

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. 30-025-50908
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 / 1273 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.225474 / LONG: -103.376874 (TVD: 0 feet, MD: 0 feet)
PPP: SWNW / 0 FSL / 396 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.246562 / LONG: -103.37975 (TVD: 12392 feet, MD: 20100 feet)
PPP: SWSW / 0 FSL / 418 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.239306 / LONG: -103.379661 (TVD: 12392 feet, MD: 17500 feet)
PPP: SWNW / 0 FSL / 430 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.235674 / LONG: -103.379617 (TVD: 12392 feet, MD: 16100 feet)
PPP: SWSW / 0 FSL / 440 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.232042 / LONG: -103.379573 (TVD: 12392 feet, MD: 14800 feet)
PPP: TR M / 607 FSL / 406 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.226454 / LONG: -103.379504 (TVD: 12392 feet, MD: 12765 feet)
BHL: LOT 4 / 150 FNL / 380 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.253417 / LONG: -103.379834 (TVD: 12392 feet, MD: 22581 feet)

BLM Point of Contact

Name: TERESA SEHGAL

Title: BA

Phone: (303) 236-1234

Email: tsehgal@blm.gov

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 30-025-50908		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 801H
⁷ OGRID No. 373910	⁸ Operator Name FRANKLIN MOUNTAIN ENERGY LLC		⁹ Elevation 3392.3'

¹⁰ Surface Location

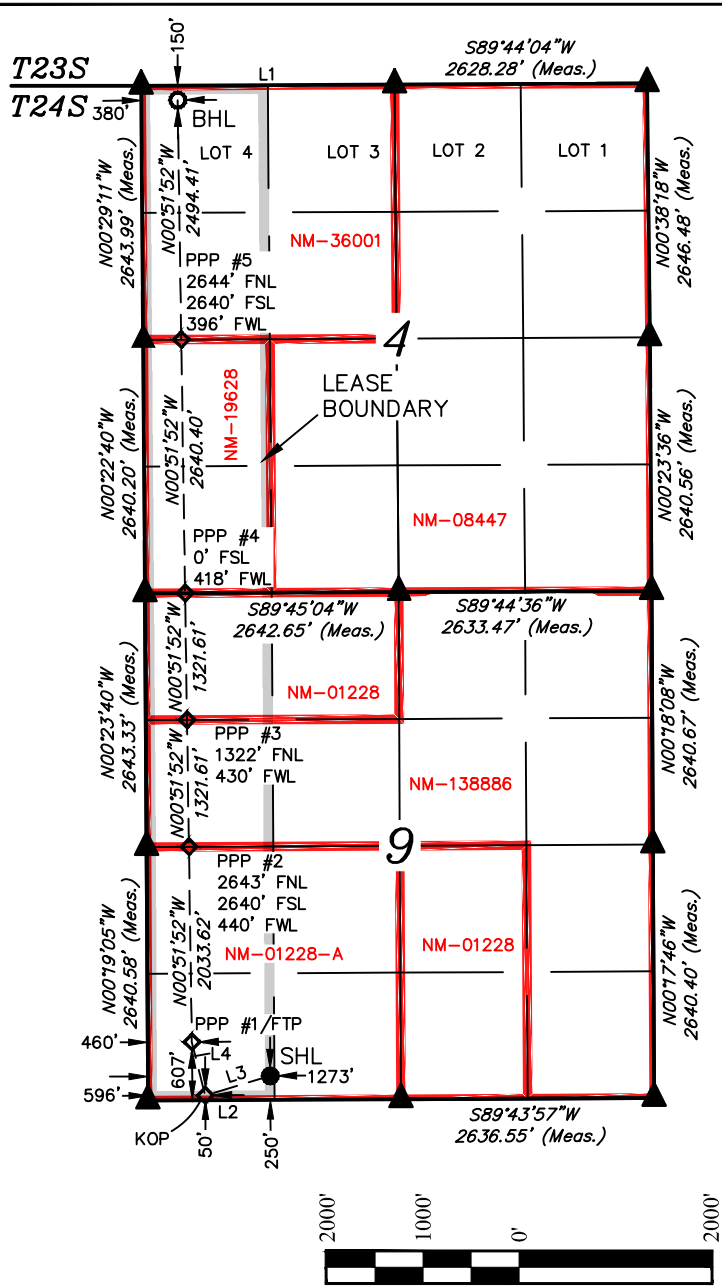
UL or lot no. M	Section 9	Township 24S	Range 35E	Lot Idn	Feet from the 250	North/South line SOUTH	Feet from the 1273	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. 4	Section 4	Township 24S	Range 35E	Lot Idn	Feet from the 150	North/South line NORTH	Feet from the 380	East/West line WEST	County 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°22'36.75" (103.376874°)
	NAD 27 (SURFACE HOLE LOCATION)
	LATITUDE = 32°13'31.25" (32.225348°)
	LONGITUDE = 103°22'35.05" (103.376403°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 447077.65' E: 837106.56'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 447018.45' E: 795921.36'
	NAD 83 (KOP)
	LATITUDE = 32°13'29.73" (32.224924°)
	LONGITUDE = 103°22'44.63" (103.379063°)
	NAD 27 (KOP)
	LATITUDE = 32°13'29.28" (32.224799°)
	LONGITUDE = 103°22'42.93" (103.378592°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 446871.75' E: 836431.56'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 446812.56' E: 795246.38'
	NAD 83 (PPP #1/FTP)
	LATITUDE = 32°13'35.23" (32.226454°)
	LONGITUDE = 103°22'46.22" (103.379504°)
	NAD 27 (PPP #1/FTP)
	LATITUDE = 32°13'34.78" (32.226328°)
	LONGITUDE = 103°22'44.52" (103.379033°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 447426.96' E: 836290.04'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 447367.76' E: 795104.88'
	NAD 83 (PPP #2)
	LATITUDE = 32°13'55.35" (32.232042°)
	LONGITUDE = 103°22'46.46" (103.379573°)
	NAD 27 (PPP #2)
	LATITUDE = 32°13'54.90" (32.231917°)
	LONGITUDE = 103°22'44.77" (103.379101°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 449459.89' E: 836250.85'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 449400.64' E: 795065.78'
	NAD 83 (PPP #3)
	LATITUDE = 32°14'08.43" (32.235674°)
	LONGITUDE = 103°22'46.62" (103.379617°)
	NAD 27 (PPP #3)
	LATITUDE = 32°14'07.97" (32.235549°)
	LONGITUDE = 103°22'44.92" (103.379146°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 450781.05' E: 836225.38'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 450721.77' E: 795040.37'
	NAD 83 (PPP #4)
	LATITUDE = 32°14'21.50" (32.239306°)
	LONGITUDE = 103°22'46.78" (103.379661°)
	NAD 27 (PPP #4)
	LATITUDE = 32°14'21.05" (32.239180°)
	LONGITUDE = 103°22'45.08" (103.379190°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 452102.22' E: 836199.91'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 452042.90' E: 795014.96'
	NAD 83 (PPP #5)
	LATITUDE = 32°14'47.62" (32.246562°)
	LONGITUDE = 103°22'47.10" (103.379750°)
	NAD 27 (PPP #5)
	LATITUDE = 32°14'47.17" (32.246437°)
	LONGITUDE = 103°22'45.40" (103.379278°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 454741.74' E: 836149.03'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 454682.34' E: 794964.19'
	NAD 83 (BOTTOM HOLE LOCATION)
	LATITUDE = 32°15'12.30" (32.253417°)
	LONGITUDE = 103°22'47.40" (103.379834°)
	NAD 27 (BOTTOM HOLE LOCATION)
	LATITUDE = 32°15'11.85" (32.253291°)
	LONGITUDE = 103°22'45.70" (103.379362°)
	STATE PLANE NAD 83 (N.M. EAST)
	N: 457235.30' E: 836100.95'
	STATE PLANE NAD 27 (N.M. EAST)
	N: 457175.84' E: 794916.19'



LINE TABLE		
LINE	DIRECTION	LENGTH
L2	S89°42'02"W	2634.31'
L3	S73°16'35"W	705.81'
L4	N14°03'36"W	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)

- = 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

Printed Name: Shelly Albrecht

E-mail Address: salbrecht@fmellic.com

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

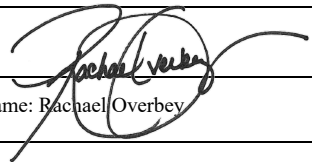
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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 30-025-50908	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 803H	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 30-025-50908	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 803H	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.

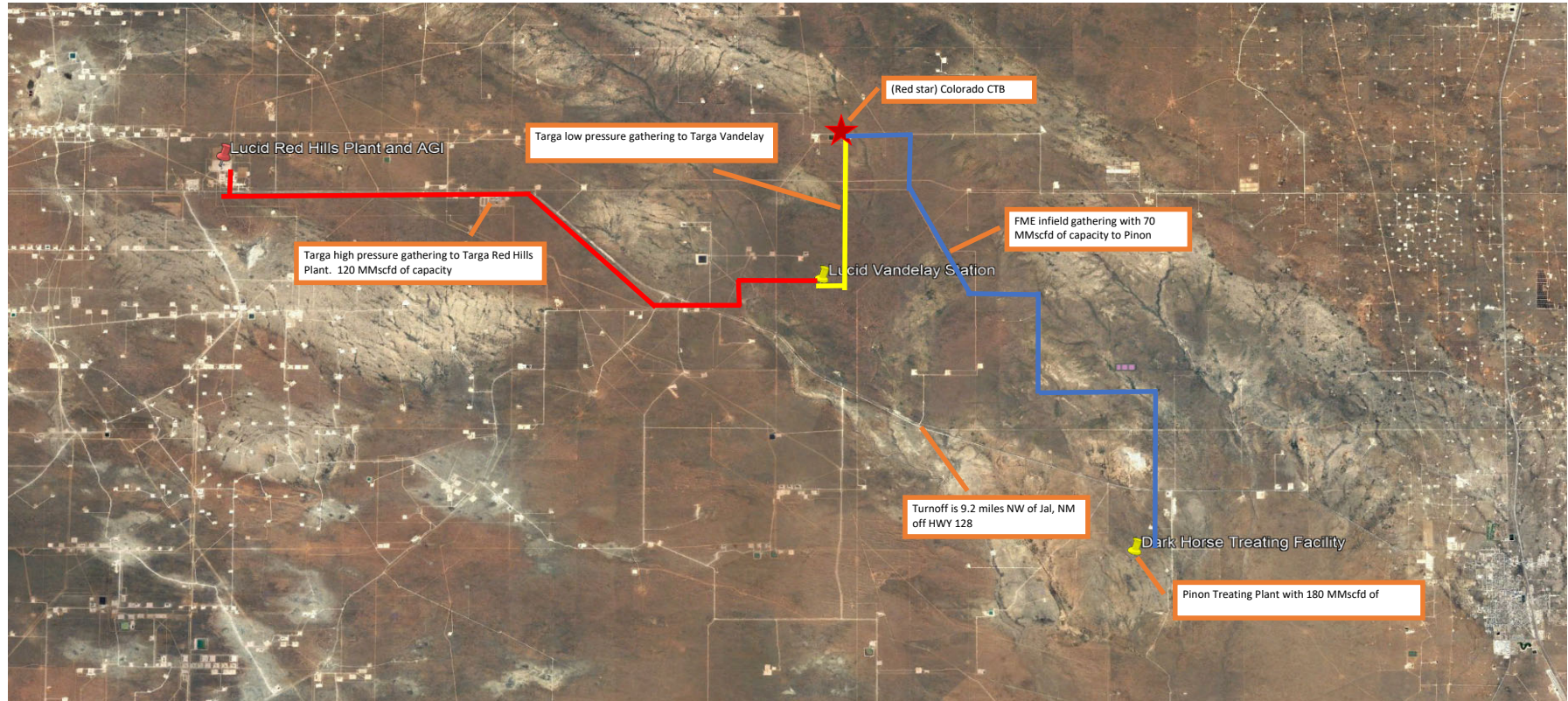
VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- 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 801H

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	2,569'	853'			Carbonates
Salado	2,231'	1,191'			Salt, Carbonate & Clastics
Base Salt	615'	2,807'			Shaley Carbonate & Shale
Lamar	-1,847'	5,269'			Carbonate & Clastics
Bell Canyon	-1,923'	5,345'			Sandstone - oil/gas/water
Cherry Canyon	-2,845'	6,267'			Sandstone - oil/gas/water
Brushy Canyon	-4,172'	7,594'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,531'	8,953'			Shale/Carbonates - oil/gas
Avalon	-5,559'	8,981'			Shale/Carbonates - oil/gas
Chert Zone	-5,750'	9,172'			Carbonate/Chert
First Bone Spring Sand	-6,633'	10,055'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,728'	10,150'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,205'	10,627'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,745'	11,167'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,179'	11,601'			Sandstone - oil/gas/water
Wolfcamp	-8,543'	11,965'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,585'	12,007'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,827'	12,249'			Overpressure Shale - Oil/Gas
HZ Target	-8,971'	12,393'			Overpressure Shale - Oil/Gas
Wolfcamp C	-9,105'	12,527'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,345'	Oil
Bone Spring	10,055'	Oil
Wolfcamp	11,965'	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	5300	1.75	1.71	2.94	3.34
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	11800	1.12	1.29	1.84	1.25
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	22581 12392	1.32	1.37	1.18	0.98 1.57



7 5/8" casing will be set at 11,800' MD/11,754' TVD at 0° Inc. Stress calculations on 5 1/2" casing performed assuming 22,581' depth. Actual max vertical depth is 12,392'.

Cementing Program:

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft ³ /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft ³ /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1300	795	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	Tail, 14.8 ppg, Class C,	1.349	6.51	1000	100%
Int1	12.25	9.625	5300	1558	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	5000	100%
Int2	8.75	7.625	11800	349	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	4300	94	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl ₂	1.33	6.29	10800	50%
Prod	6.75	5.5	22581	879	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	10800						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' – 11,800'	Brine	8.8-10.2	28-34	N/c
11,800' – 22,581' 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 12,392' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 8,377 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.

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
 Site: Colorado Fed Com
 Well: Colorado Fed Com 801H
 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

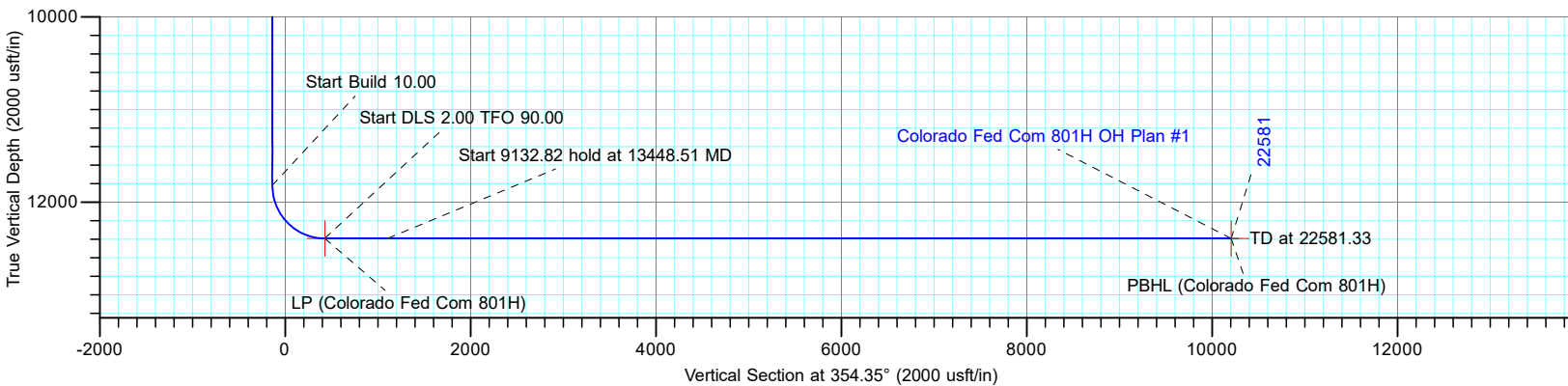
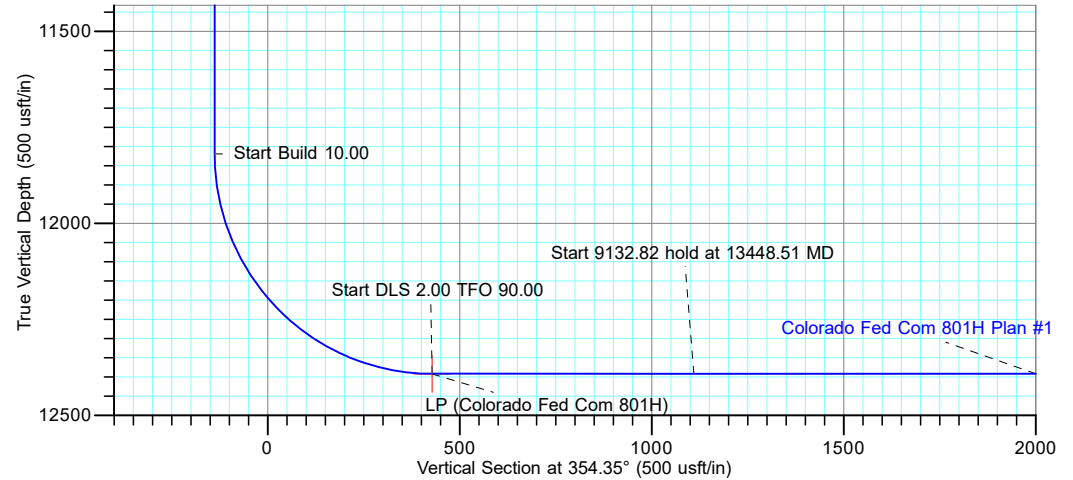
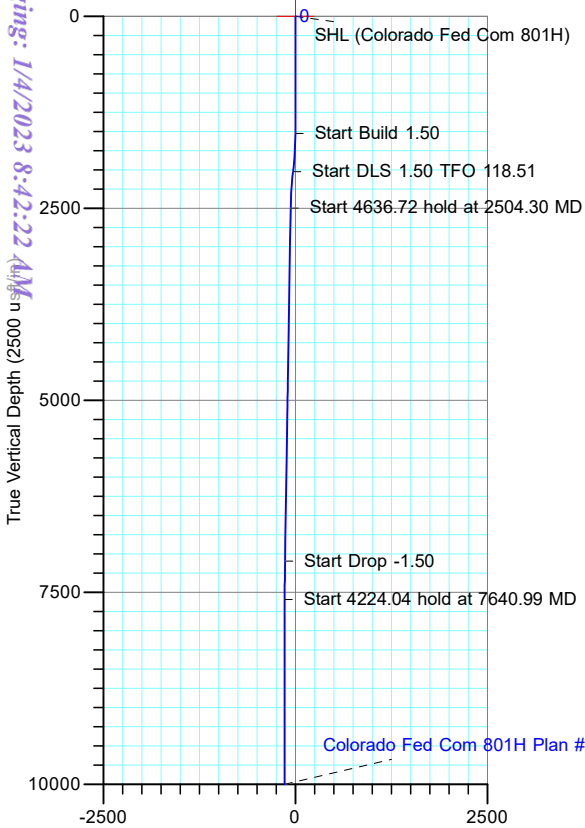


SECTION DETAILS

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	
1525.00	0.00	0.00	1525.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2025.00	7.50	200.00	2023.57	-30.71	-11.18	1.50	200.00	-29.46	Start DLS 1.50 TFO 118.51
2504.30	7.50	257.42	2499.40	-66.96	-52.46	1.50	118.51	-61.47	Start 4636.72 hold at 2504.30 MD
7141.02	7.50	257.42	7096.45	-198.78	-643.11	0.00	0.00	-134.46	Start Drop -1.50
7640.99	0.00	0.00	7595.00	-205.90	-675.00	1.50	180.00	-138.40	Start 4224.04 hold at 7640.99 MD
11865.03	0.00	0.00	11819.04	-205.90	-675.00	0.00	0.00	-138.40	Start Build 10.00
12765.03	90.00	345.70	12392.00	349.31	-816.52	10.00	345.70	428.05	Start DLS 2.00 TFO 90.00
13448.51	90.00	359.37	12392.00	1025.38	-905.11	2.00	90.00	1109.56	Start 9132.82 hold at 13448.51 MD
22581.33	90.00	359.37	12392.00	10157.65	-1005.61	0.00	0.00	10207.31	TD at 22581.33

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (Colorado Fed Com 801H)	12392.00	349.31	-816.52	32.226454	-103.379504
PBHL (Colorado Fed Com 801H)	12392.00	10157.65	-1005.61	32.253417	-103.379834
SHL (Colorado Fed Com 801H)	0.00	0.00	0.00	32.225474	-103.376874



TOTAL DIRECTIONAL SERVICES LLC

Plan: Plan #1 (Colorado Fed Com 801H/OH)
 Colorado Fed Com
 Created By: Dustin Ault Date: 16:46, August 31 2021
 Date: _____
 Approved: _____ Date: _____

Released to Imaging: 1/4/2023 8:42:22 AM

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Colorado Fed Com
Well: Colorado Fed Com 801H
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



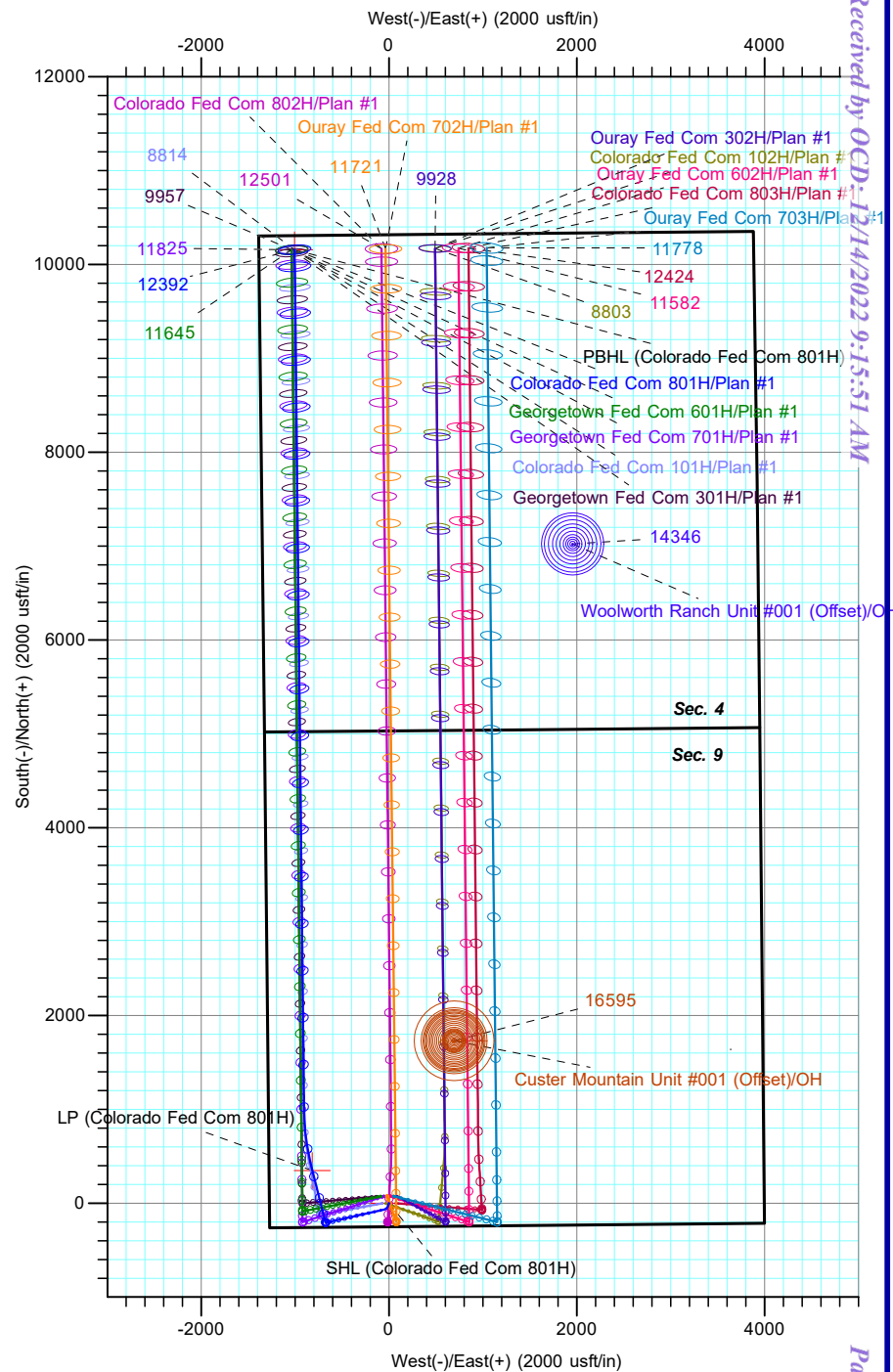
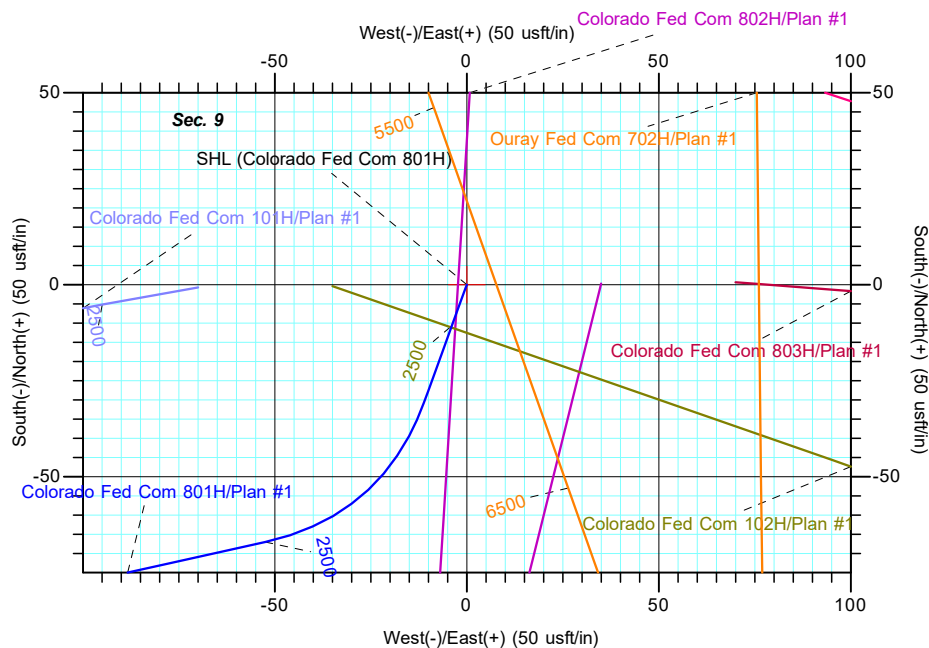
Azimuths to Grid North
True North: -0.51°
Magnetic North: 5.92°
Magnetic Field
Strength: 47492.4nT
Dip Angle: 59.92°
Date: 8/31/2021
Model: IGRF2020

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (Colorado Fed Com 801H)	12392.00	349.31	-816.52	447426.96	836290.04	32.226454	-103.379504
PBHL (Colorado Fed Com 801H)	12392.00	10157.65	-1005.61	457235.30	836100.95	32.253417	-103.379834
SHL (Colorado Fed Com 801H)	0.00	0.00	0.00	447077.65	837106.56	32.225474	-103.376874

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	
1525.00	0.00	0.00	1525.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2025.00	7.50	200.00	2023.57	-30.71	-11.18	1.50	200.00	-29.46	Start DLS 1.50 TFO 118.51
2504.30	7.50	257.42	2499.40	-66.96	-52.46	1.50	118.51	-61.47	Start 4636.72 hold at 2504.30 MD
7141.02	7.50	257.42	7096.45	-198.78	-643.11	0.00	0.00	-134.46	Start Drop -1.50
7640.99	0.00	0.00	7595.00	-205.90	-675.00	1.50	180.00	-138.40	Start 4224.04 hold at 7640.99 MD
11865.03	0.00	0.00	11819.04	-205.90	-675.00	0.00	0.00	-138.40	Start Build 10.00
12765.03	90.00	345.70	12392.00	349.31	-816.52	10.00	345.70	428.05	Start DLS 2.00 TFO 90.00
13448.51	90.00	359.37	12392.00	1025.38	-905.11	2.00	90.00	1109.56	Start 9132.82 hold at 13448.51 MD
22581.33	90.00	359.37	12392.00	10157.65	-1005.61	0.00	0.00	10207.31	TD at 22581.33



TOTAL DIRECTIONAL SERVICES LLC

Plan: Plan #1 (Colorado Fed Com 801H/OH)
Colorado Fed Com
Created By: Dustin Ault
Date: 16:12, September 03 2021
Approved: _____
Date: _____

Received by OCD: 12/14/2022 9:15:51 AM

Page 20 of 12



Franklin Mountain Energy

Lea County, NM (NAD83)

Colorado Fed Com

Colorado Fed Com 801H

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 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	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 801H					
Well Position	+N/-S	0.68 usft	Northing:	447,077.65 usft	Latitude:	32.225474
	+E/-W	69.99 usft	Easting:	837,106.56 usft	Longitude:	-103.376874
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,392.30 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/31/2021	6.43	59.92	47,492.39350778

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	354.35	

Plan Survey Tool Program	Date	8/31/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	22,581.33 Plan #1 (OH)	OWSG (Rev2) MWD		
			OWSG MWD - Standard		



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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	
1,525.00	0.00	0.00	1,525.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,025.00	7.50	200.00	2,023.57	-30.71	-11.18	1.50	1.50	0.00	200.00	
2,504.30	7.50	257.42	2,499.40	-66.96	-52.46	1.50	0.00	11.98	118.51	
7,141.02	7.50	257.42	7,096.45	-198.78	-643.11	0.00	0.00	0.00	0.00	
7,640.99	0.00	0.00	7,595.00	-205.90	-675.00	1.50	-1.50	0.00	180.00	
11,865.03	0.00	0.00	11,819.04	-205.90	-675.00	0.00	0.00	0.00	0.00	
12,765.03	90.00	345.70	12,392.00	349.31	-816.52	10.00	10.00	0.00	345.70	
13,448.51	90.00	359.37	12,392.00	1,025.38	-905.11	2.00	0.00	2.00	90.00	
22,581.33	90.00	359.37	12,392.00	10,157.65	-1,005.61	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 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	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 801H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,525.00	0.00	0.00	1,525.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
1,600.00	1.13	200.00	1,600.00	-0.69	-0.25	-0.66	1.50	1.50	0.00
1,700.00	2.63	200.00	1,699.94	-3.77	-1.37	-3.61	1.50	1.50	0.00
1,800.00	4.13	200.00	1,799.76	-9.30	-3.38	-8.92	1.50	1.50	0.00
1,900.00	5.63	200.00	1,899.40	-17.28	-6.29	-16.58	1.50	1.50	0.00
2,000.00	7.13	200.00	1,998.78	-27.72	-10.09	-26.59	1.50	1.50	0.00
2,025.00	7.50	200.00	2,023.57	-30.71	-11.18	-29.46	1.50	1.50	0.00
Start DLS 1.50 TFO 118.51									
2,100.00	7.03	208.10	2,097.97	-39.36	-15.01	-37.69	1.50	-0.62	10.80
2,200.00	6.66	220.31	2,197.27	-49.18	-21.65	-46.81	1.50	-0.38	12.21
2,300.00	6.61	233.32	2,296.60	-57.03	-30.01	-53.80	1.50	-0.05	13.01
2,400.00	6.89	245.88	2,395.91	-62.92	-40.10	-58.67	1.50	0.28	12.56
2,504.30	7.50	257.42	2,499.40	-66.96	-52.46	-61.47	1.50	0.58	11.06
Start 4636.72 hold at 2504.30 MD									
2,600.00	7.50	257.42	2,594.28	-69.68	-64.65	-62.98	0.00	0.00	0.00
2,700.00	7.50	257.42	2,693.42	-72.53	-77.39	-64.55	0.00	0.00	0.00
2,800.00	7.50	257.42	2,792.57	-75.37	-90.13	-66.12	0.00	0.00	0.00
2,900.00	7.50	257.42	2,891.71	-78.21	-102.86	-67.70	0.00	0.00	0.00
3,000.00	7.50	257.42	2,990.86	-81.06	-115.60	-69.27	0.00	0.00	0.00
3,100.00	7.50	257.42	3,090.00	-83.90	-128.34	-70.85	0.00	0.00	0.00
3,200.00	7.50	257.42	3,189.15	-86.74	-141.08	-72.42	0.00	0.00	0.00
3,300.00	7.50	257.42	3,288.29	-89.58	-153.82	-73.99	0.00	0.00	0.00
3,400.00	7.50	257.42	3,387.44	-92.43	-166.56	-75.57	0.00	0.00	0.00
3,500.00	7.50	257.42	3,486.58	-95.27	-179.30	-77.14	0.00	0.00	0.00
3,600.00	7.50	257.42	3,585.72	-98.11	-192.03	-78.72	0.00	0.00	0.00
3,700.00	7.50	257.42	3,684.87	-100.96	-204.77	-80.29	0.00	0.00	0.00
3,800.00	7.50	257.42	3,784.01	-103.80	-217.51	-81.86	0.00	0.00	0.00
3,900.00	7.50	257.42	3,883.16	-106.64	-230.25	-83.44	0.00	0.00	0.00
4,000.00	7.50	257.42	3,982.30	-109.48	-242.99	-85.01	0.00	0.00	0.00
4,100.00	7.50	257.42	4,081.45	-112.33	-255.73	-86.59	0.00	0.00	0.00
4,200.00	7.50	257.42	4,180.59	-115.17	-268.47	-88.16	0.00	0.00	0.00
4,300.00	7.50	257.42	4,279.74	-118.01	-281.20	-89.74	0.00	0.00	0.00
4,400.00	7.50	257.42	4,378.88	-120.86	-293.94	-91.31	0.00	0.00	0.00
4,500.00	7.50	257.42	4,478.03	-123.70	-306.68	-92.88	0.00	0.00	0.00
4,600.00	7.50	257.42	4,577.17	-126.54	-319.42	-94.46	0.00	0.00	0.00
4,700.00	7.50	257.42	4,676.32	-129.39	-332.16	-96.03	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 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	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)
4,800.00	7.50	257.42	4,775.46	-132.23	-344.90	-97.61	0.00	0.00	0.00
4,900.00	7.50	257.42	4,874.60	-135.07	-357.64	-99.18	0.00	0.00	0.00
5,000.00	7.50	257.42	4,973.75	-137.91	-370.37	-100.75	0.00	0.00	0.00
5,100.00	7.50	257.42	5,072.89	-140.76	-383.11	-102.33	0.00	0.00	0.00
5,200.00	7.50	257.42	5,172.04	-143.60	-395.85	-103.90	0.00	0.00	0.00
5,300.00	7.50	257.42	5,271.18	-146.44	-408.59	-105.48	0.00	0.00	0.00
5,400.00	7.50	257.42	5,370.33	-149.29	-421.33	-107.05	0.00	0.00	0.00
5,500.00	7.50	257.42	5,469.47	-152.13	-434.07	-108.63	0.00	0.00	0.00
5,600.00	7.50	257.42	5,568.62	-154.97	-446.81	-110.20	0.00	0.00	0.00
5,700.00	7.50	257.42	5,667.76	-157.82	-459.54	-111.77	0.00	0.00	0.00
5,800.00	7.50	257.42	5,766.91	-160.66	-472.28	-113.35	0.00	0.00	0.00
5,900.00	7.50	257.42	5,866.05	-163.50	-485.02	-114.92	0.00	0.00	0.00
6,000.00	7.50	257.42	5,965.19	-166.34	-497.76	-116.50	0.00	0.00	0.00
6,100.00	7.50	257.42	6,064.34	-169.19	-510.50	-118.07	0.00	0.00	0.00
6,200.00	7.50	257.42	6,163.48	-172.03	-523.24	-119.64	0.00	0.00	0.00
6,300.00	7.50	257.42	6,262.63	-174.87	-535.98	-121.22	0.00	0.00	0.00
6,400.00	7.50	257.42	6,361.77	-177.72	-548.71	-122.79	0.00	0.00	0.00
6,500.00	7.50	257.42	6,460.92	-180.56	-561.45	-124.37	0.00	0.00	0.00
6,600.00	7.50	257.42	6,560.06	-183.40	-574.19	-125.94	0.00	0.00	0.00
6,700.00	7.50	257.42	6,659.21	-186.24	-586.93	-127.52	0.00	0.00	0.00
6,800.00	7.50	257.42	6,758.35	-189.09	-599.67	-129.09	0.00	0.00	0.00
6,900.00	7.50	257.42	6,857.50	-191.93	-612.41	-130.66	0.00	0.00	0.00
7,000.00	7.50	257.42	6,956.64	-194.77	-625.15	-132.24	0.00	0.00	0.00
7,100.00	7.50	257.42	7,055.78	-197.62	-637.88	-133.81	0.00	0.00	0.00
7,141.02	7.50	257.42	7,096.45	-198.78	-643.11	-134.46	0.00	0.00	0.00
Start Drop -1.50									
7,200.00	6.61	257.42	7,154.99	-200.36	-650.18	-135.33	1.50	-1.50	0.00
7,300.00	5.11	257.42	7,254.46	-202.59	-660.15	-136.56	1.50	-1.50	0.00
7,400.00	3.61	257.42	7,354.17	-204.24	-667.58	-137.48	1.50	-1.50	0.00
7,500.00	2.11	257.42	7,454.04	-205.33	-672.46	-138.08	1.50	-1.50	0.00
7,600.00	0.61	257.42	7,554.01	-205.85	-674.79	-138.37	1.50	-1.50	0.00
7,640.99	0.00	0.00	7,595.00	-205.90	-675.00	-138.40	1.50	-1.50	0.00
Start 4224.04 hold at 7640.99 MD									
7,700.00	0.00	0.00	7,654.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
7,800.00	0.00	0.00	7,754.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
7,900.00	0.00	0.00	7,854.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,000.00	0.00	0.00	7,954.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,100.00	0.00	0.00	8,054.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,200.00	0.00	0.00	8,154.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,300.00	0.00	0.00	8,254.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,400.00	0.00	0.00	8,354.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,500.00	0.00	0.00	8,454.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,600.00	0.00	0.00	8,554.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,700.00	0.00	0.00	8,654.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,800.00	0.00	0.00	8,754.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
8,900.00	0.00	0.00	8,854.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,000.00	0.00	0.00	8,954.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,100.00	0.00	0.00	9,054.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,200.00	0.00	0.00	9,154.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,300.00	0.00	0.00	9,254.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,400.00	0.00	0.00	9,354.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,500.00	0.00	0.00	9,454.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,600.00	0.00	0.00	9,554.01	-205.90	-675.00	-138.40	0.00	0.00	0.00



