	-48.87	-189.06	10.00	10.00	0.00
12,100.00	15.93	3.50	12,085.28	-178.04	-48.16	-177.49	10.00	10.00	0.00
12,150.00	20.93	3.50	12,132.70	-162.27	-47.19	-161.73	10.00	10.00	0.00
12,200.00	25.93	3.50	12,178.57	-142.43	-45.98	-141.90	10.00	10.00	0.00
12,250.00	30.93	3.50	12,222.52	-118.68	-44.53	-118.17	10.00	10.00	0.00
12,300.00	35.93	3.50	12,264.24	-91.20	-42.85	-90.71	10.00	10.00	0.00
12,350.00	40.93	3.50	12,303.40	-60.19	-40.95	-59.72	10.00	10.00	0.00
12,400.00	45.93	3.50	12,339.70	-25.89	-38.85	-25.45	10.00	10.00	0.00
12,450.00	50.93	3.50	12,372.86	11.43	-36.57	11.85	10.00	10.00	0.00
12,500.00	55.93	3.50	12,402.64	51.50	-34.12	51.88	10.00	10.00	0.00
12,550.00	60.93	3.50	12,428.81	94.01	-31.52	94.36	10.00	10.00	0.00
12,600.00	65.93	3.50	12,451.17	138.63	-28.79	138.95	10.00	10.00	0.00
12,650.00	70.93	3.50	12,469.55	185.03	-25.95	185.31	10.00	10.00	0.00
12,700.00	75.93	3.50	12,483.81	232.85	-23.03	233.09	10.00	10.00	0.00
12,750.00	80.93	3.50	12,493.83	281.72	-20.04	281.93	10.00	10.00	0.00
12,800.00	85.93	3.50	12,499.55	331.29	-17.01	331.46	10.00	10.00	0.00
12,840.71	90.00	3.50	12,501.00	371.89	-14.52	372.03	10.00	10.00	0.00
Start DLS 2.00 TFO -90.00 - LP (Colorado Fed Com 802H)									
12,900.00	90.00	2.31	12,501.00	431.10	-11.51	431.20	2.00	0.00	-2.00
13,000.00	90.00	0.31	12,501.00	531.07	-9.22	531.14	2.00	0.00	-2.00
13,047.21	90.00	359.37	12,501.00	578.28	-9.35	578.35	2.00	0.00	-2.00
Start 9588.36 hold at 13047.21 MD									
13,100.00	90.00	359.37	12,501.00	631.06	-9.93	631.14	0.00	0.00	0.00
13,200.00	90.00	359.37	12,501.00	731.06	-11.03	731.14	0.00	0.00	0.00
13,300.00	90.00	359.37	12,501.00	831.05	-12.13	831.14	0.00	0.00	0.00
13,400.00	90.00	359.37	12,501.00	931.05	-13.23	931.14	0.00	0.00	0.00
13,500.00	90.00	359.37	12,501.00	1,031.04	-14.33	1,031.14	0.00	0.00	0.00
13,600.00	90.00	359.37	12,501.00	1,131.03	-15.43	1,131.14	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Company:	Franklin Mountain Energy	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 802H	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)
13,700.00	90.00	359.37	12,501.00	1,231.03	-16.53	1,231.14	0.00	0.00	0.00
13,800.00	90.00	359.37	12,501.00	1,331.02	-17.63	1,331.14	0.00	0.00	0.00
13,900.00	90.00	359.37	12,501.00	1,431.01	-18.73	1,431.14	0.00	0.00	0.00
14,000.00	90.00	359.37	12,501.00	1,531.01	-19.83	1,531.14	0.00	0.00	0.00
14,100.00	90.00	359.37	12,501.00	1,631.00	-20.93	1,631.14	0.00	0.00	0.00
14,200.00	90.00	359.37	12,501.00	1,731.00	-22.03	1,731.14	0.00	0.00	0.00
14,300.00	90.00	359.37	12,501.00	1,830.99	-23.13	1,831.14	0.00	0.00	0.00
14,400.00	90.00	359.37	12,501.00	1,930.98	-24.23	1,931.14	0.00	0.00	0.00
14,500.00	90.00	359.37	12,501.00	2,030.98	-25.33	2,031.14	0.00	0.00	0.00
14,600.00	90.00	359.37	12,501.00	2,130.97	-26.43	2,131.14	0.00	0.00	0.00
14,700.00	90.00	359.37	12,501.00	2,230.97	-27.52	2,231.14	0.00	0.00	0.00
14,800.00	90.00	359.37	12,501.00	2,330.96	-28.62	2,331.14	0.00	0.00	0.00
14,900.00	90.00	359.37	12,501.00	2,430.95	-29.72	2,431.14	0.00	0.00	0.00
15,000.00	90.00	359.37	12,501.00	2,530.95	-30.82	2,531.14	0.00	0.00	0.00
15,100.00	90.00	359.37	12,501.00	2,630.94	-31.92	2,631.14	0.00	0.00	0.00
15,200.00	90.00	359.37	12,501.00	2,730.94	-33.02	2,731.14	0.00	0.00	0.00
15,300.00	90.00	359.37	12,501.00	2,830.93	-34.12	2,831.14	0.00	0.00	0.00
15,400.00	90.00	359.37	12,501.00	2,930.92	-35.22	2,931.14	0.00	0.00	0.00
15,500.00	90.00	359.37	12,501.00	3,030.92	-36.32	3,031.14	0.00	0.00	0.00
15,600.00	90.00	359.37	12,501.00	3,130.91	-37.42	3,131.14	0.00	0.00	0.00
15,700.00	90.00	359.37	12,501.00	3,230.91	-38.52	3,231.14	0.00	0.00	0.00
15,800.00	90.00	359.37	12,501.00	3,330.90	-39.62	3,331.14	0.00	0.00	0.00
15,900.00	90.00	359.37	12,501.00	3,430.89	-40.72	3,431.14	0.00	0.00	0.00
16,000.00	90.00	359.37	12,501.00	3,530.89	-41.82	3,531.14	0.00	0.00	0.00
16,100.00	90.00	359.37	12,501.00	3,630.88	-42.92	3,631.14	0.00	0.00	0.00
16,200.00	90.00	359.37	12,501.00	3,730.88	-44.02	3,731.14	0.00	0.00	0.00
16,300.00	90.00	359.37	12,501.00	3,830.87	-45.12	3,831.14	0.00	0.00	0.00
16,400.00	90.00	359.37	12,501.00	3,930.86	-46.22	3,931.14	0.00	0.00	0.00
16,500.00	90.00	359.37	12,501.00	4,030.86	-47.32	4,031.14	0.00	0.00	0.00
16,600.00	90.00	359.37	12,501.00	4,130.85	-48.42	4,131.14	0.00	0.00	0.00
16,700.00	90.00	359.37	12,501.00	4,230.85	-49.52	4,231.14	0.00	0.00	0.00
16,800.00	90.00	359.37	12,501.00	4,330.84	-50.62	4,331.14	0.00	0.00	0.00
16,900.00	90.00	359.37	12,501.00	4,430.83	-51.71	4,431.14	0.00	0.00	0.00
17,000.00	90.00	359.37	12,501.00	4,530.83	-52.81	4,531.14	0.00	0.00	0.00
17,100.00	90.00	359.37	12,501.00	4,630.82	-53.91	4,631.14	0.00	0.00	0.00
17,200.00	90.00	359.37	12,501.00	4,730.82	-55.01	4,731.14	0.00	0.00	0.00
17,300.00	90.00	359.37	12,501.00	4,830.81	-56.11	4,831.14	0.00	0.00	0.00
17,400.00	90.00	359.37	12,501.00	4,930.80	-57.21	4,931.14	0.00	0.00	0.00
17,500.00	90.00	359.37	12,501.00	5,030.80	-58.31	5,031.14	0.00	0.00	0.00
17,600.00	90.00	359.37	12,501.00	5,130.79	-59.41	5,131.14	0.00	0.00	0.00
17,700.00	90.00	359.37	12,501.00	5,230.79	-60.51	5,231.14	0.00	0.00	0.00
17,800.00	90.00	359.37	12,501.00	5,330.78	-61.61	5,331.14	0.00	0.00	0.00
17,900.00	90.00	359.37	12,501.00	5,430.77	-62.71	5,431.14	0.00	0.00	0.00
18,000.00	90.00	359.37	12,501.00	5,530.77	-63.81	5,531.14	0.00	0.00	0.00
18,100.00	90.00	359.37	12,501.00	5,630.76	-64.91	5,631.14	0.00	0.00	0.00
18,200.00	90.00	359.37	12,501.00	5,730.76	-66.01	5,731.14	0.00	0.00	0.00
18,300.00	90.00	359.37	12,501.00	5,830.75	-67.11	5,831.14	0.00	0.00	0.00
18,400.00	90.00	359.37	12,501.00	5,930.74	-68.21	5,931.14	0.00	0.00	0.00
18,500.00	90.00	359.37	12,501.00	6,030.74	-69.31	6,031.14	0.00	0.00	0.00
18,600.00	90.00	359.37	12,501.00	6,130.73	-70.41	6,131.14	0.00	0.00	0.00
18,700.00	90.00	359.37	12,501.00	6,230.72	-71.51	6,231.14	0.00	0.00	0.00
18,800.00	90.00	359.37	12,501.00	6,330.72	-72.61	6,331.14	0.00	0.00	0.00
18,900.00	90.00	359.37	12,501.00	6,430.71	-73.71	6,431.14	0.00	0.00	0.00
19,000.00	90.00	359.37	12,501.00	6,530.71	-74.81	6,531.14	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Company:	Franklin Mountain Energy	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 802H	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)
19,100.00	90.00	359.37	12,501.00	6,630.70	-75.90	6,631.14	0.00	0.00	0.00
19,200.00	90.00	359.37	12,501.00	6,730.69	-77.00	6,731.14	0.00	0.00	0.00
19,300.00	90.00	359.37	12,501.00	6,830.69	-78.10	6,831.14	0.00	0.00	0.00
19,400.00	90.00	359.37	12,501.00	6,930.68	-79.20	6,931.14	0.00	0.00	0.00
19,500.00	90.00	359.37	12,501.00	7,030.68	-80.30	7,031.14	0.00	0.00	0.00
19,600.00	90.00	359.37	12,501.00	7,130.67	-81.40	7,131.14	0.00	0.00	0.00
19,700.00	90.00	359.37	12,501.00	7,230.66	-82.50	7,231.14	0.00	0.00	0.00
19,800.00	90.00	359.37	12,501.00	7,330.66	-83.60	7,331.14	0.00	0.00	0.00
19,900.00	90.00	359.37	12,501.00	7,430.65	-84.70	7,431.14	0.00	0.00	0.00
20,000.00	90.00	359.37	12,501.00	7,530.65	-85.80	7,531.14	0.00	0.00	0.00
20,100.00	90.00	359.37	12,501.00	7,630.64	-86.90	7,631.14	0.00	0.00	0.00
20,200.00	90.00	359.37	12,501.00	7,730.63	-88.00	7,731.14	0.00	0.00	0.00
20,300.00	90.00	359.37	12,501.00	7,830.63	-89.10	7,831.14	0.00	0.00	0.00
20,400.00	90.00	359.37	12,501.00	7,930.62	-90.20	7,931.14	0.00	0.00	0.00
20,500.00	90.00	359.37	12,501.00	8,030.62	-91.30	8,031.14	0.00	0.00	0.00
20,600.00	90.00	359.37	12,501.00	8,130.61	-92.40	8,131.14	0.00	0.00	0.00
20,700.00	90.00	359.37	12,501.00	8,230.60	-93.50	8,231.14	0.00	0.00	0.00
20,800.00	90.00	359.37	12,501.00	8,330.60	-94.60	8,331.14	0.00	0.00	0.00
20,900.00	90.00	359.37	12,501.00	8,430.59	-95.70	8,431.14	0.00	0.00	0.00
21,000.00	90.00	359.37	12,501.00	8,530.59	-96.80	8,531.14	0.00	0.00	0.00
21,100.00	90.00	359.37	12,501.00	8,630.58	-97.90	8,631.14	0.00	0.00	0.00
21,200.00	90.00	359.37	12,501.00	8,730.57	-99.00	8,731.14	0.00	0.00	0.00
21,300.00	90.00	359.37	12,501.00	8,830.57	-100.09	8,831.14	0.00	0.00	0.00
21,400.00	90.00	359.37	12,501.00	8,930.56	-101.19	8,931.14	0.00	0.00	0.00
21,500.00	90.00	359.37	12,501.00	9,030.56	-102.29	9,031.14	0.00	0.00	0.00
21,600.00	90.00	359.37	12,501.00	9,130.55	-103.39	9,131.14	0.00	0.00	0.00
21,700.00	90.00	359.37	12,501.00	9,230.54	-104.49	9,231.14	0.00	0.00	0.00
21,800.00	90.00	359.37	12,501.00	9,330.54	-105.59	9,331.14	0.00	0.00	0.00
21,900.00	90.00	359.37	12,501.00	9,430.53	-106.69	9,431.14	0.00	0.00	0.00
22,000.00	90.00	359.37	12,501.00	9,530.53	-107.79	9,531.14	0.00	0.00	0.00
22,100.00	90.00	359.37	12,501.00	9,630.52	-108.89	9,631.14	0.00	0.00	0.00
22,200.00	90.00	359.37	12,501.00	9,730.51	-109.99	9,731.14	0.00	0.00	0.00
22,300.00	90.00	359.37	12,501.00	9,830.51	-111.09	9,831.14	0.00	0.00	0.00
22,400.00	90.00	359.37	12,501.00	9,930.50	-112.19	9,931.14	0.00	0.00	0.00
22,500.00	90.00	359.37	12,501.00	10,030.50	-113.29	10,031.14	0.00	0.00	0.00
22,600.00	90.00	359.37	12,501.00	10,130.49	-114.39	10,131.14	0.00	0.00	0.00
22,635.57	90.00	359.37	12,501.00	10,166.06	-114.78	10,166.71	0.00	0.00	0.00
TD at 22635.57 - PBHL (Colorado Fed Com 802H)									



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Company:	Franklin Mountain Energy	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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 (Colorado Fed Cor - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	447,077.99	837,141.55	32.225474	-103.376761
LP (Colorado Fed Com - plan hits target center - Point	0.00	0.00	12,501.00	371.89	-14.52	447,449.88	837,127.03	32.226496	-103.376797
PBHL (Colorado Fed Co - plan hits target center - Point	0.00	0.00	12,501.00	10,166.06	-114.78	457,244.05	837,026.77	32.253418	-103.376840

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.00	1,500.00	0.00	0.00	Start Build 1.50
2,033.45	2,031.72	-36.10	-8.93	Start 945.77 hold at 2033.45 MD
2,979.22	2,968.28	-163.90	-40.57	Start Drop -1.50
3,512.67	3,500.00	-200.00	-49.50	Start 8428.04 hold at 3512.67 MD
11,940.71	11,928.04	-200.00	-49.50	Start Build 10.00
12,840.71	12,501.00	371.89	-14.52	Start DLS 2.00 TFO -90.00
13,047.21	12,501.00	578.28	-9.35	Start 9588.36 hold at 13047.21 MD
22,635.57	12,501.00	10,166.06	-114.78	TD at 22635.57



Franklin Mountain Energy

Lea County, NM (NAD83)

Colorado Fed Com

Colorado Fed Com 802H

OH

Plan #1

Anticollision Report

03 September, 2021





Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	9/3/2021
From (usft)	To (usft)	Survey (Wellbore)
0.00	22,635.57	Plan #1 (OH)
		Tool Name
		OWSG (Rev2) MWD
		Description
		OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Colorado Fed Com						
Colorado Fed Com 101H - OH - Plan #1	1,947.74	1,945.51	101.66	92.20	10.744	CC
Colorado Fed Com 101H - OH - Plan #1	2,000.00	1,997.37	101.87	92.14	10.479	ES
Colorado Fed Com 101H - OH - Plan #1	2,100.00	2,095.63	103.79	93.58	10.160	SF
Colorado Fed Com 102H - OH - Plan #1	1,865.52	1,864.16	67.78	58.72	7.482	CC
Colorado Fed Com 102H - OH - Plan #1	1,900.00	1,898.47	67.86	58.64	7.355	ES
Colorado Fed Com 102H - OH - Plan #1	2,200.00	2,199.40	75.69	65.00	7.077	SF
Colorado Fed Com 801H - OH - Plan #1	1,584.94	1,584.35	34.92	27.24	4.544	CC
Colorado Fed Com 801H - OH - Plan #1	1,700.00	1,699.07	35.11	26.89	4.273	ES
Colorado Fed Com 801H - OH - Plan #1	22,636.34	22,580.66	932.21	687.10	3.803	SF
Colorado Fed Com 803H - OH - Plan #1	1,416.53	1,416.93	34.99	28.14	5.106	CC
Colorado Fed Com 803H - OH - Plan #1	1,500.00	1,500.00	34.99	27.72	4.811	ES
Colorado Fed Com 803H - OH - Plan #1	22,636.34	22,506.08	929.02	683.75	3.788	SF
Custer Mountain Unit #001 (Offset) - OH - OH	14,193.36	12,492.37	680.92	379.05	2.256	CC, ES, SF
Woolworth Ranch Unit #001 (Offset) - OH - OH	19,471.95	12,493.88	2,001.07	1,694.80	6.534	CC, ES
Woolworth Ranch Unit #001 (Offset) - OH - OH	19,500.00	12,493.82	2,001.27	1,694.83	6.531	SF
Georgetown/Ouray						
Georgetown Fed Com 301H - OH - Plan #1	1,500.00	1,489.90	175.02	167.76	24.105	CC
Georgetown Fed Com 301H - OH - Plan #1	1,600.00	1,589.89	175.27	167.52	22.602	ES
Georgetown Fed Com 301H - OH - Plan #1	4,300.00	4,256.89	343.56	322.44	16.265	SF
Georgetown Fed Com 601H - OH - Plan #1	1,500.00	1,490.50	144.20	136.94	19.857	CC
Georgetown Fed Com 601H - OH - Plan #1	1,600.00	1,590.49	144.59	136.83	18.642	ES
Georgetown Fed Com 601H - OH - Plan #1	22,635.57	21,925.24	1,282.57	1,087.16	6.564	SF
Georgetown Fed Com 701H - OH - Plan #1	1,500.00	1,490.70	115.78	108.52	15.942	CC, ES
Georgetown Fed Com 701H - OH - Plan #1	22,636.34	22,239.83	1,170.48	961.67	5.606	SF
Ouray Fed Com 302H - OH - Plan #1	1,316.33	1,317.33	91.45	85.10	14.410	CC
Ouray Fed Com 302H - OH - Plan #1	1,500.00	1,500.82	91.55	84.28	12.597	ES
Ouray Fed Com 302H - OH - Plan #1	1,700.00	1,700.19	97.39	89.18	11.857	SF
Ouray Fed Com 602H - OH - Plan #1	1,500.00	1,491.40	77.31	70.04	10.642	CC, ES
Ouray Fed Com 602H - OH - Plan #1	22,635.57	22,078.61	1,231.16	1,049.20	6.766	SF
Ouray Fed Com 702H - OH - Plan #1	7,700.39	7,691.70	87.38	49.26	2.292	CC
Ouray Fed Com 702H - OH - Plan #1	11,500.00	11,492.44	92.79	35.69	1.625	ES, SF
Ouray Fed Com 703H - OH - Plan #1	1,500.00	1,491.40	77.05	69.78	10.606	CC, ES
Ouray Fed Com 703H - OH - Plan #1	22,635.57	22,311.34	1,332.66	1,118.06	6.210	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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Colorado 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	
0.00	0.00	0.00	0.00	0.00	0.00	-90.56	-1.02	-104.98	104.99					
100.00	100.00	98.80	98.80	0.13	0.12	-90.56	-1.02	-104.98	104.98	104.81		0.18	595.243	
200.00	200.00	198.80	198.80	0.48	0.48	-90.56	-1.02	-104.98	104.98	104.30		0.68	154.083	
300.00	300.00	298.80	298.80	0.84	0.84	-90.56	-1.02	-104.98	104.98	103.80		1.19	88.348	
400.00	400.00	398.80	398.80	1.20	1.20	-90.56	-1.02	-104.98	104.98	103.29		1.70	61.928	
500.00	500.00	498.80	498.80	1.56	1.56	-90.56	-1.02	-104.98	104.98	102.78		2.20	47.672	
600.00	600.00	598.80	598.80	1.92	1.91	-90.56	-1.02	-104.98	104.98	102.28		2.71	38.752	
700.00	700.00	698.80	698.80	2.28	2.27	-90.56	-1.02	-104.98	104.98	101.77		3.22	32.643	
800.00	800.00	798.80	798.80	2.63	2.63	-90.56	-1.02	-104.98	104.98	101.26		3.72	28.198	
900.00	900.00	898.80	898.80	2.99	2.99	-90.56	-1.02	-104.98	104.98	100.75		4.23	24.819	
1,000.00	1,000.00	998.80	998.80	3.35	3.35	-90.56	-1.02	-104.98	104.98	100.25		4.74	22.163	
1,100.00	1,100.00	1,098.80	1,098.80	3.71	3.71	-90.56	-1.02	-104.98	104.98	99.74		5.24	20.020	
1,200.00	1,200.00	1,198.80	1,198.80	4.07	4.06	-90.56	-1.02	-104.98	104.98	99.23		5.75	18.255	
1,300.00	1,300.00	1,298.80	1,298.80	4.43	4.42	-90.56	-1.02	-104.98	104.98	98.73		6.26	16.777	
1,400.00	1,400.00	1,398.80	1,398.80	4.79	4.78	-90.56	-1.02	-104.98	104.98	98.22		6.76	15.519	
1,500.00	1,500.00	1,498.80	1,498.80	5.14	5.14	-90.56	-1.02	-104.98	104.98	97.71		7.27	14.437	
1,600.00	1,599.99	1,598.79	1,598.79	5.48	5.50	76.24	-1.02	-104.98	104.67	96.90		7.77	13.478	
1,700.00	1,699.91	1,698.71	1,698.71	5.81	5.86	78.36	-1.02	-104.98	103.80	95.55		8.25	12.583	
1,800.00	1,799.69	1,798.49	1,798.49	6.14	6.21	81.94	-1.02	-104.98	102.68	93.94		8.74	11.754	
1,900.00	1,899.27	1,898.07	1,898.07	6.48	6.57	87.04	-1.02	-104.98	101.80	92.57		9.23	11.034	
1,947.74	1,946.71	1,945.51	1,945.51	6.64	6.74	90.00	-1.02	-104.98	101.66	92.20		9.46	10.744 CC	
2,000.00	1,998.57	1,997.37	1,997.37	6.82	6.93	93.61	-1.02	-104.98	101.87	92.14		9.72	10.479 ES	
2,033.45	2,031.72	2,030.52	2,030.52	6.94	7.05	96.10	-1.02	-104.98	102.25	92.36		9.89	10.341	
2,100.00	2,097.62	2,095.63	2,095.63	7.17	7.28	101.04	-1.05	-105.14	103.79	93.58		10.22	10.160 SF	
2,200.00	2,196.65	2,192.65	2,192.62	7.53	7.60	107.40	-1.42	-107.25	108.99	98.29		10.70	10.188	
2,300.00	2,295.67	2,289.78	2,289.64	7.90	7.94	112.24	-2.23	-111.78	117.18	106.00		11.18	10.480	
2,400.00	2,394.70	2,386.90	2,386.50	8.27	8.27	115.59	-3.48	-118.74	127.73	116.06		11.66	10.950	
2,500.00	2,493.73	2,483.87	2,483.01	8.65	8.61	117.61	-5.15	-128.11	140.19	128.04		12.15	11.537	
2,600.00	2,592.75	2,580.69	2,579.08	9.03	8.95	118.56	-7.25	-139.86	154.29	141.65		12.64	12.206	
2,700.00	2,691.78	2,679.57	2,677.06	9.42	9.31	119.05	-9.59	-152.98	169.11	155.95		13.15	12.856	
2,800.00	2,790.80	2,778.46	2,775.04	9.80	9.67	119.47	-11.94	-166.10	183.94	170.26		13.67	13.455	
2,900.00	2,889.83	2,877.35	2,873.03	10.20	10.04	119.82	-14.28	-179.23	198.77	184.58		14.19	14.006	
2,979.22	2,968.28	2,955.68	2,950.65	10.51	10.33	120.06	-16.13	-189.62	210.53	195.92		14.61	14.412	
3,000.00	2,988.86	2,976.24	2,971.02	10.59	10.41	120.15	-16.62	-192.35	213.59	198.87		14.72	14.513	
3,100.00	3,088.13	3,075.26	3,069.13	10.98	10.78	120.19	-18.97	-205.49	227.51	212.27		15.24	14.927	
3,200.00	3,187.68	3,174.42	3,167.39	11.36	11.16	119.68	-21.32	-218.65	240.14	224.38		15.76	15.234	
3,300.00	3,287.44	3,273.64	3,265.71	11.73	11.53	118.71	-23.67	-231.82	251.56	235.27		16.28	15.450	
3,400.00	3,387.34	3,372.87	3,364.03	12.08	11.92	117.31	-26.02	-244.99	261.86	245.06		16.80	15.591	
3,500.00	3,487.33	3,472.03	3,462.29	12.43	12.30	115.52	-28.37	-258.14	271.21	253.90		17.30	15.675	
3,512.67	3,500.00	3,484.59	3,474.73	12.47	12.35	-50.83	-28.67	-259.81	272.33	254.97		17.37	15.683	
3,600.00	3,587.33	3,571.12	3,560.47	12.76	12.69	-52.65	-30.72	-271.29	280.19	262.39		17.80	15.742	
3,700.00	3,687.33	3,670.21	3,658.65	13.10	13.07	-54.61	-33.07	-284.44	289.52	271.22		18.29	15.825	
3,800.00	3,787.33	3,769.30	3,756.84	13.43	13.46	-56.44	-35.41	-297.59	299.16	280.37		18.79	15.920	
3,900.00	3,887.33	3,868.38	3,855.02	13.77	13.85	-58.16	-37.76	-310.74	309.09	289.80		19.29	16.026	
4,000.00	3,987.33	3,967.47	3,953.20	14.11	14.25	-59.77	-40.11	-323.89	319.28	299.50		19.78	16.140	
4,100.00	4,087.33	4,066.56	4,051.39	14.44	14.64	-61.28	-42.46	-337.04	329.70	309.43		20.28	16.260	
4,200.00	4,187.33	4,165.65	4,149.57	14.78	15.04	-62.70	-44.81	-350.19	340.34	319.57		20.77	16.384	
4,300.00	4,287.33	4,264.73	4,247.75	15.12	15.43	-64.03	-47.16	-363.34	351.18	329.91		21.27	16.512	
4,400.00	4,387.33	4,363.82	4,345.93	15.46	15.83	-65.29	-49.50	-376.49	362.19	340.43		21.76	16.642	
4,500.00	4,487.33	4,462.91	4,444.12	15.81	16.23	-66.46	-51.85	-389.64	373.37	351.11		22.26	16.773	
4,600.00	4,587.33	4,562.00	4,542.30	16.15	16.62	-67.57	-54.20	-402.78	384.69	361.94		22.76	16.905	
4,700.00	4,687.33	4,661.08	4,640.48	16.49	17.02	-68.62	-56.55	-415.93	396.15	372.90		23.25	17.036	