Total Directional Services

Planning Report



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Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,700.00	0.00	0.00	9,654.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,800.00	0.00	0.00	9,754.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
9,900.00	0.00	0.00	9,854.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,000.00	0.00	0.00	9,954.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,100.00	0.00	0.00	10,054.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,200.00	0.00	0.00	10,154.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,300.00	0.00	0.00	10,254.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,400.00	0.00	0.00	10,354.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,500.00	0.00	0.00	10,454.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,600.00	0.00	0.00	10,554.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,700.00	0.00	0.00	10,654.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,800.00	0.00	0.00	10,754.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
10,900.00	0.00	0.00	10,854.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,000.00	0.00	0.00	10,954.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,100.00	0.00	0.00	11,054.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,200.00	0.00	0.00	11,154.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,300.00	0.00	0.00	11,254.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,400.00	0.00	0.00	11,354.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,500.00	0.00	0.00	11,454.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,600.00	0.00	0.00	11,554.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,700.00	0.00	0.00	11,654.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,800.00	0.00	0.00	11,754.01	-205.90	-675.00	-138.40	0.00	0.00	0.00
11,865.03	0.00	0.00	11,819.04	-205.90	-675.00	-138.40	0.00	0.00	0.00
Start Build 10.00									
11,900.00	3.50	345.70	11,853.99	-204.87	-675.26	-137.34	10.00	10.00	0.00
11,950.00	8.50	345.70	11,903.70	-199.81	-676.55	-132.18	10.00	10.00	0.00
12,000.00	13.50	345.70	11,952.76	-190.57	-678.91	-122.75	10.00	10.00	0.00
12,050.00	18.50	345.70	12,000.81	-177.22	-682.31	-109.14	10.00	10.00	0.00
12,100.00	23.50	345.70	12,047.48	-159.86	-686.73	-91.43	10.00	10.00	0.00
12,150.00	28.50	345.70	12,092.40	-138.63	-692.15	-69.77	10.00	10.00	0.00
12,200.00	33.50	345.70	12,135.25	-113.69	-698.50	-44.32	10.00	10.00	0.00
12,250.00	38.50	345.70	12,175.69	-85.22	-705.76	-15.28	10.00	10.00	0.00
12,300.00	43.50	345.70	12,213.41	-53.45	-713.86	17.14	10.00	10.00	0.00
12,350.00	48.50	345.70	12,248.14	-18.61	-722.74	52.69	10.00	10.00	0.00
12,400.00	53.50	345.70	12,279.60	19.03	-732.33	91.09	10.00	10.00	0.00
12,450.00	58.50	345.70	12,307.55	59.18	-742.57	132.05	10.00	10.00	0.00
12,500.00	63.50	345.70	12,331.79	101.55	-753.37	175.27	10.00	10.00	0.00
12,550.00	68.50	345.70	12,352.12	145.79	-764.65	220.41	10.00	10.00	0.00
12,600.00	73.50	345.70	12,368.39	191.59	-776.32	267.14	10.00	10.00	0.00
12,650.00	78.50	345.70	12,380.49	238.58	-788.30	315.09	10.00	10.00	0.00
12,700.00	83.50	345.70	12,388.31	286.42	-800.49	363.89	10.00	10.00	0.00
12,750.00	88.50	345.70	12,391.80	334.74	-812.81	413.19	10.00	10.00	0.00
12,765.04	90.00	345.70	12,392.00	349.31	-816.52	428.05	10.00	10.00	0.00
Start DLS 2.00 TFO 90.00 - LP (Colorado Fed Com 801H)									
12,800.00	90.00	346.40	12,392.00	383.24	-824.95	462.65	2.00	0.00	2.00
12,900.00	90.00	348.40	12,392.00	480.83	-846.76	561.91	2.00	0.00	2.00
13,000.00	90.00	350.40	12,392.00	579.12	-865.16	661.53	2.00	0.00	2.00
13,100.00	90.00	352.40	12,392.00	677.99	-880.11	761.40	2.00	0.00	2.00
13,200.00	90.00	354.40	12,392.00	777.32	-891.61	861.38	2.00	0.00	2.00
13,300.00	90.00	356.40	12,392.00	876.99	-899.63	961.35	2.00	0.00	2.00
13,400.00	90.00	358.40	12,392.00	976.88	-904.17	1,061.21	2.00	0.00	2.00
13,448.51	90.00	359.37	12,392.00	1,025.38	-905.11	1,109.56	2.00	0.00	2.00
Start 9132.82 hold at 13448.51 MD									



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	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)	
13,500.00	90.00	359.37	12,392.00	1,076.87	-905.68	1,160.86	0.00	0.00	0.00	
13,600.00	90.00	359.37	12,392.00	1,176.86	-906.78	1,260.47	0.00	0.00	0.00	
13,700.00	90.00	359.37	12,392.00	1,276.86	-907.88	1,360.09	0.00	0.00	0.00	
13,800.00	90.00	359.37	12,392.00	1,376.85	-908.98	1,459.70	0.00	0.00	0.00	
13,900.00	90.00	359.37	12,392.00	1,476.85	-910.08	1,559.32	0.00	0.00	0.00	
14,000.00	90.00	359.37	12,392.00	1,576.84	-911.18	1,658.94	0.00	0.00	0.00	
14,100.00	90.00	359.37	12,392.00	1,676.83	-912.28	1,758.55	0.00	0.00	0.00	
14,200.00	90.00	359.37	12,392.00	1,776.83	-913.38	1,858.17	0.00	0.00	0.00	
14,300.00	90.00	359.37	12,392.00	1,876.82	-914.48	1,957.78	0.00	0.00	0.00	
14,400.00	90.00	359.37	12,392.00	1,976.82	-915.58	2,057.40	0.00	0.00	0.00	
14,500.00	90.00	359.37	12,392.00	2,076.81	-916.68	2,157.02	0.00	0.00	0.00	
14,600.00	90.00	359.37	12,392.00	2,176.80	-917.78	2,256.63	0.00	0.00	0.00	
14,700.00	90.00	359.37	12,392.00	2,276.80	-918.88	2,356.25	0.00	0.00	0.00	
14,800.00	90.00	359.37	12,392.00	2,376.79	-919.98	2,455.86	0.00	0.00	0.00	
14,900.00	90.00	359.37	12,392.00	2,476.79	-921.08	2,555.48	0.00	0.00	0.00	
15,000.00	90.00	359.37	12,392.00	2,576.78	-922.18	2,655.10	0.00	0.00	0.00	
15,100.00	90.00	359.37	12,392.00	2,676.77	-923.28	2,754.71	0.00	0.00	0.00	
15,200.00	90.00	359.37	12,392.00	2,776.77	-924.38	2,854.33	0.00	0.00	0.00	
15,300.00	90.00	359.37	12,392.00	2,876.76	-925.48	2,953.94	0.00	0.00	0.00	
15,400.00	90.00	359.37	12,392.00	2,976.75	-926.58	3,053.56	0.00	0.00	0.00	
15,500.00	90.00	359.37	12,392.00	3,076.75	-927.69	3,153.18	0.00	0.00	0.00	
15,600.00	90.00	359.37	12,392.00	3,176.74	-928.79	3,252.79	0.00	0.00	0.00	
15,700.00	90.00	359.37	12,392.00	3,276.74	-929.89	3,352.41	0.00	0.00	0.00	
15,800.00	90.00	359.37	12,392.00	3,376.73	-930.99	3,452.02	0.00	0.00	0.00	
15,900.00	90.00	359.37	12,392.00	3,476.72	-932.09	3,551.64	0.00	0.00	0.00	
16,000.00	90.00	359.37	12,392.00	3,576.72	-933.19	3,651.25	0.00	0.00	0.00	
16,100.00	90.00	359.37	12,392.00	3,676.71	-934.29	3,750.87	0.00	0.00	0.00	
16,200.00	90.00	359.37	12,392.00	3,776.71	-935.39	3,850.49	0.00	0.00	0.00	
16,300.00	90.00	359.37	12,392.00	3,876.70	-936.49	3,950.10	0.00	0.00	0.00	
16,400.00	90.00	359.37	12,392.00	3,976.69	-937.59	4,049.72	0.00	0.00	0.00	
16,500.00	90.00	359.37	12,392.00	4,076.69	-938.69	4,149.33	0.00	0.00	0.00	
16,600.00	90.00	359.37	12,392.00	4,176.68	-939.79	4,248.95	0.00	0.00	0.00	
16,700.00	90.00	359.37	12,392.00	4,276.68	-940.89	4,348.57	0.00	0.00	0.00	
16,800.00	90.00	359.37	12,392.00	4,376.67	-941.99	4,448.18	0.00	0.00	0.00	
16,900.00	90.00	359.37	12,392.00	4,476.66	-943.09	4,547.80	0.00	0.00	0.00	
17,000.00	90.00	359.37	12,392.00	4,576.66	-944.19	4,647.41	0.00	0.00	0.00	
17,100.00	90.00	359.37	12,392.00	4,676.65	-945.29	4,747.03	0.00	0.00	0.00	
17,200.00	90.00	359.37	12,392.00	4,776.65	-946.39	4,846.65	0.00	0.00	0.00	
17,300.00	90.00	359.37	12,392.00	4,876.64	-947.49	4,946.26	0.00	0.00	0.00	
17,400.00	90.00	359.37	12,392.00	4,976.63	-948.59	5,045.88	0.00	0.00	0.00	
17,500.00	90.00	359.37	12,392.00	5,076.63	-949.69	5,145.49	0.00	0.00	0.00	
17,600.00	90.00	359.37	12,392.00	5,176.62	-950.79	5,245.11	0.00	0.00	0.00	
17,700.00	90.00	359.37	12,392.00	5,276.62	-951.89	5,344.73	0.00	0.00	0.00	
17,800.00	90.00	359.37	12,392.00	5,376.61	-952.99	5,444.34	0.00	0.00	0.00	
17,900.00	90.00	359.37	12,392.00	5,476.60	-954.10	5,543.96	0.00	0.00	0.00	
18,000.00	90.00	359.37	12,392.00	5,576.60	-955.20	5,643.57	0.00	0.00	0.00	
18,100.00	90.00	359.37	12,392.00	5,676.59	-956.30	5,743.19	0.00	0.00	0.00	
18,200.00	90.00	359.37	12,392.00	5,776.59	-957.40	5,842.80	0.00	0.00	0.00	
18,300.00	90.00	359.37	12,392.00	5,876.58	-958.50	5,942.42	0.00	0.00	0.00	
18,400.00	90.00	359.37	12,392.00	5,976.57	-959.60	6,042.04	0.00	0.00	0.00	
18,500.00	90.00	359.37	12,392.00	6,076.57	-960.70	6,141.65	0.00	0.00	0.00	
18,600.00	90.00	359.37	12,392.00	6,176.56	-961.80	6,241.27	0.00	0.00	0.00	
18,700.00	90.00	359.37	12,392.00	6,276.56	-962.90	6,340.88	0.00	0.00	0.00	
18,800.00	90.00	359.37	12,392.00	6,376.55	-964.00	6,440.50	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 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	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)
18,900.00	90.00	359.37	12,392.00	6,476.54	-965.10	6,540.12	0.00	0.00	0.00
19,000.00	90.00	359.37	12,392.00	6,576.54	-966.20	6,639.73	0.00	0.00	0.00
19,100.00	90.00	359.37	12,392.00	6,676.53	-967.30	6,739.35	0.00	0.00	0.00
19,200.00	90.00	359.37	12,392.00	6,776.52	-968.40	6,838.96	0.00	0.00	0.00
19,300.00	90.00	359.37	12,392.00	6,876.52	-969.50	6,938.58	0.00	0.00	0.00
19,400.00	90.00	359.37	12,392.00	6,976.51	-970.60	7,038.20	0.00	0.00	0.00
19,500.00	90.00	359.37	12,392.00	7,076.51	-971.70	7,137.81	0.00	0.00	0.00
19,600.00	90.00	359.37	12,392.00	7,176.50	-972.80	7,237.43	0.00	0.00	0.00
19,700.00	90.00	359.37	12,392.00	7,276.49	-973.90	7,337.04	0.00	0.00	0.00
19,800.00	90.00	359.37	12,392.00	7,376.49	-975.00	7,436.66	0.00	0.00	0.00
19,900.00	90.00	359.37	12,392.00	7,476.48	-976.10	7,536.28	0.00	0.00	0.00
20,000.00	90.00	359.37	12,392.00	7,576.48	-977.20	7,635.89	0.00	0.00	0.00
20,100.00	90.00	359.37	12,392.00	7,676.47	-978.30	7,735.51	0.00	0.00	0.00
20,200.00	90.00	359.37	12,392.00	7,776.46	-979.41	7,835.12	0.00	0.00	0.00
20,300.00	90.00	359.37	12,392.00	7,876.46	-980.51	7,934.74	0.00	0.00	0.00
20,400.00	90.00	359.37	12,392.00	7,976.45	-981.61	8,034.36	0.00	0.00	0.00
20,500.00	90.00	359.37	12,392.00	8,076.45	-982.71	8,133.97	0.00	0.00	0.00
20,600.00	90.00	359.37	12,392.00	8,176.44	-983.81	8,233.59	0.00	0.00	0.00
20,700.00	90.00	359.37	12,392.00	8,276.43	-984.91	8,333.20	0.00	0.00	0.00
20,800.00	90.00	359.37	12,392.00	8,376.43	-986.01	8,432.82	0.00	0.00	0.00
20,900.00	90.00	359.37	12,392.00	8,476.42	-987.11	8,532.43	0.00	0.00	0.00
21,000.00	90.00	359.37	12,392.00	8,576.42	-988.21	8,632.05	0.00	0.00	0.00
21,100.00	90.00	359.37	12,392.00	8,676.41	-989.31	8,731.67	0.00	0.00	0.00
21,200.00	90.00	359.37	12,392.00	8,776.40	-990.41	8,831.28	0.00	0.00	0.00
21,300.00	90.00	359.37	12,392.00	8,876.40	-991.51	8,930.90	0.00	0.00	0.00
21,400.00	90.00	359.37	12,392.00	8,976.39	-992.61	9,030.51	0.00	0.00	0.00
21,500.00	90.00	359.37	12,392.00	9,076.39	-993.71	9,130.13	0.00	0.00	0.00
21,600.00	90.00	359.37	12,392.00	9,176.38	-994.81	9,229.75	0.00	0.00	0.00
21,700.00	90.00	359.37	12,392.00	9,276.37	-995.91	9,329.36	0.00	0.00	0.00
21,800.00	90.00	359.37	12,392.00	9,376.37	-997.01	9,428.98	0.00	0.00	0.00
21,900.00	90.00	359.37	12,392.00	9,476.36	-998.11	9,528.59	0.00	0.00	0.00
22,000.00	90.00	359.37	12,392.00	9,576.36	-999.21	9,628.21	0.00	0.00	0.00
22,100.00	90.00	359.37	12,392.00	9,676.35	-1,000.31	9,727.83	0.00	0.00	0.00
22,200.00	90.00	359.37	12,392.00	9,776.34	-1,001.41	9,827.44	0.00	0.00	0.00
22,300.00	90.00	359.37	12,392.00	9,876.34	-1,002.51	9,927.06	0.00	0.00	0.00
22,400.00	90.00	359.37	12,392.00	9,976.33	-1,003.61	10,026.67	0.00	0.00	0.00
22,500.00	90.00	359.37	12,392.00	10,076.33	-1,004.72	10,126.29	0.00	0.00	0.00
22,581.33	90.00	359.37	12,392.00	10,157.65	-1,005.61	10,207.31	0.00	0.00	0.00
TD at 22581.33 - PBHL (Colorado Fed Com 801H)									



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Company:	Franklin Mountain Energy	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Project:	Lea County, NM (NAD83)	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site:	Colorado Fed Com	North Reference:	Grid
Well:	Colorado Fed Com 801H	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	447,077.65	837,106.56	32.225474	-103.376874
LP (Colorado Fed Com - plan hits target center - Point	0.00	0.00	12,392.00	349.31	-816.52	447,426.96	836,290.04	32.226454	-103.379504
PBHL (Colorado Fed Co - plan hits target center - Point	0.00	0.00	12,392.00	10,157.65	-1,005.61	457,235.30	836,100.95	32.253417	-103.379834

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,525.00	1,525.00	0.00	0.00	Start Build 1.50	
2,025.00	2,023.57	-30.71	-11.18	Start DLS 1.50 TFO 118.51	
2,504.30	2,499.40	-66.96	-52.46	Start 4636.72 hold at 2504.30 MD	
7,141.02	7,096.45	-198.78	-643.11	Start Drop -1.50	
7,640.99	7,595.00	-205.90	-675.00	Start 4224.04 hold at 7640.99 MD	
11,865.03	11,819.04	-205.90	-675.00	Start Build 10.00	
12,765.03	12,392.00	349.31	-816.52	Start DLS 2.00 TFO 90.00	
13,448.51	12,392.00	1,025.38	-905.11	Start 9132.82 hold at 13448.51 MD	
22,581.33	12,392.00	10,157.65	-1,005.61	TD at 22581.33	



Franklin Mountain Energy

Lea County, NM (NAD83)

Colorado Fed Com

Colorado Fed Com 801H

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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors 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	22,581.33	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	1,958.54	1,956.81	65.54	56.02	6.885	CC
Colorado Fed Com 101H - OH - Plan #1	2,000.00	1,997.98	65.72	56.00	6.758	ES
Colorado Fed Com 101H - OH - Plan #1	8,300.00	8,295.95	108.51	64.80	2.483	SF
Colorado Fed Com 102H - OH - Plan #1	1,831.49	1,830.77	32.77	23.88	3.684	CC, ES
Colorado Fed Com 102H - OH - Plan #1	1,900.00	1,899.00	33.34	24.10	3.611	SF
Colorado Fed Com 802H - OH - Plan #1	1,584.35	1,584.94	34.92	27.24	4.544	CC
Colorado Fed Com 802H - OH - Plan #1	1,700.00	1,700.82	35.11	26.89	4.271	ES
Colorado Fed Com 802H - OH - Plan #1	22,581.33	22,636.34	932.21	687.10	3.803	SF
Colorado Fed Com 803H - OH - Plan #1	1,416.40	1,417.20	69.98	63.13	10.212	CC
Colorado Fed Com 803H - OH - Plan #1	1,525.00	1,525.34	70.07	62.67	9.468	ES
Colorado Fed Com 803H - OH - Plan #1	22,581.33	22,506.08	1,852.01	1,605.97	7.527	SF
Custer Mountain Unit #001 (Offset) - OH - OH	14,138.12	12,383.92	1,606.72	1,309.15	5.399	CC, ES, SF
Woolworth Ranch Unit #001 (Offset) - OH - OH	19,415.51	12,385.23	2,926.89	2,622.40	9.612	CC, ES
Woolworth Ranch Unit #001 (Offset) - OH - OH	19,500.00	12,385.23	2,928.11	2,623.23	9.604	SF
Georgetown/Ouray						
Georgetown Fed Com 301H - OH - Plan #1	1,525.00	1,515.30	144.22	136.83	19.520	CC
Georgetown Fed Com 301H - OH - Plan #1	1,600.00	1,590.30	144.36	136.60	18.605	ES
Georgetown Fed Com 301H - OH - Plan #1	7,900.00	7,880.86	230.81	188.87	5.504	SF
Georgetown Fed Com 601H - OH - Plan #1	1,525.00	1,515.90	115.81	108.42	15.671	CC
Georgetown Fed Com 601H - OH - Plan #1	1,600.00	1,590.90	116.06	108.30	14.955	ES
Georgetown Fed Com 601H - OH - Plan #1	9,000.00	8,981.34	166.47	119.28	3.528	SF
Georgetown Fed Com 701H - OH - Plan #1	8,736.98	8,728.58	79.89	33.83	1.735	CC, ES
Georgetown Fed Com 701H - OH - Plan #1	8,800.00	8,790.99	80.37	34.01	1.734	SF
Ouray Fed Com 302H - OH - Plan #1	1,316.19	1,317.59	114.99	108.65	18.119	CC
Ouray Fed Com 302H - OH - Plan #1	1,500.00	1,500.68	115.31	108.04	15.868	ES
Ouray Fed Com 302H - OH - Plan #1	1,700.00	1,698.98	121.41	113.20	14.782	SF
Ouray Fed Com 602H - OH - Plan #1	1,525.00	1,516.80	77.07	69.68	10.426	CC, ES
Ouray Fed Com 602H - OH - Plan #1	22,581.33	22,083.83	1,924.49	1,697.49	8.478	SF
Ouray Fed Com 702H - OH - Plan #1	1,525.00	1,516.10	77.33	69.94	10.464	CC, ES
Ouray Fed Com 702H - OH - Plan #1	22,581.33	22,107.61	1,179.22	971.80	5.685	SF
Ouray Fed Com 703H - OH - Plan #1	1,525.00	1,516.80	91.38	83.98	12.361	CC, ES
Ouray Fed Com 703H - OH - Plan #1	22,581.33	22,316.48	2,135.85	1,898.17	8.987	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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference				Offset				Semi Major Axis				Distance	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.56	-0.68	-69.99	70.00	69.82	0.18	396.055	
100.00	100.00	99.20	99.20	0.13	0.12	-90.56	-0.68	-69.99	69.99	69.31	0.68	102.575	
200.00	200.00	199.20	199.20	0.48	0.48	-90.56	-0.68	-69.99	69.99	68.80	1.19	58.852	
300.00	300.00	299.20	299.20	0.84	0.84	-90.56	-0.68	-69.99	69.99	68.30	1.70	41.263	
400.00	400.00	399.20	399.20	1.20	1.20	-90.56	-0.68	-69.99	69.99	67.79	2.20	31.769	
500.00	500.00	499.20	499.20	1.56	1.56	-90.56	-0.68	-69.99	69.99	67.28	2.71	25.826	
600.00	600.00	599.20	599.20	1.92	1.91	-90.56	-0.68	-69.99	69.99	66.78	3.22	21.756	
700.00	700.00	699.20	699.20	2.28	2.27	-90.56	-0.68	-69.99	69.99	66.27	3.72	18.795	
800.00	800.00	799.20	799.20	2.63	2.63	-90.56	-0.68	-69.99	69.99	65.76	4.23	16.543	
900.00	900.00	899.20	899.20	2.99	2.99	-90.56	-0.68	-69.99	69.99	65.26	4.74	14.773	
1,000.00	1,000.00	999.20	999.20	3.35	3.35	-90.56	-0.68	-69.99	69.99	64.75	5.24	13.345	
1,100.00	1,100.00	1,099.20	1,099.20	3.71	3.71	-90.56	-0.68	-69.99	69.99	64.24	5.75	12.169	
1,200.00	1,200.00	1,199.20	1,199.20	4.07	4.07	-90.56	-0.68	-69.99	69.99	63.73	6.26	11.183	
1,300.00	1,300.00	1,299.20	1,299.20	4.43	4.42	-90.56	-0.68	-69.99	69.99	63.23	6.77	10.345	
1,400.00	1,400.00	1,399.20	1,399.20	4.79	4.78	-90.56	-0.68	-69.99	69.99	62.72	7.27	9.624	
1,500.00	1,500.00	1,499.20	1,499.20	5.14	5.14	-90.56	-0.68	-69.99	69.99	62.59	7.40	9.459	
1,525.00	1,525.00	1,524.20	1,524.20	5.23	5.23	-90.56	-0.68	-69.99	69.99	61.97	7.77	8.975	
1,600.00	1,600.00	1,599.20	1,599.20	5.49	5.50	70.01	-0.68	-69.99	69.74	60.43	8.25	8.322	
1,700.00	1,699.94	1,699.14	1,699.14	5.82	5.86	72.59	-0.68	-69.99	68.69	58.42	8.74	7.684	
1,800.00	1,799.76	1,798.96	1,798.96	6.15	6.22	77.40	-0.68	-69.99	67.16	56.60	9.23	7.132	
1,900.00	1,899.40	1,898.60	1,898.60	6.48	6.57	84.64	-0.68	-69.99	65.83	56.02	9.52	6.885 CC	
1,958.54	1,957.61	1,956.81	1,956.81	6.68	6.78	90.00	-0.68	-69.99	65.54	56.00	9.72	6.758 ES	
2,000.00	1,998.78	1,997.98	1,997.98	6.82	6.93	94.26	-0.68	-69.99	65.72	56.19	9.85	6.705	
2,025.00	2,023.57	2,022.77	2,022.77	6.91	7.02	96.99	-0.68	-69.99	66.04	57.13	10.22	6.590	
2,100.00	2,097.97	2,096.72	2,096.72	7.17	7.28	96.82	-0.71	-70.16	67.34	59.18	10.70	6.529	
2,200.00	2,197.27	2,195.03	2,195.03	7.53	7.61	93.01	-1.10	-72.34	69.88	61.27	11.19	6.475	
2,300.00	2,296.60	2,293.71	2,293.56	7.89	7.95	86.03	-1.94	-77.03	72.46	62.61	11.69	6.358	
2,400.00	2,395.91	2,392.66	2,392.24	8.26	8.29	77.47	-3.22	-84.24	74.30	62.69	12.21	6.136	
2,504.30	2,499.40	2,496.05	2,495.11	8.64	8.65	68.27	-5.05	-94.47	74.90	62.60	12.29	6.095	
2,519.86	2,514.83	2,511.49	2,510.44	8.70	8.71	68.45	-5.37	-96.23	74.89	62.52	12.69	5.925	
2,600.00	2,594.28	2,591.11	2,589.40	9.00	8.99	68.73	-7.16	-106.25	75.21	62.69	13.21	5.744	
2,700.00	2,693.42	2,691.11	2,688.49	9.38	9.35	68.59	-9.53	-119.52	75.91	62.86	13.74	5.575	
2,800.00	2,792.57	2,791.10	2,787.57	9.75	9.72	68.46	-11.89	-132.79	76.60	63.02	14.27	5.416	
2,900.00	2,891.71	2,891.10	2,886.66	10.14	10.09	68.32	-14.26	-146.06	77.29	63.18	14.80	5.267	
3,000.00	2,990.86	2,991.10	2,985.74	10.52	10.46	68.19	-16.63	-159.33	77.98	63.33	15.34	5.128	
3,100.00	3,090.00	3,091.10	3,084.83	10.91	10.84	68.07	-19.00	-172.60	78.67	63.48	15.88	4.997	
3,200.00	3,189.15	3,191.09	3,183.91	11.30	11.22	67.94	-21.37	-185.87	79.37	63.63	16.43	4.874	
3,300.00	3,288.29	3,291.09	3,283.00	11.69	11.60	67.82	-23.74	-199.14	80.06	63.78	16.97	4.758	
3,400.00	3,387.44	3,391.09	3,382.08	12.08	11.99	67.70	-26.11	-212.41	80.75	63.93	17.52	4.649	
3,500.00	3,486.58	3,491.09	3,481.17	12.48	12.37	67.58	-28.48	-225.68	81.45	64.07	18.07	4.546	
3,600.00	3,585.72	3,591.08	3,580.25	12.87	12.76	67.46	-30.85	-238.95	82.14	64.21	18.62	4.448	
3,700.00	3,684.87	3,691.08	3,679.33	13.27	13.16	67.35	-33.22	-252.22	82.84	64.36	19.18	4.356	
3,800.00	3,784.01	3,791.08	3,778.42	13.67	13.55	67.23	-35.59	-265.49	83.53	64.50	19.73	4.269	
3,900.00	3,883.16	3,891.08	3,877.50	14.07	13.94	67.12	-37.96	-278.76	84.23	64.63	20.29	4.186	
4,000.00	3,982.30	3,991.07	3,976.59	14.47	14.34	67.01	-40.33	-292.03	84.92	64.77	20.84	4.107	
4,100.00	4,081.45	4,091.07	4,075.67	14.87	14.74	66.91	-42.70	-305.30	85.62	64.91	21.40	4.033	
4,200.00	4,180.59	4,191.07	4,174.76	15.27	15.14	66.80	-45.07	-318.57	86.31	65.05	21.96	3.962	
4,300.00	4,279.74	4,291.06	4,273.84	15.67	15.54	66.70	-47.44	-331.84	87.01	65.18	22.52	3.894	
4,400.00	4,378.88	4,391.06	4,372.93	16.08	15.94	66.59	-49.81	-345.11	87.71	65.32	23.09	3.829	
4,500.00	4,478.03	4,491.06	4,472.01	16.48	16.34	66.49	-52.18	-358.38	88.40	65.45	23.65	3.768	
4,600.00	4,577.17	4,591.06	4,571.10	16.89	16.74	66.39	-54.55	-371.65	89.10	65.59	24.21	3.709	
4,700.00	4,676.32	4,691.05	4,670.18	17.29	17.14	66.29	-56.92	-384.92	89.80				

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,775.46	4,791.05	4,769.27	17.70	17.55	66.20	-59.29	-398.19	90.50	65.72	24.77	3.653		
4,900.00	4,874.60	4,891.05	4,868.35	18.10	17.95	66.10	-61.66	-411.46	91.20	65.86	25.34	3.599		
5,000.00	4,973.75	4,991.05	4,967.44	18.51	18.36	66.01	-64.03	-424.73	91.89	65.99	25.90	3.548		
5,100.00	5,072.89	5,091.04	5,066.52	18.92	18.77	65.92	-66.40	-438.00	92.59	66.12	26.47	3.498		
5,200.00	5,172.04	5,191.04	5,165.61	19.32	19.17	65.83	-68.77	-451.27	93.29	66.26	27.03	3.451		
5,300.00	5,271.18	5,291.04	5,264.69	19.73	19.58	65.74	-71.14	-464.54	93.99	66.39	27.60	3.405		
5,400.00	5,370.33	5,391.04	5,363.77	20.14	19.99	65.65	-73.51	-477.81	94.69	66.52	28.17	3.362		
5,500.00	5,469.47	5,491.03	5,462.86	20.55	20.40	65.56	-75.87	-491.08	95.39	66.65	28.73	3.320		
5,600.00	5,568.62	5,591.03	5,561.94	20.96	20.81	65.48	-78.24	-504.35	96.09	66.79	29.30	3.279		
5,700.00	5,667.76	5,691.03	5,661.03	21.37	21.21	65.39	-80.61	-517.62	96.79	66.92	29.87	3.240		
5,800.00	5,766.91	5,791.03	5,760.11	21.78	21.62	65.31	-82.98	-530.89	97.49	67.05	30.44	3.203		
5,900.00	5,866.05	5,891.02	5,859.20	22.19	22.03	65.23	-85.35	-544.16	98.19	67.18	31.01	3.167		
6,000.00	5,965.19	5,991.02	5,958.28	22.59	22.44	65.15	-87.72	-557.43	98.89	67.32	31.57	3.132		
6,100.00	6,064.34	6,091.02	6,057.37	23.01	22.86	65.07	-90.09	-570.70	99.59	67.45	32.14	3.098		
6,200.00	6,163.48	6,191.02	6,156.45	23.42	23.27	64.99	-92.46	-583.97	100.29	67.58	32.71	3.066		
6,300.00	6,262.63	6,291.01	6,255.54	23.83	23.68	64.91	-94.83	-597.24	100.99	67.71	33.28	3.034		
6,400.00	6,361.77	6,391.01	6,354.62	24.24	24.09	64.84	-97.20	-610.51	101.69	67.84	33.85	3.004		
6,500.00	6,460.92	6,491.01	6,453.71	24.65	24.50	64.76	-99.57	-623.78	102.40	67.97	34.42	2.975		
6,600.00	6,560.06	6,591.01	6,552.79	25.06	24.91	64.69	-101.94	-637.05	103.10	68.11	34.99	2.946		
6,700.00	6,659.21	6,691.00	6,651.88	25.47	25.33	64.62	-104.31	-650.32	103.80	68.24	35.56	2.919		
6,800.00	6,758.35	6,791.00	6,750.96	25.88	25.74	64.54	-106.68	-663.59	104.50	68.37	36.13	2.892		
6,900.00	6,857.50	6,891.00	6,850.05	26.29	26.15	64.47	-109.05	-676.86	105.20	68.50	36.70	2.867		
7,000.00	6,956.64	6,991.00	6,949.13	26.70	26.56	64.40	-111.42	-690.13	105.90	68.63	37.27	2.842		
7,100.00	7,055.78	7,090.99	7,048.22	27.12	26.98	64.33	-113.79	-703.40	106.61	68.77	37.84	2.817		
7,141.02	7,096.45	7,132.13	7,088.98	27.29	27.15	64.31	-114.76	-708.85	106.89	68.81	38.08	2.807		
7,200.00	7,154.99	7,191.90	7,148.28	27.53	27.39	64.34	-116.07	-716.19	107.22	68.80	38.42	2.791		
7,300.00	7,254.46	7,293.24	7,249.07	27.92	27.79	64.37	-117.92	-726.54	107.69	68.71	38.98	2.763		
7,400.00	7,354.17	7,394.59	7,350.11	28.30	28.17	64.40	-119.30	-734.25	108.03	68.52	39.51	2.734		
7,500.00	7,454.04	7,495.94	7,451.32	28.66	28.54	64.41	-120.20	-739.33	108.27	68.25	40.01	2.706		
7,600.00	7,554.01	7,597.29	7,552.64	29.00	28.89	64.41	-120.64	-741.76	108.38	67.89	40.49	2.677		
7,640.99	7,595.00	7,638.83	7,594.19	29.13	29.02	-38.17	-120.68	-741.99	108.40	67.72	40.68	2.665		
7,700.00	7,654.01	7,697.85	7,653.21	29.32	29.21	-38.17	-120.68	-741.99	108.40	67.45	40.94	2.648		
7,800.00	7,754.01	7,797.85	7,753.21	29.64	29.53	-38.17	-120.68	-741.99	108.40	67.00	41.40	2.618		
7,900.00	7,854.01	7,897.85	7,853.21	29.95	29.86	-38.17	-120.68	-741.99	108.40	66.54	41.85	2.590		
8,000.00	7,954.01	7,997.85	7,953.21	30.27	30.18	-38.17	-120.68	-741.99	108.40	66.09	42.31	2.562		
8,100.00	8,054.01	8,097.85	8,053.21	30.59	30.50	-38.17	-120.68	-741.99	108.40	65.63	42.77	2.534		
8,200.00	8,154.01	8,197.85	8,153.21	30.91	30.83	-38.17	-120.68	-741.99	108.40	65.17	43.23	2.507		
8,211.61	8,165.62	8,209.46	8,164.82	30.95	30.87	-38.17	-120.68	-741.99	108.40	65.11	43.28	2.504		
8,300.00	8,254.01	8,295.95	8,251.31	31.24	31.15	-38.14	-120.57	-742.01	108.51	64.80	43.71	2.483 SF		
8,400.00	8,354.01	8,380.64	8,335.55	31.56	31.43	-36.36	-112.81	-743.52	116.93	73.09	43.84	2.667		
8,500.00	8,454.01	8,461.32	8,413.89	31.88	31.68	-32.85	-94.16	-747.14	138.69	95.55	43.14	3.215		
8,600.00	8,554.01	8,535.40	8,482.83	32.21	31.91	-29.21	-67.69	-752.29	173.29	131.45	41.84	4.142		
8,700.00	8,654.01	8,600.00	8,539.68	32.53	32.09	-26.29	-37.64	-758.13	219.34	179.23	40.11	5.468		
8,800.00	8,754.01	8,659.43	8,588.63	32.86	32.25	-23.98	-4.61	-764.55	275.00	236.39	38.61	7.123		
8,900.00	8,854.01	8,709.58	8,627.05	33.18	32.38	-22.34	27.02	-770.70	338.46	301.41	37.05	9.136		
9,000.00	8,954.01	8,750.00	8,655.87	33.51	32.48	-21.20	54.82	-776.10	408.18	372.71	35.47	11.507		
9,100.00	9,054.01	8,800.00	8,688.64	33.84	32.60	-19.99	91.87	-783.31	483.02	448.12	34.90	13.839		
9,200.00	9,154.01	8,822.25	8,702.14	34.16	32.65	-19.51	109.23	-786.68	561.47	528.13	33.34	16.842		
9,300.00	9,254.01	8,850.00	8,718.00	34.49	32.72	-18.97	131.58	-791.02	643.28	610.85	32.43	19.836		
9,400.00	9,354.01	8,874.48	8,731.06	34.82	32.78	-18.54	151.91	-794.98	727.66	695.98	31.68	22.968		
9,500.00	9,454.01	8,900.00	8,743.72	35.15	32.84	-18.12	173.65	-799.20	814.17	782.98	31.18	26.109		
9,600.00	9,554.01	8,900.00	8,743.72	35.48	32.84	-18.12	173.65	-799.20	902.64	872.48	30.16	29.930		

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



Total Directional Services

Anticollision Report



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Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
9,700.00	9,654.01	8,931.22	8,757.84	35.81	32.92	-17.66	200.98	-804.51	991.97	961.84	30.13	32.924		
9,800.00	9,754.01	8,950.00	8,765.60	36.14	32.98	-17.40	217.77	-807.78	1,082.81	1,052.93	29.88	36.235		
9,900.00	9,854.01	8,950.00	8,765.60	36.48	32.98	-17.40	217.77	-807.78	1,174.74	1,145.38	29.36	40.010		
10,000.00	9,954.01	8,971.26	8,773.71	36.81	33.04	-17.13	237.06	-811.53	1,267.31	1,237.97	29.34	43.187		
10,100.00	10,054.01	8,982.05	8,777.54	37.14	33.07	-17.00	246.96	-813.45	1,360.73	1,331.53	29.20	46.597		
10,200.00	10,154.01	9,000.00	8,783.49	37.47	33.12	-16.79	263.58	-816.68	1,454.86	1,425.63	29.23	49.774		
10,300.00	10,254.01	9,000.00	8,783.49	37.81	33.12	-16.79	263.58	-816.68	1,549.37	1,520.33	29.05	53.343		
10,400.00	10,354.01	9,000.00	8,783.49	38.14	33.12	-16.79	263.58	-816.68	1,644.54	1,615.61	28.93	56.849		
10,500.00	10,454.01	9,000.00	8,783.49	38.48	33.12	-16.79	263.58	-816.68	1,740.24	1,711.38	28.87	60.284		
10,600.00	10,554.01	9,023.29	8,790.42	38.81	33.20	-16.54	285.41	-820.93	1,835.79	1,806.69	29.10	63.092		
10,700.00	10,654.01	9,029.65	8,792.15	39.15	33.22	-16.48	291.41	-822.09	1,931.97	1,902.80	29.16	66.248		
10,800.00	10,754.01	9,050.00	8,797.24	39.48	33.29	-16.28	310.76	-825.85	2,028.67	1,999.28	29.39	69.028		
10,900.00	10,854.01	9,050.00	8,797.24	39.82	33.29	-16.28	310.76	-825.85	2,125.25	2,095.80	29.45	72.174		
11,000.00	10,954.01	9,050.00	8,797.24	40.16	33.29	-16.28	310.76	-825.85	2,222.13	2,192.61	29.53	75.256		
11,100.00	11,054.01	9,050.00	8,797.24	40.49	33.29	-16.28	310.76	-825.85	2,319.28	2,289.65	29.64	78.261		
11,200.00	11,154.01	9,050.00	8,797.24	40.83	33.29	-16.28	310.76	-825.85	2,416.66	2,386.90	29.76	81.193		
11,300.00	11,254.01	9,050.00	8,797.24	41.17	33.29	-16.28	310.76	-825.85	2,514.25	2,484.34	29.91	84.047		
11,400.00	11,354.01	9,050.00	8,797.24	41.51	33.29	-16.28	310.76	-825.85	2,612.02	2,581.94	30.08	86.835		
11,500.00	11,454.01	9,050.00	8,797.24	41.85	33.29	-16.28	310.76	-825.85	2,709.95	2,679.69	30.26	89.550		
11,600.00	11,554.01	9,050.00	8,797.24	42.18	33.29	-16.28	310.76	-825.85	2,808.03	2,777.57	30.46	92.194		
11,700.00	11,654.01	9,073.72	8,802.29	42.52	33.37	-16.06	333.51	-830.28	2,905.65	2,874.86	30.79	94.357		
11,800.00	11,754.01	9,076.81	8,802.87	42.86	33.39	-16.03	336.48	-830.85	3,003.82	2,972.80	31.02	96.820		
11,865.03	11,819.04	9,078.72	8,803.23	43.08	33.39	-16.02	338.33	-831.21	3,067.72	3,036.54	31.18	98.388		
11,900.00	11,853.99	9,100.00	8,806.75	43.20	33.48	-1.17	358.92	-835.22	3,102.29	3,070.93	31.36	98.924		
11,950.00	11,903.70	9,100.00	8,806.75	43.37	33.48	-0.87	358.92	-835.22	3,150.15	3,118.70	31.45	100.157		
12,000.00	11,952.76	9,100.00	8,806.75	43.54	33.48	-0.70	358.92	-835.22	3,196.67	3,165.14	31.53	101.385		
12,050.00	12,000.81	9,100.00	8,806.75	43.70	33.48	-0.59	358.92	-835.22	3,241.56	3,209.97	31.59	102.598		
12,100.00	12,047.48	9,100.00	8,806.75	43.85	33.48	-0.50	358.92	-835.22	3,284.56	3,252.91	31.65	103.786		
12,150.00	12,092.40	9,100.00	8,806.75	43.99	33.48	-0.45	358.92	-835.22	3,325.40	3,293.71	31.69	104.944		
12,200.00	12,135.25	9,100.00	8,806.75	44.13	33.48	-0.40	358.92	-835.22	3,363.87	3,332.16	31.72	106.064		
12,250.00	12,175.69	9,100.00	8,806.75	44.25	33.48	-0.37	358.92	-835.22	3,399.76	3,368.03	31.73	107.133		
12,300.00	12,213.41	9,100.00	8,806.75	44.37	33.48	-0.34	358.92	-835.22	3,432.88	3,401.14	31.75	108.130		
12,350.00	12,248.14	9,100.00	8,806.75	44.48	33.48	-0.32	358.92	-835.22	3,463.07	3,431.31	31.75	109.067		
12,400.00	12,279.60	9,122.84	8,809.66	44.58	33.57	-0.27	381.16	-839.54	3,489.63	3,457.81	31.82	109.654		
12,450.00	12,307.55	9,150.00	8,811.95	44.68	33.68	-0.23	407.72	-844.70	3,513.62	3,481.72	31.90	110.134		
12,500.00	12,331.79	9,150.00	8,811.95	44.77	33.68	-0.22	407.72	-844.70	3,533.51	3,501.63	31.88	110.821		
12,550.00	12,352.12	9,150.00	8,811.95	44.88	33.68	-0.22	407.72	-844.70	3,549.95	3,518.08	31.87	111.388		
12,600.00	12,368.39	9,150.00	8,811.95	44.99	33.68	-0.21	407.72	-844.70	3,562.87	3,531.00	31.86	111.812		
12,650.00	12,380.49	9,150.00	8,811.95	45.12	33.68	-0.21	407.72	-844.70	3,572.19	3,540.33	31.86	112.114		
12,700.00	12,388.31	9,150.00	8,811.95	45.25	33.68	-0.21	407.72	-844.70	3,577.89	3,546.03	31.87	112.281		
12,750.00	12,391.80	9,169.17	8,812.79	45.41	33.76	-0.19	426.53	-848.36	3,579.57	3,547.65	31.91	112.167		
12,765.03	12,392.00	9,184.68	8,813.00	45.45	33.83	-0.17	441.75	-851.32	3,579.56	3,547.62	31.94	112.063		
12,800.00	12,392.00	9,184.68	8,813.00	45.57	33.83	-0.19	441.75	-851.32	3,578.78	3,546.82	31.95	112.006		
12,900.00	12,392.00	9,222.33	8,813.00	45.95	34.01	-0.19	478.75	-858.26	3,578.22	3,546.13	32.09	111.503		
13,000.00	12,392.00	9,322.67	8,813.00	46.37	34.53	-0.15	577.78	-874.37	3,578.21	3,545.87	32.34	110.633		
13,100.00	12,392.00	9,422.92	8,813.00	46.85	35.11	-0.11	677.23	-887.00	3,578.21	3,545.57	32.63	109.650		
13,200.00	12,392.00	9,523.10	8,813.00	47.36	35.75	-0.07	776.98	-896.14	3,578.20	3,545.24	32.96	108.566		
13,300.00	12,392.00	9,623.19	8,813.00	47.91	36.43	-0.03	876.91	-901.78	3,578.20	3,544.88	33.32	107.388		
13,391.09	12,392.00	9,714.29	8,813.00	48.43	37.09	0.00	967.98	-903.90	3,578.20	3,544.52	33.68	106.244		
13,400.00	12,392.00	9,723.19	8,813.00	48.49	37.15	0.00	976.89	-904.00	3,578.20	3,544.48	33.72	106.130		
13,448.51	12,392.00	9,771.70	8,813.00	48.78	37.52	0.01	1,025.39	-904.53	3,578.20	3,544.28	33.92	105.492		
13,500.00	12,392.00	9,823.19	8,813.00	49.10	37.93	0.01	1,076.88	-905.10	3,578.20	3,544.06	34.14	104.801		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
13,600.00	12,392.00	9,923.19	8,813.00	49.75	38.75	0.01	1,176.87	-906.21	3,578.20	3,543.60	34.60	103.416		
13,700.00	12,392.00	10,023.19	8,813.00	50.45	39.63	0.01	1,276.86	-907.32	3,578.20	3,543.11	35.09	101.982		
13,800.00	12,392.00	10,123.19	8,813.00	51.20	40.56	0.01	1,376.86	-908.42	3,578.20	3,542.60	35.60	100.509		
13,900.00	12,392.00	10,223.19	8,813.00	51.98	41.53	0.01	1,476.85	-909.53	3,578.20	3,542.06	36.14	99.005		
14,000.00	12,392.00	10,323.19	8,813.00	52.81	42.55	0.01	1,576.85	-910.64	3,578.20	3,541.49	36.71	97.476		
14,100.00	12,392.00	10,423.19	8,813.00	53.68	43.60	0.01	1,676.84	-911.75	3,578.20	3,540.90	37.30	95.932		
14,200.00	12,392.00	10,523.19	8,813.00	54.58	44.70	0.01	1,776.83	-912.85	3,578.20	3,540.29	37.91	94.378		
14,300.00	12,392.00	10,623.19	8,813.00	55.51	45.82	0.01	1,876.83	-913.96	3,578.20	3,539.65	38.55	92.820		
14,400.00	12,392.00	10,723.19	8,813.00	56.48	46.98	0.01	1,976.82	-915.07	3,578.20	3,538.99	39.21	91.264		
14,500.00	12,392.00	10,823.19	8,813.00	57.48	48.16	0.01	2,076.82	-916.17	3,578.20	3,538.32	39.88	89.714		
14,600.00	12,392.00	10,923.19	8,813.00	58.51	49.37	0.01	2,176.81	-917.28	3,578.20	3,537.62	40.58	88.174		
14,700.00	12,392.00	11,023.19	8,813.00	59.57	50.61	0.01	2,276.80	-918.39	3,578.20	3,536.90	41.30	86.648		
14,800.00	12,392.00	11,123.19	8,813.00	60.65	51.87	0.01	2,376.80	-919.49	3,578.20	3,536.17	42.03	85.139		
14,900.00	12,392.00	11,223.19	8,813.00	61.76	53.15	0.01	2,476.79	-920.60	3,578.20	3,535.42	42.78	83.650		
15,000.00	12,392.00	11,323.19	8,813.00	62.89	54.45	0.01	2,576.79	-921.71	3,578.20	3,534.66	43.54	82.183		
15,100.00	12,392.00	11,423.19	8,813.00	64.05	55.77	0.01	2,676.78	-922.81	3,578.20	3,533.88	44.32	80.740		
15,200.00	12,392.00	11,523.19	8,813.00	65.23	57.11	0.01	2,776.77	-923.92	3,578.20	3,533.09	45.11	79.322		
15,300.00	12,392.00	11,623.19	8,813.00	66.42	58.46	0.01	2,876.77	-925.03	3,578.20	3,532.29	45.92	77.931		
15,400.00	12,392.00	11,723.19	8,813.00	67.64	59.83	0.01	2,976.76	-926.13	3,578.20	3,531.47	46.73	76.566		
15,500.00	12,392.00	11,823.19	8,813.00	68.88	61.22	0.01	3,076.75	-927.24	3,578.20	3,530.64	47.56	75.230		
15,600.00	12,392.00	11,923.19	8,813.00	70.13	62.61	0.01	3,176.75	-928.35	3,578.20	3,529.80	48.40	73.924		
15,700.00	12,392.00	12,023.19	8,813.00	71.40	64.02	0.01	3,276.74	-929.45	3,578.20	3,528.94	49.26	72.645		
15,800.00	12,392.00	12,123.19	8,813.00	72.68	65.44	0.01	3,376.74	-930.56	3,578.20	3,528.08	50.12	71.396		
15,900.00	12,392.00	12,223.19	8,813.00	73.98	66.87	0.01	3,476.73	-931.67	3,578.20	3,527.21	50.99	70.176		
16,000.00	12,392.00	12,323.19	8,813.00	75.29	68.31	0.01	3,576.72	-932.77	3,578.20	3,526.33	51.87	68.985		
16,100.00	12,392.00	12,423.19	8,813.00	76.62	69.76	0.01	3,676.72	-933.88	3,578.20	3,525.44	52.76	67.823		
16,200.00	12,392.00	12,523.19	8,813.00	77.96	71.22	0.01	3,776.71	-934.99	3,578.20	3,524.54	53.66	66.688		
16,300.00	12,392.00	12,623.19	8,813.00	79.31	72.68	0.01	3,876.71	-936.09	3,578.20	3,523.64	54.56	65.582		
16,400.00	12,392.00	12,723.19	8,813.00	80.67	74.16	0.01	3,976.70	-937.20	3,578.20	3,522.73	55.47	64.503		
16,500.00	12,392.00	12,823.19	8,813.00	82.04	75.64	0.01	4,076.69	-938.31	3,578.20	3,521.81	56.39	63.451		
16,600.00	12,392.00	12,923.19	8,813.00	83.42	77.13	0.01	4,176.69	-939.41	3,578.20	3,520.88	57.32	62.426		
16,700.00	12,392.00	13,023.19	8,813.00	84.81	78.63	0.01	4,276.68	-940.52	3,578.20	3,519.95	58.25	61.426		
16,800.00	12,392.00	13,123.19	8,813.00	86.21	80.13	0.01	4,376.68	-941.63	3,578.20	3,519.01	59.19	60.452		
16,900.00	12,392.00	13,223.19	8,813.00	87.62	81.64	0.01	4,476.67	-942.73	3,578.20	3,518.06	60.14	59.502		
17,000.00	12,392.00	13,323.19	8,813.00	89.04	83.15	0.01	4,576.66	-943.84	3,578.20	3,517.11	61.09	58.576		
17,100.00	12,392.00	13,423.19	8,813.00	90.47	84.67	0.01	4,676.66	-944.95	3,578.20	3,516.16	62.04	57.674		
17,200.00	12,392.00	13,523.19	8,813.00	91.90	86.19	0.01	4,776.65	-946.05	3,578.20	3,515.20	63.00	56.795		
17,300.00	12,392.00	13,623.19	8,813.00	93.34	87.72	0.01	4,876.64	-947.16	3,578.20	3,514.23	63.97	55.937		
17,400.00	12,392.00	13,723.19	8,813.00	94.79	89.25	0.01	4,976.64	-948.27	3,578.20	3,513.26	64.94	55.102		
17,500.00	12,392.00	13,823.19	8,813.00	96.25	90.79	0.01	5,076.63	-949.37	3,578.20	3,512.29	65.91	54.287		
17,600.00	12,392.00	13,923.19	8,813.00	97.71	92.33	0.01	5,176.63	-950.48	3,578.20	3,511.31	66.89	53.493		
17,700.00	12,392.00	14,023.19	8,813.00	99.17	93.87	0.00	5,276.62	-951.59	3,578.20	3,510.33	67.87	52.718		
17,800.00	12,392.00	14,123.19	8,813.00	100.65	95.42	0.00	5,376.61	-952.69	3,578.20	3,509.34	68.86	51.963		
17,900.00	12,392.00	14,223.19	8,813.00	102.13	96.97	0.00	5,476.61	-953.80	3,578.20	3,508.35	69.85	51.226		
18,000.00	12,392.00	14,323.19	8,813.00	103.61	98.53	0.00	5,576.60	-954.91	3,578.20	3,507.35	70.85	50.507		
18,100.00	12,392.00	14,423.19	8,813.00	105.10	100.09	0.00	5,676.60	-956.01	3,578.20	3,506.36	71.84	49.806		
18,200.00	12,392.00	14,523.19	8,813.00	106.59	101.65	0.00	5,776.59	-957.12	3,578.20	3,505.36	72.84	49.122		
18,300.00	12,392.00	14,623.19	8,813.00	108.09	103.21	0.00	5,876.58	-958.23	3,578.20	3,504.35	73.85	48.454		
18,400.00	12,392.00	14,723.19	8,813.00	109.59	104.78	0.00	5,976.58	-959.33	3,578.20	3,503.35	74.85	47.803		
18,500.00	12,392.00	14,823.19	8,813.00	111.10	106.35	0.00	6,076.57	-960.44	3,578.20	3,502.34	75.86	47.166		
18,600.00	12,392.00	14,923.19	8,813.00	112.61	107.92	0.00	6,176.56	-961.55	3,578.20	3,501.32	76.88	46.545		
18,700.00	12,392.00	15,023.19	8,813.00	114.12	109.49	0.00	6,276.56	-962.65	3,578.20	3,500.31	77.89	45.939		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		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)						
18,800.00	12,392.00	15,123.19	8,813.00	115.64	111.07	0.00	6,376.55	-963.76	3,578.20	3,499.29	78.91	45.346		
18,900.00	12,392.00	15,223.19	8,813.00	117.17	112.65	0.00	6,476.55	-964.87	3,578.20	3,498.27	79.93	44.768		
19,000.00	12,392.00	15,323.19	8,813.00	118.69	114.23	0.00	6,576.54	-965.97	3,578.20	3,497.25	80.95	44.202		
19,100.00	12,392.00	15,423.19	8,813.00	120.22	115.81	0.00	6,676.53	-967.08	3,578.20	3,496.22	81.98	43.650		
19,200.00	12,392.00	15,523.19	8,813.00	121.75	117.40	0.00	6,776.53	-968.19	3,578.20	3,495.20	83.00	43.110		
19,300.00	12,392.00	15,623.19	8,813.00	123.29	118.99	0.00	6,876.52	-969.29	3,578.20	3,494.17	84.03	42.582		
19,400.00	12,392.00	15,723.19	8,813.00	124.83	120.57	0.00	6,976.52	-970.40	3,578.20	3,493.14	85.06	42.066		
19,500.00	12,392.00	15,823.19	8,813.00	126.37	122.16	0.00	7,076.51	-971.51	3,578.20	3,492.10	86.10	41.561		
19,600.00	12,392.00	15,923.19	8,813.00	127.91	123.76	0.00	7,176.50	-972.61	3,578.20	3,491.07	87.13	41.067		
19,700.00	12,392.00	16,023.19	8,813.00	129.46	125.35	0.00	7,276.50	-973.72	3,578.20	3,490.04	88.16	40.586		
19,800.00	12,392.00	16,123.19	8,813.00	131.01	126.95	0.00	7,376.49	-974.83	3,578.20	3,489.00	89.20	40.114		
19,900.00	12,392.00	16,223.19	8,813.00	132.56	128.54	0.00	7,476.49	-975.94	3,578.20	3,487.96	90.24	39.651		
20,000.00	12,392.00	16,323.19	8,813.00	134.12	130.14	0.00	7,576.48	-977.04	3,578.20	3,486.92	91.28	39.199		
20,100.00	12,392.00	16,423.19	8,813.00	135.67	131.74	0.00	7,676.47	-978.15	3,578.20	3,485.87	92.33	38.756		
20,200.00	12,392.00	16,523.19	8,813.00	137.23	133.34	0.00	7,776.47	-979.26	3,578.20	3,484.83	93.37	38.322		
20,300.00	12,392.00	16,623.19	8,813.00	138.80	134.94	0.00	7,876.46	-980.36	3,578.20	3,483.78	94.42	37.897		
20,400.00	12,392.00	16,723.19	8,813.00	140.36	136.54	0.00	7,976.45	-981.47	3,578.20	3,482.73	95.47	37.481		
20,500.00	12,392.00	16,823.19	8,813.00	141.92	138.15	0.00	8,076.45	-982.58	3,578.20	3,481.68	96.52	37.074		
20,600.00	12,392.00	16,923.19	8,813.00	143.49	139.75	0.00	8,176.44	-983.68	3,578.20	3,480.63	97.57	36.675		
20,700.00	12,392.00	17,023.19	8,813.00	145.06	141.36	0.00	8,276.44	-984.79	3,578.20	3,479.58	98.62	36.284		
20,800.00	12,392.00	17,123.19	8,813.00	146.63	142.97	0.00	8,376.43	-985.90	3,578.20	3,478.53	99.67	35.900		
20,900.00	12,392.00	17,223.19	8,813.00	148.21	144.58	0.00	8,476.42	-987.00	3,578.20	3,477.48	100.72	35.524		
21,000.00	12,392.00	17,323.19	8,813.00	149.78	146.19	0.00	8,576.42	-988.11	3,578.20	3,476.42	101.78	35.156		
21,100.00	12,392.00	17,423.19	8,813.00	151.36	147.80	0.00	8,676.41	-989.22	3,578.20	3,475.36	102.84	34.795		
21,200.00	12,392.00	17,523.19	8,813.00	152.94	149.41	0.00	8,776.41	-990.32	3,578.20	3,474.31	103.89	34.441		
21,300.00	12,392.00	17,623.19	8,813.00	154.51	151.02	0.00	8,876.40	-991.43	3,578.20	3,473.25	104.95	34.093		
21,400.00	12,392.00	17,723.19	8,813.00	156.10	152.64	0.00	8,976.39	-992.54	3,578.20	3,472.19	106.01	33.752		
21,500.00	12,392.00	17,823.19	8,813.00	157.68	154.25	0.00	9,076.39	-993.64	3,578.20	3,471.13	107.07	33.418		
21,600.00	12,392.00	17,923.19	8,813.00	159.26	155.86	0.00	9,176.38	-994.75	3,578.20	3,470.06	108.14	33.090		
21,700.00	12,392.00	18,023.19	8,813.00	160.85	157.48	0.00	9,276.38	-995.86	3,578.20	3,469.00	109.20	32.768		
21,800.00	12,392.00	18,123.19	8,813.00	162.43	159.10	0.00	9,376.37	-996.96	3,578.20	3,467.94	110.26	32.452		
21,900.00	12,392.00	18,223.19	8,813.00	164.02	160.71	0.00	9,476.36	-998.07	3,578.20	3,466.87	111.33	32.141		
22,000.00	12,392.00	18,323.19	8,813.00	165.61	162.33	0.00	9,576.36	-999.18	3,578.20	3,465.81	112.39	31.837		
22,100.00	12,392.00	18,423.19	8,813.00	167.20	163.95	0.00	9,676.35	-1,000.28	3,578.20	3,464.74	113.46	31.537		
22,200.00	12,392.00	18,523.19	8,813.00	168.80	165.57	0.00	9,776.34	-1,001.39	3,578.20	3,463.67	114.53	31.243		
22,300.00	12,392.00	18,623.19	8,813.00	170.39	167.19	0.00	9,876.34	-1,002.50	3,578.20	3,462.61	115.59	30.955		
22,400.00	12,392.00	18,723.19	8,813.00	171.98	168.81	0.00	9,976.33	-1,003.60	3,578.20	3,461.54	116.66	30.671		
22,500.00	12,392.00	18,823.19	8,813.00	173.58	170.43	0.00	10,076.33	-1,004.71	3,578.20	3,460.47	117.73	30.393		
22,554.29	12,392.00	18,877.48	8,813.00	174.44	171.31	0.00	10,130.61	-1,005.31	3,578.20	3,459.89	118.31	30.244		
22,581.33	12,392.00	18,904.52	8,813.00	174.88	171.75	0.00	10,157.65	-1,005.61	3,578.20	3,459.60	118.60	30.170		