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
4,800.00	4,787.33	4,760.17	4,738.67	16.83	17.42	-69.61	-58.90	-429.08	407.73	383.98	23.75	17.168		
4,900.00	4,887.33	4,859.26	4,836.85	17.18	17.83	-70.54	-61.24	-442.23	419.43	395.18	24.25	17.298		
5,000.00	4,987.33	4,958.34	4,935.03	17.52	18.23	-71.42	-63.59	-455.38	431.23	406.48	24.74	17.427		
5,100.00	5,087.33	5,057.43	5,033.21	17.87	18.63	-72.26	-65.94	-468.53	443.12	417.88	25.24	17.555		
5,200.00	5,187.33	5,156.52	5,131.40	18.21	19.03	-73.05	-68.29	-481.68	455.11	429.37	25.74	17.680		
5,300.00	5,287.33	5,255.61	5,229.58	18.56	19.44	-73.80	-70.64	-494.83	467.17	440.93	26.24	17.804		
5,400.00	5,387.33	5,354.69	5,327.76	18.91	19.84	-74.52	-72.98	-507.98	479.31	452.58	26.74	17.926		
5,500.00	5,487.33	5,453.78	5,425.95	19.26	20.24	-75.19	-75.33	-521.13	491.52	464.29	27.24	18.046		
5,600.00	5,587.33	5,552.87	5,524.13	19.60	20.65	-75.84	-77.68	-534.28	503.80	476.06	27.74	18.163		
5,700.00	5,687.33	5,651.96	5,622.31	19.95	21.05	-76.45	-80.03	-547.43	516.13	487.90	28.24	18.279		
5,800.00	5,787.33	5,751.04	5,720.49	20.30	21.46	-77.04	-82.38	-560.57	528.53	499.79	28.74	18.392		
5,900.00	5,887.33	5,850.13	5,818.68	20.65	21.87	-77.60	-84.72	-573.72	540.97	511.73	29.24	18.502		
6,000.00	5,987.33	5,949.22	5,916.86	21.00	22.27	-78.13	-87.07	-586.87	553.46	523.72	29.74	18.611		
6,100.00	6,087.33	6,048.30	6,015.04	21.35	22.68	-78.64	-89.42	-600.02	566.00	535.76	30.24	18.717		
6,200.00	6,187.33	6,147.39	6,113.23	21.70	23.09	-79.13	-91.77	-613.17	578.58	547.84	30.74	18.821		
6,300.00	6,287.33	6,246.48	6,211.41	22.05	23.49	-79.60	-94.12	-626.32	591.20	559.96	31.24	18.922		
6,400.00	6,387.33	6,345.57	6,309.59	22.40	23.90	-80.05	-96.46	-639.47	603.85	572.11	31.75	19.022		
6,500.00	6,487.33	6,444.65	6,407.77	22.75	24.31	-80.48	-98.81	-652.62	616.55	584.30	32.25	19.119		
6,600.00	6,587.33	6,543.74	6,505.96	23.10	24.72	-80.89	-101.16	-665.77	629.27	596.52	32.75	19.214		
6,700.00	6,687.33	6,642.83	6,604.14	23.45	25.13	-81.28	-103.51	-678.92	642.03	608.77	33.25	19.307		
6,800.00	6,787.33	6,741.91	6,702.32	23.80	25.54	-81.66	-105.86	-692.07	654.81	621.05	33.76	19.398		
6,900.00	6,887.33	6,841.00	6,800.51	24.15	25.94	-82.03	-108.20	-705.21	667.62	633.36	34.26	19.487		
7,000.00	6,987.33	6,940.09	6,898.69	24.50	26.35	-82.38	-110.55	-718.36	680.46	645.70	34.76	19.574		
7,100.00	7,087.33	7,039.18	6,996.87	24.86	26.76	-82.72	-112.90	-731.51	693.32	658.05	35.27	19.659		
7,200.00	7,187.33	7,141.51	7,098.27	25.21	27.19	-83.06	-115.32	-745.05	706.17	670.38	35.79	19.730		
7,300.00	7,287.33	7,262.42	7,218.39	25.56	27.67	-83.38	-117.75	-758.66	717.12	680.71	36.41	19.697		
7,400.00	7,387.33	7,384.10	7,339.65	25.91	28.13	-83.61	-119.52	-768.57	725.05	688.05	37.00	19.598		
7,500.00	7,487.33	7,506.30	7,461.68	26.26	28.57	-83.75	-120.61	-774.69	729.93	692.38	37.56	19.436		
7,600.00	7,587.33	7,628.77	7,584.13	26.62	28.99	-83.80	-121.02	-776.96	731.74	693.66	38.08	19.215		
7,700.00	7,687.33	7,730.77	7,686.13	26.97	29.32	-83.80	-121.02	-776.98	731.75	693.18	38.57	18.972		
7,800.00	7,787.33	7,830.77	7,786.13	27.32	29.64	-83.80	-121.02	-776.98	731.75	692.70	39.06	18.735		
7,900.00	7,887.33	7,930.77	7,886.13	27.68	29.96	-83.80	-121.02	-776.98	731.75	692.21	39.55	18.503		
8,000.00	7,987.33	8,030.77	7,986.13	28.03	30.29	-83.80	-121.02	-776.98	731.75	691.72	40.04	18.277		
8,100.00	8,087.33	8,130.77	8,086.13	28.38	30.61	-83.80	-121.02	-776.98	731.75	691.23	40.53	18.056		
8,200.00	8,187.33	8,230.77	8,186.13	28.74	30.94	-83.80	-121.02	-776.98	731.75	690.74	41.02	17.840		
8,208.28	8,195.61	8,239.05	8,194.41	28.77	30.96	-83.80	-121.02	-776.98	731.75	690.70	41.06	17.823		
8,300.00	8,287.33	8,318.10	8,273.44	29.09	31.22	-83.73	-120.06	-777.17	732.15	690.66	41.50	17.644		
8,400.00	8,387.33	8,389.54	8,344.32	29.44	31.45	-83.09	-111.63	-778.81	735.83	693.90	41.93	17.550		
8,500.00	8,487.33	8,457.85	8,410.58	29.80	31.67	-81.88	-95.53	-781.94	743.70	701.41	42.29	17.587		
8,600.00	8,587.33	8,521.45	8,470.12	30.15	31.86	-80.27	-73.68	-786.18	756.38	713.85	42.53	17.784		
8,700.00	8,687.33	8,579.42	8,521.95	30.51	32.03	-78.43	-48.23	-791.13	774.60	731.97	42.63	18.172		
8,800.00	8,787.33	8,631.46	8,566.03	30.86	32.17	-76.53	-21.11	-796.40	798.94	756.40	42.53	18.783		
8,900.00	8,887.33	8,677.71	8,602.96	31.21	32.29	-74.67	6.19	-801.71	829.77	787.52	42.24	19.642		
9,000.00	8,987.33	8,718.56	8,633.62	31.57	32.40	-72.92	32.68	-806.86	867.17	825.40	41.77	20.760		
9,100.00	9,087.33	8,750.00	8,655.87	31.92	32.48	-71.52	54.48	-811.09	911.00	869.91	41.09	22.172		
9,200.00	9,187.33	8,786.31	8,679.99	32.28	32.56	-69.87	81.11	-816.27	960.80	920.36	40.43	23.763		
9,300.00	9,287.33	8,814.33	8,697.41	32.63	32.63	-68.57	102.65	-820.46	1,016.15	976.51	39.64	25.633		
9,400.00	9,387.33	8,850.00	8,718.00	32.99	32.72	-66.90	131.24	-826.01	1,076.61	1,037.62	38.99	27.613		
9,500.00	9,487.33	8,850.00	8,718.00	33.34	32.72	-66.90	131.24	-826.01	1,141.37	1,103.49	37.88	30.131		
9,600.00	9,587.33	8,880.83	8,734.30	33.70	32.79	-65.45	156.92	-831.01	1,209.86	1,172.58	37.28	32.452		
9,700.00	9,687.33	8,900.00	8,743.72	34.05	32.84	-64.56	173.31	-834.19	1,281.89	1,245.30	36.59	35.032		
9,800.00	9,787.33	8,900.00	8,743.72	34.41	32.84	-64.56	173.31	-834.19	1,357.10	1,321.36	35.74	37.972		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,887.33	8,928.51	8,756.68	34.76	32.92	-63.23	198.24	-839.04	1,434.44	1,399.11	35.34	40.594		
10,000.00	9,987.33	8,950.00	8,765.60	35.12	32.98	-62.25	217.43	-842.77	1,514.33	1,479.42	34.91	43.374		
10,100.00	10,087.33	8,950.00	8,765.60	35.47	32.98	-62.25	217.43	-842.77	1,596.03	1,561.71	34.32	46.507		
10,200.00	10,187.33	8,950.00	8,765.60	35.83	32.98	-62.25	217.43	-842.77	1,679.70	1,645.90	33.81	49.685		
10,300.00	10,287.33	8,973.74	8,774.60	36.18	33.04	-61.17	238.99	-846.96	1,764.47	1,730.86	33.61	52.497		
10,400.00	10,387.33	9,000.00	8,783.49	36.54	33.12	-59.99	263.24	-851.67	1,851.09	1,817.60	33.49	55.280		
10,500.00	10,487.33	9,000.00	8,783.49	36.89	33.12	-59.99	263.24	-851.67	1,938.31	1,905.15	33.16	58.446		
10,600.00	10,587.33	9,000.00	8,783.49	37.25	33.12	-59.99	263.24	-851.67	2,026.72	1,993.82	32.90	61.607		
10,700.00	10,687.33	9,000.00	8,783.49	37.61	33.12	-59.99	263.24	-851.67	2,116.15	2,083.47	32.68	64.746		
10,800.00	10,787.33	9,000.00	8,783.49	37.96	33.12	-59.99	263.24	-851.67	2,206.50	2,173.98	32.52	67.853		
10,900.00	10,887.33	9,000.00	8,783.49	38.32	33.12	-59.99	263.24	-851.67	2,297.64	2,265.24	32.40	70.918		
11,000.00	10,987.33	9,024.32	8,790.70	38.67	33.20	-58.93	286.04	-856.11	2,388.88	2,356.39	32.49	73.535		
11,100.00	11,087.33	9,029.68	8,792.16	39.03	33.22	-58.70	291.11	-857.09	2,481.06	2,448.60	32.46	76.426		
11,200.00	11,187.33	9,050.00	8,797.24	39.38	33.29	-57.83	310.42	-860.84	2,574.02	2,541.45	32.57	79.035		
11,300.00	11,287.33	9,050.00	8,797.24	39.74	33.29	-57.83	310.42	-860.84	2,667.09	2,634.52	32.57	81.897		
11,400.00	11,387.33	9,050.00	8,797.24	40.10	33.29	-57.83	310.42	-860.84	2,760.64	2,728.05	32.59	84.702		
11,500.00	11,487.33	9,050.00	8,797.24	40.45	33.29	-57.83	310.42	-860.84	2,854.63	2,821.99	32.64	87.448		
11,600.00	11,587.33	9,050.00	8,797.24	40.81	33.29	-57.83	310.42	-860.84	2,949.01	2,916.30	32.72	90.140		
11,700.00	11,687.33	9,050.00	8,797.24	41.16	33.29	-57.83	310.42	-860.84	3,043.76	3,010.95	32.81	92.773		
11,800.00	11,787.33	9,050.00	8,797.24	41.52	33.29	-57.83	310.42	-860.84	3,138.83	3,105.91	32.92	95.343		
11,900.00	11,887.33	9,050.00	8,797.24	41.88	33.29	-57.83	310.42	-860.84	3,234.20	3,201.14	33.05	97.852		
11,940.71	11,928.04	9,050.00	8,797.24	42.02	33.29	-57.83	310.42	-860.84	3,273.10	3,239.99	33.11	98.855		
11,950.00	11,937.33	9,050.00	8,797.24	42.05	33.29	-58.73	310.42	-860.84	3,281.97	3,248.85	33.12	99.083		
12,000.00	11,987.22	9,050.00	8,797.24	42.23	33.29	-47.02	310.42	-860.84	3,329.31	3,296.12	33.19	100.305		
12,050.00	12,036.67	9,050.00	8,797.24	42.40	33.29	-38.55	310.42	-860.84	3,375.71	3,342.46	33.25	101.514		
12,100.00	12,085.28	9,071.70	8,801.89	42.56	33.37	-32.24	331.22	-864.89	3,420.40	3,387.00	33.40	102.400		
12,150.00	12,132.70	9,075.21	8,802.57	42.71	33.38	-27.82	334.60	-865.54	3,463.87	3,430.40	33.46	103.509		
12,200.00	12,178.57	9,100.00	8,806.75	42.86	33.48	-24.43	358.58	-870.21	3,505.91	3,472.31	33.61	104.325		
12,250.00	12,222.52	9,100.00	8,806.75	43.00	33.48	-21.92	358.58	-870.21	3,545.26	3,511.62	33.64	105.396		
12,300.00	12,264.24	9,100.00	8,806.75	43.13	33.48	-19.95	358.58	-870.21	3,582.28	3,548.62	33.66	106.411		
12,350.00	12,303.40	9,100.00	8,806.75	43.26	33.48	-18.38	358.58	-870.21	3,616.79	3,583.10	33.69	107.362		
12,400.00	12,339.70	9,100.00	8,806.75	43.38	33.48	-17.13	358.58	-870.21	3,648.59	3,614.88	33.71	108.241		
12,450.00	12,372.86	9,100.00	8,806.75	43.50	33.48	-16.11	358.58	-870.21	3,677.51	3,643.78	33.73	109.038		
12,500.00	12,402.64	9,100.00	8,806.75	43.62	33.48	-15.29	358.58	-870.21	3,703.40	3,669.65	33.75	109.744		
12,550.00	12,428.81	9,100.00	8,806.75	43.74	33.48	-14.63	358.58	-870.21	3,726.13	3,692.36	33.77	110.349		
12,600.00	12,451.17	9,122.21	8,809.60	43.85	33.56	-14.17	380.21	-874.41	3,745.10	3,711.25	33.85	110.625		
12,650.00	12,469.55	9,150.00	8,811.95	43.97	33.68	-13.85	407.38	-879.69	3,761.33	3,727.37	33.96	110.772		
12,700.00	12,483.81	9,150.00	8,811.95	44.09	33.68	-13.56	407.38	-879.69	3,773.34	3,739.35	33.98	111.030		
12,750.00	12,493.83	9,150.00	8,811.95	44.21	33.68	-13.36	407.38	-879.69	3,781.83	3,747.81	34.02	111.156		
12,800.00	12,499.55	9,150.00	8,811.95	44.33	33.68	-13.24	407.38	-879.69	3,786.77	3,752.69	34.07	111.142		
12,840.71	12,501.00	9,150.00	8,811.95	44.42	33.68	-13.21	407.38	-879.69	3,788.14	3,754.02	34.12	111.025		
12,900.00	12,501.00	9,150.00	8,811.95	44.57	33.68	-13.22	407.38	-879.69	3,788.74	3,754.53	34.21	110.766		
13,000.00	12,501.00	9,184.68	8,813.00	44.88	33.83	-13.37	441.41	-886.31	3,790.75	3,756.31	34.44	110.060		
13,047.21	12,501.00	9,184.68	8,813.00	45.04	33.83	-13.40	441.41	-886.31	3,792.13	3,757.59	34.54	109.788		
13,100.00	12,501.00	9,212.26	8,813.00	45.24	33.96	-13.47	468.51	-891.44	3,794.20	3,759.50	34.70	109.339		
13,200.00	12,501.00	9,356.80	8,813.00	45.66	34.72	-13.78	611.25	-914.05	3,797.67	3,762.52	35.15	108.027		
13,300.00	12,501.00	9,503.13	8,813.00	46.14	35.62	-13.99	756.73	-929.59	3,799.97	3,764.33	35.64	106.618		
13,400.00	12,501.00	9,650.51	8,813.00	46.67	36.62	-14.08	903.87	-937.70	3,801.04	3,764.88	36.16	105.116		
13,500.00	12,501.00	9,767.45	8,813.00	47.25	37.49	-14.09	1,020.80	-939.48	3,801.12	3,764.47	36.65	103.715		
13,600.00	12,501.00	9,867.45	8,813.00	47.88	38.29	-14.09	1,120.79	-940.58	3,801.12	3,763.98	37.14	102.338		
13,700.00	12,501.00	9,967.45	8,813.00	48.56	39.14	-14.09	1,220.79	-941.69	3,801.12	3,763.45	37.67	100.909		
13,800.00	12,501.00	10,067.45	8,813.00	49.29	40.04	-14.09	1,320.78	-942.80	3,801.12	3,762.90	38.23	99.438		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Colorado 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		
13,900.00	12,501.00	10,167.45	8,813.00	50.06	40.99	-14.09	1,420.78	-943.90	3,801.13	3,762.31	38.81	97.934		
14,000.00	12,501.00	10,267.45	8,813.00	50.87	41.98	-14.09	1,520.77	-945.01	3,801.13	3,761.70	39.43	96.404		
14,100.00	12,501.00	10,367.45	8,813.00	51.72	43.01	-14.09	1,620.76	-946.12	3,801.13	3,761.06	40.07	94.857		
14,200.00	12,501.00	10,467.45	8,813.00	52.61	44.08	-14.09	1,720.76	-947.22	3,801.13	3,760.39	40.74	93.299		
14,300.00	12,501.00	10,567.45	8,813.00	53.54	45.19	-14.09	1,820.75	-948.33	3,801.13	3,759.70	41.44	91.736		
14,400.00	12,501.00	10,667.45	8,813.00	54.50	46.33	-14.09	1,920.75	-949.44	3,801.13	3,758.98	42.15	90.175		
14,500.00	12,501.00	10,767.45	8,813.00	55.50	47.50	-14.09	2,020.74	-950.55	3,801.14	3,758.24	42.89	88.621		
14,600.00	12,501.00	10,867.45	8,813.00	56.52	48.69	-14.09	2,120.73	-951.65	3,801.14	3,757.49	43.65	87.080		
14,700.00	12,501.00	10,967.45	8,813.00	57.57	49.92	-14.09	2,220.73	-952.76	3,801.14	3,756.71	44.43	85.554		
14,800.00	12,501.00	11,067.45	8,813.00	58.66	51.16	-14.09	2,320.72	-953.87	3,801.14	3,755.91	45.23	84.044		
14,900.00	12,501.00	11,167.45	8,813.00	59.76	52.43	-14.09	2,420.71	-954.97	3,801.14	3,755.10	46.04	82.553		
15,000.00	12,501.00	11,267.45	8,813.00	60.90	53.73	-14.09	2,520.71	-956.08	3,801.14	3,754.27	46.88	81.084		
15,100.00	12,501.00	11,367.45	8,813.00	62.05	55.04	-14.09	2,620.70	-957.19	3,801.15	3,753.42	47.73	79.640		
15,200.00	12,501.00	11,467.45	8,813.00	63.23	56.36	-14.09	2,720.70	-958.29	3,801.15	3,752.55	48.60	78.221		
15,300.00	12,501.00	11,567.45	8,813.00	64.43	57.71	-14.09	2,820.69	-959.40	3,801.15	3,751.67	49.48	76.829		
15,400.00	12,501.00	11,667.45	8,813.00	65.65	59.07	-14.09	2,920.68	-960.51	3,801.15	3,750.78	50.37	75.465		
15,500.00	12,501.00	11,767.45	8,813.00	66.89	60.44	-14.09	3,020.68	-961.61	3,801.15	3,749.88	51.28	74.130		
15,600.00	12,501.00	11,867.45	8,813.00	68.14	61.83	-14.09	3,120.67	-962.72	3,801.15	3,748.96	52.20	72.825		
15,700.00	12,501.00	11,967.45	8,813.00	69.41	63.23	-14.09	3,220.67	-963.83	3,801.16	3,748.03	53.12	71.552		
15,800.00	12,501.00	12,067.45	8,813.00	70.70	64.65	-14.09	3,320.66	-964.93	3,801.16	3,747.09	54.06	70.308		
15,900.00	12,501.00	12,167.45	8,813.00	72.00	66.07	-14.09	3,420.65	-966.04	3,801.16	3,746.14	55.02	69.093		
16,000.00	12,501.00	12,267.45	8,813.00	73.32	67.51	-14.09	3,520.65	-967.15	3,801.16	3,745.19	55.98	67.907		
16,100.00	12,501.00	12,367.45	8,813.00	74.65	68.95	-14.09	3,620.64	-968.25	3,801.16	3,744.22	56.95	66.751		
16,200.00	12,501.00	12,467.45	8,813.00	75.99	70.40	-14.09	3,720.64	-969.36	3,801.17	3,743.24	57.93	65.621		
16,300.00	12,501.00	12,567.45	8,813.00	77.35	71.87	-14.09	3,820.63	-970.47	3,801.17	3,742.25	58.92	64.519		
16,400.00	12,501.00	12,667.45	8,813.00	78.72	73.34	-14.09	3,920.62	-971.57	3,801.17	3,741.26	59.91	63.445		
16,500.00	12,501.00	12,767.45	8,813.00	80.09	74.81	-14.09	4,020.62	-972.68	3,801.17	3,740.25	60.92	62.398		
16,600.00	12,501.00	12,867.45	8,813.00	81.48	76.30	-14.09	4,120.61	-973.79	3,801.17	3,739.24	61.93	61.378		
16,700.00	12,501.00	12,967.45	8,813.00	82.88	77.79	-14.09	4,220.60	-974.89	3,801.17	3,738.22	62.95	60.384		
16,800.00	12,501.00	13,067.45	8,813.00	84.28	79.29	-14.09	4,320.60	-976.00	3,801.18	3,737.20	63.97	59.418		
16,900.00	12,501.00	13,167.45	8,813.00	85.70	80.79	-14.09	4,420.59	-977.11	3,801.18	3,736.17	65.00	58.476		
17,000.00	12,501.00	13,267.45	8,813.00	87.12	82.30	-14.09	4,520.59	-978.21	3,801.18	3,735.14	66.04	57.559		
17,100.00	12,501.00	13,367.45	8,813.00	88.55	83.82	-14.09	4,620.58	-979.32	3,801.18	3,734.10	67.08	56.664		
17,200.00	12,501.00	13,467.45	8,813.00	89.99	85.34	-14.09	4,720.57	-980.43	3,801.18	3,733.05	68.13	55.793		
17,300.00	12,501.00	13,567.45	8,813.00	91.44	86.87	-14.09	4,820.57	-981.53	3,801.18	3,732.00	69.18	54.944		
17,400.00	12,501.00	13,667.45	8,813.00	92.89	88.40	-14.09	4,920.56	-982.64	3,801.19	3,730.95	70.24	54.117		
17,500.00	12,501.00	13,767.45	8,813.00	94.35	89.93	-14.09	5,020.56	-983.75	3,801.19	3,729.89	71.30	53.310		
17,600.00	12,501.00	13,867.45	8,813.00	95.82	91.47	-14.09	5,120.55	-984.85	3,801.19	3,728.82	72.37	52.524		
17,700.00	12,501.00	13,967.45	8,813.00	97.29	93.01	-14.09	5,220.54	-985.96	3,801.19	3,727.75	73.44	51.758		
17,800.00	12,501.00	14,067.45	8,813.00	98.77	94.56	-14.09	5,320.54	-987.07	3,801.19	3,726.68	74.52	51.011		
17,900.00	12,501.00	14,167.45	8,813.00	100.25	96.11	-14.09	5,420.53	-988.17	3,801.19	3,725.60	75.60	50.283		
18,000.00	12,501.00	14,267.45	8,813.00	101.74	97.66	-14.09	5,520.53	-989.28	3,801.20	3,724.52	76.68	49.574		
18,100.00	12,501.00	14,367.45	8,813.00	103.24	99.22	-14.09	5,620.52	-990.39	3,801.20	3,723.44	77.76	48.882		
18,200.00	12,501.00	14,467.45	8,813.00	104.73	100.78	-14.09	5,720.51	-991.49	3,801.20	3,722.35	78.85	48.206		
18,300.00	12,501.00	14,567.45	8,813.00	106.24	102.34	-14.09	5,820.51	-992.60	3,801.20	3,721.26	79.95	47.548		
18,400.00	12,501.00	14,667.45	8,813.00	107.75	103.91	-14.09	5,920.50	-993.71	3,801.20	3,720.16	81.04	46.905		
18,500.00	12,501.00	14,767.45	8,813.00	109.26	105.47	-14.09	6,020.49	-994.81	3,801.21	3,719.07	82.14	46.277		
18,600.00	12,501.00	14,867.45	8,813.00	110.77	107.04	-14.09	6,120.49	-995.92	3,801.21	3,717.96	83.24	45.664		
18,700.00	12,501.00	14,967.45	8,813.00	112.29	108.62	-14.09	6,220.48	-997.03	3,801.21	3,716.86	84.35	45.066		
18,800.00	12,501.00	15,067.45	8,813.00	113.82	110.19	-14.09	6,320.48	-998.13	3,801.21	3,715.76	85.45	44.482		
18,900.00	12,501.00	15,167.45	8,813.00	115.34	111.77	-14.09	6,420.47	-999.24	3,801.21	3,714.65	86.57	43.911		
19,000.00	12,501.00	15,267.45	8,813.00	116.87	113.35	-14.09	6,520.46	-1,000.35	3,801.21	3,713.54	87.68	43.355		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,100.00	12,501.00	15,367.45	8,813.00	118.41	114.93	-14.09	6,620.46	-1,001.45	3,801.22	3,712.43	88.79	42.811		
19,200.00	12,501.00	15,467.45	8,813.00	119.94	116.52	-14.09	6,720.45	-1,002.56	3,801.22	3,711.31	89.91	42.280		
19,300.00	12,501.00	15,567.45	8,813.00	121.48	118.10	-14.09	6,820.45	-1,003.67	3,801.22	3,710.19	91.03	41.760		
19,400.00	12,501.00	15,667.45	8,813.00	123.03	119.69	-14.09	6,920.44	-1,004.77	3,801.22	3,709.08	92.15	41.252		
19,500.00	12,501.00	15,767.45	8,813.00	124.57	121.28	-14.09	7,020.43	-1,005.88	3,801.22	3,707.95	93.27	40.756		
19,600.00	12,501.00	15,867.45	8,813.00	126.12	122.87	-14.09	7,120.43	-1,006.99	3,801.22	3,706.83	94.39	40.270		
19,700.00	12,501.00	15,967.45	8,813.00	127.67	124.46	-14.09	7,220.42	-1,008.09	3,801.23	3,705.71	95.52	39.795		
19,800.00	12,501.00	16,067.45	8,813.00	129.23	126.06	-14.09	7,320.41	-1,009.20	3,801.23	3,704.58	96.65	39.330		
19,900.00	12,501.00	16,167.45	8,813.00	130.78	127.65	-14.09	7,420.41	-1,010.31	3,801.23	3,703.45	97.78	38.876		
20,000.00	12,501.00	16,267.45	8,813.00	132.34	129.25	-14.09	7,520.40	-1,011.41	3,801.23	3,702.32	98.91	38.431		
20,100.00	12,501.00	16,367.45	8,813.00	133.90	130.85	-14.09	7,620.40	-1,012.52	3,801.23	3,701.19	100.05	37.995		
20,200.00	12,501.00	16,467.45	8,813.00	135.47	132.45	-14.09	7,720.39	-1,013.63	3,801.24	3,700.06	101.18	37.570		
20,300.00	12,501.00	16,567.45	8,813.00	137.03	134.05	-14.09	7,820.38	-1,014.74	3,801.24	3,698.92	102.31	37.153		
20,400.00	12,501.00	16,667.45	8,813.00	138.60	135.65	-14.09	7,920.38	-1,015.84	3,801.24	3,697.79	103.45	36.745		
20,500.00	12,501.00	16,767.45	8,813.00	140.17	137.25	-14.09	8,020.37	-1,016.95	3,801.24	3,696.65	104.59	36.345		
20,600.00	12,501.00	16,867.45	8,813.00	141.74	138.86	-14.09	8,120.37	-1,018.06	3,801.24	3,695.52	105.73	35.953		
20,700.00	12,501.00	16,967.45	8,813.00	143.31	140.47	-14.10	8,220.36	-1,019.16	3,801.24	3,694.37	106.87	35.569		
20,800.00	12,501.00	17,067.45	8,813.00	144.89	142.07	-14.10	8,320.35	-1,020.27	3,801.25	3,693.23	108.01	35.193		
20,900.00	12,501.00	17,167.45	8,813.00	146.46	143.68	-14.10	8,420.35	-1,021.38	3,801.25	3,692.09	109.16	34.823		
21,000.00	12,501.00	17,267.45	8,813.00	148.04	145.29	-14.10	8,520.34	-1,022.48	3,801.25	3,690.94	110.30	34.462		
21,100.00	12,501.00	17,367.45	8,813.00	149.62	146.90	-14.10	8,620.34	-1,023.59	3,801.25	3,689.80	111.45	34.107		
21,200.00	12,501.00	17,467.45	8,813.00	151.20	148.51	-14.10	8,720.33	-1,024.70	3,801.25	3,688.66	112.60	33.760		
21,300.00	12,501.00	17,567.45	8,813.00	152.78	150.12	-14.10	8,820.32	-1,025.80	3,801.25	3,687.51	113.74	33.419		
21,400.00	12,501.00	17,667.45	8,813.00	154.37	151.74	-14.10	8,920.32	-1,026.91	3,801.26	3,686.36	114.89	33.085		
21,500.00	12,501.00	17,767.45	8,813.00	155.95	153.35	-14.10	9,020.31	-1,028.02	3,801.26	3,685.22	116.04	32.757		
21,600.00	12,501.00	17,867.45	8,813.00	157.54	154.96	-14.10	9,120.30	-1,029.12	3,801.26	3,684.07	117.19	32.436		
21,700.00	12,501.00	17,967.45	8,813.00	159.13	156.58	-14.10	9,220.30	-1,030.23	3,801.26	3,682.92	118.35	32.120		
21,800.00	12,501.00	18,067.45	8,813.00	160.72	158.20	-14.10	9,320.29	-1,031.34	3,801.26	3,681.77	119.50	31.810		
21,900.00	12,501.00	18,167.45	8,813.00	162.31	159.81	-14.10	9,420.29	-1,032.44	3,801.26	3,680.61	120.65	31.506		
22,000.00	12,501.00	18,267.45	8,813.00	163.90	161.43	-14.10	9,520.28	-1,033.55	3,801.27	3,679.46	121.81	31.208		
22,100.00	12,501.00	18,367.45	8,813.00	165.50	163.05	-14.10	9,620.27	-1,034.66	3,801.27	3,678.31	122.96	30.914		
22,200.00	12,501.00	18,467.45	8,813.00	167.09	164.67	-14.10	9,720.27	-1,035.76	3,801.27	3,677.15	124.12	30.626		
22,300.00	12,501.00	18,567.45	8,813.00	168.69	166.29	-14.10	9,820.26	-1,036.87	3,801.27	3,676.00	125.28	30.343		
22,400.00	12,501.00	18,667.45	8,813.00	170.28	167.91	-14.10	9,920.26	-1,037.98	3,801.27	3,674.84	126.43	30.065		
22,500.00	12,501.00	18,767.45	8,813.00	171.88	169.53	-14.10	10,020.25	-1,039.08	3,801.28	3,673.69	127.59	29.793		
22,600.00	12,501.00	18,867.45	8,813.00	173.48	171.15	-14.10	10,120.24	-1,040.19	3,801.28	3,672.53	128.75	29.525		
22,635.57	12,501.00	18,903.02	8,813.00	174.05	171.73	-14.10	10,155.81	-1,040.58	3,801.28	3,672.12	129.16	29.431		
22,636.34	12,501.00	18,903.79	8,813.00	174.06	171.74	-14.10	10,156.58	-1,040.59	3,801.28	3,672.11	129.17	29.428		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.56	-0.68	-69.99	70.00					
100.00	100.00	99.20	99.20	0.13	0.12	-90.56	-0.68	-69.99	69.99	69.82	0.18	396.055		
200.00	200.00	199.20	199.20	0.48	0.48	-90.56	-0.68	-69.99	69.99	69.31	0.68	102.575		
300.00	300.00	299.20	299.20	0.84	0.84	-90.56	-0.68	-69.99	69.99	68.80	1.19	58.852		
400.00	400.00	399.20	399.20	1.20	1.20	-90.56	-0.68	-69.99	69.99	68.30	1.70	41.263		
500.00	500.00	499.20	499.20	1.56	1.56	-90.56	-0.68	-69.99	69.99	67.79	2.20	31.769		
600.00	600.00	599.20	599.20	1.92	1.91	-90.56	-0.68	-69.99	69.99	67.28	2.71	25.826		
700.00	700.00	699.20	699.20	2.28	2.27	-90.56	-0.68	-69.99	69.99	66.78	3.22	21.756		
800.00	800.00	799.20	799.20	2.63	2.63	-90.56	-0.68	-69.99	69.99	66.27	3.72	18.795		
900.00	900.00	899.20	899.20	2.99	2.99	-90.56	-0.68	-69.99	69.99	65.76	4.23	16.543		
1,000.00	1,000.00	999.20	999.20	3.35	3.35	-90.56	-0.68	-69.99	69.99	65.26	4.74	14.773		
1,100.00	1,100.00	1,099.20	1,099.20	3.71	3.71	-90.56	-0.68	-69.99	69.99	64.75	5.24	13.345		
1,200.00	1,200.00	1,199.20	1,199.20	4.07	4.07	-90.56	-0.68	-69.99	69.99	64.24	5.75	12.169		
1,300.00	1,300.00	1,299.20	1,299.20	4.43	4.42	-90.56	-0.68	-69.99	69.99	63.73	6.26	11.183		
1,400.00	1,400.00	1,399.20	1,399.20	4.79	4.78	-90.56	-0.68	-69.99	69.99	63.23	6.77	10.345		
1,500.00	1,500.00	1,499.20	1,499.20	5.14	5.14	-90.56	-0.68	-69.99	69.99	62.72	7.27	9.624		
1,600.00	1,599.99	1,599.19	1,599.19	5.48	5.50	76.59	-0.68	-69.99	69.68	61.91	7.77	8.971		
1,700.00	1,699.91	1,699.11	1,699.11	5.81	5.86	79.78	-0.68	-69.99	68.87	60.62	8.25	8.348		
1,800.00	1,799.69	1,798.89	1,798.89	6.14	6.22	85.21	-0.68	-69.99	68.02	59.28	8.74	7.785		
1,865.52	1,864.96	1,864.16	1,864.16	6.36	6.45	90.00	-0.68	-69.99	67.78	58.72	9.06	7.482 CC		
1,900.00	1,899.27	1,898.47	1,898.47	6.48	6.57	92.90	-0.68	-69.99	67.86	58.64	9.23	7.355 ES		
2,000.00	1,998.57	1,997.77	1,997.77	6.82	6.93	102.54	-0.68	-69.99	69.46	59.74	9.72	7.145		
2,033.45	2,031.72	2,031.49	2,031.49	6.94	7.05	106.15	-0.72	-69.87	70.46	60.57	9.89	7.126		
2,100.00	2,097.62	2,098.61	2,098.60	7.17	7.28	113.43	-1.10	-68.79	72.52	62.31	10.21	7.100		
2,200.00	2,196.65	2,199.40	2,199.31	7.53	7.62	124.17	-2.39	-65.08	75.69	65.00	10.70	7.077 SF		
2,300.00	2,295.67	2,299.98	2,299.67	7.90	7.96	134.90	-4.55	-58.87	79.19	68.02	11.18	7.086		
2,400.00	2,394.70	2,400.21	2,399.48	8.27	8.31	145.75	-7.56	-50.21	83.47	71.81	11.66	7.160		
2,500.00	2,493.73	2,499.40	2,498.01	8.65	8.66	156.41	-11.28	-39.50	89.27	77.12	12.15	7.348		
2,600.00	2,592.75	2,597.89	2,595.82	9.03	9.01	165.64	-15.09	-28.57	97.65	85.01	12.64	7.724		
2,700.00	2,691.78	2,696.38	2,693.63	9.42	9.36	173.28	-18.89	-17.63	108.17	95.03	13.14	8.234		
2,800.00	2,790.80	2,794.87	2,791.44	9.80	9.72	179.50	-22.69	-6.70	120.27	106.64	13.64	8.820		
2,900.00	2,889.83	2,893.36	2,889.24	10.20	10.08	-175.46	-26.49	4.24	133.53	119.39	14.14	9.443		
2,979.22	2,968.28	2,971.38	2,966.73	10.51	10.37	-172.13	-29.51	12.90	144.64	130.10	14.54	9.947		
3,000.00	2,988.86	2,991.85	2,987.06	10.59	10.44	-171.34	-30.30	15.17	147.57	132.92	14.65	10.075		
3,100.00	3,088.13	3,090.56	3,085.08	10.98	10.81	-167.84	-34.11	26.13	160.50	145.34	15.16	10.589		
3,200.00	3,187.68	3,189.52	3,183.36	11.36	11.18	-164.66	-37.93	37.11	171.43	155.76	15.67	10.941		
3,300.00	3,287.44	3,288.66	3,281.81	11.73	11.55	-161.60	-41.75	48.12	180.37	164.19	16.18	11.145		
3,400.00	3,387.34	3,387.92	3,380.38	12.08	11.93	-158.56	-45.59	59.14	187.35	170.66	16.70	11.220		
3,500.00	3,487.33	3,487.23	3,479.00	12.43	12.30	-155.42	-49.42	70.16	192.46	175.25	17.21	11.182		
3,512.67	3,500.00	3,499.82	3,491.50	12.47	12.35	38.89	-49.91	71.56	192.98	175.71	17.28	11.171		
3,600.00	3,587.33	3,586.54	3,577.62	12.76	12.68	41.69	-53.25	81.19	196.70	178.98	17.72	11.101		
3,700.00	3,687.33	3,685.85	3,676.24	13.10	13.06	44.76	-57.09	92.21	201.52	183.30	18.23	11.056		
3,800.00	3,787.33	3,785.15	3,774.86	13.43	13.44	47.68	-60.92	103.24	206.90	188.16	18.73	11.044		
3,900.00	3,887.33	3,884.46	3,873.48	13.77	13.83	50.45	-64.76	114.26	212.79	193.55	19.24	11.059		
4,000.00	3,987.33	3,983.77	3,972.10	14.11	14.21	53.06	-68.59	125.29	219.15	199.40	19.75	11.098		
4,100.00	4,087.33	4,083.07	4,070.72	14.44	14.60	55.53	-72.42	136.31	225.94	205.69	20.25	11.158		
4,200.00	4,187.33	4,182.38	4,169.33	14.78	14.98	57.84	-76.26	147.33	233.13	212.38	20.75	11.234		
4,300.00	4,287.33	4,281.69	4,267.95	15.12	15.37	60.02	-80.09	158.36	240.68	219.43	21.26	11.323		
4,400.00	4,387.33	4,381.00	4,366.57	15.46	15.76	62.06	-83.93	169.38	248.56	226.80	21.76	11.424		
4,500.00	4,487.33	4,480.30	4,465.19	15.81	16.14	63.98	-87.76	180.41	256.73	234.47	22.26	11.534		
4,600.00	4,587.33	4,579.61	4,563.81	16.15	16.53	65.77	-91.59	191.43	265.17	242.41	22.76	11.652		
4,700.00	4,687.33	4,678.92	4,662.43	16.49	16.92	67.46	-95.43	202.46	273.86	250.60	23.26	11.775		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado 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				
4,800.00	4,787.33	4,778.22	4,761.05	16.83	17.31	69.04	-99.26	213.48	282.77	259.01	23.76	11.902				
4,900.00	4,887.33	4,877.53	4,859.66	17.18	17.70	70.52	-103.10	224.50	291.87	267.62	24.26	12.032				
5,000.00	4,987.33	4,976.84	4,958.28	17.52	18.09	71.92	-106.93	235.53	301.17	276.41	24.76	12.165				
5,100.00	5,087.33	5,076.14	5,056.90	17.87	18.49	73.23	-110.76	246.55	310.63	285.37	25.26	12.299				
5,200.00	5,187.33	5,175.45	5,155.52	18.21	18.88	74.46	-114.60	257.58	320.24	294.48	25.76	12.434				
5,300.00	5,287.33	5,274.76	5,254.14	18.56	19.27	75.62	-118.43	268.60	329.99	303.73	26.25	12.569				
5,400.00	5,387.33	5,374.06	5,352.76	18.91	19.66	76.71	-122.27	279.63	339.86	313.11	26.75	12.703				
5,500.00	5,487.33	5,473.37	5,451.38	19.26	20.06	77.74	-126.10	290.65	349.86	322.60	27.25	12.837				
5,600.00	5,587.33	5,572.68	5,549.99	19.60	20.45	78.72	-129.93	301.68	359.96	332.20	27.75	12.970				
5,700.00	5,687.33	5,671.98	5,648.61	19.95	20.85	79.64	-133.77	312.70	370.15	341.90	28.25	13.101				
5,800.00	5,787.33	5,771.29	5,747.23	20.30	21.24	80.51	-137.60	323.72	380.44	351.69	28.75	13.231				
5,900.00	5,887.33	5,870.60	5,845.85	20.65	21.64	81.33	-141.44	334.75	390.81	361.56	29.25	13.359				
6,000.00	5,987.33	5,969.91	5,944.47	21.00	22.03	82.12	-145.27	345.77	401.25	371.50	29.75	13.486				
6,100.00	6,087.33	6,069.21	6,043.09	21.35	22.43	82.86	-149.10	356.80	411.77	381.52	30.25	13.610				
6,200.00	6,187.33	6,168.52	6,141.71	21.70	22.82	83.57	-152.94	367.82	422.35	391.60	30.76	13.733				
6,300.00	6,287.33	6,267.83	6,240.32	22.05	23.22	84.24	-156.77	378.85	432.99	401.74	31.26	13.853				
6,400.00	6,387.33	6,367.13	6,338.94	22.40	23.61	84.88	-160.60	389.87	443.69	411.93	31.76	13.971				
6,500.00	6,487.33	6,466.44	6,437.56	22.75	24.01	85.49	-164.44	400.89	454.44	422.18	32.26	14.087				
6,600.00	6,587.33	6,565.75	6,536.18	23.10	24.41	86.07	-168.27	411.92	465.24	432.48	32.76	14.201				
6,700.00	6,687.33	6,665.05	6,634.80	23.45	24.80	86.62	-172.11	422.94	476.08	442.82	33.26	14.313				
6,800.00	6,787.33	6,764.36	6,733.42	23.80	25.20	87.15	-175.94	433.97	486.97	453.20	33.77	14.422				
6,900.00	6,887.33	6,863.67	6,832.04	24.15	25.60	87.66	-179.77	444.99	497.90	463.63	34.27	14.529				
7,000.00	6,987.33	6,962.97	6,930.65	24.50	25.99	88.14	-183.61	456.02	508.86	474.09	34.77	14.635				
7,100.00	7,087.33	7,064.96	7,031.94	24.86	26.40	88.62	-187.53	467.28	519.81	484.52	35.29	14.729				
7,200.00	7,187.33	7,179.21	7,145.64	25.21	26.85	89.04	-191.17	477.77	528.93	493.05	35.88	14.741				
7,300.00	7,287.33	7,294.02	7,260.19	25.56	27.27	89.33	-193.71	485.07	535.26	498.81	36.44	14.687				
7,400.00	7,387.33	7,409.19	7,375.28	25.91	27.68	89.48	-195.12	489.12	538.76	501.78	36.98	14.568				
7,500.00	7,487.33	7,520.45	7,486.53	26.26	28.05	89.51	-195.43	490.01	539.53	502.04	37.49	14.393				
7,600.00	7,587.33	7,620.45	7,586.53	26.62	28.38	89.51	-195.43	490.01	539.53	501.56	37.97	14.208				
7,700.00	7,687.33	7,720.45	7,686.53	26.97	28.70	89.51	-195.43	490.01	539.53	501.07	38.46	14.028				
7,800.00	7,787.33	7,820.45	7,786.53	27.32	29.03	89.51	-195.43	490.01	539.53	500.58	38.95	13.852				
7,900.00	7,887.33	7,920.45	7,886.53	27.68	29.36	89.51	-195.43	490.01	539.53	500.09	39.44	13.680				
8,000.00	7,987.33	8,020.45	7,986.53	28.03	29.69	89.51	-195.43	490.01	539.53	499.60	39.93	13.512				
8,100.00	8,087.33	8,120.45	8,086.53	28.38	30.02	89.51	-195.43	490.01	539.53	499.11	40.42	13.348				
8,200.00	8,187.33	8,220.45	8,186.53	28.74	30.35	89.51	-195.43	490.01	539.53	498.62	40.91	13.188				
8,205.20	8,192.53	8,225.65	8,191.73	28.75	30.36	89.51	-195.43	490.01	539.53	498.59	40.94	13.180				
8,300.00	8,287.33	8,315.11	8,281.12	29.09	30.66	89.27	-193.16	490.24	539.81	498.41	41.40	13.040				
8,400.00	8,387.33	8,403.23	8,367.94	29.44	30.93	87.74	-178.67	491.68	541.92	500.05	41.87	12.944				
8,500.00	8,487.33	8,485.14	8,445.77	29.80	31.16	85.11	-153.48	494.20	547.20	504.93	42.28	12.943				
8,600.00	8,587.33	8,558.57	8,511.84	30.15	31.35	81.85	-121.71	497.37	557.47	514.93	42.54	13.105				
8,700.00	8,687.33	8,622.76	8,565.84	30.51	31.49	78.42	-87.25	500.81	574.56	532.01	42.54	13.505				
8,800.00	8,787.33	8,678.02	8,608.98	30.86	31.59	75.13	-52.93	504.23	599.81	557.60	42.21	14.210				
8,900.00	8,887.33	8,725.26	8,643.09	31.21	31.67	72.13	-20.42	507.48	633.83	592.29	41.54	15.259				
9,000.00	8,987.33	8,765.60	8,670.00	31.57	31.74	69.49	9.48	510.46	676.48	635.89	40.59	16.664				
9,100.00	9,087.33	8,800.00	8,691.23	31.92	31.79	67.21	36.40	513.15	727.13	687.64	39.49	18.415				
9,200.00	9,187.33	8,829.79	8,708.28	32.28	31.82	65.23	60.71	515.58	784.86	746.54	38.32	20.483				
9,300.00	9,287.33	8,850.00	8,719.11	32.63	31.85	63.90	77.69	517.27	848.71	811.63	37.08	22.891				
9,400.00	9,387.33	8,877.75	8,732.99	32.99	31.89	62.08	101.60	519.66	917.61	881.52	36.10	25.422				
9,500.00	9,487.33	8,900.00	8,743.26	33.34	31.92	60.64	121.23	521.62	990.86	955.70	35.16	28.180				
9,600.00	9,587.33	8,900.00	8,743.26	33.70	31.92	60.64	121.23	521.62	1,067.92	1,033.88	34.04	31.374				
9,700.00	9,687.33	8,929.69	8,755.77	34.05	31.96	58.76	148.03	524.29	1,147.46	1,113.95	33.51	34.244				
9,800.00	9,787.33	8,950.00	8,763.51	34.41	31.99	57.50	166.70	526.16	1,229.80	1,196.85	32.95	37.318				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado Fed Com 102H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
9,900.00	9,887.33	8,950.00	8,763.51	34.76	31.99	57.50	166.70	526.16	1,314.16	1,281.90	32.26	40.741				
10,000.00	9,987.33	8,950.00	8,763.51	35.12	31.99	57.50	166.70	526.16	1,400.58	1,368.90	31.68	44.206				
10,100.00	10,087.33	8,976.21	8,772.51	35.47	32.03	55.91	191.20	528.60	1,487.91	1,456.41	31.50	47.238				
10,200.00	10,187.33	9,000.00	8,779.70	35.83	32.08	54.51	213.76	530.85	1,577.08	1,545.73	31.34	50.315				
10,300.00	10,287.33	9,000.00	8,779.70	36.18	32.08	54.51	213.76	530.85	1,666.90	1,635.88	31.02	53.737				
10,400.00	10,387.33	9,000.00	8,779.70	36.54	32.08	54.51	213.76	530.85	1,757.81	1,727.05	30.77	57.130				
10,500.00	10,487.33	9,000.00	8,779.70	36.89	32.08	54.51	213.76	530.85	1,849.67	1,819.09	30.58	60.488				
10,600.00	10,587.33	9,000.00	8,779.70	37.25	32.08	54.51	213.76	530.85	1,942.33	1,911.88	30.44	63.800				
10,700.00	10,687.33	9,019.88	8,784.98	37.61	32.11	53.37	232.83	532.76	2,035.25	2,004.75	30.50	66.721				
10,800.00	10,787.33	9,025.30	8,786.30	37.96	32.13	53.07	238.06	533.28	2,128.95	2,098.46	30.49	69.830				
10,900.00	10,887.33	9,050.00	8,791.70	38.32	32.18	51.71	262.04	535.67	2,223.56	2,192.93	30.63	72.595				
11,000.00	10,987.33	9,050.00	8,791.70	38.67	32.18	51.71	262.04	535.67	2,318.01	2,287.37	30.63	75.666				
11,100.00	11,087.33	9,050.00	8,791.70	39.03	32.18	51.71	262.04	535.67	2,412.91	2,382.24	30.67	78.667				
11,200.00	11,187.33	9,050.00	8,791.70	39.38	32.18	51.71	262.04	535.67	2,508.21	2,477.47	30.74	81.600				
11,300.00	11,287.33	9,050.00	8,791.70	39.74	32.18	51.71	262.04	535.67	2,603.86	2,573.03	30.83	84.467				
11,400.00	11,387.33	9,050.00	8,791.70	40.10	32.18	51.71	262.04	535.67	2,699.82	2,668.88	30.94	87.272				
11,500.00	11,487.33	9,050.00	8,791.70	40.45	32.18	51.71	262.04	535.67	2,796.07	2,765.00	31.07	90.006				
11,600.00	11,587.33	9,050.00	8,791.70	40.81	32.18	51.71	262.04	535.67	2,892.57	2,861.36	31.21	92.672				
11,700.00	11,687.33	9,050.00	8,791.70	41.16	32.18	51.71	262.04	535.67	2,989.30	2,957.92	31.38	95.268				
11,800.00	11,787.33	9,050.00	8,791.70	41.52	32.18	51.71	262.04	535.67	3,086.24	3,054.68	31.56	97.796				
11,900.00	11,887.33	9,050.00	8,791.70	41.88	32.18	51.71	262.04	535.67	3,183.37	3,151.62	31.75	100.257				
11,940.71	11,928.04	9,050.00	8,791.70	42.02	32.18	51.71	262.04	535.67	3,222.97	3,191.13	31.84	101.239				
11,950.00	11,937.33	9,050.00	8,791.70	42.05	32.18	45.42	262.04	535.67	3,231.99	3,200.14	31.85	101.463				
12,000.00	11,987.22	9,050.00	8,791.70	42.23	32.18	34.09	262.04	535.67	3,280.11	3,248.16	31.95	102.662				
12,050.00	12,036.67	9,071.33	8,795.53	42.40	32.24	26.58	282.92	537.76	3,326.74	3,294.63	32.11	103.589				
12,100.00	12,085.28	9,074.16	8,795.98	42.56	32.25	21.94	285.70	538.03	3,372.38	3,340.18	32.20	104.728				
12,150.00	12,132.70	9,077.50	8,796.49	42.71	32.26	18.70	288.99	538.36	3,416.36	3,384.08	32.28	105.834				
12,200.00	12,178.57	9,100.00	8,799.43	42.86	32.32	16.23	311.18	540.58	3,458.75	3,426.34	32.41	106.707				
12,250.00	12,222.52	9,100.00	8,799.43	43.00	32.32	14.49	311.18	540.58	3,498.46	3,466.00	32.46	107.774				
12,300.00	12,264.24	9,100.00	8,799.43	43.13	32.32	13.15	311.18	540.58	3,535.77	3,503.26	32.50	108.789				
12,350.00	12,303.40	9,100.00	8,799.43	43.26	32.32	12.10	311.18	540.58	3,570.47	3,537.93	32.53	109.743				
12,400.00	12,339.70	9,100.00	8,799.43	43.38	32.32	11.26	311.18	540.58	3,602.38	3,569.82	32.56	110.627				
12,450.00	12,372.86	9,100.00	8,799.43	43.50	32.32	10.59	311.18	540.58	3,631.34	3,598.75	32.59	111.433				
12,500.00	12,402.64	9,100.00	8,799.43	43.62	32.32	10.04	311.18	540.58	3,657.20	3,624.59	32.61	112.150				
12,550.00	12,428.81	9,100.00	8,799.43	43.74	32.32	9.61	311.18	540.58	3,679.82	3,647.19	32.63	112.769				
12,600.00	12,451.17	9,124.37	8,801.63	43.85	32.40	9.26	335.33	542.99	3,698.50	3,665.80	32.70	113.093				
12,650.00	12,469.55	9,150.00	8,802.83	43.97	32.48	9.00	360.80	545.53	3,714.36	3,681.59	32.77	113.335				
12,700.00	12,483.81	9,150.00	8,802.83	44.09	32.48	8.81	360.80	545.53	3,726.04	3,693.24	32.80	113.615				
12,750.00	12,493.83	9,150.00	8,802.83	44.21	32.48	8.69	360.80	545.53	3,734.13	3,701.31	32.82	113.762				
12,800.00	12,499.55	9,150.00	8,802.83	44.33	32.48	8.62	360.80	545.53	3,738.61	3,705.74	32.86	113.768				
12,840.71	12,501.00	9,156.11	8,802.94	44.42	32.51	8.61	366.88	546.14	3,739.53	3,706.62	32.91	113.641				
12,871.73	12,501.00	9,163.96	8,803.00	44.50	32.53	8.62	374.69	546.92	3,739.43	3,706.48	32.95	113.487				
12,900.00	12,501.00	9,164.78	8,803.00	44.57	32.54	8.62	375.51	547.00	3,739.56	3,706.57	32.99	113.365				
13,000.00	12,501.00	9,289.12	8,803.00	44.88	33.05	8.70	499.46	556.62	3,740.38	3,707.11	33.27	112.409				
13,047.21	12,501.00	9,347.93	8,803.00	45.04	33.33	8.74	558.22	559.30	3,740.73	3,707.30	33.43	111.908				
13,100.00	12,501.00	9,413.79	8,803.00	45.24	33.67	8.77	624.06	560.86	3,741.01	3,707.41	33.60	111.327				
13,200.00	12,501.00	9,527.12	8,803.00	45.66	34.33	8.79	737.37	560.39	3,741.10	3,707.15	33.95	110.191				
13,300.00	12,501.00	9,627.12	8,803.00	46.14	34.97	8.79	837.37	559.29	3,741.10	3,706.79	34.31	109.023				
13,400.00	12,501.00	9,727.12	8,803.00	46.67	35.68	8.79	937.36	558.18	3,741.10	3,706.39	34.71	107.772				
13,500.00	12,501.00	9,827.12	8,803.00	47.25	36.45	8.79	1,037.36	557.08	3,741.10	3,705.96	35.14	106.449				
13,600.00	12,501.00	9,927.12	8,803.00	47.88	37.28	8.79	1,137.35	555.97	3,741.10	3,705.49	35.61	105.064				
13,700.00	12,501.00	10,027.12	8,803.00	48.56	38.16	8.79	1,237.34	554.87	3,741.10	3,705.00	36.10	103.625				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado Fed Com 102H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
13,800.00	12,501.00	10,127.12	8,803.00	49.29	39.09	8.79	1,337.34	553.76	3,741.10	3,704.47	36.63	102.143				
13,900.00	12,501.00	10,227.12	8,803.00	50.06	40.06	8.79	1,437.33	552.65	3,741.10	3,703.92	37.18	100.626				
14,000.00	12,501.00	10,327.12	8,803.00	50.87	41.08	8.79	1,537.33	551.55	3,741.10	3,703.34	37.76	99.082				
14,100.00	12,501.00	10,427.12	8,803.00	51.72	42.14	8.79	1,637.32	550.44	3,741.10	3,702.73	38.36	97.520				
14,200.00	12,501.00	10,527.12	8,803.00	52.61	43.23	8.79	1,737.31	549.34	3,741.09	3,702.10	38.99	95.945				
14,300.00	12,501.00	10,627.12	8,803.00	53.54	44.36	8.79	1,837.31	548.23	3,741.09	3,701.45	39.65	94.364				
14,400.00	12,501.00	10,727.12	8,803.00	54.50	45.52	8.79	1,937.30	547.13	3,741.09	3,700.77	40.32	92.783				
14,500.00	12,501.00	10,827.12	8,803.00	55.50	46.71	8.79	2,037.30	546.02	3,741.09	3,700.07	41.02	91.207				
14,600.00	12,501.00	10,927.12	8,803.00	56.52	47.93	8.79	2,137.29	544.92	3,741.09	3,699.36	41.73	89.641				
14,700.00	12,501.00	11,027.12	8,803.00	57.57	49.17	8.79	2,237.28	543.81	3,741.09	3,698.62	42.47	88.087				
14,800.00	12,501.00	11,127.12	8,803.00	58.66	50.44	8.79	2,337.28	542.71	3,741.09	3,697.86	43.22	86.550				
14,900.00	12,501.00	11,227.12	8,803.00	59.76	51.73	8.78	2,437.27	541.60	3,741.09	3,697.09	44.00	85.033				
15,000.00	12,501.00	11,327.12	8,803.00	60.90	53.03	8.78	2,537.26	540.50	3,741.09	3,696.30	44.78	83.537				
15,100.00	12,501.00	11,427.12	8,803.00	62.05	54.36	8.78	2,637.26	539.39	3,741.09	3,695.50	45.59	82.066				
15,200.00	12,501.00	11,527.12	8,803.00	63.23	55.71	8.78	2,737.25	538.29	3,741.09	3,694.68	46.40	80.619				
15,300.00	12,501.00	11,627.12	8,803.00	64.43	57.07	8.78	2,837.25	537.18	3,741.08	3,693.85	47.24	79.200				
15,400.00	12,501.00	11,727.12	8,803.00	65.65	58.44	8.78	2,937.24	536.08	3,741.08	3,693.00	48.08	77.808				
15,500.00	12,501.00	11,827.12	8,803.00	66.89	59.83	8.78	3,037.23	534.97	3,741.08	3,692.14	48.94	76.445				
15,600.00	12,501.00	11,927.12	8,803.00	68.14	61.23	8.78	3,137.23	533.86	3,741.08	3,691.27	49.81	75.110				
15,700.00	12,501.00	12,027.12	8,803.00	69.41	62.65	8.78	3,237.22	532.76	3,741.08	3,690.39	50.69	73.806				
15,800.00	12,501.00	12,127.12	8,803.00	70.70	64.07	8.78	3,337.22	531.65	3,741.08	3,689.50	51.58	72.530				
15,900.00	12,501.00	12,227.12	8,803.00	72.00	65.51	8.78	3,437.21	530.55	3,741.08	3,688.60	52.48	71.285				
16,000.00	12,501.00	12,327.12	8,803.00	73.32	66.96	8.78	3,537.20	529.44	3,741.08	3,687.69	53.39	70.070				
16,100.00	12,501.00	12,427.12	8,803.00	74.65	68.41	8.78	3,637.20	528.34	3,741.08	3,686.77	54.31	68.885				
16,200.00	12,501.00	12,527.12	8,803.00	75.99	69.88	8.78	3,737.19	527.23	3,741.08	3,685.84	55.24	67.729				
16,300.00	12,501.00	12,627.12	8,803.00	77.35	71.35	8.78	3,837.19	526.13	3,741.08	3,684.90	56.17	66.599				
16,400.00	12,501.00	12,727.12	8,803.00	78.72	72.83	8.78	3,937.18	525.02	3,741.08	3,683.96	57.12	65.499				
16,500.00	12,501.00	12,827.12	8,803.00	80.09	74.32	8.78	4,037.17	523.92	3,741.07	3,683.01	58.07	64.426				
16,600.00	12,501.00	12,927.12	8,803.00	81.48	75.81	8.78	4,137.17	522.81	3,741.07	3,682.05	59.03	63.380				
16,700.00	12,501.00	13,027.12	8,803.00	82.88	77.32	8.78	4,237.16	521.71	3,741.07	3,681.08	59.99	62.360				
16,800.00	12,501.00	13,127.12	8,803.00	84.28	78.82	8.78	4,337.15	520.60	3,741.07	3,680.11	60.96	61.367				
16,900.00	12,501.00	13,227.12	8,803.00	85.70	80.34	8.78	4,437.15	519.50	3,741.07	3,679.13	61.94	60.398				
17,000.00	12,501.00	13,327.12	8,803.00	87.12	81.85	8.78	4,537.14	518.39	3,741.07	3,678.15	62.92	59.454				
17,100.00	12,501.00	13,427.12	8,803.00	88.55	83.38	8.78	4,637.14	517.28	3,741.07	3,677.16	63.91	58.534				
17,200.00	12,501.00	13,527.12	8,803.00	89.99	84.91	8.78	4,737.13	516.18	3,741.07	3,676.16	64.91	57.637				
17,300.00	12,501.00	13,627.12	8,803.00	91.44	86.44	8.78	4,837.12	515.07	3,741.07	3,675.16	65.91	56.763				
17,400.00	12,501.00	13,727.12	8,803.00	92.89	87.98	8.78	4,937.12	513.97	3,741.07	3,674.16	66.91	55.911				
17,500.00	12,501.00	13,827.12	8,803.00	94.35	89.52	8.78	5,037.11	512.86	3,741.07	3,673.15	67.92	55.081				
17,600.00	12,501.00	13,927.12	8,803.00	95.82	91.06	8.78	5,137.11	511.76	3,741.06	3,672.13	68.93	54.273				
17,700.00	12,501.00	14,027.12	8,803.00	97.29	92.61	8.78	5,237.10	510.65	3,741.06	3,671.12	69.95	53.484				
17,800.00	12,501.00	14,127.12	8,803.00	98.77	94.17	8.78	5,337.09	509.55	3,741.06	3,670.10	70.97	52.716				
17,900.00	12,501.00	14,227.12	8,803.00	100.25	95.72	8.78	5,437.09	508.44	3,741.06	3,669.07	71.99	51.966				
18,000.00	12,501.00	14,327.12	8,803.00	101.74	97.28	8.78	5,537.08	507.34	3,741.06	3,668.04	73.02	51.235				
18,100.00	12,501.00	14,427.12	8,803.00	103.24	98.84	8.78	5,637.08	506.23	3,741.06	3,667.01	74.05	50.521				
18,200.00	12,501.00	14,527.12	8,803.00	104.73	100.41	8.78	5,737.07	505.13	3,741.06	3,665.98	75.08	49.825				
18,300.00	12,501.00	14,627.12	8,803.00	106.24	101.98	8.78	5,837.06	504.02	3,741.06	3,664.94	76.12	49.146				
18,400.00	12,501.00	14,727.12	8,803.00	107.75	103.55	8.78	5,937.06	502.92	3,741.06	3,663.89	77.16	48.482				
18,500.00	12,501.00	14,827.12	8,803.00	109.26	105.12	8.78	6,037.05	501.81	3,741.06	3,662.85	78.21	47.835				
18,600.00	12,501.00	14,927.12	8,803.00	110.77	106.70	8.78	6,137.04	500.71	3,741.06	3,661.80	79.26	47.202				
18,700.00	12,501.00	15,027.12	8,803.00	112.29	108.27	8.78	6,237.04	499.60	3,741.05	3,660.75	80.31	46.585				
18,800.00	12,501.00	15,127.12	8,803.00	113.82	109.85	8.78	6,337.03	498.49	3,741.05	3,659.69	81.36	45.981				
18,900.00	12,501.00	15,227.12	8,803.00	115.34	111.44	8.78	6,437.03	497.39	3,741.05	3,658.64	82.42	45.392				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Colorado 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		
19,000.00	12,501.00	15,327.12	8,803.00	116.87	113.02	8.78	6,537.02	496.28	3,741.05	3,657.58	83.47	44.817		
19,100.00	12,501.00	15,427.12	8,803.00	118.41	114.61	8.78	6,637.01	495.18	3,741.05	3,656.52	84.54	44.254		
19,200.00	12,501.00	15,527.12	8,803.00	119.94	116.19	8.78	6,737.01	494.07	3,741.05	3,655.45	85.60	43.705		
19,300.00	12,501.00	15,627.12	8,803.00	121.48	117.78	8.78	6,837.00	492.97	3,741.05	3,654.39	86.66	43.169		
19,400.00	12,501.00	15,727.12	8,803.00	123.03	119.38	8.78	6,937.00	491.86	3,741.05	3,653.32	87.73	42.644		
19,500.00	12,501.00	15,827.12	8,803.00	124.57	120.97	8.78	7,036.99	490.76	3,741.05	3,652.25	88.79	42.132		
19,600.00	12,501.00	15,927.12	8,803.00	126.12	122.56	8.78	7,136.98	489.65	3,741.05	3,651.18	89.86	41.630		
19,700.00	12,501.00	16,027.12	8,803.00	127.67	124.16	8.78	7,236.98	488.55	3,741.05	3,650.11	90.94	41.139		
19,800.00	12,501.00	16,127.12	8,803.00	129.23	125.76	8.78	7,336.97	487.44	3,741.05	3,649.04	92.01	40.659		
19,900.00	12,501.00	16,227.12	8,803.00	130.78	127.36	8.78	7,436.97	486.34	3,741.04	3,647.96	93.08	40.190		
20,000.00	12,501.00	16,327.12	8,803.00	132.34	128.96	8.78	7,536.96	485.23	3,741.04	3,646.88	94.16	39.730		
20,100.00	12,501.00	16,427.12	8,803.00	133.90	130.56	8.78	7,636.95	484.13	3,741.04	3,645.80	95.24	39.280		
20,200.00	12,501.00	16,527.12	8,803.00	135.47	132.16	8.78	7,736.95	483.02	3,741.04	3,644.72	96.32	38.840		
20,300.00	12,501.00	16,627.12	8,803.00	137.03	133.77	8.78	7,836.94	481.92	3,741.04	3,643.64	97.40	38.408		
20,400.00	12,501.00	16,727.12	8,803.00	138.60	135.37	8.78	7,936.93	480.81	3,741.04	3,642.55	98.49	37.986		
20,500.00	12,501.00	16,827.12	8,803.00	140.17	136.98	8.78	8,036.93	479.70	3,741.04	3,641.47	99.57	37.572		
20,600.00	12,501.00	16,927.12	8,803.00	141.74	138.59	8.78	8,136.92	478.60	3,741.04	3,640.38	100.66	37.166		
20,700.00	12,501.00	17,027.12	8,803.00	143.31	140.20	8.78	8,236.92	477.49	3,741.04	3,639.29	101.74	36.769		
20,800.00	12,501.00	17,127.12	8,803.00	144.89	141.81	8.78	8,336.91	476.39	3,741.04	3,638.20	102.83	36.380		
20,900.00	12,501.00	17,227.12	8,803.00	146.46	143.42	8.78	8,436.90	475.28	3,741.04	3,637.11	103.92	35.999		
21,000.00	12,501.00	17,327.12	8,803.00	148.04	145.03	8.78	8,536.90	474.18	3,741.03	3,636.02	105.01	35.625		
21,100.00	12,501.00	17,427.12	8,803.00	149.62	146.64	8.78	8,636.89	473.07	3,741.03	3,634.93	106.10	35.258		
21,200.00	12,501.00	17,527.12	8,803.00	151.20	148.26	8.78	8,736.89	471.97	3,741.03	3,633.84	107.20	34.899		
21,300.00	12,501.00	17,627.12	8,803.00	152.78	149.87	8.78	8,836.88	470.86	3,741.03	3,632.74	108.29	34.547		
21,400.00	12,501.00	17,727.12	8,803.00	154.37	151.49	8.78	8,936.87	469.76	3,741.03	3,631.65	109.38	34.201		
21,500.00	12,501.00	17,827.12	8,803.00	155.95	153.10	8.78	9,036.87	468.65	3,741.03	3,630.55	110.48	33.862		
21,600.00	12,501.00	17,927.12	8,803.00	157.54	154.72	8.78	9,136.86	467.55	3,741.03	3,629.45	111.58	33.529		
21,700.00	12,501.00	18,027.12	8,803.00	159.13	156.34	8.78	9,236.86	466.44	3,741.03	3,628.35	112.67	33.202		
21,800.00	12,501.00	18,127.12	8,803.00	160.72	157.96	8.78	9,336.85	465.34	3,741.03	3,627.25	113.77	32.881		
21,900.00	12,501.00	18,227.12	8,803.00	162.31	159.58	8.78	9,436.84	464.23	3,741.03	3,626.15	114.87	32.567		
22,000.00	12,501.00	18,327.12	8,803.00	163.90	161.20	8.78	9,536.84	463.12	3,741.03	3,625.05	115.97	32.257		
22,100.00	12,501.00	18,427.12	8,803.00	165.50	162.82	8.78	9,636.83	462.02	3,741.02	3,623.95	117.08	31.954		
22,200.00	12,501.00	18,527.12	8,803.00	167.09	164.44	8.78	9,736.82	460.91	3,741.02	3,622.85	118.18	31.656		
22,300.00	12,501.00	18,627.12	8,803.00	168.69	166.06	8.78	9,836.82	459.81	3,741.02	3,621.74	119.28	31.363		
22,400.00	12,501.00	18,727.12	8,803.00	170.28	167.68	8.78	9,936.81	458.70	3,741.02	3,620.64	120.39	31.075		
22,500.00	12,501.00	18,827.12	8,803.00	171.88	169.31	8.78	10,036.81	457.60	3,741.02	3,619.53	121.49	30.793		
22,600.00	12,501.00	18,927.12	8,803.00	173.48	170.93	8.78	10,136.80	456.49	3,741.02	3,618.43	122.59	30.516		
22,634.68	12,501.00	18,961.77	8,803.00	174.04	171.49	8.78	10,171.45	456.11	3,741.02	3,618.04	122.98	30.420		
22,635.57	12,501.00	18,961.77	8,803.00	174.05	171.49	8.78	10,171.45	456.11	3,741.02	3,618.04	122.98	30.419		
22,636.34	12,501.00	18,961.77	8,803.00	174.06	171.49	8.78	10,171.45	456.11	3,741.02	3,618.03	122.99	30.417		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.56	-0.34	-34.99	34.99					
100.00	100.00	99.60	99.60	0.13	0.12	-90.56	-0.34	-34.99	34.99	34.81	0.18	197.604		
200.00	200.00	199.60	199.60	0.48	0.48	-90.56	-0.34	-34.99	34.99	34.31	0.68	51.204		
300.00	300.00	299.60	299.60	0.84	0.84	-90.56	-0.34	-34.99	34.99	33.80	1.19	29.397		
400.00	400.00	399.60	399.60	1.20	1.20	-90.56	-0.34	-34.99	34.99	33.29	1.70	20.616		
500.00	500.00	499.60	499.60	1.56	1.56	-90.56	-0.34	-34.99	34.99	32.79	2.20	15.875		
600.00	600.00	599.60	599.60	1.92	1.92	-90.56	-0.34	-34.99	34.99	32.28	2.71	12.906		
700.00	700.00	699.60	699.60	2.28	2.27	-90.56	-0.34	-34.99	34.99	31.77	3.22	10.873		
800.00	800.00	799.60	799.60	2.63	2.63	-90.56	-0.34	-34.99	34.99	31.27	3.73	9.393		
900.00	900.00	899.60	899.60	2.99	2.99	-90.56	-0.34	-34.99	34.99	30.76	4.23	8.268		
1,000.00	1,000.00	999.60	999.60	3.35	3.35	-90.56	-0.34	-34.99	34.99	30.25	4.74	7.384		
1,100.00	1,100.00	1,099.60	1,099.60	3.71	3.71	-90.56	-0.34	-34.99	34.99	29.75	5.25	6.670		
1,200.00	1,200.00	1,199.60	1,199.60	4.07	4.07	-90.56	-0.34	-34.99	34.99	29.24	5.75	6.082		
1,300.00	1,300.00	1,299.60	1,299.60	4.43	4.43	-90.56	-0.34	-34.99	34.99	28.73	6.26	5.590		
1,400.00	1,400.00	1,399.60	1,399.60	4.79	4.78	-90.56	-0.34	-34.99	34.99	28.22	6.77	5.171		
1,500.00	1,500.00	1,499.60	1,499.60	5.14	5.14	-90.56	-0.34	-34.99	34.99	27.72	7.27	4.811		
1,584.94	1,584.93	1,584.35	1,584.35	5.43	5.44	76.33	-0.77	-35.15	34.92	27.24	7.69	4.544 CC		
1,600.00	1,599.99	1,599.37	1,599.36	5.48	5.49	76.50	-1.02	-35.24	34.92	27.17	7.76	4.502		
1,700.00	1,699.91	1,699.07	1,699.00	5.81	5.81	77.73	-4.07	-36.35	35.11	26.89	8.22	4.273 ES		
1,800.00	1,799.69	1,798.78	1,798.55	6.14	6.14	79.06	-9.56	-38.34	35.57	26.89	8.68	4.097		
1,900.00	1,899.27	1,898.51	1,897.92	6.48	6.48	80.46	-17.49	-41.23	36.33	27.17	9.15	3.968		
2,000.00	1,998.57	1,998.25	1,997.04	6.82	6.82	81.88	-27.85	-45.00	37.37	27.73	9.64	3.878		
2,033.45	2,031.72	2,031.59	2,030.11	6.94	6.93	82.38	-31.85	-46.46	37.79	27.99	9.80	3.856		
2,100.00	2,097.62	2,097.61	2,095.60	7.17	7.17	84.14	-39.44	-49.87	39.15	29.02	10.13	3.865		
2,200.00	2,196.65	2,196.66	2,193.95	7.53	7.52	88.31	-49.22	-56.39	42.98	32.36	10.63	4.045		
2,300.00	2,295.67	2,295.39	2,292.02	7.90	7.88	93.40	-57.06	-64.58	49.20	38.08	11.13	4.421		
2,400.00	2,394.70	2,393.68	2,389.64	8.27	8.24	98.46	-62.95	-74.40	58.03	46.40	11.63	4.989		
2,500.00	2,493.73	2,491.39	2,486.60	8.65	8.60	102.95	-66.92	-85.82	69.56	57.43	12.13	5.735		
2,600.00	2,592.75	2,590.16	2,584.52	9.03	8.96	106.54	-69.74	-98.38	82.91	70.25	12.65	6.553		
2,700.00	2,691.78	2,689.15	2,682.67	9.42	9.33	109.14	-72.56	-110.99	96.50	83.32	13.18	7.321		
2,800.00	2,790.80	2,788.14	2,780.81	9.80	9.71	111.10	-75.37	-123.60	110.25	96.53	13.71	8.039		
2,900.00	2,889.83	2,887.13	2,878.95	10.20	10.09	112.62	-78.19	-136.21	124.09	109.84	14.25	8.708		
2,979.22	2,968.28	2,965.55	2,956.70	10.51	10.39	113.60	-80.42	-146.20	135.11	120.43	14.68	9.207		
3,000.00	2,988.86	2,986.12	2,977.10	10.59	10.47	113.85	-81.00	-148.82	137.98	123.19	14.79	9.331		
3,100.00	3,088.13	3,085.24	3,075.37	10.98	10.85	114.38	-83.82	-161.45	151.18	135.86	15.32	9.866		
3,200.00	3,187.68	3,184.49	3,173.77	11.36	11.24	114.00	-86.64	-174.09	163.31	147.46	15.85	10.301		
3,300.00	3,287.44	3,283.80	3,272.23	11.73	11.63	112.89	-89.46	-186.74	174.44	158.06	16.38	10.650		
3,400.00	3,387.34	3,383.10	3,370.68	12.08	12.02	111.17	-92.29	-199.39	184.69	167.79	16.90	10.930		
3,500.00	3,487.33	3,482.32	3,469.05	12.43	12.41	108.91	-95.11	-212.03	194.26	176.85	17.41	11.160		
3,512.67	3,500.00	3,494.89	3,481.51	12.47	12.46	-57.51	-95.46	-213.63	195.44	177.97	17.47	11.187		
3,600.00	3,587.33	3,581.46	3,567.35	12.76	12.80	-59.77	-97.93	-224.66	203.68	185.77	17.90	11.377		
3,700.00	3,687.33	3,680.61	3,665.64	13.10	13.19	-62.14	-100.74	-237.29	213.47	195.08	18.40	11.603		
3,800.00	3,787.33	3,779.75	3,763.94	13.43	13.59	-64.30	-103.56	-249.92	223.60	204.71	18.89	11.836		
3,900.00	3,887.33	3,878.90	3,862.24	13.77	13.98	-66.28	-106.38	-262.55	234.02	214.64	19.38	12.073		
4,000.00	3,987.33	3,978.04	3,960.53	14.11	14.38	-68.08	-109.20	-275.18	244.69	224.81	19.88	12.311		
4,100.00	4,087.33	4,077.19	4,058.83	14.44	14.78	-69.74	-112.02	-287.81	255.58	235.21	20.37	12.548		
4,200.00	4,187.33	4,176.33	4,157.13	14.78	15.18	-71.25	-114.84	-300.44	266.67	245.81	20.86	12.783		
4,300.00	4,287.33	4,275.48	4,255.42	15.12	15.57	-72.65	-117.66	-313.07	277.92	256.57	21.35	13.015		
4,400.00	4,387.33	4,374.62	4,353.72	15.46	15.97	-73.94	-120.48	-325.70	289.33	267.49	21.85	13.244		
4,500.00	4,487.33	4,473.77	4,452.02	15.81	16.37	-75.13	-123.29	-338.33	300.87	278.53	22.34	13.468		
4,600.00	4,587.33	4,572.91	4,550.31	16.15	16.78	-76.23	-126.11	-350.96	312.53	289.70	22.83	13.687		
4,700.00	4,687.33	4,672.06	4,648.61	16.49	17.18	-77.25	-128.93	-363.59	324.30	300.97	23.33	13.901		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
4,800.00	4,787.33	4,771.20	4,746.91	16.83	17.58	-78.20	-131.75	-376.22	336.16	312.34	23.82	14.111		
4,900.00	4,887.33	4,870.34	4,845.20	17.18	17.98	-79.09	-134.57	-388.85	348.11	323.79	24.32	14.314		
5,000.00	4,987.33	4,969.49	4,943.50	17.52	18.39	-79.91	-137.39	-401.48	360.13	335.32	24.81	14.513		
5,100.00	5,087.33	5,068.63	5,041.80	17.87	18.79	-80.69	-140.21	-414.11	372.22	346.91	25.31	14.706		
5,200.00	5,187.33	5,167.78	5,140.09	18.21	19.19	-81.41	-143.02	-426.74	384.38	358.57	25.81	14.894		
5,300.00	5,287.33	5,266.92	5,238.39	18.56	19.60	-82.09	-145.84	-439.37	396.59	370.29	26.31	15.077		
5,400.00	5,387.33	5,366.07	5,336.68	18.91	20.00	-82.73	-148.66	-452.00	408.86	382.05	26.80	15.254		
5,500.00	5,487.33	5,465.21	5,434.98	19.26	20.41	-83.33	-151.48	-464.63	421.17	393.87	27.30	15.427		
5,600.00	5,587.33	5,564.36	5,533.28	19.60	20.81	-83.90	-154.30	-477.26	433.52	405.72	27.80	15.594		
5,700.00	5,687.33	5,663.50	5,631.57	19.95	21.22	-84.44	-157.12	-489.88	445.92	417.62	28.30	15.757		
5,800.00	5,787.33	5,762.65	5,729.87	20.30	21.62	-84.95	-159.94	-502.51	458.35	429.55	28.80	15.915		
5,900.00	5,887.33	5,861.79	5,828.17	20.65	22.03	-85.43	-162.75	-515.14	470.81	441.51	29.30	16.069		
6,000.00	5,987.33	5,960.93	5,926.46	21.00	22.43	-85.88	-165.57	-527.77	483.31	453.51	29.80	16.219		
6,100.00	6,087.33	6,060.08	6,024.76	21.35	22.84	-86.32	-168.39	-540.40	495.83	465.53	30.30	16.364		
6,200.00	6,187.33	6,159.22	6,123.06	21.70	23.25	-86.73	-171.21	-553.03	508.38	477.58	30.80	16.505		
6,300.00	6,287.33	6,258.37	6,221.35	22.05	23.65	-87.12	-174.03	-565.66	520.96	489.66	31.30	16.642		
6,400.00	6,387.33	6,357.51	6,319.65	22.40	24.06	-87.49	-176.85	-578.29	533.56	501.75	31.80	16.776		
6,500.00	6,487.33	6,456.66	6,417.95	22.75	24.47	-87.85	-179.67	-590.92	546.18	513.87	32.31	16.906		
6,600.00	6,587.33	6,555.80	6,516.24	23.10	24.88	-88.19	-182.49	-603.55	558.82	526.01	32.81	17.032		
6,700.00	6,687.33	6,654.95	6,614.54	23.45	25.28	-88.51	-185.30	-616.18	571.47	538.16	33.31	17.155		
6,800.00	6,787.33	6,754.09	6,712.83	23.80	25.69	-88.83	-188.12	-628.81	584.15	550.33	33.82	17.275		
6,900.00	6,887.33	6,853.24	6,811.13	24.15	26.10	-89.12	-190.94	-641.44	596.84	562.52	34.32	17.391		
7,000.00	6,987.33	6,952.38	6,909.43	24.50	26.51	-89.41	-193.76	-654.07	609.55	574.73	34.82	17.504		
7,100.00	7,087.33	7,051.52	7,007.72	24.86	26.92	-89.68	-196.58	-666.70	622.27	586.94	35.33	17.615		
7,200.00	7,187.33	7,152.54	7,107.88	25.21	27.33	-89.95	-199.45	-679.55	634.99	599.15	35.84	17.716		
7,300.00	7,287.33	7,271.37	7,225.96	25.56	27.81	-90.21	-202.35	-692.55	645.94	609.49	36.45	17.721		
7,400.00	7,387.33	7,390.93	7,345.11	25.91	28.26	-90.39	-204.46	-702.00	653.86	616.83	37.03	17.657		
7,500.00	7,487.33	7,510.97	7,465.00	26.26	28.69	-90.50	-205.76	-707.83	658.72	621.14	37.58	17.528		
7,600.00	7,587.33	7,631.28	7,585.28	26.62	29.10	-90.54	-206.24	-709.98	660.51	622.41	38.10	17.337		
7,700.00	7,687.33	7,732.92	7,686.93	26.97	29.42	-90.54	-206.24	-709.99	660.52	621.94	38.58	17.119		
7,800.00	7,787.33	7,832.92	7,786.93	27.32	29.74	-90.54	-206.24	-709.99	660.52	621.45	39.07	16.907		
7,900.00	7,887.33	7,932.92	7,886.93	27.68	30.06	-90.54	-206.24	-709.99	660.52	620.96	39.56	16.699		
8,000.00	7,987.33	8,032.92	7,986.93	28.03	30.38	-90.54	-206.24	-709.99	660.52	620.48	40.04	16.496		
8,100.00	8,087.33	8,132.92	8,086.93	28.38	30.70	-90.54	-206.24	-709.99	660.52	619.99	40.53	16.297		
8,200.00	8,187.33	8,232.92	8,186.93	28.74	31.02	-90.54	-206.24	-709.99	660.52	619.50	41.02	16.104		
8,300.00	8,287.33	8,332.92	8,286.93	29.09	31.34	-90.54	-206.24	-709.99	660.52	619.01	41.50	15.914		
8,400.00	8,387.33	8,432.92	8,386.93	29.44	31.66	-90.54	-206.24	-709.99	660.52	618.53	41.99	15.729		
8,500.00	8,487.33	8,532.92	8,486.93	29.80	31.99	-90.54	-206.24	-709.99	660.52	618.04	42.48	15.548		
8,600.00	8,587.33	8,632.92	8,586.93	30.15	32.31	-90.54	-206.24	-709.99	660.52	617.55	42.97	15.371		
8,700.00	8,687.33	8,732.92	8,686.93	30.51	32.64	-90.54	-206.24	-709.99	660.52	617.06	43.46	15.198		
8,800.00	8,787.33	8,832.92	8,786.93	30.86	32.96	-90.54	-206.24	-709.99	660.52	616.57	43.95	15.028		
8,900.00	8,887.33	8,932.92	8,886.93	31.21	33.29	-90.54	-206.24	-709.99	660.52	616.08	44.44	14.862		
9,000.00	8,987.33	9,032.92	8,986.93	31.57	33.62	-90.54	-206.24	-709.99	660.52	615.59	44.93	14.700		
9,100.00	9,087.33	9,132.92	9,086.93	31.92	33.94	-90.54	-206.24	-709.99	660.52	615.10	45.42	14.541		
9,200.00	9,187.33	9,232.92	9,186.93	32.28	34.27	-90.54	-206.24	-709.99	660.52	614.60	45.92	14.385		
9,300.00	9,287.33	9,332.92	9,286.93	32.63	34.60	-90.54	-206.24	-709.99	660.52	614.11	46.41	14.233		
9,400.00	9,387.33	9,432.92	9,386.93	32.99	34.93	-90.54	-206.24	-709.99	660.52	613.62	46.90	14.083		
9,500.00	9,487.33	9,532.92	9,486.93	33.34	35.26	-90.54	-206.24	-709.99	660.52	613.13	47.39	13.937		
9,600.00	9,587.33	9,632.92	9,586.93	33.70	35.59	-90.54	-206.24	-709.99	660.52	612.63	47.89	13.794		
9,700.00	9,687.33	9,732.92	9,686.93	34.05	35.92	-90.54	-206.24	-709.99	660.52	612.14	48.38	13.653		
9,800.00	9,787.33	9,832.92	9,786.93	34.41	36.25	-90.54	-206.24	-709.99	660.52	611.65	48.87	13.515		
9,900.00	9,887.33	9,932.92	9,886.93	34.76	36.58	-90.54	-206.24	-709.99	660.52	611.15	49.37	13.380		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Colorado 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		
10,000.00	9,987.33	10,032.92	9,986.93	35.12	36.92	-90.54	-206.24	-709.99	660.52	610.66	49.86	13.247		
10,100.00	10,087.33	10,132.92	10,086.93	35.47	37.25	-90.54	-206.24	-709.99	660.52	610.17	50.35	13.117		
10,200.00	10,187.33	10,232.92	10,186.93	35.83	37.58	-90.54	-206.24	-709.99	660.52	609.67	50.85	12.990		
10,300.00	10,287.33	10,332.92	10,286.93	36.18	37.92	-90.54	-206.24	-709.99	660.52	609.18	51.34	12.865		
10,400.00	10,387.33	10,432.92	10,386.93	36.54	38.25	-90.54	-206.24	-709.99	660.52	608.68	51.84	12.742		
10,500.00	10,487.33	10,532.92	10,486.93	36.89	38.59	-90.54	-206.24	-709.99	660.52	608.19	52.33	12.621		
10,600.00	10,587.33	10,632.92	10,586.93	37.25	38.92	-90.54	-206.24	-709.99	660.52	607.69	52.83	12.503		
10,700.00	10,687.33	10,732.92	10,686.93	37.61	39.26	-90.54	-206.24	-709.99	660.52	607.19	53.33	12.387		
10,800.00	10,787.33	10,832.92	10,786.93	37.96	39.59	-90.54	-206.24	-709.99	660.52	606.70	53.82	12.273		
10,900.00	10,887.33	10,932.92	10,886.93	38.32	39.93	-90.54	-206.24	-709.99	660.52	606.20	54.32	12.160		
11,000.00	10,987.33	11,032.92	10,986.93	38.67	40.27	-90.54	-206.24	-709.99	660.52	605.71	54.81	12.050		
11,100.00	11,087.33	11,132.92	11,086.93	39.03	40.60	-90.54	-206.24	-709.99	660.52	605.21	55.31	11.942		
11,200.00	11,187.33	11,232.92	11,186.93	39.38	40.94	-90.54	-206.24	-709.99	660.52	604.71	55.81	11.836		
11,300.00	11,287.33	11,332.92	11,286.93	39.74	41.28	-90.54	-206.24	-709.99	660.52	604.22	56.30	11.731		
11,400.00	11,387.33	11,432.92	11,386.93	40.10	41.62	-90.54	-206.24	-709.99	660.52	603.72	56.80	11.629		
11,500.00	11,487.33	11,532.92	11,486.93	40.45	41.96	-90.54	-206.24	-709.99	660.52	603.22	57.30	11.528		
11,600.00	11,587.33	11,632.92	11,586.93	40.81	42.30	-90.54	-206.24	-709.99	660.52	602.72	57.79	11.429		
11,700.00	11,687.33	11,732.92	11,686.93	41.16	42.64	-90.54	-206.24	-709.99	660.52	602.23	58.29	11.331		
11,800.00	11,787.33	11,832.92	11,786.93	41.52	42.97	-90.54	-206.24	-709.99	660.52	601.73	58.79	11.235		
11,900.00	11,887.33	11,918.16	11,872.09	41.88	43.26	-90.33	-203.86	-710.60	661.28	602.00	59.27	11.156		
11,940.71	11,928.04	11,950.00	11,903.70	42.02	43.37	-90.01	-200.15	-711.54	662.48	603.02	59.46	11.142		
11,950.00	11,937.33	11,956.77	11,910.39	42.05	43.39	-93.39	-199.14	-711.80	662.84	603.34	59.50	11.141		
12,000.00	11,987.22	12,000.00	11,952.76	42.23	43.54	-92.66	-190.91	-713.90	665.48	605.76	59.72	11.143		
12,050.00	12,036.67	12,032.88	11,984.50	42.40	43.64	-92.00	-182.59	-716.02	669.20	609.31	59.88	11.175		
12,100.00	12,085.28	12,070.54	12,020.17	42.56	43.76	-91.26	-170.91	-719.00	673.99	613.95	60.04	11.226		
12,150.00	12,132.70	12,107.95	12,054.75	42.71	43.87	-90.51	-157.08	-722.52	679.79	619.61	60.18	11.297		
12,200.00	12,178.57	12,150.00	12,092.40	42.86	43.99	-89.73	-138.97	-727.14	686.54	626.22	60.33	11.380		
12,250.00	12,222.52	12,182.10	12,120.17	43.00	44.08	-88.96	-123.38	-731.11	694.13	633.73	60.40	11.492		
12,300.00	12,264.24	12,218.87	12,150.81	43.13	44.17	-88.18	-103.69	-736.13	702.55	642.05	60.50	11.613		
12,350.00	12,303.40	12,250.00	12,175.69	43.26	44.25	-87.37	-85.56	-740.75	711.74	651.19	60.55	11.755		
12,400.00	12,339.70	12,291.95	12,207.53	43.38	44.35	-86.63	-59.12	-747.49	721.55	660.86	60.69	11.889		
12,450.00	12,372.86	12,328.30	12,233.46	43.50	44.43	-85.87	-34.43	-753.78	732.00	671.20	60.80	12.039		
12,500.00	12,402.64	12,364.59	12,257.66	43.62	44.50	-85.13	-8.24	-760.46	743.00	682.07	60.93	12.195		
12,550.00	12,428.81	12,400.00	12,279.60	43.74	44.58	-84.39	18.69	-767.32	754.47	693.41	61.06	12.356		
12,600.00	12,451.17	12,437.09	12,300.68	43.85	44.65	-83.70	48.26	-774.86	766.37	705.14	61.23	12.516		
12,650.00	12,469.55	12,473.41	12,319.37	43.97	44.72	-83.02	78.42	-782.55	778.61	717.21	61.41	12.679		
12,700.00	12,483.81	12,509.84	12,336.10	44.09	44.79	-82.37	109.78	-790.54	791.15	729.55	61.61	12.842		
12,750.00	12,493.83	12,550.00	12,352.12	44.21	44.88	-81.82	145.45	-799.64	803.94	742.09	61.84	13.000		
12,800.00	12,499.55	12,583.30	12,363.42	44.33	44.95	-81.18	175.80	-807.37	816.87	754.81	62.06	13.163		
12,840.71	12,501.00	12,613.54	12,372.09	44.42	45.02	-80.74	203.88	-814.53	827.50	765.25	62.25	13.293		
12,900.00	12,501.00	12,658.76	12,382.17	44.57	45.14	-81.64	246.57	-825.41	842.91	780.38	62.53	13.480		
13,000.00	12,501.00	12,738.50	12,391.38	44.88	45.37	-82.54	323.26	-844.96	868.08	805.08	63.00	13.779		
13,047.21	12,501.00	12,785.45	12,392.00	45.04	45.52	-82.71	368.77	-856.48	879.39	816.15	63.24	13.906		
13,100.00	12,501.00	12,859.77	12,392.00	45.24	45.79	-82.85	441.14	-873.39	890.74	827.17	63.57	14.012		
13,200.00	12,501.00	13,002.72	12,392.00	45.66	46.39	-83.05	581.46	-900.60	908.58	844.32	64.26	14.140		
13,300.00	12,501.00	13,147.94	12,392.00	46.14	47.09	-83.19	725.21	-921.05	921.48	856.44	65.04	14.169		
13,400.00	12,501.00	13,294.72	12,392.00	46.67	47.88	-83.28	871.38	-934.28	929.35	863.47	65.88	14.107		
13,500.00	12,501.00	13,442.32	12,392.00	47.25	48.74	-83.31	1,018.85	-940.03	932.12	865.35	66.77	13.959		
13,600.00	12,501.00	13,544.32	12,392.00	47.88	49.38	-83.31	1,120.85	-941.15	932.13	864.45	67.68	13.772		
13,700.00	12,501.00	13,644.32	12,392.00	48.56	50.06	-83.31	1,220.84	-942.25	932.13	863.48	68.65	13.578		
13,800.00	12,501.00	13,744.32	12,392.00	49.29	50.78	-83.31	1,320.83	-943.36	932.13	862.45	69.68	13.376		
13,900.00	12,501.00	13,844.32	12,392.00	50.06	51.54	-83.31	1,420.83	-944.46	932.13	861.35	70.78	13.170		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Colorado 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		
14,000.00	12,501.00	13,944.32	12,392.00	50.87	52.35	-83.31	1,520.82	-945.56	932.13	860.20	71.93	12.958		
14,100.00	12,501.00	14,044.32	12,392.00	51.72	53.19	-83.31	1,620.82	-946.66	932.13	858.99	73.14	12.744		
14,200.00	12,501.00	14,144.32	12,392.00	52.61	54.07	-83.31	1,720.81	-947.76	932.13	857.73	74.40	12.528		
14,300.00	12,501.00	14,244.32	12,392.00	53.54	54.99	-83.31	1,820.80	-948.86	932.13	856.42	75.72	12.311		
14,400.00	12,501.00	14,344.32	12,392.00	54.50	55.94	-83.31	1,920.80	-949.96	932.14	855.06	77.08	12.094		
14,500.00	12,501.00	14,444.32	12,392.00	55.50	56.92	-83.31	2,020.79	-951.06	932.14	853.66	78.48	11.877		
14,600.00	12,501.00	14,544.32	12,392.00	56.52	57.94	-83.31	2,120.79	-952.16	932.14	852.21	79.93	11.662		
14,700.00	12,501.00	14,644.32	12,392.00	57.57	58.98	-83.31	2,220.78	-953.26	932.14	850.72	81.42	11.449		
14,800.00	12,501.00	14,744.32	12,392.00	58.66	60.05	-83.31	2,320.77	-954.36	932.14	849.19	82.95	11.238		
14,900.00	12,501.00	14,844.32	12,392.00	59.76	61.14	-83.31	2,420.77	-955.46	932.14	847.63	84.51	11.030		
15,000.00	12,501.00	14,944.32	12,392.00	60.90	62.26	-83.31	2,520.76	-956.56	932.14	846.03	86.11	10.825		
15,100.00	12,501.00	15,044.32	12,392.00	62.05	63.41	-83.31	2,620.75	-957.66	932.14	844.41	87.74	10.624		
15,200.00	12,501.00	15,144.32	12,392.00	63.23	64.57	-83.31	2,720.75	-958.76	932.14	842.75	89.40	10.427		
15,300.00	12,501.00	15,244.32	12,392.00	64.43	65.76	-83.31	2,820.74	-959.86	932.14	841.06	91.09	10.233		
15,400.00	12,501.00	15,344.32	12,392.00	65.65	66.96	-83.31	2,920.74	-960.96	932.14	839.34	92.81	10.044		
15,500.00	12,501.00	15,444.32	12,392.00	66.89	68.19	-83.31	3,020.73	-962.06	932.15	837.60	94.55	9.859		
15,600.00	12,501.00	15,544.32	12,392.00	68.14	69.43	-83.31	3,120.72	-963.16	932.15	835.83	96.32	9.678		
15,700.00	12,501.00	15,644.32	12,392.00	69.41	70.69	-83.31	3,220.72	-964.26	932.15	834.04	98.11	9.501		
15,800.00	12,501.00	15,744.32	12,392.00	70.70	71.97	-83.31	3,320.71	-965.36	932.15	832.23	99.92	9.329		
15,900.00	12,501.00	15,844.32	12,392.00	72.00	73.26	-83.31	3,420.71	-966.46	932.15	830.39	101.75	9.161		
16,000.00	12,501.00	15,944.32	12,392.00	73.32	74.56	-83.31	3,520.70	-967.56	932.15	828.54	103.61	8.997		
16,100.00	12,501.00	16,044.32	12,392.00	74.65	75.88	-83.31	3,620.69	-968.66	932.15	826.67	105.48	8.837		
16,200.00	12,501.00	16,144.32	12,392.00	75.99	77.21	-83.31	3,720.69	-969.77	932.15	824.78	107.37	8.682		
16,300.00	12,501.00	16,244.32	12,392.00	77.35	78.55	-83.31	3,820.68	-970.87	932.15	822.88	109.28	8.530		
16,400.00	12,501.00	16,344.32	12,392.00	78.72	79.91	-83.31	3,920.68	-971.97	932.15	820.96	111.20	8.383		
16,500.00	12,501.00	16,444.32	12,392.00	80.09	81.27	-83.31	4,020.67	-973.07	932.15	819.02	113.13	8.239		
16,600.00	12,501.00	16,544.32	12,392.00	81.48	82.65	-83.31	4,120.66	-974.17	932.15	817.07	115.09	8.100		
16,700.00	12,501.00	16,644.32	12,392.00	82.88	84.04	-83.31	4,220.66	-975.27	932.16	815.10	117.05	7.964		
16,800.00	12,501.00	16,744.32	12,392.00	84.28	85.43	-83.31	4,320.65	-976.37	932.16	813.13	119.03	7.831		
16,900.00	12,501.00	16,844.32	12,392.00	85.70	86.84	-83.31	4,420.65	-977.47	932.16	811.14	121.02	7.703		
17,000.00	12,501.00	16,944.32	12,392.00	87.12	88.25	-83.31	4,520.64	-978.57	932.16	809.14	123.02	7.577		
17,100.00	12,501.00	17,044.32	12,392.00	88.55	89.67	-83.31	4,620.63	-979.67	932.16	807.12	125.04	7.455		
17,200.00	12,501.00	17,144.32	12,392.00	89.99	91.10	-83.31	4,720.63	-980.77	932.16	805.10	127.06	7.336		
17,300.00	12,501.00	17,244.32	12,392.00	91.44	92.54	-83.31	4,820.62	-981.87	932.16	803.07	129.09	7.221		
17,400.00	12,501.00	17,344.32	12,392.00	92.89	93.98	-83.31	4,920.62	-982.97	932.16	801.03	131.14	7.108		
17,500.00	12,501.00	17,444.32	12,392.00	94.35	95.44	-83.31	5,020.61	-984.07	932.16	798.98	133.19	6.999		
17,600.00	12,501.00	17,544.32	12,392.00	95.82	96.89	-83.31	5,120.60	-985.17	932.16	796.91	135.25	6.892		
17,700.00	12,501.00	17,644.32	12,392.00	97.29	98.36	-83.31	5,220.60	-986.27	932.16	794.85	137.32	6.788		
17,800.00	12,501.00	17,744.32	12,392.00	98.77	99.83	-83.31	5,320.59	-987.37	932.17	792.77	139.40	6.687		
17,900.00	12,501.00	17,844.32	12,392.00	100.25	101.30	-83.31	5,420.59	-988.47	932.17	790.69	141.48	6.589		
18,000.00	12,501.00	17,944.32	12,392.00	101.74	102.78	-83.31	5,520.58	-989.57	932.17	788.59	143.57	6.493		
18,100.00	12,501.00	18,044.32	12,392.00	103.24	104.27	-83.31	5,620.57	-990.67	932.17	786.50	145.67	6.399		
18,200.00	12,501.00	18,144.32	12,392.00	104.73	105.76	-83.31	5,720.57	-991.77	932.17	784.39	147.78	6.308		
18,300.00	12,501.00	18,244.32	12,392.00	106.24	107.25	-83.31	5,820.56	-992.87	932.17	782.28	149.89	6.219		
18,400.00	12,501.00	18,344.32	12,392.00	107.75	108.76	-83.31	5,920.56	-993.97	932.17	780.16	152.01	6.132		
18,500.00	12,501.00	18,444.32	12,392.00	109.26	110.26	-83.31	6,020.55	-995.08	932.17	778.04	154.13	6.048		
18,600.00	12,501.00	18,544.32	12,392.00	110.77	111.77	-83.31	6,120.54	-996.18	932.17	775.91	156.26	5.965		
18,700.00	12,501.00	18,644.32	12,392.00	112.29	113.28	-83.31	6,220.54	-997.28	932.17	773.78	158.40	5.885		
18,800.00	12,501.00	18,744.32	12,392.00	113.82	114.80	-83.31	6,320.53	-998.38	932.17	771.64	160.54	5.807		
18,900.00	12,501.00	18,844.32	12,392.00	115.34	116.32	-83.31	6,420.52	-999.48	932.18	769.49	162.68	5.730		
19,000.00	12,501.00	18,944.32	12,392.00	116.87	117.84	-83.31	6,520.52	-1,000.58	932.18	767.35	164.83	5.655		
19,100.00	12,501.00	19,044.32	12,392.00	118.41	119.37	-83.31	6,620.51	-1,001.68	932.18	765.19	166.98	5.582		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.00	12,501.00	19,144.32	12,392.00	119.94	120.90	-83.31	6,720.51	-1,002.78	932.18	763.03	169.14	5.511		
19,300.00	12,501.00	19,244.32	12,392.00	121.48	122.43	-83.31	6,820.50	-1,003.88	932.18	760.87	171.31	5.442		
19,400.00	12,501.00	19,344.32	12,392.00	123.03	123.97	-83.31	6,920.49	-1,004.98	932.18	758.71	173.47	5.374		
19,500.00	12,501.00	19,444.32	12,392.00	124.57	125.51	-83.31	7,020.49	-1,006.08	932.18	756.54	175.64	5.307		
19,600.00	12,501.00	19,544.32	12,392.00	126.12	127.05	-83.31	7,120.48	-1,007.18	932.18	754.36	177.82	5.242		
19,700.00	12,501.00	19,644.32	12,392.00	127.67	128.60	-83.31	7,220.48	-1,008.28	932.18	752.18	180.00	5.179		
19,800.00	12,501.00	19,744.32	12,392.00	129.23	130.15	-83.31	7,320.47	-1,009.38	932.18	750.00	182.18	5.117		
19,900.00	12,501.00	19,844.32	12,392.00	130.78	131.70	-83.31	7,420.46	-1,010.48	932.18	747.82	184.37	5.056		
20,000.00	12,501.00	19,944.32	12,392.00	132.34	133.25	-83.31	7,520.46	-1,011.58	932.18	745.63	186.55	4.997		
20,100.00	12,501.00	20,044.32	12,392.00	133.90	134.81	-83.31	7,620.45	-1,012.68	932.19	743.44	188.74	4.939		
20,200.00	12,501.00	20,144.32	12,392.00	135.47	136.37	-83.31	7,720.45	-1,013.78	932.19	741.25	190.94	4.882		
20,300.00	12,501.00	20,244.32	12,392.00	137.03	137.93	-83.31	7,820.44	-1,014.88	932.19	739.05	193.14	4.827		
20,400.00	12,501.00	20,344.32	12,392.00	138.60	139.49	-83.31	7,920.43	-1,015.98	932.19	736.85	195.34	4.772		
20,500.00	12,501.00	20,444.32	12,392.00	140.17	141.05	-83.31	8,020.43	-1,017.08	932.19	734.65	197.54	4.719		
20,600.00	12,501.00	20,544.32	12,392.00	141.74	142.62	-83.31	8,120.42	-1,018.18	932.19	732.45	199.74	4.667		
20,700.00	12,501.00	20,644.32	12,392.00	143.31	144.19	-83.31	8,220.42	-1,019.28	932.19	730.24	201.95	4.616		
20,800.00	12,501.00	20,744.32	12,392.00	144.89	145.76	-83.31	8,320.41	-1,020.39	932.19	728.03	204.16	4.566		
20,900.00	12,501.00	20,844.32	12,392.00	146.46	147.33	-83.31	8,420.40	-1,021.49	932.19	725.82	206.38	4.517		
21,000.00	12,501.00	20,944.32	12,392.00	148.04	148.90	-83.31	8,520.40	-1,022.59	932.19	723.60	208.59	4.469		
21,100.00	12,501.00	21,044.32	12,392.00	149.62	150.48	-83.31	8,620.39	-1,023.69	932.19	721.39	210.81	4.422		
21,200.00	12,501.00	21,144.32	12,392.00	151.20	152.06	-83.31	8,720.39	-1,024.79	932.20	719.17	213.03	4.376		
21,300.00	12,501.00	21,244.32	12,392.00	152.78	153.64	-83.31	8,820.38	-1,025.89	932.20	716.95	215.25	4.331		
21,400.00	12,501.00	21,344.32	12,392.00	154.37	155.22	-83.31	8,920.37	-1,026.99	932.20	714.72	217.47	4.286		
21,500.00	12,501.00	21,444.32	12,392.00	155.95	156.80	-83.31	9,020.37	-1,028.09	932.20	712.50	219.70	4.243		
21,600.00	12,501.00	21,544.32	12,392.00	157.54	158.38	-83.31	9,120.36	-1,029.19	932.20	710.27	221.93	4.201		
21,700.00	12,501.00	21,644.32	12,392.00	159.13	159.97	-83.31	9,220.36	-1,030.29	932.20	708.05	224.15	4.159		
21,800.00	12,501.00	21,744.32	12,392.00	160.72	161.55	-83.31	9,320.35	-1,031.39	932.20	705.82	226.39	4.118		
21,900.00	12,501.00	21,844.32	12,392.00	162.31	163.14	-83.31	9,420.34	-1,032.49	932.20	703.58	228.62	4.078		
22,000.00	12,501.00	21,944.32	12,392.00	163.90	164.73	-83.31	9,520.34	-1,033.59	932.20	701.35	230.85	4.038		
22,100.00	12,501.00	22,044.32	12,392.00	165.50	166.32	-83.31	9,620.33	-1,034.69	932.20	699.12	233.09	3.999		
22,200.00	12,501.00	22,144.32	12,392.00	167.09	167.91	-83.31	9,720.33	-1,035.79	932.20	696.88	235.33	3.961		
22,300.00	12,501.00	22,244.32	12,392.00	168.69	169.50	-83.31	9,820.32	-1,036.89	932.20	694.64	237.56	3.924		
22,400.00	12,501.00	22,344.32	12,392.00	170.28	171.09	-83.31	9,920.31	-1,037.99	932.21	692.40	239.81	3.887		
22,500.00	12,501.00	22,444.32	12,392.00	171.88	172.69	-83.31	10,020.31	-1,039.09	932.21	690.16	242.05	3.851		
22,600.00	12,501.00	22,544.32	12,392.00	173.48	174.29	-83.31	10,120.30	-1,040.19	932.21	687.92	244.29	3.816		
22,635.57	12,501.00	22,579.89	12,392.00	174.05	174.85	-83.31	10,155.87	-1,040.58	932.21	687.12	245.09	3.804		
22,636.34	12,501.00	22,580.66	12,392.00	174.06	174.87	-83.31	10,156.64	-1,040.59	932.21	687.10	245.11	3.803 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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado 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			
0.00	0.00	0.40	0.40	0.00	0.00	89.44	0.34	34.99	34.99							
100.00	100.00	100.40	100.40	0.13	0.13	89.44	0.34	34.99	34.99	34.81		0.18	196.085			
200.00	200.00	200.40	200.40	0.48	0.49	89.44	0.34	34.99	34.99	34.31		0.69	51.053			
300.00	300.00	300.40	300.40	0.84	0.84	89.44	0.34	34.99	34.99	33.80		1.19	29.347			
400.00	400.00	400.40	400.40	1.20	1.20	89.44	0.34	34.99	34.99	33.29		1.70	20.592			
500.00	500.00	500.40	500.40	1.56	1.56	89.44	0.34	34.99	34.99	32.79		2.21	15.860			
600.00	600.00	600.40	600.40	1.92	1.92	89.44	0.34	34.99	34.99	32.28		2.71	12.897			
700.00	700.00	700.40	700.40	2.28	2.28	89.44	0.34	34.99	34.99	31.77		3.22	10.866			
800.00	800.00	800.40	800.40	2.63	2.64	89.44	0.34	34.99	34.99	31.26		3.73	9.388			
900.00	900.00	900.40	900.40	2.99	2.99	89.44	0.34	34.99	34.99	30.76		4.23	8.264			
1,000.00	1,000.00	1,000.40	1,000.40	3.35	3.35	89.44	0.34	34.99	34.99	30.25		4.74	7.381			
1,100.00	1,100.00	1,100.40	1,100.40	3.71	3.71	89.44	0.34	34.99	34.99	29.74		5.25	6.668			
1,200.00	1,200.00	1,200.40	1,200.40	4.07	4.07	89.44	0.34	34.99	34.99	29.24		5.75	6.080			
1,300.00	1,300.00	1,300.40	1,300.40	4.43	4.43	89.44	0.34	34.99	34.99	28.73		6.26	5.588			
1,400.00	1,400.00	1,400.40	1,400.40	4.79	4.79	89.44	0.34	34.99	34.99	28.22		6.77	5.169			
1,416.53	1,416.53	1,416.93	1,416.93	4.84	4.85	89.44	0.34	34.99	34.99	28.14		6.85	5.106 CC			
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.44	0.34	34.99	34.99	27.72		7.27	4.811 ES			
1,600.00	1,599.99	1,599.45	1,599.44	5.48	5.49	-106.23	0.24	36.28	36.64	28.88		7.76	4.722			
1,700.00	1,699.91	1,698.27	1,698.18	5.81	5.83	-110.66	-0.05	40.12	41.74	33.52		8.22	5.077			
1,800.00	1,799.69	1,796.63	1,796.33	6.14	6.17	-115.99	-0.53	46.47	50.63	41.95		8.68	5.832			
1,900.00	1,899.27	1,894.29	1,893.59	6.48	6.51	-120.85	-1.20	55.26	63.54	54.40		9.14	6.950			
2,000.00	1,998.57	1,991.04	1,989.69	6.82	6.86	-124.73	-2.05	66.42	80.51	70.91		9.60	8.384			
2,033.45	2,031.72	2,023.17	2,021.54	6.94	6.98	-125.80	-2.37	70.66	87.09	77.33		9.76	8.925			
2,100.00	2,097.62	2,086.77	2,084.46	7.17	7.21	-127.56	-3.07	79.84	101.15	91.08		10.06	10.049			
2,200.00	2,196.65	2,181.62	2,178.01	7.53	7.57	-128.95	-4.26	95.47	124.14	113.61		10.52	11.796			
2,300.00	2,295.67	2,278.05	2,272.83	7.90	7.94	-129.61	-5.59	112.95	148.57	137.56		11.01	13.492			
2,400.00	2,394.70	2,375.00	2,368.16	8.27	8.32	-130.07	-6.93	130.57	173.06	161.55		11.51	15.031			
2,500.00	2,493.73	2,471.95	2,463.48	8.65	8.71	-130.41	-8.27	148.18	197.56	185.54		12.02	16.436			
2,600.00	2,592.75	2,568.89	2,558.81	9.03	9.11	-130.69	-9.61	165.80	222.06	209.53		12.53	17.722			
2,700.00	2,691.78	2,665.84	2,654.13	9.42	9.51	-130.90	-10.95	183.42	246.57	233.52		13.04	18.902			
2,800.00	2,790.80	2,762.79	2,749.45	9.80	9.91	-131.08	-12.29	201.04	271.08	257.51		13.56	19.988			
2,900.00	2,889.83	2,859.74	2,844.78	10.20	10.32	-131.23	-13.63	218.65	295.59	281.50		14.08	20.989			
2,979.22	2,968.28	2,936.54	2,920.29	10.51	10.65	-131.33	-14.70	232.61	315.00	300.51		14.50	21.729			
3,000.00	2,988.86	2,956.69	2,940.11	10.59	10.73	-131.40	-14.97	236.27	320.06	305.46		14.61	21.914			
3,100.00	3,088.13	3,053.93	3,035.72	10.98	11.15	-131.54	-16.32	253.94	343.38	328.25		15.13	22.699			
3,200.00	3,187.68	3,151.52	3,131.68	11.36	11.57	-131.36	-17.67	271.68	365.02	349.38		15.65	23.328			
3,300.00	3,287.44	3,249.40	3,227.92	11.73	11.99	-130.91	-19.02	289.46	385.01	368.84		16.16	23.819			
3,400.00	3,387.34	3,347.51	3,324.38	12.08	12.42	-130.22	-20.38	307.29	403.38	386.71		16.68	24.190			
3,500.00	3,487.33	3,445.77	3,420.99	12.43	12.85	-129.32	-21.74	325.15	420.21	403.03		17.18	24.457			
3,512.67	3,500.00	3,458.23	3,433.25	12.47	12.90	64.71	-21.91	327.41	422.24	405.00		17.25	24.485			
3,600.00	3,587.33	3,544.09	3,517.67	12.76	13.28	65.74	-23.10	343.01	436.20	418.52		17.68	24.672			
3,700.00	3,687.33	3,642.42	3,614.35	13.10	13.71	66.84	-24.46	360.88	452.34	434.16		18.18	24.883			
3,800.00	3,787.33	3,740.74	3,711.03	13.43	14.15	67.87	-25.82	378.75	468.64	449.96		18.68	25.091			
3,900.00	3,887.33	3,839.07	3,807.71	13.77	14.59	68.82	-27.17	396.62	485.07	465.89		19.18	25.294			
4,000.00	3,987.33	3,937.39	3,904.39	14.11	15.02	69.72	-28.53	414.48	501.62	481.95		19.68	25.493			
4,100.00	4,087.33	4,035.72	4,001.07	14.44	15.46	70.56	-29.89	432.35	518.29	498.11		20.18	25.688			
4,200.00	4,187.33	4,134.05	4,097.75	14.78	15.90	71.34	-31.25	450.22	535.06	514.38		20.68	25.877			
4,300.00	4,287.33	4,232.37	4,194.42	15.12	16.34	72.08	-32.61	468.09	551.92	530.75		21.18	26.062			
4,400.00	4,387.33	4,330.70	4,291.10	15.46	16.78	72.77	-33.97	485.95	568.87	547.19		21.68	26.241			
4,500.00	4,487.33	4,429.02	4,387.78	15.81	17.23	73.43	-35.33	503.82	585.89	563.71		22.18	26.415			
4,600.00	4,587.33	4,527.35	4,484.46	16.15	17.67	74.04	-36.69	521.69	602.98	580.30		22.68	26.584			
4,700.00	4,687.33	4,625.67	4,581.14	16.49	18.11	74.63	-38.05	539.56	620.14	596.96		23.18	26.748			