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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	-35.00	35.00					
100.00	100.00	99.60	99.60	0.13	0.12	-90.56	-0.34	-35.00	35.00	34.82	0.18	197.660		
200.00	200.00	199.60	199.60	0.48	0.48	-90.56	-0.34	-35.00	35.00	34.32	0.68	51.219		
300.00	300.00	299.60	299.60	0.84	0.84	-90.56	-0.34	-35.00	35.00	33.81	1.19	29.405		
400.00	400.00	399.60	399.60	1.20	1.20	-90.56	-0.34	-35.00	35.00	33.30	1.70	20.622		
500.00	500.00	499.60	499.60	1.56	1.56	-90.56	-0.34	-35.00	35.00	32.80	2.20	15.879		
600.00	600.00	599.60	599.60	1.92	1.92	-90.56	-0.34	-35.00	35.00	32.29	2.71	12.910		
700.00	700.00	699.60	699.60	2.28	2.27	-90.56	-0.34	-35.00	35.00	31.78	3.22	10.876		
800.00	800.00	799.60	799.60	2.63	2.63	-90.56	-0.34	-35.00	35.00	31.28	3.73	9.396		
900.00	900.00	899.60	899.60	2.99	2.99	-90.56	-0.34	-35.00	35.00	30.77	4.23	8.271		
1,000.00	1,000.00	999.60	999.60	3.35	3.35	-90.56	-0.34	-35.00	35.00	30.26	4.74	7.386		
1,100.00	1,100.00	1,099.60	1,099.60	3.71	3.71	-90.56	-0.34	-35.00	35.00	29.76	5.25	6.672		
1,200.00	1,200.00	1,199.60	1,199.60	4.07	4.07	-90.56	-0.34	-35.00	35.00	29.25	5.75	6.084		
1,300.00	1,300.00	1,299.60	1,299.60	4.43	4.43	-90.56	-0.34	-35.00	35.00	28.74	6.26	5.591		
1,400.00	1,400.00	1,399.60	1,399.60	4.79	4.78	-90.56	-0.34	-35.00	35.00	28.23	6.77	5.173		
1,500.00	1,500.00	1,499.60	1,499.60	5.14	5.14	-90.56	-0.34	-35.00	35.00	27.73	7.27	4.812		
1,525.00	1,525.00	1,524.60	1,524.60	5.23	5.23	-90.56	-0.34	-35.00	35.00	27.60	7.40	4.730		
1,600.00	1,600.00	1,599.60	1,599.60	5.49	5.50	70.58	-0.34	-35.00	34.75	26.98	7.77	4.472		
1,700.00	1,699.94	1,699.54	1,699.54	5.82	5.86	75.83	-0.34	-35.00	33.80	25.55	8.25	4.095		
1,800.00	1,799.76	1,799.36	1,799.36	6.15	6.22	85.83	-0.34	-35.00	32.86	24.12	8.74	3.759		
1,831.49	1,831.17	1,830.77	1,830.77	6.25	6.33	90.00	-0.34	-35.00	32.77	23.88	8.90	3.684 CC, ES		
1,900.00	1,899.40	1,899.00	1,899.00	6.48	6.57	100.50	-0.34	-35.00	33.34	24.10	9.23	3.611 SF		
2,000.00	1,998.78	1,998.38	1,998.38	6.82	6.93	117.52	-0.34	-35.00	37.02	27.29	9.73	3.806		
2,025.00	2,023.57	2,023.37	2,023.37	6.91	7.02	121.76	-0.36	-34.93	38.54	28.69	9.85	3.913		
2,100.00	2,097.97	2,098.37	2,098.36	7.17	7.28	125.84	-0.76	-33.80	42.94	32.73	10.21	4.205		
2,200.00	2,197.27	2,198.18	2,198.09	7.53	7.61	129.41	-2.03	-30.15	47.92	37.23	10.69	4.483		
2,300.00	2,296.60	2,297.42	2,297.12	7.89	7.95	132.98	-4.14	-24.07	53.23	42.06	11.17	4.765		
2,400.00	2,395.91	2,395.73	2,395.02	8.26	8.29	137.51	-7.07	-15.66	60.97	49.32	11.65	5.234		
2,504.30	2,499.40	2,497.21	2,495.85	8.64	8.65	142.52	-10.86	-4.75	73.71	61.57	12.14	6.072		
2,600.00	2,594.28	2,590.19	2,588.18	9.00	8.98	153.99	-14.45	5.57	89.52	76.93	12.59	7.111		
2,700.00	2,693.42	2,687.34	2,684.66	9.38	9.33	162.17	-18.20	16.36	108.67	95.60	13.07	8.317		
2,800.00	2,792.57	2,784.49	2,781.14	9.75	9.68	167.85	-21.95	27.14	129.33	115.78	13.55	9.546		
2,900.00	2,891.71	2,881.65	2,877.62	10.14	10.03	171.96	-25.70	37.93	150.89	136.85	14.03	10.752		
3,000.00	2,990.86	2,978.80	2,974.10	10.52	10.39	175.04	-29.45	48.71	173.00	158.48	14.52	11.914		
3,100.00	3,090.00	3,075.95	3,070.57	10.91	10.75	177.42	-33.20	59.50	195.49	180.48	15.01	13.022		
3,200.00	3,189.15	3,173.11	3,167.05	11.30	11.12	179.31	-36.95	70.28	218.23	202.72	15.50	14.076		
3,300.00	3,288.29	3,270.26	3,263.53	11.69	11.48	-179.16	-40.70	81.07	241.15	225.15	16.00	15.074		
3,400.00	3,387.44	3,367.41	3,360.01	12.08	11.85	-177.89	-44.46	91.85	264.21	247.72	16.49	16.020		
3,500.00	3,486.58	3,464.57	3,456.49	12.48	12.22	-176.83	-48.21	102.64	287.37	270.38	16.99	16.915		
3,600.00	3,585.72	3,561.72	3,552.97	12.87	12.59	-175.92	-51.96	113.42	310.61	293.13	17.49	17.763		
3,700.00	3,684.87	3,658.87	3,649.45	13.27	12.96	-175.14	-55.71	124.21	333.92	315.93	17.99	18.566		
3,800.00	3,784.01	3,756.02	3,745.93	13.67	13.33	-174.46	-59.46	134.99	357.27	338.79	18.48	19.328		
3,900.00	3,883.16	3,853.18	3,842.41	14.07	13.71	-173.87	-63.21	145.78	380.67	361.69	18.98	20.051		
4,000.00	3,982.30	3,950.33	3,938.89	14.47	14.08	-173.35	-66.96	156.56	404.10	384.62	19.49	20.738		
4,100.00	4,081.45	4,047.48	4,035.37	14.87	14.46	-172.88	-70.71	167.35	427.56	407.58	19.99	21.391		
4,200.00	4,180.59	4,144.64	4,131.85	15.27	14.84	-172.46	-74.46	178.13	451.05	430.56	20.49	22.013		
4,300.00	4,279.74	4,241.79	4,228.33	15.67	15.21	-172.08	-78.21	188.92	474.55	453.56	20.99	22.605		
4,400.00	4,378.88	4,338.94	4,324.81	16.08	15.59	-171.74	-81.96	199.70	498.08	476.58	21.50	23.169		
4,500.00	4,478.03	4,436.10	4,421.29	16.48	15.97	-171.43	-85.71	210.49	521.62	499.61	22.00	23.708		
4,600.00	4,577.17	4,533.25	4,517.77	16.89	16.35	-171.14	-89.46	221.28	545.17	522.66	22.51	24.223		
4,700.00	4,676.32	4,630.40	4,614.25	17.29	16.73	-170.88	-93.22	232.06	568.73	545.72	23.01	24.715		
4,800.00	4,775.46	4,727.55	4,710.73	17.70	17.11	-170.64	-96.97	242.85	592.30	568.79	23.52	25.186		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
4,900.00	4,874.60	4,824.71	4,807.21	18.10	17.50	-170.42	-100.72	253.63	615.89	591.86	24.02	25.637		
5,000.00	4,973.75	4,921.86	4,903.69	18.51	17.88	-170.21	-104.47	264.42	639.48	614.95	24.53	26.069		
5,100.00	5,072.89	5,019.01	5,000.17	18.92	18.26	-170.02	-108.22	275.20	663.07	638.04	25.04	26.484		
5,200.00	5,172.04	5,116.17	5,096.65	19.32	18.64	-169.85	-111.97	285.99	686.68	661.13	25.54	26.882		
5,300.00	5,271.18	5,213.32	5,193.13	19.73	19.03	-169.68	-115.72	296.77	710.29	684.24	26.05	27.264		
5,400.00	5,370.33	5,310.47	5,289.61	20.14	19.41	-169.52	-119.47	307.56	733.90	707.34	26.56	27.632		
5,500.00	5,469.47	5,407.63	5,386.09	20.55	19.80	-169.38	-123.22	318.34	757.52	730.46	27.07	27.986		
5,600.00	5,568.62	5,504.78	5,482.56	20.96	20.18	-169.24	-126.97	329.13	781.15	753.57	27.58	28.326		
5,700.00	5,667.76	5,601.93	5,579.04	21.37	20.57	-169.11	-130.72	339.91	804.78	776.69	28.09	28.654		
5,800.00	5,766.91	5,699.08	5,675.52	21.78	20.95	-168.99	-134.47	350.70	828.41	799.81	28.59	28.971		
5,900.00	5,866.05	5,796.24	5,772.00	22.19	21.34	-168.88	-138.22	361.48	852.04	822.94	29.10	29.276		
6,000.00	5,965.19	5,893.39	5,868.48	22.59	21.73	-168.77	-141.97	372.27	875.68	846.07	29.61	29.570		
6,100.00	6,064.34	5,990.54	5,964.96	23.01	22.11	-168.67	-145.73	383.05	899.32	869.20	30.12	29.855		
6,200.00	6,163.48	6,087.70	6,061.44	23.42	22.50	-168.57	-149.48	393.84	922.97	892.33	30.63	30.129		
6,300.00	6,262.63	6,184.85	6,157.92	23.83	22.89	-168.48	-153.23	404.62	946.61	915.47	31.14	30.395		
6,400.00	6,361.77	6,282.00	6,254.40	24.24	23.27	-168.39	-156.98	415.41	970.26	938.61	31.65	30.652		
6,500.00	6,460.92	6,379.16	6,350.88	24.65	23.66	-168.30	-160.73	426.19	993.91	961.75	32.16	30.900		
6,600.00	6,560.06	6,476.31	6,447.36	25.06	24.05	-168.22	-164.48	436.98	1,017.56	984.89	32.68	31.141		
6,700.00	6,659.21	6,573.46	6,543.84	25.47	24.44	-168.15	-168.23	447.77	1,041.22	1,008.03	33.19	31.374		
6,800.00	6,758.35	6,670.61	6,640.32	25.88	24.83	-168.07	-171.98	458.55	1,064.87	1,031.18	33.70	31.600		
6,900.00	6,857.50	6,767.77	6,736.80	26.29	25.21	-168.00	-175.73	469.34	1,088.53	1,054.32	34.21	31.819		
7,000.00	6,956.64	6,864.92	6,833.28	26.70	25.60	-167.94	-179.48	480.12	1,112.19	1,077.47	34.72	32.032		
7,100.00	7,055.78	6,962.07	6,929.76	27.12	25.99	-167.87	-183.23	490.91	1,135.85	1,100.62	35.23	32.238		
7,141.02	7,096.45	7,001.92	6,969.33	27.29	26.15	-167.85	-184.77	495.33	1,145.56	1,110.11	35.44	32.321		
7,200.00	7,154.99	7,065.48	7,032.46	27.53	26.40	-167.85	-187.21	502.33	1,159.04	1,123.26	35.78	32.394		
7,300.00	7,254.46	7,203.44	7,169.80	27.92	26.94	-167.84	-191.46	514.57	1,177.80	1,141.31	36.49	32.276		
7,400.00	7,354.17	7,343.51	7,309.62	28.30	27.45	-167.86	-194.12	522.20	1,190.65	1,153.48	37.17	32.036		
7,500.00	7,454.04	7,484.90	7,450.98	28.66	27.94	-167.90	-195.09	524.99	1,197.50	1,159.70	37.80	31.683		
7,600.00	7,554.01	7,587.53	7,553.61	29.00	28.27	-167.93	-195.09	525.00	1,199.83	1,161.54	38.29	31.335		
7,640.99	7,595.00	7,628.52	7,594.60	29.13	28.40	89.48	-195.09	525.00	1,200.05	1,161.56	38.49	31.180		
7,700.00	7,654.01	7,687.53	7,653.61	29.32	28.60	89.48	-195.09	525.00	1,200.05	1,161.28	38.77	30.955		
7,800.00	7,754.01	7,787.53	7,753.61	29.64	28.92	89.48	-195.09	525.00	1,200.05	1,160.81	39.24	30.580		
7,900.00	7,854.01	7,887.53	7,853.61	29.95	29.25	89.48	-195.09	525.00	1,200.05	1,160.33	39.72	30.214		
8,000.00	7,954.01	7,987.53	7,953.61	30.27	29.58	89.48	-195.09	525.00	1,200.05	1,159.85	40.20	29.855		
8,100.00	8,054.01	8,087.53	8,053.61	30.59	29.91	89.48	-195.09	525.00	1,200.05	1,159.38	40.67	29.505		
8,200.00	8,154.01	8,187.53	8,153.61	30.91	30.24	89.48	-195.09	525.00	1,200.05	1,158.90	41.15	29.162		
8,206.41	8,160.41	8,193.93	8,160.01	30.94	30.26	89.48	-195.09	525.00	1,200.05	1,158.87	41.18	29.140		
8,300.00	8,254.01	8,283.17	8,249.24	31.24	30.55	89.47	-194.77	525.03	1,200.09	1,158.47	41.62	28.836		
8,400.00	8,354.01	8,363.67	8,329.24	31.56	30.81	89.07	-186.48	525.86	1,201.26	1,159.23	42.03	28.581		
8,500.00	8,454.01	8,440.40	8,403.71	31.88	31.04	88.21	-168.27	527.68	1,204.30	1,161.89	42.41	28.400		
8,600.00	8,554.01	8,511.14	8,469.63	32.21	31.23	87.01	-142.85	530.21	1,209.78	1,167.05	42.73	28.315		
8,700.00	8,654.01	8,574.69	8,525.76	32.53	31.38	85.62	-113.28	533.17	1,218.44	1,175.47	42.97	28.358		
8,800.00	8,754.01	8,630.78	8,572.30	32.86	31.50	84.17	-82.19	536.27	1,230.99	1,187.88	43.11	28.554		
8,900.00	8,854.01	8,679.74	8,610.27	33.18	31.60	82.75	-51.45	539.34	1,248.07	1,204.93	43.14	28.929		
9,000.00	8,954.01	8,722.26	8,641.01	33.51	31.67	81.42	-22.22	542.25	1,270.10	1,227.05	43.05	29.501		
9,100.00	9,054.01	8,750.00	8,659.85	33.84	31.71	80.50	-1.97	544.28	1,297.41	1,254.64	42.77	30.333		
9,200.00	9,154.01	8,800.00	8,691.23	34.16	31.79	78.78	36.74	548.14	1,329.94	1,287.37	42.57	31.240		
9,300.00	9,254.01	8,819.18	8,702.35	34.49	31.81	78.10	52.29	549.69	1,367.63	1,325.55	42.08	32.502		
9,400.00	9,354.01	8,850.00	8,719.11	34.82	31.85	76.97	78.03	552.26	1,410.45	1,368.83	41.63	33.884		
9,500.00	9,454.01	8,865.20	8,726.86	35.15	31.87	76.41	91.04	553.56	1,457.98	1,416.97	41.01	35.549		
9,600.00	9,554.01	8,884.25	8,736.07	35.48	31.90	75.70	107.63	555.22	1,510.00	1,469.58	40.42	37.355		
9,700.00	9,654.01	8,900.00	8,743.26	35.81	31.92	75.11	121.57	556.61	1,566.15	1,526.35	39.80	39.347		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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				
9,800.00	9,754.01	8,900.00	8,743.26	36.14	31.92	75.11	121.57	556.61	1,626.31	1,587.24	39.07	41.621				
9,900.00	9,854.01	8,929.87	8,755.84	36.48	31.96	73.98	148.52	559.30	1,689.44	1,650.82	38.62	43.749				
10,000.00	9,954.01	8,950.00	8,763.51	36.81	31.99	73.21	167.04	561.15	1,755.98	1,717.87	38.11	46.078				
10,100.00	10,054.01	8,950.00	8,763.51	37.14	31.99	73.21	167.04	561.15	1,825.24	1,787.75	37.49	48.685				
10,200.00	10,154.01	8,950.00	8,763.51	37.47	31.99	73.21	167.04	561.15	1,897.24	1,860.32	36.92	51.386				
10,300.00	10,254.01	8,972.41	8,771.28	37.81	32.02	72.35	187.96	563.23	1,971.21	1,934.64	36.56	53.912				
10,400.00	10,354.01	8,980.82	8,773.98	38.14	32.04	72.03	195.88	564.02	2,047.40	2,011.25	36.15	56.637				
10,500.00	10,454.01	9,000.00	8,779.70	38.48	32.08	71.30	214.10	565.84	2,125.57	2,089.72	35.85	59.288				
10,600.00	10,554.01	9,000.00	8,779.70	38.81	32.08	71.30	214.10	565.84	2,205.19	2,169.71	35.47	62.165				
10,700.00	10,654.01	9,000.00	8,779.70	39.15	32.08	71.30	214.10	565.84	2,286.40	2,251.26	35.14	65.061				
10,800.00	10,754.01	9,000.00	8,779.70	39.48	32.08	71.30	214.10	565.84	2,369.05	2,334.20	34.86	67.965				
10,900.00	10,854.01	9,000.00	8,779.70	39.82	32.08	71.30	214.10	565.84	2,453.00	2,418.38	34.61	70.866				
11,000.00	10,954.01	9,000.00	8,779.70	40.16	32.08	71.30	214.10	565.84	2,538.10	2,503.69	34.41	73.756				
11,100.00	11,054.01	9,024.17	8,786.03	40.49	32.12	70.38	237.31	568.16	2,623.70	2,589.32	34.38	76.323				
11,200.00	11,154.01	9,028.77	8,787.12	40.83	32.13	70.20	241.76	568.60	2,710.57	2,676.31	34.27	79.104				
11,300.00	11,254.01	9,050.00	8,791.70	41.17	32.18	69.40	262.38	570.66	2,798.56	2,764.29	34.27	81.666				
11,400.00	11,354.01	9,050.00	8,791.70	41.51	32.18	69.40	262.38	570.66	2,886.92	2,852.73	34.19	84.426				
11,500.00	11,454.01	9,050.00	8,791.70	41.85	32.18	69.40	262.38	570.66	2,976.02	2,941.87	34.15	87.143				
11,600.00	11,554.01	9,050.00	8,791.70	42.18	32.18	69.40	262.38	570.66	3,065.79	3,031.66	34.13	89.816				
11,700.00	11,654.01	9,050.00	8,791.70	42.52	32.18	69.40	262.38	570.66	3,156.18	3,122.04	34.14	92.447				
11,800.00	11,754.01	9,050.00	8,791.70	42.86	32.18	69.40	262.38	570.66	3,247.13	3,212.96	34.17	95.026				
11,865.03	11,819.04	9,050.00	8,791.70	43.08	32.18	69.40	262.38	570.66	3,306.56	3,272.35	34.20	96.675				
11,900.00	11,853.99	9,050.00	8,791.70	43.20	32.18	75.93	262.38	570.66	3,338.53	3,304.31	34.22	97.552				
11,950.00	11,903.70	9,050.00	8,791.70	43.37	32.18	65.67	262.38	570.66	3,383.96	3,349.71	34.25	98.792				
12,000.00	11,952.76	9,050.00	8,791.70	43.54	32.18	56.84	262.38	570.66	3,428.76	3,394.47	34.29	100.007				
12,050.00	12,000.81	9,050.00	8,791.70	43.70	32.18	49.53	262.38	570.66	3,472.61	3,438.29	34.32	101.191				
12,100.00	12,047.48	9,050.00	8,791.70	43.85	32.18	43.61	262.38	570.66	3,515.22	3,480.87	34.35	102.335				
12,150.00	12,092.40	9,050.00	8,791.70	43.99	32.18	38.85	262.38	570.66	3,556.33	3,521.95	34.38	103.432				
12,200.00	12,135.25	9,074.68	8,796.06	44.13	32.25	34.95	286.55	573.07	3,595.09	3,560.59	34.50	104.210				
12,250.00	12,175.69	9,100.00	8,799.43	44.25	32.32	31.87	311.52	575.57	3,632.58	3,597.97	34.61	104.955				
12,300.00	12,213.41	9,100.00	8,799.43	44.37	32.32	29.42	311.52	575.57	3,667.20	3,632.56	34.64	105.867				
12,350.00	12,248.14	9,100.00	8,799.43	44.48	32.32	27.42	311.52	575.57	3,699.38	3,664.71	34.67	106.700				
12,400.00	12,279.60	9,100.00	8,799.43	44.58	32.32	25.78	311.52	575.57	3,728.93	3,694.23	34.70	107.447				
12,450.00	12,307.55	9,100.00	8,799.43	44.68	32.32	24.44	311.52	575.57	3,755.69	3,720.95	34.74	108.098				
12,500.00	12,331.79	9,100.00	8,799.43	44.77	32.32	23.34	311.52	575.57	3,779.53	3,744.74	34.79	108.646				
12,550.00	12,352.12	9,100.00	8,799.43	44.88	32.32	22.45	311.52	575.57	3,800.31	3,765.47	34.84	109.081				
12,600.00	12,368.39	9,100.00	8,799.43	44.99	32.32	21.74	311.52	575.57	3,817.93	3,783.03	34.90	109.396				
12,650.00	12,380.49	9,126.48	8,801.77	45.12	32.40	21.30	337.77	578.19	3,831.64	3,796.61	35.03	109.381				
12,700.00	12,388.31	9,150.00	8,802.83	45.25	32.48	21.01	361.14	580.52	3,842.60	3,807.44	35.16	109.291				
12,750.00	12,391.80	9,150.00	8,802.83	45.41	32.48	20.76	361.14	580.52	3,849.66	3,814.41	35.25	109.212				
12,765.03	12,392.00	9,150.00	8,802.83	45.45	32.48	20.71	361.14	580.52	3,851.12	3,815.84	35.28	109.163				
12,800.00	12,392.00	9,150.00	8,802.83	45.57	32.48	20.77	361.14	580.52	3,854.23	3,818.88	35.35	109.024				
12,900.00	12,392.00	9,163.96	8,803.00	45.95	32.53	21.01	375.03	581.91	3,863.98	3,828.37	35.61	108.506				
13,000.00	12,392.00	9,284.94	8,803.00	46.37	33.03	21.62	495.63	591.38	3,873.82	3,837.76	36.07	107.400				
13,100.00	12,392.00	9,486.97	8,803.00	46.85	34.08	22.21	697.57	595.82	3,880.31	3,843.60	36.71	105.692				
13,200.00	12,392.00	9,583.15	8,803.00	47.36	34.68	22.42	793.75	594.76	3,884.28	3,847.10	37.18	104.477				
13,300.00	12,392.00	9,682.91	8,803.00	47.91	35.36	22.57	893.50	593.66	3,886.93	3,849.26	37.68	103.168				
13,400.00	12,392.00	9,782.84	8,803.00	48.49	36.10	22.64	993.43	592.56	3,888.25	3,850.05	38.20	101.793				
13,448.51	12,392.00	9,831.35	8,803.00	48.78	36.49	22.65	1,041.93	592.02	3,888.41	3,849.95	38.46	101.105				
13,500.00	12,392.00	9,882.84	8,803.00	49.10	36.90	22.65	1,093.42	591.45	3,888.41	3,849.66	38.74	100.364				
13,600.00	12,392.00	9,982.84	8,803.00	49.75	37.76	22.65	1,193.41	590.34	3,888.41	3,849.08	39.33	98.876				
13,700.00	12,392.00	10,082.84	8,803.00	50.45	38.67	22.65	1,293.41	589.24	3,888.40	3,848.46	39.95	97.339				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,800.00	12,392.00	10,182.84	8,803.00	51.20	39.62	22.65	1,393.40	588.13	3,888.40	3,847.80	40.60	95.764		
13,900.00	12,392.00	10,282.84	8,803.00	51.98	40.62	22.65	1,493.40	587.03	3,888.40	3,847.10	41.30	94.161		
14,000.00	12,392.00	10,382.84	8,803.00	52.81	41.66	22.65	1,593.39	585.92	3,888.40	3,846.38	42.02	92.539		
14,100.00	12,392.00	10,482.84	8,803.00	53.68	42.74	22.65	1,693.38	584.82	3,888.40	3,845.62	42.77	90.906		
14,200.00	12,392.00	10,582.84	8,803.00	54.58	43.86	22.65	1,793.38	583.71	3,888.39	3,844.84	43.56	89.272		
14,300.00	12,392.00	10,682.84	8,803.00	55.51	45.00	22.65	1,893.37	582.61	3,888.39	3,844.03	44.37	87.643		
14,400.00	12,392.00	10,782.84	8,803.00	56.48	46.18	22.65	1,993.36	581.50	3,888.39	3,843.19	45.20	86.023		
14,500.00	12,392.00	10,882.84	8,803.00	57.48	47.39	22.65	2,093.36	580.40	3,888.39	3,842.33	46.06	84.416		
14,600.00	12,392.00	10,982.84	8,803.00	58.51	48.62	22.65	2,193.35	579.29	3,888.39	3,841.44	46.95	82.826		
14,700.00	12,392.00	11,082.84	8,803.00	59.57	49.87	22.65	2,293.35	578.19	3,888.38	3,840.53	47.85	81.257		
14,800.00	12,392.00	11,182.84	8,803.00	60.65	51.15	22.65	2,393.34	577.08	3,888.38	3,839.60	48.78	79.713		
14,900.00	12,392.00	11,282.84	8,803.00	61.76	52.45	22.65	2,493.33	575.98	3,888.38	3,838.65	49.73	78.195		
15,000.00	12,392.00	11,382.84	8,803.00	62.89	53.77	22.65	2,593.33	574.87	3,888.38	3,837.69	50.69	76.704		
15,100.00	12,392.00	11,482.84	8,803.00	64.05	55.11	22.65	2,693.32	573.77	3,888.38	3,836.70	51.68	75.243		
15,200.00	12,392.00	11,582.84	8,803.00	65.23	56.46	22.65	2,793.32	572.66	3,888.38	3,835.70	52.68	73.817		
15,300.00	12,392.00	11,682.84	8,803.00	66.42	57.83	22.65	2,893.31	571.55	3,888.37	3,834.68	53.69	72.422		
15,400.00	12,392.00	11,782.84	8,803.00	67.64	59.21	22.65	2,993.30	570.45	3,888.37	3,833.65	54.72	71.060		
15,500.00	12,392.00	11,882.84	8,803.00	68.88	60.61	22.65	3,093.30	569.34	3,888.37	3,832.61	55.76	69.733		
15,600.00	12,392.00	11,982.84	8,803.00	70.13	62.02	22.65	3,193.29	568.24	3,888.37	3,831.55	56.82	68.439		
15,700.00	12,392.00	12,082.84	8,803.00	71.40	63.44	22.65	3,293.29	567.13	3,888.37	3,830.48	57.88	67.177		
15,800.00	12,392.00	12,182.84	8,803.00	72.68	64.87	22.65	3,393.28	566.03	3,888.36	3,829.40	58.96	65.947		
15,900.00	12,392.00	12,282.84	8,803.00	73.98	66.32	22.65	3,493.27	564.92	3,888.36	3,828.31	60.05	64.749		
16,000.00	12,392.00	12,382.84	8,803.00	75.29	67.77	22.64	3,593.27	563.82	3,888.36	3,827.21	61.15	63.583		
16,100.00	12,392.00	12,482.84	8,803.00	76.62	69.23	22.64	3,693.26	562.71	3,888.36	3,826.09	62.26	62.449		
16,200.00	12,392.00	12,582.84	8,803.00	77.96	70.70	22.64	3,793.25	561.61	3,888.36	3,824.97	63.39	61.345		
16,300.00	12,392.00	12,682.84	8,803.00	79.31	72.17	22.64	3,893.25	560.50	3,888.35	3,823.84	64.51	60.271		
16,400.00	12,392.00	12,782.84	8,803.00	80.67	73.66	22.64	3,993.24	559.40	3,888.35	3,822.70	65.65	59.229		
16,500.00	12,392.00	12,882.84	8,803.00	82.04	75.15	22.64	4,093.24	558.29	3,888.35	3,821.56	66.79	58.215		
16,600.00	12,392.00	12,982.84	8,803.00	83.42	76.65	22.64	4,193.23	557.19	3,888.35	3,820.41	67.94	57.230		
16,700.00	12,392.00	13,082.84	8,803.00	84.81	78.15	22.64	4,293.22	556.08	3,888.35	3,819.25	69.10	56.271		
16,800.00	12,392.00	13,182.84	8,803.00	86.21	79.67	22.64	4,393.22	554.97	3,888.35	3,818.08	70.27	55.338		
16,900.00	12,392.00	13,282.84	8,803.00	87.62	81.18	22.64	4,493.21	553.87	3,888.34	3,816.91	71.44	54.431		
17,000.00	12,392.00	13,382.84	8,803.00	89.04	82.70	22.64	4,593.21	552.76	3,888.34	3,815.73	72.61	53.548		
17,100.00	12,392.00	13,482.84	8,803.00	90.47	84.23	22.64	4,693.20	551.66	3,888.34	3,814.54	73.80	52.689		
17,200.00	12,392.00	13,582.84	8,803.00	91.90	85.76	22.64	4,793.19	550.55	3,888.34	3,813.35	74.99	51.854		
17,300.00	12,392.00	13,682.84	8,803.00	93.34	87.30	22.64	4,893.19	549.45	3,888.34	3,812.15	76.18	51.041		
17,400.00	12,392.00	13,782.84	8,803.00	94.79	88.84	22.64	4,993.18	548.34	3,888.33	3,810.95	77.38	50.249		
17,500.00	12,392.00	13,882.84	8,803.00	96.25	90.38	22.64	5,093.18	547.24	3,888.33	3,809.75	78.59	49.479		
17,600.00	12,392.00	13,982.84	8,803.00	97.71	91.93	22.64	5,193.17	546.13	3,888.33	3,808.54	79.79	48.729		
17,700.00	12,392.00	14,082.84	8,803.00	99.17	93.48	22.64	5,293.16	545.03	3,888.33	3,807.32	81.01	48.000		
17,800.00	12,392.00	14,182.84	8,803.00	100.65	95.03	22.64	5,393.16	543.92	3,888.33	3,806.11	82.22	47.291		
17,900.00	12,392.00	14,282.84	8,803.00	102.13	96.59	22.64	5,493.15	542.82	3,888.32	3,804.88	83.44	46.600		
18,000.00	12,392.00	14,382.84	8,803.00	103.61	98.15	22.64	5,593.14	541.71	3,888.32	3,803.66	84.66	45.927		
18,100.00	12,392.00	14,482.84	8,803.00	105.10	99.71	22.64	5,693.14	540.61	3,888.32	3,802.43	85.89	45.272		
18,200.00	12,392.00	14,582.84	8,803.00	106.59	101.28	22.64	5,793.13	539.50	3,888.32	3,801.20	87.12	44.632		
18,300.00	12,392.00	14,682.84	8,803.00	108.09	102.85	22.64	5,893.13	538.40	3,888.32	3,799.96	88.35	44.009		
18,400.00	12,392.00	14,782.84	8,803.00	109.59	104.42	22.64	5,993.12	537.29	3,888.32	3,798.72	89.59	43.401		
18,500.00	12,392.00	14,882.84	8,803.00	111.10	106.00	22.64	6,093.11	536.18	3,888.31	3,797.48	90.83	42.808		
18,600.00	12,392.00	14,982.84	8,803.00	112.61	107.57	22.64	6,193.11	535.08	3,888.31	3,796.24	92.07	42.231		
18,700.00	12,392.00	15,082.84	8,803.00	114.12	109.15	22.64	6,293.10	533.97	3,888.31	3,794.99	93.32	41.668		
18,800.00	12,392.00	15,182.84	8,803.00	115.64	110.74	22.64	6,393.10	532.87	3,888.31	3,793.74	94.56	41.118		
18,900.00	12,392.00	15,282.84	8,803.00	117.17	112.32	22.64	6,493.09	531.76	3,888.31	3,792.49	95.81	40.582		