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado 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				
				(usft)	(usft)	(°)										
4,800.00	4,787.33	4,724.00	4,677.82	16.83	18.56	75.18	-39.41	557.42	637.36	613.67	23.69	26.907				
4,900.00	4,887.33	4,822.32	4,774.50	17.18	19.00	75.70	-40.77	575.29	654.63	630.44	24.19	27.062				
5,000.00	4,987.33	4,920.65	4,871.18	17.52	19.45	76.20	-42.13	593.16	671.95	647.26	24.69	27.212				
5,100.00	5,087.33	5,018.97	4,967.85	17.87	19.89	76.67	-43.49	611.03	689.32	664.12	25.20	27.357				
5,200.00	5,187.33	5,117.30	5,064.53	18.21	20.34	77.12	-44.85	628.89	706.73	681.03	25.70	27.498				
5,300.00	5,287.33	5,215.62	5,161.21	18.56	20.79	77.54	-46.21	646.76	724.18	697.97	26.21	27.634				
5,400.00	5,387.33	5,313.95	5,257.89	18.91	21.23	77.95	-47.57	664.63	741.67	714.96	26.71	27.767				
5,500.00	5,487.33	5,412.28	5,354.57	19.26	21.68	78.34	-48.93	682.50	759.19	731.98	27.22	27.895				
5,600.00	5,587.33	5,510.60	5,451.25	19.60	22.13	78.71	-50.29	700.36	776.75	749.03	27.72	28.020				
5,700.00	5,687.33	5,608.93	5,547.93	19.95	22.58	79.06	-51.65	718.23	794.33	766.11	28.23	28.141				
5,800.00	5,787.33	5,707.25	5,644.61	20.30	23.03	79.40	-53.01	736.10	811.95	783.21	28.73	28.258				
5,900.00	5,887.33	5,805.58	5,741.28	20.65	23.48	79.73	-54.36	753.97	829.59	800.35	29.24	28.372				
6,000.00	5,987.33	5,903.90	5,837.96	21.00	23.93	80.04	-55.72	771.83	847.25	817.50	29.75	28.483				
6,100.00	6,087.33	6,002.23	5,934.64	21.35	24.38	80.34	-57.08	789.70	864.94	834.69	30.25	28.590				
6,200.00	6,187.33	6,100.55	6,031.32	21.70	24.83	80.62	-58.44	807.57	882.65	851.89	30.76	28.695				
6,300.00	6,287.33	6,198.88	6,128.00	22.05	25.28	80.90	-59.80	825.44	900.38	869.11	31.27	28.796				
6,400.00	6,387.33	6,297.20	6,224.68	22.40	25.73	81.16	-61.16	843.30	918.13	886.35	31.78	28.894				
6,500.00	6,487.33	6,395.53	6,321.36	22.75	26.18	81.42	-62.52	861.17	935.90	903.61	32.28	28.990				
6,600.00	6,587.33	6,493.85	6,418.04	23.10	26.63	81.66	-63.88	879.04	953.68	920.89	32.79	29.083				
6,700.00	6,687.33	6,602.55	6,524.95	23.45	27.12	81.92	-65.37	898.57	971.31	937.95	33.36	29.115				
6,800.00	6,787.33	6,734.38	6,655.19	23.80	27.70	82.17	-66.91	918.87	986.42	952.38	34.04	28.978				
6,900.00	6,887.33	6,867.48	6,787.33	24.15	28.23	82.37	-68.12	934.81	998.17	963.48	34.69	28.776				
7,000.00	6,987.33	7,001.55	6,920.90	24.50	28.74	82.50	-68.99	946.22	1,006.52	971.22	35.30	28.515				
7,100.00	7,087.33	7,136.27	7,055.44	24.86	29.20	82.58	-69.51	952.96	1,011.44	975.57	35.87	28.198				
7,200.00	7,187.33	7,271.29	7,190.44	25.21	29.63	82.61	-69.66	954.98	1,012.90	976.50	36.40	27.829				
7,230.94	7,218.27	7,299.52	7,218.67	25.32	29.72	82.61	-69.66	954.99	1,012.91	976.37	36.54	27.717				
7,300.00	7,287.33	7,368.58	7,287.73	25.56	29.92	82.61	-69.66	954.99	1,012.91	976.03	36.88	27.467				
7,400.00	7,387.33	7,468.58	7,387.73	25.91	30.22	82.61	-69.66	954.99	1,012.91	975.55	37.36	27.112				
7,500.00	7,487.33	7,568.58	7,487.73	26.26	30.53	82.61	-69.66	954.99	1,012.91	975.07	37.84	26.765				
7,600.00	7,587.33	7,668.58	7,587.73	26.62	30.83	82.61	-69.66	954.99	1,012.91	974.58	38.33	26.427				
7,700.00	7,687.33	7,768.58	7,687.73	26.97	31.13	82.61	-69.66	954.99	1,012.91	974.10	38.81	26.097				
7,800.00	7,787.33	7,868.58	7,787.73	27.32	31.44	82.61	-69.66	954.99	1,012.91	973.61	39.30	25.775				
7,900.00	7,887.33	7,968.58	7,887.73	27.68	31.75	82.61	-69.66	954.99	1,012.91	973.13	39.78	25.461				
8,000.00	7,987.33	8,068.58	7,987.73	28.03	32.05	82.61	-69.66	954.99	1,012.91	972.64	40.27	25.153				
8,100.00	8,087.33	8,168.58	8,087.73	28.38	32.36	82.61	-69.66	954.99	1,012.91	972.15	40.76	24.853				
8,200.00	8,187.33	8,268.58	8,187.73	28.74	32.67	82.61	-69.66	954.99	1,012.91	971.67	41.24	24.559				
8,300.00	8,287.33	8,368.58	8,287.73	29.09	32.98	82.61	-69.66	954.99	1,012.91	971.18	41.73	24.272				
8,400.00	8,387.33	8,468.58	8,387.73	29.44	33.29	82.61	-69.66	954.99	1,012.91	970.69	42.22	23.991				
8,500.00	8,487.33	8,568.58	8,487.73	29.80	33.61	82.61	-69.66	954.99	1,012.91	970.20	42.71	23.717				
8,600.00	8,587.33	8,668.58	8,587.73	30.15	33.92	82.61	-69.66	954.99	1,012.91	969.71	43.20	23.448				
8,700.00	8,687.33	8,768.58	8,687.73	30.51	34.24	82.61	-69.66	954.99	1,012.91	969.22	43.69	23.186				
8,800.00	8,787.33	8,868.58	8,787.73	30.86	34.55	82.61	-69.66	954.99	1,012.91	968.73	44.18	22.929				
8,900.00	8,887.33	8,968.58	8,887.73	31.21	34.87	82.61	-69.66	954.99	1,012.91	968.24	44.67	22.677				
9,000.00	8,987.33	9,068.58	8,987.73	31.57	35.18	82.61	-69.66	954.99	1,012.91	967.75	45.16	22.431				
9,100.00	9,087.33	9,168.58	9,087.73	31.92	35.50	82.61	-69.66	954.99	1,012.91	967.26	45.65	22.189				
9,200.00	9,187.33	9,268.58	9,187.73	32.28	35.82	82.61	-69.66	954.99	1,012.91	966.77	46.14	21.953				
9,300.00	9,287.33	9,368.58	9,287.73	32.63	36.14	82.61	-69.66	954.99	1,012.91	966.28	46.63	21.722				
9,400.00	9,387.33	9,468.58	9,387.73	32.99	36.46	82.61	-69.66	954.99	1,012.91	965.79	47.12	21.495				
9,500.00	9,487.33	9,568.58	9,487.73	33.34	36.78	82.61	-69.66	954.99	1,012.91	965.30	47.62	21.273				
9,600.00	9,587.33	9,668.58	9,587.73	33.70	37.10	82.61	-69.66	954.99	1,012.91	964.80	48.11	21.055				
9,700.00	9,687.33	9,768.58	9,687.73	34.05	37.42	82.61	-69.66	954.99	1,012.91	964.31	48.60	20.841				
9,800.00	9,787.33	9,868.58	9,787.73	34.41	37.75	82.61	-69.66	954.99	1,012.91	963.82	49.09	20.632				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado 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				
9,900.00	9,887.33	9,968.58	9,887.73	34.76	38.07	82.61	-69.66	954.99	1,012.91	963.32	49.59	20.427				
10,000.00	9,987.33	10,068.58	9,987.73	35.12	38.39	82.61	-69.66	954.99	1,012.91	962.83	50.08	20.225				
10,100.00	10,087.33	10,168.58	10,087.73	35.47	38.72	82.61	-69.66	954.99	1,012.91	962.34	50.58	20.028				
10,200.00	10,187.33	10,268.58	10,187.73	35.83	39.04	82.61	-69.66	954.99	1,012.91	961.84	51.07	19.834				
10,300.00	10,287.33	10,368.58	10,287.73	36.18	39.37	82.61	-69.66	954.99	1,012.91	961.35	51.56	19.644				
10,400.00	10,387.33	10,468.58	10,387.73	36.54	39.70	82.61	-69.66	954.99	1,012.91	960.85	52.06	19.457				
10,500.00	10,487.33	10,568.58	10,487.73	36.89	40.02	82.61	-69.66	954.99	1,012.91	960.36	52.55	19.274				
10,600.00	10,587.33	10,668.58	10,587.73	37.25	40.35	82.61	-69.66	954.99	1,012.91	959.86	53.05	19.094				
10,700.00	10,687.33	10,768.58	10,687.73	37.61	40.68	82.61	-69.66	954.99	1,012.91	959.37	53.54	18.917				
10,800.00	10,787.33	10,868.58	10,787.73	37.96	41.01	82.61	-69.66	954.99	1,012.91	958.87	54.04	18.744				
10,900.00	10,887.33	10,968.58	10,887.73	38.32	41.34	82.61	-69.66	954.99	1,012.91	958.38	54.54	18.573				
11,000.00	10,987.33	11,068.58	10,987.73	38.67	41.67	82.61	-69.66	954.99	1,012.91	957.88	55.03	18.406				
11,100.00	11,087.33	11,168.58	11,087.73	39.03	42.00	82.61	-69.66	954.99	1,012.91	957.38	55.53	18.242				
11,200.00	11,187.33	11,268.58	11,187.73	39.38	42.33	82.61	-69.66	954.99	1,012.91	956.89	56.02	18.080				
11,300.00	11,287.33	11,368.58	11,287.73	39.74	42.66	82.61	-69.66	954.99	1,012.91	956.39	56.52	17.921				
11,400.00	11,387.33	11,468.58	11,387.73	40.10	42.99	82.61	-69.66	954.99	1,012.91	955.89	57.02	17.765				
11,500.00	11,487.33	11,568.58	11,487.73	40.45	43.32	82.61	-69.66	954.99	1,012.91	955.40	57.51	17.611				
11,600.00	11,587.33	11,668.58	11,587.73	40.81	43.65	82.61	-69.66	954.99	1,012.91	954.90	58.01	17.461				
11,700.00	11,687.33	11,768.58	11,687.73	41.16	43.99	82.61	-69.66	954.99	1,012.91	954.40	58.51	17.312				
11,800.00	11,787.33	11,868.58	11,787.73	41.52	44.32	82.61	-69.66	954.99	1,012.91	953.90	59.01	17.166				
11,808.35	11,795.67	11,876.93	11,796.07	41.55	44.35	82.61	-69.66	954.99	1,012.91	953.86	59.05	17.154				
11,900.00	11,887.33	11,964.64	11,883.77	41.88	44.64	82.56	-68.78	954.94	1,012.98	953.48	59.50	17.025				
11,940.71	11,928.04	12,000.00	11,918.99	42.02	44.75	82.39	-65.74	954.76	1,013.24	953.54	59.70	16.973				
11,950.00	11,937.33	12,008.75	11,927.68	42.05	44.78	78.82	-64.65	954.69	1,013.31	953.57	59.74	16.962				
12,000.00	11,987.22	12,050.00	11,968.33	42.23	44.91	78.55	-57.75	954.28	1,013.38	953.41	59.97	16.898				
12,050.00	12,036.67	12,095.78	12,012.75	42.40	45.05	78.34	-46.70	953.63	1,012.92	952.72	60.20	16.826				
12,100.00	12,085.28	12,138.87	12,053.61	42.56	45.18	78.21	-33.10	952.82	1,011.92	951.51	60.41	16.751				
12,150.00	12,132.70	12,181.72	12,093.12	42.71	45.29	78.17	-16.57	951.84	1,010.39	949.78	60.61	16.670				
12,200.00	12,178.57	12,224.36	12,131.10	42.86	45.40	78.20	2.76	950.69	1,008.32	947.52	60.80	16.584				
12,250.00	12,222.52	12,266.83	12,167.39	43.00	45.50	78.31	24.76	949.38	1,005.74	944.76	60.98	16.493				
12,300.00	12,264.24	12,309.15	12,201.83	43.13	45.59	78.50	49.29	947.92	1,002.65	941.50	61.15	16.397				
12,350.00	12,303.40	12,350.00	12,233.27	43.26	45.67	78.78	75.32	946.38	999.07	937.77	61.30	16.297				
12,400.00	12,339.70	12,393.49	12,264.61	43.38	45.75	79.12	105.41	944.59	995.03	933.57	61.46	16.189				
12,450.00	12,372.86	12,435.59	12,292.68	43.50	45.81	79.54	136.71	942.73	990.56	928.95	61.62	16.076				
12,500.00	12,402.64	12,477.67	12,318.37	43.62	45.87	80.03	169.98	940.75	985.69	923.92	61.77	15.958				
12,550.00	12,428.81	12,519.79	12,341.56	43.74	45.92	80.60	205.06	938.67	980.45	918.53	61.92	15.835				
12,600.00	12,451.17	12,561.97	12,362.13	43.85	45.97	81.23	241.81	936.49	974.88	912.81	62.07	15.706				
12,650.00	12,469.55	12,604.26	12,379.99	43.97	46.01	81.92	280.07	934.21	969.04	906.81	62.23	15.572				
12,700.00	12,483.81	12,650.00	12,396.05	44.09	46.06	82.69	322.80	931.67	962.97	900.57	62.40	15.433				
12,750.00	12,493.83	12,689.33	12,407.11	44.21	46.10	83.49	360.47	929.44	956.71	894.15	62.56	15.293				
12,800.00	12,499.55	12,732.18	12,416.17	44.33	46.15	84.36	402.27	926.95	950.32	887.59	62.73	15.148				
12,840.71	12,501.00	12,767.28	12,421.25	44.42	46.19	85.09	436.94	924.89	945.07	882.19	62.88	15.030				
12,900.00	12,501.00	12,818.99	12,424.83	44.57	46.27	85.29	488.41	921.83	938.24	875.14	63.10	14.869				
13,000.00	12,501.00	12,900.00	12,425.00	44.88	46.43	85.29	569.32	917.82	930.97	867.46	63.51	14.659				
13,047.21	12,501.00	12,931.92	12,425.00	45.04	46.51	85.29	601.23	916.85	929.63	865.90	63.72	14.588				
13,100.00	12,501.00	12,971.97	12,425.00	45.24	46.62	85.28	641.27	916.13	929.27	865.28	63.98	14.523				
13,200.00	12,501.00	13,071.97	12,425.00	45.66	46.96	85.28	741.26	915.03	929.27	864.69	64.57	14.391				
13,300.00	12,501.00	13,171.97	12,425.00	46.14	47.36	85.28	841.26	913.93	929.26	864.03	65.24	14.244				
13,400.00	12,501.00	13,271.97	12,425.00	46.67	47.84	85.28	941.25	912.83	929.26	863.28	65.98	14.085				
13,500.00	12,501.00	13,371.97	12,425.00	47.25	48.37	85.28	1,041.25	911.73	929.26	862.47	66.79	13.913				
13,600.00	12,501.00	13,471.97	12,425.00	47.88	48.96	85.28	1,141.24	910.62	929.26	861.58	67.67	13.732				
13,700.00	12,501.00	13,571.97	12,425.00	48.56	49.60	85.28	1,241.23	909.52	929.25	860.63	68.62	13.542				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Colorado 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			
13,800.00	12,501.00	13,671.97	12,425.00	49.29	50.29	85.28	1,341.23	908.42	929.25	859.61	69.64	13.344				
13,900.00	12,501.00	13,771.97	12,425.00	50.06	51.03	85.28	1,441.22	907.32	929.25	858.53	70.72	13.141				
14,000.00	12,501.00	13,871.97	12,425.00	50.87	51.81	85.28	1,541.22	906.21	929.24	857.39	71.85	12.932				
14,100.00	12,501.00	13,971.97	12,425.00	51.72	52.63	85.28	1,641.21	905.11	929.24	856.19	73.05	12.721				
14,200.00	12,501.00	14,071.97	12,425.00	52.61	53.49	85.28	1,741.20	904.01	929.24	854.94	74.30	12.507				
14,300.00	12,501.00	14,171.97	12,425.00	53.54	54.39	85.28	1,841.20	902.91	929.24	853.64	75.60	12.292				
14,400.00	12,501.00	14,271.97	12,425.00	54.50	55.32	85.28	1,941.19	901.81	929.23	852.29	76.95	12.076				
14,500.00	12,501.00	14,371.97	12,425.00	55.50	56.29	85.28	2,041.19	900.70	929.23	850.89	78.34	11.861				
14,600.00	12,501.00	14,471.97	12,425.00	56.52	57.29	85.28	2,141.18	899.60	929.23	849.45	79.78	11.648				
14,700.00	12,501.00	14,571.97	12,425.00	57.57	58.32	85.28	2,241.17	898.50	929.23	847.97	81.26	11.435				
14,800.00	12,501.00	14,671.97	12,425.00	58.66	59.37	85.28	2,341.17	897.40	929.22	846.45	82.78	11.225				
14,900.00	12,501.00	14,771.97	12,425.00	59.76	60.46	85.28	2,441.16	896.29	929.22	844.89	84.33	11.018				
15,000.00	12,501.00	14,871.97	12,425.00	60.90	61.56	85.28	2,541.16	895.19	929.22	843.29	85.93	10.814				
15,100.00	12,501.00	14,971.97	12,425.00	62.05	62.70	85.28	2,641.15	894.09	929.22	841.67	87.55	10.614				
15,200.00	12,501.00	15,071.97	12,425.00	63.23	63.85	85.28	2,741.14	892.99	929.21	840.01	89.21	10.417				
15,300.00	12,501.00	15,171.97	12,425.00	64.43	65.03	85.28	2,841.14	891.89	929.21	838.32	90.89	10.223				
15,400.00	12,501.00	15,271.97	12,425.00	65.65	66.23	85.28	2,941.13	890.78	929.21	836.60	92.60	10.034				
15,500.00	12,501.00	15,371.97	12,425.00	66.89	67.44	85.28	3,041.13	889.68	929.21	834.86	94.34	9.849				
15,600.00	12,501.00	15,471.97	12,425.00	68.14	68.68	85.28	3,141.12	888.58	929.20	833.09	96.11	9.668				
15,700.00	12,501.00	15,571.97	12,425.00	69.41	69.93	85.28	3,241.11	887.48	929.20	831.30	97.90	9.491				
15,800.00	12,501.00	15,671.97	12,425.00	70.70	71.20	85.28	3,341.11	886.38	929.20	829.49	99.71	9.319				
15,900.00	12,501.00	15,771.97	12,425.00	72.00	72.48	85.28	3,441.10	885.27	929.19	827.65	101.54	9.151				
16,000.00	12,501.00	15,871.97	12,425.00	73.32	73.78	85.28	3,541.09	884.17	929.19	825.80	103.39	8.987				
16,100.00	12,501.00	15,971.97	12,425.00	74.65	75.09	85.28	3,641.09	883.07	929.19	823.92	105.27	8.827				
16,200.00	12,501.00	16,071.97	12,425.00	75.99	76.41	85.28	3,741.08	881.97	929.19	822.03	107.16	8.671				
16,300.00	12,501.00	16,171.97	12,425.00	77.35	77.75	85.28	3,841.08	880.86	929.18	820.12	109.06	8.520				
16,400.00	12,501.00	16,271.97	12,425.00	78.72	79.10	85.28	3,941.07	879.76	929.18	818.20	110.99	8.372				
16,500.00	12,501.00	16,371.97	12,425.00	80.09	80.46	85.28	4,041.06	878.66	929.18	816.26	112.92	8.228				
16,600.00	12,501.00	16,471.97	12,425.00	81.48	81.84	85.28	4,141.06	877.56	929.18	814.30	114.88	8.088				
16,700.00	12,501.00	16,571.97	12,425.00	82.88	83.22	85.28	4,241.05	876.46	929.17	812.33	116.84	7.952				
16,800.00	12,501.00	16,671.97	12,425.00	84.28	84.61	85.28	4,341.05	875.35	929.17	810.35	118.82	7.820				
16,900.00	12,501.00	16,771.97	12,425.00	85.70	86.01	85.28	4,441.04	874.25	929.17	808.35	120.81	7.691				
17,000.00	12,501.00	16,871.97	12,425.00	87.12	87.42	85.28	4,541.03	873.15	929.17	806.35	122.82	7.565				
17,100.00	12,501.00	16,971.97	12,425.00	88.55	88.84	85.28	4,641.03	872.05	929.16	804.33	124.83	7.443				
17,200.00	12,501.00	17,071.97	12,425.00	89.99	90.26	85.28	4,741.02	870.94	929.16	802.30	126.86	7.324				
17,300.00	12,501.00	17,171.97	12,425.00	91.44	91.70	85.28	4,841.02	869.84	929.16	800.26	128.90	7.209				
17,400.00	12,501.00	17,271.97	12,425.00	92.89	93.14	85.28	4,941.01	868.74	929.15	798.21	130.94	7.096				
17,500.00	12,501.00	17,371.97	12,425.00	94.35	94.59	85.28	5,041.00	867.64	929.15	796.15	133.00	6.986				
17,600.00	12,501.00	17,471.97	12,425.00	95.82	96.04	85.28	5,141.00	866.54	929.15	794.09	135.06	6.879				
17,700.00	12,501.00	17,571.97	12,425.00	97.29	97.50	85.28	5,240.99	865.43	929.15	792.01	137.14	6.775				
17,800.00	12,501.00	17,671.97	12,425.00	98.77	98.97	85.28	5,340.99	864.33	929.14	789.93	139.22	6.674				
17,900.00	12,501.00	17,771.97	12,425.00	100.25	100.44	85.28	5,440.98	863.23	929.14	787.83	141.31	6.575				
18,000.00	12,501.00	17,871.97	12,425.00	101.74	101.92	85.28	5,540.97	862.13	929.14	785.73	143.41	6.479				
18,100.00	12,501.00	17,971.97	12,425.00	103.24	103.40	85.28	5,640.97	861.02	929.14	783.63	145.51	6.385				
18,200.00	12,501.00	18,071.97	12,425.00	104.73	104.89	85.28	5,740.96	859.92	929.13	781.51	147.62	6.294				
18,300.00	12,501.00	18,171.97	12,425.00	106.24	106.39	85.28	5,840.96	858.82	929.13	779.39	149.74	6.205				
18,400.00	12,501.00	18,271.97	12,425.00	107.75	107.88	85.28	5,940.95	857.72	929.13	777.27	151.86	6.118				
18,500.00	12,501.00	18,371.97	12,425.00	109.26	109.39	85.28	6,040.94	856.62	929.13	775.14	153.99	6.034				
18,600.00	12,501.00	18,471.97	12,425.00	110.77	110.89	85.28	6,140.94	855.51	929.12	773.00	156.12	5.951				
18,700.00	12,501.00	18,571.97	12,425.00	112.29	112.40	85.28	6,240.93	854.41	929.12	770.86	158.26	5.871				
18,800.00	12,501.00	18,671.97	12,425.00	113.82	113.92	85.28	6,340.92	853.31	929.12	768.71	160.41	5.792				
18,900.00	12,501.00	18,771.97	12,425.00	115.34	115.44	85.28	6,440.92	852.21	929.12	766.55	162.56	5.715				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Colorado 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		
19,000.00	12,501.00	18,871.97	12,425.00	116.87	116.96	85.28	6,540.91	851.10	929.11	764.40	164.72	5.641		
19,100.00	12,501.00	18,971.97	12,425.00	118.41	118.49	85.28	6,640.91	850.00	929.11	762.23	166.88	5.568		
19,200.00	12,501.00	19,071.97	12,425.00	119.94	120.02	85.28	6,740.90	848.90	929.11	760.06	169.04	5.496		
19,300.00	12,501.00	19,171.97	12,425.00	121.48	121.55	85.28	6,840.89	847.80	929.10	757.89	171.21	5.427		
19,400.00	12,501.00	19,271.97	12,425.00	123.03	123.08	85.28	6,940.89	846.70	929.10	755.72	173.38	5.359		
19,500.00	12,501.00	19,371.97	12,425.00	124.57	124.62	85.28	7,040.88	845.59	929.10	753.54	175.56	5.292		
19,600.00	12,501.00	19,471.97	12,425.00	126.12	126.16	85.28	7,140.88	844.49	929.10	751.35	177.74	5.227		
19,700.00	12,501.00	19,571.97	12,425.00	127.67	127.71	85.28	7,240.87	843.39	929.09	749.17	179.93	5.164		
19,800.00	12,501.00	19,671.97	12,425.00	129.23	129.26	85.28	7,340.86	842.29	929.09	746.98	182.12	5.102		
19,900.00	12,501.00	19,771.97	12,425.00	130.78	130.81	85.28	7,440.86	841.19	929.09	744.78	184.31	5.041		
20,000.00	12,501.00	19,871.97	12,425.00	132.34	132.36	85.28	7,540.85	840.08	929.09	742.58	186.50	4.982		
20,100.00	12,501.00	19,971.97	12,425.00	133.90	133.91	85.28	7,640.85	838.98	929.08	740.38	188.70	4.924		
20,200.00	12,501.00	20,071.97	12,425.00	135.47	135.47	85.28	7,740.84	837.88	929.08	738.18	190.90	4.867		
20,300.00	12,501.00	20,171.97	12,425.00	137.03	137.03	85.28	7,840.83	836.78	929.08	735.97	193.11	4.811		
20,400.00	12,501.00	20,271.97	12,425.00	138.60	138.59	85.28	7,940.83	835.67	929.08	733.76	195.32	4.757		
20,500.00	12,501.00	20,371.97	12,425.00	140.17	140.15	85.28	8,040.82	834.57	929.07	731.55	197.53	4.704		
20,600.00	12,501.00	20,471.97	12,425.00	141.74	141.72	85.28	8,140.82	833.47	929.07	729.33	199.74	4.651		
20,700.00	12,501.00	20,571.97	12,425.00	143.31	143.29	85.28	8,240.81	832.37	929.07	727.11	201.96	4.600		
20,800.00	12,501.00	20,671.97	12,425.00	144.89	144.86	85.28	8,340.80	831.27	929.07	724.89	204.17	4.550		
20,900.00	12,501.00	20,771.97	12,425.00	146.46	146.43	85.28	8,440.80	830.16	929.06	722.67	206.39	4.501		
21,000.00	12,501.00	20,871.97	12,425.00	148.04	148.00	85.28	8,540.79	829.06	929.06	720.44	208.62	4.453		
21,100.00	12,501.00	20,971.97	12,425.00	149.62	149.57	85.28	8,640.79	827.96	929.06	718.22	210.84	4.406		
21,200.00	12,501.00	21,071.97	12,425.00	151.20	151.15	85.28	8,740.78	826.86	929.05	715.99	213.07	4.360		
21,300.00	12,501.00	21,171.97	12,425.00	152.78	152.73	85.28	8,840.77	825.75	929.05	713.75	215.30	4.315		
21,400.00	12,501.00	21,271.97	12,425.00	154.37	154.31	85.28	8,940.77	824.65	929.05	711.52	217.53	4.271		
21,500.00	12,501.00	21,371.97	12,425.00	155.95	155.89	85.28	9,040.76	823.55	929.05	709.28	219.76	4.228		
21,600.00	12,501.00	21,471.97	12,425.00	157.54	157.47	85.28	9,140.75	822.45	929.04	707.05	222.00	4.185		
21,700.00	12,501.00	21,571.97	12,425.00	159.13	159.06	85.28	9,240.75	821.35	929.04	704.81	224.24	4.143		
21,800.00	12,501.00	21,671.97	12,425.00	160.72	160.64	85.28	9,340.74	820.24	929.04	702.56	226.47	4.102		
21,900.00	12,501.00	21,771.97	12,425.00	162.31	162.23	85.28	9,440.74	819.14	929.04	700.32	228.72	4.062		
22,000.00	12,501.00	21,871.97	12,425.00	163.90	163.82	85.28	9,540.73	818.04	929.03	698.08	230.96	4.023		
22,100.00	12,501.00	21,971.97	12,425.00	165.50	165.41	85.28	9,640.72	816.94	929.03	695.83	233.20	3.984		
22,200.00	12,501.00	22,071.97	12,425.00	167.09	167.00	85.28	9,740.72	815.83	929.03	693.58	235.45	3.946		
22,300.00	12,501.00	22,171.97	12,425.00	168.69	168.59	85.28	9,840.71	814.73	929.03	691.33	237.70	3.908		
22,400.00	12,501.00	22,271.97	12,425.00	170.28	170.18	85.28	9,940.71	813.63	929.02	689.08	239.95	3.872		
22,500.00	12,501.00	22,371.97	12,425.00	171.88	171.78	85.28	10,040.70	812.53	929.02	686.82	242.20	3.836		
22,600.00	12,501.00	22,471.97	12,425.00	173.48	173.37	85.28	10,140.69	811.43	929.02	684.57	244.45	3.800		
22,634.12	12,501.00	22,506.08	12,425.00	174.03	173.92	85.28	10,174.80	811.05	929.02	683.80	245.22	3.789		
22,635.57	12,501.00	22,506.08	12,425.00	174.05	173.92	85.28	10,174.80	811.05	929.02	683.77	245.25	3.788		
22,636.34	12,501.00	22,506.08	12,425.00	174.06	173.92	85.28	10,174.80	811.05	929.02	683.75	245.27	3.788 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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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: 60-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	20.83	1,731.60	658.93	1,852.78					
100.00	100.00	86.30	86.30	0.13	0.84	20.83	1,731.60	658.93	1,852.73	1,851.88	0.85	2,184.030		
200.00	200.00	188.52	188.52	0.48	2.81	20.83	1,731.79	658.93	1,852.91	1,850.06	2.85	650.568		
300.00	300.00	289.86	289.85	0.84	4.73	20.83	1,731.71	658.93	1,852.84	1,848.04	4.81	385.519		
400.00	400.00	386.32	386.30	1.20	6.45	20.83	1,731.60	658.93	1,852.73	1,846.17	6.56	282.601		
500.00	500.00	489.32	489.31	1.56	8.35	20.83	1,731.62	658.93	1,852.76	1,844.26	8.49	218.144		
513.88	513.88	504.10	504.08	1.61	8.62	20.83	1,731.59	658.93	1,852.73	1,843.96	8.77	211.236		
600.00	600.00	589.72	589.70	1.92	10.25	20.83	1,731.80	658.93	1,852.92	1,842.49	10.43	177.671		
700.00	700.00	686.33	686.30	2.28	12.12	20.83	1,731.60	658.93	1,852.73	1,840.40	12.33	150.274		
800.00	800.00	788.02	787.98	2.63	14.11	20.83	1,731.85	658.93	1,852.97	1,838.62	14.35	129.088		
900.00	900.00	886.35	886.30	2.99	16.04	20.83	1,731.60	658.93	1,852.73	1,836.41	16.32	113.528		
1,000.00	1,000.00	1,003.12	1,003.06	3.35	18.55	20.83	1,731.54	658.93	1,852.75	1,833.90	18.85	98.265		
1,010.12	1,010.12	1,016.95	1,016.89	3.39	18.85	20.84	1,731.39	658.93	1,852.65	1,833.50	19.15	96.727		
1,100.00	1,100.00	1,086.39	1,086.30	3.71	20.36	20.83	1,731.60	658.93	1,852.73	1,832.04	20.70	89.524		
1,200.00	1,200.00	1,186.41	1,186.30	4.07	22.52	20.83	1,731.60	658.93	1,852.73	1,829.85	22.88	80.965		
1,300.00	1,300.00	1,286.42	1,286.30	4.43	24.63	20.83	1,731.60	658.93	1,852.73	1,827.71	25.02	74.038		
1,400.00	1,400.00	1,386.43	1,386.30	4.79	26.45	20.83	1,731.60	658.93	1,852.73	1,825.85	26.88	68.924		
1,500.00	1,500.00	1,488.10	1,487.97	5.14	28.18	20.83	1,731.66	658.93	1,852.79	1,824.15	28.64	64.687		
1,503.89	1,503.89	1,492.20	1,492.07	5.16	28.25	-173.07	1,731.66	658.93	1,852.79	1,824.08	28.71	64.528		
1,600.00	1,599.99	1,589.57	1,589.44	5.48	29.94	-173.07	1,731.61	658.93	1,854.04	1,823.60	30.44	60.906		
1,700.00	1,699.91	1,688.77	1,688.64	5.81	31.76	-173.08	1,731.73	658.93	1,858.06	1,825.77	32.29	57.542		
1,800.00	1,799.69	1,786.13	1,785.99	6.14	33.52	-173.09	1,731.60	658.93	1,864.42	1,830.34	34.08	54.705		
1,900.00	1,899.27	1,890.77	1,890.63	6.48	35.38	-173.11	1,731.71	658.93	1,873.62	1,837.65	35.97	52.086		
2,000.00	1,998.57	1,985.01	1,984.87	6.82	37.18	-173.13	1,731.60	658.93	1,885.17	1,847.38	37.80	49.876		
2,033.45	2,031.72	2,018.16	2,018.02	6.94	37.83	-173.14	1,731.60	658.93	1,889.65	1,851.20	38.46	49.134		
2,100.00	2,097.62	2,086.31	2,086.17	7.17	39.17	-173.17	1,731.67	658.93	1,898.92	1,859.11	39.82	47.691		
2,200.00	2,196.65	2,183.11	2,182.95	7.53	41.14	-173.22	1,731.60	658.93	1,912.68	1,870.86	41.82	45.739		
2,300.00	2,295.67	2,282.16	2,281.97	7.90	43.19	-173.27	1,731.60	658.93	1,926.50	1,882.61	43.90	43.888		
2,400.00	2,394.70	2,388.56	2,388.38	8.27	45.29	-173.32	1,731.75	658.93	1,940.49	1,894.47	46.02	42.169		
2,500.00	2,493.73	2,480.22	2,480.03	8.65	47.21	-173.37	1,731.60	658.93	1,954.16	1,906.18	47.98	40.732		
2,600.00	2,592.75	2,589.31	2,589.11	9.03	49.58	-173.42	1,731.69	658.93	1,968.10	1,917.74	50.36	39.078		
2,700.00	2,691.78	2,678.33	2,678.08	9.42	51.66	-173.46	1,731.60	658.93	1,981.82	1,929.34	52.48	37.764		
2,800.00	2,790.80	2,807.65	2,807.37	9.80	54.75	-173.52	1,731.38	658.93	1,995.68	1,940.10	55.58	35.907		
2,900.00	2,889.83	2,894.67	2,894.36	10.20	56.92	-173.56	1,731.77	658.93	2,009.73	1,951.95	57.78	34.782		
2,979.22	2,968.28	2,954.92	2,954.58	10.51	58.42	-173.58	1,731.60	658.93	2,020.44	1,961.14	59.31	34.067		
3,000.00	2,988.86	3,012.79	3,012.43	10.59	59.87	-173.61	1,731.37	658.93	2,023.40	1,962.66	60.73	33.316		
3,100.00	3,088.13	3,079.85	3,079.46	10.98	61.67	-173.66	1,732.01	658.93	2,035.67	1,973.09	62.58	32.528		
3,200.00	3,187.68	3,174.43	3,173.98	11.36	64.33	-173.70	1,731.60	658.93	2,044.70	1,979.43	65.26	31.329		
3,300.00	3,287.44	3,274.27	3,273.74	11.73	67.44	-173.73	1,731.60	658.93	2,051.53	1,983.14	68.39	29.999		
3,400.00	3,387.34	3,374.22	3,373.64	12.08	70.66	-173.75	1,731.60	658.93	2,055.76	1,984.14	71.62	28.704		
3,500.00	3,487.33	3,474.41	3,473.63	12.43	74.02	-173.76	1,731.60	658.93	2,057.39	1,982.40	74.99	27.436		
3,512.67	3,500.00	3,487.09	3,486.30	12.47	74.45	20.14	1,731.60	658.93	2,057.41	1,981.99	75.42	27.280		
3,600.00	3,587.33	3,574.51	3,573.63	12.76	77.33	20.14	1,731.60	658.93	2,057.41	1,979.09	78.32	26.270		
3,700.00	3,687.33	3,674.61	3,673.63	13.10	80.49	20.14	1,731.60	658.93	2,057.41	1,975.92	81.49	25.248		
3,800.00	3,787.33	3,803.29	3,802.24	13.43	84.36	20.14	1,731.70	658.93	2,057.71	1,972.35	85.36	24.106		
3,818.94	3,806.27	3,793.62	3,792.57	13.50	84.07	20.14	1,731.60	658.93	2,057.41	1,972.32	85.09	24.179		
3,900.00	3,887.33	3,904.43	3,903.31	13.77	87.20	20.14	1,731.80	658.93	2,057.81	1,969.59	88.22	23.326		
3,975.68	3,963.01	3,969.79	3,968.63	14.02	88.98	20.14	1,731.68	658.93	2,057.58	1,967.56	90.02	22.857		
4,000.00	3,987.33	3,974.79	3,973.63	14.11	89.11	20.14	1,731.60	658.93	2,057.41	1,967.24	90.17	22.817		
4,100.00	4,087.33	4,074.85	4,073.63	14.44	91.98	20.14	1,731.60	658.93	2,057.41	1,964.36	93.05	22.111		
4,200.00	4,187.33	4,190.00	4,188.72	14.78	94.93	20.14	1,731.60	658.93	2,057.46	1,961.45	96.02	21.428		
4,239.26	4,226.58	4,214.17	4,212.88	14.92	95.37	20.14	1,731.60	658.93	2,057.41	1,960.93	96.48	21.325		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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: 60-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,300.00	4,287.33	4,274.91	4,273.63	15.12	96.49	20.14	1,731.60	658.93	2,057.41	1,959.79	97.62	21.076		
4,400.00	4,387.33	4,374.93	4,373.63	15.46	98.50	20.14	1,731.60	658.93	2,057.41	1,957.75	99.66	20.645		
4,500.00	4,487.33	4,504.62	4,503.30	15.81	101.74	20.14	1,731.43	658.93	2,057.47	1,954.56	102.90	19.994		
4,536.26	4,523.58	4,511.22	4,509.88	15.93	102.09	20.14	1,731.60	658.93	2,057.41	1,954.13	103.28	19.921		
4,600.00	4,587.33	4,575.05	4,573.63	16.15	104.57	20.14	1,731.60	658.93	2,057.41	1,951.65	105.76	19.454		
4,700.00	4,687.33	4,675.35	4,673.63	16.49	109.46	20.14	1,731.60	658.93	2,057.41	1,946.76	110.65	18.594		
4,800.00	4,787.33	4,775.73	4,773.63	16.83	114.73	20.14	1,731.60	658.93	2,057.41	1,941.49	115.92	17.749		
4,900.00	4,887.33	4,875.99	4,873.63	17.18	119.58	20.14	1,731.60	658.93	2,057.41	1,936.64	120.77	17.036		
5,000.00	4,987.33	4,976.12	4,973.63	17.52	123.17	20.14	1,731.60	658.93	2,057.41	1,933.04	124.37	16.542		
5,100.00	5,087.33	5,076.18	5,073.63	17.87	125.78	20.14	1,731.60	658.93	2,057.41	1,930.40	127.01	16.199		
5,200.00	5,187.33	5,176.20	5,173.63	18.21	128.06	20.14	1,731.60	658.93	2,057.41	1,928.10	129.31	15.910		
5,300.00	5,287.33	5,276.21	5,273.63	18.56	130.06	20.14	1,731.60	658.93	2,057.41	1,926.06	131.35	15.664		
5,400.00	5,387.33	5,379.61	5,377.02	18.91	132.01	20.14	1,731.94	658.93	2,057.74	1,924.42	133.32	15.435		
5,500.00	5,487.33	5,476.23	5,473.63	19.26	133.82	20.14	1,731.60	658.93	2,057.41	1,922.24	135.16	15.222		
5,600.00	5,587.33	5,579.32	5,576.71	19.60	135.76	20.14	1,731.88	658.93	2,057.68	1,920.55	137.14	15.005		
5,700.00	5,687.33	5,676.25	5,673.63	19.95	137.62	20.14	1,731.60	658.93	2,057.41	1,918.39	139.02	14.799		
5,800.00	5,787.33	5,782.67	5,780.05	20.30	139.74	20.14	1,731.81	658.93	2,057.62	1,916.45	141.17	14.575		
5,900.00	5,887.33	5,876.27	5,873.63	20.65	141.66	20.14	1,731.60	658.93	2,057.41	1,914.29	143.12	14.375		
6,000.00	5,987.33	5,983.06	5,980.41	21.00	143.90	20.14	1,732.00	658.93	2,057.81	1,912.41	145.40	14.153		
6,100.00	6,087.33	6,076.30	6,073.63	21.35	145.86	20.14	1,731.60	658.93	2,057.41	1,910.02	147.39	13.959		
6,200.00	6,187.33	6,191.47	6,188.79	21.70	148.29	20.14	1,731.66	658.93	2,057.52	1,907.69	149.83	13.732		
6,222.62	6,209.95	6,220.72	6,218.04	21.78	148.90	20.14	1,731.38	658.93	2,057.32	1,906.87	150.45	13.675		
6,300.00	6,287.33	6,276.33	6,273.63	22.05	150.07	20.14	1,731.60	658.93	2,057.41	1,905.76	151.65	13.567		
6,400.00	6,387.33	6,388.85	6,386.14	22.40	152.44	20.14	1,731.81	658.93	2,057.65	1,903.60	154.04	13.357		
6,500.00	6,487.33	6,476.36	6,473.63	22.75	154.28	20.14	1,731.60	658.93	2,057.41	1,901.49	155.92	13.195		
6,600.00	6,587.33	6,591.08	6,588.34	23.10	156.70	20.14	1,731.69	658.93	2,057.55	1,899.19	158.36	12.993		
6,626.29	6,613.61	6,623.19	6,620.45	23.19	157.38	20.14	1,731.40	658.93	2,057.33	1,898.29	159.04	12.936		
6,700.00	6,687.33	6,676.39	6,673.63	23.45	158.42	20.14	1,731.60	658.93	2,057.41	1,897.29	160.12	12.849		
6,800.00	6,787.33	6,785.25	6,782.49	23.80	160.60	20.14	1,731.97	658.93	2,057.78	1,895.46	162.33	12.677		
6,900.00	6,887.33	6,876.41	6,873.63	24.15	162.39	20.14	1,731.60	658.93	2,057.41	1,893.26	164.15	12.534		
7,000.00	6,987.33	6,976.84	6,974.05	24.50	164.31	20.14	1,732.02	658.93	2,057.81	1,891.72	166.09	12.389		
7,100.00	7,087.33	7,087.58	7,084.79	24.86	166.41	20.14	1,731.69	658.93	2,057.53	1,889.30	168.23	12.230		
7,159.53	7,146.85	7,135.97	7,133.15	25.06	167.34	20.14	1,731.60	658.93	2,057.41	1,888.23	169.17	12.161		
7,200.00	7,187.33	7,176.44	7,173.63	25.21	168.11	20.14	1,731.60	658.93	2,057.41	1,887.45	169.96	12.105		
7,300.00	7,287.33	7,285.24	7,282.42	25.56	170.18	20.14	1,731.78	658.93	2,057.60	1,885.54	172.06	11.958		
7,400.00	7,387.33	7,376.46	7,373.63	25.91	171.92	20.14	1,731.60	658.93	2,057.41	1,883.57	173.84	11.835		
7,500.00	7,487.33	7,483.05	7,480.22	26.26	173.96	20.14	1,731.85	658.93	2,057.66	1,881.76	175.90	11.698		
7,600.00	7,587.33	7,576.47	7,573.63	26.62	175.75	20.14	1,731.60	658.93	2,057.41	1,879.69	177.72	11.576		
7,700.00	7,687.33	7,684.11	7,681.26	26.97	177.80	20.14	1,731.79	658.93	2,057.61	1,877.79	179.81	11.443		
7,800.00	7,787.33	7,776.49	7,773.63	27.32	179.57	20.14	1,731.60	658.93	2,057.41	1,875.80	181.61	11.329		
7,900.00	7,887.33	7,882.60	7,879.73	27.68	181.60	20.14	1,731.87	658.93	2,057.68	1,874.00	183.68	11.203		
8,000.00	7,987.33	7,976.51	7,973.63	28.03	183.44	20.14	1,731.60	658.93	2,057.41	1,871.86	185.55	11.088		
8,100.00	8,087.33	8,079.45	8,076.56	28.38	185.52	20.14	1,731.95	658.93	2,057.74	1,870.09	187.65	10.966		
8,200.00	8,187.33	8,176.54	8,173.63	28.74	187.49	20.14	1,731.60	658.93	2,057.41	1,867.75	189.66	10.848		
8,300.00	8,287.33	8,276.54	8,273.63	29.09	189.71	20.14	1,731.60	658.93	2,057.41	1,865.50	191.90	10.721		
8,400.00	8,387.33	8,391.67	8,388.75	29.44	192.26	20.14	1,731.70	658.93	2,057.56	1,863.08	194.48	10.580		
8,427.11	8,414.44	8,423.28	8,420.36	29.54	192.96	20.14	1,731.41	658.93	2,057.33	1,862.15	195.18	10.541		
8,500.00	8,487.33	8,476.58	8,473.63	29.80	194.07	20.14	1,731.60	658.93	2,057.41	1,861.08	196.32	10.480		
8,600.00	8,587.33	8,586.86	8,583.89	30.15	196.41	20.14	1,732.11	658.93	2,057.92	1,859.23	198.69	10.358		
8,700.00	8,687.33	8,676.62	8,673.63	30.51	198.26	20.14	1,731.60	658.93	2,057.41	1,856.84	200.57	10.258		
8,800.00	8,787.33	8,780.02	8,777.02	30.86	200.24	20.14	1,731.91	658.93	2,057.70	1,855.12	202.59	10.157		
8,900.00	8,887.33	8,876.64	8,873.63	31.21	202.10	20.14	1,731.60	658.93	2,057.41	1,852.94	204.47	10.062		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Colorado Fed Com - Custer Mountain Unit #001 (Offset) - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 60-INC-ONLY															Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
9,000.00	8,987.33	8,989.13	8,986.11	31.57	204.26	20.14	1,731.60	658.93	2,057.45	1,850.79	206.66	9.956				
9,012.86	9,000.19	9,004.96	9,001.94	31.61	204.57	20.14	1,731.49	658.93	2,057.37	1,850.40	206.97	9.940				
9,100.00	9,087.33	9,076.65	9,073.63	31.92	206.00	20.14	1,731.60	658.93	2,057.41	1,848.97	208.44	9.871				
9,200.00	9,187.33	9,180.90	9,177.87	32.28	208.21	20.14	1,731.88	658.93	2,057.68	1,847.01	210.67	9.767				
9,300.00	9,287.33	9,276.68	9,273.63	32.63	210.27	20.14	1,731.60	658.93	2,057.41	1,844.64	212.77	9.670				
9,400.00	9,387.33	9,396.23	9,393.16	32.99	212.92	20.14	1,731.66	658.93	2,057.56	1,842.13	215.43	9.551				
9,422.66	9,409.98	9,427.29	9,424.21	33.07	213.61	20.14	1,731.27	658.93	2,057.30	1,841.18	216.12	9.519				
9,500.00	9,487.33	9,476.71	9,473.63	33.34	214.56	20.14	1,731.60	658.93	2,057.41	1,840.29	217.11	9.476				
9,600.00	9,587.33	9,582.59	9,579.49	33.70	216.70	20.14	1,732.11	658.93	2,057.90	1,838.62	219.29	9.385				
9,700.00	9,687.33	9,676.75	9,673.63	34.05	218.61	20.14	1,731.60	658.93	2,057.41	1,836.19	221.22	9.300				
9,800.00	9,787.33	9,781.02	9,777.90	34.41	220.72	20.14	1,731.84	658.93	2,057.64	1,834.28	223.36	9.212				
9,900.00	9,887.33	9,876.77	9,873.63	34.76	222.69	20.14	1,731.60	658.93	2,057.41	1,832.04	225.37	9.129				
10,000.00	9,987.33	9,982.71	9,979.57	35.12	224.94	20.14	1,732.01	658.93	2,057.81	1,830.16	227.65	9.039				
10,100.00	10,087.33	10,076.80	10,073.63	35.47	226.92	20.14	1,731.60	658.93	2,057.41	1,827.76	229.65	8.959				
10,200.00	10,187.33	10,187.01	10,183.83	35.83	229.15	20.14	1,731.83	658.93	2,057.65	1,825.74	231.91	8.873				
10,300.00	10,287.33	10,276.82	10,273.63	36.18	230.86	20.14	1,731.60	658.93	2,057.41	1,823.75	233.66	8.805				
10,400.00	10,387.33	10,381.32	10,378.12	36.54	232.77	20.14	1,731.94	658.93	2,057.73	1,822.13	235.60	8.734				
10,500.00	10,487.33	10,476.83	10,473.63	36.89	234.56	20.14	1,731.60	658.93	2,057.41	1,819.98	237.43	8.665				
10,600.00	10,587.33	10,582.18	10,578.97	37.25	236.70	20.14	1,731.69	658.93	2,057.51	1,817.92	239.59	8.588				
10,700.00	10,687.33	10,700.85	10,697.62	37.61	239.54	20.14	1,731.53	658.93	2,057.49	1,815.05	242.44	8.487				
10,738.30	10,725.63	10,715.18	10,711.93	37.74	239.93	20.14	1,731.60	658.93	2,057.41	1,814.54	242.87	8.471				
10,800.00	10,787.33	10,776.89	10,773.63	37.96	241.60	20.14	1,731.60	658.93	2,057.41	1,812.86	244.55	8.413				
10,900.00	10,887.33	10,876.94	10,873.63	38.32	244.30	20.14	1,731.60	658.93	2,057.41	1,810.14	247.27	8.321				
11,000.00	10,987.33	10,977.00	10,973.63	38.67	246.97	20.14	1,731.60	658.93	2,057.41	1,807.45	249.96	8.231				
11,100.00	11,087.33	11,077.00	11,073.63	39.03	249.48	20.14	1,731.60	658.93	2,057.41	1,804.91	252.50	8.148				
11,200.00	11,187.33	11,191.65	11,188.24	39.38	252.36	20.13	1,732.49	658.93	2,058.30	1,802.91	255.39	8.060				
11,300.00	11,287.33	11,277.11	11,273.63	39.74	254.51	20.14	1,731.60	658.93	2,057.41	1,799.84	257.57	7.988				
11,400.00	11,387.33	11,377.15	11,373.63	40.10	257.16	20.14	1,731.60	658.93	2,057.41	1,797.16	260.25	7.905				
11,500.00	11,487.33	11,477.19	11,473.63	40.45	260.07	20.14	1,731.60	658.93	2,057.41	1,794.23	263.18	7.818				
11,600.00	11,587.33	11,584.08	11,580.44	40.81	263.11	20.14	1,731.97	658.93	2,057.77	1,791.53	266.24	7.729				
11,621.52	11,608.85	11,598.78	11,595.15	40.88	263.53	20.14	1,731.60	658.93	2,057.41	1,790.75	266.66	7.715				
11,700.00	11,687.33	11,683.52	11,679.84	41.16	266.03	20.14	1,731.98	658.93	2,057.78	1,788.60	269.18	7.645				
11,800.00	11,787.33	11,777.37	11,773.63	41.52	269.00	20.14	1,731.60	658.93	2,057.41	1,785.24	272.17	7.559				
11,900.00	11,887.33	11,877.50	11,873.63	41.88	272.31	20.14	1,731.60	658.93	2,057.41	1,781.91	275.50	7.468				
11,940.71	11,928.04	11,935.00	11,931.05	42.02	274.21	20.14	1,731.60	658.93	2,057.48	1,780.08	277.39	7.417				
11,950.00	11,937.33	11,935.00	11,931.05	42.05	274.21	16.64	1,731.60	658.93	2,057.35	1,779.95	277.40	7.416				
12,000.00	11,987.22	11,977.48	11,973.52	42.23	275.62	16.75	1,731.60	658.93	2,054.47	1,775.65	278.82	7.368				
12,050.00	12,036.67	12,026.98	12,022.97	42.40	277.35	17.02	1,731.60	658.93	2,047.46	1,766.90	280.56	7.298				
12,100.00	12,085.28	12,075.62	12,071.58	42.56	279.16	17.45	1,731.60	658.93	2,036.34	1,753.97	282.37	7.212				
12,150.00	12,132.70	12,123.16	12,119.00	42.71	281.01	18.07	1,731.60	658.93	2,021.22	1,737.00	284.22	7.111				
12,200.00	12,178.57	12,169.06	12,164.87	42.86	282.99	18.90	1,731.60	658.93	2,002.22	1,716.01	286.21	6.996				
12,250.00	12,222.52	12,213.17	12,208.82	43.00	284.96	19.97	1,731.60	658.93	1,979.49	1,691.32	288.17	6.869				
12,300.00	12,264.24	12,254.93	12,250.54	43.13	286.94	21.34	1,731.60	658.93	1,953.22	1,663.06	290.15	6.732				
12,350.00	12,303.40	12,294.24	12,289.70	43.26	288.77	23.07	1,731.60	658.93	1,923.62	1,631.65	291.98	6.588				
12,400.00	12,339.70	12,330.54	12,326.00	43.38	290.43	25.24	1,731.60	658.93	1,890.94	1,597.31	293.63	6.440				
12,450.00	12,372.86	12,405.00	12,400.13	43.50	293.83	28.68	1,731.60	658.93	1,855.90	1,558.96	296.93	6.250				
12,500.00	12,402.64	12,405.00	12,400.13	43.62	293.83	31.70	1,731.60	658.93	1,817.46	1,520.44	297.02	6.119				
12,550.00	12,428.81	12,419.99	12,415.11	43.74	294.43	35.87	1,731.60	658.93	1,777.19	1,479.57	297.62	5.971				
12,600.00	12,451.17	12,442.37	12,437.47	43.85	295.31	41.51	1,731.60	658.93	1,735.08	1,436.57	298.51	5.812				
12,650.00	12,469.55	12,460.80	12,455.85	43.97	296.04	48.68	1,731.60	658.93	1,691.43	1,392.20	299.23	5.653				
12,700.00	12,483.81	12,475.06	12,470.11	44.09	296.59	57.61	1,731.60	658.93	1,646.61	1,346.82	299.78	5.493				
12,750.00	12,493.83	12,485.10	12,480.13	44.21	296.98	68.28	1,731.60	658.93	1,600.98	1,300.80	300.17	5.333				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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: 60-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
12,800.00	12,499.55	12,490.82	12,485.85	44.33	297.20	80.16	1,731.60	658.93	1,554.91	1,254.52	300.40	5.176		
12,840.71	12,501.00	12,492.27	12,487.30	44.42	297.26	90.00	1,731.60	658.93	1,517.35	1,216.89	300.46	5.050		
12,900.00	12,501.00	12,492.27	12,487.30	44.57	297.26	90.00	1,731.60	658.93	1,463.14	1,162.68	300.46	4.870		
13,000.00	12,501.00	12,492.27	12,487.30	44.88	297.26	90.00	1,731.60	658.93	1,373.93	1,073.46	300.48	4.573		
13,047.21	12,501.00	12,492.27	12,487.30	45.04	297.26	90.00	1,731.60	658.93	1,332.94	1,032.46	300.49	4.436		
13,100.00	12,501.00	12,492.27	12,487.30	45.24	297.26	90.00	1,731.60	658.93	1,287.85	987.35	300.50	4.286		
13,200.00	12,501.00	12,505.00	12,499.97	45.66	297.75	91.07	1,731.60	658.93	1,204.19	903.20	301.00	4.001		
13,300.00	12,501.00	12,505.00	12,499.97	46.14	297.75	91.07	1,731.60	658.93	1,123.15	822.11	301.04	3.731		
13,400.00	12,501.00	12,492.27	12,487.30	46.67	297.26	90.00	1,731.60	658.93	1,045.31	744.69	300.63	3.477		
13,500.00	12,501.00	12,492.27	12,487.30	47.25	297.26	90.00	1,731.60	658.93	971.63	670.93	300.70	3.231		
13,600.00	12,501.00	12,513.28	12,508.29	47.88	298.07	91.77	1,731.34	658.93	903.09	601.59	301.50	2.995		
13,700.00	12,501.00	12,505.91	12,500.93	48.56	297.79	91.15	1,731.57	658.93	840.82	539.42	301.40	2.790		
13,800.00	12,501.00	12,501.21	12,496.24	49.29	297.60	90.75	1,731.69	658.93	786.35	484.95	301.40	2.609		
13,900.00	12,501.00	12,497.95	12,492.98	50.06	297.48	90.48	1,731.75	658.93	741.41	439.93	301.48	2.459		
14,000.00	12,501.00	12,495.56	12,490.59	50.87	297.39	90.28	1,731.79	658.93	707.84	406.23	301.61	2.347		
14,100.00	12,501.00	12,493.73	12,488.76	51.72	297.31	90.12	1,731.82	658.93	687.29	385.54	301.75	2.278		
14,193.36	12,501.00	12,492.37	12,487.40	52.55	297.26	90.01	1,731.84	658.93	680.92	379.05	301.87	2.256 CC, ES, SF		
14,200.00	12,501.00	12,492.28	12,487.32	52.61	297.26	90.00	1,731.84	658.93	680.96	379.08	301.88	2.256		
14,300.00	12,501.00	12,491.11	12,486.14	53.54	297.21	89.90	1,731.86	658.93	689.22	387.26	301.96	2.282		
14,400.00	12,501.00	12,490.14	12,485.18	54.50	297.18	89.82	1,731.87	658.93	711.59	409.59	301.99	2.356		
14,500.00	12,501.00	12,489.33	12,484.36	55.50	297.14	89.75	1,731.88	658.93	746.78	444.81	301.97	2.473		
14,600.00	12,501.00	12,488.64	12,483.67	56.52	297.12	89.69	1,731.88	658.93	793.09	491.19	301.91	2.627		
14,700.00	12,501.00	12,488.04	12,483.07	57.57	297.09	89.64	1,731.89	658.93	848.71	546.90	301.82	2.812		
14,800.00	12,501.00	12,487.52	12,482.55	58.66	297.07	89.60	1,731.89	658.93	911.94	610.22	301.72	3.022		
14,900.00	12,501.00	12,487.06	12,482.10	59.76	297.06	89.56	1,731.90	658.93	981.30	679.68	301.62	3.253		
15,000.00	12,501.00	12,486.66	12,481.69	60.90	297.04	89.53	1,731.90	658.93	1,055.59	754.06	301.53	3.501		
15,100.00	12,501.00	12,486.30	12,481.33	62.05	297.03	89.50	1,731.90	658.93	1,133.84	832.40	301.44	3.761		
15,200.00	12,501.00	12,485.97	12,481.01	63.23	297.01	89.47	1,731.90	658.93	1,215.28	913.92	301.36	4.033		
15,300.00	12,501.00	12,485.68	12,480.71	64.43	297.00	89.45	1,731.91	658.93	1,299.32	998.03	301.29	4.313		
15,400.00	12,501.00	12,485.41	12,480.45	65.65	296.99	89.42	1,731.91	658.93	1,385.47	1,084.25	301.22	4.599		
15,500.00	12,501.00	12,485.17	12,480.21	66.89	296.98	89.40	1,731.91	658.93	1,473.38	1,172.21	301.17	4.892		
15,600.00	12,501.00	12,484.95	12,479.98	68.14	296.98	89.38	1,731.91	658.93	1,562.74	1,261.63	301.12	5.190		
15,700.00	12,501.00	12,484.75	12,479.78	69.41	296.97	89.37	1,731.91	658.93	1,653.32	1,352.25	301.07	5.491		
15,800.00	12,501.00	12,484.56	12,479.59	70.70	296.96	89.35	1,731.91	658.93	1,744.93	1,443.90	301.03	5.796		
15,900.00	12,501.00	12,484.39	12,479.42	72.00	296.95	89.34	1,731.91	658.93	1,837.42	1,536.42	301.00	6.104		
16,000.00	12,501.00	12,484.23	12,479.26	73.32	296.95	89.32	1,731.91	658.93	1,930.65	1,629.68	300.97	6.415		
16,100.00	12,501.00	12,484.08	12,479.11	74.65	296.94	89.31	1,731.91	658.93	2,024.53	1,723.59	300.94	6.727		
16,200.00	12,501.00	12,483.94	12,478.97	75.99	296.94	89.30	1,731.91	658.93	2,118.97	1,818.05	300.92	7.042		
16,300.00	12,501.00	12,483.81	12,478.84	77.35	296.93	89.29	1,731.91	658.93	2,213.90	1,913.00	300.90	7.358		
16,400.00	12,501.00	12,483.68	12,478.72	78.72	296.93	89.28	1,731.91	658.93	2,309.26	2,008.38	300.88	7.675		
16,500.00	12,501.00	12,483.57	12,478.61	80.09	296.92	89.27	1,731.92	658.93	2,404.99	2,104.13	300.86	7.994		
16,600.00	12,501.00	12,483.46	12,478.50	81.48	296.92	89.26	1,731.92	658.93	2,501.06	2,200.21	300.85	8.313		
16,700.00	12,501.00	12,483.36	12,478.40	82.88	296.91	89.25	1,731.92	658.93	2,597.43	2,296.59	300.84	8.634		
16,800.00	12,501.00	12,483.27	12,478.30	84.28	296.91	89.24	1,731.92	658.93	2,694.06	2,393.23	300.82	8.956		
16,900.00	12,501.00	12,483.17	12,478.21	85.70	296.91	89.24	1,731.92	658.93	2,790.92	2,490.11	300.82	9.278		
17,000.00	12,501.00	12,483.09	12,478.12	87.12	296.90	89.23	1,731.92	658.93	2,888.00	2,587.20	300.81	9.601		
17,100.00	12,501.00	12,483.01	12,478.04	88.55	296.90	89.22	1,731.92	658.93	2,985.28	2,684.48	300.80	9.924		
17,200.00	12,501.00	12,482.93	12,477.97	89.99	296.90	89.21	1,731.92	658.93	3,082.72	2,781.93	300.79	10.249		
17,300.00	12,501.00	12,482.86	12,477.89	91.44	296.89	89.21	1,731.92	658.93	3,180.33	2,879.54	300.79	10.573		
17,400.00	12,501.00	12,482.79	12,477.82	92.89	296.89	89.20	1,731.92	658.93	3,278.08	2,977.30	300.79	10.898		
17,500.00	12,501.00	12,482.72	12,477.76	94.35	296.89	89.20	1,731.92	658.93	3,375.96	3,075.18	300.78	11.224		
17,600.00	12,501.00	12,482.66	12,477.69	95.82	296.89	89.19	1,731.92	658.93	3,473.97	3,173.19	300.78	11.550		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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: 60-INC-ONLY												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)			
17,700.00	12,501.00	12,482.60	12,477.63	97.29	296.88	89.19	1,731.92	658.93	3,572.08	3,271.30	300.78	11.876	
17,800.00	12,501.00	12,482.54	12,477.58	98.77	296.88	89.18	1,731.92	658.93	3,670.30	3,369.52	300.78	12.203	
17,900.00	12,501.00	12,482.48	12,477.52	100.25	296.88	89.18	1,731.92	658.93	3,768.60	3,467.83	300.78	12.530	
18,000.00	12,501.00	12,482.43	12,477.47	101.74	296.88	89.17	1,731.92	658.93	3,867.00	3,566.22	300.78	12.857	
18,100.00	12,501.00	12,482.38	12,477.42	103.24	296.88	89.17	1,731.92	658.93	3,965.48	3,664.70	300.78	13.184	
18,200.00	12,501.00	12,482.33	12,477.37	104.73	296.87	89.16	1,731.92	658.93	4,064.03	3,763.25	300.78	13.512	
18,300.00	12,501.00	12,482.28	12,477.32	106.24	296.87	89.16	1,731.92	658.93	4,162.65	3,861.86	300.78	13.839	
18,400.00	12,501.00	12,482.24	12,477.28	107.75	296.87	89.16	1,731.92	658.93	4,261.33	3,960.54	300.79	14.167	
18,500.00	12,501.00	12,482.20	12,477.23	109.26	296.87	89.15	1,731.92	658.93	4,360.08	4,059.29	300.79	14.495	
18,600.00	12,501.00	12,482.15	12,477.19	110.77	296.87	89.15	1,731.92	658.93	4,458.88	4,158.08	300.79	14.824	
18,700.00	12,501.00	12,482.11	12,477.15	112.29	296.87	89.15	1,731.92	658.93	4,557.73	4,256.93	300.80	15.152	
18,800.00	12,501.00	12,482.08	12,477.11	113.82	296.86	89.14	1,731.92	658.93	4,656.63	4,355.83	300.80	15.481	
18,900.00	12,501.00	12,482.04	12,477.07	115.34	296.86	89.14	1,731.92	658.93	4,755.58	4,454.77	300.81	15.809	
19,000.00	12,501.00	12,482.00	12,477.04	116.87	296.86	89.14	1,731.92	658.93	4,854.57	4,553.75	300.81	16.138	
19,100.00	12,501.00	12,481.97	12,477.00	118.41	296.86	89.13	1,731.92	658.93	4,953.60	4,652.78	300.82	16.467	

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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: 192-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,900.00	12,501.00	12,505.25	12,501.72	59.76	280.20	90.33	7,024.61	1,920.95	4,990.68	4,706.61	284.08	17.568		
15,000.00	12,501.00	12,504.97	12,501.43	60.90	280.19	90.32	7,024.61	1,920.95	4,899.24	4,615.11	284.13	17.243		
15,100.00	12,501.00	12,504.69	12,501.16	62.05	280.19	90.31	7,024.61	1,920.95	4,808.13	4,523.94	284.19	16.918		
15,200.00	12,501.00	12,504.41	12,500.88	63.23	280.18	90.30	7,024.61	1,920.95	4,717.39	4,433.13	284.26	16.595		
15,300.00	12,501.00	12,504.14	12,500.60	64.43	280.18	90.30	7,024.61	1,920.95	4,627.03	4,342.69	284.34	16.273		
15,400.00	12,501.00	12,503.86	12,500.33	65.65	280.17	90.29	7,024.61	1,920.95	4,537.07	4,252.65	284.42	15.952		
15,500.00	12,501.00	12,503.59	12,500.06	66.89	280.17	90.28	7,024.61	1,920.95	4,447.54	4,163.03	284.51	15.632		
15,600.00	12,501.00	12,503.32	12,499.78	68.14	280.16	90.27	7,024.61	1,920.95	4,358.47	4,073.86	284.61	15.314		
15,700.00	12,501.00	12,503.05	12,499.52	69.41	280.16	90.26	7,024.61	1,920.95	4,269.88	3,985.16	284.71	14.997		
15,800.00	12,501.00	12,502.78	12,499.25	70.70	280.15	90.26	7,024.61	1,920.95	4,181.80	3,896.97	284.83	14.682		
15,900.00	12,501.00	12,502.52	12,498.98	72.00	280.15	90.25	7,024.61	1,920.95	4,094.27	3,809.31	284.96	14.368		
16,000.00	12,501.00	12,502.25	12,498.72	73.32	280.14	90.24	7,024.62	1,920.95	4,007.33	3,722.22	285.10	14.056		
16,100.00	12,501.00	12,501.99	12,498.45	74.65	280.14	90.23	7,024.62	1,920.95	3,921.01	3,635.75	285.26	13.745		
16,200.00	12,501.00	12,501.72	12,498.19	75.99	280.13	90.23	7,024.62	1,920.95	3,835.35	3,549.92	285.43	13.437		
16,300.00	12,501.00	12,501.46	12,497.93	77.35	280.13	90.22	7,024.62	1,920.95	3,750.40	3,464.79	285.61	13.131		
16,400.00	12,501.00	12,501.20	12,497.67	78.72	280.12	90.21	7,024.62	1,920.95	3,666.21	3,380.40	285.82	12.827		
16,500.00	12,501.00	12,500.95	12,497.41	80.09	280.12	90.20	7,024.62	1,920.95	3,582.84	3,296.80	286.04	12.526		
16,600.00	12,501.00	12,500.69	12,497.16	81.48	280.11	90.20	7,024.62	1,920.95	3,500.34	3,214.06	286.28	12.227		
16,700.00	12,501.00	12,500.44	12,496.90	82.88	280.11	90.19	7,024.62	1,920.95	3,418.77	3,132.23	286.54	11.931		
16,800.00	12,501.00	12,500.18	12,496.65	84.28	280.10	90.18	7,024.62	1,920.95	3,338.20	3,051.37	286.83	11.638		
16,900.00	12,501.00	12,499.93	12,496.39	85.70	280.10	90.17	7,024.62	1,920.95	3,258.71	2,971.57	287.14	11.349		
17,000.00	12,501.00	12,499.68	12,496.14	87.12	280.09	90.17	7,024.62	1,920.95	3,180.38	2,892.90	287.48	11.063		
17,100.00	12,501.00	12,499.43	12,495.89	88.55	280.09	90.16	7,024.62	1,920.95	3,103.29	2,815.44	287.85	10.781		
17,200.00	12,501.00	12,499.18	12,495.65	89.99	280.08	90.15	7,024.62	1,920.95	3,027.54	2,739.28	288.26	10.503		
17,300.00	12,501.00	12,498.93	12,495.40	91.44	280.08	90.15	7,024.62	1,920.95	2,953.24	2,664.54	288.70	10.229		
17,400.00	12,501.00	12,498.69	12,495.15	92.89	280.07	90.14	7,024.62	1,920.95	2,880.49	2,591.32	289.18	9.961		
17,500.00	12,501.00	12,498.44	12,494.91	94.35	280.07	90.13	7,024.62	1,920.95	2,809.42	2,519.73	289.70	9.698		
17,600.00	12,501.00	12,498.20	12,494.67	95.82	280.06	90.13	7,024.63	1,920.95	2,740.16	2,449.90	290.26	9.441		
17,700.00	12,501.00	12,497.96	12,494.43	97.29	280.06	90.12	7,024.63	1,920.95	2,672.84	2,381.98	290.86	9.189		
17,800.00	12,501.00	12,497.72	12,494.18	98.77	280.05	90.11	7,024.63	1,920.95	2,607.62	2,316.11	291.51	8.945		
17,900.00	12,501.00	12,497.48	12,493.95	100.25	280.05	90.10	7,024.63	1,920.95	2,544.66	2,252.45	292.21	8.708		
18,000.00	12,501.00	12,497.24	12,493.71	101.74	280.05	90.10	7,024.63	1,920.95	2,484.13	2,191.18	292.96	8.480		
18,100.00	12,501.00	12,497.01	12,493.47	103.24	280.04	90.09	7,024.63	1,920.95	2,426.22	2,132.46	293.75	8.259		
18,200.00	12,501.00	12,496.77	12,493.24	104.73	280.04	90.08	7,024.63	1,920.95	2,371.10	2,076.51	294.59	8.049		
18,300.00	12,501.00	12,496.54	12,493.00	106.24	280.03	90.08	7,024.63	1,920.95	2,319.00	2,023.52	295.48	7.848		
18,400.00	12,501.00	12,496.30	12,492.77	107.75	280.03	90.07	7,024.63	1,920.95	2,270.10	1,973.69	296.41	7.659		
18,500.00	12,501.00	12,496.07	12,492.54	109.26	280.02	90.06	7,024.63	1,920.95	2,224.63	1,927.26	297.37	7.481		
18,600.00	12,501.00	12,495.84	12,492.31	110.77	280.02	90.06	7,024.63	1,920.95	2,182.79	1,884.43	298.36	7.316		
18,700.00	12,501.00	12,495.61	12,492.08	112.29	280.01	90.05	7,024.63	1,920.95	2,144.81	1,845.44	299.37	7.164		
18,800.00	12,501.00	12,495.38	12,491.85	113.82	280.01	90.04	7,024.63	1,920.95	2,110.88	1,810.50	300.38	7.027		
18,900.00	12,501.00	12,495.16	12,491.62	115.34	280.00	90.04	7,024.63	1,920.95	2,081.20	1,779.82	301.39	6.905		
19,000.00	12,501.00	12,494.93	12,491.40	116.87	280.00	90.03	7,024.63	1,920.95	2,055.97	1,753.60	302.37	6.799		
19,100.00	12,501.00	12,494.71	12,491.17	118.41	280.00	90.03	7,024.63	1,920.95	2,035.34	1,732.02	303.32	6.710		
19,200.00	12,501.00	12,494.48	12,490.95	119.94	279.99	90.02	7,024.63	1,920.95	2,019.46	1,715.25	304.22	6.638		
19,300.00	12,501.00	12,494.26	12,490.73	121.48	279.99	90.01	7,024.63	1,920.95	2,008.44	1,703.40	305.05	6.584		
19,400.00	12,501.00	12,494.04	12,490.51	123.03	279.98	90.01	7,024.63	1,920.95	2,002.36	1,696.57	305.79	6.548		
19,471.95	12,501.00	12,493.88	12,490.35	124.14	279.98	90.00	7,024.63	1,920.95	2,001.07	1,694.80	306.27	6.534 CC, ES		
19,500.00	12,501.00	12,493.82	12,490.29	124.57	279.98	90.00	7,024.63	1,920.95	2,001.27	1,694.83	306.44	6.531 SF		
19,600.00	12,501.00	12,493.60	12,490.07	126.12	279.97	89.99	7,024.64	1,920.95	2,005.16	1,698.18	306.99	6.532		
19,700.00	12,501.00	12,493.38	12,489.85	127.67	279.97	89.99	7,024.64	1,920.95	2,014.02	1,706.60	307.42	6.551		
19,800.00	12,501.00	12,493.17	12,489.63	129.23	279.97	89.98	7,024.64	1,920.95	2,027.78	1,720.04	307.74	6.589		
19,900.00	12,501.00	12,492.95	12,489.42	130.78	279.96	89.97	7,024.64	1,920.95	2,046.34	1,738.40	307.94	6.645		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Colorado Fed Com - Woolworth Ranch Unit #001 (Offset) - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 192-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
20,000.00	12,501.00	12,492.74	12,489.20	132.34	279.96	89.97	7,024.64	1,920.95	2,069.57	1,761.53	308.04	6.719		
20,100.00	12,501.00	12,492.52	12,488.99	133.90	279.95	89.96	7,024.64	1,920.95	2,097.31	1,789.28	308.03	6.809		
20,200.00	12,501.00	12,492.31	12,488.78	135.47	279.95	89.96	7,024.64	1,920.95	2,129.40	1,821.47	307.92	6.915		
20,300.00	12,501.00	12,492.10	12,488.57	137.03	279.95	89.95	7,024.64	1,920.95	2,165.63	1,857.89	307.73	7.037		
20,400.00	12,501.00	12,491.89	12,488.36	138.60	279.94	89.94	7,024.64	1,920.95	2,205.80	1,898.33	307.47	7.174		
20,500.00	12,501.00	12,491.68	12,488.15	140.17	279.94	89.94	7,024.64	1,920.95	2,249.70	1,942.56	307.14	7.325		
20,600.00	12,501.00	12,491.47	12,487.94	141.74	279.93	89.93	7,024.64	1,920.95	2,297.12	1,990.37	306.75	7.488		
20,700.00	12,501.00	12,491.27	12,487.73	143.31	279.93	89.93	7,024.64	1,920.95	2,347.84	2,041.52	306.33	7.664		
20,800.00	12,501.00	12,491.06	12,487.53	144.89	279.93	89.92	7,024.64	1,920.95	2,401.66	2,095.79	305.87	7.852		
20,900.00	12,501.00	12,490.85	12,487.32	146.46	279.92	89.91	7,024.64	1,920.95	2,458.37	2,152.98	305.39	8.050		
21,000.00	12,501.00	12,490.65	12,487.12	148.04	279.92	89.91	7,024.64	1,920.95	2,517.78	2,212.89	304.89	8.258		
21,100.00	12,501.00	12,490.45	12,486.91	149.62	279.91	89.90	7,024.64	1,920.95	2,579.69	2,275.31	304.38	8.475		
21,200.00	12,501.00	12,490.25	12,486.71	151.20	279.91	89.90	7,024.64	1,920.95	2,643.94	2,340.07	303.87	8.701		
21,300.00	12,501.00	12,490.04	12,486.51	152.78	279.91	89.89	7,024.64	1,920.95	2,710.35	2,407.00	303.36	8.935		
21,400.00	12,501.00	12,489.84	12,486.31	154.37	279.90	89.89	7,024.64	1,920.95	2,778.78	2,475.93	302.85	9.175		
21,500.00	12,501.00	12,489.64	12,486.11	155.95	279.90	89.88	7,024.64	1,920.95	2,849.08	2,546.72	302.36	9.423		
21,600.00	12,501.00	12,489.45	12,485.91	157.54	279.89	89.87	7,024.64	1,920.95	2,921.10	2,619.23	301.87	9.677		
21,700.00	12,501.00	12,489.25	12,485.71	159.13	279.89	89.87	7,024.64	1,920.95	2,994.74	2,693.34	301.39	9.936		
21,800.00	12,501.00	12,489.05	12,485.52	160.72	279.89	89.86	7,024.65	1,920.95	3,069.86	2,768.93	300.93	10.201		
21,900.00	12,501.00	12,488.86	12,485.32	162.31	279.88	89.86	7,024.65	1,920.95	3,146.37	2,845.88	300.49	10.471		
22,000.00	12,501.00	12,488.66	12,485.13	163.90	279.88	89.85	7,024.65	1,920.95	3,224.17	2,924.11	300.06	10.745		
22,100.00	12,501.00	12,488.47	12,484.94	165.50	279.88	89.85	7,024.65	1,920.95	3,303.16	3,003.52	299.64	11.024		
22,200.00	12,501.00	12,488.28	12,484.74	167.09	279.87	89.84	7,024.65	1,920.95	3,383.27	3,084.02	299.24	11.306		
22,300.00	12,501.00	12,488.09	12,484.55	168.69	279.87	89.84	7,024.65	1,920.95	3,464.40	3,165.54	298.86	11.592		
22,400.00	12,501.00	12,487.89	12,484.36	170.28	279.86	89.83	7,024.65	1,920.95	3,546.50	3,248.01	298.49	11.881		
22,500.00	12,501.00	12,487.70	12,484.17	171.88	279.86	89.82	7,024.65	1,920.95	3,629.50	3,331.37	298.14	12.174		
22,600.00	12,501.00	12,487.52	12,483.98	173.48	279.86	89.82	7,024.65	1,920.95	3,713.34	3,415.54	297.80	12.469		
22,635.57	12,501.00	12,487.45	12,483.91	174.05	279.86	89.82	7,024.65	1,920.95	3,743.36	3,445.67	297.68	12.575		
22,636.34	12,501.00	12,487.45	12,483.91	174.06	279.86	89.82	7,024.65	1,920.95	3,744.00	3,445.46	298.54	12.541		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 301H - 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	-65.07	73.77	-158.71	175.31					
100.00	100.00	89.90	89.90	0.13	0.13	-65.07	73.77	-158.71	175.02	174.84	0.18	979.206		
200.00	200.00	189.90	189.90	0.48	0.46	-65.07	73.77	-158.71	175.02	174.35	0.67	261.084		
300.00	300.00	289.90	289.90	0.84	0.82	-65.07	73.77	-158.71	175.02	173.84	1.18	148.668		
400.00	400.00	389.90	389.90	1.20	1.18	-65.07	73.77	-158.71	175.02	173.33	1.68	103.919		
500.00	500.00	489.90	489.90	1.56	1.54	-65.07	73.77	-158.71	175.02	172.83	2.19	79.876		
600.00	600.00	589.90	589.90	1.92	1.90	-65.07	73.77	-158.71	175.02	172.32	2.70	64.868		
700.00	700.00	689.90	689.90	2.28	2.26	-65.07	73.77	-158.71	175.02	171.81	3.21	54.607		
800.00	800.00	789.90	789.90	2.63	2.61	-65.07	73.77	-158.71	175.02	171.30	3.71	47.150		
900.00	900.00	889.90	889.90	2.99	2.97	-65.07	73.77	-158.71	175.02	170.80	4.22	41.484		
1,000.00	1,000.00	989.90	989.90	3.35	3.33	-65.07	73.77	-158.71	175.02	170.29	4.73	37.034		
1,100.00	1,100.00	1,089.90	1,089.90	3.71	3.69	-65.07	73.77	-158.71	175.02	169.78	5.23	33.446		
1,200.00	1,200.00	1,189.90	1,189.90	4.07	4.05	-65.07	73.77	-158.71	175.02	169.28	5.74	30.492		
1,300.00	1,300.00	1,289.90	1,289.90	4.43	4.41	-65.07	73.77	-158.71	175.02	168.77	6.25	28.017		
1,400.00	1,400.00	1,389.90	1,389.90	4.79	4.77	-65.07	73.77	-158.71	175.02	168.26	6.75	25.914		
1,500.00	1,500.00	1,489.90	1,489.90	5.14	5.12	-65.07	73.77	-158.71	175.02	167.76	7.26	24.105 CC		
1,600.00	1,599.99	1,589.89	1,589.89	5.48	5.48	101.44	73.77	-158.71	175.27	167.52	7.75	22.602 ES		
1,700.00	1,699.91	1,689.81	1,689.81	5.81	5.84	102.68	73.77	-158.71	176.09	167.85	8.24	21.375		
1,800.00	1,799.69	1,789.59	1,789.59	6.14	6.20	104.71	73.77	-158.71	177.65	168.92	8.73	20.360		
1,900.00	1,899.27	1,889.17	1,889.17	6.48	6.56	107.48	73.77	-158.71	180.19	170.98	9.22	19.554		
2,000.00	1,998.57	1,988.47	1,988.47	6.82	6.91	110.90	73.77	-158.71	184.08	174.37	9.71	18.959		
2,033.45	2,031.72	2,021.62	2,021.62	6.94	7.03	112.16	73.77	-158.71	185.75	175.88	9.88	18.808		
2,100.00	2,097.62	2,087.52	2,087.52	7.17	7.27	114.74	73.77	-158.71	189.47	179.26	10.21	18.561		
2,200.00	2,196.65	2,186.55	2,186.55	7.53	7.62	118.41	73.77	-158.71	195.75	185.04	10.71	18.278		
2,300.00	2,295.67	2,285.57	2,285.57	7.90	7.98	121.85	73.77	-158.71	202.79	191.58	11.21	18.084		
2,400.00	2,394.70	2,384.60	2,384.60	8.27	8.33	125.05	73.77	-158.71	210.52	198.80	11.72	17.964		
2,500.00	2,493.73	2,483.63	2,483.63	8.65	8.69	128.02	73.77	-158.71	218.86	206.64	12.22	17.903		
2,600.00	2,592.75	2,582.65	2,582.65	9.03	9.04	130.76	73.77	-158.71	227.75	215.02	12.73	17.890		
2,700.00	2,691.78	2,681.68	2,681.68	9.42	9.40	133.30	73.77	-158.71	237.12	223.89	13.24	17.914		
2,800.00	2,790.80	2,780.70	2,780.70	9.80	9.75	135.64	73.77	-158.71	246.93	233.18	13.74	17.967		
2,900.00	2,889.83	2,879.73	2,879.73	10.20	10.11	137.80	73.77	-158.71	257.11	242.86	14.25	18.043		
2,979.22	2,968.28	2,958.18	2,958.18	10.51	10.39	139.39	73.77	-158.71	265.41	250.76	14.65	18.117		
3,000.00	2,988.86	2,978.76	2,978.76	10.59	10.46	139.80	73.77	-158.71	267.58	252.83	14.76	18.135		
3,100.00	3,088.13	3,078.03	3,078.03	10.98	10.82	141.50	73.77	-158.71	276.96	261.70	15.26	18.149		
3,200.00	3,187.68	3,177.58	3,177.58	11.36	11.17	142.76	73.77	-158.71	284.45	268.69	15.76	18.045		
3,300.00	3,287.44	3,275.64	3,275.64	11.73	11.52	143.47	73.70	-159.46	290.19	273.93	16.25	17.852		
3,400.00	3,387.34	3,373.32	3,373.26	12.08	11.85	143.40	73.40	-162.62	294.57	277.84	16.74	17.600		
3,500.00	3,487.33	3,470.86	3,470.64	12.43	12.19	142.57	72.87	-168.27	297.66	280.44	17.22	17.288		
3,512.67	3,500.00	3,483.20	3,482.94	12.47	12.23	-23.68	72.79	-169.16	297.96	280.68	17.28	17.245		
3,600.00	3,587.33	3,568.04	3,567.47	12.76	12.52	-24.99	72.12	-176.35	300.39	282.69	17.69	16.977		
3,700.00	3,687.33	3,664.75	3,663.60	13.10	12.86	-26.86	71.13	-186.83	304.23	286.06	18.17	16.745		
3,800.00	3,787.33	3,761.76	3,759.75	13.43	13.20	-29.09	69.93	-199.66	309.38	290.73	18.65	16.592		
3,900.00	3,887.33	3,860.79	3,857.81	13.77	13.55	-31.39	68.64	-213.39	315.29	296.15	19.14	16.473		
4,000.00	3,987.33	3,959.81	3,955.88	14.11	13.91	-33.60	67.36	-227.11	321.69	302.05	19.63	16.384		
4,100.00	4,087.33	4,058.84	4,053.94	14.44	14.27	-35.72	66.07	-240.84	328.55	308.42	20.13	16.321		
4,200.00	4,187.33	4,157.86	4,152.00	14.78	14.63	-37.76	64.78	-254.56	335.85	315.23	20.63	16.283		
4,300.00	4,287.33	4,256.89	4,250.06	15.12	15.00	-39.70	63.50	-268.29	343.56	322.44	21.12	16.265 SF		
4,400.00	4,387.33	4,355.92	4,348.12	15.46	15.37	-41.56	62.21	-282.01	351.66	330.04	21.62	16.265		
4,500.00	4,487.33	4,454.94	4,446.19	15.81	15.74	-43.34	60.92	-295.74	360.11	337.99	22.12	16.281		
4,600.00	4,587.33	4,553.97	4,544.25	16.15	16.12	-45.04	59.64	-309.46	368.89	346.27	22.62	16.311		
4,700.00	4,687.33	4,653.00	4,642.31	16.49	16.49	-46.65	58.35	-323.19	377.98	354.87	23.11	16.352		
4,800.00	4,787.33	4,752.02	4,740.37	16.83	16.87	-48.19	57.06	-336.91	387.36	363.75	23.61	16.404		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 301H - 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		
4,900.00	4,887.33	4,851.05	4,838.43	17.18	17.25	-49.66	55.78	-350.64	397.00	372.89	24.11	16.465		
5,000.00	4,987.33	4,950.07	4,936.50	17.52	17.63	-51.05	54.49	-364.37	406.90	382.29	24.61	16.533		
5,100.00	5,087.33	5,049.10	5,034.56	17.87	18.02	-52.38	53.20	-378.09	417.02	391.91	25.11	16.608		
5,200.00	5,187.33	5,148.13	5,132.62	18.21	18.40	-53.65	51.92	-391.82	427.35	401.75	25.61	16.688		
5,300.00	5,287.33	5,247.15	5,230.68	18.56	18.79	-54.86	50.63	-405.54	437.89	411.78	26.11	16.773		
5,400.00	5,387.33	5,346.18	5,328.74	18.91	19.17	-56.01	49.34	-419.27	448.61	422.00	26.61	16.861		
5,500.00	5,487.33	5,445.21	5,426.81	19.26	19.56	-57.10	48.06	-432.99	459.50	432.40	27.11	16.952		
5,600.00	5,587.33	5,544.23	5,524.87	19.60	19.95	-58.15	46.77	-446.72	470.55	442.95	27.60	17.046		
5,700.00	5,687.33	5,643.26	5,622.93	19.95	20.35	-59.15	45.48	-460.44	481.75	453.65	28.10	17.142		
5,800.00	5,787.33	5,742.28	5,720.99	20.30	20.74	-60.10	44.20	-474.17	493.09	464.49	28.60	17.239		
5,900.00	5,887.33	5,841.31	5,819.05	20.65	21.13	-61.01	42.91	-487.89	504.56	475.45	29.10	17.337		
6,000.00	5,987.33	5,940.34	5,917.12	21.00	21.53	-61.88	41.62	-501.62	516.15	486.54	29.60	17.435		
6,100.00	6,087.33	6,039.36	6,015.18	21.35	21.92	-62.71	40.34	-515.35	527.85	497.74	30.10	17.534		
6,200.00	6,187.33	6,138.39	6,113.24	21.70	22.32	-63.51	39.05	-529.07	539.65	509.05	30.60	17.633		
6,300.00	6,287.33	6,237.42	6,211.30	22.05	22.72	-64.27	37.76	-542.80	551.56	520.45	31.10	17.732		
6,400.00	6,387.33	6,336.44	6,309.36	22.40	23.11	-65.00	36.48	-556.52	563.56	531.95	31.61	17.831		
6,500.00	6,487.33	6,435.47	6,407.43	22.75	23.51	-65.69	35.19	-570.25	575.64	543.53	32.11	17.929		
6,600.00	6,587.33	6,534.50	6,505.49	23.10	23.91	-66.36	33.90	-583.97	587.81	555.20	32.61	18.027		
6,700.00	6,687.33	6,633.52	6,603.55	23.45	24.31	-67.01	32.61	-597.70	600.05	566.94	33.11	18.123		
6,800.00	6,787.33	6,732.55	6,701.61	23.80	24.71	-67.62	31.33	-611.42	612.36	578.75	33.61	18.219		
6,900.00	6,887.33	6,831.57	6,799.67	24.15	25.11	-68.22	30.04	-625.15	624.74	590.63	34.11	18.314		
7,000.00	6,987.33	6,930.60	6,897.74	24.50	25.52	-68.79	28.75	-638.87	637.19	602.57	34.61	18.408		
7,100.00	7,087.33	7,029.63	6,995.80	24.86	25.92	-69.34	27.47	-652.60	649.69	614.58	35.12	18.501		
7,200.00	7,187.33	7,128.65	7,093.86	25.21	26.32	-69.86	26.18	-666.32	662.25	626.64	35.62	18.593		
7,300.00	7,287.33	7,227.68	7,191.92	25.56	26.72	-70.37	24.89	-680.05	674.87	638.75	36.12	18.683		
7,400.00	7,387.33	7,326.71	7,289.98	25.91	27.13	-70.86	23.61	-693.78	687.53	650.91	36.62	18.773		
7,500.00	7,487.33	7,425.73	7,388.05	26.26	27.53	-71.33	22.32	-707.50	700.25	663.12	37.13	18.861		
7,600.00	7,587.33	7,524.76	7,486.11	26.62	27.94	-71.79	21.03	-721.23	713.00	675.37	37.63	18.947		
7,700.00	7,687.33	7,623.78	7,584.17	26.97	28.34	-72.22	19.75	-734.95	725.80	687.67	38.13	19.033		
7,800.00	7,787.33	7,722.81	7,682.23	27.32	28.75	-72.65	18.46	-748.68	738.65	700.01	38.64	19.117		
7,900.00	7,887.33	7,821.84	7,780.29	27.68	29.15	-73.06	17.17	-762.40	751.53	712.38	39.14	19.200		
8,000.00	7,987.33	7,920.86	7,878.36	28.03	29.56	-73.45	15.89	-776.13	764.44	724.80	39.65	19.282		
8,100.00	8,087.33	8,019.89	7,976.42	28.38	29.97	-73.84	14.60	-789.85	777.39	737.24	40.15	19.362		
8,200.00	8,187.33	8,118.92	8,074.48	28.74	30.37	-74.20	13.31	-803.58	790.38	749.72	40.65	19.442		
8,300.00	8,287.33	8,217.94	8,172.54	29.09	30.78	-74.56	12.03	-817.30	803.39	762.23	41.16	19.519		
8,400.00	8,387.33	8,316.97	8,270.60	29.44	31.19	-74.91	10.74	-831.03	816.44	774.77	41.66	19.596		
8,500.00	8,487.33	8,415.99	8,368.67	29.80	31.60	-75.24	9.45	-844.75	829.51	787.34	42.17	19.672		
8,600.00	8,587.33	8,515.02	8,466.73	30.15	32.01	-75.57	8.17	-858.48	842.61	799.94	42.67	19.746		
8,700.00	8,687.33	8,614.05	8,564.79	30.51	32.41	-75.88	6.88	-872.21	855.74	812.56	43.18	19.819		
8,800.00	8,787.33	8,713.07	8,662.85	30.86	32.82	-76.19	5.59	-885.93	868.89	825.20	43.68	19.890		
8,900.00	8,887.33	8,812.10	8,760.91	31.21	33.23	-76.49	4.31	-899.66	882.06	837.87	44.19	19.961		
9,000.00	8,987.33	8,911.13	8,858.98	31.57	33.64	-76.77	3.02	-913.38	895.26	850.57	44.70	20.030		
9,100.00	9,087.33	9,021.59	8,968.41	31.92	34.09	-77.08	1.62	-928.36	908.23	862.96	45.27	20.063		
9,200.00	9,187.33	9,150.25	9,096.29	32.28	34.60	-77.36	0.30	-942.37	918.63	872.71	45.92	20.005		
9,300.00	9,287.33	9,279.72	9,225.39	32.63	35.09	-77.54	-0.61	-952.13	925.84	879.31	46.54	19.895		
9,400.00	9,387.33	9,409.71	9,355.26	32.99	35.55	-77.65	-1.12	-957.54	929.82	882.71	47.11	19.737		
9,500.00	9,487.33	9,531.69	9,477.23	33.34	35.96	-77.67	-1.23	-958.71	930.68	883.05	47.64	19.537		
9,600.00	9,587.33	9,631.69	9,577.23	33.70	36.29	-77.67	-1.23	-958.71	930.68	882.56	48.13	19.338		
9,700.00	9,687.33	9,707.86	9,653.26	34.05	36.53	-77.45	2.38	-958.75	931.81	883.22	48.59	19.178		
9,800.00	9,787.33	9,778.85	9,723.13	34.41	36.76	-76.72	14.69	-958.89	935.95	886.94	49.00	19.099		
9,900.00	9,887.33	9,850.00	9,791.09	34.76	36.97	-75.48	35.59	-959.12	943.57	894.19	49.38	19.108		
10,000.00	9,987.33	9,900.00	9,837.05	35.12	37.11	-74.33	55.24	-959.33	955.30	905.72	49.58	19.269		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 301H - 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		
10,100.00	10,087.33	9,963.33	9,892.51	35.47	37.27	-72.57	85.76	-959.67	971.69	921.94	49.76	19.529		
10,200.00	10,187.33	10,013.07	9,933.50	35.83	37.38	-70.98	113.90	-959.98	993.43	943.70	49.73	19.976		
10,300.00	10,287.33	10,050.00	9,962.27	36.18	37.46	-69.69	137.04	-960.23	1,020.89	971.42	49.48	20.634		
10,400.00	10,387.33	10,100.00	9,998.74	36.54	37.56	-67.83	171.22	-960.61	1,054.13	1,004.89	49.24	21.410		
10,500.00	10,487.33	10,129.95	10,019.11	36.89	37.62	-66.66	193.18	-960.85	1,093.17	1,044.47	48.70	22.448		
10,600.00	10,587.33	10,150.00	10,032.08	37.25	37.65	-65.86	208.46	-961.02	1,137.93	1,089.96	47.97	23.720		
10,700.00	10,687.33	10,200.00	10,062.06	37.61	37.74	-63.81	248.45	-961.46	1,187.95	1,140.38	47.56	24.977		
10,800.00	10,787.33	10,200.00	10,062.06	37.96	37.74	-63.81	248.45	-961.46	1,242.68	1,196.12	46.56	26.689		
10,900.00	10,887.33	10,230.96	10,078.83	38.32	37.79	-62.52	274.47	-961.75	1,301.83	1,255.89	45.94	28.338		
11,000.00	10,987.33	10,250.00	10,088.43	38.67	37.82	-61.72	290.91	-961.93	1,365.09	1,319.88	45.21	30.193		
11,100.00	11,087.33	10,250.00	10,088.43	39.03	37.82	-61.72	290.91	-961.93	1,432.21	1,387.89	44.32	32.314		
11,200.00	11,187.33	10,281.40	10,103.06	39.38	37.87	-60.39	318.69	-962.23	1,501.98	1,458.14	43.84	34.259		
11,300.00	11,287.33	10,300.00	10,111.00	39.74	37.90	-59.60	335.50	-962.42	1,574.88	1,531.60	43.28	36.388		
11,400.00	11,387.33	10,300.00	10,111.00	40.10	37.90	-59.60	335.50	-962.42	1,650.30	1,607.71	42.60	38.742		
11,500.00	11,487.33	10,318.57	10,118.38	40.45	37.93	-58.82	352.54	-962.61	1,727.87	1,685.70	42.17	40.975		
11,600.00	11,587.33	10,328.83	10,122.22	40.81	37.95	-58.39	362.05	-962.71	1,807.46	1,765.73	41.72	43.319		
11,700.00	11,687.33	10,350.00	10,129.60	41.16	37.99	-57.50	381.90	-962.93	1,888.94	1,847.50	41.44	45.586		
11,800.00	11,787.33	10,350.00	10,129.60	41.52	37.99	-57.50	381.90	-962.93	1,971.70	1,930.68	41.02	48.061		
11,900.00	11,887.33	10,350.00	10,129.60	41.88	37.99	-57.50	381.90	-962.93	2,056.00	2,015.32	40.68	50.546		
11,940.71	11,928.04	10,350.00	10,129.60	42.02	37.99	-57.50	381.90	-962.93	2,090.72	2,050.17	40.55	51.559		
11,950.00	11,937.33	10,350.00	10,129.60	42.05	37.99	-59.68	381.90	-962.93	2,098.65	2,058.13	40.52	51.790		
12,000.00	11,987.22	10,350.00	10,129.60	42.23	37.99	-53.15	381.90	-962.93	2,140.81	2,100.44	40.37	53.032		
12,050.00	12,036.67	10,350.00	10,129.60	42.40	37.99	-47.60	381.90	-962.93	2,181.88	2,141.67	40.21	54.263		
12,100.00	12,085.28	10,373.53	10,136.94	42.56	38.03	-42.46	404.25	-963.18	2,221.06	2,180.84	40.22	55.228		
12,150.00	12,132.70	10,379.81	10,138.74	42.71	38.05	-38.58	410.26	-963.24	2,258.90	2,218.81	40.09	56.341		
12,200.00	12,178.57	10,400.00	10,144.09	42.86	38.09	-35.19	429.73	-963.46	2,295.05	2,254.99	40.06	57.290		
12,250.00	12,222.52	10,400.00	10,144.09	43.00	38.09	-32.64	429.73	-963.46	2,328.77	2,288.88	39.89	58.375		
12,300.00	12,264.24	10,400.00	10,144.09	43.13	38.09	-30.50	429.73	-963.46	2,360.34	2,320.61	39.73	59.408		
12,350.00	12,303.40	10,400.00	10,144.09	43.26	38.09	-28.72	429.73	-963.46	2,389.59	2,350.01	39.58	60.378		
12,400.00	12,339.70	10,400.00	10,144.09	43.38	38.09	-27.23	429.73	-963.46	2,416.39	2,376.95	39.43	61.280		
12,450.00	12,372.86	10,427.25	10,150.21	43.50	38.15	-25.90	456.28	-963.75	2,439.86	2,400.42	39.44	61.863		
12,500.00	12,402.64	10,450.00	10,154.35	43.62	38.20	-24.84	478.65	-964.00	2,461.02	2,421.60	39.42	62.423		
12,550.00	12,428.81	10,450.00	10,154.35	43.74	38.20	-24.05	478.65	-964.00	2,478.87	2,439.56	39.31	63.061		
12,600.00	12,451.17	10,450.00	10,154.35	43.85	38.20	-23.42	478.65	-964.00	2,493.86	2,454.64	39.21	63.598		
12,650.00	12,469.55	10,450.00	10,154.35	43.97	38.20	-22.93	478.65	-964.00	2,505.92	2,466.78	39.14	64.027		
12,700.00	12,483.81	10,474.44	10,157.81	44.09	38.26	-22.59	502.84	-964.26	2,514.40	2,475.22	39.18	64.179		
12,750.00	12,493.83	10,500.00	10,160.31	44.21	38.33	-22.40	528.27	-964.54	2,520.15	2,480.92	39.23	64.235		
12,800.00	12,499.55	10,500.00	10,160.31	44.33	38.33	-22.32	528.27	-964.54	2,522.21	2,482.98	39.22	64.302		
12,840.71	12,501.00	10,500.00	10,160.31	44.42	38.33	-22.34	528.27	-964.54	2,521.63	2,482.39	39.24	64.262		
12,900.00	12,501.00	10,500.00	10,160.31	44.57	38.33	-22.31	528.27	-964.54	2,519.79	2,480.50	39.29	64.133		
13,000.00	12,501.00	10,550.00	10,161.92	44.88	38.47	-22.32	578.23	-965.09	2,517.95	2,478.43	39.52	63.719		
13,047.21	12,501.00	10,550.00	10,161.92	45.04	38.47	-22.31	578.23	-965.09	2,517.45	2,477.86	39.59	63.581		
13,057.68	12,501.00	10,550.00	10,161.92	45.08	38.47	-22.31	578.23	-965.09	2,517.43	2,477.82	39.61	63.548		
13,100.00	12,501.00	10,553.11	10,161.88	45.24	38.48	-22.31	581.34	-965.13	2,517.78	2,478.07	39.71	63.407		
13,200.00	12,501.00	10,640.22	10,159.94	45.66	38.79	-22.29	668.42	-966.09	2,519.81	2,479.76	40.05	62.923		
13,300.00	12,501.00	10,740.19	10,157.70	46.14	39.22	-22.27	768.36	-967.19	2,521.88	2,481.44	40.43	62.373		
13,400.00	12,501.00	10,840.17	10,155.47	46.67	39.72	-22.26	868.31	-968.29	2,523.94	2,483.08	40.86	61.770		
13,500.00	12,501.00	10,940.14	10,153.23	47.25	40.30	-22.24	968.25	-969.39	2,526.01	2,484.69	41.33	61.122		
13,600.00	12,501.00	11,040.12	10,151.00	47.88	40.93	-22.22	1,068.20	-970.49	2,528.08	2,486.25	41.83	60.434		
13,700.00	12,501.00	11,140.09	10,148.77	48.56	41.63	-22.20	1,168.14	-971.59	2,530.15	2,487.78	42.37	59.714		
13,800.00	12,501.00	11,240.07	10,146.53	49.29	42.38	-22.18	1,268.08	-972.69	2,532.22	2,489.28	42.95	58.963		
13,900.00	12,501.00	11,340.04	10,144.30	50.06	43.19	-22.16	1,368.03	-973.79	2,534.30	2,490.74	43.55	58.188		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 301H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.00	12,501.00	11,440.02	10,142.06	50.87	44.04	-22.14	1,467.97	-974.89	2,536.37	2,492.17	44.19	57.392		
14,100.00	12,501.00	11,539.99	10,139.83	51.72	44.94	-22.12	1,567.92	-975.99	2,538.44	2,493.57	44.86	56.581		
14,200.00	12,501.00	11,639.97	10,137.59	52.61	45.87	-22.10	1,667.86	-977.09	2,540.51	2,494.95	45.56	55.758		
14,300.00	12,501.00	11,739.95	10,135.36	53.54	46.85	-22.08	1,767.80	-978.19	2,542.58	2,496.29	46.29	54.928		
14,400.00	12,501.00	11,839.92	10,133.12	54.50	47.87	-22.06	1,867.75	-979.29	2,544.65	2,497.61	47.04	54.092		
14,500.00	12,501.00	11,939.90	10,130.89	55.50	48.92	-22.05	1,967.69	-980.40	2,546.73	2,498.90	47.82	53.255		
14,600.00	12,501.00	12,039.87	10,128.65	56.52	50.00	-22.03	2,067.64	-981.50	2,548.80	2,500.18	48.62	52.419		
14,700.00	12,501.00	12,139.85	10,126.42	57.57	51.12	-22.01	2,167.58	-982.60	2,550.87	2,501.43	49.45	51.589		
14,800.00	12,501.00	12,239.82	10,124.18	58.66	52.26	-21.99	2,267.52	-983.70	2,552.94	2,502.65	50.29	50.764		
14,900.00	12,501.00	12,339.80	10,121.95	59.76	53.43	-21.97	2,367.47	-984.80	2,555.02	2,503.86	51.15	49.947		
15,000.00	12,501.00	12,439.77	10,119.71	60.90	54.62	-21.95	2,467.41	-985.90	2,557.09	2,505.05	52.04	49.139		
15,100.00	12,501.00	12,539.75	10,117.48	62.05	55.84	-21.93	2,567.36	-987.00	2,559.17	2,506.23	52.94	48.342		
15,200.00	12,501.00	12,639.72	10,115.25	63.23	57.08	-21.91	2,667.30	-988.10	2,561.24	2,507.38	53.86	47.556		
15,300.00	12,501.00	12,739.70	10,113.01	64.43	58.34	-21.90	2,767.24	-989.20	2,563.32	2,508.52	54.79	46.782		
15,400.00	12,501.00	12,839.67	10,110.78	65.65	59.61	-21.88	2,867.19	-990.30	2,565.39	2,509.65	55.74	46.022		
15,500.00	12,501.00	12,939.65	10,108.54	66.89	60.91	-21.86	2,967.13	-991.40	2,567.47	2,510.76	56.71	45.278		
15,600.00	12,501.00	13,039.62	10,106.31	68.14	62.22	-21.84	3,067.08	-992.50	2,569.54	2,511.86	57.68	44.547		
15,700.00	12,501.00	13,139.60	10,104.07	69.41	63.55	-21.82	3,167.02	-993.60	2,571.62	2,512.94	58.67	43.831		
15,800.00	12,501.00	13,239.57	10,101.84	70.70	64.90	-21.80	3,266.96	-994.70	2,573.69	2,514.02	59.67	43.129		
15,900.00	12,501.00	13,339.55	10,099.60	72.00	66.26	-21.79	3,366.91	-995.81	2,575.77	2,515.08	60.69	42.443		
16,000.00	12,501.00	13,439.52	10,097.37	73.32	67.63	-21.77	3,466.85	-996.91	2,577.84	2,516.13	61.71	41.772		
16,100.00	12,501.00	13,539.50	10,095.13	74.65	69.01	-21.75	3,566.80	-998.01	2,579.92	2,517.18	62.75	41.117		
16,200.00	12,501.00	13,639.47	10,092.90	75.99	70.40	-21.73	3,666.74	-999.11	2,582.00	2,518.21	63.79	40.478		
16,300.00	12,501.00	13,739.45	10,090.66	77.35	71.81	-21.71	3,766.68	-1,000.21	2,584.08	2,519.24	64.84	39.853		
16,400.00	12,501.00	13,839.42	10,088.43	78.72	73.23	-21.69	3,866.63	-1,001.31	2,586.15	2,520.25	65.90	39.242		
16,500.00	12,501.00	13,939.40	10,086.19	80.09	74.65	-21.68	3,966.57	-1,002.41	2,588.23	2,521.26	66.97	38.646		
16,600.00	12,501.00	14,039.37	10,083.96	81.48	76.09	-21.66	4,066.52	-1,003.51	2,590.31	2,522.26	68.05	38.063		
16,700.00	12,501.00	14,139.35	10,081.72	82.88	77.53	-21.64	4,166.46	-1,004.61	2,592.39	2,523.25	69.14	37.497		
16,800.00	12,501.00	14,239.32	10,079.49	84.28	78.98	-21.62	4,266.40	-1,005.71	2,594.47	2,524.24	70.23	36.944		
16,900.00	12,501.00	14,339.30	10,077.26	85.70	80.44	-21.60	4,366.35	-1,006.81	2,596.55	2,525.22	71.33	36.404		
17,000.00	12,501.00	14,439.27	10,075.02	87.12	81.91	-21.58	4,466.29	-1,007.91	2,598.62	2,526.19	72.43	35.878		
17,100.00	12,501.00	14,539.25	10,072.79	88.55	83.38	-21.57	4,566.24	-1,009.01	2,600.70	2,527.16	73.54	35.364		
17,200.00	12,501.00	14,639.22	10,070.55	89.99	84.86	-21.55	4,666.18	-1,010.12	2,602.78	2,528.13	74.66	34.863		
17,300.00	12,501.00	14,739.20	10,068.32	91.44	86.35	-21.53	4,766.12	-1,011.22	2,604.86	2,529.09	75.78	34.375		
17,400.00	12,501.00	14,839.17	10,066.08	92.89	87.84	-21.51	4,866.07	-1,012.32	2,606.94	2,530.04	76.90	33.899		
17,500.00	12,501.00	14,939.15	10,063.85	94.35	89.34	-21.49	4,966.01	-1,013.42	2,609.02	2,530.99	78.03	33.435		
17,600.00	12,501.00	15,039.12	10,061.61	95.82	90.85	-21.48	5,065.96	-1,014.52	2,611.10	2,531.94	79.17	32.982		
17,700.00	12,501.00	15,139.10	10,059.38	97.29	92.35	-21.46	5,165.90	-1,015.62	2,613.19	2,532.88	80.31	32.540		
17,800.00	12,501.00	15,239.07	10,057.14	98.77	93.87	-21.44	5,265.84	-1,016.72	2,615.27	2,533.81	81.45	32.108		
17,900.00	12,501.00	15,339.05	10,054.91	100.25	95.39	-21.42	5,365.79	-1,017.82	2,617.35	2,534.75	82.60	31.687		
18,000.00	12,501.00	15,439.02	10,052.67	101.74	96.91	-21.40	5,465.73	-1,018.92	2,619.43	2,535.68	83.75	31.277		
18,100.00	12,501.00	15,539.00	10,050.44	103.24	98.44	-21.39	5,565.68	-1,020.02	2,621.51	2,536.61	84.90	30.876		
18,200.00	12,501.00	15,638.97	10,048.20	104.73	99.97	-21.37	5,665.62	-1,021.12	2,623.59	2,537.53	86.06	30.485		
18,300.00	12,501.00	15,738.95	10,045.97	106.24	101.50	-21.35	5,765.56	-1,022.22	2,625.68	2,538.45	87.22	30.104		
18,400.00	12,501.00	15,838.92	10,043.74	107.75	103.04	-21.33	5,865.51	-1,023.32	2,627.76	2,539.37	88.39	29.731		
18,500.00	12,501.00	15,938.90	10,041.50	109.26	104.58	-21.32	5,965.45	-1,024.43	2,629.84	2,540.29	89.55	29.367		
18,600.00	12,501.00	16,038.87	10,039.27	110.77	106.13	-21.30	6,065.39	-1,025.53	2,631.92	2,541.20	90.72	29.011		
18,700.00	12,501.00	16,138.85	10,037.03	112.29	107.68	-21.28	6,165.34	-1,026.63	2,634.01	2,542.12	91.89	28.664		
18,800.00	12,501.00	16,238.82	10,034.80	113.82	109.23	-21.26	6,265.28	-1,027.73	2,636.09	2,543.03	93.06	28.326		
18,900.00	12,501.00	16,338.80	10,032.56	115.34	110.78	-21.25	6,365.23	-1,028.83	2,638.18	2,543.94	94.24	27.994		
19,000.00	12,501.00	16,438.77	10,030.33	116.87	112.34	-21.23	6,465.17	-1,029.93	2,640.26	2,544.84	95.42	27.670		
19,100.00	12,501.00	16,538.75	10,028.09	118.41	113.90	-21.21	6,565.11	-1,031.03	2,642.34	2,545.74	96.60	27.353		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 301H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.00	12,501.00	16,638.72	10,025.86	119.94	115.46	-21.19	6,665.06	-1,032.13	2,644.43	2,546.65	97.78	27.044		
19,300.00	12,501.00	16,738.70	10,023.62	121.48	117.03	-21.18	6,765.00	-1,033.23	2,646.51	2,547.55	98.97	26.742		
19,400.00	12,501.00	16,838.67	10,021.39	123.03	118.59	-21.16	6,864.95	-1,034.33	2,648.60	2,548.45	100.15	26.446		
19,500.00	12,501.00	16,938.65	10,019.15	124.57	120.16	-21.14	6,964.89	-1,035.43	2,650.68	2,549.35	101.34	26.157		
19,600.00	12,501.00	17,038.62	10,016.92	126.12	121.74	-21.12	7,064.83	-1,036.53	2,652.77	2,550.24	102.53	25.874		
19,700.00	12,501.00	17,138.60	10,014.68	127.67	123.31	-21.11	7,164.78	-1,037.63	2,654.86	2,551.14	103.72	25.597		
19,800.00	12,501.00	17,238.57	10,012.45	129.23	124.89	-21.09	7,264.72	-1,038.74	2,656.94	2,552.03	104.91	25.326		
19,900.00	12,501.00	17,338.55	10,010.22	130.78	126.46	-21.07	7,364.67	-1,039.84	2,659.03	2,552.93	106.10	25.061		
20,000.00	12,501.00	17,438.52	10,007.98	132.34	128.04	-21.05	7,464.61	-1,040.94	2,661.11	2,553.82	107.29	24.802		
20,100.00	12,501.00	17,538.50	10,005.75	133.90	129.63	-21.04	7,564.55	-1,042.04	2,663.20	2,554.71	108.49	24.548		
20,200.00	12,501.00	17,638.47	10,003.51	135.47	131.21	-21.02	7,664.50	-1,043.14	2,665.29	2,555.60	109.69	24.299		
20,300.00	12,501.00	17,738.45	10,001.28	137.03	132.79	-21.00	7,764.44	-1,044.24	2,667.38	2,556.49	110.88	24.056		
20,400.00	12,501.00	17,838.42	9,999.04	138.60	134.38	-20.99	7,864.39	-1,045.34	2,669.46	2,557.38	112.08	23.817		
20,500.00	12,501.00	17,938.40	9,996.81	140.17	135.97	-20.97	7,964.33	-1,046.44	2,671.55	2,558.27	113.28	23.583		
20,600.00	12,501.00	18,038.37	9,994.57	141.74	137.56	-20.95	8,064.27	-1,047.54	2,673.64	2,559.16	114.48	23.354		
20,700.00	12,501.00	18,138.35	9,992.34	143.31	139.15	-20.93	8,164.22	-1,048.64	2,675.73	2,560.04	115.68	23.130		
20,800.00	12,501.00	18,238.32	9,990.10	144.89	140.74	-20.92	8,264.16	-1,049.74	2,677.82	2,560.93	116.88	22.910		
20,900.00	12,501.00	18,338.30	9,987.87	146.46	142.34	-20.90	8,364.11	-1,050.84	2,679.91	2,561.82	118.09	22.694		
21,000.00	12,501.00	18,438.27	9,985.63	148.04	143.93	-20.88	8,464.05	-1,051.94	2,681.99	2,562.70	119.29	22.483		
21,100.00	12,501.00	18,538.25	9,983.40	149.62	145.53	-20.87	8,563.99	-1,053.04	2,684.08	2,563.59	120.50	22.275		
21,200.00	12,501.00	18,638.22	9,981.16	151.20	147.13	-20.85	8,663.94	-1,054.15	2,686.17	2,564.47	121.70	22.072		
21,300.00	12,501.00	18,738.20	9,978.93	152.78	148.73	-20.83	8,763.88	-1,055.25	2,688.26	2,565.36	122.90	21.873		
21,400.00	12,501.00	18,838.17	9,976.70	154.37	150.33	-20.82	8,863.83	-1,056.35	2,690.35	2,566.25	124.11	21.678		
21,500.00	12,501.00	18,938.15	9,974.46	155.95	151.93	-20.80	8,963.77	-1,057.45	2,692.44	2,567.13	125.31	21.486		
21,600.00	12,501.00	19,038.12	9,972.23	157.54	153.53	-20.78	9,063.71	-1,058.55	2,694.53	2,568.01	126.52	21.297		
21,700.00	12,501.00	19,138.10	9,969.99	159.13	155.14	-20.76	9,163.66	-1,059.65	2,696.62	2,568.90	127.73	21.113		
21,800.00	12,501.00	19,238.07	9,967.76	160.72	156.74	-20.75	9,263.60	-1,060.75	2,698.71	2,569.78	128.93	20.931		
21,900.00	12,501.00	19,338.05	9,965.52	162.31	158.35	-20.73	9,363.55	-1,061.85	2,700.81	2,570.66	130.14	20.753		
22,000.00	12,501.00	19,438.02	9,963.29	163.90	159.95	-20.71	9,463.49	-1,062.95	2,702.90	2,571.55	131.35	20.578		
22,100.00	12,501.00	19,538.00	9,961.05	165.50	161.56	-20.70	9,563.43	-1,064.05	2,704.99	2,572.43	132.56	20.406		
22,200.00	12,501.00	19,637.97	9,958.82	167.09	163.17	-20.68	9,663.38	-1,065.15	2,707.08	2,573.31	133.77	20.237		
22,300.00	12,501.00	19,737.95	9,956.58	168.69	164.78	-20.66	9,763.32	-1,066.25	2,709.17	2,574.20	134.98	20.072		
22,400.00	12,501.00	19,837.92	9,954.35	170.28	166.39	-20.65	9,863.27	-1,067.35	2,711.26	2,575.08	136.19	19.909		
22,500.00	12,501.00	19,937.90	9,952.11	171.88	168.00	-20.63	9,963.21	-1,068.46	2,713.36	2,575.96	137.39	19.749		
22,600.00	12,501.00	20,037.87	9,949.88	173.48	169.61	-20.61	10,063.15	-1,069.56	2,715.45	2,576.85	138.60	19.592		
22,635.57	12,501.00	20,073.44	9,949.08	174.05	170.19	-20.61	10,098.71	-1,069.95	2,716.19	2,577.16	139.03	19.536		
22,636.34	12,501.00	20,074.20	9,949.07	174.06	170.20	-20.61	10,099.47	-1,069.96	2,716.21	2,577.22	138.99	19.542		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 601H - 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	-59.09	74.08	-123.72	144.52					
100.00	100.00	90.50	90.50	0.13	0.13	-59.09	74.08	-123.72	144.20	144.02	0.18	804.079		
200.00	200.00	190.50	190.50	0.48	0.47	-59.09	74.08	-123.72	144.20	143.53	0.67	214.640		
300.00	300.00	290.50	290.50	0.84	0.82	-59.09	74.08	-123.72	144.20	143.02	1.18	122.337		
400.00	400.00	390.50	390.50	1.20	1.18	-59.09	74.08	-123.72	144.20	142.52	1.69	85.546		
500.00	500.00	490.50	490.50	1.56	1.54	-59.09	74.08	-123.72	144.20	142.01	2.19	65.767		
600.00	600.00	590.50	590.50	1.92	1.90	-59.09	74.08	-123.72	144.20	141.50	2.70	53.417		
700.00	700.00	690.50	690.50	2.28	2.26	-59.09	74.08	-123.72	144.20	141.00	3.21	44.972		
800.00	800.00	790.50	790.50	2.63	2.62	-59.09	74.08	-123.72	144.20	140.49	3.71	38.832		
900.00	900.00	890.50	890.50	2.99	2.98	-59.09	74.08	-123.72	144.20	139.98	4.22	34.168		
1,000.00	1,000.00	990.50	990.50	3.35	3.33	-59.09	74.08	-123.72	144.20	139.48	4.73	30.504		
1,100.00	1,100.00	1,090.50	1,090.50	3.71	3.69	-59.09	74.08	-123.72	144.20	138.97	5.23	27.549		
1,200.00	1,200.00	1,190.50	1,190.50	4.07	4.05	-59.09	74.08	-123.72	144.20	138.46	5.74	25.117		
1,300.00	1,300.00	1,290.50	1,290.50	4.43	4.41	-59.09	74.08	-123.72	144.20	137.95	6.25	23.079		
1,400.00	1,400.00	1,390.50	1,390.50	4.79	4.77	-59.09	74.08	-123.72	144.20	137.45	6.76	21.347		
1,500.00	1,500.00	1,490.50	1,490.50	5.14	5.13	-59.09	74.08	-123.72	144.20	136.94	7.26	19.857 CC		
1,600.00	1,599.99	1,590.49	1,590.49	5.48	5.48	107.50	74.08	-123.72	144.59	136.83	7.76	18.642 ES		
1,700.00	1,699.91	1,690.41	1,690.41	5.81	5.84	108.95	74.08	-123.72	145.82	137.58	8.24	17.697		
1,800.00	1,799.69	1,790.19	1,790.19	6.14	6.20	111.31	74.08	-123.72	148.08	139.35	8.73	16.968		
1,900.00	1,899.27	1,889.77	1,889.77	6.48	6.56	114.47	74.08	-123.72	151.65	142.43	9.22	16.454		
2,000.00	1,998.57	1,989.07	1,989.07	6.82	6.91	118.29	74.08	-123.72	156.91	147.20	9.71	16.158		
2,033.45	2,031.72	2,022.22	2,022.22	6.94	7.03	119.68	74.08	-123.72	159.11	149.23	9.88	16.109		
2,100.00	2,097.62	2,088.12	2,088.12	7.17	7.27	122.48	74.08	-123.72	163.93	153.72	10.21	16.059		
2,200.00	2,196.65	2,187.15	2,187.15	7.53	7.62	126.37	74.08	-123.72	171.85	161.15	10.71	16.050		
2,300.00	2,295.67	2,286.17	2,286.17	7.90	7.98	129.91	74.08	-123.72	180.51	169.30	11.21	16.104		
2,400.00	2,394.70	2,385.20	2,385.20	8.27	8.33	133.12	74.08	-123.72	189.79	178.08	11.71	16.206		
2,500.00	2,493.73	2,484.23	2,484.23	8.65	8.69	136.02	74.08	-123.72	199.61	187.40	12.21	16.344		
2,600.00	2,592.75	2,583.25	2,583.25	9.03	9.04	138.65	74.08	-123.72	209.89	197.18	12.72	16.506		
2,700.00	2,691.78	2,682.28	2,682.28	9.42	9.40	141.03	74.08	-123.72	220.58	207.36	13.22	16.686		
2,800.00	2,790.80	2,781.30	2,781.30	9.80	9.75	143.19	74.08	-123.72	231.61	217.88	13.72	16.877		
2,900.00	2,889.83	2,880.33	2,880.33	10.20	10.11	145.15	74.08	-123.72	242.93	228.71	14.23	17.076		
2,979.22	2,968.28	2,958.78	2,958.78	10.51	10.39	146.58	74.08	-123.72	252.09	237.46	14.63	17.237		
3,000.00	2,988.86	2,979.36	2,979.36	10.59	10.46	146.95	74.08	-123.72	254.47	239.74	14.73	17.276		
3,100.00	3,088.13	3,078.63	3,078.63	10.98	10.82	148.46	74.08	-123.72	264.70	249.47	15.23	17.377		
3,200.00	3,187.68	3,178.18	3,178.18	11.36	11.18	149.56	74.08	-123.72	272.84	257.11	15.74	17.340		
3,300.00	3,287.44	3,277.94	3,277.94	11.73	11.53	150.32	74.08	-123.72	278.79	262.56	16.24	17.170		
3,400.00	3,387.34	3,377.84	3,377.84	12.08	11.89	150.77	74.08	-123.72	282.50	265.76	16.74	16.878		
3,500.00	3,487.33	3,477.39	3,477.38	12.43	12.24	150.79	73.93	-124.49	283.99	266.76	17.23	16.483		
3,512.67	3,500.00	3,489.98	3,489.97	12.47	12.28	-15.37	73.88	-124.76	284.03	266.74	17.29	16.426		
3,600.00	3,587.33	3,576.72	3,576.65	12.76	12.58	-15.97	73.31	-127.73	284.29	266.58	17.71	16.050		
3,700.00	3,687.33	3,675.81	3,675.57	13.10	12.92	-17.15	72.20	-133.50	284.88	266.68	18.20	15.657		
3,800.00	3,787.33	3,774.53	3,773.93	13.43	13.25	-18.82	70.62	-141.74	285.94	267.26	18.68	15.307		
3,900.00	3,887.33	3,872.84	3,871.63	13.77	13.60	-20.97	68.57	-152.42	287.69	268.52	19.17	15.009		
4,000.00	3,987.33	3,972.09	3,970.15	14.11	13.94	-23.32	66.30	-164.30	290.09	270.43	19.66	14.754		
4,100.00	4,087.33	4,071.35	4,068.66	14.44	14.29	-25.63	64.02	-176.17	292.98	272.82	20.16	14.534		
4,200.00	4,187.33	4,170.60	4,167.18	14.78	14.65	-27.89	61.74	-188.05	296.34	275.68	20.65	14.347		
4,300.00	4,287.33	4,269.86	4,265.69	15.12	15.00	-30.10	59.46	-199.93	300.16	279.01	21.15	14.190		
4,400.00	4,387.33	4,369.11	4,364.21	15.46	15.36	-32.26	57.18	-211.80	304.42	282.77	21.65	14.060		
4,500.00	4,487.33	4,468.37	4,462.72	15.81	15.72	-34.35	54.90	-223.68	309.10	286.95	22.15	13.954		
4,600.00	4,587.33	4,567.62	4,561.24	16.15	16.08	-36.37	52.62	-235.56	314.18	291.53	22.65	13.870		
4,700.00	4,687.33	4,666.88	4,659.75	16.49	16.45	-38.33	50.35	-247.43	319.65	296.50	23.15	13.807		
4,800.00	4,787.33	4,766.13	4,758.27	16.83	16.82	-40.22	48.07	-259.31	325.49	301.83	23.65	13.761		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 601H - 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		
4,900.00	4,887.33	4,865.39	4,856.79	17.18	17.19	-42.05	45.79	-271.19	331.66	307.51	24.15	13.732		
5,000.00	4,987.33	4,964.64	4,955.30	17.52	17.56	-43.81	43.51	-283.06	338.17	313.51	24.65	13.717		
5,100.00	5,087.33	5,063.90	5,053.82	17.87	17.93	-45.50	41.23	-294.94	344.98	319.82	25.15	13.714		
5,200.00	5,187.33	5,163.15	5,152.33	18.21	18.30	-47.12	38.95	-306.82	352.08	326.43	25.66	13.724		
5,300.00	5,287.33	5,262.41	5,250.85	18.56	18.68	-48.68	36.67	-318.69	359.46	333.30	26.16	13.743		
5,400.00	5,387.33	5,361.66	5,349.36	18.91	19.05	-50.17	34.40	-330.57	367.09	340.43	26.66	13.771		
5,500.00	5,487.33	5,460.92	5,447.88	19.26	19.43	-51.61	32.12	-342.45	374.96	347.80	27.16	13.808		
5,600.00	5,587.33	5,560.17	5,546.39	19.60	19.81	-52.98	29.84	-354.33	383.06	355.40	27.66	13.851		
5,700.00	5,687.33	5,659.43	5,644.91	19.95	20.19	-54.30	27.56	-366.20	391.37	363.21	28.16	13.900		
5,800.00	5,787.33	5,758.68	5,743.42	20.30	20.57	-55.56	25.28	-378.08	399.87	371.22	28.66	13.954		
5,900.00	5,887.33	5,857.94	5,841.94	20.65	20.95	-56.77	23.00	-389.96	408.57	379.41	29.16	14.013		
6,000.00	5,987.33	5,957.19	5,940.46	21.00	21.33	-57.93	20.73	-401.83	417.44	387.78	29.66	14.076		
6,100.00	6,087.33	6,056.45	6,038.97	21.35	21.71	-59.05	18.45	-413.71	426.47	396.31	30.16	14.142		
6,200.00	6,187.33	6,155.70	6,137.49	21.70	22.10	-60.11	16.17	-425.59	435.66	405.00	30.66	14.211		
6,300.00	6,287.33	6,254.96	6,236.00	22.05	22.48	-61.13	13.89	-437.46	444.99	413.83	31.16	14.282		
6,400.00	6,387.33	6,354.21	6,334.52	22.40	22.87	-62.11	11.61	-449.34	454.45	422.80	31.66	14.356		
6,500.00	6,487.33	6,453.47	6,433.03	22.75	23.25	-63.05	9.33	-461.22	464.04	431.89	32.16	14.431		
6,600.00	6,587.33	6,552.72	6,531.55	23.10	23.64	-63.95	7.05	-473.09	473.76	441.10	32.66	14.507		
6,700.00	6,687.33	6,651.98	6,630.06	23.45	24.03	-64.82	4.78	-484.97	483.58	450.42	33.16	14.584		
6,800.00	6,787.33	6,751.23	6,728.58	23.80	24.42	-65.65	2.50	-496.85	493.51	459.85	33.66	14.662		
6,900.00	6,887.33	6,850.49	6,827.09	24.15	24.80	-66.44	0.22	-508.72	503.53	469.38	34.16	14.741		
7,000.00	6,987.33	6,949.74	6,925.61	24.50	25.19	-67.21	-2.06	-520.60	513.66	479.00	34.66	14.820		
7,100.00	7,087.33	7,049.00	7,024.13	24.86	25.58	-67.95	-4.34	-532.48	523.86	488.70	35.16	14.899		
7,200.00	7,187.33	7,148.25	7,122.64	25.21	25.97	-68.66	-6.62	-544.35	534.16	498.49	35.66	14.979		
7,300.00	7,287.33	7,247.51	7,221.16	25.56	26.36	-69.34	-8.90	-556.23	544.53	508.36	36.16	15.058		
7,400.00	7,387.33	7,346.76	7,319.67	25.91	26.76	-69.99	-11.17	-568.11	554.97	518.31	36.66	15.137		
7,500.00	7,487.33	7,446.02	7,418.19	26.26	27.15	-70.63	-13.45	-579.98	565.48	528.32	37.17	15.215		
7,600.00	7,587.33	7,545.27	7,516.70	26.62	27.54	-71.23	-15.73	-591.86	576.06	538.39	37.67	15.293		
7,700.00	7,687.33	7,644.53	7,615.22	26.97	27.93	-71.82	-18.01	-603.74	586.70	548.53	38.17	15.371		
7,800.00	7,787.33	7,743.78	7,713.73	27.32	28.32	-72.39	-20.29	-615.61	597.40	558.73	38.67	15.448		
7,900.00	7,887.33	7,843.04	7,812.25	27.68	28.72	-72.93	-22.57	-627.49	608.16	568.99	39.17	15.525		
8,000.00	7,987.33	7,942.29	7,910.77	28.03	29.11	-73.46	-24.85	-639.37	618.97	579.29	39.68	15.601		
8,100.00	8,087.33	8,041.55	8,009.28	28.38	29.50	-73.97	-27.12	-651.24	629.83	589.65	40.18	15.676		
8,200.00	8,187.33	8,140.80	8,107.80	28.74	29.90	-74.46	-29.40	-663.12	640.73	600.05	40.68	15.750		
8,300.00	8,287.33	8,240.06	8,206.31	29.09	30.29	-74.94	-31.68	-675.00	651.69	610.50	41.18	15.824		
8,400.00	8,387.33	8,339.31	8,304.83	29.44	30.69	-75.40	-33.96	-686.88	662.68	620.99	41.69	15.897		
8,500.00	8,487.33	8,438.57	8,403.34	29.80	31.08	-75.84	-36.24	-698.75	673.72	631.53	42.19	15.969		
8,600.00	8,587.33	8,537.82	8,501.86	30.15	31.48	-76.27	-38.52	-710.63	684.79	642.10	42.69	16.040		
8,700.00	8,687.33	8,637.07	8,600.37	30.51	31.87	-76.69	-40.79	-722.51	695.90	652.71	43.20	16.110		
8,800.00	8,787.33	8,736.33	8,698.89	30.86	32.27	-77.09	-43.07	-734.38	707.05	663.35	43.70	16.180		
8,900.00	8,887.33	8,835.58	8,797.40	31.21	32.67	-77.49	-45.35	-746.26	718.23	674.03	44.20	16.248		
9,000.00	8,987.33	8,934.84	8,895.92	31.57	33.06	-77.87	-47.63	-758.14	729.44	684.74	44.71	16.316		
9,100.00	9,087.33	9,034.09	8,994.44	31.92	33.46	-78.23	-49.91	-770.01	740.69	695.48	45.21	16.382		
9,200.00	9,187.33	9,133.35	9,092.95	32.28	33.86	-78.59	-52.19	-781.89	751.96	706.25	45.72	16.448		
9,300.00	9,287.33	9,232.60	9,191.47	32.63	34.25	-78.94	-54.47	-793.77	763.26	717.04	46.22	16.513		
9,400.00	9,387.33	9,331.86	9,289.98	32.99	34.65	-79.27	-56.74	-805.64	774.59	727.87	46.73	16.577		
9,500.00	9,487.33	9,431.11	9,388.50	33.34	35.05	-79.60	-59.02	-817.52	785.94	738.71	47.23	16.641		
9,600.00	9,587.33	9,530.37	9,487.01	33.70	35.45	-79.92	-61.30	-829.40	797.32	749.59	47.74	16.703		
9,700.00	9,687.33	9,629.62	9,585.53	34.05	35.84	-80.22	-63.58	-841.27	808.72	760.48	48.24	16.765		
9,800.00	9,787.33	9,728.88	9,684.04	34.41	36.24	-80.52	-65.86	-853.15	820.15	771.40	48.75	16.825		
9,900.00	9,887.33	9,828.13	9,782.56	34.76	36.64	-80.82	-68.14	-865.03	831.59	782.34	49.25	16.885		
10,000.00	9,987.33	9,927.39	9,881.07	35.12	37.04	-81.10	-70.42	-876.90	843.06	793.30	49.76	16.944		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 601H - 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		
10,100.00	10,087.33	10,026.64	9,979.59	35.47	37.44	-81.37	-72.69	-888.78	854.55	804.28	50.26	17.002		
10,200.00	10,187.33	10,125.90	10,078.11	35.83	37.83	-81.64	-74.97	-900.66	866.05	815.28	50.77	17.059		
10,300.00	10,287.33	10,225.15	10,176.62	36.18	38.23	-81.91	-77.25	-912.53	877.57	826.30	51.27	17.116		
10,400.00	10,387.33	10,324.41	10,275.14	36.54	38.63	-82.16	-79.53	-924.41	889.12	837.34	51.78	17.171		
10,500.00	10,487.33	10,439.36	10,389.31	36.89	39.09	-82.43	-82.05	-937.54	900.20	847.83	52.37	17.189		
10,600.00	10,587.33	10,567.89	10,517.34	37.25	39.58	-82.66	-84.15	-948.50	908.45	855.44	53.00	17.139		
10,700.00	10,687.33	10,697.02	10,646.29	37.61	40.05	-82.79	-85.45	-955.25	913.51	859.91	53.60	17.044		
10,800.00	10,787.33	10,826.48	10,775.71	37.96	40.50	-82.84	-85.92	-957.71	915.35	861.20	54.15	16.905		
10,900.00	10,887.33	10,928.59	10,877.83	38.32	40.83	-82.84	-85.92	-957.72	915.36	860.71	54.64	16.752		
11,000.00	10,987.33	11,028.59	10,977.83	38.67	41.16	-82.84	-85.92	-957.72	915.36	860.22	55.13	16.602		
11,100.00	11,087.33	11,128.59	11,077.83	39.03	41.49	-82.84	-85.92	-957.72	915.36	859.73	55.63	16.455		
11,200.00	11,187.33	11,228.59	11,177.83	39.38	41.82	-82.84	-85.92	-957.72	915.36	859.24	56.12	16.311		
11,300.00	11,287.33	11,328.59	11,277.83	39.74	42.15	-82.84	-85.92	-957.72	915.36	858.74	56.61	16.169		
11,309.84	11,297.17	11,338.43	11,287.67	39.77	42.18	-82.84	-85.92	-957.72	915.36	858.70	56.66	16.155		
11,400.00	11,387.33	11,419.11	11,368.30	40.10	42.45	-82.74	-84.28	-957.74	915.63	858.54	57.09	16.037		
11,500.00	11,487.33	11,500.00	11,448.26	40.45	42.70	-82.01	-72.50	-957.87	917.75	860.19	57.55	15.946		
11,600.00	11,587.33	11,575.13	11,520.37	40.81	42.92	-80.72	-51.59	-958.10	922.43	864.46	57.97	15.913		
11,700.00	11,687.33	11,650.00	11,588.88	41.16	43.12	-78.89	-21.54	-958.43	930.54	872.21	58.33	15.952		
11,800.00	11,787.33	11,700.00	11,632.20	41.52	43.23	-77.39	3.39	-958.70	942.99	884.51	58.48	16.124		
11,900.00	11,887.33	11,759.95	11,681.03	41.88	43.35	-75.33	38.12	-959.09	960.61	902.05	58.57	16.402		
11,940.71	11,928.04	11,779.92	11,696.46	42.02	43.39	-74.59	50.80	-959.23	969.44	910.91	58.53	16.563		
11,950.00	11,937.33	11,784.34	11,699.82	42.05	43.40	-77.71	53.68	-959.26	971.58	913.06	58.52	16.603		
12,000.00	11,987.22	11,800.00	11,711.52	42.23	43.43	-75.95	64.08	-959.37	983.47	925.11	58.35	16.854		
12,050.00	12,036.67	11,832.16	11,734.64	42.40	43.48	-73.66	86.43	-959.62	995.62	937.32	58.29	17.080		
12,100.00	12,085.28	11,850.00	11,746.91	42.56	43.51	-71.90	99.38	-959.76	1,008.04	949.97	58.07	17.359		
12,150.00	12,132.70	11,880.19	11,766.74	42.71	43.55	-69.86	122.14	-960.01	1,020.39	962.45	57.93	17.613		
12,200.00	12,178.57	11,900.00	11,779.09	42.86	43.58	-68.20	137.62	-960.18	1,032.61	974.93	57.68	17.902		
12,250.00	12,222.52	11,928.38	11,795.83	43.00	43.61	-66.47	160.53	-960.44	1,044.46	986.96	57.50	18.166		
12,300.00	12,264.24	11,950.00	11,807.82	43.13	43.64	-65.00	178.53	-960.63	1,055.85	998.61	57.25	18.444		
12,350.00	12,303.40	11,976.68	11,821.65	43.26	43.67	-63.58	201.34	-960.89	1,066.63	1,009.57	57.05	18.695		
12,400.00	12,339.70	12,000.00	11,832.87	43.38	43.69	-62.35	221.78	-961.11	1,076.68	1,019.85	56.83	18.945		
12,450.00	12,372.86	12,025.06	11,843.98	43.50	43.72	-61.25	244.23	-961.36	1,085.91	1,029.26	56.65	19.168		
12,500.00	12,402.64	12,050.00	11,854.05	43.62	43.74	-60.31	267.05	-961.61	1,094.22	1,037.73	56.49	19.369		
12,550.00	12,428.81	12,073.48	11,862.62	43.74	43.77	-59.52	288.91	-961.85	1,101.55	1,045.19	56.36	19.546		
12,600.00	12,451.17	12,100.00	11,871.21	43.85	43.79	-58.87	313.99	-962.13	1,107.84	1,051.55	56.29	19.683		
12,650.00	12,469.55	12,121.93	11,877.43	43.97	43.82	-58.39	335.02	-962.36	1,113.02	1,056.79	56.23	19.795		
12,700.00	12,483.81	12,150.00	11,884.21	44.09	43.85	-58.05	362.25	-962.66	1,117.08	1,060.82	56.26	19.857		
12,750.00	12,493.83	12,170.38	11,888.29	44.21	43.88	-57.85	382.22	-962.88	1,119.96	1,063.67	56.29	19.895		
12,800.00	12,499.55	12,200.00	11,892.96	44.33	43.92	-57.83	411.46	-963.20	1,121.71	1,065.28	56.43	19.877		
12,840.71	12,501.00	12,214.33	11,894.67	44.42	43.94	-57.87	425.68	-963.36	1,122.23	1,065.68	56.55	19.846		
12,900.00	12,501.00	12,250.00	11,897.38	44.57	44.00	-58.05	461.25	-963.75	1,122.78	1,065.99	56.79	19.772		
13,000.00	12,501.00	12,293.21	11,897.70	44.88	44.09	-58.12	504.44	-964.23	1,124.87	1,067.73	57.14	19.686		
13,047.21	12,501.00	12,340.40	11,896.42	45.04	44.20	-58.09	551.62	-964.75	1,125.88	1,068.54	57.34	19.635		
13,100.00	12,501.00	12,393.17	11,894.99	45.24	44.35	-58.03	604.36	-965.33	1,126.64	1,069.07	57.57	19.570		
13,200.00	12,501.00	12,493.13	11,892.28	45.66	44.69	-57.91	704.28	-966.43	1,128.08	1,070.02	58.06	19.429		
13,300.00	12,501.00	12,593.10	11,889.57	46.14	45.10	-57.79	804.20	-967.53	1,129.52	1,070.90	58.62	19.268		
13,400.00	12,501.00	12,693.06	11,886.86	46.67	45.58	-57.68	904.12	-968.63	1,130.97	1,071.73	59.24	19.090		
13,500.00	12,501.00	12,793.02	11,884.15	47.25	46.12	-57.56	1,004.04	-969.73	1,132.43	1,072.50	59.93	18.897		
13,600.00	12,501.00	12,892.99	11,881.44	47.88	46.72	-57.45	1,103.96	-970.83	1,133.89	1,073.22	60.67	18.689		
13,700.00	12,501.00	12,992.95	11,878.73	48.56	47.37	-57.33	1,203.88	-971.93	1,135.35	1,073.88	61.47	18.470		
13,800.00	12,501.00	13,092.91	11,876.02	49.29	48.07	-57.22	1,303.80	-973.03	1,136.82	1,074.50	62.32	18.241		
13,900.00	12,501.00	13,192.88	11,873.31	50.06	48.82	-57.10	1,403.72	-974.13	1,138.29	1,075.07	63.22	18.004		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 601H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.00	12,501.00	13,292.84	11,870.60	50.87	49.61	-56.99	1,503.65	-975.24	1,139.77	1,075.59	64.18	17.760		
14,100.00	12,501.00	13,392.80	11,867.89	51.72	50.44	-56.87	1,603.57	-976.34	1,141.25	1,076.07	65.17	17.511		
14,200.00	12,501.00	13,492.77	11,865.18	52.61	51.31	-56.76	1,703.49	-977.44	1,142.73	1,076.52	66.22	17.258		
14,300.00	12,501.00	13,592.73	11,862.47	53.54	52.22	-56.65	1,803.41	-978.54	1,144.22	1,076.92	67.30	17.002		
14,400.00	12,501.00	13,692.69	11,859.76	54.50	53.16	-56.53	1,903.33	-979.64	1,145.72	1,077.30	68.42	16.745		
14,500.00	12,501.00	13,792.66	11,857.05	55.50	54.14	-56.42	2,003.25	-980.74	1,147.22	1,077.64	69.58	16.489		
14,600.00	12,501.00	13,892.62	11,854.35	56.52	55.15	-56.31	2,103.17	-981.84	1,148.72	1,077.95	70.77	16.232		
14,700.00	12,501.00	13,992.58	11,851.64	57.57	56.19	-56.20	2,203.09	-982.94	1,150.23	1,078.24	71.99	15.977		
14,800.00	12,501.00	14,092.55	11,848.93	58.66	57.26	-56.08	2,303.01	-984.04	1,151.74	1,078.50	73.25	15.724		
14,900.00	12,501.00	14,192.51	11,846.22	59.76	58.36	-55.97	2,402.93	-985.15	1,153.26	1,078.73	74.53	15.474		
15,000.00	12,501.00	14,292.47	11,843.51	60.90	59.48	-55.86	2,502.85	-986.25	1,154.78	1,078.94	75.84	15.227		
15,100.00	12,501.00	14,392.44	11,840.80	62.05	60.63	-55.75	2,602.77	-987.35	1,156.30	1,079.13	77.17	14.984		
15,200.00	12,501.00	14,492.40	11,838.09	63.23	61.80	-55.64	2,702.69	-988.45	1,157.83	1,079.31	78.53	14.745		
15,300.00	12,501.00	14,592.36	11,835.38	64.43	62.99	-55.53	2,802.61	-989.55	1,159.37	1,079.46	79.90	14.510		
15,400.00	12,501.00	14,692.33	11,832.67	65.65	64.20	-55.42	2,902.53	-990.65	1,160.91	1,079.60	81.30	14.279		
15,500.00	12,501.00	14,792.29	11,829.96	66.89	65.43	-55.31	3,002.45	-991.75	1,162.45	1,079.73	82.72	14.053		
15,600.00	12,501.00	14,892.25	11,827.25	68.14	66.68	-55.20	3,102.37	-992.85	1,164.00	1,079.84	84.15	13.832		
15,700.00	12,501.00	14,992.22	11,824.54	69.41	67.95	-55.09	3,202.29	-993.95	1,165.55	1,079.94	85.61	13.615		
15,800.00	12,501.00	15,092.18	11,821.83	70.70	69.23	-54.98	3,302.21	-995.05	1,167.10	1,080.03	87.07	13.404		
15,900.00	12,501.00	15,192.14	11,819.12	72.00	70.53	-54.87	3,402.13	-996.16	1,168.66	1,080.11	88.55	13.198		
16,000.00	12,501.00	15,292.11	11,816.41	73.32	71.84	-54.76	3,502.05	-997.26	1,170.23	1,080.18	90.04	12.996		
16,100.00	12,501.00	15,392.07	11,813.70	74.65	73.16	-54.66	3,601.97	-998.36	1,171.80	1,080.25	91.55	12.800		
16,200.00	12,501.00	15,492.03	11,810.99	75.99	74.50	-54.55	3,701.90	-999.46	1,173.37	1,080.30	93.07	12.608		
16,300.00	12,501.00	15,591.99	11,808.29	77.35	75.85	-54.44	3,801.82	-1,000.56	1,174.94	1,080.35	94.59	12.421		
16,400.00	12,501.00	15,691.96	11,805.58	78.72	77.22	-54.33	3,901.74	-1,001.66	1,176.53	1,080.40	96.13	12.239		
16,500.00	12,501.00	15,791.92	11,802.87	80.09	78.59	-54.23	4,001.66	-1,002.76	1,178.11	1,080.43	97.68	12.061		
16,600.00	12,501.00	15,891.88	11,800.16	81.48	79.97	-54.12	4,101.58	-1,003.86	1,179.70	1,080.47	99.23	11.889		
16,700.00	12,501.00	15,991.85	11,797.45	82.88	81.37	-54.01	4,201.50	-1,004.96	1,181.29	1,080.50	100.79	11.720		