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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
							+N/-S (usft)	+E/-W (usft)						
19,000.00	12,392.00	15,382.84	8,803.00	118.69	113.90	22.64	6,593.08	530.66	3,888.30	3,791.24	97.06	40.060		
19,100.00	12,392.00	15,482.84	8,803.00	120.22	115.49	22.64	6,693.08	529.55	3,888.30	3,789.99	98.32	39.549		
19,200.00	12,392.00	15,582.84	8,803.00	121.75	117.08	22.64	6,793.07	528.45	3,888.30	3,788.73	99.57	39.051		
19,300.00	12,392.00	15,682.84	8,803.00	123.29	118.67	22.64	6,893.07	527.34	3,888.30	3,787.47	100.83	38.563		
19,400.00	12,392.00	15,782.84	8,803.00	124.83	120.26	22.64	6,993.06	526.24	3,888.30	3,786.21	102.09	38.087		
19,500.00	12,392.00	15,882.84	8,803.00	126.37	121.86	22.64	7,093.05	525.13	3,888.29	3,784.94	103.35	37.622		
19,600.00	12,392.00	15,982.84	8,803.00	127.91	123.45	22.64	7,193.05	524.03	3,888.29	3,783.68	104.62	37.167		
19,700.00	12,392.00	16,082.84	8,803.00	129.46	125.05	22.64	7,293.04	522.92	3,888.29	3,782.41	105.88	36.723		
19,800.00	12,392.00	16,182.84	8,803.00	131.01	126.65	22.64	7,393.03	521.82	3,888.29	3,781.14	107.15	36.289		
19,900.00	12,392.00	16,282.84	8,803.00	132.56	128.25	22.64	7,493.03	520.71	3,888.29	3,779.87	108.41	35.865		
20,000.00	12,392.00	16,382.84	8,803.00	134.12	129.85	22.64	7,593.02	519.61	3,888.29	3,778.60	109.68	35.450		
20,100.00	12,392.00	16,482.84	8,803.00	135.67	131.45	22.64	7,693.02	518.50	3,888.28	3,777.33	110.95	35.044		
20,200.00	12,392.00	16,582.84	8,803.00	137.23	133.06	22.64	7,793.01	517.39	3,888.28	3,776.06	112.23	34.647		
20,300.00	12,392.00	16,682.84	8,803.00	138.80	134.66	22.64	7,893.00	516.29	3,888.28	3,774.78	113.50	34.258		
20,400.00	12,392.00	16,782.84	8,803.00	140.36	136.27	22.64	7,993.00	515.18	3,888.28	3,773.50	114.77	33.877		
20,500.00	12,392.00	16,882.84	8,803.00	141.92	137.88	22.64	8,092.99	514.08	3,888.28	3,772.22	116.05	33.505		
20,600.00	12,392.00	16,982.84	8,803.00	143.49	139.49	22.64	8,192.99	512.97	3,888.27	3,770.94	117.33	33.140		
20,700.00	12,392.00	17,082.84	8,803.00	145.06	141.09	22.64	8,292.98	511.87	3,888.27	3,769.66	118.61	32.782		
20,800.00	12,392.00	17,182.84	8,803.00	146.63	142.71	22.64	8,392.97	510.76	3,888.27	3,768.38	119.89	32.432		
20,900.00	12,392.00	17,282.84	8,803.00	148.21	144.32	22.64	8,492.97	509.66	3,888.27	3,767.10	121.17	32.089		
21,000.00	12,392.00	17,382.84	8,803.00	149.78	145.93	22.64	8,592.96	508.55	3,888.27	3,765.81	122.45	31.753		
21,100.00	12,392.00	17,482.84	8,803.00	151.36	147.54	22.64	8,692.96	507.45	3,888.26	3,764.53	123.74	31.424		
21,200.00	12,392.00	17,582.84	8,803.00	152.94	149.16	22.64	8,792.95	506.34	3,888.26	3,763.25	125.02	31.102		
21,300.00	12,392.00	17,682.84	8,803.00	154.51	150.77	22.64	8,892.94	505.24	3,888.26	3,761.96	126.30	30.786		
21,400.00	12,392.00	17,782.84	8,803.00	156.10	152.39	22.64	8,992.94	504.13	3,888.26	3,760.67	127.59	30.476		
21,500.00	12,392.00	17,882.84	8,803.00	157.68	154.00	22.64	9,092.93	503.03	3,888.26	3,759.38	128.87	30.171		
21,600.00	12,392.00	17,982.84	8,803.00	159.26	155.62	22.64	9,192.92	501.92	3,888.26	3,758.09	130.16	29.873		
21,700.00	12,392.00	18,082.84	8,803.00	160.85	157.24	22.64	9,292.92	500.81	3,888.25	3,756.80	131.45	29.580		
21,800.00	12,392.00	18,182.84	8,803.00	162.43	158.86	22.64	9,392.91	499.71	3,888.25	3,755.51	132.74	29.293		
21,900.00	12,392.00	18,282.84	8,803.00	164.02	160.48	22.64	9,492.91	498.60	3,888.25	3,754.22	134.03	29.011		
22,000.00	12,392.00	18,382.84	8,803.00	165.61	162.10	22.64	9,592.90	497.50	3,888.25	3,752.93	135.32	28.735		
22,100.00	12,392.00	18,482.84	8,803.00	167.20	163.72	22.64	9,692.89	496.39	3,888.25	3,751.64	136.61	28.463		
22,200.00	12,392.00	18,582.84	8,803.00	168.80	165.34	22.64	9,792.89	495.29	3,888.24	3,750.35	137.90	28.197		
22,300.00	12,392.00	18,682.84	8,803.00	170.39	166.96	22.64	9,892.88	494.18	3,888.24	3,749.06	139.19	27.935		
22,400.00	12,392.00	18,782.84	8,803.00	171.98	168.59	22.64	9,992.88	493.08	3,888.24	3,747.76	140.48	27.679		
22,500.00	12,392.00	18,882.84	8,803.00	173.58	170.21	22.64	10,092.87	491.97	3,888.24	3,746.47	141.77	27.427		
22,578.97	12,392.00	18,961.77	8,803.00	174.84	171.49	22.64	10,171.79	491.10	3,888.24	3,745.45	142.79	27.230		
22,581.33	12,392.00	18,961.77	8,803.00	174.88	171.49	22.64	10,171.79	491.10	3,888.24	3,745.43	142.81	27.227		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	0.40	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		
1,500.00	1,500.00	1,500.40	1,500.40	5.14	5.15	89.44	0.34	34.99	34.99	27.72	7.28	4.809		
1,525.00	1,525.00	1,525.46	1,525.46	5.23	5.23	89.58	0.26	34.97	34.97	27.57	7.40	4.726		
1,584.35	1,584.34	1,584.94	1,584.93	5.44	5.43	-109.77	-0.58	34.76	34.92	27.24	7.69	4.544 CC		
1,600.00	1,600.00	1,600.62	1,600.61	5.49	5.49	-109.59	-0.95	34.67	34.93	27.16	7.76	4.500		
1,700.00	1,699.94	1,700.82	1,700.73	5.82	5.81	-108.35	-4.78	33.72	35.11	26.89	8.22	4.271 ES		
1,800.00	1,799.76	1,801.00	1,800.69	6.15	6.15	-107.01	-11.17	32.14	35.58	26.89	8.69	4.095		
1,900.00	1,899.40	1,901.17	1,900.43	6.48	6.48	-105.59	-20.09	29.93	36.34	27.18	9.16	3.966		
2,000.00	1,998.78	2,001.30	1,999.87	6.82	6.82	-104.14	-31.55	27.10	37.39	27.74	9.65	3.876		
2,025.00	2,023.57	2,026.33	2,024.67	6.91	6.91	-103.78	-34.81	26.29	37.70	27.93	9.77	3.858		
2,100.00	2,097.97	2,101.32	2,098.92	7.17	7.18	-109.88	-44.93	23.79	39.20	29.06	10.14	3.864		
2,200.00	2,197.27	2,201.19	2,197.82	7.53	7.54	-117.78	-58.43	20.45	43.10	32.44	10.65	4.046		
2,300.00	2,296.60	2,300.90	2,296.56	7.89	7.90	-125.58	-71.90	17.11	49.41	38.25	11.17	4.425		
2,400.00	2,395.91	2,400.38	2,395.07	8.26	8.27	-132.98	-85.34	13.78	58.38	46.69	11.68	4.996		
2,504.30	2,499.40	2,503.82	2,497.50	8.64	8.66	-139.75	-99.32	10.32	70.67	58.44	12.23	5.780		
2,600.00	2,594.28	2,598.55	2,591.31	9.00	9.03	-136.38	-112.12	7.16	83.48	70.75	12.72	6.560		
2,700.00	2,693.42	2,697.54	2,689.34	9.38	9.41	-133.81	-125.50	3.85	97.08	83.83	13.25	7.327		
2,800.00	2,792.57	2,796.53	2,787.36	9.75	9.79	-131.88	-138.87	0.53	110.83	97.05	13.78	8.044		
2,900.00	2,891.71	2,895.52	2,885.39	10.14	10.18	-130.38	-152.25	-2.78	124.68	110.37	14.31	8.713		
3,000.00	2,990.86	2,994.73	2,983.65	10.52	10.57	-129.18	-165.63	-6.09	138.58	123.73	14.85	9.335		
3,100.00	3,090.00	3,095.42	3,083.57	10.91	10.96	-128.78	-177.56	-9.04	151.83	136.44	15.39	9.864		
3,200.00	3,189.15	3,196.37	3,184.06	11.30	11.34	-129.29	-186.95	-11.37	164.01	148.07	15.93	10.293		
3,300.00	3,288.29	3,297.45	3,284.89	11.69	11.72	-130.54	-193.78	-13.05	175.17	158.70	16.47	10.636		
3,400.00	3,387.44	3,398.52	3,385.87	12.08	12.08	-132.41	-198.00	-14.10	185.45	168.46	17.00	10.911		
3,500.00	3,486.58	3,499.44	3,486.77	12.48	12.43	-134.82	-199.64	-14.50	195.06	177.55	17.51	11.138		
3,600.00	3,585.72	3,598.80	3,586.12	12.87	12.76	-137.40	-199.66	-14.51	204.52	186.50	18.01	11.354		
3,700.00	3,684.87	3,697.94	3,685.27	13.27	13.09	-139.76	-199.66	-14.51	214.34	195.83	18.51	11.580		
3,800.00	3,784.01	3,797.09	3,784.41	13.67	13.42	-141.90	-199.66	-14.51	224.50	205.49	19.00	11.813		
3,900.00	3,883.16	3,896.23	3,883.56	14.07	13.76	-143.86	-199.66	-14.51	234.94	215.44	19.50	12.050		
4,000.00	3,982.30	3,995.38	3,982.70	14.47	14.09	-145.65	-199.66	-14.51	245.63	225.64	19.99	12.288		
4,100.00	4,081.45	4,094.52	4,081.85	14.87	14.42	-147.29	-199.66	-14.51	256.54	236.06	20.48	12.525		
4,200.00	4,180.59	4,193.67	4,180.99	15.27	14.76	-148.80	-199.66	-14.51	267.64	246.67	20.97	12.760		
4,300.00	4,279.74	4,292.81	4,280.14	15.67	15.10	-150.19	-199.66	-14.51	278.91	257.44	21.47	12.992		
4,400.00	4,378.88	4,391.95	4,379.28	16.08	15.44	-151.46	-199.66	-14.51	290.33	268.37	21.96	13.221		
4,500.00	4,478.03	4,491.10	4,478.43	16.48	15.77	-152.65	-199.66	-14.51	301.88	279.43	22.45	13.445		
4,600.00	4,577.17	4,590.24	4,577.57	16.89	16.11	-153.74	-199.66	-14.51	313.55	290.61	22.95	13.664		
4,700.00	4,676.32	4,689.39	4,676.72	17.29	16.45	-154.75	-199.66	-14.51	325.33	301.89	23.44	13.879		
4,800.00	4,775.46	4,788.53	4,775.86	17.70	16.79	-155.70	-199.66	-14.51	337.20	313.26	23.94	14.088		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 802H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
4,900.00	4,874.60	4,887.68	4,875.00	18.10	17.14	-156.58	-199.66	-14.51	349.15	324.72	24.43	14.292				
5,000.00	4,973.75	4,986.82	4,974.15	18.51	17.48	-157.40	-199.66	-14.51	361.18	336.26	24.93	14.490				
5,100.00	5,072.89	5,085.97	5,073.29	18.92	17.82	-158.17	-199.66	-14.51	373.28	347.86	25.42	14.683				
5,200.00	5,172.04	5,185.11	5,172.44	19.32	18.16	-158.89	-199.66	-14.51	385.44	359.52	25.92	14.871				
5,300.00	5,271.18	5,284.26	5,271.58	19.73	18.51	-159.57	-199.66	-14.51	397.66	371.24	26.42	15.054				
5,400.00	5,370.33	5,383.40	5,370.73	20.14	18.85	-160.20	-199.66	-14.51	409.93	383.01	26.91	15.231				
5,500.00	5,469.47	5,482.54	5,469.87	20.55	19.19	-160.80	-199.66	-14.51	422.24	394.83	27.41	15.404				
5,600.00	5,568.62	5,581.69	5,569.02	20.96	19.54	-161.37	-199.66	-14.51	434.60	406.69	27.91	15.572				
5,700.00	5,667.76	5,680.83	5,668.16	21.37	19.88	-161.90	-199.66	-14.51	447.00	418.59	28.41	15.735				
5,800.00	5,766.91	5,779.98	5,767.31	21.78	20.23	-162.41	-199.66	-14.51	459.43	430.52	28.91	15.893				
5,900.00	5,866.05	5,879.12	5,866.45	22.19	20.58	-162.89	-199.66	-14.51	471.90	442.49	29.41	16.047				
6,000.00	5,965.19	5,978.27	5,965.59	22.59	20.92	-163.34	-199.66	-14.51	484.40	454.49	29.91	16.197				
6,100.00	6,064.34	6,077.41	6,064.74	23.01	21.27	-163.77	-199.66	-14.51	496.92	466.52	30.41	16.342				
6,200.00	6,163.48	6,176.56	6,163.88	23.42	21.61	-164.18	-199.66	-14.51	509.48	478.57	30.91	16.483				
6,300.00	6,262.63	6,275.70	6,263.03	23.83	21.96	-164.57	-199.66	-14.51	522.05	490.64	31.41	16.621				
6,400.00	6,361.77	6,374.85	6,362.17	24.24	22.31	-164.94	-199.66	-14.51	534.65	502.74	31.91	16.754				
6,500.00	6,460.92	6,473.99	6,461.32	24.65	22.66	-165.30	-199.66	-14.51	547.28	514.86	32.41	16.884				
6,600.00	6,560.06	6,573.14	6,560.46	25.06	23.00	-165.64	-199.66	-14.51	559.92	527.00	32.92	17.011				
6,700.00	6,659.21	6,672.28	6,659.61	25.47	23.35	-165.96	-199.66	-14.51	572.58	539.16	33.42	17.134				
6,800.00	6,758.35	6,771.42	6,758.75	25.88	23.70	-166.27	-199.66	-14.51	585.25	551.33	33.92	17.254				
6,900.00	6,857.50	6,870.57	6,857.90	26.29	24.05	-166.57	-199.66	-14.51	597.95	563.52	34.42	17.370				
7,000.00	6,956.64	6,969.71	6,957.04	26.70	24.40	-166.85	-199.66	-14.51	610.66	575.73	34.93	17.484				
7,100.00	7,055.78	7,068.86	7,056.18	27.12	24.75	-167.12	-199.66	-14.51	623.38	587.95	35.43	17.594				
7,141.02	7,096.45	7,109.52	7,096.85	27.29	24.89	-167.23	-199.66	-14.51	628.60	592.96	35.64	17.639				
7,200.00	7,154.99	7,168.06	7,155.39	27.53	25.09	-167.40	-199.66	-14.51	635.67	599.74	35.93	17.690				
7,300.00	7,254.46	7,267.53	7,254.86	27.92	25.45	-167.63	-199.66	-14.51	645.65	609.21	36.44	17.720				
7,400.00	7,354.17	7,367.24	7,354.57	28.30	25.80	-167.80	-199.66	-14.51	653.09	616.15	36.94	17.680				
7,500.00	7,454.04	7,467.11	7,454.44	28.66	26.15	-167.91	-199.66	-14.51	657.98	620.54	37.44	17.575				
7,600.00	7,554.01	7,567.08	7,554.41	29.00	26.50	-167.96	-199.66	-14.51	660.30	622.37	37.94	17.406				
7,640.99	7,595.00	7,608.07	7,595.40	29.13	26.65	89.46	-199.66	-14.51	660.52	622.38	38.14	17.320				
7,700.00	7,654.01	7,667.08	7,654.41	29.32	26.85	89.46	-199.66	-14.51	660.52	622.10	38.42	17.191				
7,800.00	7,754.01	7,767.08	7,754.41	29.64	27.21	89.46	-199.66	-14.51	660.52	621.61	38.91	16.976				
7,900.00	7,854.01	7,867.08	7,854.41	29.95	27.56	89.46	-199.66	-14.51	660.52	621.12	39.39	16.767				
8,000.00	7,954.01	7,967.08	7,954.41	30.27	27.91	89.46	-199.66	-14.51	660.52	620.64	39.88	16.562				
8,100.00	8,054.01	8,067.08	8,054.41	30.59	28.27	89.46	-199.66	-14.51	660.52	620.15	40.37	16.362				
8,200.00	8,154.01	8,167.08	8,154.41	30.91	28.62	89.46	-199.66	-14.51	660.52	619.66	40.86	16.167				
8,300.00	8,254.01	8,267.08	8,254.41	31.24	28.97	89.46	-199.66	-14.51	660.52	619.18	41.34	15.976				
8,400.00	8,354.01	8,367.08	8,354.41	31.56	29.33	89.46	-199.66	-14.51	660.52	618.69	41.83	15.790				
8,500.00	8,454.01	8,467.08	8,454.41	31.88	29.68	89.46	-199.66	-14.51	660.52	618.20	42.32	15.607				
8,600.00	8,554.01	8,567.08	8,554.41	32.21	30.04	89.46	-199.66	-14.51	660.52	617.71	42.81	15.429				
8,700.00	8,654.01	8,667.08	8,654.41	32.53	30.39	89.46	-199.66	-14.51	660.52	617.22	43.30	15.254				
8,800.00	8,754.01	8,767.08	8,754.41	32.86	30.74	89.46	-199.66	-14.51	660.52	616.73	43.79	15.084				
8,900.00	8,854.01	8,867.08	8,854.41	33.18	31.10	89.46	-199.66	-14.51	660.52	616.24	44.28	14.917				
9,000.00	8,954.01	8,967.08	8,954.41	33.51	31.45	89.46	-199.66	-14.51	660.52	615.75	44.77	14.753				
9,100.00	9,054.01	9,067.08	9,054.41	33.84	31.81	89.46	-199.66	-14.51	660.52	615.26	45.26	14.593				
9,200.00	9,154.01	9,167.08	9,154.41	34.16	32.16	89.46	-199.66	-14.51	660.52	614.77	45.75	14.436				
9,300.00	9,254.01	9,267.08	9,254.41	34.49	32.52	89.46	-199.66	-14.51	660.52	614.27	46.25	14.283				
9,400.00	9,354.01	9,367.08	9,354.41	34.82	32.87	89.46	-199.66	-14.51	660.52	613.78	46.74	14.132				
9,500.00	9,454.01	9,467.08	9,454.41	35.15	33.22	89.46	-199.66	-14.51	660.52	613.29	47.23	13.985				
9,600.00	9,554.01	9,567.08	9,554.41	35.48	33.58	89.46	-199.66	-14.51	660.52	612.80	47.72	13.841				
9,700.00	9,654.01	9,667.08	9,654.41	35.81	33.93	89.46	-199.66	-14.51	660.52	612.30	48.22	13.699				
9,800.00	9,754.01	9,767.08	9,754.41	36.14	34.29	89.46	-199.66	-14.51	660.52	611.81	48.71	13.560				

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 802H - OH - Plan #1		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,900.00	9,854.01	9,867.08	9,854.41	36.48	34.64	89.46	-199.66	-14.51	660.52	611.32	49.20	13.424				
10,000.00	9,954.01	9,967.08	9,954.41	36.81	35.00	89.46	-199.66	-14.51	660.52	610.82	49.70	13.291				
10,100.00	10,054.01	10,067.08	10,054.41	37.14	35.36	89.46	-199.66	-14.51	660.52	610.33	50.19	13.160				
10,200.00	10,154.01	10,167.08	10,154.41	37.47	35.71	89.46	-199.66	-14.51	660.52	609.83	50.69	13.032				
10,300.00	10,254.01	10,267.08	10,254.41	37.81	36.07	89.46	-199.66	-14.51	660.52	609.34	51.18	12.906				
10,400.00	10,354.01	10,367.08	10,354.41	38.14	36.42	89.46	-199.66	-14.51	660.52	608.84	51.68	12.782				
10,500.00	10,454.01	10,467.08	10,454.41	38.48	36.78	89.46	-199.66	-14.51	660.52	608.35	52.17	12.661				
10,600.00	10,554.01	10,567.08	10,554.41	38.81	37.13	89.46	-199.66	-14.51	660.52	607.85	52.67	12.542				
10,700.00	10,654.01	10,667.08	10,654.41	39.15	37.49	89.46	-199.66	-14.51	660.52	607.36	53.16	12.425				
10,800.00	10,754.01	10,767.08	10,754.41	39.48	37.84	89.46	-199.66	-14.51	660.52	606.86	53.66	12.310				
10,900.00	10,854.01	10,867.08	10,854.41	39.82	38.20	89.46	-199.66	-14.51	660.52	606.37	54.15	12.197				
11,000.00	10,954.01	10,967.08	10,954.41	40.16	38.56	89.46	-199.66	-14.51	660.52	605.87	54.65	12.086				
11,100.00	11,054.01	11,067.08	11,054.41	40.49	38.91	89.46	-199.66	-14.51	660.52	605.37	55.15	11.978				
11,200.00	11,154.01	11,167.08	11,154.41	40.83	39.27	89.46	-199.66	-14.51	660.52	604.88	55.64	11.871				
11,300.00	11,254.01	11,267.08	11,254.41	41.17	39.62	89.46	-199.66	-14.51	660.52	604.38	56.14	11.766				
11,400.00	11,354.01	11,367.08	11,354.41	41.51	39.98	89.46	-199.66	-14.51	660.52	603.88	56.64	11.662				
11,500.00	11,454.01	11,467.08	11,454.41	41.85	40.33	89.46	-199.66	-14.51	660.52	603.39	57.13	11.561				
11,600.00	11,554.01	11,567.08	11,554.41	42.18	40.69	89.46	-199.66	-14.51	660.52	602.89	57.63	11.461				
11,700.00	11,654.01	11,667.08	11,654.41	42.52	41.05	89.46	-199.66	-14.51	660.52	602.39	58.13	11.363				
11,800.00	11,754.01	11,767.08	11,754.41	42.86	41.40	89.46	-199.66	-14.51	660.52	601.89	58.63	11.267				
11,865.03	11,819.04	11,832.11	11,819.44	43.08	41.63	89.46	-199.66	-14.51	660.52	601.57	58.95	11.205				
11,900.00	11,853.99	11,867.06	11,854.39	43.20	41.76	103.82	-199.66	-14.51	660.77	601.65	59.12	11.176				
11,950.00	11,903.70	11,916.77	11,904.10	43.37	41.94	104.14	-199.66	-14.51	662.04	602.67	59.37	11.150				
12,000.00	11,952.76	11,964.51	11,951.83	43.54	42.10	104.62	-199.17	-14.48	664.49	604.87	59.61	11.146				
12,050.00	12,000.81	12,011.25	11,998.40	43.70	42.27	105.00	-195.33	-14.25	668.32	608.47	59.84	11.167				
12,100.00	12,047.48	12,058.58	12,045.08	43.85	42.42	105.25	-187.60	-13.77	673.54	613.47	60.07	11.212				
12,150.00	12,092.40	12,106.51	12,091.53	43.99	42.58	105.38	-175.88	-13.06	680.11	619.82	60.29	11.281				
12,200.00	12,135.25	12,155.03	12,137.39	44.13	42.73	105.38	-160.12	-12.09	687.98	627.48	60.50	11.371				
12,250.00	12,175.69	12,204.15	12,182.29	44.25	42.87	105.26	-140.27	-10.88	697.09	636.38	60.71	11.483				
12,300.00	12,213.41	12,253.88	12,225.84	44.37	43.01	105.00	-116.34	-9.41	707.35	646.45	60.90	11.615				
12,350.00	12,248.14	12,304.23	12,267.66	44.48	43.14	104.61	-88.37	-7.70	718.69	657.60	61.08	11.766				
12,400.00	12,279.60	12,355.23	12,307.33	44.58	43.27	104.10	-56.41	-5.75	731.00	669.75	61.26	11.934				
12,450.00	12,307.55	12,406.89	12,344.46	44.68	43.40	103.48	-20.58	-3.56	744.20	682.78	61.42	12.117				
12,500.00	12,331.79	12,459.25	12,378.63	44.77	43.52	102.74	18.99	-1.14	758.17	696.60	61.57	12.314				
12,550.00	12,352.12	12,512.34	12,409.45	44.88	43.65	101.90	62.12	1.50	772.80	711.09	61.72	12.522				
12,600.00	12,368.39	12,566.22	12,436.49	44.99	43.78	100.96	108.61	4.34	787.97	726.12	61.86	12.738				
12,650.00	12,380.49	12,620.92	12,459.36	45.12	43.90	99.94	158.19	7.38	803.57	741.57	62.00	12.961				
12,700.00	12,388.31	12,676.51	12,477.63	45.25	44.03	98.84	210.56	10.58	819.45	757.31	62.14	13.187				
12,750.00	12,391.80	12,733.02	12,490.91	45.41	44.17	97.69	265.36	13.93	835.50	773.21	62.29	13.413				
12,765.03	12,392.00	12,750.19	12,493.86	45.45	44.21	97.33	282.25	14.97	840.33	778.00	62.34	13.480				
12,800.00	12,392.00	12,790.72	12,498.82	45.57	44.30	97.54	322.39	17.42	851.24	788.79	62.46	13.629				
12,900.00	12,392.00	12,920.42	12,501.00	45.95	44.64	97.30	451.84	24.23	878.21	815.27	62.95	13.951				
13,000.00	12,392.00	13,057.50	12,501.00	46.37	45.08	97.04	588.91	25.53	897.33	833.74	63.60	14.109				
13,100.00	12,392.00	13,156.53	12,501.00	46.85	45.48	96.90	687.93	24.44	911.10	846.91	64.19	14.193				
13,200.00	12,392.00	13,255.99	12,501.00	47.36	45.93	96.79	787.38	23.34	921.43	856.57	64.86	14.207				
13,300.00	12,392.00	13,355.74	12,501.00	47.91	46.43	96.73	887.13	22.25	928.30	862.71	65.59	14.152				
13,400.00	12,392.00	13,455.68	12,501.00	48.49	46.99	96.69	987.06	21.15	931.72	865.32	66.40	14.032				
13,448.51	12,392.00	13,504.18	12,501.00	48.78	47.28	96.69	1,035.56	20.61	932.13	865.32	66.81	13.951				
13,500.00	12,392.00	13,555.67	12,501.00	49.10	47.60	96.69	1,087.05	20.05	932.13	864.86	67.27	13.856				
13,600.00	12,392.00	13,655.67	12,501.00	49.75	48.26	96.69	1,187.04	18.95	932.13	863.92	68.21	13.665				
13,700.00	12,392.00	13,755.67	12,501.00	50.45	48.97	96.69	1,287.04	17.85	932.13	862.91	69.22	13.466				
13,800.00	12,392.00	13,855.67	12,501.00	51.20	49.72	96.69	1,387.03	16.75	932.13	861.84	70.29	13.262				