16,800.00	12,501.00	16,091.81	11,794.74	84.28	82.77	-53.91	4,301.42	-1,006.07	1,182.89	1,080.53	102.36	11.556		
16,900.00	12,501.00	16,191.77	11,792.03	85.70	84.19	-53.80	4,401.34	-1,007.17	1,184.49	1,080.56	103.93	11.397		
17,000.00	12,501.00	16,291.74	11,789.32	87.12	85.61	-53.69	4,501.26	-1,008.27	1,186.09	1,080.58	105.51	11.241		
17,100.00	12,501.00	16,391.70	11,786.61	88.55	87.04	-53.59	4,601.18	-1,009.37	1,187.70	1,080.61	107.10	11.090		
17,200.00	12,501.00	16,491.66	11,783.90	89.99	88.47	-53.48	4,701.10	-1,010.47	1,189.32	1,080.63	108.69	10.942		
17,300.00	12,501.00	16,591.63	11,781.19	91.44	89.92	-53.38	4,801.02	-1,011.57	1,190.93	1,080.65	110.28	10.799		
17,400.00	12,501.00	16,691.59	11,778.48	92.89	91.37	-53.28	4,900.94	-1,012.67	1,192.55	1,080.67	111.88	10.659		
17,500.00	12,501.00	16,791.55	11,775.77	94.35	92.83	-53.17	5,000.86	-1,013.77	1,194.18	1,080.70	113.48	10.523		
17,600.00	12,501.00	16,891.52	11,773.06	95.82	94.29	-53.07	5,100.78	-1,014.87	1,195.81	1,080.72	115.09	10.390		
17,700.00	12,501.00	16,991.48	11,770.35	97.29	95.76	-52.96	5,200.70	-1,015.97	1,197.44	1,080.74	116.70	10.261		
17,800.00	12,501.00	17,091.44	11,767.64	98.77	97.24	-52.86	5,300.62	-1,017.08	1,199.08	1,080.77	118.31	10.135		
17,900.00	12,501.00	17,191.41	11,764.94	100.25	98.72	-52.76	5,400.54	-1,018.18	1,200.72	1,080.80	119.92	10.013		
18,000.00	12,501.00	17,291.37	11,762.23	101.74	100.21	-52.65	5,500.46	-1,019.28	1,202.36	1,080.83	121.54	9.893		
18,100.00	12,501.00	17,391.33	11,759.52	103.24	101.70	-52.55	5,600.38	-1,020.38	1,204.01	1,080.86	123.15	9.777		
18,200.00	12,501.00	17,491.30	11,756.81	104.73	103.20	-52.45	5,700.30	-1,021.48	1,205.66	1,080.89	124.77	9.663		
18,300.00	12,501.00	17,591.26	11,754.10	106.24	104.70	-52.35	5,800.23	-1,022.58	1,207.32	1,080.93	126.39	9.552		
18,400.00	12,501.00	17,691.22	11,751.39	107.75	106.21	-52.25	5,900.15	-1,023.68	1,208.98	1,080.97	128.01	9.445		
18,500.00	12,501.00	17,791.19	11,748.68	109.26	107.72	-52.15	6,000.07	-1,024.78	1,210.64	1,081.01	129.63	9.339		
18,600.00	12,501.00	17,891.15	11,745.97	110.77	109.24	-52.04	6,099.99	-1,025.88	1,212.31	1,081.06	131.25	9.237		
18,700.00	12,501.00	17,991.11	11,743.26	112.29	110.76	-51.94	6,199.91	-1,026.99	1,213.98	1,081.11	132.87	9.137		
18,800.00	12,501.00	18,091.08	11,740.55	113.82	112.28	-51.84	6,299.83	-1,028.09	1,215.66	1,081.17	134.49	9.039		
18,900.00	12,501.00	18,191.04	11,737.84	115.34	113.81	-51.74	6,399.75	-1,029.19	1,217.34	1,081.23	136.11	8.944		
19,000.00	12,501.00	18,291.00	11,735.13	116.87	115.34	-51.64	6,499.67	-1,030.29	1,219.02	1,081.29	137.73	8.851		
19,100.00	12,501.00	18,390.97	11,732.42	118.41	116.87	-51.54	6,599.59	-1,031.39	1,220.70	1,081.35	139.35	8.760		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 601H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.00	12,501.00	18,490.93	11,729.71	119.94	118.41	-51.44	6,699.51	-1,032.49	1,222.39	1,081.43	140.97	8.671		
19,300.00	12,501.00	18,590.89	11,727.00	121.48	119.95	-51.34	6,799.43	-1,033.59	1,224.09	1,081.50	142.59	8.585		
19,400.00	12,501.00	18,690.86	11,724.29	123.03	121.49	-51.25	6,899.35	-1,034.69	1,225.78	1,081.58	144.20	8.500		
19,500.00	12,501.00	18,790.82	11,721.58	124.57	123.03	-51.15	6,999.27	-1,035.79	1,227.48	1,081.67	145.82	8.418		
19,600.00	12,501.00	18,890.78	11,718.88	126.12	124.58	-51.05	7,099.19	-1,036.89	1,229.19	1,081.76	147.43	8.337		
19,700.00	12,501.00	18,990.75	11,716.17	127.67	126.13	-50.95	7,199.11	-1,038.00	1,230.90	1,081.85	149.05	8.259		
19,800.00	12,501.00	19,090.71	11,713.46	129.23	127.69	-50.85	7,299.03	-1,039.10	1,232.61	1,081.95	150.66	8.182		
19,900.00	12,501.00	19,190.67	11,710.75	130.78	129.24	-50.76	7,398.95	-1,040.20	1,234.32	1,082.06	152.27	8.106		
20,000.00	12,501.00	19,290.64	11,708.04	132.34	130.80	-50.66	7,498.87	-1,041.30	1,236.04	1,082.17	153.87	8.033		
20,100.00	12,501.00	19,390.60	11,705.33	133.90	132.36	-50.56	7,598.79	-1,042.40	1,237.76	1,082.28	155.48	7.961		
20,200.00	12,501.00	19,490.56	11,702.62	135.47	133.92	-50.46	7,698.71	-1,043.50	1,239.49	1,082.40	157.09	7.891		
20,300.00	12,501.00	19,590.53	11,699.91	137.03	135.49	-50.37	7,798.63	-1,044.60	1,241.22	1,082.53	158.69	7.822		
20,400.00	12,501.00	19,690.49	11,697.20	138.60	137.06	-50.27	7,898.56	-1,045.70	1,242.95	1,082.66	160.29	7.754		
20,500.00	12,501.00	19,790.45	11,694.49	140.17	138.63	-50.18	7,998.48	-1,046.80	1,244.69	1,082.80	161.89	7.689		
20,600.00	12,501.00	19,890.42	11,691.78	141.74	140.20	-50.08	8,098.40	-1,047.91	1,246.43	1,082.94	163.48	7.624		
20,700.00	12,501.00	19,990.38	11,689.07	143.31	141.77	-49.99	8,198.32	-1,049.01	1,248.17	1,083.09	165.08	7.561		
20,800.00	12,501.00	20,090.34	11,686.36	144.89	143.34	-49.89	8,298.24	-1,050.11	1,249.92	1,083.25	166.67	7.499		
20,900.00	12,501.00	20,190.31	11,683.65	146.46	144.92	-49.80	8,398.16	-1,051.21	1,251.67	1,083.41	168.26	7.439		
21,000.00	12,501.00	20,290.27	11,680.94	148.04	146.50	-49.70	8,498.08	-1,052.31	1,253.42	1,083.58	169.85	7.380		
21,100.00	12,501.00	20,390.23	11,678.23	149.62	148.08	-49.61	8,598.00	-1,053.41	1,255.18	1,083.75	171.43	7.322		
21,200.00	12,501.00	20,490.19	11,675.52	151.20	149.66	-49.51	8,697.92	-1,054.51	1,256.94	1,083.93	173.01	7.265		
21,300.00	12,501.00	20,590.16	11,672.82	152.78	151.24	-49.42	8,797.84	-1,055.61	1,258.70	1,084.11	174.59	7.209		
21,400.00	12,501.00	20,690.12	11,670.11	154.37	152.83	-49.33	8,897.76	-1,056.71	1,260.47	1,084.30	176.17	7.155		
21,500.00	12,501.00	20,790.08	11,667.40	155.95	154.41	-49.23	8,997.68	-1,057.81	1,262.24	1,084.50	177.74	7.102		
21,600.00	12,501.00	20,890.05	11,664.69	157.54	156.00	-49.14	9,097.60	-1,058.92	1,264.01	1,084.70	179.31	7.049		
21,700.00	12,501.00	20,990.01	11,661.98	159.13	157.59	-49.05	9,197.52	-1,060.02	1,265.79	1,084.91	180.88	6.998		
21,800.00	12,501.00	21,089.97	11,659.27	160.72	159.18	-48.95	9,297.44	-1,061.12	1,267.57	1,085.13	182.44	6.948		
21,900.00	12,501.00	21,189.94	11,656.56	162.31	160.77	-48.86	9,397.36	-1,062.22	1,269.35	1,085.35	184.01	6.898		
22,000.00	12,501.00	21,289.90	11,653.85	163.90	162.36	-48.77	9,497.28	-1,063.32	1,271.14	1,085.57	185.57	6.850		
22,100.00	12,501.00	21,389.86	11,651.14	165.50	163.95	-48.68	9,597.20	-1,064.42	1,272.93	1,085.81	187.12	6.803		
22,200.00	12,501.00	21,489.83	11,648.43	167.09	165.55	-48.59	9,697.12	-1,065.52	1,274.72	1,086.05	188.68	6.756		
22,300.00	12,501.00	21,589.79	11,645.72	168.69	167.14	-48.50	9,797.04	-1,066.62	1,276.52	1,086.29	190.23	6.710		
22,400.00	12,501.00	21,689.75	11,643.01	170.28	168.74	-48.41	9,896.96	-1,067.72	1,278.32	1,086.54	191.78	6.666		
22,500.00	12,501.00	21,789.72	11,640.30	171.88	170.34	-48.31	9,996.89	-1,068.83	1,280.12	1,086.80	193.32	6.622		
22,600.00	12,501.00	21,889.68	11,637.59	173.48	171.94	-48.22	10,096.81	-1,069.93	1,281.93	1,087.07	194.86	6.579		
22,635.57	12,501.00	21,925.24	11,636.63	174.05	172.51	-48.19	10,132.35	-1,070.32	1,282.57	1,087.16	195.41	6.564 SF		
22,636.34	12,501.00	21,926.00	11,636.61	174.06	172.52	-48.19	10,133.11	-1,070.33	1,282.59	1,087.18	195.40	6.564		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 701H - 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	-50.02	74.39	-88.72	116.15					
100.00	100.00	90.70	90.70	0.13	0.13	-50.02	74.39	-88.72	115.78	115.60	0.18	644.866		
200.00	200.00	190.70	190.70	0.48	0.47	-50.02	74.39	-88.72	115.78	115.11	0.67	172.207		
300.00	300.00	290.70	290.70	0.84	0.83	-50.02	74.39	-88.72	115.78	114.60	1.18	98.182		
400.00	400.00	390.70	390.70	1.20	1.18	-50.02	74.39	-88.72	115.78	114.09	1.69	68.664		
500.00	500.00	490.70	490.70	1.56	1.54	-50.02	74.39	-88.72	115.78	113.59	2.19	52.793		
600.00	600.00	590.70	590.70	1.92	1.90	-50.02	74.39	-88.72	115.78	113.08	2.70	42.881		
700.00	700.00	690.70	690.70	2.28	2.26	-50.02	74.39	-88.72	115.78	112.57	3.21	36.102		
800.00	800.00	790.70	790.70	2.63	2.62	-50.02	74.39	-88.72	115.78	112.07	3.71	31.174		
900.00	900.00	890.70	890.70	2.99	2.98	-50.02	74.39	-88.72	115.78	111.56	4.22	27.430		
1,000.00	1,000.00	990.70	990.70	3.35	3.33	-50.02	74.39	-88.72	115.78	111.05	4.73	24.489		
1,100.00	1,100.00	1,090.70	1,090.70	3.71	3.69	-50.02	74.39	-88.72	115.78	110.55	5.23	22.117		
1,200.00	1,200.00	1,190.70	1,190.70	4.07	4.05	-50.02	74.39	-88.72	115.78	110.04	5.74	20.165		
1,300.00	1,300.00	1,290.70	1,290.70	4.43	4.41	-50.02	74.39	-88.72	115.78	109.53	6.25	18.529		
1,400.00	1,400.00	1,390.70	1,390.70	4.79	4.77	-50.02	74.39	-88.72	115.78	109.02	6.76	17.138		
1,500.00	1,500.00	1,490.70	1,490.70	5.14	5.13	-50.02	74.39	-88.72	115.78	108.52	7.26	15.942 CC, ES		
1,600.00	1,599.99	1,590.69	1,590.69	5.48	5.49	116.65	74.39	-88.72	116.36	108.60	7.76	15.001		
1,700.00	1,699.91	1,690.61	1,690.61	5.81	5.84	118.33	74.39	-88.72	118.18	109.93	8.24	14.340		
1,800.00	1,799.69	1,790.39	1,790.39	6.14	6.20	121.00	74.39	-88.72	121.42	112.69	8.73	13.912		
1,900.00	1,899.27	1,889.97	1,889.97	6.48	6.56	124.48	74.39	-88.72	126.38	117.17	9.22	13.712		
2,000.00	1,998.57	1,989.27	1,989.27	6.82	6.91	128.55	74.39	-88.72	133.41	123.70	9.71	13.740		
2,033.45	2,031.72	2,022.42	2,022.42	6.94	7.03	129.99	74.39	-88.72	136.29	126.41	9.88	13.800		
2,100.00	2,097.62	2,088.32	2,088.32	7.17	7.27	132.83	74.39	-88.72	142.45	132.24	10.21	13.958		
2,200.00	2,196.65	2,187.35	2,187.35	7.53	7.62	136.66	74.39	-88.72	152.30	141.60	10.70	14.231		
2,300.00	2,295.67	2,286.37	2,286.37	7.90	7.98	140.01	74.39	-88.72	162.75	151.55	11.20	14.531		
2,400.00	2,394.70	2,385.40	2,385.40	8.27	8.33	142.95	74.39	-88.72	173.69	161.99	11.70	14.846		
2,500.00	2,493.73	2,484.43	2,484.43	8.65	8.69	145.54	74.39	-88.72	185.02	172.82	12.20	15.167		
2,600.00	2,592.75	2,583.45	2,583.45	9.03	9.04	147.83	74.39	-88.72	196.69	183.99	12.70	15.489		
2,700.00	2,691.78	2,682.48	2,682.48	9.42	9.40	149.86	74.39	-88.72	208.64	195.44	13.20	15.806		
2,800.00	2,790.80	2,781.50	2,781.50	9.80	9.75	151.67	74.39	-88.72	220.81	207.11	13.70	16.117		
2,900.00	2,889.83	2,880.53	2,880.53	10.20	10.11	153.29	74.39	-88.72	233.19	218.98	14.20	16.419		
2,979.22	2,968.28	2,958.98	2,958.98	10.51	10.39	154.46	74.39	-88.72	243.11	228.51	14.60	16.651		
3,000.00	2,988.86	2,979.56	2,979.56	10.59	10.46	154.76	74.39	-88.72	245.67	230.97	14.70	16.708		
3,100.00	3,088.13	3,078.83	3,078.83	10.98	10.82	155.97	74.39	-88.72	256.67	241.47	15.21	16.880		
3,200.00	3,187.68	3,178.38	3,178.38	11.36	11.18	156.86	74.39	-88.72	265.37	249.66	15.71	16.894		
3,300.00	3,287.44	3,278.14	3,278.14	11.73	11.53	157.46	74.39	-88.72	271.70	255.49	16.21	16.762		
3,400.00	3,387.34	3,378.04	3,378.04	12.08	11.89	157.83	74.39	-88.72	275.64	258.93	16.71	16.495		
3,500.00	3,487.33	3,478.03	3,478.03	12.43	12.25	157.96	74.39	-88.72	277.16	259.95	17.21	16.105		
3,512.67	3,500.00	3,490.70	3,490.70	12.47	12.30	-8.13	74.39	-88.72	277.18	259.91	17.27	16.047		
3,600.00	3,587.33	3,578.03	3,578.03	12.76	12.61	-8.13	74.39	-88.72	277.18	259.47	17.71	15.655		
3,700.00	3,687.33	3,678.96	3,678.96	13.10	12.96	-8.30	74.14	-89.50	277.05	258.85	18.20	15.223		
3,800.00	3,787.33	3,780.04	3,779.97	13.43	13.30	-9.00	73.11	-92.76	276.52	257.83	18.69	14.797		
3,900.00	3,887.33	3,880.87	3,880.62	13.77	13.65	-10.25	71.27	-98.56	275.69	256.51	19.18	14.375		
4,000.00	3,987.33	3,981.31	3,980.68	14.11	13.99	-12.05	68.65	-106.85	274.71	255.04	19.67	13.966		
4,100.00	4,087.33	4,081.23	4,079.95	14.44	14.33	-14.40	65.25	-117.58	273.85	253.69	20.16	13.581		
4,200.00	4,187.33	4,180.46	4,178.27	14.78	14.68	-17.21	61.18	-130.41	273.43	252.77	20.66	13.234		
4,212.69	4,200.01	4,193.03	4,190.71	14.83	14.72	-17.58	60.65	-132.08	273.42	252.70	20.72	13.193		
4,300.00	4,287.33	4,279.49	4,276.33	15.12	15.03	-20.10	57.02	-143.56	273.69	252.53	21.16	12.934		
4,400.00	4,387.33	4,378.51	4,374.40	15.46	15.38	-22.98	52.85	-156.70	274.66	253.00	21.66	12.680		
4,500.00	4,487.33	4,477.54	4,472.46	15.81	15.74	-25.82	48.69	-169.85	276.33	254.17	22.16	12.468		
4,600.00	4,587.33	4,576.57	4,570.52	16.15	16.09	-28.63	44.52	-182.99	278.69	256.02	22.67	12.295		
4,700.00	4,687.33	4,675.59	4,668.58	16.49	16.46	-31.39	40.36	-196.14	281.72	258.55	23.17	12.159		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 701H - 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		
4,800.00	4,787.33	4,774.62	4,766.64	16.83	16.82	-34.08	36.19	-209.28	285.39	261.72	23.67	12.056		
4,900.00	4,887.33	4,873.64	4,864.70	17.18	17.19	-36.70	32.03	-222.42	289.69	265.51	24.18	11.982		
5,000.00	4,987.33	4,972.67	4,962.76	17.52	17.56	-39.23	27.87	-235.57	294.58	269.90	24.68	11.936		
5,100.00	5,087.33	5,071.70	5,060.82	17.87	17.93	-41.69	23.70	-248.71	300.04	274.86	25.18	11.915		
5,200.00	5,187.33	5,170.72	5,158.89	18.21	18.30	-44.05	19.54	-261.86	306.04	280.35	25.68	11.916		
5,300.00	5,287.33	5,269.75	5,256.95	18.56	18.68	-46.32	15.37	-275.00	312.54	286.35	26.18	11.936		
5,400.00	5,387.33	5,368.77	5,355.01	18.91	19.06	-48.49	11.21	-288.15	319.52	292.83	26.69	11.973		
5,500.00	5,487.33	5,467.80	5,453.07	19.26	19.43	-50.57	7.04	-301.29	326.94	299.75	27.19	12.026		
5,600.00	5,587.33	5,566.83	5,551.13	19.60	19.82	-52.56	2.88	-314.43	334.77	307.09	27.69	12.092		
5,700.00	5,687.33	5,665.85	5,649.19	19.95	20.20	-54.45	-1.29	-327.58	343.00	314.81	28.18	12.170		
5,800.00	5,787.33	5,764.88	5,747.25	20.30	20.58	-56.26	-5.45	-340.72	351.58	322.90	28.68	12.258		
5,900.00	5,887.33	5,863.90	5,845.31	20.65	20.97	-57.97	-9.61	-353.87	360.50	331.31	29.18	12.354		
6,000.00	5,987.33	5,962.93	5,943.38	21.00	21.35	-59.61	-13.78	-367.01	369.72	340.04	29.68	12.457		
6,100.00	6,087.33	6,061.95	6,041.44	21.35	21.74	-61.16	-17.94	-380.16	379.23	349.06	30.18	12.567		
6,200.00	6,187.33	6,160.98	6,139.50	21.70	22.13	-62.64	-22.11	-393.30	389.01	358.34	30.67	12.682		
6,300.00	6,287.33	6,260.01	6,237.56	22.05	22.52	-64.05	-26.27	-406.45	399.04	367.86	31.17	12.801		
6,400.00	6,387.33	6,359.03	6,335.62	22.40	22.91	-65.38	-30.44	-419.59	409.29	377.62	31.67	12.924		
6,500.00	6,487.33	6,458.06	6,433.68	22.75	23.30	-66.66	-34.60	-432.73	419.75	387.59	32.17	13.050		
6,600.00	6,587.33	6,557.08	6,531.74	23.10	23.70	-67.87	-38.77	-445.88	430.41	397.75	32.66	13.177		
6,700.00	6,687.33	6,656.11	6,629.80	23.45	24.09	-69.02	-42.93	-459.02	441.25	408.09	33.16	13.307		
6,800.00	6,787.33	6,755.14	6,727.86	23.80	24.48	-70.11	-47.09	-472.17	452.27	418.61	33.66	13.437		
6,900.00	6,887.33	6,854.16	6,825.93	24.15	24.88	-71.16	-51.26	-485.31	463.43	429.28	34.16	13.568		
7,000.00	6,987.33	6,953.19	6,923.99	24.50	25.28	-72.15	-55.42	-498.46	474.75	440.09	34.65	13.700		
7,100.00	7,087.33	7,052.21	7,022.05	24.86	25.67	-73.10	-59.59	-511.60	486.20	451.04	35.15	13.831		
7,200.00	7,187.33	7,151.24	7,120.11	25.21	26.07	-74.00	-63.75	-524.75	497.77	462.12	35.65	13.963		
7,300.00	7,287.33	7,250.27	7,218.17	25.56	26.47	-74.87	-67.92	-537.89	509.46	473.31	36.15	14.093		
7,400.00	7,387.33	7,349.29	7,316.23	25.91	26.87	-75.69	-72.08	-551.03	521.27	484.62	36.65	14.224		
7,500.00	7,487.33	7,448.32	7,414.29	26.26	27.27	-76.48	-76.24	-564.18	533.17	496.02	37.15	14.353		
7,600.00	7,587.33	7,547.34	7,512.35	26.62	27.67	-77.23	-80.41	-577.32	545.17	507.53	37.65	14.481		
7,700.00	7,687.33	7,646.37	7,610.42	26.97	28.07	-77.96	-84.57	-590.47	557.26	519.12	38.15	14.609		
7,800.00	7,787.33	7,745.39	7,708.48	27.32	28.47	-78.65	-88.74	-603.61	569.44	530.79	38.65	14.735		
7,900.00	7,887.33	7,844.42	7,806.54	27.68	28.87	-79.31	-92.90	-616.76	581.69	542.54	39.15	14.859		
8,000.00	7,987.33	7,943.45	7,904.60	28.03	29.28	-79.94	-97.07	-629.90	594.01	554.37	39.65	14.983		
8,100.00	8,087.33	8,042.47	8,002.66	28.38	29.68	-80.55	-101.23	-643.05	606.41	566.26	40.15	15.105		
8,200.00	8,187.33	8,141.50	8,100.72	28.74	30.08	-81.14	-105.40	-656.19	618.87	578.22	40.65	15.225		
8,300.00	8,287.33	8,240.52	8,198.78	29.09	30.49	-81.70	-109.56	-669.33	631.39	590.24	41.15	15.344		
8,400.00	8,387.33	8,339.55	8,296.84	29.44	30.89	-82.24	-113.72	-682.48	643.97	602.32	41.65	15.461		
8,500.00	8,487.33	8,438.58	8,394.91	29.80	31.30	-82.76	-117.89	-695.62	656.60	614.45	42.15	15.577		
8,600.00	8,587.33	8,537.60	8,492.97	30.15	31.70	-83.26	-122.05	-708.77	669.29	626.63	42.65	15.691		
8,700.00	8,687.33	8,636.63	8,591.03	30.51	32.11	-83.74	-126.22	-721.91	682.02	638.86	43.16	15.803		
8,800.00	8,787.33	8,735.65	8,689.09	30.86	32.51	-84.20	-130.38	-735.06	694.80	651.14	43.66	15.914		
8,900.00	8,887.33	8,834.68	8,787.15	31.21	32.92	-84.65	-134.55	-748.20	707.62	663.46	44.16	16.023		
9,000.00	8,987.33	8,933.71	8,885.21	31.57	33.32	-85.08	-138.71	-761.34	720.48	675.82	44.67	16.131		
9,100.00	9,087.33	9,032.73	8,983.27	31.92	33.73	-85.49	-142.88	-774.49	733.38	688.21	45.17	16.237		
9,200.00	9,187.33	9,131.76	9,081.33	32.28	34.14	-85.90	-147.04	-787.63	746.32	700.65	45.67	16.341		
9,300.00	9,287.33	9,230.78	9,179.40	32.63	34.55	-86.28	-151.20	-800.78	759.29	713.12	46.18	16.444		
9,400.00	9,387.33	9,329.81	9,277.46	32.99	34.95	-86.66	-155.37	-813.92	772.30	725.62	46.68	16.545		
9,500.00	9,487.33	9,428.83	9,375.52	33.34	35.36	-87.02	-159.53	-827.07	785.34	738.15	47.18	16.644		
9,600.00	9,587.33	9,527.86	9,473.58	33.70	35.77	-87.37	-163.70	-840.21	798.41	750.72	47.69	16.742		
9,700.00	9,687.33	9,626.89	9,571.64	34.05	36.18	-87.71	-167.86	-853.36	811.50	763.31	48.19	16.839		
9,800.00	9,787.33	9,725.91	9,669.70	34.41	36.59	-88.04	-172.03	-866.50	824.62	775.93	48.70	16.934		
9,900.00	9,887.33	9,824.94	9,767.76	34.76	37.00	-88.36	-176.19	-879.64	837.77	788.57	49.20	17.027		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 701H - 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		
10,000.00	9,987.33	9,923.96	9,865.82	35.12	37.41	-88.67	-180.36	-892.79	850.95	801.24	49.71	17.119		
10,100.00	10,087.33	10,022.99	9,963.89	35.47	37.82	-88.96	-184.52	-905.93	864.14	813.93	50.21	17.210		
10,200.00	10,187.33	10,122.02	10,061.95	35.83	38.22	-89.25	-188.68	-919.08	877.36	826.65	50.72	17.299		
10,300.00	10,287.33	10,244.59	10,183.52	36.18	38.72	-89.57	-193.40	-933.95	889.51	838.15	51.36	17.319		
10,400.00	10,387.33	10,372.69	10,311.03	36.54	39.22	-89.81	-197.07	-945.55	898.56	846.56	52.00	17.281		
10,500.00	10,487.33	10,501.46	10,439.56	36.89	39.69	-89.97	-199.46	-953.09	904.41	851.82	52.59	17.197		
10,600.00	10,587.33	10,630.63	10,568.67	37.25	40.14	-90.03	-200.54	-956.51	907.06	853.91	53.14	17.068		
10,700.00	10,687.33	10,739.99	10,678.03	37.61	40.50	-90.04	-200.61	-956.72	907.22	853.58	53.64	16.912		
10,800.00	10,787.33	10,839.99	10,778.03	37.96	40.82	-90.04	-200.61	-956.72	907.22	853.08	54.14	16.758		
10,900.00	10,887.33	10,939.99	10,878.03	38.32	41.14	-90.04	-200.61	-956.72	907.22	852.59	54.63	16.607		
11,000.00	10,987.33	11,039.99	10,978.03	38.67	41.47	-90.04	-200.61	-956.72	907.22	852.10	55.12	16.459		
11,100.00	11,087.33	11,139.99	11,078.03	39.03	41.80	-90.04	-200.61	-956.72	907.22	851.61	55.61	16.314		
11,200.00	11,187.33	11,239.99	11,178.03	39.38	42.12	-90.04	-200.61	-956.72	907.22	851.12	56.10	16.171		
11,300.00	11,287.33	11,339.99	11,278.03	39.74	42.45	-90.04	-200.61	-956.72	907.22	850.62	56.60	16.030		
11,400.00	11,387.33	11,439.99	11,378.03	40.10	42.78	-90.04	-200.61	-956.72	907.22	850.13	57.09	15.892		
11,500.00	11,487.33	11,539.99	11,478.03	40.45	43.10	-90.04	-200.61	-956.72	907.22	849.64	57.58	15.756		
11,507.88	11,495.21	11,547.87	11,485.91	40.48	43.13	-90.04	-200.61	-956.72	907.22	849.60	57.62	15.745		
11,600.00	11,587.33	11,638.53	11,576.41	40.81	43.42	-89.78	-196.51	-956.77	907.27	849.20	58.07	15.623		
11,700.00	11,687.33	11,732.73	11,668.59	41.16	43.70	-88.59	-177.65	-956.97	907.80	849.24	58.56	15.502		
11,800.00	11,787.33	11,818.74	11,749.03	41.52	43.92	-86.69	-147.45	-957.30	909.79	850.76	59.03	15.413		
11,900.00	11,887.33	11,894.29	11,815.29	41.88	44.08	-84.42	-111.24	-957.70	914.68	855.25	59.43	15.390		
11,940.71	11,928.04	11,921.93	11,838.25	42.02	44.13	-83.46	-95.86	-957.87	917.86	858.29	59.56	15.410		
11,950.00	11,937.33	11,928.03	11,843.21	42.05	44.14	-86.66	-92.33	-957.91	918.69	859.10	59.59	15.417		
12,000.00	11,987.22	11,960.46	11,868.96	42.23	44.20	-85.03	-72.62	-958.13	923.73	864.02	59.71	15.470		
12,050.00	12,036.67	11,992.37	11,893.17	42.40	44.24	-83.40	-51.84	-958.36	929.61	869.82	59.79	15.548		
12,100.00	12,085.28	12,023.82	11,915.86	42.56	44.28	-81.78	-30.07	-958.59	936.18	876.35	59.82	15.649		
12,150.00	12,132.70	12,050.00	11,933.82	42.71	44.32	-80.32	-11.02	-958.80	943.32	883.53	59.79	15.777		
12,200.00	12,178.57	12,085.60	11,956.80	42.86	44.35	-78.64	16.16	-959.10	950.84	891.05	59.79	15.903		
12,250.00	12,222.52	12,116.02	11,975.07	43.00	44.37	-77.13	40.48	-959.37	958.64	898.91	59.73	16.050		
12,300.00	12,264.24	12,150.00	11,993.92	43.13	44.40	-75.62	68.74	-959.68	966.59	906.92	59.67	16.199		
12,350.00	12,303.40	12,176.15	12,007.26	43.26	44.41	-74.34	91.22	-959.93	974.54	914.99	59.55	16.366		
12,400.00	12,339.70	12,200.00	12,018.53	43.38	44.43	-73.16	112.25	-960.16	982.42	923.01	59.41	16.536		
12,450.00	12,372.86	12,235.51	12,033.65	43.50	44.44	-71.89	144.36	-960.51	990.04	930.69	59.35	16.681		
12,500.00	12,402.64	12,264.97	12,044.68	43.62	44.45	-70.82	171.68	-960.81	997.38	938.12	59.27	16.828		
12,550.00	12,428.81	12,300.00	12,055.93	43.74	44.47	-69.80	204.84	-961.18	1,004.36	945.13	59.23	16.956		
12,600.00	12,451.17	12,323.57	12,062.36	43.85	44.48	-69.00	227.52	-961.43	1,010.81	951.65	59.17	17.084		
12,650.00	12,469.55	12,350.00	12,068.45	43.97	44.49	-68.27	253.23	-961.71	1,016.76	957.62	59.15	17.190		
12,700.00	12,483.81	12,381.86	12,074.20	44.09	44.50	-67.64	284.57	-962.05	1,022.10	962.91	59.19	17.269		
12,750.00	12,493.83	12,410.94	12,077.92	44.21	44.52	-67.14	313.40	-962.37	1,026.81	967.55	59.26	17.328		
12,800.00	12,499.55	12,450.00	12,080.61	44.33	44.55	-66.76	352.36	-962.80	1,030.91	971.52	59.39	17.360		
12,840.71	12,501.00	12,463.64	12,080.92	44.42	44.56	-66.54	365.99	-962.95	1,033.58	974.09	59.49	17.374		
12,900.00	12,501.00	12,507.14	12,080.16	44.57	44.61	-66.58	409.48	-963.43	1,037.29	977.60	59.69	17.377		
13,000.00	12,501.00	12,607.04	12,077.45	44.88	44.79	-66.55	509.33	-964.53	1,041.48	981.38	60.10	17.330		
13,047.21	12,501.00	12,654.23	12,076.17	45.04	44.90	-66.51	556.51	-965.04	1,042.34	982.03	60.31	17.283		
13,100.00	12,501.00	12,707.00	12,074.74	45.24	45.05	-66.43	609.25	-965.62	1,042.92	982.36	60.56	17.221		
13,200.00	12,501.00	12,806.96	12,072.04	45.66	45.41	-66.30	709.17	-966.72	1,044.00	982.91	61.09	17.088		
13,300.00	12,501.00	12,906.92	12,069.33	46.14	45.83	-66.16	809.09	-967.82	1,045.09	983.40	61.70	16.939		
13,400.00	12,501.00	13,006.89	12,066.62	46.67	46.33	-66.03	909.01	-968.92	1,046.19	983.82	62.37	16.773		
13,500.00	12,501.00	13,106.85	12,063.91	47.25	46.88	-65.89	1,008.93	-970.02	1,047.30	984.19	63.11	16.595		
13,600.00	12,501.00	13,206.81	12,061.20	47.88	47.49	-65.75	1,108.85	-971.12	1,048.41	984.50	63.91	16.404		
13,700.00	12,501.00	13,306.78	12,058.49	48.56	48.15	-65.62	1,208.78	-972.21	1,049.52	984.75	64.77	16.203		
13,800.00	12,501.00	13,406.74	12,055.78	49.29	48.86	-65.49	1,308.70	-973.31	1,050.64	984.95	65.69	15.994		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 701H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	12,501.00	13,506.70	12,053.07	50.06	49.61	-65.35	1,408.62	-974.41	1,051.77	985.11	66.67	15.777		
14,000.00	12,501.00	13,606.67	12,050.36	50.87	50.41	-65.22	1,508.54	-975.51	1,052.91	985.21	67.69	15.554		
14,100.00	12,501.00	13,706.63	12,047.65	51.72	51.25	-65.08	1,608.46	-976.61	1,054.04	985.28	68.77	15.328		
14,200.00	12,501.00	13,806.59	12,044.94	52.61	52.12	-64.95	1,708.38	-977.71	1,055.19	985.30	69.89	15.098		
14,300.00	12,501.00	13,906.56	12,042.24	53.54	53.04	-64.82	1,808.30	-978.81	1,056.34	985.28	71.06	14.866		
14,400.00	12,501.00	14,006.52	12,039.53	54.50	53.99	-64.68	1,908.22	-979.90	1,057.50	985.23	72.26	14.634		
14,500.00	12,501.00	14,106.48	12,036.82	55.50	54.97	-64.55	2,008.14	-981.00	1,058.66	985.15	73.51	14.402		
14,600.00	12,501.00	14,206.45	12,034.11	56.52	55.98	-64.42	2,108.06	-982.10	1,059.83	985.03	74.79	14.171		
14,700.00	12,501.00	14,306.41	12,031.40	57.57	57.02	-64.29	2,207.98	-983.20	1,061.00	984.89	76.11	13.941		
14,800.00	12,501.00	14,406.37	12,028.69	58.66	58.10	-64.16	2,307.90	-984.30	1,062.18	984.72	77.46	13.713		
14,900.00	12,501.00	14,506.34	12,025.98	59.76	59.19	-64.02	2,407.82	-985.40	1,063.36	984.52	78.84	13.488		
15,000.00	12,501.00	14,606.30	12,023.27	60.90	60.32	-63.89	2,507.74	-986.50	1,064.55	984.30	80.25	13.266		
15,100.00	12,501.00	14,706.26	12,020.56	62.05	61.46	-63.76	2,607.66	-987.59	1,065.75	984.06	81.68	13.047		
15,200.00	12,501.00	14,806.23	12,017.85	63.23	62.63	-63.63	2,707.58	-988.69	1,066.95	983.80	83.14	12.833		
15,300.00	12,501.00	14,906.19	12,015.14	64.43	63.82	-63.50	2,807.50	-989.79	1,068.16	983.53	84.63	12.622		
15,400.00	12,501.00	15,006.15	12,012.44	65.65	65.03	-63.37	2,907.42	-990.89	1,069.37	983.23	86.13	12.415		
15,500.00	12,501.00	15,106.12	12,009.73	66.89	66.26	-63.24	3,007.34	-991.99	1,070.58	982.93	87.66	12.213		
15,600.00	12,501.00	15,206.08	12,007.02	68.14	67.51	-63.11	3,107.26	-993.09	1,071.81	982.61	89.20	12.016		
15,700.00	12,501.00	15,306.04	12,004.31	69.41	68.77	-62.98	3,207.19	-994.18	1,073.04	982.27	90.76	11.822		
15,800.00	12,501.00	15,406.01	12,001.60	70.70	70.05	-62.85	3,307.11	-995.28	1,074.27	981.93	92.34	11.634		
15,900.00	12,501.00	15,505.97	11,998.89	72.00	71.35	-62.73	3,407.03	-996.38	1,075.51	981.58	93.93	11.450		
16,000.00	12,501.00	15,605.93	11,996.18	73.32	72.66	-62.60	3,506.95	-997.48	1,076.75	981.21	95.54	11.270		
16,100.00	12,501.00	15,705.90	11,993.47	74.65	73.98	-62.47	3,606.87	-998.58	1,078.00	980.84	97.16	11.095		
16,200.00	12,501.00	15,805.86	11,990.76	75.99	75.31	-62.34	3,706.79	-999.68	1,079.26	980.46	98.80	10.924		
16,300.00	12,501.00	15,905.82	11,988.05	77.35	76.66	-62.22	3,806.71	-1,000.78	1,080.52	980.08	100.44	10.758		
16,400.00	12,501.00	16,005.79	11,985.34	78.72	78.02	-62.09	3,906.63	-1,001.87	1,081.79	979.69	102.09	10.596		
16,500.00	12,501.00	16,105.75	11,982.64	80.09	79.40	-61.96	4,006.55	-1,002.97	1,083.06	979.30	103.76	10.438		
16,600.00	12,501.00	16,205.71	11,979.93	81.48	80.78	-61.84	4,106.47	-1,004.07	1,084.34	978.91	105.43	10.285		
16,700.00	12,501.00	16,305.68	11,977.22	82.88	82.17	-61.71	4,206.39	-1,005.17	1,085.62	978.51	107.11	10.136		
16,800.00	12,501.00	16,405.64	11,974.51	84.28	83.57	-61.58	4,306.31	-1,006.27	1,086.90	978.11	108.80	9.990		
16,900.00	12,501.00	16,505.60	11,971.80	85.70	84.98	-61.46	4,406.23	-1,007.37	1,088.20	977.70	110.49	9.848		
17,000.00	12,501.00	16,605.57	11,969.09	87.12	86.40	-61.33	4,506.15	-1,008.47	1,089.49	977.30	112.20	9.711		
17,100.00	12,501.00	16,705.53	11,966.38	88.55	87.83	-61.21	4,606.07	-1,009.56	1,090.80	976.89	113.90	9.577		
17,200.00	12,501.00	16,805.49	11,963.67	89.99	89.26	-61.08	4,705.99	-1,010.66	1,092.11	976.49	115.62	9.446		
17,300.00	12,501.00	16,905.46	11,960.96	91.44	90.70	-60.96	4,805.91	-1,011.76	1,093.42	976.09	117.33	9.319		
17,400.00	12,501.00	17,005.42	11,958.25	92.89	92.15	-60.84	4,905.83	-1,012.86	1,094.74	975.68	119.05	9.195		
17,500.00	12,501.00	17,105.38	11,955.54	94.35	93.61	-60.71	5,005.75	-1,013.96	1,096.06	975.28	120.78	9.075		
17,600.00	12,501.00	17,205.35	11,952.84	95.82	95.07	-60.59	5,105.68	-1,015.06	1,097.39	974.88	122.51	8.958		
17,700.00	12,501.00	17,305.31	11,950.13	97.29	96.54	-60.46	5,205.60	-1,016.15	1,098.72	974.48	124.24	8.844		
17,800.00	12,501.00	17,405.27	11,947.42	98.77	98.01	-60.34	5,305.52	-1,017.25	1,100.06	974.09	125.97	8.732		
17,900.00	12,501.00	17,505.24	11,944.71	100.25	99.49	-60.22	5,405.44	-1,018.35	1,101.40	973.69	127.71	8.624		
18,000.00	12,501.00	17,605.20	11,942.00	101.74	100.98	-60.10	5,505.36	-1,019.45	1,102.75	973.30	129.45	8.519		
18,100.00	12,501.00	17,705.16	11,939.29	103.24	102.47	-59.98	5,605.28	-1,020.55	1,104.11	972.92	131.19	8.416		
18,200.00	12,501.00	17,805.13	11,936.58	104.73	103.96	-59.85	5,705.20	-1,021.65	1,105.47	972.53	132.93	8.316		
18,300.00	12,501.00	17,905.09	11,933.87	106.24	105.46	-59.73	5,805.12	-1,022.75	1,106.83	972.15	134.67	8.219		
18,400.00	12,501.00	18,005.05	11,931.16	107.75	106.97	-59.61	5,905.04	-1,023.84	1,108.20	971.78	136.42	8.124		
18,500.00	12,501.00	18,105.02	11,928.45	109.26	108.48	-59.49	6,004.96	-1,024.94	1,109.57	971.41	138.16	8.031		
18,600.00	12,501.00	18,204.98	11,925.74	110.77	109.99	-59.37	6,104.88	-1,026.04	1,110.95	971.04	139.91	7.941		
18,700.00	12,501.00	18,304.94	11,923.04	112.29	111.51	-59.25	6,204.80	-1,027.14	1,112.33	970.68	141.65	7.853		
18,800.00	12,501.00	18,404.90	11,920.33	113.82	113.03	-59.13	6,304.72	-1,028.24	1,113.72	970.33	143.39	7.767		
18,900.00	12,501.00	18,504.87	11,917.62	115.34	114.55	-59.01	6,404.64	-1,029.34	1,115.12	969.98	145.14	7.683		
19,000.00	12,501.00	18,604.83	11,914.91	116.87	116.08	-58.89	6,504.56	-1,030.44	1,116.51	969.63	146.88	7.601		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Georgetown Fed Com 701H - 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	12,501.00	18,704.79	11,912.20	118.41	117.61	-58.77	6,604.48	-1,031.53	1,117.92	969.29	148.63	7.522		
19,200.00	12,501.00	18,804.76	11,909.49	119.94	119.15	-58.65	6,704.40	-1,032.63	1,119.32	968.96	150.37	7.444		
19,300.00	12,501.00	18,904.72	11,906.78	121.48	120.68	-58.54	6,804.32	-1,033.73	1,120.74	968.63	152.11	7.368		
19,400.00	12,501.00	19,004.68	11,904.07	123.03	122.22	-58.42	6,904.24	-1,034.83	1,122.15	968.31	153.85	7.294		
19,500.00	12,501.00	19,104.65	11,901.36	124.57	123.77	-58.30	7,004.17	-1,035.93	1,123.57	967.99	155.59	7.222		
19,600.00	12,501.00	19,204.61	11,898.65	126.12	125.31	-58.18	7,104.09	-1,037.03	1,125.00	967.68	157.32	7.151		
19,700.00	12,501.00	19,304.57	11,895.94	127.67	126.86	-58.07	7,204.01	-1,038.13	1,126.43	967.38	159.06	7.082		
19,800.00	12,501.00	19,404.54	11,893.24	129.23	128.41	-57.95	7,303.93	-1,039.22	1,127.87	967.08	160.79	7.014		
19,900.00	12,501.00	19,504.50	11,890.53	130.78	129.97	-57.83	7,403.85	-1,040.32	1,129.31	966.79	162.52	6.949		
20,000.00	12,501.00	19,604.46	11,887.82	132.34	131.52	-57.72	7,503.77	-1,041.42	1,130.75	966.50	164.25	6.884		
20,100.00	12,501.00	19,704.43	11,885.11	133.90	133.08	-57.60	7,603.69	-1,042.52	1,132.20	966.23	165.98	6.821		
20,200.00	12,501.00	19,804.39	11,882.40	135.47	134.64	-57.48	7,703.61	-1,043.62	1,133.66	965.96	167.70	6.760		
20,300.00	12,501.00	19,904.35	11,879.69	137.03	136.21	-57.37	7,803.53	-1,044.72	1,135.12	965.69	169.42	6.700		
20,400.00	12,501.00	20,004.32	11,876.98	138.60	137.77	-57.25	7,903.45	-1,045.81	1,136.58	965.44	171.15	6.641		
20,500.00	12,501.00	20,104.28	11,874.27	140.17	139.34	-57.14	8,003.37	-1,046.91	1,138.05	965.19	172.86	6.584		
20,600.00	12,501.00	20,204.24	11,871.56	141.74	140.91	-57.03	8,103.29	-1,048.01	1,139.52	964.95	174.58	6.527		
20,700.00	12,501.00	20,304.21	11,868.85	143.31	142.48	-56.91	8,203.21	-1,049.11	1,141.00	964.71	176.29	6.472		
20,800.00	12,501.00	20,404.17	11,866.14	144.89	144.05	-56.80	8,303.13	-1,050.21	1,142.48	964.48	178.00	6.418		
20,900.00	12,501.00	20,504.13	11,863.44	146.46	145.63	-56.68	8,403.05	-1,051.31	1,143.97	964.26	179.71	6.366		
21,000.00	12,501.00	20,604.10	11,860.73	148.04	147.20	-56.57	8,502.97	-1,052.41	1,145.46	964.05	181.41	6.314		
21,100.00	12,501.00	20,704.06	11,858.02	149.62	148.78	-56.46	8,602.89	-1,053.50	1,146.96	963.85	183.11	6.264		
21,200.00	12,501.00	20,804.02	11,855.31	151.20	150.36	-56.34	8,702.81	-1,054.60	1,148.46	963.65	184.81	6.214		
21,300.00	12,501.00	20,903.99	11,852.60	152.78	151.94	-56.23	8,802.73	-1,055.70	1,149.96	963.46	186.50	6.166		
21,400.00	12,501.00	21,003.95	11,849.89	154.37	153.53	-56.12	8,902.65	-1,056.80	1,151.47	963.28	188.19	6.119		
21,500.00	12,501.00	21,103.91	11,847.18	155.95	155.11	-56.01	9,002.58	-1,057.90	1,152.98	963.10	189.88	6.072		
21,600.00	12,501.00	21,203.88	11,844.47	157.54	156.70	-55.90	9,102.50	-1,059.00	1,154.50	962.93	191.57	6.027		
21,700.00	12,501.00	21,303.84	11,841.76	159.13	158.28	-55.79	9,202.42	-1,060.10	1,156.02	962.77	193.25	5.982		
21,800.00	12,501.00	21,403.80	11,839.05	160.72	159.87	-55.68	9,302.34	-1,061.19	1,157.55	962.62	194.92	5.938		
21,900.00	12,501.00	21,503.77	11,836.34	162.31	161.46	-55.56	9,402.26	-1,062.29	1,159.08	962.48	196.60	5.896		
22,000.00	12,501.00	21,603.73	11,833.63	163.90	163.05	-55.45	9,502.18	-1,063.39	1,160.61	962.34	198.27	5.854		
22,100.00	12,501.00	21,703.69	11,830.93	165.50	164.64	-55.34	9,602.10	-1,064.49	1,162.15	962.22	199.94	5.813		
22,200.00	12,501.00	21,803.66	11,828.22	167.09	166.24	-55.23	9,702.02	-1,065.59	1,163.70	962.10	201.60	5.772		
22,300.00	12,501.00	21,903.62	11,825.51	168.69	167.83	-55.12	9,801.94	-1,066.69	1,165.24	961.98	203.26	5.733		
22,400.00	12,501.00	22,003.58	11,822.80	170.28	169.43	-55.02	9,901.86	-1,067.78	1,166.80	961.88	204.92	5.694		
22,500.00	12,501.00	22,103.55	11,820.09	171.88	171.02	-54.91	10,001.78	-1,068.88	1,168.35	961.78	206.57	5.656		
22,600.00	12,501.00	22,203.51	11,817.38	173.48	172.62	-54.80	10,101.70	-1,069.98	1,169.91	961.69	208.22	5.619		
22,635.57	12,501.00	22,239.07	11,816.42	174.05	173.19	-54.76	10,137.25	-1,070.37	1,170.47	961.66	208.80	5.606		
22,636.34	12,501.00	22,239.83	11,816.40	174.06	173.20	-54.76	10,138.01	-1,070.38	1,170.48	961.67	208.81	5.606 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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 302H - 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	1.00	1.00	0.00	0.00	34.06	75.76	51.22	91.45					
100.00	100.00	101.00	101.00	0.13	0.13	34.06	75.76	51.22	91.45	91.27	0.18	508.090		
200.00	200.00	201.00	201.00	0.48	0.49	34.06	75.76	51.22	91.45	90.76	0.69	133.128		
300.00	300.00	301.00	301.00	0.84	0.85	34.06	75.76	51.22	91.45	90.26	1.19	76.599		
400.00	400.00	401.00	401.00	1.20	1.20	34.06	75.76	51.22	91.45	89.75	1.70	53.768		
500.00	500.00	501.00	501.00	1.56	1.56	34.06	75.76	51.22	91.45	89.24	2.21	41.421		
600.00	600.00	601.00	601.00	1.92	1.92	34.06	75.76	51.22	91.45	88.74	2.71	33.686		
700.00	700.00	701.00	701.00	2.28	2.28	34.06	75.76	51.22	91.45	88.23	3.22	28.386		
800.00	800.00	801.00	801.00	2.63	2.64	34.06	75.76	51.22	91.45	87.72	3.73	24.526		
900.00	900.00	901.00	901.00	2.99	3.00	34.06	75.76	51.22	91.45	87.21	4.24	21.591		
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	34.06	75.76	51.22	91.45	86.71	4.74	19.283		
1,100.00	1,100.00	1,101.00	1,101.00	3.71	3.71	34.06	75.76	51.22	91.45	86.20	5.25	17.421		
1,200.00	1,200.00	1,201.00	1,201.00	4.07	4.07	34.06	75.76	51.22	91.45	85.69	5.76	15.886		
1,300.00	1,300.00	1,301.00	1,301.00	4.43	4.43	34.06	75.76	51.22	91.45	85.19	6.26	14.601		
1,316.33	1,316.33	1,317.33	1,317.33	4.49	4.49	34.06	75.76	51.22	91.45	85.10	6.35	14.410 CC		
1,400.00	1,400.00	1,401.00	1,401.00	4.79	4.79	34.06	75.76	51.22	91.45	84.68	6.77	13.508		
1,500.00	1,500.00	1,500.82	1,500.81	5.14	5.13	34.61	75.34	52.00	91.55	84.28	7.27	12.597 ES		
1,600.00	1,599.99	1,600.57	1,600.53	5.48	5.47	-157.96	74.12	54.32	93.10	85.36	7.74	12.021		
1,700.00	1,699.91	1,700.19	1,700.05	5.81	5.81	-156.26	72.08	58.17	97.39	89.18	8.21	11.857 SF		
1,800.00	1,799.69	1,799.56	1,799.23	6.14	6.15	-154.37	69.24	63.53	104.46	95.78	8.69	12.024		
1,900.00	1,899.27	1,898.60	1,897.97	6.48	6.49	-152.45	65.61	70.38	114.34	105.17	9.17	12.474		
2,000.00	1,998.57	1,997.21	1,996.12	6.82	6.84	-150.63	61.20	78.70	127.03	117.38	9.65	13.165		
2,033.45	2,031.72	2,030.27	2,029.01	6.94	6.96	-150.08	59.58	81.75	131.88	122.07	9.81	13.440		
2,100.00	2,097.62	2,096.04	2,094.42	7.17	7.19	-149.24	56.37	87.82	141.81	131.67	10.14	13.987		
2,200.00	2,196.65	2,194.88	2,192.72	7.53	7.55	-148.18	51.53	96.95	156.77	146.14	10.63	14.744		
2,300.00	2,295.67	2,293.72	2,291.01	7.90	7.91	-147.30	46.69	106.08	171.77	160.64	11.13	15.431		
2,400.00	2,394.70	2,392.55	2,389.31	8.27	8.28	-146.56	41.86	115.20	186.81	175.18	11.64	16.055		
2,500.00	2,493.73	2,491.39	2,487.60	8.65	8.64	-145.93	37.02	124.33	201.88	189.73	12.14	16.624		
2,600.00	2,592.75	2,590.22	2,585.90	9.03	9.01	-145.39	32.19	133.46	216.96	204.30	12.65	17.145		
2,700.00	2,691.78	2,689.06	2,684.19	9.42	9.38	-144.92	27.35	142.58	232.06	218.89	13.17	17.622		
2,800.00	2,790.80	2,787.90	2,782.49	9.80	9.75	-144.51	22.51	151.71	247.17	233.49	13.69	18.060		
2,900.00	2,889.83	2,886.73	2,880.78	10.20	10.13	-144.14	17.68	160.84	262.30	248.09	14.21	18.464		
2,979.22	2,968.28	2,965.03	2,958.65	10.51	10.42	-143.88	13.85	168.07	274.29	259.67	14.62	18.762		
3,000.00	2,988.86	2,985.58	2,979.08	10.59	10.50	-143.84	12.84	169.97	277.39	262.66	14.73	18.834		
3,100.00	3,088.13	3,084.60	3,077.57	10.98	10.88	-143.45	8.00	179.11	291.06	275.81	15.25	19.085		
3,200.00	3,187.68	3,183.85	3,176.27	11.36	11.26	-142.79	3.14	188.27	302.68	286.91	15.77	19.191		
3,300.00	3,287.44	3,283.23	3,275.11	11.73	11.64	-141.88	-1.72	197.45	312.30	296.01	16.29	19.168		
3,400.00	3,387.34	3,382.70	3,374.03	12.08	12.02	-140.71	-6.59	206.64	319.99	303.18	16.81	19.035		
3,500.00	3,487.33	3,482.18	3,472.97	12.43	12.40	-139.29	-11.46	215.82	325.84	308.51	17.33	18.807		
3,512.67	3,500.00	3,494.78	3,485.50	12.47	12.45	54.81	-12.07	216.99	326.45	309.06	17.39	18.773		
3,600.00	3,587.33	3,581.63	3,571.88	12.76	12.78	56.21	-16.32	225.01	330.70	312.87	17.83	18.545		
3,700.00	3,687.33	3,681.08	3,670.78	13.10	13.17	57.78	-21.19	234.19	335.80	317.46	18.34	18.310		
3,800.00	3,787.33	3,780.54	3,769.69	13.43	13.55	59.29	-26.06	243.37	341.14	322.30	18.85	18.101		
3,900.00	3,887.33	3,879.99	3,868.60	13.77	13.94	60.76	-30.92	252.56	346.72	327.37	19.35	17.915		
4,000.00	3,987.33	3,979.44	3,967.51	14.11	14.32	62.18	-35.79	261.74	352.52	332.66	19.86	17.751		
4,100.00	4,087.33	4,078.89	4,066.41	14.44	14.71	63.56	-40.65	270.93	358.53	338.16	20.37	17.605		
4,200.00	4,187.33	4,178.35	4,165.32	14.78	15.09	64.89	-45.52	280.11	364.74	343.87	20.87	17.476		
4,300.00	4,287.33	4,277.80	4,264.23	15.12	15.48	66.17	-50.39	289.29	371.14	349.76	21.38	17.362		
4,400.00	4,387.33	4,377.25	4,363.14	15.46	15.87	67.41	-55.25	298.48	377.72	355.84	21.88	17.262		
4,500.00	4,487.33	4,476.70	4,462.05	15.81	16.26	68.61	-60.12	307.66	384.47	362.09	22.39	17.175		
4,600.00	4,587.33	4,576.16	4,560.95	16.15	16.64	69.77	-64.98	316.84	391.39	368.50	22.89	17.099		
4,700.00	4,687.33	4,675.61	4,659.86	16.49	17.03	70.88	-69.85	326.03	398.46	375.07	23.39	17.032		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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
Georgetown/Ouray - Ouray Fed Com 302H - 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		
4,800.00	4,787.33	4,775.06	4,758.77	16.83	17.42	71.96	-74.72	335.21	405.68	381.78	23.90	16.975		
4,900.00	4,887.33	4,874.51	4,857.68	17.18	17.81	73.00	-79.58	344.40	413.03	388.63	24.40	16.926		
5,000.00	4,987.33	4,973.97	4,956.59	17.52	18.20	74.00	-84.45	353.58	420.51	395.61	24.91	16.885		
5,100.00	5,087.33	5,073.42	5,055.49	17.87	18.59	74.97	-89.32	362.76	428.12	402.71	25.41	16.850		
5,200.00	5,187.33	5,172.87	5,154.40	18.21	18.97	75.91	-94.18	371.95	435.85	409.94	25.91	16.821		
5,300.00	5,287.33	5,272.32	5,253.31	18.56	19.36	76.81	-99.05	381.13	443.69	417.27	26.41	16.797		
5,400.00	5,387.33	5,371.78	5,352.22	18.91	19.75	77.68	-103.91	390.31	451.63	424.72	26.92	16.778		
5,500.00	5,487.33	5,471.23	5,451.12	19.26	20.14	78.52	-108.78	399.50	459.68	432.26	27.42	16.764		
5,600.00	5,587.33	5,570.68	5,550.03	19.60	20.53	79.33	-113.65	408.68	467.82	439.89	27.92	16.753		
5,700.00	5,687.33	5,670.13	5,648.94	19.95	20.92	80.11	-118.51	417.86	476.05	447.62	28.43	16.747		
5,800.00	5,787.33	5,769.59	5,747.85	20.30	21.31	80.87	-123.38	427.05	484.36	455.43	28.93	16.743		
5,900.00	5,887.33	5,869.04	5,846.76	20.65	21.70	81.60	-128.24	436.23	492.76	463.33	29.43	16.742		
6,000.00	5,987.33	5,968.49	5,945.66	21.00	22.10	82.30	-133.11	445.42	501.23	471.30	29.94	16.744		
6,100.00	6,087.33	6,067.94	6,044.57	21.35	22.49	82.99	-137.98	454.60	509.78	479.34	30.44	16.748		
6,200.00	6,187.33	6,167.40	6,143.48	21.70	22.88	83.65	-142.84	463.78	518.40	487.46	30.94	16.754		
6,300.00	6,287.33	6,266.85	6,242.39	22.05	23.27	84.28	-147.71	472.97	527.08	495.64	31.44	16.763		
6,400.00	6,387.33	6,366.30	6,341.30	22.40	23.66	84.90	-152.58	482.15	535.83	503.88	31.95	16.772		
6,500.00	6,487.33	6,465.75	6,440.20	22.75	24.05	85.50	-157.44	491.33	544.64	512.19	32.45	16.784		
6,600.00	6,587.33	6,565.20	6,539.11	23.10	24.44	86.08	-162.31	500.52	553.50	520.55	32.95	16.796		
6,700.00	6,687.33	6,664.66	6,638.02	23.45	24.83	86.64	-167.17	509.70	562.42	528.96	33.46	16.810		
6,800.00	6,787.33	6,764.11	6,736.93	23.80	25.22	87.18	-172.04	518.89	571.39	537.43	33.96	16.825		
6,900.00	6,887.33	6,863.56	6,835.84	24.15	25.62	87.71	-176.91	528.07	580.41	545.95	34.46	16.841		
7,000.00	6,987.33	6,963.01	6,934.74	24.50	26.01	88.22	-181.77	537.25	589.48	554.51	34.97	16.858		
7,100.00	7,087.33	7,066.75	7,037.93	24.86	26.41	88.73	-186.76	546.66	598.44	562.94	35.49	16.861		
7,200.00	7,187.33	7,176.48	7,147.24	25.21	26.84	89.17	-191.22	555.08	606.04	569.99	36.04	16.814		
7,300.00	7,287.33	7,286.52	7,257.03	25.56	27.25	89.50	-194.71	561.66	611.99	575.40	36.59	16.727		
7,400.00	7,387.33	7,396.82	7,367.20	25.91	27.65	89.74	-197.21	566.39	616.26	579.14	37.12	16.602		
7,500.00	7,487.33	7,507.28	7,477.61	26.26	28.04	89.88	-198.72	569.25	618.84	581.20	37.64	16.440		
7,600.00	7,587.33	7,617.83	7,588.15	26.62	28.41	89.93	-199.24	570.22	619.72	581.57	38.15	16.244		
7,700.00	7,687.33	7,718.00	7,688.33	26.97	28.74	89.93	-199.24	570.22	619.72	581.09	38.63	16.040		
7,800.00	7,787.33	7,818.00	7,788.33	27.32	29.06	89.93	-199.24	570.22	619.72	580.60	39.12	15.842		
7,900.00	7,887.33	7,918.01	7,888.33	27.68	29.38	89.93	-199.24	570.22	619.72	580.12	39.60	15.648		
8,000.00	7,987.33	8,018.01	7,988.33	28.03	29.70	89.93	-199.24	570.22	619.72	579.63	40.09	15.459		
8,100.00	8,087.33	8,118.01	8,088.33	28.38	30.03	89.93	-199.24	570.22	619.72	579.15	40.57	15.274		
8,200.00	8,187.33	8,218.01	8,188.33	28.74	30.35	89.93	-199.24	570.22	619.72	578.66	41.06	15.094		
8,300.00	8,287.33	8,318.01	8,288.33	29.09	30.68	89.93	-199.24	570.22	619.72	578.18	41.55	14.917		
8,400.00	8,387.33	8,418.01	8,388.33	29.44	31.01	89.93	-199.24	570.22	619.72	577.69	42.03	14.744		
8,500.00	8,487.33	8,518.01	8,488.33	29.80	31.33	89.93	-199.24	570.22	619.72	577.20	42.52	14.575		
8,600.00	8,587.33	8,618.01	8,588.33	30.15	31.66	89.93	-199.24	570.22	619.72	576.71	43.01	14.410		
8,700.00	8,687.33	8,718.01	8,688.33	30.51	31.99	89.93	-199.24	570.22	619.72	576.23	43.50	14.248		
8,800.00	8,787.33	8,818.01	8,788.33	30.86	32.32	89.93	-199.24	570.22	619.72	575.74	43.98	14.090		
8,900.00	8,887.33	8,918.01	8,888.33	31.21	32.65	89.93	-199.24	570.22	619.72	575.25	44.47	13.935		
9,000.00	8,987.33	9,018.01	8,988.33	31.57	32.98	89.93	-199.24	570.22	619.72	574.76	44.96	13.783		
9,100.00	9,087.33	9,118.01	9,088.33	31.92	33.31	89.93	-199.24	570.22	619.72	574.27	45.45	13.635		
9,200.00	9,187.33	9,218.01	9,188.33	32.28	33.64	89.93	-199.24	570.22	619.72	573.78	45.94	13.489		
9,300.00	9,287.33	9,318.01	9,288.33	32.63	33.97	89.93	-199.24	570.22	619.72	573.29	46.43	13.347		
9,400.00	9,387.33	9,418.01	9,388.33	32.99	34.31	89.93	-199.24	570.22	619.72	572.80	46.92	13.207		
9,500.00	9,487.33	9,518.01	9,488.33	33.34	34.64	89.93	-199.24	570.22	619.72	572.31	47.42	13.070		
9,600.00	9,587.33	9,618.14	9,588.47	33.70	34.97	89.92	-199.08	570.22	619.72	571.81	47.91	12.936		
9,669.77	9,657.10	9,688.07	9,658.10	33.94	35.20	89.37	-193.18	570.15	619.69	571.44	48.25	12.844		
9,700.00	9,687.33	9,717.73	9,687.32	34.05	35.29	88.90	-188.12	570.10	619.71	571.32	48.40	12.805		
9,800.00	9,787.33	9,810.89	9,776.79	34.41	35.54	86.54	-162.53	569.82	620.56	571.69	48.87	12.698		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 302H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,887.33	9,893.97	9,852.16	34.76	35.74	83.34	-127.75	569.43	624.19	574.90	49.28	12.665		
10,000.00	9,987.33	9,965.64	9,912.55	35.12	35.87	79.85	-89.26	569.01	632.90	583.37	49.53	12.779		
10,100.00	10,087.33	10,026.29	9,959.58	35.47	35.97	76.45	-51.00	568.59	648.70	599.22	49.48	13.111		
10,200.00	10,187.33	10,077.21	9,995.75	35.83	36.03	73.34	-15.20	568.19	672.89	623.83	49.07	13.714		
10,300.00	10,287.33	10,119.93	10,023.56	36.18	36.07	70.61	17.23	567.84	705.97	657.68	48.30	14.618		
10,400.00	10,387.33	10,150.00	10,041.64	36.54	36.10	68.65	41.25	567.57	747.78	700.61	47.16	15.855		
10,500.00	10,487.33	10,186.40	10,061.81	36.89	36.12	66.24	71.54	567.24	797.51	751.47	46.04	17.320		
10,600.00	10,587.33	10,200.00	10,068.84	37.25	36.13	65.33	83.18	567.11	854.56	809.96	44.60	19.162		
10,700.00	10,687.33	10,234.83	10,085.58	37.61	36.14	63.02	113.72	566.78	917.34	873.79	43.56	21.062		
10,800.00	10,787.33	10,250.00	10,092.28	37.96	36.14	62.02	127.32	566.63	985.51	943.16	42.35	23.272		
10,900.00	10,887.33	10,271.20	10,101.04	38.32	36.15	60.63	146.63	566.41	1,057.98	1,016.61	41.37	25.572		
11,000.00	10,987.33	10,300.00	10,111.79	38.67	36.15	58.77	173.34	566.12	1,134.33	1,093.69	40.64	27.913		
11,100.00	11,087.33	10,300.00	10,111.79	39.03	36.15	58.77	173.34	566.12	1,213.26	1,173.58	39.68	30.573		
11,200.00	11,187.33	10,300.00	10,111.79	39.38	36.15	58.77	173.34	566.12	1,295.11	1,256.22	38.89	33.305		
11,300.00	11,287.33	10,321.60	10,118.96	39.74	36.15	57.39	193.71	565.90	1,378.82	1,340.38	38.45	35.864		
11,400.00	11,387.33	10,331.07	10,121.86	40.10	36.15	56.79	202.73	565.80	1,464.49	1,426.51	37.98	38.557		
11,500.00	11,487.33	10,350.00	10,127.21	40.45	36.15	55.62	220.89	565.60	1,551.82	1,514.12	37.70	41.164		
11,600.00	11,587.33	10,350.00	10,127.21	40.81	36.15	55.62	220.89	565.60	1,640.23	1,602.91	37.33	43.942		
11,700.00	11,687.33	10,350.00	10,127.21	41.16	36.15	55.62	220.89	565.60	1,729.91	1,692.87	37.04	46.703		
11,800.00	11,787.33	10,350.00	10,127.21	41.52	36.15	55.62	220.89	565.60	1,820.66	1,783.84	36.83	49.439		
11,900.00	11,887.33	10,350.00	10,127.21	41.88	36.15	55.62	220.89	565.60	1,912.34	1,875.67	36.67	52.147		
11,940.71	11,928.04	10,369.28	10,132.03	42.02	36.15	54.44	239.55	565.39	1,949.49	1,912.75	36.75	53.049		
11,950.00	11,937.33	10,369.81	10,132.16	42.05	36.15	49.24	240.06	565.39	1,958.04	1,921.30	36.74	53.292		
12,000.00	11,987.22	10,373.17	10,133.93	42.23	36.15	41.37	243.33	565.35	2,003.44	1,966.74	36.70	54.590		
12,050.00	12,036.67	10,377.34	10,133.86	42.40	36.15	35.37	247.39	565.31	2,047.60	2,010.94	36.65	55.866		
12,100.00	12,085.28	10,400.00	10,138.42	42.56	36.16	30.31	269.59	565.06	2,090.59	2,053.89	36.70	56.961		
12,150.00	12,132.70	10,400.00	10,138.42	42.71	36.16	26.95	269.59	565.06	2,131.32	2,094.71	36.61	58.220		
12,200.00	12,178.57	10,400.00	10,138.42	42.86	36.16	24.29	269.59	565.06	2,170.12	2,133.61	36.51	59.436		
12,250.00	12,222.52	10,400.00	10,138.42	43.00	36.16	22.16	269.59	565.06	2,206.81	2,170.40	36.41	60.605		
12,300.00	12,264.24	10,400.00	10,138.42	43.13	36.16	20.43	269.59	565.06	2,241.22	2,204.90	36.32	61.715		
12,350.00	12,303.40	10,400.00	10,138.42	43.26	36.16	19.03	269.59	565.06	2,273.20	2,236.98	36.22	62.756		
12,400.00	12,339.70	10,423.82	10,142.26	43.38	36.18	17.70	293.10	564.80	2,302.01	2,265.78	36.23	63.542		
12,450.00	12,372.86	10,450.00	10,145.35	43.50	36.23	16.62	319.09	564.52	2,328.57	2,292.33	36.23	64.264		
12,500.00	12,402.64	10,450.00	10,145.35	43.62	36.23	15.90	319.09	564.52	2,351.56	2,315.42	36.15	65.052		
12,550.00	12,428.81	10,450.00	10,145.35	43.74	36.23	15.31	319.09	564.52	2,371.64	2,335.57	36.08	65.738		
12,600.00	12,451.17	10,450.00	10,145.35	43.85	36.23	14.83	319.09	564.52	2,388.72	2,352.70	36.02	66.313		
12,650.00	12,469.55	10,450.00	10,145.35	43.97	36.23	14.46	319.09	564.52	2,402.74	2,366.76	35.98	66.771		
12,700.00	12,483.81	10,478.24	10,147.35	44.09	36.30	14.11	347.25	564.21	2,412.81	2,376.79	36.02	66.990		
12,750.00	12,493.83	10,500.00	10,147.94	44.21	36.37	13.88	369.01	563.97	2,420.04	2,383.99	36.04	67.141		
12,800.00	12,499.55	10,500.00	10,147.94	44.33	36.37	13.80	369.01	563.97	2,423.58	2,387.52	36.06	67.214		
12,840.71	12,501.00	10,500.00	10,147.94	44.42	36.37	13.79	369.01	563.97	2,424.10	2,388.01	36.09	67.170		
12,882.23	12,501.00	10,517.47	10,147.82	44.53	36.42	13.76	386.48	563.78	2,423.79	2,387.64	36.15	67.049		
12,900.00	12,501.00	10,517.47	10,147.82	44.57	36.42	13.76	386.48	563.78	2,423.87	2,387.69	36.18	67.002		
13,000.00	12,501.00	10,615.75	10,145.62	44.88	36.77	13.65	484.72	562.69	2,425.23	2,388.83	36.40	66.631		
13,047.21	12,501.00	10,662.95	10,144.57	45.04	36.97	13.62	531.91	562.18	2,426.17	2,389.64	36.52	66.426		
13,100.00	12,501.00	10,715.72	10,143.39	45.24	37.20	13.61	584.67	561.59	2,427.31	2,390.63	36.68	66.183		
13,200.00	12,501.00	10,815.70	10,141.16	45.66	37.68	13.60	684.61	560.49	2,429.48	2,392.49	36.99	65.674		
13,300.00	12,501.00	10,915.67	10,138.92	46.14	38.22	13.58	784.55	559.40	2,431.65	2,394.31	37.35	65.112		
13,400.00	12,501.00	11,015.65	10,136.69	46.67	38.83	13.57	884.50	558.30	2,433.82	2,396.09	37.73	64.501		
13,500.00	12,501.00	11,115.62	10,134.46	47.25	39.49	13.56	984.44	557.20	2,435.99	2,397.84	38.15	63.845		
13,600.00	12,501.00	11,215.60	10,132.23	47.88	40.20	13.55	1,084.39	556.10	2,438.16	2,399.55	38.61	63.150		
13,700.00	12,501.00	11,315.57	10,129.99	48.56	40.97	13.53	1,184.33	555.00	2,440.33	2,401.24	39.09	62.421		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 302H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor	
13,800.00	12,501.00	11,415.55	10,127.76	49.29	41.78	13.52	1,284.27	553.90	2,442.51	2,402.89	39.61	61.660		
13,900.00	12,501.00	11,515.52	10,125.53	50.06	42.65	13.51	1,384.22	552.80	2,444.68	2,404.52	40.16	60.876		
14,000.00	12,501.00	11,615.50	10,123.30	50.87	43.56	13.50	1,484.16	551.70	2,446.85	2,406.11	40.73	60.070		
14,100.00	12,501.00	11,715.47	10,121.06	51.72	44.51	13.49	1,584.11	550.60	2,449.02	2,407.68	41.33	59.249		
14,200.00	12,501.00	11,815.45	10,118.83	52.61	45.50	13.47	1,684.05	549.50	2,451.19	2,409.23	41.96	58.416		
14,300.00	12,501.00	11,915.42	10,116.60	53.54	46.53	13.46	1,783.99	548.40	2,453.36	2,410.75	42.61	57.575		
14,400.00	12,501.00	12,015.40	10,114.37	54.50	47.59	13.45	1,883.94	547.30	2,455.53	2,412.25	43.28	56.730		
14,500.00	12,501.00	12,115.37	10,112.13	55.50	48.68	13.44	1,983.88	546.20	2,457.71	2,413.73	43.98	55.883		
14,600.00	12,501.00	12,215.35	10,109.90	56.52	49.81	13.42	2,083.83	545.10	2,459.88	2,415.18	44.70	55.036		
14,700.00	12,501.00	12,315.33	10,107.67	57.57	50.96	13.41	2,183.77	544.00	2,462.05	2,416.62	45.43	54.190		
14,800.00	12,501.00	12,415.30	10,105.43	58.66	52.14	13.40	2,283.72	542.90	2,464.22	2,418.03	46.19	53.349		
14,900.00	12,501.00	12,515.28	10,103.20	59.76	53.35	13.39	2,383.66	541.80	2,466.39	2,419.43	46.97	52.515		
15,000.00	12,501.00	12,615.25	10,100.97	60.90	54.58	13.38	2,483.60	540.70	2,468.57	2,420.81	47.76	51.689		
15,100.00	12,501.00	12,715.23	10,098.74	62.05	55.83	13.36	2,583.55	539.60	2,470.74	2,422.17	48.57	50.875		
15,200.00	12,501.00	12,815.20	10,096.50	63.23	57.10	13.35	2,683.49	538.50	2,472.91	2,423.52	49.39	50.071		
15,300.00	12,501.00	12,915.18	10,094.27	64.43	58.39	13.34	2,783.44	537.40	2,475.08	2,424.86	50.23	49.280		
15,400.00	12,501.00	13,015.15	10,092.04	65.65	59.70	13.33	2,883.38	536.30	2,477.26	2,426.18	51.08	48.501		
15,500.00	12,501.00	13,115.13	10,089.81	66.89	61.02	13.32	2,983.32	535.20	2,479.43	2,427.49	51.94	47.735		
15,600.00	12,501.00	13,215.10	10,087.57	68.14	62.36	13.30	3,083.27	534.10	2,481.60	2,428.78	52.82	46.984		
15,700.00	12,501.00	13,315.08	10,085.34	69.41	63.71	13.29	3,183.21	533.00	2,483.78	2,430.07	53.71	46.246		
15,800.00	12,501.00	13,415.05	10,083.11	70.70	65.08	13.28	3,283.16	531.90	2,485.95	2,431.34	54.61	45.523		
15,900.00	12,501.00	13,515.03	10,080.88	72.00	66.46	13.27	3,383.10	530.80	2,488.12	2,432.60	55.52	44.814		
16,000.00	12,501.00	13,615.00	10,078.64	73.32	67.86	13.26	3,483.04	529.70	2,490.30	2,433.85	56.44	44.121		
16,100.00	12,501.00	13,714.98	10,076.41	74.65	69.26	13.25	3,582.99	528.60	2,492.47	2,435.10	57.37	43.444		
16,200.00	12,501.00	13,814.95	10,074.18	75.99	70.68	13.23	3,682.93	527.50	2,494.64	2,436.33	58.31	42.781		
16,300.00	12,501.00	13,914.93	10,071.95	77.35	72.10	13.22	3,782.88	526.40	2,496.82	2,437.56	59.26	42.133		
16,400.00	12,501.00	14,014.90	10,069.71	78.72	73.54	13.21	3,882.82	525.30	2,498.99	2,438.77	60.22	41.500		
16,500.00	12,501.00	14,114.88	10,067.48	80.09	74.98	13.20	3,982.76	524.20	2,501.16	2,439.98	61.18	40.881		
16,600.00	12,501.00	14,214.85	10,065.25	81.48	76.43	13.19	4,082.71	523.11	2,503.34	2,441.18	62.15	40.276		
16,700.00	12,501.00	14,314.83	10,063.02	82.88	77.89	13.18	4,182.65	522.01	2,505.51	2,442.38	63.13	39.686		
16,800.00	12,501.00	14,414.80	10,060.78	84.28	79.36	13.16	4,282.60	520.91	2,507.69	2,443.57	64.12	39.109		
16,900.00	12,501.00	14,514.78	10,058.55	85.70	80.84	13.15	4,382.54	519.81	2,509.86	2,444.75	65.11	38.546		
17,000.00	12,501.00	14,614.75	10,056.32	87.12	82.32	13.14	4,482.49	518.71	2,512.04	2,445.93	66.11	37.998		
17,100.00	12,501.00	14,714.73	10,054.09	88.55	83.81	13.13	4,582.43	517.61	2,514.21	2,447.10	67.11	37.462		
17,200.00	12,501.00	14,814.70	10,051.85	89.99	85.30	13.12	4,682.37	516.51	2,516.38	2,448.26	68.12	36.939		
17,300.00	12,501.00	14,914.68	10,049.62	91.44	86.80	13.11	4,782.32	515.41	2,518.56	2,449.42	69.14	36.428		
17,400.00	12,501.00	15,014.65	10,047.39	92.89	88.31	13.09	4,882.26	514.31	2,520.73	2,450.58	70.16	35.930		
17,500.00	12,501.00	15,114.63	10,045.16	94.35	89.82	13.08	4,982.21	513.21	2,522.91	2,451.73	71.18	35.443		
17,600.00	12,501.00	15,214.60	10,042.92	95.82	91.33	13.07	5,082.15	512.11	2,525.08	2,452.87	72.21	34.968		
17,700.00	12,501.00	15,314.58	10,040.69	97.29	92.85	13.06	5,182.09	511.01	2,527.26	2,454.01	73.25	34.504		
17,800.00	12,501.00	15,414.55	10,038.46	98.77	94.38	13.05	5,282.04	509.91	2,529.43	2,455.15	74.28	34.051		
17,900.00	12,501.00	15,514.53	10,036.23	100.25	95.91	13.04	5,381.98	508.81	2,531.61	2,456.28	75.33	33.609		
18,000.00	12,501.00	15,614.50	10,033.99	101.74	97.44	13.03	5,481.93	507.71	2,533.79	2,457.42	76.37	33.178		
18,100.00	12,501.00	15,714.48	10,031.76	103.24	98.98	13.01	5,581.87	506.61	2,535.96	2,458.54	77.42	32.757		
18,200.00	12,501.00	15,814.45	10,029.53	104.73	100.52	13.00	5,681.81	505.51	2,538.14	2,459.67	78.47	32.346		
18,300.00	12,501.00	15,914.43	10,027.30	106.24	102.06	12.99	5,781.76	504.41	2,540.31	2,460.79	79.53	31.943		
18,400.00	12,501.00	16,014.40	10,025.06	107.75	103.61	12.98	5,881.70	503.31	2,542.49	2,461.90	80.59	31.550		
18,500.00	12,501.00	16,114.38	10,022.83	109.26	105.16	12.97	5,981.65	502.21	2,544.66	2,463.02	81.65	31.166		
18,600.00	12,501.00	16,214.35	10,020.60	110.77	106.71	12.96	6,081.59	501.11	2,546.84	2,464.13	82.71	30.792		
18,700.00	12,501.00	16,314.33	10,018.37	112.29	108.27	12.95	6,181.53	500.01	2,549.02	2,465.24	83.78	30.426		
18,800.00	12,501.00	16,414.30	10,016.13	113.82	109.83	12.94	6,281.48	498.91	2,551.19	2,466.34	84.85	30.068		
18,900.00	12,501.00	16,514.28	10,013.90	115.34	111.39	12.92	6,381.42	497.81	2,553.37	2,467.45	85.92	29.718		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 302H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,000.00	12,501.00	16,614.25	10,011.67	116.87	112.96	12.91	6,481.37	496.71	2,555.55	2,468.55	86.99	29.376		
19,100.00	12,501.00	16,714.23	10,009.44	118.41	114.52	12.90	6,581.31	495.61	2,557.72	2,469.65	88.07	29.041		
19,200.00	12,501.00	16,814.20	10,007.20	119.94	116.09	12.89	6,681.25	494.51	2,559.90	2,470.75	89.15	28.714		
19,300.00	12,501.00	16,914.18	10,004.97	121.48	117.66	12.88	6,781.20	493.41	2,562.08	2,471.84	90.23	28.394		
19,400.00	12,501.00	17,014.15	10,002.74	123.03	119.24	12.87	6,881.14	492.31	2,564.25	2,472.93	91.32	28.080		
19,500.00	12,501.00	17,114.13	10,000.51	124.57	120.82	12.86	6,981.09	491.21	2,566.43	2,474.03	92.40	27.774		
19,600.00	12,501.00	17,214.10	9,998.27	126.12	122.39	12.85	7,081.03	490.11	2,568.61	2,475.12	93.49	27.475		
19,700.00	12,501.00	17,314.08	9,996.04	127.67	123.97	12.83	7,180.98	489.01	2,570.78	2,476.21	94.58	27.182		
19,800.00	12,501.00	17,414.05	9,993.81	129.23	125.56	12.82	7,280.92	487.91	2,572.96	2,477.29	95.67	26.895		
19,900.00	12,501.00	17,514.03	9,991.58	130.78	127.14	12.81	7,380.86	486.82	2,575.14	2,478.38	96.76	26.614		
20,000.00	12,501.00	17,614.00	9,989.34	132.34	128.73	12.80	7,480.81	485.72	2,577.32	2,479.46	97.85	26.338		
20,100.00	12,501.00	17,713.98	9,987.11	133.90	130.31	12.79	7,580.75	484.62	2,579.49	2,480.54	98.95	26.069		
20,200.00	12,501.00	17,813.95	9,984.88	135.47	131.90	12.78	7,680.70	483.52	2,581.67	2,481.62	100.05	25.805		
20,300.00	12,501.00	17,913.93	9,982.65	137.03	133.49	12.77	7,780.64	482.42	2,583.85	2,482.70	101.14	25.546		
20,400.00	12,501.00	18,013.90	9,980.41	138.60	135.08	12.76	7,880.58	481.32	2,586.03	2,483.78	102.24	25.293		
20,500.00	12,501.00	18,113.88	9,978.18	140.17	136.68	12.75	7,980.53	480.22	2,588.20	2,484.86	103.35	25.044		
20,600.00	12,501.00	18,213.85	9,975.95	141.74	138.27	12.74	8,080.47	479.12	2,590.38	2,485.93	104.45	24.801		
20,700.00	12,501.00	18,313.83	9,973.72	143.31	139.87	12.72	8,180.42	478.02	2,592.56	2,487.01	105.55	24.562		
20,800.00	12,501.00	18,413.80	9,971.48	144.89	141.47	12.71	8,280.36	476.92	2,594.74	2,488.08	106.66	24.328		
20,900.00	12,501.00	18,513.78	9,969.25	146.46	143.07	12.70	8,380.30	475.82	2,596.92	2,489.15	107.76	24.098		
21,000.00	12,501.00	18,613.75	9,967.02	148.04	144.67	12.69	8,480.25	474.72	2,599.10	2,490.23	108.87	23.873		
21,100.00	12,501.00	18,713.73	9,964.79	149.62	146.27	12.68	8,580.19	473.62	2,601.27	2,491.30	109.98	23.653		
21,200.00	12,501.00	18,813.70	9,962.55	151.20	147.87	12.67	8,680.14	472.52	2,603.45	2,492.37	111.08	23.437		
21,300.00	12,501.00	18,913.68	9,960.32	152.78	149.47	12.66	8,780.08	471.42	2,605.63	2,493.44	112.19	23.224		
21,400.00	12,501.00	19,013.65	9,958.09	154.37	151.08	12.65	8,880.02	470.32	2,607.81	2,494.51	113.30	23.016		
21,500.00	12,501.00	19,113.63	9,955.86	155.95	152.68	12.64	8,979.97	469.22	2,609.99	2,495.57	114.41	22.812		
21,600.00	12,501.00	19,213.60	9,953.62	157.54	154.29	12.63	9,079.91	468.12	2,612.17	2,496.64	115.53	22.611		
21,700.00	12,501.00	19,313.58	9,951.39	159.13	155.90	12.62	9,179.86	467.02	2,614.35	2,497.71	116.64	22.414		
21,800.00	12,501.00	19,413.55	9,949.16	160.72	157.51	12.61	9,279.80	465.92	2,616.53	2,498.77	117.75	22.220		
21,900.00	12,501.00	19,513.53	9,946.93	162.31	159.12	12.60	9,379.75	464.82	2,618.70	2,499.84	118.87	22.030		
22,000.00	12,501.00	19,613.50	9,944.69	163.90	160.73	12.58	9,479.69	463.72	2,620.88	2,500.90	119.98	21.844		
22,100.00	12,501.00	19,713.48	9,942.46	165.50	162.34	12.57	9,579.63	462.62	2,623.06	2,501.96	121.10	21.660		
22,200.00	12,501.00	19,813.46	9,940.23	167.09	163.95	12.56	9,679.58	461.52	2,625.24	2,503.03	122.22	21.480		
22,300.00	12,501.00	19,913.43	9,938.00	168.69	165.56	12.55	9,779.52	460.42	2,627.42	2,504.09	123.33	21.303		
22,400.00	12,501.00	20,013.41	9,935.76	170.28	167.18	12.54	9,879.47	459.32	2,629.60	2,505.15	124.45	21.130		
22,500.00	12,501.00	20,113.38	9,933.53	171.88	168.79	12.53	9,979.41	458.22	2,631.78	2,506.21	125.57	20.959		
22,600.00	12,501.00	20,213.36	9,931.30	173.48	170.41	12.52	10,079.35	457.12	2,633.96	2,507.28	126.69	20.791		
22,635.57	12,501.00	20,248.92	9,930.50	174.05	170.98	12.52	10,114.91	456.73	2,634.74	2,507.65	127.08	20.732		
22,636.34	12,501.00	20,249.68	9,930.49	174.06	170.99	12.52	10,115.67	456.72	2,634.75	2,507.72	127.04	20.740		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 602H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-14.03	75.00	-18.74	77.78					
100.00	100.00	91.40	91.40	0.13	0.13	-14.03	75.00	-18.74	77.31	77.13	0.18	428.876		
200.00	200.00	191.40	191.40	0.48	0.47	-14.03	75.00	-18.74	77.31	76.63	0.67	114.684		
300.00	300.00	291.40	291.40	0.84	0.83	-14.03	75.00	-18.74	77.31	76.12	1.18	65.458		
400.00	400.00	391.40	391.40	1.20	1.19	-14.03	75.00	-18.74	77.31	75.62	1.69	45.799		
500.00	500.00	491.40	491.40	1.56	1.54	-14.03	75.00	-18.74	77.31	75.11	2.19	35.221		
600.00	600.00	591.40	591.40	1.92	1.90	-14.03	75.00	-18.74	77.31	74.60	2.70	28.612		
700.00	700.00	691.40	691.40	2.28	2.26	-14.03	75.00	-18.74	77.31	74.10	3.21	24.092		
800.00	800.00	791.40	791.40	2.63	2.62	-14.03	75.00	-18.74	77.31	73.59	3.72	20.805		
900.00	900.00	891.40	891.40	2.99	2.98	-14.03	75.00	-18.74	77.31	73.08	4.22	18.307		
1,000.00	1,000.00	991.40	991.40	3.35	3.34	-14.03	75.00	-18.74	77.31	72.58	4.73	16.345		
1,100.00	1,100.00	1,091.40	1,091.40	3.71	3.70	-14.03	75.00	-18.74	77.31	72.07	5.24	14.763		
1,200.00	1,200.00	1,191.40	1,191.40	4.07	4.05	-14.03	75.00	-18.74	77.31	71.56	5.74	13.460		
1,300.00	1,300.00	1,291.40	1,291.40	4.43	4.41	-14.03	75.00	-18.74	77.31	71.06	6.25	12.368		
1,400.00	1,400.00	1,391.40	1,391.40	4.79	4.77	-14.03	75.00	-18.74	77.31	70.55	6.76	11.440		
1,500.00	1,500.00	1,491.40	1,491.40	5.14	5.13	-14.03	75.00	-18.74	77.31	70.04	7.26	10.642 CC, ES		
1,600.00	1,599.99	1,591.39	1,591.39	5.48	5.49	152.51	75.00	-18.74	78.46	70.71	7.76	10.113		
1,700.00	1,699.91	1,691.31	1,691.31	5.81	5.85	153.75	75.00	-18.74	81.97	73.72	8.24	9.944		
1,800.00	1,799.69	1,791.09	1,791.09	6.14	6.20	155.60	75.00	-18.74	87.88	79.15	8.73	10.067		
1,900.00	1,899.27	1,890.67	1,890.67	6.48	6.56	157.80	75.00	-18.74	96.29	87.07	9.22	10.446		
2,000.00	1,998.57	1,989.97	1,989.97	6.82	6.92	160.12	75.00	-18.74	107.28	97.57	9.71	11.050		
2,033.45	2,031.72	2,023.12	2,023.12	6.94	7.04	160.88	75.00	-18.74	111.53	101.66	9.87	11.297		
2,100.00	2,097.62	2,089.02	2,089.02	7.17	7.27	162.33	75.00	-18.74	120.33	110.13	10.20	11.798		
2,200.00	2,196.65	2,188.05	2,188.05	7.53	7.63	164.14	75.00	-18.74	133.67	122.98	10.69	12.504		
2,300.00	2,295.67	2,287.07	2,287.07	7.90	7.98	165.62	75.00	-18.74	147.12	135.94	11.18	13.155		
2,400.00	2,394.70	2,386.10	2,386.10	8.27	8.34	166.85	75.00	-18.74	160.65	148.97	11.68	13.757		
2,500.00	2,493.73	2,485.13	2,485.13	8.65	8.69	167.89	75.00	-18.74	174.24	162.07	12.17	14.313		
2,600.00	2,592.75	2,584.15	2,584.15	9.03	9.05	168.78	75.00	-18.74	187.88	175.21	12.67	14.827		
2,700.00	2,691.78	2,683.18	2,683.18	9.42	9.40	169.55	75.00	-18.74	201.56	188.39	13.17	15.305		
2,800.00	2,790.80	2,782.20	2,782.20	9.80	9.76	170.22	75.00	-18.74	215.26	201.60	13.67	15.749		
2,900.00	2,889.83	2,881.23	2,881.23	10.20	10.11	170.81	75.00	-18.74	229.00	214.83	14.17	16.163		
2,979.22	2,968.28	2,959.68	2,959.68	10.51	10.39	171.23	75.00	-18.74	239.89	225.33	14.57	16.471		
3,000.00	2,988.86	2,980.26	2,980.26	10.59	10.47	171.34	75.00	-18.74	242.70	228.03	14.67	16.545		
3,100.00	3,088.13	3,079.53	3,079.53	10.98	10.82	171.78	75.00	-18.74	254.65	239.48	15.17	16.786		
3,200.00	3,187.68	3,179.08	3,179.08	11.36	11.18	172.09	75.00	-18.74	264.04	248.37	15.67	16.848		
3,300.00	3,287.44	3,278.84	3,278.84	11.73	11.54	172.31	75.00	-18.74	270.85	254.67	16.17	16.746		
3,400.00	3,387.34	3,378.74	3,378.74	12.08	11.89	172.43	75.00	-18.74	275.07	258.39	16.67	16.496		
3,500.00	3,487.33	3,479.90	3,479.89	12.43	12.25	172.65	74.74	-17.95	276.53	259.35	17.17	16.103		
3,512.67	3,500.00	3,492.75	3,492.75	12.47	12.29	6.61	74.65	-17.67	276.49	259.25	17.24	16.042		
3,600.00	3,587.33	3,581.27	3,581.21	12.76	12.59	7.26	73.66	-14.65	275.88	258.22	17.66	15.622		
3,700.00	3,687.33	3,682.40	3,682.14	13.10	12.93	8.51	71.75	-8.83	274.79	256.65	18.14	15.145		
3,800.00	3,787.33	3,783.12	3,782.48	13.43	13.28	10.32	69.01	-0.50	273.47	254.84	18.63	14.678		
3,900.00	3,887.33	3,883.32	3,882.03	13.77	13.62	12.69	65.48	10.27	272.14	253.03	19.12	14.235		
4,000.00	3,987.33	3,982.69	3,980.48	14.11	13.97	15.53	61.27	23.11	271.17	251.57	19.61	13.831		
4,090.54	4,077.87	4,072.35	4,069.27	14.41	14.29	18.17	57.38	34.96	270.88	250.83	20.05	13.510		
4,100.00	4,087.33	4,081.72	4,078.54	14.44	14.32	18.44	56.97	36.20	270.88	250.79	20.10	13.478		
4,200.00	4,187.33	4,180.75	4,176.61	14.78	14.67	21.36	52.67	49.30	271.31	250.72	20.59	13.176		
4,300.00	4,287.33	4,279.77	4,274.67	15.12	15.03	24.25	48.38	62.39	272.45	251.36	21.09	12.919		
4,400.00	4,387.33	4,378.80	4,372.73	15.46	15.39	27.12	44.08	75.48	274.28	252.70	21.59	12.706		
4,500.00	4,487.33	4,477.83	4,470.80	15.81	15.75	29.94	39.78	88.58	276.81	254.72	22.09	12.533		
4,600.00	4,587.33	4,576.85	4,568.86	16.15	16.12	32.70	35.49	101.67	280.01	257.42	22.59	12.396		
4,700.00	4,687.33	4,675.88	4,666.92	16.49	16.49	35.39	31.19	114.77	283.85	260.76	23.09	12.292		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 602H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,787.33	4,774.91	4,764.99	16.83	16.86	38.01	26.89	127.86	288.31	264.72	23.59	12.219		
4,900.00	4,887.33	4,873.93	4,863.05	17.18	17.23	40.55	22.59	140.95	293.37	269.27	24.10	12.174		
5,000.00	4,987.33	4,972.96	4,961.11	17.52	17.61	43.00	18.30	154.05	298.99	274.39	24.60	12.153		
5,100.00	5,087.33	5,071.99	5,059.18	17.87	17.98	45.35	14.00	167.14	305.14	280.04	25.11	12.155		
5,200.00	5,187.33	5,171.01	5,157.24	18.21	18.36	47.61	9.70	180.24	311.80	286.19	25.61	12.175		
5,300.00	5,287.33	5,270.04	5,255.30	18.56	18.74	49.77	5.41	193.33	318.92	292.80	26.11	12.214		
5,400.00	5,387.33	5,369.07	5,353.37	18.91	19.13	51.84	1.11	206.43	326.48	299.86	26.61	12.267		
5,500.00	5,487.33	5,468.10	5,451.43	19.26	19.51	53.81	-3.19	219.52	334.44	307.33	27.12	12.334		
5,600.00	5,587.33	5,567.12	5,549.49	19.60	19.89	55.69	-7.48	232.61	342.79	315.17	27.62	12.412		
5,700.00	5,687.33	5,666.15	5,647.56	19.95	20.28	57.48	-11.78	245.71	351.49	323.37	28.12	12.500		
5,800.00	5,787.33	5,765.18	5,745.62	20.30	20.67	59.18	-16.08	258.80	360.52	331.90	28.62	12.596		
5,900.00	5,887.33	5,864.20	5,843.68	20.65	21.06	60.80	-20.38	271.90	369.85	340.73	29.12	12.700		
6,000.00	5,987.33	5,963.23	5,941.75	21.00	21.45	62.34	-24.67	284.99	379.46	349.84	29.62	12.810		
6,100.00	6,087.33	6,062.26	6,039.81	21.35	21.84	63.80	-28.97	298.09	389.33	359.21	30.12	12.925		
6,200.00	6,187.33	6,161.28	6,137.87	21.70	22.23	65.19	-33.27	311.18	399.45	368.82	30.62	13.044		
6,300.00	6,287.33	6,260.31	6,235.94	22.05	22.62	66.51	-37.56	324.27	409.78	378.66	31.12	13.166		
6,400.00	6,387.33	6,359.34	6,334.00	22.40	23.02	67.77	-41.86	337.37	420.33	388.70	31.62	13.292		
6,500.00	6,487.33	6,458.36	6,432.06	22.75	23.41	68.96	-46.16	350.46	431.06	398.94	32.12	13.419		
6,600.00	6,587.33	6,557.39	6,530.13	23.10	23.81	70.10	-50.46	363.56	441.97	409.35	32.62	13.548		
6,700.00	6,687.33	6,656.42	6,628.19	23.45	24.20	71.18	-54.75	376.65	453.05	419.93	33.12	13.677		
6,800.00	6,787.33	6,755.45	6,726.25	23.80	24.60	72.21	-59.05	389.74	464.28	430.66	33.62	13.808		
6,900.00	6,887.33	6,854.47	6,824.31	24.15	25.00	73.19	-63.35	402.84	475.65	441.53	34.12	13.939		
7,000.00	6,987.33	6,953.50	6,922.38	24.50	25.40	74.13	-67.64	415.93	487.16	452.53	34.63	14.070		
7,100.00	7,087.33	7,052.53	7,020.44	24.86	25.80	75.02	-71.94	429.03	498.78	463.66	35.13	14.200		
7,200.00	7,187.33	7,151.55	7,118.50	25.21	26.20	75.87	-76.24	442.12	510.53	474.90	35.63	14.330		
7,300.00	7,287.33	7,250.58	7,216.57	25.56	26.60	76.68	-80.53	455.22	522.37	486.25	36.13	14.459		
7,400.00	7,387.33	7,349.61	7,314.63	25.91	27.00	77.46	-84.83	468.31	534.32	497.69	36.63	14.588		
7,500.00	7,487.33	7,448.63	7,412.69	26.26	27.40	78.20	-89.13	481.40	546.36	509.23	37.13	14.715		
7,600.00	7,587.33	7,547.66	7,510.76	26.62	27.80	78.92	-93.43	494.50	558.49	520.86	37.63	14.841		
7,700.00	7,687.33	7,646.69	7,608.82	26.97	28.21	79.60	-97.72	507.59	570.70	532.57	38.13	14.966		
7,800.00	7,787.33	7,745.71	7,706.88	27.32	28.61	80.25	-102.02	520.69	582.99	544.35	38.63	15.090		
7,900.00	7,887.33	7,844.74	7,804.95	27.68	29.01	80.88	-106.32	533.78	595.35	556.21	39.14	15.212		
8,000.00	7,987.33	7,943.77	7,903.01	28.03	29.42	81.48	-110.61	546.88	607.77	568.13	39.64	15.333		
8,100.00	8,087.33	8,042.79	8,001.07	28.38	29.82	82.05	-114.91	559.97	620.26	580.12	40.14	15.452		
8,200.00	8,187.33	8,141.82	8,099.14	28.74	30.23	82.61	-119.21	573.06	632.81	592.17	40.64	15.570		
8,300.00	8,287.33	8,240.85	8,197.20	29.09	30.63	83.14	-123.50	586.16	645.41	604.27	41.15	15.686		
8,400.00	8,387.33	8,339.88	8,295.26	29.44	31.04	83.65	-127.80	599.25	658.07	616.42	41.65	15.800		
8,500.00	8,487.33	8,438.90	8,393.33	29.80	31.44	84.14	-132.10	612.35	670.78	628.63	42.15	15.913		
8,600.00	8,587.33	8,537.93	8,491.39	30.15	31.85	84.62	-136.40	625.44	683.53	640.88	42.66	16.024		
8,700.00	8,687.33	8,636.96	8,589.45	30.51	32.26	85.07	-140.69	638.54	696.33	653.17	43.16	16.134		
8,800.00	8,787.33	8,735.98	8,687.52	30.86	32.66	85.51	-144.99	651.63	709.17	665.51	43.66	16.242		
8,900.00	8,887.33	8,835.01	8,785.58	31.21	33.07	85.94	-149.29	664.72	722.05	677.89	44.17	16.348		
9,000.00	8,987.33	8,934.04	8,883.64	31.57	33.48	86.35	-153.58	677.82	734.97	690.30	44.67	16.453		
9,100.00	9,087.33	9,033.06	8,981.71	31.92	33.88	86.74	-157.88	690.91	747.93	702.75	45.18	16.556		
9,200.00	9,187.33	9,132.09	9,079.77	32.28	34.29	87.13	-162.18	704.01	760.92	715.24	45.68	16.657		
9,300.00	9,287.33	9,231.12	9,177.83	32.63	34.70	87.50	-166.48	717.10	773.94	727.75	46.19	16.757		
9,400.00	9,387.33	9,330.14	9,275.90	32.99	35.11	87.85	-170.77	730.19	786.99	740.30	46.69	16.855		
9,500.00	9,487.33	9,429.17	9,373.96	33.34	35.52	88.20	-175.07	743.29	800.07	752.87	47.20	16.952		
9,600.00	9,587.33	9,528.20	9,472.02	33.70	35.93	88.53	-179.37	756.38	813.18	765.48	47.70	17.047		
9,700.00	9,687.33	9,627.23	9,570.09	34.05	36.34	88.86	-183.66	769.48	826.31	778.11	48.21	17.141		
9,800.00	9,787.33	9,726.25	9,668.15	34.41	36.75	89.17	-187.96	782.57	839.47	790.76	48.71	17.233		
9,900.00	9,887.33	9,849.05	9,789.97	34.76	37.24	89.51	-192.78	797.25	851.42	802.06	49.36	17.248		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 602H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,000.00	9,987.33	9,975.49	9,915.85	35.12	37.73	89.76	-196.46	808.48	860.29	810.29	50.00	17.207		
10,100.00	10,087.33	10,102.58	10,042.70	35.47	38.20	89.92	-198.86	815.78	866.03	815.44	50.59	17.119		
10,200.00	10,187.33	10,230.04	10,170.11	35.83	38.64	90.00	-199.94	819.06	868.60	817.46	51.14	16.984		
10,300.00	10,287.33	10,338.66	10,278.73	36.18	38.99	90.00	-200.00	819.26	868.76	817.12	51.64	16.822		
10,400.00	10,387.33	10,438.66	10,378.73	36.54	39.32	90.00	-200.00	819.26	868.76	816.63	52.13	16.664		
10,500.00	10,487.33	10,538.66	10,478.73	36.89	39.64	90.00	-200.00	819.26	868.76	816.13	52.63	16.508		
10,600.00	10,587.33	10,638.66	10,578.73	37.25	39.97	90.00	-200.00	819.26	868.76	815.64	53.12	16.356		
10,700.00	10,687.33	10,738.66	10,678.73	37.61	40.29	90.00	-200.00	819.26	868.76	815.15	53.61	16.206		
10,800.00	10,787.33	10,838.66	10,778.73	37.96	40.62	90.00	-200.00	819.26	868.76	814.66	54.10	16.058		
10,900.00	10,887.33	10,938.66	10,878.73	38.32	40.94	90.00	-200.00	819.26	868.76	814.17	54.59	15.913		
11,000.00	10,987.33	11,038.66	10,978.73	38.67	41.27	90.00	-200.00	819.26	868.76	813.67	55.09	15.771		
11,100.00	11,087.33	11,138.66	11,078.73	39.03	41.60	90.00	-200.00	819.26	868.76	813.18	55.58	15.631		
11,200.00	11,187.33	11,238.66	11,178.73	39.38	41.93	90.00	-200.00	819.26	868.76	812.69	56.07	15.494		
11,300.00	11,287.33	11,338.66	11,278.73	39.74	42.26	90.00	-200.00	819.26	868.76	812.20	56.56	15.359		
11,400.00	11,387.33	11,439.23	11,379.27	40.10	42.59	89.92	-198.79	819.25	868.75	811.69	57.06	15.226		
11,467.52	11,454.84	11,506.76	11,446.24	40.34	42.80	89.37	-190.44	819.15	868.71	811.32	57.39	15.137		
11,500.00	11,487.33	11,538.34	11,477.13	40.45	42.89	88.93	-183.84	819.08	868.73	811.18	57.55	15.095		
11,600.00	11,587.33	11,629.85	11,563.95	40.81	43.13	87.05	-155.27	818.77	869.54	811.52	58.03	14.985		
11,700.00	11,687.33	11,710.59	11,635.94	41.16	43.31	84.66	-118.86	818.37	872.70	814.24	58.46	14.927		
11,800.00	11,787.33	11,779.75	11,693.03	41.52	43.43	82.12	-79.89	817.94	879.90	821.11	58.79	14.968		
11,900.00	11,887.33	11,838.05	11,737.21	41.88	43.52	79.67	-41.89	817.52	892.61	833.69	58.92	15.149		
11,940.71	11,928.04	11,858.99	11,752.10	42.02	43.54	78.72	-27.18	817.36	899.62	840.71	58.91	15.271		
11,950.00	11,937.33	11,863.59	11,755.30	42.05	43.55	74.85	-23.87	817.32	901.36	842.45	58.90	15.303		
12,000.00	11,987.22	11,888.40	11,772.09	42.23	43.57	72.81	-5.61	817.12	911.03	852.20	58.82	15.487		
12,050.00	12,036.67	11,913.21	11,788.08	42.40	43.60	70.82	13.37	816.91	921.07	862.38	58.69	15.694		
12,100.00	12,085.28	11,938.04	11,803.23	42.56	43.62	68.88	33.02	816.70	931.29	872.77	58.51	15.916		
12,150.00	12,132.70	11,962.86	11,817.52	42.71	43.63	67.03	53.32	816.47	941.48	883.19	58.29	16.152		
12,200.00	12,178.57	11,987.69	11,830.92	42.86	43.65	65.28	74.22	816.24	951.48	893.45	58.03	16.396		
12,250.00	12,222.52	12,012.53	11,843.41	43.00	43.66	63.65	95.68	816.01	961.12	903.37	57.75	16.642		
12,300.00	12,264.24	12,037.36	11,854.95	43.13	43.67	62.13	117.67	815.76	970.25	912.79	57.46	16.887		
12,350.00	12,303.40	12,062.20	11,865.53	43.26	43.68	60.76	140.14	815.52	978.74	921.59	57.15	17.125		
12,400.00	12,339.70	12,087.04	11,875.13	43.38	43.68	59.52	163.04	815.26	986.47	929.61	56.85	17.352		
12,450.00	12,372.86	12,111.87	11,883.72	43.50	43.69	58.42	186.34	815.01	993.32	936.76	56.56	17.562		
12,500.00	12,402.64	12,136.71	11,891.30	43.62	43.69	57.48	209.99	814.75	999.22	942.93	56.29	17.750		
12,550.00	12,428.81	12,150.00	11,894.93	43.74	43.70	56.84	222.77	814.61	1,004.21	948.22	55.98	17.938		
12,600.00	12,451.17	12,186.39	11,903.35	43.85	43.70	56.03	258.16	814.22	1,007.82	951.97	55.85	18.044		
12,650.00	12,469.55	12,200.00	11,905.91	43.97	43.71	55.64	271.53	814.07	1,010.54	954.89	55.64	18.162		
12,700.00	12,483.81	12,236.06	11,911.18	44.09	43.72	55.19	307.20	813.68	1,011.80	956.21	55.59	18.202		
12,750.00	12,493.83	12,250.00	11,912.61	44.21	43.72	55.06	321.06	813.52	1,012.06	956.56	55.50	18.234		
12,800.00	12,499.55	12,285.73	11,914.73	44.33	43.74	54.95	356.72	813.13	1,010.85	955.30	55.54	18.200		
12,840.71	12,501.00	12,305.96	11,914.94	44.42	43.76	55.03	376.94	812.91	1,009.02	953.43	55.59	18.150		
12,900.00	12,501.00	12,349.02	11,913.67	44.57	43.81	54.91	419.98	812.44	1,006.95	951.23	55.72	18.072		
12,976.49	12,501.00	12,425.40	11,911.00	44.81	43.93	54.70	496.31	811.60	1,006.11	950.17	55.94	17.984		
13,000.00	12,501.00	12,448.89	11,910.18	44.88	43.98	54.64	519.79	811.34	1,006.19	950.17	56.02	17.961		
13,047.21	12,501.00	12,496.08	11,908.54	45.04	44.10	54.55	566.94	810.82	1,006.83	950.63	56.20	17.916		
13,100.00	12,501.00	12,548.83	11,906.70	45.24	44.26	54.46	619.66	810.24	1,007.89	951.47	56.42	17.863		
13,200.00	12,501.00	12,648.77	11,903.22	45.66	44.64	54.30	719.53	809.14	1,009.92	953.03	56.90	17.749		
13,300.00	12,501.00	12,748.71	11,899.73	46.14	45.09	54.14	819.41	808.04	1,011.96	954.53	57.43	17.619		
13,400.00	12,501.00	12,848.65	11,896.25	46.67	45.60	53.98	919.28	806.94	1,014.01	955.98	58.03	17.474		
13,500.00	12,501.00	12,948.59	11,892.77	47.25	46.18	53.82	1,019.15	805.84	1,016.06	957.38	58.68	17.314		
13,600.00	12,501.00	13,048.53	11,889.28	47.88	46.80	53.66	1,119.02	804.74	1,018.12	958.73	59.39	17.143		
13,700.00	12,501.00	13,148.47	11,885.80	48.56	47.48	53.51	1,218.90	803.64	1,020.19	960.04	60.15	16.960		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 602H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,800.00	12,501.00	13,248.40	11,882.31	49.29	48.21	53.35	1,318.77	802.54	1,022.27	961.31	60.96	16.769		
13,900.00	12,501.00	13,348.34	11,878.83	50.06	48.97	53.19	1,418.64	801.44	1,024.35	962.53	61.82	16.570		
14,000.00	12,501.00	13,448.28	11,875.35	50.87	49.79	53.04	1,518.51	800.34	1,026.45	963.72	62.72	16.365		
14,100.00	12,501.00	13,548.22	11,871.86	51.72	50.64	52.88	1,618.39	799.24	1,028.54	964.88	63.67	16.154		
14,200.00	12,501.00	13,648.16	11,868.38	52.61	51.53	52.73	1,718.26	798.14	1,030.65	966.00	64.66	15.941		
14,300.00	12,501.00	13,748.10	11,864.90	53.54	52.46	52.57	1,818.13	797.05	1,032.77	967.09	65.68	15.724		
14,400.00	12,501.00	13,848.04	11,861.41	54.50	53.42	52.42	1,918.00	795.95	1,034.89	968.15	66.74	15.507		
14,500.00	12,501.00	13,947.98	11,857.93	55.50	54.41	52.27	2,017.88	794.85	1,037.02	969.19	67.83	15.289		
14,600.00	12,501.00	14,047.92	11,854.44	56.52	55.44	52.12	2,117.75	793.75	1,039.15	970.20	68.95	15.071		
14,700.00	12,501.00	14,147.86	11,850.96	57.57	56.49	51.97	2,217.62	792.65	1,041.30	971.20	70.10	14.854		
14,800.00	12,501.00	14,247.80	11,847.48	58.66	57.57	51.81	2,317.49	791.55	1,043.45	972.17	71.28	14.638		
14,900.00	12,501.00	14,347.74	11,843.99	59.76	58.68	51.66	2,417.37	790.45	1,045.61	973.12	72.48	14.425		
15,000.00	12,501.00	14,447.68	11,840.51	60.90	59.82	51.51	2,517.24	789.35	1,047.77	974.06	73.71	14.214		
15,100.00	12,501.00	14,547.61	11,837.03	62.05	60.97	51.37	2,617.11	788.25	1,049.95	974.99	74.96	14.006		
15,200.00	12,501.00	14,647.55	11,833.54	63.23	62.15	51.22	2,716.98	787.15	1,052.13	975.90	76.23	13.802		
15,300.00	12,501.00	14,747.49	11,830.06	64.43	63.35	51.07	2,816.86	786.05	1,054.31	976.79	77.52	13.601		
15,400.00	12,501.00	14,847.43	11,826.58	65.65	64.57	50.92	2,916.73	784.95	1,056.51	977.68	78.83	13.403		
15,500.00	12,501.00	14,947.37	11,823.09	66.89	65.81	50.78	3,016.60	783.85	1,058.71	978.56	80.15	13.209		
15,600.00	12,501.00	15,047.31	11,819.61	68.14	67.07	50.63	3,116.47	782.75	1,060.92	979.43	81.48	13.020		
15,700.00	12,501.00	15,147.25	11,816.12	69.41	68.34	50.49	3,216.35	781.65	1,063.13	980.30	82.83	12.834		
15,800.00	12,501.00	15,247.19	11,812.64	70.70	69.63	50.34	3,316.22	780.56	1,065.35	981.15	84.20	12.653		
15,900.00	12,501.00	15,347.13	11,809.16	72.00	70.93	50.20	3,416.09	779.46	1,067.58	982.01	85.57	12.476		
16,000.00	12,501.00	15,447.07	11,805.67	73.32	72.25	50.05	3,515.96	778.36	1,069.81	982.85	86.96	12.302		
16,100.00	12,501.00	15,547.01	11,802.19	74.65	73.58	49.91	3,615.83	777.26	1,072.06	983.70	88.35	12.134		
16,200.00	12,501.00	15,646.95	11,798.71	75.99	74.92	49.77	3,715.71	776.16	1,074.30	984.54	89.76	11.969		
16,300.00	12,501.00	15,746.89	11,795.22	77.35	76.28	49.63	3,815.58	775.06	1,076.56	985.39	91.17	11.808		
16,400.00	12,501.00	15,846.82	11,791.74	78.72	77.65	49.49	3,915.45	773.96	1,078.82	986.23	92.59	11.651		
16,500.00	12,501.00	15,946.76	11,788.26	80.09	79.03	49.35	4,015.32	772.86	1,081.09	987.07	94.02	11.498		
16,600.00	12,501.00	16,046.70	11,784.77	81.48	80.41	49.21	4,115.20	771.76	1,083.36	987.91	95.45	11.350		
16,700.00	12,501.00	16,146.64	11,781.29	82.88	81.81	49.07	4,215.07	770.66	1,085.64	988.75	96.89	11.205		
16,800.00	12,501.00	16,246.58	11,777.80	84.28	83.22	48.93	4,314.94	769.56	1,087.93	989.59	98.34	11.063		
16,900.00	12,501.00	16,346.52	11,774.32	85.70	84.64	48.79	4,414.81	768.46	1,090.22	990.44	99.79	10.926		
17,000.00	12,501.00	16,446.46	11,770.84	87.12	86.06	48.65	4,514.69	767.36	1,092.52	991.28	101.24	10.792		
17,100.00	12,501.00	16,546.40	11,767.35	88.55	87.49	48.52	4,614.56	766.26	1,094.83	992.13	102.69	10.661		
17,200.00	12,501.00	16,646.34	11,763.87	89.99	88.93	48.38	4,714.43	765.16	1,097.14	992.99	104.15	10.534		
17,300.00	12,501.00	16,746.28	11,760.39	91.44	90.38	48.24	4,814.30	764.06	1,099.46	993.84	105.61	10.410		
17,400.00	12,501.00	16,846.22	11,756.90	92.89	91.84	48.11	4,914.18	762.97	1,101.78	994.70	107.08	10.289		
17,500.00	12,501.00	16,946.16	11,753.42	94.35	93.30	47.97	5,014.05	761.87	1,104.11	995.57	108.54	10.172		
17,600.00	12,501.00	17,046.10	11,749.93	95.82	94.76	47.84	5,113.92	760.77	1,106.45	996.44	110.01	10.058		
17,700.00	12,501.00	17,146.03	11,746.45	97.29	96.24	47.71	5,213.79	759.67	1,108.79	997.31	111.48	9.946		
17,800.00	12,501.00	17,245.97	11,742.97	98.77	97.72	47.57	5,313.67	758.57	1,111.14	998.19	112.95	9.837		
17,900.00	12,501.00	17,345.91	11,739.48	100.25	99.20	47.44	5,413.54	757.47	1,113.50	999.08	114.42	9.732		
18,000.00	12,501.00	17,445.85	11,736.00	101.74	100.69	47.31	5,513.41	756.37	1,115.86	999.97	115.89	9.629		
18,100.00	12,501.00	17,545.79	11,732.52	103.24	102.18	47.18	5,613.28	755.27	1,118.22	1,000.86	117.36	9.528		
18,200.00	12,501.00	17,645.73	11,729.03	104.73	103.68	47.05	5,713.16	754.17	1,120.59	1,001.76	118.83	9.430		
18,300.00	12,501.00	17,745.67	11,725.55	106.24	105.19	46.92	5,813.03	753.07	1,122.97	1,002.67	120.30	9.335		
18,400.00	12,501.00	17,845.61	11,722.07	107.75	106.70	46.79	5,912.90	751.97	1,125.36	1,003.59	121.77	9.242		
18,500.00	12,501.00	17,945.55	11,718.58	109.26	108.21	46.66	6,012.77	750.87	1,127.75	1,004.51	123.24	9.151		
18,600.00	12,501.00	18,045.49	11,715.10	110.77	109.72	46.53	6,112.65	749.77	1,130.14	1,005.44	124.70	9.063		
18,700.00	12,501.00	18,145.43	11,711.61	112.29	111.24	46.40	6,212.52	748.67	1,132.54	1,006.37	126.17	8.976		
18,800.00	12,501.00	18,245.37	11,708.13	113.82	112.77	46.27	6,312.39	747.57	1,134.95	1,007.31	127.64	8.892		
18,900.00	12,501.00	18,345.31	11,704.65	115.34	114.30	46.15	6,412.26	746.48	1,137.36	1,008.26	129.10	8.810		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 602H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor	
19,000.00	12,501.00	18,445.24	11,701.16	116.87	115.83	46.02	6,512.14	745.38	1,139.78	1,009.22	130.56	8.730		
19,100.00	12,501.00	18,545.18	11,697.68	118.41	117.36	45.89	6,612.01	744.28	1,142.20	1,010.18	132.02	8.652		
19,200.00	12,501.00	18,645.12	11,694.20	119.94	118.90	45.77	6,711.88	743.18	1,144.63	1,011.15	133.48	8.575		
19,300.00	12,501.00	18,745.06	11,690.71	121.48	120.44	45.64	6,811.75	742.08	1,147.07	1,012.13	134.94	8.501		
19,400.00	12,501.00	18,845.00	11,687.23	123.03	121.98	45.52	6,911.63	740.98	1,149.50	1,013.11	136.39	8.428		
19,500.00	12,501.00	18,944.94	11,683.75	124.57	123.53	45.40	7,011.50	739.88	1,151.95	1,014.11	137.84	8.357		
19,600.00	12,501.00	19,044.88	11,680.26	126.12	125.08	45.27	7,111.37	738.78	1,154.40	1,015.10	139.30	8.287		
19,700.00	12,501.00	19,144.82	11,676.78	127.67	126.63	45.15	7,211.24	737.68	1,156.86	1,016.11	140.74	8.220		
19,800.00	12,501.00	19,244.76	11,673.29	129.23	128.18	45.03	7,311.12	736.58	1,159.32	1,017.13	142.19	8.153		
19,900.00	12,501.00	19,344.70	11,669.81	130.78	129.74	44.91	7,410.99	735.48	1,161.78	1,018.15	143.63	8.089		
20,000.00	12,501.00	19,444.64	11,666.33	132.34	131.30	44.79	7,510.86	734.38	1,164.25	1,019.18	145.07	8.025		
20,100.00	12,501.00	19,544.58	11,662.84	133.90	132.86	44.67	7,610.73	733.28	1,166.73	1,020.22	146.51	7.964		
20,200.00	12,501.00	19,644.52	11,659.36	135.47	134.42	44.55	7,710.61	732.18	1,169.21	1,021.27	147.94	7.903		
20,300.00	12,501.00	19,744.45	11,655.88	137.03	135.99	44.43	7,810.48	731.08	1,171.70	1,022.32	149.38	7.844		
20,400.00	12,501.00	19,844.39	11,652.39	138.60	137.56	44.31	7,910.35	729.99	1,174.19	1,023.39	150.81	7.786		
20,500.00	12,501.00	19,944.33	11,648.91	140.17	139.13	44.19	8,010.22	728.89	1,176.69	1,024.45	152.23	7.729		
20,600.00	12,501.00	20,044.27	11,645.42	141.74	140.70	44.07	8,110.09	727.79	1,179.19	1,025.53	153.66	7.674		
20,700.00	12,501.00	20,144.21	11,641.94	143.31	142.27	43.95	8,209.97	726.69	1,181.70	1,026.62	155.08	7.620		
20,800.00	12,501.00	20,244.15	11,638.46	144.89	143.85	43.84	8,309.84	725.59	1,184.21	1,027.71	156.50	7.567		
20,900.00	12,501.00	20,344.09	11,634.97	146.46	145.42	43.72	8,409.71	724.49	1,186.73	1,028.82	157.91	7.515		
21,000.00	12,501.00	20,444.03	11,631.49	148.04	147.00	43.60	8,509.58	723.39	1,189.25	1,029.93	159.32	7.464		
21,100.00	12,501.00	20,543.97	11,628.01	149.62	148.58	43.49	8,609.46	722.29	1,191.77	1,031.05	160.73	7.415		
21,200.00	12,501.00	20,643.91	11,624.52	151.20	150.16	43.37	8,709.33	721.19	1,194.31	1,032.17	162.13	7.366		
21,300.00	12,501.00	20,743.85	11,621.04	152.78	151.74	43.26	8,809.20	720.09	1,196.84	1,033.30	163.54	7.318		
21,400.00	12,501.00	20,843.79	11,617.56	154.37	153.33	43.14	8,909.07	718.99	1,199.38	1,034.45	164.94	7.272		
21,500.00	12,501.00	20,943.73	11,614.07	155.95	154.91	43.03	9,008.95	717.89	1,201.93	1,035.60	166.33	7.226		
21,600.00	12,501.00	21,043.66	11,610.59	157.54	156.50	42.92	9,108.82	716.79	1,204.48	1,036.75	167.72	7.181		
21,700.00	12,501.00	21,143.60	11,607.10	159.13	158.09	42.80	9,208.69	715.69	1,207.03	1,037.92	169.11	7.137		
21,800.00	12,501.00	21,243.54	11,603.62	160.72	159.68	42.69	9,308.56	714.59	1,209.59	1,039.09	170.50	7.094		
21,900.00	12,501.00	21,343.48	11,600.14	162.31	161.27	42.58	9,408.44	713.49	1,212.16	1,040.27	171.89	7.052		
22,000.00	12,501.00	21,443.42	11,596.65	163.90	162.86	42.47	9,508.31	712.40	1,214.73	1,041.46	173.26	7.011		
22,100.00	12,501.00	21,543.36	11,593.17	165.50	164.46	42.36	9,608.18	711.30	1,217.30	1,042.66	174.64	6.970		
22,200.00	12,501.00	21,643.30	11,589.69	167.09	166.05	42.25	9,708.05	710.20	1,219.88	1,043.87	176.01	6.931		
22,300.00	12,501.00	21,743.24	11,586.20	168.69	167.65	42.14	9,807.93	709.10	1,222.46	1,045.08	177.38	6.892		
22,400.00	12,501.00	21,843.18	11,582.72	170.28	169.24	42.03	9,907.80	708.00	1,225.05	1,046.30	178.75	6.853		
22,500.00	12,501.00	21,943.12	11,579.24	171.88	170.84	41.92	10,007.67	706.90	1,227.64	1,047.52	180.12	6.816		
22,600.00	12,501.00	22,043.06	11,575.75	173.48	172.44	41.81	10,107.54	705.80	1,230.24	1,048.76	181.48	6.779		
22,635.57	12,501.00	22,078.61	11,574.51	174.05	173.01	41.77	10,143.07	705.41	1,231.16	1,049.20	181.96	6.766 SF		
22,636.34	12,501.00	22,079.37	11,574.49	174.06	173.02	41.77	10,143.83	705.40	1,231.18	1,049.24	181.94	6.767		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 702H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	-35.73	74.69	-53.73	92.48					
100.00	100.00	90.70	90.70	0.13	0.13	-35.73	74.69	-53.73	92.01	91.83	0.18	512.461		
200.00	200.00	190.70	190.70	0.48	0.47	-35.73	74.69	-53.73	92.01	91.34	0.67	136.849		
300.00	300.00	290.70	290.70	0.84	0.83	-35.73	74.69	-53.73	92.01	90.83	1.18	78.023		
400.00	400.00	390.70	390.70	1.20	1.18	-35.73	74.69	-53.73	92.01	90.32	1.69	54.566		
500.00	500.00	490.70	490.70	1.56	1.54	-35.73	74.69	-53.73	92.01	89.82	2.19	41.953		
600.00	600.00	590.70	590.70	1.92	1.90	-35.73	74.69	-53.73	92.01	89.31	2.70	34.076		
700.00	700.00	690.70	690.70	2.28	2.26	-35.73	74.69	-53.73	92.01	88.80	3.21	28.690		
800.00	800.00	790.70	790.70	2.63	2.62	-35.73	74.69	-53.73	92.01	88.29	3.71	24.774		
900.00	900.00	890.70	890.70	2.99	2.98	-35.73	74.69	-53.73	92.01	87.79	4.22	21.798		
1,000.00	1,000.00	990.70	990.70	3.35	3.33	-35.73	74.69	-53.73	92.01	87.28	4.73	19.461		
1,100.00	1,100.00	1,090.70	1,090.70	3.71	3.69	-35.73	74.69	-53.73	92.01	86.77	5.23	17.576		
1,200.00	1,200.00	1,190.70	1,190.70	4.07	4.05	-35.73	74.69	-53.73	92.01	86.27	5.74	16.024		
1,300.00	1,300.00	1,290.70	1,290.70	4.43	4.41	-35.73	74.69	-53.73	92.01	85.76	6.25	14.724		
1,400.00	1,400.00	1,390.70	1,390.70	4.79	4.77	-35.73	74.69	-53.73	92.01	85.25	6.76	13.619		
1,500.00	1,500.00	1,490.70	1,490.70	5.14	5.13	-35.73	74.69	-53.73	92.01	84.75	7.26	12.669		
1,600.00	1,599.99	1,590.69	1,590.69	5.48	5.49	130.97	74.69	-53.73	92.86	85.10	7.76	11.971		
1,700.00	1,699.91	1,690.61	1,690.61	5.81	5.84	132.72	74.69	-53.73	95.48	87.24	8.24	11.586		
1,800.00	1,799.69	1,790.39	1,790.39	6.14	6.20	135.43	74.69	-53.73	100.04	91.31	8.73	11.462		
1,900.00	1,899.27	1,889.97	1,889.97	6.48	6.56	138.80	74.69	-53.73	106.76	97.54	9.22	11.583		
2,000.00	1,998.57	1,989.27	1,989.27	6.82	6.91	142.54	74.69	-53.73	115.88	106.17	9.71	11.936		
2,033.45	2,031.72	2,022.42	2,022.42	6.94	7.03	143.82	74.69	-53.73	119.50	109.63	9.87	12.103		
2,100.00	2,097.62	2,088.32	2,088.32	7.17	7.27	146.28	74.69	-53.73	127.12	116.92	10.20	12.461		
2,200.00	2,196.65	2,187.35	2,187.35	7.53	7.62	149.46	74.69	-53.73	138.95	128.25	10.70	12.992		
2,300.00	2,295.67	2,286.37	2,286.37	7.90	7.98	152.13	74.69	-53.73	151.13	139.94	11.19	13.506		
2,400.00	2,394.70	2,385.40	2,385.40	8.27	8.33	154.41	74.69	-53.73	163.59	151.90	11.69	13.998		
2,500.00	2,493.73	2,484.43	2,484.43	8.65	8.69	156.36	74.69	-53.73	176.27	164.08	12.18	14.468		
2,600.00	2,592.75	2,583.45	2,583.45	9.03	9.04	158.05	74.69	-53.73	189.12	176.44	12.68	14.913		
2,700.00	2,691.78	2,682.48	2,682.48	9.42	9.40	159.52	74.69	-53.73	202.12	188.94	13.18	15.334		
2,800.00	2,790.80	2,781.50	2,781.50	9.80	9.75	160.82	74.69	-53.73	215.23	201.55	13.68	15.732		
2,900.00	2,889.83	2,880.53	2,880.53	10.20	10.11	161.96	74.69	-53.73	228.43	214.25	14.18	16.108		
2,979.22	2,968.28	2,958.98	2,958.98	10.51	10.39	162.78	74.69	-53.73	238.95	224.37	14.58	16.391		
3,000.00	2,988.86	2,979.56	2,979.56	10.59	10.46	162.99	74.69	-53.73	241.67	226.98	14.68	16.460		
3,100.00	3,088.13	3,078.83	3,078.83	10.98	10.82	163.84	74.69	-53.73	253.25	238.07	15.18	16.680		
3,200.00	3,187.68	3,178.38	3,178.38	11.36	11.18	164.45	74.69	-53.73	262.38	246.69	15.68	16.728		
3,300.00	3,287.44	3,278.14	3,278.14	11.73	11.53	164.87	74.69	-53.73	269.00	252.82	16.19	16.619		
3,400.00	3,387.34	3,378.04	3,378.04	12.08	11.89	165.12	74.69	-53.73	273.12	256.43	16.69	16.367		
3,500.00	3,487.33	3,478.03	3,478.03	12.43	12.25	165.22	74.69	-53.73	274.70	257.51	17.19	15.983		
3,512.67	3,500.00	3,490.70	3,490.70	12.47	12.30	-0.88	74.69	-53.73	274.72	257.47	17.25	15.925		
3,600.00	3,587.33	3,578.03	3,578.03	12.76	12.61	-0.88	74.69	-53.73	274.72	257.04	17.68	15.535		
3,700.00	3,687.33	3,678.03	3,678.03	13.10	12.97	-0.88	74.69	-53.73	274.72	256.54	18.18	15.111		
3,800.00	3,787.33	3,778.03	3,778.03	13.43	13.33	-0.88	74.69	-53.73	274.72	256.04	18.68	14.708		
3,900.00	3,887.33	3,878.03	3,878.03	13.77	13.68	-0.88	74.69	-53.73	274.72	255.55	19.18	14.327		
4,000.00	3,987.33	3,978.03	3,978.03	14.11	14.04	-0.88	74.69	-53.73	274.72	255.05	19.67	13.964		
4,100.00	4,087.33	4,078.03	4,078.03	14.44	14.40	-0.88	74.69	-53.73	274.72	254.55	20.17	13.619		
4,200.00	4,187.33	4,178.03	4,178.03	14.78	14.76	-0.88	74.69	-53.73	274.72	254.05	20.67	13.290		
4,300.00	4,287.33	4,278.03	4,278.03	15.12	15.12	-0.88	74.69	-53.73	274.72	253.55	21.17	12.976		
4,400.00	4,387.33	4,378.03	4,378.03	15.46	15.48	-0.88	74.69	-53.73	274.72	253.05	21.67	12.677		
4,500.00	4,487.33	4,478.03	4,478.03	15.81	15.84	-0.88	74.69	-53.73	274.72	252.55	22.17	12.391		
4,600.00	4,587.33	4,578.03	4,578.03	16.15	16.19	-0.88	74.69	-53.73	274.72	252.05	22.67	12.118		
4,700.00	4,687.33	4,678.03	4,678.03	16.49	16.55	-0.88	74.69	-53.73	274.72	251.55	23.17	11.856		
4,800.00	4,787.33	4,778.03	4,778.03	16.83	16.91	-0.88	74.69	-53.73	274.72	251.05	23.67	11.605		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 702H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,887.33	4,878.03	4,878.03	17.18	17.27	-0.88	74.69	-53.73	274.72	250.55	24.17	11.364		
5,000.00	4,987.33	4,978.03	4,978.03	17.52	17.63	-0.88	74.69	-53.73	274.72	250.05	24.68	11.133		
5,100.00	5,087.33	5,083.72	5,083.72	17.87	17.99	-0.82	73.82	-53.42	273.91	248.73	25.19	10.876		
5,200.00	5,187.33	5,190.90	5,190.82	18.21	18.34	-0.56	70.19	-52.14	270.51	244.84	25.67	10.537		
5,300.00	5,287.33	5,297.77	5,297.47	18.56	18.69	-0.08	63.75	-49.87	264.47	238.33	26.14	10.118		
5,400.00	5,387.33	5,403.91	5,403.16	18.91	19.03	0.65	54.57	-46.63	255.82	229.23	26.59	9.621		
5,500.00	5,487.33	5,503.36	5,502.07	19.26	19.36	1.48	44.77	-43.18	246.03	218.96	27.07	9.089		
5,600.00	5,587.33	5,602.81	5,600.97	19.60	19.69	2.38	34.97	-39.72	236.29	208.74	27.55	8.578		
5,700.00	5,687.33	5,702.27	5,699.88	19.95	20.02	3.37	25.16	-36.26	226.61	198.58	28.03	8.085		
5,800.00	5,787.33	5,801.72	5,798.79	20.30	20.35	4.43	15.36	-32.80	217.00	188.49	28.51	7.612		
5,900.00	5,887.33	5,901.17	5,897.70	20.65	20.69	5.60	5.56	-29.34	207.48	178.49	28.99	7.156		
6,000.00	5,987.33	6,000.62	5,996.60	21.00	21.02	6.88	-4.25	-25.89	198.05	168.57	29.48	6.719		
6,100.00	6,087.33	6,100.08	6,095.51	21.35	21.36	8.28	-14.05	-22.43	188.72	158.76	29.96	6.299		
6,200.00	6,187.33	6,199.53	6,194.42	21.70	21.70	9.83	-23.85	-18.97	179.52	149.07	30.45	5.896		
6,300.00	6,287.33	6,298.98	6,293.33	22.05	22.05	11.55	-33.65	-15.51	170.47	139.53	30.94	5.510		
6,400.00	6,387.33	6,398.43	6,392.23	22.40	22.39	13.45	-43.46	-12.06	161.58	130.15	31.43	5.141		
6,500.00	6,487.33	6,497.88	6,491.14	22.75	22.74	15.57	-53.26	-8.60	152.90	120.97	31.93	4.789		
6,600.00	6,587.33	6,597.34	6,590.05	23.10	23.09	17.95	-63.06	-5.14	144.44	112.02	32.42	4.455		
6,700.00	6,687.33	6,696.79	6,688.96	23.45	23.44	20.61	-72.87	-1.68	136.27	103.34	32.92	4.139		
6,800.00	6,787.33	6,796.24	6,787.86	23.80	23.79	23.61	-82.67	1.77	128.42	94.99	33.43	3.842		
6,900.00	6,887.33	6,895.69	6,886.77	24.15	24.14	26.98	-92.47	5.23	120.97	87.04	33.94	3.565		
7,000.00	6,987.33	6,995.15	6,985.68	24.50	24.49	30.77	-102.27	8.69	114.00	79.55	34.45	3.309		
7,100.00	7,087.33	7,094.60	7,084.59	24.86	24.85	35.04	-112.08	12.15	107.58	72.61	34.97	3.077		
7,200.00	7,187.33	7,194.05	7,183.49	25.21	25.20	39.81	-121.88	15.61	101.84	66.35	35.49	2.870		
7,300.00	7,287.33	7,293.50	7,282.40	25.56	25.56	45.10	-131.68	19.06	96.89	60.87	36.02	2.690		
7,400.00	7,387.33	7,392.96	7,381.31	25.91	25.92	50.91	-141.49	22.52	92.85	56.31	36.55	2.541		
7,500.00	7,487.33	7,492.41	7,480.22	26.26	26.28	57.16	-151.29	25.98	89.86	52.78	37.08	2.424		
7,600.00	7,587.33	7,591.86	7,579.12	26.62	26.64	63.76	-161.09	29.44	88.01	50.41	37.60	2.341		
7,700.00	7,687.33	7,691.31	7,678.03	26.97	27.00	70.54	-170.89	32.89	87.38	49.26	38.12	2.292		
7,700.39	7,687.72	7,691.70	7,678.42	26.97	27.00	70.57	-170.93	32.91	87.38	49.26	38.12	2.292 CC		
7,800.00	7,787.33	7,790.77	7,776.94	27.32	27.36	77.33	-180.70	36.35	88.00	49.37	38.63	2.278		
7,900.00	7,887.33	7,890.75	7,876.50	27.68	27.73	83.13	-189.29	39.38	89.54	50.41	39.13	2.288		
8,000.00	7,987.33	7,991.14	7,976.68	28.03	28.08	87.14	-195.45	41.56	91.18	51.54	39.64	2.300		
8,100.00	8,087.33	8,091.80	8,077.26	28.38	28.44	89.46	-199.13	42.85	92.36	52.23	40.14	2.301		
8,200.00	8,187.33	8,192.58	8,178.03	28.74	28.79	90.19	-200.31	43.27	92.77	52.14	40.63	2.283		
8,300.00	8,287.33	8,292.58	8,278.03	29.09	29.14	90.19	-200.31	43.27	92.77	51.64	41.13	2.256		
8,400.00	8,387.33	8,392.58	8,378.03	29.44	29.48	90.19	-200.31	43.27	92.77	51.14	41.63	2.229		
8,500.00	8,487.33	8,492.58	8,478.03	29.80	29.83	90.19	-200.31	43.27	92.77	50.65	42.12	2.202		
8,600.00	8,587.33	8,592.58	8,578.03	30.15	30.18	90.19	-200.31	43.27	92.77	50.15	42.62	2.177		
8,700.00	8,687.33	8,692.58	8,678.03	30.51	30.53	90.19	-200.31	43.27	92.77	49.65	43.12	2.152		
8,800.00	8,787.33	8,792.58	8,778.03	30.86	30.88	90.19	-200.31	43.27	92.77	49.16	43.61	2.127		
8,900.00	8,887.33	8,892.58	8,878.03	31.21	31.23	90.19	-200.31	43.27	92.77	48.66	44.11	2.103		
9,000.00	8,987.33	8,992.58	8,978.03	31.57	31.58	90.19	-200.31	43.27	92.77	48.16	44.61	2.080		
9,100.00	9,087.33	9,092.58	9,078.03	31.92	31.93	90.19	-200.31	43.27	92.77	47.66	45.11	2.057		
9,200.00	9,187.33	9,192.58	9,178.03	32.28	32.28	90.19	-200.31	43.27	92.77	47.16	45.61	2.034		
9,300.00	9,287.33	9,292.58	9,278.03	32.63	32.63	90.19	-200.31	43.27	92.77	46.67	46.11	2.012		
9,400.00	9,387.33	9,392.58	9,378.03	32.99	32.98	90.19	-200.31	43.27	92.77	46.17	46.60	1.991		
9,500.00	9,487.33	9,492.58	9,478.03	33.34	33.33	90.19	-200.31	43.27	92.77	45.67	47.10	1.970		
9,600.00	9,587.33	9,592.58	9,578.03	33.70	33.68	90.19	-200.31	43.27	92.77	45.17	47.60	1.949		
9,700.00	9,687.33	9,692.58	9,678.03	34.05	34.03	90.19	-200.31	43.27	92.77	44.67	48.10	1.929		
9,800.00	9,787.33	9,792.58	9,778.03	34.41	34.38	90.19	-200.31	43.27	92.77	44.17	48.60	1.909		
9,900.00	9,887.33	9,892.58	9,878.03	34.76	34.73	90.19	-200.31	43.27	92.77	43.67	49.10	1.889		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 702H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.00	9,987.33	9,992.58	9,978.03	35.12	35.08	90.19	-200.31	43.27	92.77	43.17	49.60	1.870		
10,100.00	10,087.33	10,092.58	10,078.03	35.47	35.43	90.19	-200.31	43.27	92.77	42.67	50.10	1.852		
10,200.00	10,187.33	10,192.58	10,178.03	35.83	35.78	90.19	-200.31	43.27	92.77	42.17	50.60	1.833		
10,300.00	10,287.33	10,292.58	10,278.03	36.18	36.14	90.19	-200.31	43.27	92.77	41.67	51.10	1.815		
10,400.00	10,387.33	10,392.58	10,378.03	36.54	36.49	90.19	-200.31	43.27	92.77	41.17	51.60	1.798		
10,500.00	10,487.33	10,492.58	10,478.03	36.89	36.84	90.19	-200.31	43.27	92.77	40.67	52.10	1.781		
10,600.00	10,587.33	10,592.58	10,578.03	37.25	37.19	90.19	-200.31	43.27	92.77	40.17	52.60	1.764		
10,700.00	10,687.33	10,692.58	10,678.03	37.61	37.54	90.19	-200.31	43.27	92.77	39.67	53.10	1.747		
10,800.00	10,787.33	10,792.58	10,778.03	37.96	37.90	90.19	-200.31	43.27	92.77	39.17	53.60	1.731		
10,900.00	10,887.33	10,892.58	10,878.03	38.32	38.25	90.19	-200.31	43.27	92.77	38.67	54.10	1.715		
11,000.00	10,987.33	10,992.58	10,978.03	38.67	38.60	90.19	-200.31	43.27	92.77	38.17	54.60	1.699		
11,100.00	11,087.33	11,092.58	11,078.03	39.03	38.95	90.19	-200.31	43.27	92.77	37.67	55.10	1.684		
11,200.00	11,187.33	11,192.58	11,178.03	39.38	39.31	90.19	-200.31	43.27	92.77	37.16	55.61	1.668		
11,300.00	11,287.33	11,292.58	11,278.03	39.74	39.66	90.19	-200.31	43.27	92.77	36.66	56.11	1.653		
11,400.00	11,387.33	11,392.58	11,378.03	40.10	40.01	90.19	-200.31	43.27	92.77	36.16	56.61	1.639		
11,472.99	11,460.32	11,465.60	11,451.02	40.36	40.27	89.37	-198.98	43.26	92.76	35.79	56.97	1.628		
11,500.00	11,487.33	11,492.44	11,477.74	40.45	40.36	87.85	-196.53	43.23	92.79	35.69	57.11	1.625 ES, SF		
11,600.00	11,587.33	11,588.51	11,571.81	40.81	40.67	76.37	-177.57	43.02	95.40	37.96	57.44	1.661		
11,700.00	11,687.33	11,676.12	11,653.75	41.16	40.92	60.02	-146.81	42.68	109.16	52.64	56.52	1.931		
11,800.00	11,787.33	11,750.00	11,718.54	41.52	41.11	46.02	-111.42	42.29	140.75	87.05	53.71	2.621		
11,900.00	11,887.33	11,818.44	11,774.04	41.88	41.27	35.40	-71.44	41.85	188.91	137.51	51.40	3.675		
11,940.71	11,928.04	11,842.12	11,792.08	42.02	41.33	32.36	-56.11	41.68	212.28	161.85	50.43	4.209		
11,950.00	11,937.33	11,850.00	11,797.94	42.05	41.34	27.62	-50.84	41.63	217.84	167.36	50.48	4.316		
12,000.00	11,987.22	11,875.21	11,816.20	42.23	41.40	23.59	-33.45	41.43	247.22	198.10	49.12	5.033		
12,050.00	12,036.67	11,900.00	11,833.38	42.40	41.45	20.45	-15.59	41.24	275.75	227.90	47.85	5.763		
12,100.00	12,085.28	11,930.35	11,853.34	42.56	41.51	17.64	7.26	40.99	303.07	256.02	47.06	6.441		
12,150.00	12,132.70	11,950.00	11,865.61	42.71	41.56	15.86	22.61	40.82	329.22	283.65	45.57	7.225		
12,200.00	12,178.57	11,984.83	11,886.04	42.86	41.63	13.86	50.81	40.51	353.61	308.51	45.11	7.840		
12,250.00	12,222.52	12,011.87	11,900.70	43.00	41.68	12.47	73.54	40.26	376.58	332.40	44.18	8.525		
12,300.00	12,264.24	12,038.81	11,914.21	43.13	41.74	11.31	96.84	40.00	397.89	354.60	43.28	9.193		
12,350.00	12,303.40	12,065.66	11,926.58	43.26	41.80	10.34	120.66	39.74	417.47	375.04	42.43	9.839		
12,400.00	12,339.70	12,100.00	11,940.75	43.38	41.87	9.39	151.93	39.39	435.39	393.45	41.94	10.380		
12,450.00	12,372.86	12,119.14	11,947.82	43.50	41.91	8.82	169.71	39.20	451.26	410.36	40.89	11.035		
12,500.00	12,402.64	12,150.00	11,957.97	43.62	41.98	8.16	198.85	38.88	465.39	425.04	40.36	11.532		
12,550.00	12,428.81	12,172.38	11,964.34	43.74	42.02	7.70	220.31	38.64	477.55	437.92	39.63	12.050		
12,600.00	12,451.17	12,200.00	11,971.04	43.85	42.08	7.23	247.10	38.35	487.81	448.66	39.15	12.461		
12,650.00	12,469.55	12,225.46	11,976.06	43.97	42.14	6.86	272.06	38.07	496.09	457.38	38.71	12.815		
12,700.00	12,483.81	12,250.00	11,979.85	44.09	42.19	6.54	296.30	37.81	502.40	464.02	38.38	13.090		
12,750.00	12,493.83	12,278.45	11,982.94	44.21	42.26	6.22	324.57	37.50	506.70	468.49	38.20	13.263		
12,800.00	12,499.55	12,300.00	11,984.34	44.33	42.31	6.01	346.07	37.26	509.03	470.92	38.11	13.358		
12,840.71	12,501.00	12,326.47	11,984.96	44.42	42.37	5.79	372.53	36.97	509.35	471.22	38.13	13.358		
12,848.44	12,501.00	12,330.56	11,984.94	44.44	42.38	5.75	376.62	36.92	509.32	471.18	38.14	13.353		
12,900.00	12,501.00	12,371.42	11,983.93	44.57	42.48	5.46	417.47	36.47	510.21	471.98	38.23	13.346		
13,000.00	12,501.00	12,471.32	11,981.15	44.88	42.79	5.00	517.32	35.37	512.68	474.29	38.39	13.356		
13,047.21	12,501.00	12,518.51	11,979.83	45.04	42.95	4.92	564.49	34.86	513.96	475.47	38.48	13.355		
13,100.00	12,501.00	12,571.28	11,978.36	45.24	43.15	4.90	617.24	34.28	515.42	476.82	38.60	13.351		
13,200.00	12,501.00	12,671.24	11,975.57	45.66	43.57	4.88	717.15	33.18	518.20	479.34	38.86	13.336		
13,300.00	12,501.00	12,771.20	11,972.79	46.14	44.04	4.85	817.07	32.08	520.98	481.84	39.14	13.311		
13,400.00	12,501.00	12,871.16	11,970.00	46.67	44.58	4.83	916.99	30.98	523.75	484.30	39.45	13.276		
13,500.00	12,501.00	12,971.12	11,967.22	47.25	45.17	4.80	1,016.90	29.88	526.53	486.74	39.79	13.231		
13,600.00	12,501.00	13,071.09	11,964.43	47.88	45.81	4.78	1,116.82	28.78	529.31	489.14	40.16	13.179		
13,700.00	12,501.00	13,171.05	11,961.65	48.56	46.50	4.75	1,216.73	27.68	532.09	491.52	40.56	13.118		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 702H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,800.00	12,501.00	13,271.01	11,958.86	49.29	47.23	4.73	1,316.65	26.58	534.86	493.88	40.99	13.050		
13,900.00	12,501.00	13,370.97	11,956.07	50.06	48.02	4.70	1,416.57	25.48	537.64	496.21	41.43	12.976		
14,000.00	12,501.00	13,470.93	11,953.29	50.87	48.84	4.68	1,516.48	24.38	540.42	498.51	41.91	12.895		
14,100.00	12,501.00	13,570.89	11,950.50	51.72	49.71	4.65	1,616.40	23.28	543.20	500.79	42.41	12.809		
14,200.00	12,501.00	13,670.85	11,947.72	52.61	50.62	4.63	1,716.32	22.18	545.97	503.04	42.93	12.718		
14,300.00	12,501.00	13,770.81	11,944.93	53.54	51.56	4.61	1,816.23	21.09	548.75	505.28	43.47	12.623		
14,400.00	12,501.00	13,870.77	11,942.14	54.50	52.54	4.58	1,916.15	19.99	551.53	507.49	44.04	12.524		
14,500.00	12,501.00	13,970.74	11,939.36	55.50	53.55	4.56	2,016.06	18.89	554.31	509.68	44.62	12.421		
14,600.00	12,501.00	14,070.70	11,936.57	56.52	54.60	4.54	2,115.98	17.79	557.09	511.85	45.23	12.316		
14,700.00	12,501.00	14,170.66	11,933.79	57.57	55.67	4.51	2,215.90	16.69	559.86	514.01	45.86	12.209		
14,800.00	12,501.00	14,270.62	11,931.00	58.66	56.77	4.49	2,315.81	15.59	562.64	516.14	46.50	12.100		
14,900.00	12,501.00	14,370.58	11,928.21	59.76	57.90	4.47	2,415.73	14.49	565.42	518.26	47.16	11.989		
15,000.00	12,501.00	14,470.54	11,925.43	60.90	59.05	4.45	2,515.65	13.39	568.20	520.36	47.84	11.878		
15,100.00	12,501.00	14,570.50	11,922.64	62.05	60.23	4.43	2,615.56	12.29	570.98	522.45	48.53	11.765		
15,200.00	12,501.00	14,670.46	11,919.86	63.23	61.42	4.40	2,715.48	11.19	573.76	524.51	49.24	11.652		
15,300.00	12,501.00	14,770.42	11,917.07	64.43	62.64	4.38	2,815.40	10.09	576.53	526.57	49.97	11.539		
15,400.00	12,501.00	14,870.39	11,914.29	65.65	63.88	4.36	2,915.31	8.99	579.31	528.61	50.70	11.426		
15,500.00	12,501.00	14,970.35	11,911.50	66.89	65.13	4.34	3,015.23	7.89	582.09	530.64	51.45	11.313		
15,600.00	12,501.00	15,070.31	11,908.71	68.14	66.41	4.32	3,115.14	6.80	584.87	532.65	52.22	11.200		
15,700.00	12,501.00	15,170.27	11,905.93	69.41	67.70	4.30	3,215.06	5.70	587.65	534.66	53.00	11.089		
15,800.00	12,501.00	15,270.23	11,903.14	70.70	69.00	4.28	3,314.98	4.60	590.43	536.65	53.78	10.978		
15,900.00	12,501.00	15,370.19	11,900.36	72.00	70.32	4.26	3,414.89	3.50	593.21	538.62	54.58	10.868		
16,000.00	12,501.00	15,470.15	11,897.57	73.32	71.66	4.24	3,514.81	2.40	595.99	540.59	55.40	10.759		
16,100.00	12,501.00	15,570.11	11,894.78	74.65	73.00	4.22	3,614.73	1.30	598.77	542.55	56.22	10.651		
16,200.00	12,501.00	15,670.08	11,892.00	75.99	74.36	4.20	3,714.64	0.20	601.55	544.50	57.05	10.545		
16,300.00	12,501.00	15,770.04	11,889.21	77.35	75.73	4.18	3,814.56	-0.90	604.33	546.44	57.89	10.440		
16,400.00	12,501.00	15,870.00	11,886.43	78.72	77.11	4.16	3,914.47	-2.00	607.11	548.37	58.74	10.336		
16,500.00	12,501.00	15,969.96	11,883.64	80.09	78.51	4.14	4,014.39	-3.10	609.89	550.29	59.60	10.234		
16,600.00	12,501.00	16,069.92	11,880.86	81.48	79.91	4.12	4,114.31	-4.20	612.67	552.20	60.46	10.133		
16,700.00	12,501.00	16,169.88	11,878.07	82.88	81.32	4.10	4,214.22	-5.30	615.44	554.11	61.33	10.034		
16,800.00	12,501.00	16,269.84	11,875.28	84.28	82.74	4.09	4,314.14	-6.40	618.22	556.01	62.22	9.937		
16,900.00	12,501.00	16,369.80	11,872.50	85.70	84.17	4.07	4,414.06	-7.49	621.00	557.90	63.11	9.841		
17,000.00	12,501.00	16,469.76	11,869.71	87.12	85.61	4.05	4,513.97	-8.59	623.78	559.78	64.00	9.746		
17,100.00	12,501.00	16,569.73	11,866.93	88.55	87.05	4.03	4,613.89	-9.69	626.56	561.66	64.90	9.654		
17,200.00	12,501.00	16,669.69	11,864.14	89.99	88.51	4.01	4,713.80	-10.79	629.34	563.53	65.81	9.563		
17,300.00	12,501.00	16,769.65	11,861.35	91.44	89.96	4.00	4,813.72	-11.89	632.12	565.40	66.73	9.473		
17,400.00	12,501.00	16,869.61	11,858.57	92.89	91.43	3.98	4,913.64	-12.99	634.90	567.26	67.65	9.385		
17,500.00	12,501.00	16,969.57	11,855.78	94.35	92.90	3.96	5,013.55	-14.09	637.69	569.11	68.57	9.299		
17,600.00	12,501.00	17,069.53	11,853.00	95.82	94.38	3.94	5,113.47	-15.19	640.47	570.96	69.51	9.215		
17,700.00	12,501.00	17,169.49	11,850.21	97.29	95.86	3.93	5,213.39	-16.29	643.25	572.80	70.44	9.131		
17,800.00	12,501.00	17,269.45	11,847.43	98.77	97.35	3.91	5,313.30	-17.39	646.03	574.64	71.39	9.050		
17,900.00	12,501.00	17,369.41	11,844.64	100.25	98.85	3.89	5,413.22	-18.49	648.81	576.47	72.33	8.970		
18,000.00	12,501.00	17,469.38	11,841.85	101.74	100.35	3.88	5,513.13	-19.59	651.59	578.30	73.28	8.891		
18,100.00	12,501.00	17,569.34	11,839.07	103.24	101.85	3.86	5,613.05	-20.69	654.37	580.13	74.24	8.814		
18,200.00	12,501.00	17,669.30	11,836.28	104.73	103.36	3.84	5,712.97	-21.78	657.15	581.95	75.20	8.739		
18,300.00	12,501.00	17,769.26	11,833.50	106.24	104.87	3.83	5,812.88	-22.88	659.93	583.77	76.16	8.665		
18,400.00	12,501.00	17,869.22	11,830.71	107.75	106.39	3.81	5,912.80	-23.98	662.71	585.58	77.13	8.592		
18,500.00	12,501.00	17,969.18	11,827.92	109.26	107.91	3.79	6,012.72	-25.08	665.49	587.39	78.10	8.521		
18,600.00	12,501.00	18,069.14	11,825.14	110.77	109.44	3.78	6,112.63	-26.18	668.27	589.19	79.08	8.451		
18,700.00	12,501.00	18,169.10	11,822.35	112.29	110.96	3.76	6,212.55	-27.28	671.05	591.00	80.06	8.382		
18,800.00	12,501.00	18,269.07	11,819.57	113.82	112.50	3.75	6,312.47	-28.38	673.83	592.79	81.04	8.315		
18,900.00	12,501.00	18,369.03	11,816.78	115.34	114.03	3.73	6,412.38	-29.48	676.61	594.59	82.02	8.249		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 702H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,000.00	12,501.00	18,468.99	11,814.00	116.87	115.57	3.72	6,512.30	-30.58	679.40	596.38	83.01	8.184		
19,100.00	12,501.00	18,568.95	11,811.21	118.41	117.11	3.70	6,612.21	-31.68	682.18	598.17	84.01	8.121		
19,200.00	12,501.00	18,668.91	11,808.42	119.94	118.66	3.69	6,712.13	-32.78	684.96	599.96	85.00	8.058		
19,300.00	12,501.00	18,768.87	11,805.64	121.48	120.21	3.67	6,812.05	-33.88	687.74	601.74	86.00	7.997		
19,400.00	12,501.00	18,868.83	11,802.85	123.03	121.76	3.66	6,911.96	-34.98	690.52	603.52	87.00	7.937		
19,500.00	12,501.00	18,968.79	11,800.07	124.57	123.31	3.64	7,011.88	-36.07	693.30	605.30	88.00	7.878		
19,600.00	12,501.00	19,068.75	11,797.28	126.12	124.87	3.63	7,111.80	-37.17	696.08	607.08	89.00	7.821		
19,700.00	12,501.00	19,168.72	11,794.49	127.67	126.42	3.61	7,211.71	-38.27	698.86	608.85	90.01	7.764		
19,800.00	12,501.00	19,268.68	11,791.71	129.23	127.98	3.60	7,311.63	-39.37	701.65	610.62	91.02	7.709		
19,900.00	12,501.00	19,368.64	11,788.92	130.78	129.55	3.58	7,411.54	-40.47	704.43	612.39	92.03	7.654		
20,000.00	12,501.00	19,468.60	11,786.14	132.34	131.11	3.57	7,511.46	-41.57	707.21	614.16	93.05	7.600		
20,100.00	12,501.00	19,568.56	11,783.35	133.90	132.68	3.56	7,611.38	-42.67	709.99	615.92	94.07	7.548		
20,200.00	12,501.00	19,668.52	11,780.57	135.47	134.25	3.54	7,711.29	-43.77	712.77	617.69	95.09	7.496		
20,300.00	12,501.00	19,768.48	11,777.78	137.03	135.82	3.53	7,811.21	-44.87	715.55	619.45	96.11	7.445		
20,400.00	12,501.00	19,868.44	11,774.99	138.60	137.39	3.51	7,911.13	-45.97	718.33	621.20	97.13	7.396		
20,500.00	12,501.00	19,968.41	11,772.21	140.17	138.97	3.50	8,011.04	-47.07	721.12	622.96	98.15	7.347		
20,600.00	12,501.00	20,068.37	11,769.42	141.74	140.55	3.49	8,110.96	-48.17	723.90	624.72	99.18	7.299		
20,700.00	12,501.00	20,168.33	11,766.64	143.31	142.12	3.47	8,210.87	-49.27	726.68	626.47	100.21	7.252		
20,800.00	12,501.00	20,268.29	11,763.85	144.89	143.70	3.46	8,310.79	-50.36	729.46	628.22	101.24	7.205		
20,900.00	12,501.00	20,368.25	11,761.06	146.46	145.29	3.45	8,410.71	-51.46	732.24	629.97	102.27	7.160		
21,000.00	12,501.00	20,468.21	11,758.28	148.04	146.87	3.43	8,510.62	-52.56	735.03	631.72	103.30	7.115		
21,100.00	12,501.00	20,568.17	11,755.49	149.62	148.46	3.42	8,610.54	-53.66	737.81	633.47	104.34	7.071		
21,200.00	12,501.00	20,668.13	11,752.71	151.20	150.04	3.41	8,710.46	-54.76	740.59	635.22	105.37	7.028		
21,300.00	12,501.00	20,768.09	11,749.92	152.78	151.63	3.40	8,810.37	-55.86	743.37	636.96	106.41	6.986		
21,400.00	12,501.00	20,868.06	11,747.13	154.37	153.22	3.38	8,910.29	-56.96	746.15	638.70	107.45	6.944		
21,500.00	12,501.00	20,968.02	11,744.35	155.95	154.81	3.37	9,010.20	-58.06	748.94	640.45	108.49	6.903		
21,600.00	12,501.00	21,067.98	11,741.56	157.54	156.40	3.36	9,110.12	-59.16	751.72	642.19	109.53	6.863		
21,700.00	12,501.00	21,167.94	11,738.78	159.13	157.99	3.35	9,210.04	-60.26	754.50	643.92	110.58	6.823		
21,800.00	12,501.00	21,267.90	11,735.99	160.72	159.59	3.33	9,309.95	-61.36	757.28	645.66	111.62	6.784		
21,900.00	12,501.00	21,367.86	11,733.21	162.31	161.18	3.32	9,409.87	-62.46	760.06	647.40	112.67	6.746		
22,000.00	12,501.00	21,467.82	11,730.42	163.90	162.78	3.31	9,509.79	-63.56	762.85	649.13	113.71	6.709		
22,100.00	12,501.00	21,567.78	11,727.63	165.50	164.38	3.30	9,609.70	-64.65	765.63	650.87	114.76	6.672		
22,200.00	12,501.00	21,667.74	11,724.85	167.09	165.98	3.28	9,709.62	-65.75	768.41	652.60	115.81	6.635		
22,300.00	12,501.00	21,767.71	11,722.06	168.69	167.58	3.27	9,809.54	-66.85	771.19	654.33	116.86	6.599		
22,400.00	12,501.00	21,867.67	11,719.28	170.28	169.18	3.26	9,909.45	-67.95	773.98	656.06	117.91	6.564		
22,500.00	12,501.00	21,967.63	11,716.49	171.88	170.78	3.25	10,009.37	-69.05	776.76	657.80	118.96	6.529		
22,600.00	12,501.00	22,067.59	11,713.70	173.48	172.38	3.24	10,109.28	-70.15	779.54	659.52	120.02	6.495		
22,635.57	12,501.00	22,103.15	11,712.71	174.05	172.95	3.23	10,144.83	-70.54	780.53	660.14	120.39	6.483		
22,636.34	12,501.00	22,103.91	11,712.69	174.06	172.97	3.23	10,145.59	-70.55	780.55	660.21	120.34	6.486		