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 802H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	12,392.00	13,955.67	12,501.00	51.98	50.51	96.69	1,487.03	15.65	932.13	860.72	71.41	13.052		
14,000.00	12,392.00	14,055.67	12,501.00	52.81	51.34	96.69	1,587.02	14.55	932.13	859.53	72.60	12.839		
14,100.00	12,392.00	14,155.67	12,501.00	53.68	52.22	96.69	1,687.01	13.45	932.13	858.30	73.84	12.624		
14,200.00	12,392.00	14,255.67	12,501.00	54.58	53.13	96.69	1,787.01	12.35	932.13	857.01	75.13	12.407		
14,300.00	12,392.00	14,355.67	12,501.00	55.51	54.08	96.69	1,887.00	11.25	932.14	855.67	76.47	12.190		
14,400.00	12,392.00	14,455.67	12,501.00	56.48	55.05	96.69	1,986.99	10.15	932.14	854.28	77.85	11.973		
14,500.00	12,392.00	14,555.67	12,501.00	57.48	56.07	96.69	2,086.99	9.05	932.14	852.86	79.28	11.757		
14,600.00	12,392.00	14,655.67	12,501.00	58.51	57.11	96.69	2,186.98	7.95	932.14	851.38	80.75	11.543		
14,700.00	12,392.00	14,755.67	12,501.00	59.57	58.18	96.69	2,286.98	6.85	932.14	849.88	82.26	11.331		
14,800.00	12,392.00	14,855.67	12,501.00	60.65	59.27	96.69	2,386.97	5.75	932.14	848.33	83.81	11.122		
14,900.00	12,392.00	14,955.67	12,501.00	61.76	60.40	96.69	2,486.96	4.65	932.14	846.75	85.39	10.916		
15,000.00	12,392.00	15,055.67	12,501.00	62.89	61.54	96.69	2,586.96	3.55	932.14	845.13	87.01	10.713		
15,100.00	12,392.00	15,155.67	12,501.00	64.05	62.71	96.69	2,686.95	2.45	932.14	843.48	88.66	10.514		
15,200.00	12,392.00	15,255.67	12,501.00	65.23	63.90	96.69	2,786.95	1.36	932.14	841.81	90.34	10.319		
15,300.00	12,392.00	15,355.67	12,501.00	66.42	65.11	96.69	2,886.94	0.26	932.14	840.10	92.04	10.128		
15,400.00	12,392.00	15,455.67	12,501.00	67.64	66.34	96.69	2,986.93	-0.84	932.14	838.37	93.77	9.940		
15,500.00	12,392.00	15,555.67	12,501.00	68.88	67.59	96.69	3,086.93	-1.94	932.15	836.62	95.53	9.758		
15,600.00	12,392.00	15,655.67	12,501.00	70.13	68.85	96.69	3,186.92	-3.04	932.15	834.83	97.31	9.579		
15,700.00	12,392.00	15,755.67	12,501.00	71.40	70.13	96.69	3,286.92	-4.14	932.15	833.03	99.11	9.405		
15,800.00	12,392.00	15,855.67	12,501.00	72.68	71.43	96.69	3,386.91	-5.24	932.15	831.21	100.94	9.235		
15,900.00	12,392.00	15,955.67	12,501.00	73.98	72.74	96.69	3,486.90	-6.34	932.15	829.37	102.78	9.069		
16,000.00	12,392.00	16,055.67	12,501.00	75.29	74.06	96.69	3,586.90	-7.44	932.15	827.50	104.65	8.908		
16,100.00	12,392.00	16,155.67	12,501.00	76.62	75.40	96.69	3,686.89	-8.54	932.15	825.62	106.53	8.750		
16,200.00	12,392.00	16,255.67	12,501.00	77.96	76.75	96.69	3,786.89	-9.64	932.15	823.72	108.43	8.597		
16,300.00	12,392.00	16,355.67	12,501.00	79.31	78.11	96.69	3,886.88	-10.74	932.15	821.81	110.34	8.448		
16,400.00	12,392.00	16,455.67	12,501.00	80.67	79.48	96.69	3,986.87	-11.84	932.15	819.88	112.27	8.302		
16,500.00	12,392.00	16,555.67	12,501.00	82.04	80.87	96.69	4,086.87	-12.94	932.15	817.94	114.22	8.161		
16,600.00	12,392.00	16,655.67	12,501.00	83.42	82.26	96.69	4,186.86	-14.04	932.16	815.98	116.18	8.023		
16,700.00	12,392.00	16,755.67	12,501.00	84.81	83.66	96.69	4,286.86	-15.14	932.16	814.01	118.15	7.890		
16,800.00	12,392.00	16,855.67	12,501.00	86.21	85.07	96.69	4,386.85	-16.24	932.16	812.02	120.14	7.759		
16,900.00	12,392.00	16,955.67	12,501.00	87.62	86.49	96.69	4,486.84	-17.34	932.16	810.02	122.13	7.632		
17,000.00	12,392.00	17,055.67	12,501.00	89.04	87.92	96.69	4,586.84	-18.44	932.16	808.02	124.14	7.509		
17,100.00	12,392.00	17,155.67	12,501.00	90.47	89.36	96.69	4,686.83	-19.54	932.16	806.00	126.16	7.389		
17,200.00	12,392.00	17,255.67	12,501.00	91.90	90.80	96.69	4,786.83	-20.64	932.16	803.97	128.19	7.272		
17,300.00	12,392.00	17,355.67	12,501.00	93.34	92.25	96.69	4,886.82	-21.74	932.16	801.93	130.23	7.158		
17,400.00	12,392.00	17,455.67	12,501.00	94.79	93.71	96.69	4,986.81	-22.83	932.16	799.89	132.28	7.047		
17,500.00	12,392.00	17,555.67	12,501.00	96.25	95.17	96.69	5,086.81	-23.93	932.16	797.83	134.33	6.939		
17,600.00	12,392.00	17,655.67	12,501.00	97.71	96.64	96.69	5,186.80	-25.03	932.16	795.76	136.40	6.834		
17,700.00	12,392.00	17,755.67	12,501.00	99.17	98.12	96.69	5,286.80	-26.13	932.16	793.69	138.47	6.732		
17,800.00	12,392.00	17,855.67	12,501.00	100.65	99.60	96.69	5,386.79	-27.23	932.17	791.61	140.56	6.632		
17,900.00	12,392.00	17,955.67	12,501.00	102.13	101.08	96.69	5,486.78	-28.33	932.17	789.52	142.64	6.535		
18,000.00	12,392.00	18,055.67	12,501.00	103.61	102.57	96.69	5,586.78	-29.43	932.17	787.43	144.74	6.440		
18,100.00	12,392.00	18,155.67	12,501.00	105.10	104.07	96.69	5,686.77	-30.53	932.17	785.33	146.84	6.348		
18,200.00	12,392.00	18,255.67	12,501.00	106.59	105.57	96.69	5,786.77	-31.63	932.17	783.22	148.95	6.258		
18,300.00	12,392.00	18,355.67	12,501.00	108.09	107.08	96.69	5,886.76	-32.73	932.17	781.10	151.07	6.171		
18,400.00	12,392.00	18,455.67	12,501.00	109.59	108.59	96.69	5,986.75	-33.83	932.17	778.98	153.19	6.085		
18,500.00	12,392.00	18,555.67	12,501.00	111.10	110.10	96.69	6,086.75	-34.93	932.17	776.86	155.32	6.002		
18,600.00	12,392.00	18,655.67	12,501.00	112.61	111.62	96.69	6,186.74	-36.03	932.17	774.72	157.45	5.920		
18,700.00	12,392.00	18,755.67	12,501.00	114.12	113.14	96.69	6,286.74	-37.13	932.17	772.59	159.59	5.841		
18,800.00	12,392.00	18,855.67	12,501.00	115.64	114.67	96.69	6,386.73	-38.23	932.17	770.45	161.73	5.764		
18,900.00	12,392.00	18,955.67	12,501.00	117.17	116.20	96.69	6,486.72	-39.33	932.18	768.30	163.88	5.688		
19,000.00	12,392.00	19,055.67	12,501.00	118.69	117.73	96.69	6,586.72	-40.43	932.18	766.15	166.03	5.615		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 802H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,100.00	12,392.00	19,155.67	12,501.00	120.22	119.26	96.69	6,686.71	-41.53	932.18	763.99	168.19	5.543		
19,200.00	12,392.00	19,255.67	12,501.00	121.75	120.80	96.69	6,786.70	-42.63	932.18	761.83	170.35	5.472		
19,300.00	12,392.00	19,355.67	12,501.00	123.29	122.34	96.69	6,886.70	-43.73	932.18	759.67	172.51	5.404		
19,400.00	12,392.00	19,455.67	12,501.00	124.83	123.89	96.69	6,986.69	-44.83	932.18	757.50	174.68	5.336		
19,500.00	12,392.00	19,555.67	12,501.00	126.37	125.44	96.69	7,086.69	-45.93	932.18	755.33	176.85	5.271		
19,600.00	12,392.00	19,655.67	12,501.00	127.91	126.99	96.69	7,186.68	-47.02	932.18	753.15	179.03	5.207		
19,700.00	12,392.00	19,755.67	12,501.00	129.46	128.54	96.69	7,286.67	-48.12	932.18	750.97	181.21	5.144		
19,800.00	12,392.00	19,855.67	12,501.00	131.01	130.09	96.69	7,386.67	-49.22	932.18	748.79	183.40	5.083		
19,900.00	12,392.00	19,955.67	12,501.00	132.56	131.65	96.69	7,486.66	-50.32	932.18	746.60	185.58	5.023		
20,000.00	12,392.00	20,055.67	12,501.00	134.12	133.21	96.69	7,586.66	-51.42	932.19	744.41	187.77	4.964		
20,100.00	12,392.00	20,155.67	12,501.00	135.67	134.77	96.69	7,686.65	-52.52	932.19	742.22	189.97	4.907		
20,200.00	12,392.00	20,255.67	12,501.00	137.23	136.34	96.69	7,786.64	-53.62	932.19	740.03	192.16	4.851		
20,300.00	12,392.00	20,355.67	12,501.00	138.80	137.90	96.69	7,886.64	-54.72	932.19	737.83	194.36	4.796		
20,400.00	12,392.00	20,455.67	12,501.00	140.36	139.47	96.69	7,986.63	-55.82	932.19	735.63	196.56	4.742		
20,500.00	12,392.00	20,555.67	12,501.00	141.92	141.04	96.69	8,086.63	-56.92	932.19	733.42	198.77	4.690		
20,600.00	12,392.00	20,655.67	12,501.00	143.49	142.61	96.69	8,186.62	-58.02	932.19	731.22	200.97	4.638		
20,700.00	12,392.00	20,755.67	12,501.00	145.06	144.19	96.69	8,286.61	-59.12	932.19	729.01	203.18	4.588		
20,800.00	12,392.00	20,855.67	12,501.00	146.63	145.76	96.69	8,386.61	-60.22	932.19	726.80	205.39	4.539		
20,900.00	12,392.00	20,955.67	12,501.00	148.21	147.34	96.69	8,486.60	-61.32	932.19	724.58	207.61	4.490		
21,000.00	12,392.00	21,055.67	12,501.00	149.78	148.92	96.69	8,586.60	-62.42	932.19	722.37	209.83	4.443		
21,100.00	12,392.00	21,155.67	12,501.00	151.36	150.50	96.69	8,686.59	-63.52	932.19	720.15	212.04	4.396		
21,200.00	12,392.00	21,255.67	12,501.00	152.94	152.08	96.69	8,786.58	-64.62	932.20	717.93	214.27	4.351		
21,300.00	12,392.00	21,355.67	12,501.00	154.51	153.67	96.69	8,886.58	-65.72	932.20	715.71	216.49	4.306		
21,400.00	12,392.00	21,455.67	12,501.00	156.10	155.25	96.69	8,986.57	-66.82	932.20	713.49	218.71	4.262		
21,500.00	12,392.00	21,555.67	12,501.00	157.68	156.84	96.69	9,086.57	-67.92	932.20	711.26	220.94	4.219		
21,600.00	12,392.00	21,655.67	12,501.00	159.26	158.43	96.69	9,186.56	-69.02	932.20	709.03	223.17	4.177		
21,700.00	12,392.00	21,755.67	12,501.00	160.85	160.01	96.69	9,286.55	-70.12	932.20	706.80	225.40	4.136		
21,800.00	12,392.00	21,855.67	12,501.00	162.43	161.61	96.69	9,386.55	-71.21	932.20	704.57	227.63	4.095		
21,900.00	12,392.00	21,955.67	12,501.00	164.02	163.20	96.69	9,486.54	-72.31	932.20	702.34	229.86	4.055		
22,000.00	12,392.00	22,055.67	12,501.00	165.61	164.79	96.69	9,586.54	-73.41	932.20	700.11	232.10	4.016		
22,100.00	12,392.00	22,155.67	12,501.00	167.20	166.38	96.69	9,686.53	-74.51	932.20	697.87	234.33	3.978		
22,200.00	12,392.00	22,255.67	12,501.00	168.80	167.98	96.69	9,786.52	-75.61	932.20	695.63	236.57	3.940		
22,300.00	12,392.00	22,355.67	12,501.00	170.39	169.58	96.69	9,886.52	-76.71	932.21	693.39	238.81	3.904		
22,400.00	12,392.00	22,455.67	12,501.00	171.98	171.17	96.69	9,986.51	-77.81	932.21	691.15	241.05	3.867		
22,500.00	12,392.00	22,555.67	12,501.00	173.58	172.77	96.69	10,086.51	-78.91	932.21	688.91	243.30	3.832		
22,508.35	12,392.00	22,564.02	12,501.00	173.71	172.91	96.69	10,094.85	-79.00	932.21	688.72	243.48	3.829		
22,581.33	12,392.00	22,636.34	12,501.00	174.88	174.06	96.69	10,167.16	-79.80	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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	0.80	0.80	0.00	0.00	89.44	0.68	69.98	69.98					
100.00	100.00	100.80	100.80	0.13	0.13	89.44	0.68	69.98	69.98	69.80	0.18	389.936		
200.00	200.00	200.80	200.80	0.48	0.49	89.44	0.68	69.98	69.98	69.30	0.69	101.954		
300.00	300.00	300.80	300.80	0.84	0.85	89.44	0.68	69.98	69.98	68.79	1.19	58.643		
400.00	400.00	400.80	400.80	1.20	1.20	89.44	0.68	69.98	69.98	68.28	1.70	41.159		
500.00	500.00	500.80	500.80	1.56	1.56	89.44	0.68	69.98	69.98	67.78	2.21	31.706		
600.00	600.00	600.80	600.80	1.92	1.92	89.44	0.68	69.98	69.98	67.27	2.71	25.784		
700.00	700.00	700.80	700.80	2.28	2.28	89.44	0.68	69.98	69.98	66.76	3.22	21.726		
800.00	800.00	800.80	800.80	2.63	2.64	89.44	0.68	69.98	69.98	66.26	3.73	18.772		
900.00	900.00	900.80	900.80	2.99	3.00	89.44	0.68	69.98	69.98	65.75	4.24	16.525		
1,000.00	1,000.00	1,000.80	1,000.80	3.35	3.35	89.44	0.68	69.98	69.98	65.24	4.74	14.758		
1,100.00	1,100.00	1,100.80	1,100.80	3.71	3.71	89.44	0.68	69.98	69.98	64.73	5.25	13.333		
1,200.00	1,200.00	1,200.80	1,200.80	4.07	4.07	89.44	0.68	69.98	69.98	64.23	5.76	12.158		
1,300.00	1,300.00	1,300.80	1,300.80	4.43	4.43	89.44	0.68	69.98	69.98	63.72	6.26	11.174		
1,400.00	1,400.00	1,400.80	1,400.80	4.79	4.79	89.44	0.68	69.98	69.98	63.21	6.77	10.337		
1,416.40	1,416.40	1,417.20	1,417.20	4.84	4.85	89.44	0.68	69.98	69.98	63.13	6.85	10.212 CC		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.44	0.68	69.98	69.99	62.71	7.27	9.621		
1,525.00	1,525.00	1,525.34	1,525.34	5.23	5.23	89.45	0.67	70.06	70.07	62.67	7.40	9.468 ES		
1,600.00	1,600.00	1,598.96	1,598.95	5.49	5.49	-110.99	0.58	71.26	71.55	63.78	7.76	9.219		
1,700.00	1,699.94	1,696.91	1,696.82	5.82	5.82	-112.90	0.30	75.04	76.62	68.40	8.22	9.320		
1,800.00	1,799.76	1,794.39	1,794.10	6.15	6.16	-115.81	-0.18	81.29	85.40	76.73	8.68	9.841		
1,900.00	1,899.40	1,891.15	1,890.47	6.48	6.50	-119.09	-0.84	89.93	98.10	88.97	9.14	10.739		
2,000.00	1,998.78	1,986.96	1,985.65	6.82	6.84	-122.27	-1.67	100.89	114.84	105.25	9.59	11.975		
2,025.00	2,023.57	2,010.74	2,009.22	6.91	6.93	-123.01	-1.91	103.98	119.66	109.96	9.70	12.331		
2,100.00	2,097.97	2,081.69	2,079.45	7.17	7.19	-133.01	-2.67	114.06	135.57	125.53	10.04	13.499		
2,200.00	2,197.27	2,175.29	2,171.78	7.53	7.54	-146.23	-3.84	129.35	159.83	149.34	10.49	15.237		
2,300.00	2,296.60	2,270.59	2,265.49	7.89	7.91	-159.16	-5.15	146.58	186.81	175.84	10.96	17.042		
2,400.00	2,395.91	2,366.48	2,359.78	8.26	8.29	-171.09	-6.47	164.01	214.97	203.53	11.45	18.782		
2,504.30	2,499.40	2,466.05	2,457.68	8.64	8.69	-178.39	-7.85	182.10	245.60	233.65	11.95	20.555		
2,600.00	2,594.28	2,557.16	2,547.27	9.00	9.06	-179.61	-9.11	198.66	274.38	261.97	12.41	22.110		
2,700.00	2,693.42	2,652.37	2,640.88	9.38	9.45	-179.35	-10.43	215.96	304.56	291.66	12.89	23.621		
2,800.00	2,792.57	2,747.58	2,734.50	9.75	9.85	-178.50	-11.74	233.26	334.80	321.42	13.38	25.024		
2,900.00	2,891.71	2,842.79	2,828.11	10.14	10.25	-177.79	-13.06	250.56	365.11	351.24	13.87	26.330		
3,000.00	2,990.86	2,938.00	2,921.73	10.52	10.65	-177.19	-14.38	267.86	395.45	381.10	14.36	27.546		
3,100.00	3,090.00	3,033.20	3,015.34	10.91	11.06	-176.68	-15.69	285.17	425.83	410.99	14.85	28.682		
3,200.00	3,189.15	3,128.41	3,108.95	11.30	11.47	-176.23	-17.01	302.47	456.24	440.90	15.34	29.744		
3,300.00	3,288.29	3,223.62	3,202.57	11.69	11.88	-175.84	-18.33	319.77	486.67	470.84	15.83	30.740		
3,400.00	3,387.44	3,318.83	3,296.18	12.08	12.29	-175.50	-19.64	337.07	517.12	500.79	16.33	31.674		
3,500.00	3,486.58	3,414.04	3,389.80	12.48	12.71	-175.19	-20.96	354.37	547.58	530.76	16.82	32.552		
3,600.00	3,585.72	3,509.25	3,483.41	12.87	13.13	-174.92	-22.27	371.67	578.05	560.74	17.32	33.378		
3,700.00	3,684.87	3,604.46	3,577.03	13.27	13.55	-174.67	-23.59	388.97	608.54	590.73	17.82	34.158		
3,800.00	3,784.01	3,699.67	3,670.64	13.67	13.97	-174.45	-24.91	406.27	639.04	620.72	18.31	34.894		
3,900.00	3,883.16	3,794.87	3,764.25	14.07	14.39	-174.25	-26.22	423.57	669.54	650.73	18.81	35.590		
4,000.00	3,982.30	3,890.08	3,857.87	14.47	14.81	-174.06	-27.54	440.88	700.05	680.74	19.31	36.249		
4,100.00	4,081.45	3,985.29	3,951.48	14.87	15.24	-173.89	-28.86	458.18	730.57	710.75	19.81	36.875		
4,200.00	4,180.59	4,080.50	4,045.10	15.27	15.66	-173.74	-30.17	475.48	761.09	740.77	20.31	37.468		
4,300.00	4,279.74	4,175.71	4,138.71	15.67	16.09	-173.59	-31.49	492.78	791.61	770.80	20.81	38.032		
4,400.00	4,378.88	4,270.92	4,232.33	16.08	16.51	-173.46	-32.81	510.08	822.14	800.83	21.32	38.569		
4,500.00	4,478.03	4,366.13	4,325.94	16.48	16.94	-173.33	-34.12	527.38	852.68	830.86	21.82	39.081		
4,600.00	4,577.17	4,461.34	4,419.55	16.89	17.37	-173.22	-35.44	544.68	883.22	860.89	22.32	39.569		
4,700.00	4,676.32	4,556.54	4,513.17	17.29	17.80	-173.11	-36.76	561.98	913.76	890.93	22.82	40.034		
4,800.00	4,775.46	4,651.75	4,606.78	17.70	18.23	-173.01	-38.07	579.28	944.30	920.97	23.33	40.479		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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				
4,900.00	4,874.60	4,746.96	4,700.40	18.10	18.66	-172.92	-39.39	596.59	974.84	951.01	23.83	40.905				
5,000.00	4,973.75	4,842.17	4,794.01	18.51	19.09	-172.83	-40.70	613.89	1,005.39	981.06	24.34	41.312				
5,100.00	5,072.89	4,937.38	4,887.63	18.92	19.52	-172.75	-42.02	631.19	1,035.94	1,011.10	24.84	41.703				
5,200.00	5,172.04	5,032.59	4,981.24	19.32	19.95	-172.67	-43.34	648.49	1,066.49	1,041.15	25.35	42.077				
5,300.00	5,271.18	5,127.80	5,074.85	19.73	20.39	-172.59	-44.65	665.79	1,097.05	1,071.20	25.85	42.436				
5,400.00	5,370.33	5,223.00	5,168.47	20.14	20.82	-172.52	-45.97	683.09	1,127.60	1,101.25	26.36	42.781				
5,500.00	5,469.47	5,318.21	5,262.08	20.55	21.25	-172.46	-47.29	700.39	1,158.16	1,131.30	26.86	43.113				
5,600.00	5,568.62	5,413.42	5,355.70	20.96	21.69	-172.39	-48.60	717.69	1,188.72	1,161.35	27.37	43.432				
5,700.00	5,667.76	5,508.63	5,449.31	21.37	22.12	-172.33	-49.92	735.00	1,219.28	1,191.40	27.88	43.739				
5,800.00	5,766.91	5,603.84	5,542.93	21.78	22.56	-172.28	-51.24	752.30	1,249.84	1,221.45	28.38	44.034				
5,900.00	5,866.05	5,699.05	5,636.54	22.19	22.99	-172.22	-52.55	769.60	1,280.40	1,251.51	28.89	44.319				
6,000.00	5,965.19	5,794.26	5,730.15	22.59	23.42	-172.17	-53.87	786.90	1,310.96	1,281.56	29.40	44.594				
6,100.00	6,064.34	5,889.47	5,823.77	23.01	23.86	-172.12	-55.18	804.20	1,341.52	1,311.62	29.91	44.859				
6,200.00	6,163.48	5,984.67	5,917.38	23.42	24.30	-172.07	-56.50	821.50	1,372.09	1,341.68	30.41	45.115				
6,300.00	6,262.63	6,079.88	6,011.00	23.83	24.73	-172.03	-57.82	838.80	1,402.65	1,371.73	30.92	45.362				
6,400.00	6,361.77	6,175.09	6,104.61	24.24	25.17	-171.99	-59.13	856.10	1,433.22	1,401.79	31.43	45.601				
6,500.00	6,460.92	6,270.30	6,198.23	24.65	25.60	-171.94	-60.45	873.40	1,463.79	1,431.85	31.94	45.832				
6,600.00	6,560.06	6,365.51	6,291.84	25.06	26.04	-171.90	-61.77	890.71	1,494.35	1,461.91	32.45	46.055				
6,700.00	6,659.21	6,460.72	6,385.45	25.47	26.48	-171.87	-63.08	908.01	1,524.92	1,491.96	32.96	46.272				
6,800.00	6,758.35	6,555.93	6,479.07	25.88	26.91	-171.83	-64.40	925.31	1,555.49	1,522.02	33.47	46.481				
6,900.00	6,857.50	6,713.89	6,634.91	26.29	27.61	-171.79	-66.35	951.00	1,584.27	1,549.97	34.30	46.192				
7,000.00	6,956.64	6,878.98	6,798.76	26.70	28.28	-171.79	-67.87	970.96	1,608.99	1,573.89	35.10	45.836				
7,100.00	7,055.78	7,047.41	6,966.67	27.12	28.90	-171.83	-68.87	984.04	1,629.50	1,593.65	35.86	45.443				
7,141.02	7,096.45	7,117.32	7,036.51	27.29	29.14	-171.86	-69.12	987.29	1,636.68	1,600.52	36.15	45.272				
7,200.00	7,154.99	7,218.70	7,137.85	27.53	29.47	-171.93	-69.30	989.75	1,645.26	1,608.70	36.56	45.006				
7,300.00	7,254.46	7,336.11	7,255.26	27.92	29.83	-172.00	-69.32	989.98	1,655.51	1,618.42	37.09	44.640				
7,400.00	7,354.17	7,435.82	7,354.97	28.30	30.12	-172.06	-69.32	989.98	1,663.05	1,625.47	37.57	44.260				
7,500.00	7,454.04	7,535.69	7,454.84	28.66	30.43	-172.09	-69.32	989.98	1,668.00	1,629.93	38.06	43.824				
7,600.00	7,554.01	7,635.66	7,554.81	29.00	30.73	-172.11	-69.32	989.98	1,670.35	1,631.81	38.55	43.335				
7,640.99	7,595.00	7,676.65	7,595.80	29.13	30.85	85.31	-69.32	989.98	1,670.57	1,631.83	38.74	43.122				
7,700.00	7,654.01	7,735.66	7,654.81	29.32	31.03	85.31	-69.32	989.98	1,670.57	1,631.55	39.02	42.814				
7,800.00	7,754.01	7,835.66	7,754.81	29.64	31.34	85.31	-69.32	989.98	1,670.57	1,631.08	39.49	42.301				
7,900.00	7,854.01	7,935.66	7,854.81	29.95	31.64	85.31	-69.32	989.98	1,670.57	1,630.61	39.97	41.800				
8,000.00	7,954.01	8,035.66	7,954.81	30.27	31.95	85.31	-69.32	989.98	1,670.57	1,630.13	40.44	41.310				
8,100.00	8,054.01	8,135.66	8,054.81	30.59	32.26	85.31	-69.32	989.98	1,670.57	1,629.66	40.92	40.830				
8,200.00	8,154.01	8,235.66	8,154.81	30.91	32.57	85.31	-69.32	989.98	1,670.57	1,629.18	41.39	40.361				
8,300.00	8,254.01	8,335.66	8,254.81	31.24	32.88	85.31	-69.32	989.98	1,670.57	1,628.71	41.87	39.901				
8,400.00	8,354.01	8,435.66	8,354.81	31.56	33.19	85.31	-69.32	989.98	1,670.57	1,628.23	42.34	39.452				
8,500.00	8,454.01	8,535.66	8,454.81	31.88	33.50	85.31	-69.32	989.98	1,670.57	1,627.75	42.82	39.011				
8,600.00	8,554.01	8,635.66	8,554.81	32.21	33.82	85.31	-69.32	989.98	1,670.57	1,627.27	43.30	38.580				
8,700.00	8,654.01	8,735.66	8,654.81	32.53	34.13	85.31	-69.32	989.98	1,670.57	1,626.79	43.78	38.158				
8,800.00	8,754.01	8,835.66	8,754.81	32.86	34.45	85.31	-69.32	989.98	1,670.57	1,626.31	44.26	37.744				
8,900.00	8,854.01	8,935.66	8,854.81	33.18	34.76	85.31	-69.32	989.98	1,670.57	1,625.83	44.74	37.339				
9,000.00	8,954.01	9,035.66	8,954.81	33.51	35.08	85.31	-69.32	989.98	1,670.57	1,625.35	45.22	36.941				
9,100.00	9,054.01	9,135.66	9,054.81	33.84	35.40	85.31	-69.32	989.98	1,670.57	1,624.87	45.70	36.552				
9,200.00	9,154.01	9,235.66	9,154.81	34.16	35.72	85.31	-69.32	989.98	1,670.57	1,624.39	46.19	36.171				
9,300.00	9,254.01	9,335.66	9,254.81	34.49	36.03	85.31	-69.32	989.98	1,670.57	1,623.90	46.67	35.796				
9,400.00	9,354.01	9,435.66	9,354.81	34.82	36.35	85.31	-69.32	989.98	1,670.57	1,623.42	47.15	35.430				
9,500.00	9,454.01	9,535.66	9,454.81	35.15	36.68	85.31	-69.32	989.98	1,670.57	1,622.94	47.64	35.070				
9,600.00	9,554.01	9,635.66	9,554.81	35.48	37.00	85.31	-69.32	989.98	1,670.57	1,622.45	48.12	34.717				
9,700.00	9,654.01	9,735.66	9,654.81	35.81	37.32	85.31	-69.32	989.98	1,670.57	1,621.97	48.60	34.371				
9,800.00	9,754.01	9,835.66	9,754.81	36.14	37.64	85.31	-69.32	989.98	1,670.57	1,621.48	49.09	34.031				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	9,854.01	9,935.66	9,854.81	36.48	37.96	85.31	-69.32	989.98	1,670.57	1,621.00	49.57	33.698		
10,000.00	9,954.01	10,035.66	9,954.81	36.81	38.29	85.31	-69.32	989.98	1,670.57	1,620.51	50.06	33.371		
10,100.00	10,054.01	10,135.66	10,054.81	37.14	38.61	85.31	-69.32	989.98	1,670.57	1,620.03	50.55	33.050		
10,200.00	10,154.01	10,235.66	10,154.81	37.47	38.94	85.31	-69.32	989.98	1,670.57	1,619.54	51.03	32.735		
10,300.00	10,254.01	10,335.66	10,254.81	37.81	39.26	85.31	-69.32	989.98	1,670.57	1,619.05	51.52	32.425		
10,400.00	10,354.01	10,435.66	10,354.81	38.14	39.59	85.31	-69.32	989.98	1,670.57	1,618.56	52.01	32.121		
10,500.00	10,454.01	10,535.66	10,454.81	38.48	39.92	85.31	-69.32	989.98	1,670.57	1,618.08	52.50	31.823		
10,600.00	10,554.01	10,635.66	10,554.81	38.81	40.24	85.31	-69.32	989.98	1,670.57	1,617.59	52.98	31.529		
10,700.00	10,654.01	10,735.66	10,654.81	39.15	40.57	85.31	-69.32	989.98	1,670.57	1,617.10	53.47	31.241		
10,800.00	10,754.01	10,835.66	10,754.81	39.48	40.90	85.31	-69.32	989.98	1,670.57	1,616.61	53.96	30.958		
10,900.00	10,854.01	10,935.66	10,854.81	39.82	41.23	85.31	-69.32	989.98	1,670.57	1,616.12	54.45	30.680		
11,000.00	10,954.01	11,035.66	10,954.81	40.16	41.56	85.31	-69.32	989.98	1,670.57	1,615.63	54.94	30.407		
11,100.00	11,054.01	11,135.66	11,054.81	40.49	41.89	85.31	-69.32	989.98	1,670.57	1,615.14	55.43	30.138		
11,200.00	11,154.01	11,235.66	11,154.81	40.83	42.22	85.31	-69.32	989.98	1,670.57	1,614.65	55.92	29.874		
11,300.00	11,254.01	11,335.66	11,254.81	41.17	42.55	85.31	-69.32	989.98	1,670.57	1,614.16	56.41	29.614		
11,400.00	11,354.01	11,435.66	11,354.81	41.51	42.88	85.31	-69.32	989.98	1,670.57	1,613.67	56.90	29.358		
11,500.00	11,454.01	11,535.66	11,454.81	41.85	43.21	85.31	-69.32	989.98	1,670.57	1,613.18	57.39	29.107		
11,600.00	11,554.01	11,635.66	11,554.81	42.18	43.54	85.31	-69.32	989.98	1,670.57	1,612.69	57.89	28.860		
11,700.00	11,654.01	11,735.66	11,654.81	42.52	43.88	85.31	-69.32	989.98	1,670.57	1,612.20	58.38	28.617		
11,800.00	11,754.01	11,835.66	11,754.81	42.86	44.21	85.31	-69.32	989.98	1,670.57	1,611.70	58.87	28.378		
11,865.03	11,819.04	11,900.69	11,819.84	43.08	44.43	85.31	-69.32	989.98	1,670.57	1,611.38	59.19	28.225		
11,900.00	11,853.99	11,935.47	11,854.62	43.20	44.54	99.63	-69.31	989.98	1,670.75	1,611.39	59.36	28.146		
11,950.00	11,903.70	11,982.50	11,901.58	43.37	44.70	99.63	-67.18	989.85	1,671.68	1,612.08	59.59	28.051		
12,000.00	11,952.76	12,029.72	11,948.41	43.54	44.85	99.56	-61.17	989.50	1,673.42	1,613.60	59.82	27.973		
12,050.00	12,000.81	12,077.14	11,994.77	43.70	44.99	99.41	-51.29	988.91	1,675.97	1,615.93	60.04	27.912		
12,100.00	12,047.48	12,124.77	12,040.35	43.85	45.13	99.19	-37.55	988.09	1,679.31	1,619.05	60.26	27.868		
12,150.00	12,092.40	12,172.61	12,084.82	43.99	45.27	98.90	-19.99	987.05	1,683.40	1,622.94	60.47	27.841		
12,200.00	12,135.25	12,220.66	12,127.86	44.13	45.39	98.54	1.31	985.78	1,688.23	1,627.56	60.67	27.828		
12,250.00	12,175.69	12,268.93	12,169.14	44.25	45.50	98.12	26.26	984.30	1,693.75	1,632.89	60.86	27.830		
12,300.00	12,213.41	12,317.43	12,208.36	44.37	45.61	97.63	54.73	982.61	1,699.93	1,638.88	61.05	27.846		
12,350.00	12,248.14	12,366.18	12,245.19	44.48	45.70	97.09	86.57	980.72	1,706.71	1,645.47	61.23	27.873		
12,400.00	12,279.60	12,415.17	12,279.35	44.58	45.78	96.49	121.62	978.64	1,714.04	1,652.63	61.42	27.909		
12,450.00	12,307.55	12,464.44	12,310.55	44.68	45.85	95.84	159.65	976.38	1,721.88	1,660.28	61.60	27.955		
12,500.00	12,331.79	12,513.99	12,338.52	44.77	45.91	95.15	200.47	973.95	1,730.16	1,668.38	61.78	28.007		
12,550.00	12,352.12	12,563.84	12,362.98	44.88	45.97	94.41	243.82	971.38	1,738.82	1,676.86	61.96	28.064		
12,600.00	12,368.39	12,614.02	12,383.70	44.99	46.02	93.65	289.42	968.67	1,747.79	1,685.64	62.14	28.125		
12,650.00	12,380.49	12,664.55	12,400.45	45.12	46.07	92.86	336.99	965.84	1,757.00	1,694.67	62.33	28.188		
12,700.00	12,388.31	12,715.45	12,413.00	45.25	46.13	92.05	386.21	962.92	1,766.39	1,703.87	62.52	28.252		
12,750.00	12,391.80	12,766.74	12,421.18	45.41	46.19	91.23	436.74	959.91	1,775.88	1,713.17	62.72	28.316		
12,765.03	12,392.00	12,782.24	12,422.76	45.45	46.21	90.98	452.13	959.00	1,778.75	1,715.97	62.78	28.335		
12,800.00	12,392.00	12,818.53	12,424.82	45.57	46.27	91.04	488.30	956.85	1,785.18	1,722.27	62.92	28.373		
12,900.00	12,392.00	12,885.17	12,425.00	45.95	46.40	91.04	554.84	953.38	1,801.95	1,738.66	63.29	28.473		
13,000.00	12,392.00	12,945.73	12,425.00	46.37	46.55	91.03	615.37	951.53	1,817.33	1,753.64	63.69	28.533		
13,100.00	12,392.00	13,028.53	12,425.00	46.85	46.80	91.02	698.16	950.50	1,831.01	1,766.79	64.22	28.512		
13,200.00	12,392.00	13,127.98	12,425.00	47.36	47.18	91.01	797.61	949.40	1,841.41	1,776.54	64.87	28.388		
13,300.00	12,392.00	13,227.74	12,425.00	47.91	47.62	91.00	897.36	948.31	1,848.33	1,782.74	65.59	28.180		
13,400.00	12,392.00	13,327.67	12,425.00	48.49	48.13	91.00	997.29	947.20	1,851.76	1,785.38	66.38	27.895		
13,448.51	12,392.00	13,376.18	12,425.00	48.78	48.39	91.00	1,045.79	946.67	1,852.17	1,785.38	66.79	27.730		
13,500.00	12,392.00	13,427.67	12,425.00	49.10	48.69	91.00	1,097.28	946.10	1,852.17	1,784.93	67.24	27.544		
13,600.00	12,392.00	13,527.67	12,425.00	49.75	49.31	91.00	1,197.28	945.00	1,852.17	1,783.99	68.17	27.168		
13,700.00	12,392.00	13,627.67	12,425.00	50.45	49.98	91.00	1,297.27	943.90	1,852.17	1,782.99	69.17	26.776		
13,800.00	12,392.00	13,727.67	12,425.00	51.20	50.70	91.00	1,397.26	942.79	1,852.17	1,781.93	70.23	26.372		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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			
13,900.00	12,392.00	13,827.67	12,425.00	51.98	51.46	91.00	1,497.26	941.69	1,852.16	1,780.81	71.36	25.957			
14,000.00	12,392.00	13,927.67	12,425.00	52.81	52.26	91.00	1,597.25	940.59	1,852.16	1,779.63	72.54	25.535			
14,100.00	12,392.00	14,027.67	12,425.00	53.68	53.11	91.00	1,697.24	939.49	1,852.16	1,778.39	73.77	25.107			
14,200.00	12,392.00	14,127.67	12,425.00	54.58	53.99	91.00	1,797.24	938.39	1,852.16	1,777.10	75.06	24.676			
14,300.00	12,392.00	14,227.67	12,425.00	55.51	54.91	91.00	1,897.23	937.28	1,852.16	1,775.76	76.40	24.244			
14,400.00	12,392.00	14,327.67	12,425.00	56.48	55.86	91.00	1,997.23	936.18	1,852.15	1,774.37	77.78	23.813			
14,500.00	12,392.00	14,427.67	12,425.00	57.48	56.84	91.00	2,097.22	935.08	1,852.15	1,772.94	79.21	23.383			
14,600.00	12,392.00	14,527.67	12,425.00	58.51	57.86	91.00	2,197.21	933.98	1,852.15	1,771.47	80.68	22.956			
14,700.00	12,392.00	14,627.67	12,425.00	59.57	58.90	91.00	2,297.21	932.88	1,852.15	1,769.95	82.19	22.534			
14,800.00	12,392.00	14,727.67	12,425.00	60.65	59.97	91.00	2,397.20	931.77	1,852.15	1,768.40	83.74	22.117			
14,900.00	12,392.00	14,827.67	12,425.00	61.76	61.07	91.00	2,497.20	930.67	1,852.15	1,766.81	85.33	21.705			
15,000.00	12,392.00	14,927.67	12,425.00	62.89	62.19	91.00	2,597.19	929.57	1,852.14	1,765.19	86.95	21.301			
15,100.00	12,392.00	15,027.67	12,425.00	64.05	63.34	91.00	2,697.18	928.47	1,852.14	1,763.54	88.60	20.904			
15,200.00	12,392.00	15,127.67	12,425.00	65.23	64.50	91.00	2,797.18	927.36	1,852.14	1,761.85	90.29	20.514			
15,300.00	12,392.00	15,227.67	12,425.00	66.42	65.69	91.00	2,897.17	926.26	1,852.14	1,760.14	92.00	20.133			
15,400.00	12,392.00	15,327.67	12,425.00	67.64	66.90	91.00	2,997.17	925.16	1,852.14	1,758.40	93.74	19.759			
15,500.00	12,392.00	15,427.67	12,425.00	68.88	68.13	91.00	3,097.16	924.06	1,852.14	1,756.64	95.50	19.394			
15,600.00	12,392.00	15,527.67	12,425.00	70.13	69.37	91.00	3,197.15	922.96	1,852.13	1,754.85	97.29	19.038			
15,700.00	12,392.00	15,627.67	12,425.00	71.40	70.63	91.00	3,297.15	921.85	1,852.13	1,753.03	99.10	18.690			
15,800.00	12,392.00	15,727.67	12,425.00	72.68	71.91	91.00	3,397.14	920.75	1,852.13	1,751.20	100.93	18.350			
15,900.00	12,392.00	15,827.67	12,425.00	73.98	73.20	91.00	3,497.14	919.65	1,852.13	1,749.34	102.78	18.020			
16,000.00	12,392.00	15,927.67	12,425.00	75.29	74.51	91.00	3,597.13	918.55	1,852.13	1,747.47	104.66	17.697			
16,100.00	12,392.00	16,027.67	12,425.00	76.62	75.83	91.00	3,697.12	917.44	1,852.12	1,745.58	106.55	17.383			
16,200.00	12,392.00	16,127.67	12,425.00	77.96	77.16	91.00	3,797.12	916.34	1,852.12	1,743.67	108.46	17.077			
16,300.00	12,392.00	16,227.67	12,425.00	79.31	78.50	91.00	3,897.11	915.24	1,852.12	1,741.74	110.38	16.779			
16,400.00	12,392.00	16,327.67	12,425.00	80.67	79.86	91.00	3,997.11	914.14	1,852.12	1,739.80	112.32	16.489			
16,500.00	12,392.00	16,427.67	12,425.00	82.04	81.23	91.00	4,097.10	913.04	1,852.12	1,737.84	114.28	16.207			
16,600.00	12,392.00	16,527.67	12,425.00	83.42	82.60	91.00	4,197.09	911.93	1,852.12	1,735.87	116.25	15.933			
16,700.00	12,392.00	16,627.67	12,425.00	84.81	83.99	91.00	4,297.09	910.83	1,852.11	1,733.88	118.23	15.665			
16,800.00	12,392.00	16,727.67	12,425.00	86.21	85.39	91.00	4,397.08	909.73	1,852.11	1,731.89	120.23	15.405			
16,900.00	12,392.00	16,827.67	12,425.00	87.62	86.79	91.00	4,497.07	908.63	1,852.11	1,729.88	122.23	15.152			
17,000.00	12,392.00	16,927.67	12,425.00	89.04	88.21	91.00	4,597.07	907.52	1,852.11	1,727.86	124.25	14.906			
17,100.00	12,392.00	17,027.67	12,425.00	90.47	89.63	91.00	4,697.06	906.42	1,852.11	1,725.82	126.28	14.666			
17,200.00	12,392.00	17,127.67	12,425.00	91.90	91.06	91.00	4,797.06	905.32	1,852.11	1,723.78	128.32	14.433			
17,300.00	12,392.00	17,227.67	12,425.00	93.34	92.50	91.00	4,897.05	904.22	1,852.10	1,721.73	130.38	14.206			
17,400.00	12,392.00	17,327.67	12,425.00	94.79	93.94	91.00	4,997.04	903.12	1,852.10	1,719.67	132.44	13.985			
17,500.00	12,392.00	17,427.67	12,425.00	96.25	95.40	91.00	5,097.04	902.01	1,852.10	1,717.59	134.51	13.770			
17,600.00	12,392.00	17,527.67	12,425.00	97.71	96.85	91.00	5,197.03	900.91	1,852.10	1,715.51	136.58	13.560			
17,700.00	12,392.00	17,627.67	12,425.00	99.17	98.32	91.00	5,297.03	899.81	1,852.10	1,713.43	138.67	13.356			
17,800.00	12,392.00	17,727.67	12,425.00	100.65	99.79	91.00	5,397.02	898.71	1,852.09	1,711.33	140.77	13.157			
17,900.00	12,392.00	17,827.67	12,425.00	102.13	101.26	91.00	5,497.01	897.61	1,852.09	1,709.23	142.87	12.964			
18,000.00	12,392.00	17,927.67	12,425.00	103.61	102.75	91.00	5,597.01	896.50	1,852.09	1,707.11	144.98	12.775			
18,100.00	12,392.00	18,027.67	12,425.00	105.10	104.23	91.00	5,697.00	895.40	1,852.09	1,705.00	147.09	12.591			
18,200.00	12,392.00	18,127.67	12,425.00	106.59	105.72	91.00	5,797.00	894.30	1,852.09	1,702.87	149.22	12.412			
18,300.00	12,392.00	18,227.67	12,425.00	108.09	107.22	91.00	5,896.99	893.20	1,852.09	1,700.74	151.34	12.238			
18,400.00	12,392.00	18,327.67	12,425.00	109.59	108.72	91.00	5,996.98	892.09	1,852.08	1,698.60	153.48	12.067			
18,500.00	12,392.00	18,427.67	12,425.00	111.10	110.23	91.00	6,096.98	890.99	1,852.08	1,696.46	155.62	11.901			
18,600.00	12,392.00	18,527.67	12,425.00	112.61	111.73	91.00	6,196.97	889.89	1,852.08	1,694.31	157.77	11.739			
18,700.00	12,392.00	18,627.67	12,425.00	114.12	113.25	91.00	6,296.97	888.79	1,852.08	1,692.16	159.92	11.581			
18,800.00	12,392.00	18,727.67	12,425.00	115.64	114.76	91.00	6,396.96	887.69	1,852.08	1,690.00	162.08	11.427			
18,900.00	12,392.00	18,827.67	12,425.00	117.17	116.29	91.00	6,496.95	886.58	1,852.08	1,687.84	164.24	11.277			
19,000.00	12,392.00	18,927.67	12,425.00	118.69	117.81	91.00	6,596.95	885.48	1,852.07	1,685.67	166.41	11.130			

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	12,392.00	19,027.67	12,425.00	120.22	119.34	91.00	6,696.94	884.38	1,852.07	1,683.50	168.58	10.987		
19,200.00	12,392.00	19,127.67	12,425.00	121.75	120.87	91.00	6,796.94	883.28	1,852.07	1,681.32	170.75	10.847		
19,300.00	12,392.00	19,227.67	12,425.00	123.29	122.40	91.00	6,896.93	882.17	1,852.07	1,679.14	172.93	10.710		
19,400.00	12,392.00	19,327.67	12,425.00	124.83	123.94	91.00	6,996.92	881.07	1,852.07	1,676.95	175.12	10.576		
19,500.00	12,392.00	19,427.67	12,425.00	126.37	125.48	91.00	7,096.92	879.97	1,852.06	1,674.76	177.30	10.446		
19,600.00	12,392.00	19,527.67	12,425.00	127.91	127.02	91.00	7,196.91	878.87	1,852.06	1,672.57	179.50	10.318		
19,700.00	12,392.00	19,627.67	12,425.00	129.46	128.57	91.00	7,296.90	877.77	1,852.06	1,670.37	181.69	10.193		
19,800.00	12,392.00	19,727.67	12,425.00	131.01	130.12	91.00	7,396.90	876.66	1,852.06	1,668.17	183.89	10.072		
19,900.00	12,392.00	19,827.67	12,425.00	132.56	131.67	91.00	7,496.89	875.56	1,852.06	1,665.96	186.09	9.952		
20,000.00	12,392.00	19,927.67	12,425.00	134.12	133.22	91.00	7,596.89	874.46	1,852.06	1,663.76	188.30	9.836		
20,100.00	12,392.00	20,027.67	12,425.00	135.67	134.78	91.00	7,696.88	873.36	1,852.05	1,661.55	190.51	9.722		
20,200.00	12,392.00	20,127.67	12,425.00	137.23	136.34	91.00	7,796.87	872.25	1,852.05	1,659.33	192.72	9.610		
20,300.00	12,392.00	20,227.67	12,425.00	138.80	137.90	91.00	7,896.87	871.15	1,852.05	1,657.12	194.93	9.501		
20,400.00	12,392.00	20,327.67	12,425.00	140.36	139.46	91.00	7,996.86	870.05	1,852.05	1,654.90	197.15	9.394		
20,500.00	12,392.00	20,427.67	12,425.00	141.92	141.02	91.00	8,096.86	868.95	1,852.05	1,652.67	199.37	9.289		
20,600.00	12,392.00	20,527.67	12,425.00	143.49	142.59	91.00	8,196.85	867.85	1,852.05	1,650.45	201.60	9.187		
20,700.00	12,392.00	20,627.67	12,425.00	145.06	144.16	91.00	8,296.84	866.74	1,852.04	1,648.22	203.82	9.087		
20,800.00	12,392.00	20,727.67	12,425.00	146.63	145.73	91.00	8,396.84	865.64	1,852.04	1,645.99	206.05	8.988		
20,900.00	12,392.00	20,827.67	12,425.00	148.21	147.30	91.00	8,496.83	864.54	1,852.04	1,643.76	208.28	8.892		
21,000.00	12,392.00	20,927.67	12,425.00	149.78	148.88	91.00	8,596.83	863.44	1,852.04	1,641.53	210.51	8.798		
21,100.00	12,392.00	21,027.67	12,425.00	151.36	150.45	91.00	8,696.82	862.33	1,852.04	1,639.29	212.75	8.705		
21,200.00	12,392.00	21,127.67	12,425.00	152.94	152.03	91.00	8,796.81	861.23	1,852.03	1,637.05	214.99	8.615		
21,300.00	12,392.00	21,227.67	12,425.00	154.51	153.61	91.00	8,896.81	860.13	1,852.03	1,634.81	217.22	8.526		
21,400.00	12,392.00	21,327.67	12,425.00	156.10	155.19	91.00	8,996.80	859.03	1,852.03	1,632.57	219.47	8.439		
21,500.00	12,392.00	21,427.67	12,425.00	157.68	156.77	91.00	9,096.80	857.93	1,852.03	1,630.32	221.71	8.353		
21,600.00	12,392.00	21,527.67	12,425.00	159.26	158.35	91.00	9,196.79	856.82	1,852.03	1,628.07	223.95	8.270		
21,700.00	12,392.00	21,627.67	12,425.00	160.85	159.94	91.00	9,296.78	855.72	1,852.03	1,625.82	226.20	8.187		
21,800.00	12,392.00	21,727.67	12,425.00	162.43	161.53	91.00	9,396.78	854.62	1,852.02	1,623.57	228.45	8.107		
21,900.00	12,392.00	21,827.67	12,425.00	164.02	163.11	91.00	9,496.77	853.52	1,852.02	1,621.32	230.70	8.028		
22,000.00	12,392.00	21,927.67	12,425.00	165.61	164.70	91.00	9,596.77	852.42	1,852.02	1,619.07	232.95	7.950		
22,100.00	12,392.00	22,027.67	12,425.00	167.20	166.29	91.00	9,696.76	851.31	1,852.02	1,616.81	235.21	7.874		
22,200.00	12,392.00	22,127.67	12,425.00	168.80	167.88	91.00	9,796.75	850.21	1,852.02	1,614.55	237.46	7.799		
22,300.00	12,392.00	22,227.67	12,425.00	170.39	169.48	91.00	9,896.75	849.11	1,852.02	1,612.29	239.72	7.726		
22,400.00	12,392.00	22,327.67	12,425.00	171.98	171.07	91.00	9,996.74	848.01	1,852.01	1,610.03	241.98	7.654		
22,500.00	12,392.00	22,427.67	12,425.00	173.58	172.66	91.00	10,096.73	846.90	1,852.01	1,607.77	244.24	7.583		
22,578.41	12,392.00	22,506.08	12,425.00	174.83	173.92	91.00	10,175.14	846.04	1,852.01	1,606.00	246.01	7.528		
22,581.33	12,392.00	22,506.08	12,425.00	174.88	173.92	91.00	10,175.14	846.04	1,852.01	1,605.97	246.05	7.527 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	21.83	1,731.94	693.92	1,865.82					
100.00	100.00	86.70	86.70	0.13	0.85	21.83	1,731.94	693.92	1,865.78	1,864.92	0.86	2,180.678		
200.00	200.00	189.01	189.01	0.48	2.82	21.83	1,732.13	693.92	1,865.96	1,863.10	2.86	652.977		
300.00	300.00	290.42	290.41	0.84	4.74	21.83	1,732.05	693.92	1,865.89	1,861.07	4.82	387.411		
400.00	400.00	386.72	386.70	1.20	6.45	21.83	1,731.94	693.92	1,865.78	1,859.21	6.56	284.276		
500.00	500.00	489.75	489.73	1.56	8.36	21.83	1,731.96	693.92	1,865.80	1,857.30	8.50	219.479		
513.90	513.90	504.55	504.53	1.61	8.63	21.83	1,731.93	693.92	1,865.78	1,857.00	8.78	212.526		
600.00	600.00	590.20	590.18	1.92	10.26	21.83	1,732.14	693.92	1,865.97	1,855.53	10.44	178.768		
700.00	700.00	686.73	686.70	2.28	12.12	21.83	1,731.94	693.92	1,865.78	1,853.44	12.34	151.237		
800.00	800.00	788.44	788.41	2.63	14.12	21.83	1,732.19	693.92	1,866.02	1,851.65	14.36	129.922		
900.00	900.00	886.75	886.70	2.99	16.05	21.83	1,731.94	693.92	1,865.78	1,849.45	16.33	114.268		
1,000.00	1,000.00	1,003.67	1,003.61	3.35	18.57	21.83	1,731.87	693.92	1,865.80	1,846.93	18.87	98.896		
1,009.82	1,009.82	1,017.08	1,017.01	3.39	18.86	21.84	1,731.73	693.92	1,865.70	1,846.54	19.16	97.395		
1,100.00	1,100.00	1,086.79	1,086.70	3.71	20.37	21.83	1,731.94	693.92	1,865.78	1,845.07	20.70	90.117		
1,200.00	1,200.00	1,186.81	1,186.70	4.07	22.53	21.83	1,731.94	693.92	1,865.78	1,842.89	22.89	81.506		
1,300.00	1,300.00	1,286.82	1,286.70	4.43	24.64	21.83	1,731.94	693.92	1,865.78	1,840.74	25.03	74.534		
1,400.00	1,400.00	1,386.83	1,386.70	4.79	26.46	21.83	1,731.94	693.92	1,865.78	1,838.89	26.89	69.392		
1,500.00	1,500.00	1,488.52	1,488.39	5.14	28.18	21.83	1,732.00	693.92	1,865.84	1,837.19	28.65	65.127		
1,525.00	1,525.00	1,514.85	1,514.72	5.23	28.63	21.83	1,731.97	693.92	1,865.81	1,836.70	29.10	64.106		
1,531.65	1,531.65	1,521.84	1,521.71	5.26	28.75	-178.17	1,731.95	693.92	1,865.80	1,836.58	29.23	63.841		
1,600.00	1,600.00	1,590.03	1,589.90	5.49	29.95	-178.17	1,731.95	693.92	1,866.53	1,836.08	30.45	61.298		
1,700.00	1,699.94	1,689.25	1,689.12	5.82	31.77	-178.17	1,732.07	693.92	1,869.91	1,837.61	32.30	57.892		
1,800.00	1,799.76	1,786.60	1,786.46	6.15	33.53	-178.17	1,731.94	693.92	1,875.67	1,841.58	34.09	55.020		
1,900.00	1,899.40	1,891.34	1,891.20	6.48	35.39	-178.18	1,732.05	693.92	1,884.27	1,848.29	35.98	52.366		
2,000.00	1,998.78	1,985.62	1,985.48	6.82	37.19	-178.18	1,731.94	693.92	1,895.26	1,857.45	37.81	50.126		
2,025.00	2,023.57	2,010.41	2,010.27	6.91	37.68	-178.18	1,731.94	693.92	1,898.44	1,860.13	38.30	49.562		
2,100.00	2,097.97	2,087.09	2,086.94	7.17	39.19	173.66	1,732.01	693.92	1,907.97	1,868.13	39.83	47.899		
2,200.00	2,197.27	2,184.13	2,183.97	7.53	41.16	161.46	1,731.94	693.92	1,919.48	1,877.64	41.84	45.877		
2,300.00	2,296.60	2,283.48	2,283.30	7.89	43.22	148.54	1,731.94	693.92	1,929.89	1,885.97	43.92	43.938		
2,400.00	2,395.91	2,390.36	2,390.18	8.26	45.32	136.17	1,732.08	693.92	1,939.30	1,893.25	46.05	42.109		
2,504.30	2,499.40	2,486.29	2,486.10	8.64	47.35	124.88	1,731.94	693.92	1,947.59	1,899.48	48.11	40.480		
2,600.00	2,594.28	2,591.25	2,591.05	9.00	49.62	125.21	1,732.02	693.92	1,954.91	1,904.49	50.41	38.779		
2,700.00	2,693.42	2,680.38	2,680.12	9.38	51.71	125.49	1,731.94	693.92	1,962.40	1,909.86	52.53	37.354		
2,800.00	2,792.57	2,809.47	2,809.19	9.75	54.80	125.89	1,731.69	693.92	1,970.05	1,914.42	55.63	35.412		
2,900.00	2,891.71	2,897.29	2,896.98	10.14	56.99	126.16	1,732.08	693.92	1,977.97	1,920.12	57.86	34.187		
3,000.00	2,990.86	3,014.66	3,014.30	10.52	59.91	126.52	1,731.67	693.92	1,985.61	1,924.82	60.79	32.662		
3,100.00	3,090.00	3,083.00	3,082.61	10.91	61.76	126.72	1,732.34	693.92	1,993.71	1,931.03	62.68	31.806		
3,200.00	3,189.15	3,176.30	3,175.85	11.30	64.39	127.01	1,731.94	693.92	2,001.20	1,935.86	65.34	30.627		
3,300.00	3,288.29	3,275.52	3,274.99	11.69	67.48	127.30	1,731.94	693.92	2,009.13	1,940.68	68.45	29.352		
3,400.00	3,387.44	3,374.72	3,374.14	12.08	70.68	127.59	1,731.94	693.92	2,017.11	1,945.44	71.66	28.148		
3,500.00	3,486.58	3,474.07	3,473.28	12.48	74.01	127.89	1,731.94	693.92	2,025.14	1,950.13	75.01	26.999		
3,600.00	3,585.72	3,573.31	3,572.42	12.87	77.30	128.17	1,731.94	693.92	2,033.22	1,954.91	78.32	25.962		
3,700.00	3,684.87	3,672.55	3,671.57	13.27	80.42	128.46	1,731.94	693.92	2,041.36	1,959.89	81.47	25.058		
3,800.00	3,784.01	3,787.30	3,786.25	13.67	83.88	128.79	1,732.23	693.92	2,049.86	1,964.92	84.94	24.133		
3,900.00	3,883.16	3,888.07	3,886.96	14.07	86.74	129.07	1,732.34	693.92	2,058.21	1,970.39	87.82	23.436		
4,000.00	3,982.30	3,970.16	3,969.00	14.47	88.99	129.31	1,731.94	693.92	2,066.07	1,975.97	90.10	22.931		
4,100.00	4,081.45	4,069.37	4,068.15	14.87	91.82	129.58	1,731.94	693.92	2,074.40	1,981.44	92.96	22.315		
4,200.00	4,180.59	4,190.00	4,188.72	15.27	94.93	129.92	1,731.94	693.92	2,082.89	1,986.81	96.08	21.678		
4,300.00	4,279.74	4,267.72	4,266.44	15.67	96.35	130.13	1,731.94	693.92	2,091.21	1,993.66	97.55	21.437		
4,400.00	4,378.88	4,366.87	4,365.58	16.08	98.32	130.40	1,731.94	693.92	2,099.69	2,000.14	99.56	21.090		
4,500.00	4,478.03	4,475.56	4,474.25	16.48	100.95	130.70	1,732.07	693.92	2,108.36	2,006.14	102.21	20.627		
4,600.00	4,577.17	4,565.29	4,563.87	16.89	104.13	130.94	1,731.94	693.92	2,116.79	2,011.38	105.41	20.082		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
4,700.00	4,676.32	4,664.74	4,663.02	17.29	108.91	131.20	1,731.94	693.92	2,125.41	2,015.22	110.19	19.288		
4,800.00	4,775.46	4,764.18	4,762.16	17.70	114.14	131.47	1,731.94	693.92	2,134.07	2,018.64	115.42	18.489		
4,900.00	4,874.60	4,863.67	4,861.30	18.10	119.03	131.73	1,731.94	693.92	2,142.77	2,022.46	120.31	17.810		
5,000.00	4,973.75	4,962.94	4,960.45	18.51	122.75	131.98	1,731.94	693.92	2,151.53	2,027.47	124.05	17.344		
5,100.00	5,072.89	5,062.14	5,059.59	18.92	125.46	132.24	1,731.94	693.92	2,160.32	2,033.53	126.78	17.039		
5,200.00	5,172.04	5,161.30	5,158.74	19.32	127.75	132.49	1,731.94	693.92	2,169.16	2,040.05	129.10	16.802		
5,300.00	5,271.18	5,260.47	5,257.88	19.73	129.77	132.75	1,731.94	693.92	2,178.03	2,046.87	131.16	16.606		
5,400.00	5,370.33	5,360.90	5,358.31	20.14	131.65	132.99	1,732.30	693.92	2,187.27	2,054.19	133.08	16.436		
5,500.00	5,469.47	5,472.09	5,469.50	20.55	133.74	133.28	1,731.87	693.92	2,195.90	2,060.70	135.20	16.242		
5,600.00	5,568.62	5,558.14	5,555.53	20.96	135.36	133.49	1,732.24	693.92	2,205.18	2,068.32	136.86	16.112		
5,700.00	5,667.76	5,657.08	5,654.46	21.37	137.24	133.73	1,731.94	693.92	2,213.96	2,075.19	138.77	15.954		
5,800.00	5,766.91	5,759.22	5,756.59	21.78	139.27	133.98	1,732.21	693.92	2,223.28	2,082.44	140.84	15.786		
5,900.00	5,866.05	5,855.39	5,852.75	22.19	141.22	134.22	1,731.94	693.92	2,232.17	2,089.35	142.82	15.629		
6,000.00	5,965.19	5,957.41	5,954.77	22.59	143.37	134.45	1,732.41	693.92	2,241.73	2,096.73	145.00	15.460		
6,100.00	6,064.34	6,053.71	6,051.04	23.01	145.39	134.69	1,731.94	693.92	2,250.53	2,103.47	147.06	15.304		
6,200.00	6,163.48	6,161.01	6,158.33	23.42	147.65	134.94	1,732.18	693.92	2,259.99	2,110.64	149.35	15.133		
6,300.00	6,262.63	6,252.03	6,249.33	23.83	149.56	135.16	1,731.94	693.92	2,269.04	2,117.75	151.30	14.997		
6,400.00	6,361.77	6,358.98	6,356.27	24.24	151.81	135.40	1,732.31	693.92	2,278.68	2,125.10	153.58	14.837		
6,500.00	6,460.92	6,450.35	6,447.62	24.65	153.74	135.62	1,731.94	693.92	2,287.71	2,132.17	155.54	14.708		
6,600.00	6,560.06	6,558.16	6,555.42	25.06	156.01	135.86	1,732.23	693.92	2,297.35	2,139.51	157.84	14.555		
6,700.00	6,659.21	6,648.67	6,645.91	25.47	157.87	136.07	1,731.94	693.92	2,306.51	2,146.78	159.73	14.400		
6,800.00	6,758.35	6,751.95	6,749.18	25.88	159.93	136.29	1,732.43	693.92	2,316.38	2,154.54	161.84	14.313		
6,900.00	6,857.50	6,846.98	6,844.20	26.29	161.83	136.51	1,731.94	693.92	2,325.46	2,161.68	163.77	14.199		
7,000.00	6,956.64	6,946.13	6,943.34	26.70	163.72	136.73	1,731.94	693.92	2,334.98	2,169.29	165.70	14.092		
7,100.00	7,055.78	7,053.08	7,050.29	27.12	165.76	136.96	1,732.20	693.92	2,344.77	2,177.01	167.77	13.977		
7,141.02	7,096.45	7,098.12	7,095.33	27.29	166.61	137.06	1,731.97	693.92	2,348.53	2,179.89	168.64	13.927		
7,200.00	7,154.99	7,144.50	7,141.69	27.53	167.50	137.21	1,731.94	693.92	2,353.80	2,184.26	169.54	13.883		
7,300.00	7,254.46	7,248.44	7,245.63	27.92	169.48	137.46	1,732.24	693.92	2,361.59	2,190.03	171.56	13.765		
7,400.00	7,354.17	7,343.70	7,340.87	28.30	171.30	137.64	1,731.94	693.92	2,366.96	2,193.55	173.41	13.649		
7,500.00	7,454.04	7,445.83	7,443.00	28.66	173.25	137.75	1,732.28	693.92	2,370.94	2,195.54	175.39	13.518		
7,600.00	7,554.01	7,543.56	7,540.71	29.00	175.12	137.81	1,731.94	693.92	2,372.42	2,195.13	177.29	13.381		
7,640.99	7,595.00	7,584.55	7,581.70	29.13	175.90	35.24	1,731.94	693.92	2,372.58	2,194.49	178.09	13.323		
7,700.00	7,654.01	7,646.01	7,643.16	29.32	177.08	35.23	1,732.23	693.92	2,372.82	2,193.54	179.28	13.235		
7,800.00	7,754.01	7,743.57	7,740.71	29.64	178.94	35.24	1,731.94	693.92	2,372.58	2,191.41	181.17	13.096		
7,900.00	7,854.01	7,845.36	7,842.49	29.95	180.89	35.23	1,732.29	693.92	2,372.87	2,189.72	183.15	12.956		
8,000.00	7,954.01	7,943.59	7,940.71	30.27	182.78	35.24	1,731.94	693.92	2,372.58	2,187.52	185.07	12.820		
8,100.00	8,054.01	8,043.59	8,040.71	30.59	184.79	35.24	1,731.94	693.92	2,372.58	2,185.47	187.11	12.680		
8,200.00	8,154.01	8,154.95	8,152.06	30.91	187.04	35.24	1,732.01	693.92	2,372.67	2,183.29	189.38	12.529		
8,223.26	8,177.27	8,181.12	8,178.23	30.99	187.57	35.24	1,731.84	693.92	2,372.55	2,182.63	189.91	12.493		
8,300.00	8,254.01	8,243.62	8,240.71	31.24	188.98	35.24	1,731.94	693.92	2,372.58	2,181.23	191.35	12.399		
8,400.00	8,354.01	8,353.31	8,350.40	31.56	191.41	35.23	1,732.28	693.92	2,372.89	2,179.08	193.80	12.244		
8,500.00	8,454.01	8,443.66	8,440.71	31.88	193.38	35.24	1,731.94	693.92	2,372.58	2,176.79	195.80	12.118		
8,600.00	8,554.01	8,547.13	8,544.17	32.21	195.57	35.23	1,732.59	693.92	2,373.12	2,175.11	198.01	11.985		
8,700.00	8,654.01	8,667.94	8,664.96	32.53	198.13	35.24	1,731.73	693.92	2,372.53	2,171.95	200.58	11.828		
8,704.49	8,658.50	8,673.37	8,670.39	32.54	198.24	35.24	1,731.66	693.92	2,372.49	2,171.79	200.70	11.821		
8,800.00	8,754.01	8,743.70	8,740.71	32.86	199.55	35.24	1,731.94	693.92	2,372.58	2,170.54	202.05	11.743		
8,900.00	8,854.01	8,856.60	8,853.60	33.18	201.72	35.24	1,731.92	693.92	2,372.61	2,168.37	204.24	11.617		
8,911.00	8,865.01	8,869.15	8,866.15	33.22	201.96	35.24	1,731.84	693.92	2,372.55	2,168.06	204.48	11.603		
9,000.00	8,954.01	8,948.63	8,945.62	33.51	203.48	35.24	1,732.12	693.92	2,372.74	2,166.70	206.04	11.516		
9,100.00	9,054.01	9,061.12	9,058.10	33.84	205.65	35.24	1,731.85	693.92	2,372.58	2,164.35	208.23	11.394		
9,132.73	9,086.74	9,076.46	9,073.44	33.94	206.00	35.24	1,731.94	693.92	2,372.58	2,163.99	208.59	11.374		
9,200.00	9,154.01	9,143.73	9,140.71	34.16	207.42	35.24	1,731.94	693.92	2,372.58	2,162.55	210.04	11.296		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,300.00	9,254.01	9,257.99	9,254.95	34.49	209.84	35.24	1,731.85	693.92	2,372.56	2,160.08	212.48	11.166				
9,313.57	9,267.58	9,257.33	9,254.28	34.54	209.84	35.24	1,731.94	693.92	2,372.58	2,160.10	212.49	11.166				
9,400.00	9,354.01	9,351.13	9,348.07	34.82	211.92	35.23	1,732.31	693.92	2,372.90	2,158.31	214.59	11.058				
9,500.00	9,454.01	9,443.80	9,440.71	35.15	213.89	35.24	1,731.94	693.92	2,372.58	2,155.99	216.59	10.954				
9,600.00	9,554.01	9,544.92	9,541.83	35.48	215.94	35.23	1,732.52	693.92	2,373.06	2,154.40	218.66	10.853				
9,700.00	9,654.01	9,659.40	9,656.30	35.81	218.26	35.24	1,732.02	693.92	2,372.71	2,151.71	221.00	10.736				
9,725.95	9,679.96	9,689.11	9,686.01	35.90	218.86	35.24	1,731.76	693.92	2,372.52	2,150.91	221.61	10.706				
9,800.00	9,754.01	9,743.83	9,740.71	36.14	219.96	35.24	1,731.94	693.92	2,372.58	2,149.84	222.74	10.652				
9,900.00	9,854.01	9,843.85	9,840.71	36.48	222.00	35.24	1,731.94	693.92	2,372.58	2,147.78	224.80	10.554				
10,000.00	9,954.01	9,943.85	9,940.71	36.81	224.12	35.24	1,731.94	693.92	2,372.58	2,145.63	226.95	10.454				
10,100.00	10,054.01	10,062.23	10,059.08	37.14	226.63	35.24	1,731.85	693.92	2,372.58	2,143.10	229.48	10.339				
10,108.86	10,062.87	10,072.73	10,069.58	37.17	226.85	35.24	1,731.75	693.92	2,372.51	2,142.81	229.71	10.328				
10,200.00	10,154.01	10,145.76	10,142.58	37.47	228.31	35.23	1,732.30	693.92	2,372.88	2,141.67	231.20	10.263				
10,300.00	10,254.01	10,243.90	10,240.71	37.81	230.25	35.24	1,731.94	693.92	2,372.58	2,139.41	233.17	10.175				
10,400.00	10,354.01	10,344.48	10,341.29	38.14	232.10	35.23	1,732.32	693.92	2,372.90	2,137.85	235.05	10.095				
10,500.00	10,454.01	10,456.43	10,453.23	38.48	234.15	35.24	1,731.95	693.92	2,372.62	2,135.50	237.13	10.006				
10,514.08	10,468.09	10,472.20	10,469.00	38.52	234.44	35.24	1,731.84	693.92	2,372.54	2,135.12	237.42	9.993				
10,600.00	10,554.01	10,545.16	10,541.95	38.81	235.95	35.24	1,732.10	693.92	2,372.72	2,133.76	238.96	9.929				
10,700.00	10,654.01	10,643.93	10,640.71	39.15	238.11	35.24	1,731.94	693.92	2,372.58	2,131.43	241.15	9.839				
10,800.00	10,754.01	10,746.42	10,743.16	39.48	240.78	35.23	1,732.30	693.92	2,372.88	2,129.04	243.84	9.731				
10,900.00	10,854.01	10,861.40	10,858.09	39.82	243.88	35.23	1,732.16	693.92	2,372.83	2,125.88	246.95	9.609				
11,000.00	10,954.01	10,944.06	10,940.71	40.16	246.11	35.24	1,731.94	693.92	2,372.58	2,123.37	249.21	9.520				
11,100.00	11,054.01	11,044.08	11,040.71	40.49	248.65	35.24	1,731.94	693.92	2,372.58	2,120.81	251.78	9.423				
11,200.00	11,154.01	11,150.99	11,147.59	40.83	251.34	35.22	1,733.05	693.92	2,373.51	2,119.03	254.48	9.327				
11,300.00	11,254.01	11,274.71	11,271.28	41.17	254.44	35.24	1,731.86	693.92	2,372.72	2,115.14	257.58	9.212				
11,325.73	11,279.73	11,306.54	11,303.10	41.26	255.24	35.25	1,731.31	693.92	2,372.36	2,113.98	258.38	9.182				
11,400.00	11,354.01	11,370.12	11,366.62	41.51	256.93	35.24	1,731.81	693.92	2,372.62	2,112.52	260.10	9.122				
11,436.04	11,390.05	11,380.27	11,376.75	41.63	257.25	35.24	1,731.94	693.92	2,372.58	2,112.13	260.45	9.109				
11,500.00	11,454.01	11,444.27	11,440.71	41.85	259.11	35.24	1,731.94	693.92	2,372.58	2,110.26	262.32	9.045				
11,600.00	11,554.01	11,544.33	11,540.71	42.18	262.00	35.24	1,731.94	693.92	2,372.58	2,107.36	265.23	8.945				
11,700.00	11,654.01	11,644.38	11,640.71	42.52	264.85	35.24	1,731.94	693.92	2,372.58	2,104.48	268.10	8.850				
11,800.00	11,754.01	11,744.45	11,740.71	42.86	267.92	35.24	1,731.94	693.92	2,372.58	2,101.40	271.18	8.749				
11,865.03	11,819.04	11,849.73	11,845.94	43.08	271.39	35.24	1,732.00	693.92	2,372.98	2,098.36	274.62	8.641				
11,900.00	11,853.99	11,844.47	11,840.69	43.20	271.22	49.61	1,731.94	693.92	2,371.89	2,097.39	274.50	8.641				
11,950.00	11,903.70	11,894.28	11,890.40	43.37	272.87	49.97	1,731.94	693.92	2,368.51	2,092.35	276.15	8.577				
12,000.00	11,952.76	11,943.41	11,939.46	43.54	274.49	50.62	1,731.94	693.92	2,362.34	2,084.56	277.79	8.504				
12,050.00	12,000.81	11,991.48	11,987.51	43.70	276.08	51.57	1,731.94	693.92	2,353.48	2,074.10	279.39	8.424				
12,100.00	12,047.48	12,038.19	12,034.18	43.85	277.77	52.84	1,731.94	693.92	2,342.03	2,060.96	281.07	8.332				
12,150.00	12,092.40	12,083.14	12,079.10	43.99	279.44	54.40	1,731.94	693.92	2,328.13	2,045.38	282.75	8.234				
12,200.00	12,135.25	12,126.11	12,121.95	44.13	281.13	56.28	1,731.94	693.92	2,311.96	2,027.51	284.45	8.128				
12,250.00	12,175.69	12,166.58	12,162.39	44.25	282.89	58.47	1,731.94	693.92	2,293.72	2,007.51	286.21	8.014				
12,300.00	12,213.41	12,204.47	12,200.11	44.37	284.55	60.95	1,731.94	693.92	2,273.64	1,985.76	287.88	7.898				
12,350.00	12,248.14	12,239.22	12,234.84	44.48	286.20	63.70	1,731.94	693.92	2,251.96	1,962.43	289.53	7.778				
12,400.00	12,279.60	12,270.84	12,266.30	44.58	287.70	66.69	1,731.94	693.92	2,228.96	1,937.91	291.04	7.659				
12,450.00	12,307.55	12,298.79	12,294.25	44.68	288.98	69.87	1,731.94	693.92	2,204.90	1,912.57	292.33	7.543				
12,500.00	12,331.79	12,323.03	12,318.49	44.77	290.08	73.19	1,731.94	693.92	2,180.09	1,886.64	293.45	7.429				
12,550.00	12,352.12	12,405.00	12,400.13	44.88	293.83	78.29	1,731.94	693.92	2,155.69	1,858.64	297.06	7.257				
12,600.00	12,368.39	12,405.00	12,400.13	44.99	293.83	81.26	1,731.94	693.92	2,129.86	1,832.72	297.14	7.168				
12,650.00	12,380.49	12,405.00	12,400.13	45.12	293.83	84.20	1,731.94	693.92	2,104.32	1,807.12	297.20	7.080				
12,700.00	12,388.31	12,405.00	12,400.13	45.25	293.83	87.09	1,731.94	693.92	2,079.28	1,782.04	297.24	6.995				
12,750.00	12,391.80	12,383.16	12,378.50	45.41	292.83	89.18	1,731.94	693.92	2,054.84	1,758.54	296.30	6.935				
12,765.03	12,392.00	12,383.36	12,378.70	45.45	292.84	90.00	1,731.94	693.92	2,047.70	1,751.39	296.32	6.910				