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 Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 703H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	12.18	75.31	16.26	77.52					
100.00	100.00	91.40	91.40	0.13	0.13	12.18	75.31	16.26	77.05	76.87	0.18	427.431		
200.00	200.00	191.40	191.40	0.48	0.47	12.18	75.31	16.26	77.05	76.37	0.67	114.297		
300.00	300.00	291.40	291.40	0.84	0.83	12.18	75.31	16.26	77.05	75.86	1.18	65.237		
400.00	400.00	391.40	391.40	1.20	1.19	12.18	75.31	16.26	77.05	75.36	1.69	45.645		
500.00	500.00	491.40	491.40	1.56	1.54	12.18	75.31	16.26	77.05	74.85	2.19	35.102		
600.00	600.00	591.40	591.40	1.92	1.90	12.18	75.31	16.26	77.05	74.34	2.70	28.516		
700.00	700.00	691.40	691.40	2.28	2.26	12.18	75.31	16.26	77.05	73.84	3.21	24.011		
800.00	800.00	791.40	791.40	2.63	2.62	12.18	75.31	16.26	77.05	73.33	3.72	20.735		
900.00	900.00	891.40	891.40	2.99	2.98	12.18	75.31	16.26	77.05	72.82	4.22	18.246		
1,000.00	1,000.00	991.40	991.40	3.35	3.34	12.18	75.31	16.26	77.05	72.32	4.73	16.290		
1,100.00	1,100.00	1,091.40	1,091.40	3.71	3.70	12.18	75.31	16.26	77.05	71.81	5.24	14.713		
1,200.00	1,200.00	1,191.40	1,191.40	4.07	4.05	12.18	75.31	16.26	77.05	71.30	5.74	13.414		
1,300.00	1,300.00	1,291.40	1,291.40	4.43	4.41	12.18	75.31	16.26	77.05	70.79	6.25	12.326		
1,400.00	1,400.00	1,391.40	1,391.40	4.79	4.77	12.18	75.31	16.26	77.05	70.29	6.76	11.402		
1,500.00	1,500.00	1,491.40	1,491.40	5.14	5.13	12.18	75.31	16.26	77.05	69.78	7.26	10.606 CC, ES		
1,600.00	1,599.99	1,591.39	1,591.39	5.48	5.49	178.31	75.31	16.26	78.35	70.59	7.76	10.099		
1,700.00	1,699.91	1,691.31	1,691.31	5.81	5.85	178.39	75.31	16.26	82.28	74.03	8.24	9.981		
1,800.00	1,799.69	1,791.09	1,791.09	6.14	6.20	178.51	75.31	16.26	88.82	80.09	8.73	10.174		
1,900.00	1,899.27	1,890.67	1,890.67	6.48	6.56	178.64	75.31	16.26	97.96	88.74	9.22	10.628		
2,000.00	1,998.57	1,989.97	1,989.97	6.82	6.92	178.78	75.31	16.26	109.71	100.01	9.71	11.303		
2,033.45	2,031.72	2,023.12	2,023.12	6.94	7.04	178.83	75.31	16.26	114.22	104.35	9.87	11.571		
2,100.00	2,097.62	2,089.02	2,089.02	7.17	7.27	178.92	75.31	16.26	123.49	113.29	10.20	12.110		
2,200.00	2,196.65	2,188.05	2,188.05	7.53	7.63	179.03	75.31	16.26	137.40	126.72	10.69	12.857		
2,300.00	2,295.67	2,287.07	2,287.07	7.90	7.98	179.12	75.31	16.26	151.32	140.14	11.18	13.536		
2,400.00	2,394.70	2,386.10	2,386.10	8.27	8.34	179.19	75.31	16.26	165.24	153.57	11.67	14.155		
2,500.00	2,493.73	2,485.13	2,485.13	8.65	8.69	179.25	75.31	16.26	179.16	166.99	12.17	14.723		
2,600.00	2,592.75	2,584.15	2,584.15	9.03	9.05	179.31	75.31	16.26	193.08	180.41	12.67	15.244		
2,700.00	2,691.78	2,683.18	2,683.18	9.42	9.40	179.35	75.31	16.26	207.00	193.84	13.16	15.725		
2,800.00	2,790.80	2,782.20	2,782.20	9.80	9.76	179.40	75.31	16.26	220.92	207.26	13.66	16.169		
2,900.00	2,889.83	2,881.23	2,881.23	10.20	10.11	179.43	75.31	16.26	234.84	220.68	14.16	16.581		
2,979.22	2,968.28	2,959.68	2,959.68	10.51	10.39	179.46	75.31	16.26	245.87	231.31	14.56	16.887		
3,000.00	2,988.86	2,980.26	2,980.26	10.59	10.47	179.46	75.31	16.26	248.70	234.04	14.66	16.961		
3,100.00	3,088.13	3,079.53	3,079.53	10.98	10.82	179.49	75.31	16.26	260.79	245.62	15.16	17.197		
3,200.00	3,187.68	3,179.08	3,179.08	11.36	11.18	179.51	75.31	16.26	270.26	254.60	15.67	17.252		
3,300.00	3,287.44	3,278.88	3,278.88	11.73	11.53	179.69	75.11	17.05	277.13	260.97	16.16	17.147		
3,400.00	3,387.34	3,378.75	3,378.68	12.08	11.87	-179.62	74.30	20.32	281.38	264.73	16.65	16.900		
3,500.00	3,487.33	3,478.44	3,478.19	12.43	12.21	-178.41	72.85	26.10	283.11	265.98	17.14	16.522		
3,512.67	3,500.00	3,491.05	3,490.77	12.47	12.25	15.68	72.63	27.01	283.16	265.96	17.20	16.466		
3,600.00	3,587.33	3,577.77	3,577.16	12.76	12.55	17.21	70.79	34.37	283.49	265.87	17.62	16.091		
3,700.00	3,687.33	3,676.60	3,675.36	13.10	12.89	19.43	68.12	45.07	284.33	266.23	18.10	15.708		
3,800.00	3,787.33	3,774.78	3,772.62	13.43	13.23	22.12	64.86	58.14	285.96	267.38	18.58	15.387		
3,900.00	3,887.33	3,873.28	3,869.91	13.77	13.59	25.13	61.15	73.01	288.59	269.52	19.07	15.132		
4,000.00	3,987.33	3,972.05	3,967.46	14.11	13.94	28.11	57.41	88.01	292.05	272.48	19.57	14.927		
4,100.00	4,087.33	4,070.81	4,065.01	14.44	14.30	31.02	53.66	103.01	296.30	276.23	20.06	14.770		
4,200.00	4,187.33	4,169.58	4,162.56	14.78	14.67	33.83	49.92	118.00	301.29	280.74	20.56	14.656		
4,300.00	4,287.33	4,268.35	4,260.12	15.12	15.04	36.55	46.18	133.00	307.01	285.95	21.06	14.580		
4,400.00	4,387.33	4,367.12	4,357.67	15.46	15.41	39.17	42.44	148.00	313.41	291.85	21.56	14.538		
4,500.00	4,487.33	4,465.89	4,455.22	15.81	15.79	41.68	38.69	162.99	320.44	298.38	22.06	14.527		
4,600.00	4,587.33	4,564.65	4,552.77	16.15	16.16	44.08	34.95	177.99	328.06	305.51	22.56	14.542		
4,700.00	4,687.33	4,663.42	4,650.32	16.49	16.54	46.36	31.21	192.98	336.25	313.19	23.06	14.581		
4,800.00	4,787.33	4,762.19	4,747.87	16.83	16.93	48.54	27.47	207.98	344.95	321.39	23.56	14.640		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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
Georgetown/Ouray - Ouray Fed Com 703H - 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		
4,900.00	4,887.33	4,860.96	4,845.42	17.18	17.31	50.61	23.72	222.98	354.13	330.06	24.06	14.716		
5,000.00	4,987.33	4,959.73	4,942.97	17.52	17.70	52.58	19.98	237.97	363.75	339.18	24.56	14.808		
5,100.00	5,087.33	5,058.49	5,040.52	17.87	18.09	54.44	16.24	252.97	373.77	348.71	25.07	14.912		
5,200.00	5,187.33	5,157.26	5,138.08	18.21	18.48	56.20	12.50	267.97	384.18	358.61	25.57	15.026		
5,300.00	5,287.33	5,256.03	5,235.63	18.56	18.88	57.87	8.76	282.96	394.93	368.86	26.07	15.150		
5,400.00	5,387.33	5,354.80	5,333.18	18.91	19.27	59.46	5.01	297.96	406.00	379.43	26.57	15.281		
5,500.00	5,487.33	5,453.57	5,430.73	19.26	19.67	60.96	1.27	312.95	417.36	390.29	27.07	15.418		
5,600.00	5,587.33	5,552.33	5,528.28	19.60	20.07	62.38	-2.47	327.95	428.99	401.42	27.57	15.560		
5,700.00	5,687.33	5,651.10	5,625.83	19.95	20.47	63.72	-6.21	342.95	440.87	412.80	28.07	15.706		
5,800.00	5,787.33	5,749.87	5,723.38	20.30	20.87	64.99	-9.96	357.94	452.98	424.41	28.57	15.855		
5,900.00	5,887.33	5,848.64	5,820.93	20.65	21.27	66.20	-13.70	372.94	465.30	436.23	29.07	16.006		
6,000.00	5,987.33	5,947.41	5,918.48	21.00	21.68	67.35	-17.44	387.94	477.81	448.24	29.57	16.158		
6,100.00	6,087.33	6,046.17	6,016.04	21.35	22.08	68.43	-21.18	402.93	490.51	460.44	30.07	16.312		
6,200.00	6,187.33	6,144.94	6,113.59	21.70	22.49	69.47	-24.92	417.93	503.37	472.80	30.57	16.465		
6,300.00	6,287.33	6,243.71	6,211.14	22.05	22.90	70.45	-28.67	432.92	516.39	485.31	31.07	16.619		
6,400.00	6,387.33	6,342.48	6,308.69	22.40	23.30	71.38	-32.41	447.92	529.55	497.97	31.57	16.772		
6,500.00	6,487.33	6,441.25	6,406.24	22.75	23.71	72.27	-36.15	462.92	542.84	510.76	32.07	16.924		
6,600.00	6,587.33	6,540.01	6,503.79	23.10	24.12	73.11	-39.89	477.91	556.25	523.67	32.58	17.076		
6,700.00	6,687.33	6,638.78	6,601.34	23.45	24.53	73.92	-43.64	492.91	569.78	536.70	33.08	17.226		
6,800.00	6,787.33	6,737.55	6,698.89	23.80	24.94	74.69	-47.38	507.91	583.41	549.83	33.58	17.375		
6,900.00	6,887.33	6,836.32	6,796.44	24.15	25.36	75.42	-51.12	522.90	597.14	563.06	34.08	17.522		
7,000.00	6,987.33	6,935.09	6,894.00	24.50	25.77	76.12	-54.86	537.90	610.97	576.38	34.58	17.667		
7,100.00	7,087.33	7,033.85	6,991.55	24.86	26.18	76.79	-58.60	552.89	624.88	589.79	35.08	17.811		
7,200.00	7,187.33	7,132.62	7,089.10	25.21	26.60	77.43	-62.35	567.89	638.87	603.28	35.59	17.953		
7,300.00	7,287.33	7,231.39	7,186.65	25.56	27.01	78.04	-66.09	582.89	652.93	616.85	36.09	18.092		
7,400.00	7,387.33	7,330.16	7,284.20	25.91	27.43	78.63	-69.83	597.88	667.07	630.48	36.59	18.230		
7,500.00	7,487.33	7,428.93	7,381.75	26.26	27.84	79.19	-73.57	612.88	681.27	644.18	37.09	18.366		
7,600.00	7,587.33	7,527.69	7,479.30	26.62	28.26	79.73	-77.32	627.87	695.54	657.94	37.60	18.499		
7,700.00	7,687.33	7,626.46	7,576.85	26.97	28.68	80.25	-81.06	642.87	709.86	671.76	38.10	18.631		
7,800.00	7,787.33	7,725.23	7,674.40	27.32	29.09	80.75	-84.80	657.87	724.24	685.63	38.60	18.760		
7,900.00	7,887.33	7,824.00	7,771.96	27.68	29.51	81.23	-88.54	672.86	738.67	699.56	39.11	18.888		
8,000.00	7,987.33	7,922.77	7,869.51	28.03	29.93	81.69	-92.29	687.86	753.15	713.53	39.61	19.013		
8,100.00	8,087.33	8,021.53	7,967.06	28.38	30.35	82.13	-96.03	702.86	767.67	727.55	40.12	19.136		
8,200.00	8,187.33	8,120.30	8,064.61	28.74	30.77	82.56	-99.77	717.85	782.24	741.62	40.62	19.257		
8,300.00	8,287.33	8,219.07	8,162.16	29.09	31.19	82.97	-103.51	732.85	796.85	755.72	41.13	19.376		
8,400.00	8,387.33	8,317.84	8,259.71	29.44	31.61	83.37	-107.25	747.84	811.50	769.86	41.63	19.492		
8,500.00	8,487.33	8,416.61	8,357.26	29.80	32.03	83.75	-111.00	762.84	826.18	784.04	42.14	19.607		
8,600.00	8,587.33	8,515.37	8,454.81	30.15	32.45	84.12	-114.74	777.84	840.90	798.26	42.64	19.720		
8,700.00	8,687.33	8,614.14	8,552.36	30.51	32.87	84.47	-118.48	792.83	855.65	812.50	43.15	19.831		
8,800.00	8,787.33	8,712.91	8,649.92	30.86	33.29	84.82	-122.22	807.83	870.43	826.78	43.65	19.940		
8,900.00	8,887.33	8,811.68	8,747.47	31.21	33.71	85.15	-125.97	822.83	885.25	841.09	44.16	20.047		
9,000.00	8,987.33	8,910.44	8,845.02	31.57	34.13	85.47	-129.71	837.82	900.09	855.42	44.67	20.152		
9,100.00	9,087.33	9,009.21	8,942.57	31.92	34.56	85.78	-133.45	852.82	914.96	869.79	45.17	20.255		
9,200.00	9,187.33	9,107.98	9,040.12	32.28	34.98	86.08	-137.19	867.81	929.85	884.17	45.68	20.357		
9,300.00	9,287.33	9,206.75	9,137.67	32.63	35.40	86.37	-140.93	882.81	944.77	898.58	46.18	20.456		
9,400.00	9,387.33	9,305.52	9,235.22	32.99	35.82	86.66	-144.68	897.81	959.71	913.02	46.69	20.554		
9,500.00	9,487.33	9,404.28	9,332.77	33.34	36.25	86.93	-148.42	912.80	974.67	927.48	47.20	20.650		
9,600.00	9,587.33	9,503.05	9,430.32	33.70	36.67	87.20	-152.16	927.80	989.66	941.95	47.71	20.745		
9,700.00	9,687.33	9,601.82	9,527.88	34.05	37.09	87.46	-155.90	942.80	1,004.67	956.45	48.21	20.838		
9,800.00	9,787.33	9,700.59	9,625.43	34.41	37.52	87.71	-159.65	957.79	1,019.69	970.97	48.72	20.929		
9,900.00	9,887.33	9,799.36	9,722.98	34.76	37.94	87.95	-163.39	972.79	1,034.73	985.50	49.23	21.019		
10,000.00	9,987.33	9,898.12	9,820.53	35.12	38.37	88.19	-167.13	987.78	1,049.79	1,000.06	49.74	21.107		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 703H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	10,087.33	9,996.89	9,918.08	35.47	38.79	88.41	-170.87	1,002.78	1,064.87	1,014.63	50.24	21.194		
10,200.00	10,187.33	10,095.66	10,015.63	35.83	39.22	88.64	-174.61	1,017.78	1,079.97	1,029.21	50.75	21.279		
10,300.00	10,287.33	10,194.43	10,113.18	36.18	39.64	88.85	-178.36	1,032.77	1,095.08	1,043.81	51.26	21.363		
10,400.00	10,387.33	10,293.20	10,210.73	36.54	40.07	89.07	-182.10	1,047.77	1,110.20	1,058.43	51.77	21.445		
10,500.00	10,487.33	10,391.96	10,308.28	36.89	40.49	89.27	-185.84	1,062.77	1,125.34	1,073.06	52.28	21.526		
10,600.00	10,587.33	10,504.57	10,419.54	37.25	40.98	89.49	-190.04	1,079.58	1,140.28	1,087.42	52.87	21.568		
10,700.00	10,687.33	10,644.46	10,558.32	37.61	41.55	89.72	-194.30	1,096.67	1,152.49	1,098.91	53.58	21.508		
10,800.00	10,787.33	10,785.48	10,698.76	37.96	42.09	89.87	-197.36	1,108.90	1,161.16	1,106.91	54.25	21.404		
10,900.00	10,887.33	10,927.23	10,840.31	38.32	42.59	89.96	-199.16	1,116.12	1,166.26	1,111.39	54.86	21.258		
11,000.00	10,987.33	11,065.67	10,978.73	38.67	43.05	89.98	-199.69	1,118.26	1,167.76	1,112.34	55.42	21.073		
11,100.00	11,087.33	11,165.67	11,078.73	39.03	43.36	89.98	-199.69	1,118.26	1,167.76	1,111.86	55.90	20.889		
11,200.00	11,187.33	11,265.67	11,178.73	39.38	43.68	89.98	-199.69	1,118.26	1,167.76	1,111.37	56.39	20.708		
11,300.00	11,287.33	11,365.67	11,278.73	39.74	43.99	89.98	-199.69	1,118.26	1,167.76	1,110.88	56.88	20.530		
11,400.00	11,387.33	11,465.67	11,378.73	40.10	44.31	89.98	-199.69	1,118.26	1,167.76	1,110.39	57.37	20.355		
11,500.00	11,487.33	11,565.67	11,478.73	40.45	44.63	89.98	-199.69	1,118.26	1,167.76	1,109.90	57.86	20.182		
11,600.00	11,587.33	11,666.50	11,579.52	40.81	44.94	89.91	-198.18	1,118.24	1,167.75	1,109.40	58.35	20.013		
11,678.01	11,665.34	11,744.55	11,656.74	41.09	45.17	89.37	-187.25	1,118.12	1,167.69	1,108.96	58.73	19.881		
11,700.00	11,687.33	11,765.88	11,677.52	41.16	45.23	89.14	-182.44	1,118.07	1,167.70	1,108.86	58.84	19.846		
11,800.00	11,787.33	11,857.36	11,764.10	41.52	45.46	87.70	-153.20	1,117.75	1,168.28	1,108.96	59.32	19.695		
11,900.00	11,887.33	11,937.89	11,835.61	41.88	45.63	85.90	-116.34	1,117.35	1,170.64	1,110.87	59.77	19.586		
11,940.71	11,928.04	11,967.30	11,860.34	42.02	45.68	85.12	-100.42	1,117.18	1,172.41	1,112.47	59.93	19.561		
11,950.00	11,937.33	11,973.77	11,865.68	42.05	45.69	81.40	-96.75	1,117.14	1,172.88	1,112.91	59.97	19.558		
12,000.00	11,987.22	12,008.17	11,893.29	42.23	45.75	80.22	-76.24	1,116.91	1,175.56	1,115.41	60.15	19.544		
12,050.00	12,036.67	12,041.88	11,919.10	42.40	45.80	79.08	-54.57	1,116.68	1,178.39	1,118.09	60.30	19.541		
12,100.00	12,085.28	12,075.00	11,943.18	42.56	45.83	77.99	-31.85	1,116.43	1,181.29	1,120.87	60.42	19.550		
12,150.00	12,132.70	12,107.61	11,965.57	42.71	45.87	76.96	-8.15	1,116.17	1,184.19	1,123.67	60.52	19.568		
12,200.00	12,178.57	12,139.77	11,986.29	42.86	45.90	76.00	16.45	1,115.90	1,186.99	1,126.41	60.58	19.593		
12,250.00	12,222.52	12,171.56	12,005.39	43.00	45.92	75.11	41.85	1,115.62	1,189.62	1,129.00	60.62	19.623		
12,300.00	12,264.24	12,200.00	12,021.26	43.13	45.94	74.34	65.45	1,115.37	1,192.03	1,131.39	60.63	19.660		
12,350.00	12,303.40	12,234.18	12,038.75	43.26	45.95	73.55	94.81	1,115.05	1,194.11	1,133.46	60.65	19.689		
12,400.00	12,339.70	12,265.11	12,053.04	43.38	45.96	72.89	122.23	1,114.75	1,195.84	1,135.20	60.64	19.719		
12,450.00	12,372.86	12,300.00	12,067.37	43.50	45.97	72.27	154.04	1,114.40	1,197.17	1,136.52	60.65	19.739		
12,500.00	12,402.64	12,326.35	12,078.88	43.62	45.98	71.85	178.60	1,114.13	1,198.01	1,137.39	60.62	19.763		
12,550.00	12,428.81	12,350.00	12,084.46	43.74	45.98	71.55	201.01	1,113.89	1,198.39	1,137.80	60.59	19.779		
12,600.00	12,451.17	12,386.97	12,094.43	43.85	45.99	71.20	236.60	1,113.50	1,198.17	1,137.56	60.62	19.767		
12,650.00	12,469.55	12,417.12	12,100.84	43.97	46.00	71.01	266.05	1,113.18	1,197.44	1,136.80	60.64	19.746		
12,700.00	12,483.81	12,450.00	12,106.06	44.09	46.01	70.92	298.51	1,112.82	1,196.13	1,135.44	60.69	19.710		
12,750.00	12,493.83	12,477.18	12,108.97	44.21	46.01	70.95	325.53	1,112.53	1,194.23	1,133.49	60.75	19.659		
12,800.00	12,499.55	12,500.00	12,110.42	44.33	46.02	71.09	348.30	1,112.28	1,191.80	1,130.97	60.83	19.593		
12,840.71	12,501.00	12,531.52	12,110.92	44.42	46.04	71.25	379.81	1,111.94	1,189.32	1,128.39	60.94	19.517		
12,900.00	12,501.00	12,581.74	12,109.33	44.57	46.08	71.15	430.00	1,111.39	1,186.45	1,125.33	61.12	19.412		
13,000.00	12,501.00	12,681.62	12,105.85	44.88	46.22	70.95	529.81	1,110.30	1,184.38	1,122.87	61.51	19.255		
13,012.46	12,501.00	12,694.06	12,105.41	44.92	46.24	70.93	542.25	1,110.16	1,184.35	1,122.79	61.56	19.238		
13,047.21	12,501.00	12,728.80	12,104.20	45.04	46.31	70.87	576.96	1,109.78	1,184.55	1,122.83	61.72	19.191		
13,100.00	12,501.00	12,781.56	12,102.37	45.24	46.43	70.78	629.68	1,109.21	1,185.16	1,123.17	61.99	19.120		
13,200.00	12,501.00	12,881.50	12,098.89	45.66	46.72	70.63	729.55	1,108.12	1,186.32	1,123.78	62.54	18.969		
13,300.00	12,501.00	12,981.43	12,095.40	46.14	47.10	70.47	829.43	1,107.03	1,187.49	1,124.32	63.17	18.800		
13,400.00	12,501.00	13,081.37	12,091.92	46.67	47.55	70.31	929.30	1,105.94	1,188.66	1,124.80	63.86	18.613		
13,500.00	12,501.00	13,181.31	12,088.44	47.25	48.07	70.15	1,029.17	1,104.85	1,189.85	1,125.23	64.62	18.412		
13,600.00	12,501.00	13,281.25	12,084.96	47.88	48.65	69.99	1,129.05	1,103.76	1,191.05	1,125.59	65.45	18.197		
13,700.00	12,501.00	13,381.19	12,081.48	48.56	49.28	69.84	1,228.92	1,102.67	1,192.25	1,125.91	66.34	17.971		
13,800.00	12,501.00	13,481.13	12,078.00	49.29	49.97	69.68	1,328.79	1,101.58	1,193.46	1,126.17	67.29	17.736		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 703H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	12,501.00	13,581.07	12,074.51	50.06	50.71	69.52	1,428.66	1,100.49	1,194.69	1,126.39	68.30	17.493		
14,000.00	12,501.00	13,681.01	12,071.03	50.87	51.49	69.37	1,528.54	1,099.40	1,195.92	1,126.56	69.35	17.244		
14,100.00	12,501.00	13,780.95	12,067.55	51.72	52.32	69.21	1,628.41	1,098.31	1,197.16	1,126.69	70.46	16.990		
14,200.00	12,501.00	13,880.89	12,064.07	52.61	53.18	69.06	1,728.28	1,097.22	1,198.41	1,126.79	71.62	16.732		
14,300.00	12,501.00	13,980.83	12,060.59	53.54	54.08	68.90	1,828.15	1,096.13	1,199.67	1,126.84	72.82	16.473		
14,400.00	12,501.00	14,080.77	12,057.11	54.50	55.02	68.75	1,928.03	1,095.04	1,200.93	1,126.86	74.07	16.214		
14,500.00	12,501.00	14,180.71	12,053.63	55.50	55.99	68.59	2,027.90	1,093.95	1,202.21	1,126.85	75.35	15.954		
14,600.00	12,501.00	14,280.65	12,050.14	56.52	56.99	68.44	2,127.77	1,092.86	1,203.49	1,126.82	76.68	15.696		
14,700.00	12,501.00	14,380.58	12,046.66	57.57	58.02	68.28	2,227.65	1,091.77	1,204.78	1,126.75	78.03	15.439		
14,800.00	12,501.00	14,480.52	12,043.18	58.66	59.08	68.13	2,327.52	1,090.68	1,206.09	1,126.66	79.43	15.185		
14,900.00	12,501.00	14,580.46	12,039.70	59.76	60.16	67.98	2,427.39	1,089.59	1,207.40	1,126.55	80.85	14.934		
15,000.00	12,501.00	14,680.40	12,036.22	60.90	61.27	67.82	2,527.26	1,088.50	1,208.72	1,126.41	82.30	14.686		
15,100.00	12,501.00	14,780.34	12,032.74	62.05	62.41	67.67	2,627.14	1,087.41	1,210.04	1,126.26	83.78	14.443		
15,200.00	12,501.00	14,880.28	12,029.26	63.23	63.56	67.52	2,727.01	1,086.32	1,211.38	1,126.09	85.28	14.204		
15,300.00	12,501.00	14,980.22	12,025.77	64.43	64.74	67.37	2,826.88	1,085.23	1,212.72	1,125.91	86.81	13.969		
15,400.00	12,501.00	15,080.16	12,022.29	65.65	65.94	67.22	2,926.75	1,084.14	1,214.08	1,125.71	88.36	13.739		
15,500.00	12,501.00	15,180.10	12,018.81	66.89	67.16	67.07	3,026.63	1,083.05	1,215.44	1,125.50	89.94	13.515		
15,600.00	12,501.00	15,280.04	12,015.33	68.14	68.39	66.91	3,126.50	1,081.96	1,216.81	1,125.28	91.53	13.295		
15,700.00	12,501.00	15,379.98	12,011.85	69.41	69.65	66.76	3,226.37	1,080.87	1,218.19	1,125.05	93.14	13.080		
15,800.00	12,501.00	15,479.92	12,008.37	70.70	70.92	66.61	3,326.24	1,079.78	1,219.57	1,124.81	94.76	12.870		
15,900.00	12,501.00	15,579.86	12,004.89	72.00	72.20	66.46	3,426.12	1,078.69	1,220.97	1,124.56	96.40	12.665		
16,000.00	12,501.00	15,679.80	12,001.40	73.32	73.50	66.31	3,525.99	1,077.60	1,222.37	1,124.31	98.06	12.466		
16,100.00	12,501.00	15,779.74	11,997.92	74.65	74.81	66.17	3,625.86	1,076.51	1,223.78	1,124.05	99.73	12.271		
16,200.00	12,501.00	15,879.67	11,994.44	75.99	76.14	66.02	3,725.74	1,075.42	1,225.20	1,123.79	101.41	12.082		
16,300.00	12,501.00	15,979.61	11,990.96	77.35	77.48	65.87	3,825.61	1,074.33	1,226.63	1,123.53	103.11	11.897		
16,400.00	12,501.00	16,079.55	11,987.48	78.72	78.83	65.72	3,925.48	1,073.24	1,228.07	1,123.26	104.81	11.717		
16,500.00	12,501.00	16,179.49	11,984.00	80.09	80.19	65.57	4,025.35	1,072.15	1,229.51	1,122.99	106.52	11.542		
16,600.00	12,501.00	16,279.43	11,980.52	81.48	81.56	65.43	4,125.23	1,071.06	1,230.97	1,122.72	108.25	11.372		
16,700.00	12,501.00	16,379.37	11,977.03	82.88	82.94	65.28	4,225.10	1,069.97	1,232.43	1,122.45	109.98	11.206		
16,800.00	12,501.00	16,479.31	11,973.55	84.28	84.34	65.13	4,324.97	1,068.88	1,233.90	1,122.18	111.72	11.045		
16,900.00	12,501.00	16,579.25	11,970.07	85.70	85.74	64.98	4,424.84	1,067.79	1,235.37	1,121.91	113.47	10.888		
17,000.00	12,501.00	16,679.19	11,966.59	87.12	87.15	64.84	4,524.72	1,066.70	1,236.86	1,121.64	115.22	10.735		
17,100.00	12,501.00	16,779.13	11,963.11	88.55	88.56	64.69	4,624.59	1,065.61	1,238.35	1,121.37	116.98	10.586		
17,200.00	12,501.00	16,879.07	11,959.63	89.99	89.99	64.55	4,724.46	1,064.52	1,239.85	1,121.11	118.74	10.442		
17,300.00	12,501.00	16,979.01	11,956.15	91.44	91.42	64.40	4,824.34	1,063.43	1,241.36	1,120.85	120.51	10.301		
17,400.00	12,501.00	17,078.95	11,952.66	92.89	92.87	64.26	4,924.21	1,062.34	1,242.88	1,120.59	122.28	10.164		
17,500.00	12,501.00	17,178.89	11,949.18	94.35	94.31	64.11	5,024.08	1,061.25	1,244.40	1,120.34	124.06	10.030		
17,600.00	12,501.00	17,278.82	11,945.70	95.82	95.77	63.97	5,123.95	1,060.16	1,245.94	1,120.09	125.84	9.901		
17,700.00	12,501.00	17,378.76	11,942.22	97.29	97.23	63.83	5,223.83	1,059.07	1,247.48	1,119.85	127.62	9.775		
17,800.00	12,501.00	17,478.70	11,938.74	98.77	98.69	63.68	5,323.70	1,057.98	1,249.03	1,119.61	129.41	9.652		
17,900.00	12,501.00	17,578.64	11,935.26	100.25	100.17	63.54	5,423.57	1,056.89	1,250.58	1,119.38	131.20	9.532		
18,000.00	12,501.00	17,678.58	11,931.78	101.74	101.65	63.40	5,523.44	1,055.80	1,252.15	1,119.15	132.99	9.415		
18,100.00	12,501.00	17,778.52	11,928.29	103.24	103.13	63.26	5,623.32	1,054.71	1,253.72	1,118.93	134.79	9.302		
18,200.00	12,501.00	17,878.46	11,924.81	104.73	104.62	63.11	5,723.19	1,053.62	1,255.30	1,118.72	136.58	9.191		
18,300.00	12,501.00	17,978.40	11,921.33	106.24	106.11	62.97	5,823.06	1,052.53	1,256.88	1,118.51	138.38	9.083		
18,400.00	12,501.00	18,078.34	11,917.85	107.75	107.61	62.83	5,922.93	1,051.44	1,258.48	1,118.31	140.17	8.978		
18,500.00	12,501.00	18,178.28	11,914.37	109.26	109.11	62.69	6,022.81	1,050.35	1,260.08	1,118.12	141.97	8.876		
18,600.00	12,501.00	18,278.22	11,910.89	110.77	110.62	62.55	6,122.68	1,049.26	1,261.69	1,117.93	143.76	8.776		
18,700.00	12,501.00	18,378.16	11,907.41	112.29	112.13	62.41	6,222.55	1,048.17	1,263.31	1,117.75	145.56	8.679		
18,800.00	12,501.00	18,478.10	11,903.92	113.82	113.64	62.27	6,322.43	1,047.08	1,264.93	1,117.58	147.35	8.584		
18,900.00	12,501.00	18,578.04	11,900.44	115.34	115.16	62.13	6,422.30	1,045.99	1,266.57	1,117.42	149.15	8.492		
19,000.00	12,501.00	18,677.98	11,896.96	116.87	116.68	61.99	6,522.17	1,044.90	1,268.21	1,117.26	150.95	8.402		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Georgetown/Ouray - Ouray Fed Com 703H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,100.00	12,501.00	18,777.91	11,893.48	118.41	118.21	61.85	6,622.04	1,043.81	1,269.86	1,117.11	152.74	8.314		
19,200.00	12,501.00	18,877.85	11,890.00	119.94	119.74	61.72	6,721.92	1,042.72	1,271.51	1,116.98	154.53	8.228		
19,300.00	12,501.00	18,977.79	11,886.52	121.48	121.27	61.58	6,821.79	1,041.63	1,273.17	1,116.85	156.33	8.144		
19,400.00	12,501.00	19,077.73	11,883.03	123.03	122.80	61.44	6,921.66	1,040.54	1,274.84	1,116.73	158.12	8.063		
19,500.00	12,501.00	19,177.67	11,879.55	124.57	124.34	61.30	7,021.53	1,039.45	1,276.52	1,116.61	159.91	7.983		
19,600.00	12,501.00	19,277.61	11,876.07	126.12	125.88	61.17	7,121.41	1,038.36	1,278.20	1,116.51	161.69	7.905		
19,700.00	12,501.00	19,377.55	11,872.59	127.67	127.43	61.03	7,221.28	1,037.27	1,279.89	1,116.42	163.48	7.829		
19,800.00	12,501.00	19,477.49	11,869.11	129.23	128.97	60.90	7,321.15	1,036.18	1,281.59	1,116.33	165.26	7.755		
19,900.00	12,501.00	19,577.43	11,865.63	130.78	130.52	60.76	7,421.03	1,035.09	1,283.30	1,116.26	167.04	7.682		
20,000.00	12,501.00	19,677.37	11,862.15	132.34	132.07	60.62	7,520.90	1,034.00	1,285.01	1,116.19	168.82	7.612		
20,100.00	12,501.00	19,777.31	11,858.66	133.90	133.63	60.49	7,620.77	1,032.91	1,286.73	1,116.13	170.60	7.542		
20,200.00	12,501.00	19,877.25	11,855.18	135.47	135.18	60.35	7,720.64	1,031.82	1,288.46	1,116.09	172.37	7.475		
20,300.00	12,501.00	19,977.19	11,851.70	137.03	136.74	60.22	7,820.52	1,030.73	1,290.20	1,116.05	174.15	7.409		
20,400.00	12,501.00	20,077.13	11,848.22	138.60	138.30	60.09	7,920.39	1,029.64	1,291.94	1,116.02	175.92	7.344		
20,500.00	12,501.00	20,177.06	11,844.74	140.17	139.86	59.95	8,020.26	1,028.55	1,293.69	1,116.00	177.68	7.281		
20,600.00	12,501.00	20,277.00	11,841.26	141.74	141.43	59.82	8,120.13	1,027.46	1,295.44	1,115.99	179.45	7.219		
20,700.00	12,501.00	20,376.94	11,837.78	143.31	143.00	59.69	8,220.01	1,026.37	1,297.20	1,116.00	181.21	7.159		
20,800.00	12,501.00	20,476.88	11,834.29	144.89	144.56	59.55	8,319.88	1,025.28	1,298.97	1,116.01	182.96	7.100		
20,900.00	12,501.00	20,576.82	11,830.81	146.46	146.13	59.42	8,419.75	1,024.19	1,300.75	1,116.03	184.72	7.042		
21,000.00	12,501.00	20,676.76	11,827.33	148.04	147.71	59.29	8,519.63	1,023.10	1,302.53	1,116.06	186.47	6.985		
21,100.00	12,501.00	20,776.70	11,823.85	149.62	149.28	59.16	8,619.50	1,022.00	1,304.32	1,116.10	188.22	6.930		
21,200.00	12,501.00	20,876.64	11,820.37	151.20	150.86	59.03	8,719.37	1,020.91	1,306.12	1,116.16	189.96	6.876		
21,300.00	12,501.00	20,976.58	11,816.89	152.78	152.43	58.90	8,819.24	1,019.82	1,307.92	1,116.22	191.71	6.823		
21,400.00	12,501.00	21,076.52	11,813.41	154.37	154.01	58.77	8,919.12	1,018.73	1,309.73	1,116.29	193.44	6.771		
21,500.00	12,501.00	21,176.46	11,809.92	155.95	155.59	58.64	9,018.99	1,017.64	1,311.55	1,116.37	195.18	6.720		
21,600.00	12,501.00	21,276.40	11,806.44	157.54	157.18	58.51	9,118.86	1,016.55	1,313.38	1,116.47	196.91	6.670		
21,700.00	12,501.00	21,376.34	11,802.96	159.13	158.76	58.38	9,218.73	1,015.46	1,315.21	1,116.57	198.63	6.621		
21,800.00	12,501.00	21,476.28	11,799.48	160.72	160.34	58.25	9,318.61	1,014.37	1,317.04	1,116.69	200.36	6.573		
21,900.00	12,501.00	21,576.21	11,796.00	162.31	161.93	58.12	9,418.48	1,013.28	1,318.89	1,116.81	202.08	6.527		
22,000.00	12,501.00	21,676.15	11,792.52	163.90	163.52	57.99	9,518.35	1,012.19	1,320.74	1,116.95	203.79	6.481		
22,100.00	12,501.00	21,776.09	11,789.04	165.50	165.11	57.87	9,618.22	1,011.10	1,322.60	1,117.09	205.51	6.436		
22,200.00	12,501.00	21,876.03	11,785.55	167.09	166.69	57.74	9,718.10	1,010.01	1,324.46	1,117.25	207.21	6.392		
22,300.00	12,501.00	21,975.97	11,782.07	168.69	168.29	57.61	9,817.97	1,008.92	1,326.33	1,117.41	208.92	6.349		
22,400.00	12,501.00	22,075.91	11,778.59	170.28	169.88	57.49	9,917.84	1,007.83	1,328.21	1,117.59	210.62	6.306		
22,500.00	12,501.00	22,175.85	11,775.11	171.88	171.47	57.36	10,017.72	1,006.74	1,330.09	1,117.78	212.32	6.265		
22,600.00	12,501.00	22,275.79	11,771.63	173.48	173.07	57.23	10,117.59	1,005.65	1,331.98	1,117.98	214.01	6.224		
22,635.57	12,501.00	22,311.34	11,770.39	174.05	173.62	57.19	10,153.12	1,005.27	1,332.66	1,118.06	214.59	6.210 SF		
22,636.34	12,501.00	22,312.10	11,770.36	174.06	173.63	57.19	10,153.88	1,005.26	1,332.67	1,118.08	214.59	6.210		

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



Total Directional Services

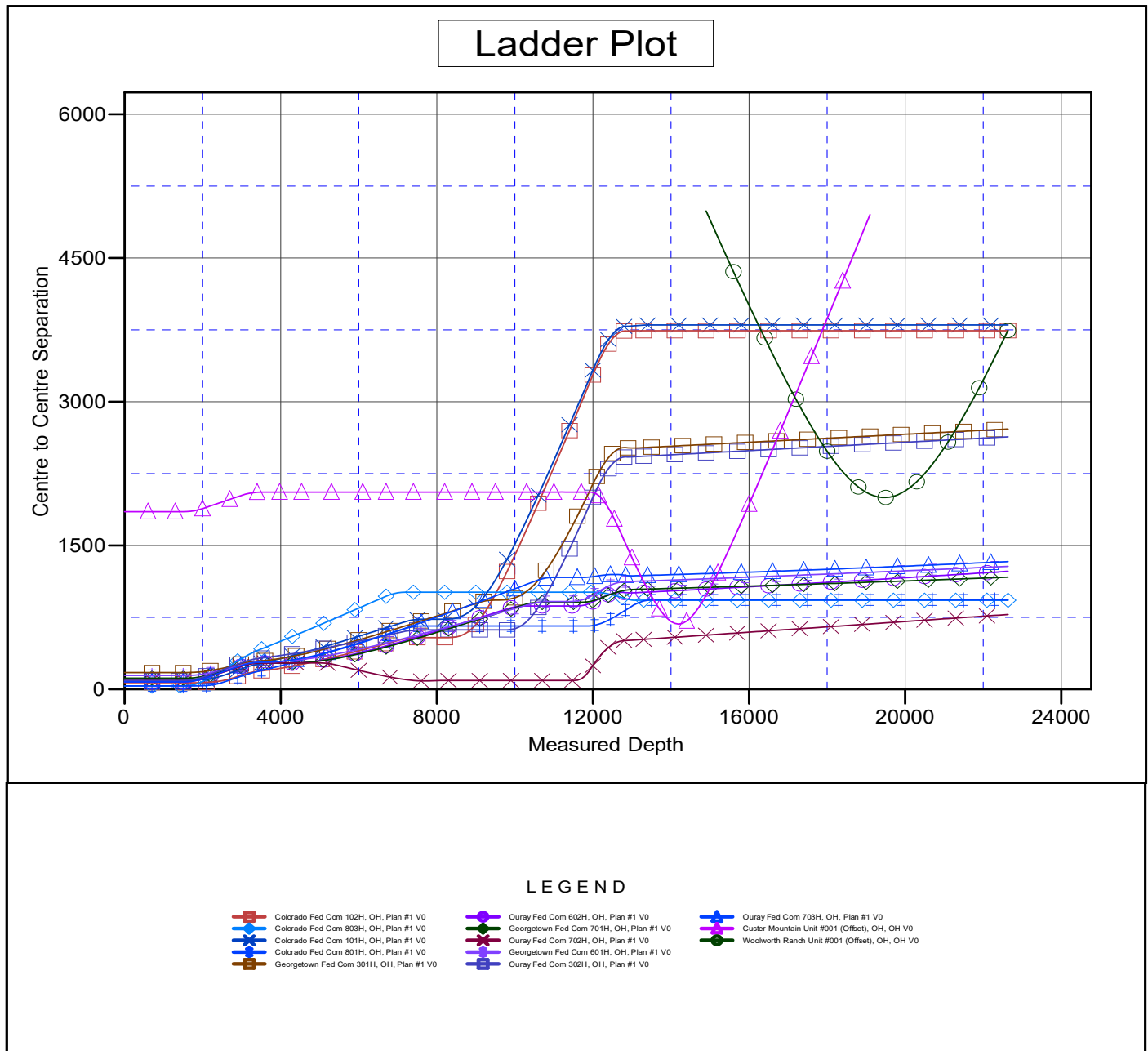
Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 802H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.7' GE + 30' KB @ 3422.70usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 802H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors 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 3392.7' GE + 30' KB @ 3422.70usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Colorado Fed Com 802H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.51°



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



Total Directional Services

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Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3392.7' GE + 30' KB @ 3422.70usft

Offset Depths are relative to Offset Datum

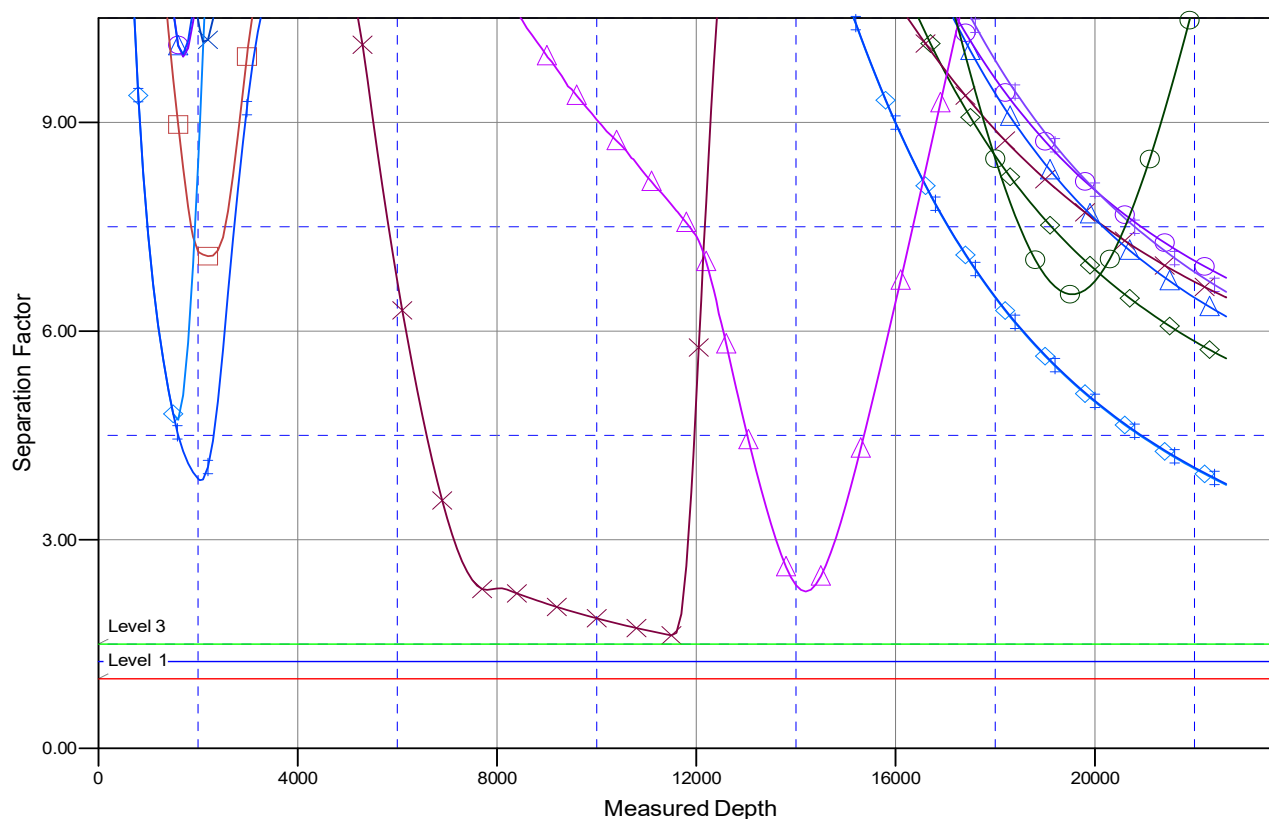
Central Meridian is -104.333334

Coordinates are relative to: Colorado Fed Com 802H

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

Grid Convergence at Surface is: 0.51°

Separation Factor Plot



LEGEND

Colorado Fed Com 102H, OH, Plan #1 V0	Ourray Fed Com 602H, OH, Plan #1 V0	Ourray Fed Com 703H, OH, Plan #1 V0
Colorado Fed Com 803H, OH, Plan #1 V0	Georgetown Fed Com 701H, OH, Plan #1 V0	Custer Mountain Unit #001 (Offset), OH, OH V0
Colorado Fed Com 101H, OH, Plan #1 V0	Ourray Fed Com 702H, OH, Plan #1 V0	Woolworth Ranch Unit #001 (Offset), OH, OH V0
Colorado Fed Com 801H, OH, Plan #1 V0	Georgetown Fed Com 601H, OH, Plan #1 V0	
Georgetown Fed Com 301H, OH, Plan #1 V0	Ourray Fed Com 302H, 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 Company LLC
LEASE NO.:	NMNM114998, NMNM138898, NMNM01228, NMNM0001228A
COUNTY:	Lea

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
- ☐ **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.

VRM IV:

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

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

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

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

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 Enclosure 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 enclosure 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 Enclosures

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

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, Carlsbad Canyon from the BLM Standard Environmental Color Chart (CC-001: June 2008).

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 3, for Shallow Sites

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

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

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

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

*Pounds of pure live seed:

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Franklin Mountain Energy LLC
LEASE NO.:	NMNM01228A
LOCATION:	Section 9, T.24 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico
Sundry ID:	N/A

WELL NAME & NO.:	Colorado Fed Com 101H
SURFACE HOLE FOOTAGE:	250'S & 1203'/W
BOTTOM HOLE FOOTAGE:	150'/N & 380'/W

WELL NAME & NO.:	Colorado Fed Com 102H
SURFACE HOLE FOOTAGE:	250'S & 1238'/W
BOTTOM HOLE FOOTAGE:	150'/N & 1877'/W

WELL NAME & NO.:	Colorado Fed Com 801H
SURFACE HOLE FOOTAGE:	250'S & 1273'/W
BOTTOM HOLE FOOTAGE:	150'/N & 380'/W

WELL NAME & NO.:	Colorado Fed Com 802H
SURFACE HOLE FOOTAGE:	250'S & 1308'/W
BOTTOM HOLE FOOTAGE:	150'/N & 1306'/W

WELL NAME & NO.:	Colorado Fed Com 803H
SURFACE HOLE FOOTAGE:	250'S & 1343'/W
BOTTOM HOLE FOOTAGE:	150'/N & 2232'/W

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

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1100 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 166793

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 166793
	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	1/4/2023
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	1/4/2023
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	1/4/2023
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	1/4/2023