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	12,392.00	12,383.36	12,378.70	45.57	292.84	90.00	1,731.94	693.92	2,031.24	1,734.90	296.34	6.854		
12,900.00	12,392.00	12,383.36	12,378.70	45.95	292.84	90.00	1,731.94	693.92	1,984.69	1,688.29	296.40	6.696		
13,000.00	12,392.00	12,383.36	12,378.70	46.37	292.84	90.00	1,731.94	693.92	1,939.00	1,642.53	296.47	6.540		
13,100.00	12,392.00	12,383.36	12,378.70	46.85	292.84	90.00	1,731.94	693.92	1,894.30	1,597.76	296.55	6.388		
13,200.00	12,392.00	12,383.36	12,378.70	47.36	292.84	90.00	1,731.94	693.92	1,850.73	1,554.10	296.63	6.239		
13,300.00	12,392.00	12,429.53	12,424.79	47.91	294.95	91.61	1,730.79	693.92	1,808.45	1,509.75	298.70	6.054		
13,400.00	12,392.00	12,419.90	12,415.18	48.49	294.51	91.29	1,731.28	693.92	1,767.58	1,469.19	298.39	5.924		
13,448.51	12,392.00	12,415.91	12,411.20	48.78	294.33	91.16	1,731.47	693.92	1,748.29	1,450.02	298.27	5.861		
13,500.00	12,392.00	12,412.08	12,407.38	49.10	294.15	91.02	1,731.64	693.92	1,728.66	1,430.50	298.16	5.798		
13,600.00	12,392.00	12,405.61	12,400.93	49.75	293.86	90.79	1,731.90	693.92	1,694.34	1,396.36	297.98	5.686		
13,700.00	12,392.00	12,400.17	12,395.50	50.45	293.61	90.60	1,732.11	693.92	1,665.32	1,367.47	297.85	5.591		
13,800.00	12,392.00	12,395.54	12,390.87	51.20	293.40	90.43	1,732.27	693.92	1,641.87	1,344.13	297.75	5.514		
13,900.00	12,392.00	12,391.54	12,386.88	51.98	293.22	90.29	1,732.40	693.92	1,624.25	1,326.57	297.67	5.456		
14,000.00	12,392.00	12,388.05	12,383.40	52.81	293.06	90.17	1,732.51	693.92	1,612.64	1,315.02	297.62	5.418		
14,100.00	12,392.00	12,384.99	12,380.34	53.68	292.92	90.06	1,732.60	693.92	1,607.17	1,309.59	297.58	5.401		
14,138.12	12,392.00	12,383.92	12,379.27	54.02	292.87	90.02	1,732.63	693.92	1,606.72	1,309.15	297.57	5.399 CC, ES, SF		
14,200.00	12,392.00	12,382.27	12,377.63	54.58	292.79	89.96	1,732.67	693.92	1,607.91	1,310.36	297.55	5.404		
14,300.00	12,392.00	12,379.85	12,375.21	55.51	292.68	89.88	1,732.73	693.92	1,614.84	1,317.33	297.52	5.428		
14,400.00	12,392.00	12,377.68	12,373.04	56.48	292.58	89.80	1,732.78	693.92	1,627.90	1,330.42	297.49	5.472		
14,500.00	12,392.00	12,375.71	12,371.08	57.48	292.49	89.73	1,732.83	693.92	1,646.94	1,349.49	297.46	5.537		
14,600.00	12,392.00	12,373.93	12,369.30	58.51	292.41	89.66	1,732.87	693.92	1,671.75	1,374.33	297.42	5.621		
14,700.00	12,392.00	12,372.31	12,367.68	59.57	292.34	89.61	1,732.90	693.92	1,702.08	1,404.70	297.38	5.724		
14,800.00	12,392.00	12,370.83	12,366.20	60.65	292.27	89.55	1,732.93	693.92	1,737.64	1,440.31	297.33	5.844		
14,900.00	12,392.00	12,369.46	12,364.84	61.76	292.21	89.51	1,732.96	693.92	1,778.12	1,480.84	297.28	5.981		
15,000.00	12,392.00	12,368.20	12,363.58	62.89	292.15	89.46	1,732.98	693.92	1,823.19	1,525.96	297.23	6.134		
15,100.00	12,392.00	12,367.04	12,362.42	64.05	292.10	89.42	1,733.00	693.92	1,872.52	1,575.34	297.17	6.301		
15,200.00	12,392.00	12,365.96	12,361.34	65.23	292.05	89.38	1,733.02	693.92	1,925.78	1,628.67	297.11	6.482		
15,300.00	12,392.00	12,364.96	12,360.34	66.42	292.00	89.35	1,733.04	693.92	1,982.65	1,685.60	297.05	6.674		
15,400.00	12,392.00	12,364.03	12,359.41	67.64	291.96	89.31	1,733.05	693.92	2,042.84	1,745.86	296.99	6.879		
15,500.00	12,392.00	12,363.15	12,358.53	68.88	291.92	89.28	1,733.06	693.92	2,106.06	1,809.14	296.92	7.093		
15,600.00	12,392.00	12,362.33	12,357.72	70.13	291.88	89.25	1,733.08	693.92	2,172.05	1,875.18	296.86	7.317		
15,700.00	12,392.00	12,361.57	12,356.95	71.40	291.85	89.22	1,733.09	693.92	2,240.55	1,943.75	296.80	7.549		
15,800.00	12,392.00	12,360.84	12,356.23	72.68	291.81	89.20	1,733.10	693.92	2,311.35	2,014.61	296.74	7.789		
15,900.00	12,392.00	12,360.16	12,355.55	73.98	291.78	89.17	1,733.11	693.92	2,384.25	2,087.56	296.69	8.036		
16,000.00	12,392.00	12,359.52	12,354.91	75.29	291.75	89.15	1,733.11	693.92	2,459.05	2,162.42	296.63	8.290		
16,100.00	12,392.00	12,358.91	12,354.30	76.62	291.72	89.13	1,733.12	693.92	2,535.59	2,239.01	296.58	8.550		
16,200.00	12,392.00	12,358.34	12,353.73	77.96	291.70	89.11	1,733.13	693.92	2,613.71	2,317.18	296.53	8.814		
16,300.00	12,392.00	12,357.79	12,353.18	79.31	291.67	89.09	1,733.14	693.92	2,693.28	2,396.80	296.48	9.084		
16,400.00	12,392.00	12,357.28	12,352.66	80.67	291.65	89.07	1,733.14	693.92	2,774.17	2,477.74	296.43	9.359		
16,500.00	12,392.00	12,356.79	12,352.17	82.04	291.63	89.05	1,733.15	693.92	2,856.27	2,559.89	296.38	9.637		
16,600.00	12,392.00	12,356.32	12,351.70	83.42	291.61	89.04	1,733.15	693.92	2,939.49	2,643.14	296.34	9.919		
16,700.00	12,392.00	12,355.87	12,351.26	84.81	291.59	89.02	1,733.16	693.92	3,023.71	2,727.41	296.30	10.205		
16,800.00	12,392.00	12,355.45	12,350.83	86.21	291.57	89.01	1,733.16	693.92	3,108.88	2,812.61	296.26	10.494		
16,900.00	12,392.00	12,355.04	12,350.43	87.62	291.55	88.99	1,733.17	693.92	3,194.90	2,898.67	296.23	10.785		
17,000.00	12,392.00	12,354.65	12,350.04	89.04	291.53	88.98	1,733.17	693.92	3,281.72	2,985.52	296.19	11.080		
17,100.00	12,392.00	12,354.28	12,349.67	90.47	291.51	88.96	1,733.17	693.92	3,369.26	3,073.10	296.16	11.376		
17,200.00	12,392.00	12,353.92	12,349.31	91.90	291.50	88.95	1,733.18	693.92	3,457.48	3,161.35	296.13	11.676		
17,300.00	12,392.00	12,353.58	12,348.97	93.34	291.48	88.94	1,733.18	693.92	3,546.33	3,250.23	296.10	11.977		
17,400.00	12,392.00	12,353.25	12,348.64	94.79	291.47	88.93	1,733.18	693.92	3,635.76	3,339.68	296.08	12.280		
17,500.00	12,392.00	12,352.94	12,348.33	96.25	291.45	88.92	1,733.19	693.92	3,725.72	3,429.67	296.05	12.585		
17,600.00	12,392.00	12,352.63	12,348.03	97.71	291.44	88.91	1,733.19	693.92	3,816.18	3,520.16	296.03	12.891		
17,700.00	12,392.00	12,352.34	12,347.74	99.17	291.42	88.90	1,733.19	693.92	3,907.11	3,611.11	296.00	13.200		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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
Colorado Fed Com - Custer Mountain Unit #001 (Offset) - OH - OH													Offset Well Error:	0.00 usft
Survey Program: 60-INC-ONLY														
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
17,800.00	12,392.00	12,352.06	12,347.46	100.65	291.41	88.89	1,733.19	693.92	3,998.47	3,702.49	295.98	13.509		
17,900.00	12,392.00	12,351.79	12,347.19	102.13	291.40	88.88	1,733.20	693.92	4,090.24	3,794.27	295.96	13.820		
18,000.00	12,392.00	12,351.53	12,346.93	103.61	291.39	88.87	1,733.20	693.92	4,182.38	3,886.44	295.94	14.132		
18,100.00	12,392.00	12,351.28	12,346.67	105.10	291.38	88.86	1,733.20	693.92	4,274.88	3,978.95	295.93	14.446		
18,200.00	12,392.00	12,351.04	12,346.43	106.59	291.36	88.85	1,733.20	693.92	4,367.70	4,071.79	295.91	14.760		
18,300.00	12,392.00	12,350.81	12,346.20	108.09	291.35	88.84	1,733.20	693.92	4,460.84	4,164.94	295.90	15.076		
18,400.00	12,392.00	12,350.58	12,345.97	109.59	291.34	88.83	1,733.21	693.92	4,554.27	4,258.38	295.88	15.392		
18,500.00	12,392.00	12,350.36	12,345.75	111.10	291.33	88.83	1,733.21	693.92	4,647.97	4,352.10	295.87	15.709		
18,600.00	12,392.00	12,350.15	12,345.54	112.61	291.32	88.82	1,733.21	693.92	4,741.93	4,446.07	295.86	16.028		
18,700.00	12,392.00	12,349.94	12,345.34	114.12	291.31	88.81	1,733.21	693.92	4,836.13	4,540.28	295.85	16.347		
18,800.00	12,392.00	12,349.75	12,345.14	115.64	291.31	88.80	1,733.21	693.92	4,930.56	4,634.72	295.84	16.666		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
15,400.00	12,392.00	12,385.23	12,381.70	67.64	277.89	90.00	7,024.23	1,955.94	4,969.00	4,684.92	284.09	17.491				
15,500.00	12,392.00	12,385.23	12,381.70	68.88	277.89	90.00	7,024.23	1,955.94	4,888.55	4,604.26	284.28	17.196				
15,600.00	12,392.00	12,385.23	12,381.70	70.13	277.89	90.00	7,024.23	1,955.94	4,808.83	4,524.33	284.49	16.903				
15,700.00	12,392.00	12,385.23	12,381.70	71.40	277.89	90.00	7,024.23	1,955.94	4,729.87	4,445.16	284.72	16.613				
15,800.00	12,392.00	12,385.23	12,381.70	72.68	277.89	90.00	7,024.23	1,955.94	4,651.73	4,366.78	284.95	16.324				
15,900.00	12,392.00	12,385.23	12,381.70	73.98	277.89	90.00	7,024.23	1,955.94	4,574.44	4,289.23	285.21	16.039				
16,000.00	12,392.00	12,385.23	12,381.70	75.29	277.89	90.00	7,024.23	1,955.94	4,498.04	4,212.57	285.47	15.756				
16,100.00	12,392.00	12,385.23	12,381.70	76.62	277.89	90.00	7,024.23	1,955.94	4,422.59	4,136.83	285.76	15.477				
16,200.00	12,392.00	12,385.23	12,381.70	77.96	277.89	90.00	7,024.23	1,955.94	4,348.13	4,062.07	286.06	15.200				
16,300.00	12,392.00	12,385.23	12,381.70	79.31	277.89	90.00	7,024.23	1,955.94	4,274.70	3,988.33	286.38	14.927				
16,400.00	12,392.00	12,385.23	12,381.70	80.67	277.89	90.00	7,024.23	1,955.94	4,202.38	3,915.66	286.72	14.657				
16,500.00	12,392.00	12,385.23	12,381.70	82.04	277.89	90.00	7,024.23	1,955.94	4,131.21	3,844.14	287.07	14.391				
16,600.00	12,392.00	12,385.23	12,381.70	83.42	277.89	90.00	7,024.23	1,955.94	4,061.25	3,773.80	287.45	14.129				
16,700.00	12,392.00	12,385.23	12,381.70	84.81	277.89	90.00	7,024.23	1,955.94	3,992.58	3,704.73	287.85	13.870				
16,800.00	12,392.00	12,385.23	12,381.70	86.21	277.89	90.00	7,024.23	1,955.94	3,925.25	3,636.98	288.27	13.617				
16,900.00	12,392.00	12,385.23	12,381.70	87.62	277.89	90.00	7,024.23	1,955.94	3,859.34	3,570.63	288.71	13.367				
17,000.00	12,392.00	12,385.23	12,381.70	89.04	277.89	90.00	7,024.23	1,955.94	3,794.92	3,505.74	289.18	13.123				
17,100.00	12,392.00	12,385.23	12,381.70	90.47	277.89	90.00	7,024.23	1,955.94	3,732.06	3,442.39	289.67	12.884				
17,200.00	12,392.00	12,385.23	12,381.70	91.90	277.89	90.00	7,024.23	1,955.94	3,670.86	3,380.68	290.18	12.650				
17,300.00	12,392.00	12,385.23	12,381.70	93.34	277.89	90.00	7,024.23	1,955.94	3,611.38	3,320.66	290.72	12.422				
17,400.00	12,392.00	12,385.23	12,381.70	94.79	277.89	90.00	7,024.23	1,955.94	3,553.73	3,262.45	291.28	12.200				
17,500.00	12,392.00	12,385.23	12,381.70	96.25	277.89	90.00	7,024.23	1,955.94	3,497.98	3,206.12	291.86	11.985				
17,600.00	12,392.00	12,385.23	12,381.70	97.71	277.89	90.00	7,024.23	1,955.94	3,444.24	3,151.77	292.47	11.776				
17,700.00	12,392.00	12,385.23	12,381.70	99.17	277.89	90.00	7,024.23	1,955.94	3,392.59	3,099.49	293.10	11.575				
17,800.00	12,392.00	12,385.23	12,381.70	100.65	277.89	90.00	7,024.23	1,955.94	3,343.14	3,049.38	293.75	11.381				
17,900.00	12,392.00	12,385.23	12,381.70	102.13	277.89	90.00	7,024.23	1,955.94	3,295.98	3,001.55	294.42	11.195				
18,000.00	12,392.00	12,385.23	12,381.70	103.61	277.89	90.00	7,024.23	1,955.94	3,251.21	2,956.10	295.11	11.017				
18,100.00	12,392.00	12,385.23	12,381.70	105.10	277.89	90.00	7,024.23	1,955.94	3,208.94	2,913.12	295.81	10.848				
18,200.00	12,392.00	12,385.23	12,381.70	106.59	277.89	90.00	7,024.23	1,955.94	3,169.25	2,872.73	296.52	10.688				
18,300.00	12,392.00	12,385.23	12,381.70	108.09	277.89	90.00	7,024.23	1,955.94	3,132.26	2,835.02	297.24	10.538				
18,400.00	12,392.00	12,385.23	12,381.70	109.59	277.89	90.00	7,024.23	1,955.94	3,098.06	2,800.09	297.97	10.397				
18,500.00	12,392.00	12,385.23	12,381.70	111.10	277.89	90.00	7,024.23	1,955.94	3,066.73	2,768.04	298.70	10.267				
18,600.00	12,392.00	12,385.23	12,381.70	112.61	277.89	90.00	7,024.23	1,955.94	3,038.38	2,738.96	299.42	10.148				
18,700.00	12,392.00	12,385.23	12,381.70	114.12	277.89	90.00	7,024.23	1,955.94	3,013.08	2,712.95	300.13	10.039				
18,800.00	12,392.00	12,385.23	12,381.70	115.64	277.89	90.00	7,024.23	1,955.94	2,990.91	2,690.09	300.82	9.942				
18,900.00	12,392.00	12,385.23	12,381.70	117.17	277.89	90.00	7,024.23	1,955.94	2,971.94	2,670.44	301.50	9.857				
19,000.00	12,392.00	12,385.23	12,381.70	118.69	277.89	90.00	7,024.23	1,955.94	2,956.24	2,654.09	302.15	9.784				
19,100.00	12,392.00	12,385.23	12,381.70	120.22	277.89	90.00	7,024.23	1,955.94	2,943.85	2,641.07	302.78	9.723				
19,200.00	12,392.00	12,385.23	12,381.70	121.75	277.89	90.00	7,024.23	1,955.94	2,934.82	2,631.45	303.36	9.674				
19,300.00	12,392.00	12,385.23	12,381.70	123.29	277.89	90.00	7,024.23	1,955.94	2,929.17	2,625.26	303.91	9.638				
19,400.00	12,392.00	12,385.23	12,381.70	124.83	277.89	90.00	7,024.23	1,955.94	2,926.93	2,622.51	304.42	9.615				
19,415.51	12,392.00	12,385.23	12,381.70	125.07	277.89	90.00	7,024.23	1,955.94	2,926.89	2,622.40	304.50	9.612 CC, ES				
19,500.00	12,392.00	12,385.23	12,381.70	126.37	277.89	90.00	7,024.23	1,955.94	2,928.11	2,623.23	304.88	9.604 SF				
19,600.00	12,392.00	12,385.23	12,381.70	127.91	277.89	90.00	7,024.23	1,955.94	2,932.70	2,627.42	305.29	9.606				
19,700.00	12,392.00	12,385.23	12,381.70	129.46	277.89	90.00	7,024.23	1,955.94	2,940.69	2,635.04	305.64	9.621				
19,800.00	12,392.00	12,385.23	12,381.70	131.01	277.89	90.00	7,024.23	1,955.94	2,952.04	2,646.10	305.95	9.649				
19,900.00	12,392.00	12,385.23	12,381.70	132.56	277.89	90.00	7,024.23	1,955.94	2,966.72	2,660.53	306.19	9.689				
20,000.00	12,392.00	12,385.23	12,381.70	134.12	277.89	90.00	7,024.23	1,955.94	2,984.68	2,678.30	306.39	9.742				
20,100.00	12,392.00	12,385.23	12,381.70	135.67	277.89	90.00	7,024.23	1,955.94	3,005.87	2,699.34	306.53	9.806				
20,200.00	12,392.00	12,385.23	12,381.70	137.23	277.89	90.00	7,024.23	1,955.94	3,030.20	2,723.59	306.62	9.883				
20,300.00	12,392.00	12,385.23	12,381.70	138.80	277.89	90.00	7,024.23	1,955.94	3,057.62	2,750.96	306.66	9.971				
20,400.00	12,392.00	12,385.23	12,381.70	140.36	277.89	90.00	7,024.23	1,955.94	3,088.03	2,781.39	306.65	10.070				

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
20,500.00	12,392.00	12,385.23	12,381.70	141.92	277.89	90.00	7,024.23	1,955.94	3,121.35	2,814.76	306.59	10.181		
20,600.00	12,392.00	12,385.23	12,381.70	143.49	277.89	90.00	7,024.23	1,955.94	3,157.49	2,850.99	306.50	10.302		
20,700.00	12,392.00	12,385.23	12,381.70	145.06	277.89	90.00	7,024.23	1,955.94	3,196.35	2,889.98	306.37	10.433		
20,800.00	12,392.00	12,385.23	12,381.70	146.63	277.89	90.00	7,024.23	1,955.94	3,237.83	2,931.62	306.20	10.574		
20,900.00	12,392.00	12,385.23	12,381.70	148.21	277.89	90.00	7,024.23	1,955.94	3,281.83	2,975.82	306.01	10.725		
21,000.00	12,392.00	12,385.23	12,381.70	149.78	277.89	90.00	7,024.23	1,955.94	3,328.26	3,022.47	305.79	10.884		
21,100.00	12,392.00	12,385.23	12,381.70	151.36	277.89	90.00	7,024.23	1,955.94	3,377.01	3,071.47	305.54	11.053		
21,200.00	12,392.00	12,385.23	12,381.70	152.94	277.89	90.00	7,024.23	1,955.94	3,427.99	3,122.72	305.27	11.229		
21,300.00	12,392.00	12,385.23	12,381.70	154.51	277.89	90.00	7,024.23	1,955.94	3,481.09	3,176.11	304.99	11.414		
21,400.00	12,392.00	12,385.23	12,381.70	156.10	277.89	90.00	7,024.23	1,955.94	3,536.23	3,231.54	304.69	11.606		
21,500.00	12,392.00	12,385.23	12,381.70	157.68	277.89	90.00	7,024.23	1,955.94	3,593.30	3,288.93	304.38	11.805		
21,600.00	12,392.00	12,385.23	12,381.70	159.26	277.89	90.00	7,024.23	1,955.94	3,652.22	3,348.16	304.06	12.012		
21,700.00	12,392.00	12,385.23	12,381.70	160.85	277.89	90.00	7,024.23	1,955.94	3,712.90	3,409.17	303.73	12.224		
21,800.00	12,392.00	12,385.23	12,381.70	162.43	277.89	90.00	7,024.23	1,955.94	3,775.25	3,471.85	303.40	12.443		
21,900.00	12,392.00	12,385.23	12,381.70	164.02	277.89	90.00	7,024.23	1,955.94	3,839.19	3,536.13	303.07	12.668		
22,000.00	12,392.00	12,385.23	12,381.70	165.61	277.89	90.00	7,024.23	1,955.94	3,904.65	3,601.92	302.73	12.898		
22,100.00	12,392.00	12,385.23	12,381.70	167.20	277.89	90.00	7,024.23	1,955.94	3,971.55	3,669.15	302.40	13.134		
22,200.00	12,392.00	12,385.23	12,381.70	168.80	277.89	90.00	7,024.23	1,955.94	4,039.82	3,737.75	302.06	13.374		
22,300.00	12,392.00	12,385.23	12,381.70	170.39	277.89	90.00	7,024.23	1,955.94	4,109.38	3,807.65	301.73	13.619		
22,400.00	12,392.00	12,385.23	12,381.70	171.98	277.89	90.00	7,024.23	1,955.94	4,180.18	3,878.77	301.41	13.869		
22,500.00	12,392.00	12,385.23	12,381.70	173.58	277.89	90.00	7,024.23	1,955.94	4,252.15	3,951.07	301.08	14.123		
22,581.33	12,392.00	12,385.23	12,381.70	174.88	277.89	90.00	7,024.23	1,955.94	4,311.51	4,010.69	300.82	14.332		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	-59.08	74.11	-123.72	144.54					
100.00	100.00	90.30	90.30	0.13	0.13	-59.08	74.11	-123.72	144.22	144.04	0.18	805.072		
200.00	200.00	190.30	190.30	0.48	0.47	-59.08	74.11	-123.72	144.22	143.55	0.67	214.822		
300.00	300.00	290.30	290.30	0.84	0.82	-59.08	74.11	-123.72	144.22	143.04	1.18	122.402		
400.00	400.00	390.30	390.30	1.20	1.18	-59.08	74.11	-123.72	144.22	142.53	1.69	85.581		
500.00	500.00	490.30	490.30	1.56	1.54	-59.08	74.11	-123.72	144.22	142.03	2.19	65.790		
600.00	600.00	590.30	590.30	1.92	1.90	-59.08	74.11	-123.72	144.22	141.52	2.70	53.433		
700.00	700.00	690.30	690.30	2.28	2.26	-59.08	74.11	-123.72	144.22	141.01	3.21	44.984		
800.00	800.00	790.30	790.30	2.63	2.62	-59.08	74.11	-123.72	144.22	140.51	3.71	38.842		
900.00	900.00	890.30	890.30	2.99	2.97	-59.08	74.11	-123.72	144.22	140.00	4.22	34.176		
1,000.00	1,000.00	990.30	990.30	3.35	3.33	-59.08	74.11	-123.72	144.22	139.49	4.73	30.510		
1,100.00	1,100.00	1,090.30	1,090.30	3.71	3.69	-59.08	74.11	-123.72	144.22	138.98	5.23	27.555		
1,200.00	1,200.00	1,190.30	1,190.30	4.07	4.05	-59.08	74.11	-123.72	144.22	138.48	5.74	25.122		
1,300.00	1,300.00	1,290.30	1,290.30	4.43	4.41	-59.08	74.11	-123.72	144.22	137.97	6.25	23.083		
1,400.00	1,400.00	1,390.30	1,390.30	4.79	4.77	-59.08	74.11	-123.72	144.22	137.46	6.75	21.351		
1,500.00	1,500.00	1,490.30	1,490.30	5.14	5.13	-59.08	74.11	-123.72	144.22	136.96	7.26	19.860		
1,525.00	1,525.00	1,515.30	1,515.30	5.23	5.22	-59.08	74.11	-123.72	144.22	136.83	7.39	19.520 CC		
1,600.00	1,600.00	1,590.30	1,590.30	5.49	5.48	101.21	74.11	-123.72	144.36	136.60	7.76	18.605 ES		
1,700.00	1,699.94	1,690.24	1,690.24	5.82	5.84	102.46	74.11	-123.72	145.03	136.79	8.24	17.595		
1,800.00	1,799.76	1,790.06	1,790.06	6.15	6.20	104.69	74.11	-123.72	146.42	137.69	8.73	16.773		
1,900.00	1,899.40	1,889.70	1,889.70	6.48	6.56	107.81	74.11	-123.72	148.80	139.58	9.22	16.140		
2,000.00	1,998.78	1,989.08	1,989.08	6.82	6.91	111.71	74.11	-123.72	152.58	142.87	9.71	15.709		
2,025.00	2,023.57	2,013.87	2,013.87	6.91	7.00	112.79	74.11	-123.72	153.79	143.96	9.84	15.634		
2,100.00	2,097.97	2,088.27	2,088.27	7.17	7.27	108.00	74.11	-123.72	157.14	146.93	10.21	15.389		
2,200.00	2,197.27	2,187.57	2,187.57	7.53	7.62	100.00	74.11	-123.72	160.06	149.35	10.71	14.941		
2,300.00	2,296.60	2,286.90	2,286.90	7.89	7.98	91.12	74.11	-123.72	161.18	149.97	11.22	14.368		
2,400.00	2,395.91	2,386.21	2,386.21	8.26	8.34	82.78	74.11	-123.72	160.53	148.80	11.73	13.689		
2,504.30	2,499.40	2,489.70	2,489.70	8.64	8.71	75.90	74.11	-123.72	158.05	145.79	12.26	12.892		
2,600.00	2,594.28	2,584.58	2,584.58	9.00	9.05	80.33	74.11	-123.72	155.45	142.70	12.75	12.193		
2,700.00	2,693.42	2,683.72	2,683.72	9.38	9.40	85.09	74.11	-123.72	153.78	140.52	13.26	11.595		
2,800.00	2,792.57	2,782.87	2,782.87	9.75	9.76	89.92	74.11	-123.72	153.21	139.43	13.78	11.121		
2,801.75	2,794.30	2,784.60	2,784.60	9.76	9.77	90.00	74.11	-123.72	153.21	139.42	13.79	11.114		
2,900.00	2,891.71	2,882.01	2,882.01	10.14	10.11	94.74	74.11	-123.72	153.74	139.45	14.29	10.759		
3,000.00	2,990.86	2,981.16	2,981.16	10.52	10.47	99.51	74.11	-123.72	155.38	140.58	14.80	10.497		
3,100.00	3,090.00	3,080.30	3,080.30	10.91	10.83	104.14	74.11	-123.72	158.08	142.76	15.31	10.323		
3,200.00	3,189.15	3,179.45	3,179.45	11.30	11.18	108.59	74.11	-123.72	161.79	145.96	15.82	10.225		
3,300.00	3,288.29	3,279.52	3,279.52	11.69	11.53	112.59	74.03	-124.54	166.22	149.89	16.33	10.179		
3,400.00	3,387.44	3,380.35	3,380.28	12.08	11.88	115.57	73.71	-127.96	170.58	153.75	16.83	10.134		
3,500.00	3,486.58	3,481.62	3,481.37	12.48	12.22	117.59	73.14	-134.05	174.44	157.10	17.34	10.059		
3,600.00	3,585.72	3,583.20	3,582.56	12.87	12.57	118.72	72.32	-142.84	177.51	159.65	17.85	9.942		
3,700.00	3,684.87	3,684.93	3,683.63	13.27	12.93	119.01	71.24	-154.33	179.63	161.26	18.37	9.777		
3,800.00	3,784.01	3,785.77	3,783.52	13.67	13.29	118.62	69.96	-168.00	180.91	162.01	18.90	9.573		
3,900.00	3,883.16	3,885.75	3,882.53	14.07	13.64	118.14	68.66	-181.86	182.08	162.66	19.43	9.372		
4,000.00	3,982.30	3,985.73	3,981.54	14.47	14.00	117.67	67.36	-195.71	183.27	163.31	19.96	9.182		
4,100.00	4,081.45	4,085.71	4,080.55	14.87	14.37	117.21	66.06	-209.57	184.47	163.98	20.50	9.000		
4,200.00	4,180.59	4,185.69	4,179.56	15.27	14.74	116.75	64.76	-223.43	185.69	164.65	21.04	8.827		
4,300.00	4,279.74	4,285.67	4,278.56	15.67	15.11	116.30	63.46	-237.29	186.91	165.33	21.58	8.662		
4,400.00	4,378.88	4,385.66	4,377.57	16.08	15.48	115.85	62.16	-251.15	188.14	166.02	22.12	8.504		
4,500.00	4,478.03	4,485.64	4,476.58	16.48	15.86	115.41	60.86	-265.00	189.39	166.72	22.67	8.354		
4,600.00	4,577.17	4,585.62	4,575.59	16.89	16.24	114.98	59.57	-278.86	190.65	167.43	23.22	8.210		
4,700.00	4,676.32	4,685.60	4,674.60	17.29	16.62	114.55	58.27	-292.72	191.92	168.14	23.77	8.073		
4,800.00	4,775.46	4,785.58	4,773.61	17.70	17.00	114.13	56.97	-306.58	193.20	168.87	24.33	7.941		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	4,874.60	4,885.56	4,872.61	18.10	17.38	113.71	55.67	-320.43	194.49	169.60	24.88	7.816		
5,000.00	4,973.75	4,985.55	4,971.62	18.51	17.77	113.30	54.37	-334.29	195.79	170.34	25.44	7.695		
5,100.00	5,072.89	5,085.53	5,070.63	18.92	18.16	112.89	53.07	-348.15	197.10	171.09	26.00	7.580		
5,200.00	5,172.04	5,185.51	5,169.64	19.32	18.55	112.49	51.77	-362.01	198.41	171.85	26.56	7.469		
5,300.00	5,271.18	5,285.49	5,268.65	19.73	18.94	112.09	50.47	-375.87	199.74	172.62	27.13	7.363		
5,400.00	5,370.33	5,385.47	5,367.65	20.14	19.33	111.70	49.17	-389.72	201.08	173.39	27.69	7.262		
5,500.00	5,469.47	5,485.46	5,466.66	20.55	19.72	111.32	47.87	-403.58	202.43	174.17	28.26	7.164		
5,600.00	5,568.62	5,585.44	5,565.67	20.96	20.12	110.94	46.57	-417.44	203.79	174.96	28.82	7.070		
5,700.00	5,667.76	5,685.42	5,664.68	21.37	20.51	110.56	45.27	-431.30	205.15	175.76	29.39	6.980		
5,800.00	5,766.91	5,785.40	5,763.69	21.78	20.91	110.19	43.98	-445.15	206.53	176.56	29.96	6.893		
5,900.00	5,866.05	5,885.38	5,862.70	22.19	21.31	109.83	42.68	-459.01	207.91	177.37	30.53	6.809		
6,000.00	5,965.19	5,985.36	5,961.70	22.59	21.71	109.47	41.38	-472.87	209.30	178.19	31.11	6.729		
6,100.00	6,064.34	6,085.35	6,060.71	23.01	22.11	109.11	40.08	-486.73	210.70	179.02	31.68	6.651		
6,200.00	6,163.48	6,185.33	6,159.72	23.42	22.51	108.76	38.78	-500.59	212.11	179.85	32.25	6.576		
6,300.00	6,262.63	6,285.31	6,258.73	23.83	22.91	108.42	37.48	-514.44	213.52	180.69	32.83	6.504		
6,400.00	6,361.77	6,385.29	6,357.74	24.24	23.31	108.08	36.18	-528.30	214.94	181.54	33.40	6.435		
6,500.00	6,460.92	6,485.27	6,456.74	24.65	23.71	107.74	34.88	-542.16	216.37	182.39	33.98	6.368		
6,600.00	6,560.06	6,585.25	6,555.75	25.06	24.12	107.41	33.58	-556.02	217.81	183.25	34.56	6.303		
6,700.00	6,659.21	6,685.24	6,654.76	25.47	24.52	107.08	32.28	-569.88	219.26	184.12	35.14	6.240		
6,800.00	6,758.35	6,785.22	6,753.77	25.88	24.93	106.75	30.98	-583.73	220.71	184.99	35.72	6.180		
6,900.00	6,857.50	6,885.20	6,852.78	26.29	25.33	106.43	29.68	-597.59	222.17	185.87	36.29	6.121		
7,000.00	6,956.64	6,985.18	6,951.79	26.70	25.74	106.12	28.39	-611.45	223.63	186.76	36.88	6.065		
7,100.00	7,055.78	7,085.16	7,050.79	27.12	26.14	105.81	27.09	-625.31	225.10	187.65	37.46	6.010		
7,141.02	7,096.45	7,126.17	7,091.40	27.29	26.31	105.68	26.55	-630.99	225.71	188.02	37.69	5.988		
7,200.00	7,154.99	7,185.14	7,149.80	27.53	26.55	105.40	25.79	-639.16	226.46	188.42	38.04	5.954		
7,300.00	7,254.46	7,285.05	7,248.74	27.92	26.96	104.41	24.49	-653.01	227.22	188.60	38.62	5.883		
7,400.00	7,354.17	7,384.84	7,347.56	28.30	27.37	102.79	23.19	-666.84	227.46	188.25	39.21	5.802		
7,500.00	7,454.04	7,484.43	7,446.18	28.66	27.77	100.53	21.90	-680.65	227.39	187.60	39.79	5.715		
7,587.63	7,541.64	7,571.48	7,532.38	28.96	28.13	98.02	20.77	-692.71	227.31	187.02	40.29	5.642		
7,600.00	7,554.01	7,583.76	7,544.53	29.00	28.18	97.63	20.61	-694.41	227.31	186.95	40.36	5.633		
7,640.99	7,595.00	7,624.38	7,584.76	29.13	28.35	-6.32	20.08	-700.04	227.36	186.78	40.58	5.602		
7,700.00	7,654.01	7,682.81	7,642.62	29.32	28.58	-8.37	19.32	-708.14	227.65	186.75	40.90	5.566		
7,800.00	7,754.01	7,781.84	7,740.69	29.64	28.99	-11.82	18.03	-721.87	228.81	187.39	41.43	5.523		
7,900.00	7,854.01	7,880.86	7,838.75	29.95	29.40	-15.22	16.75	-735.59	230.81	188.87	41.94	5.504 SF		
8,000.00	7,954.01	7,979.89	7,936.81	30.27	29.80	-18.56	15.46	-749.32	233.62	191.19	42.43	5.506		
8,100.00	8,054.01	8,078.92	8,034.87	30.59	30.21	-21.80	14.17	-763.04	237.22	194.31	42.91	5.529		
8,200.00	8,154.01	8,177.94	8,132.93	30.91	30.62	-24.95	12.89	-776.77	241.57	198.20	43.37	5.570		
8,300.00	8,254.01	8,276.97	8,231.00	31.24	31.02	-27.97	11.60	-790.50	246.62	202.80	43.82	5.628		
8,400.00	8,354.01	8,376.00	8,329.06	31.56	31.43	-30.86	10.31	-804.22	252.35	208.09	44.26	5.702		
8,500.00	8,454.01	8,475.02	8,427.12	31.88	31.84	-33.63	9.03	-817.95	258.69	214.00	44.69	5.788		
8,600.00	8,554.01	8,574.05	8,525.18	32.21	32.25	-36.25	7.74	-831.67	265.62	220.50	45.12	5.887		
8,700.00	8,654.01	8,673.08	8,623.24	32.53	32.66	-38.74	6.45	-845.40	273.08	227.54	45.54	5.996		
8,800.00	8,754.01	8,772.10	8,721.31	32.86	33.07	-41.10	5.17	-859.12	281.03	235.07	45.96	6.114		
8,900.00	8,854.01	8,871.13	8,819.37	33.18	33.48	-43.32	3.88	-872.85	289.44	243.05	46.39	6.240		
9,000.00	8,954.01	8,970.15	8,917.43	33.51	33.89	-45.42	2.59	-886.57	298.25	251.44	46.81	6.372		
9,100.00	9,054.01	9,074.78	9,021.22	33.84	34.31	-47.31	1.36	-899.68	306.55	259.28	47.28	6.484		
9,200.00	9,154.01	9,180.10	9,126.03	34.16	34.72	-48.72	0.39	-910.02	313.25	265.50	47.74	6.561		
9,300.00	9,254.01	9,285.92	9,231.58	34.49	35.11	-49.71	-0.31	-917.50	318.18	269.96	48.21	6.600		
9,400.00	9,354.01	9,392.08	9,337.63	34.82	35.49	-50.29	-0.74	-922.07	321.22	272.55	48.67	6.600		
9,500.00	9,454.01	9,498.41	9,443.95	35.15	35.85	-50.50	-0.89	-923.72	322.32	273.19	49.13	6.561		
9,600.00	9,554.01	9,598.77	9,544.31	35.48	36.18	-50.50	-0.89	-923.72	322.32	272.72	49.60	6.499		
9,605.58	9,559.59	9,604.36	9,549.89	35.50	36.20	-50.50	-0.89	-923.72	322.32	272.70	49.62	6.495		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	
9,700.00	9,654.01	9,683.99	9,629.49	35.81	36.46	-50.31	0.54	-923.74	323.59	273.50	50.09	6.460	
9,800.00	9,754.01	9,750.00	9,694.92	36.14	36.67	-49.19	8.99	-923.83	332.46	282.16	50.30	6.610	
9,900.00	9,854.01	9,824.56	9,767.09	36.48	36.89	-46.86	27.49	-924.03	349.93	299.59	50.33	6.952	
10,000.00	9,954.01	9,888.18	9,826.34	36.81	37.07	-44.19	50.58	-924.29	376.62	326.74	49.87	7.552	
10,100.00	10,054.01	9,950.00	9,881.12	37.14	37.23	-41.21	79.17	-924.60	412.55	363.39	49.16	8.393	
10,200.00	10,154.01	10,000.00	9,922.97	37.47	37.35	-38.66	106.50	-924.90	457.21	409.27	47.93	9.538	
10,300.00	10,254.01	10,050.00	9,962.27	37.81	37.46	-36.09	137.38	-925.24	509.91	463.14	46.76	10.904	
10,400.00	10,354.01	10,084.00	9,987.39	38.14	37.53	-34.38	160.28	-925.50	569.40	524.25	45.15	12.611	
10,500.00	10,454.01	10,119.58	10,012.18	38.48	37.60	-32.63	185.79	-925.78	634.86	591.03	43.83	14.484	
10,600.00	10,554.01	10,150.00	10,032.08	38.81	37.65	-31.19	208.80	-926.03	705.24	662.65	42.59	16.560	
10,700.00	10,654.01	10,178.53	10,049.62	39.15	37.70	-29.89	231.30	-926.28	779.71	738.17	41.53	18.774	
10,800.00	10,754.01	10,200.00	10,062.06	39.48	37.74	-28.95	248.79	-926.47	857.58	817.08	40.50	21.175	
10,900.00	10,854.01	10,224.68	10,075.54	39.82	37.78	-27.90	269.46	-926.70	938.26	898.50	39.76	23.597	
11,000.00	10,954.01	10,250.00	10,088.43	40.16	37.82	-26.87	291.25	-926.94	1,021.35	982.15	39.20	26.053	
11,100.00	11,054.01	10,250.00	10,088.43	40.49	37.82	-26.87	291.25	-926.94	1,106.49	1,068.25	38.24	28.936	
11,200.00	11,154.01	10,276.92	10,101.07	40.83	37.86	-25.83	315.01	-927.20	1,193.02	1,155.03	37.99	31.402	
11,300.00	11,254.01	10,300.00	10,111.00	41.17	37.90	-24.98	335.84	-927.43	1,281.24	1,243.49	37.75	33.937	
11,400.00	11,354.01	10,300.00	10,111.00	41.51	37.90	-24.98	335.84	-927.43	1,370.49	1,333.28	37.21	36.831	
11,500.00	11,454.01	10,300.00	10,111.00	41.85	37.90	-24.98	335.84	-927.43	1,461.13	1,424.34	36.79	39.716	
11,600.00	11,554.01	10,325.81	10,121.11	42.18	37.95	-24.08	359.59	-927.69	1,552.13	1,515.31	36.82	42.150	
11,700.00	11,654.01	10,350.00	10,129.60	42.52	37.99	-23.27	382.24	-927.94	1,644.45	1,607.58	36.87	44.600	
11,800.00	11,754.01	10,350.00	10,129.60	42.86	37.99	-23.27	382.24	-927.94	1,736.99	1,700.33	36.66	47.383	
11,865.03	11,819.04	10,350.00	10,129.60	43.08	37.99	-23.27	382.24	-927.94	1,797.61	1,761.05	36.56	49.174	
11,900.00	11,853.99	10,350.00	10,129.60	43.20	37.99	-7.74	382.24	-927.94	1,829.94	1,793.44	36.50	50.135	
11,950.00	11,903.70	10,350.00	10,129.60	43.37	37.99	-6.47	382.24	-927.94	1,874.85	1,838.45	36.40	51.512	
12,000.00	11,952.76	10,350.00	10,129.60	43.54	37.99	-5.57	382.24	-927.94	1,918.01	1,881.74	36.27	52.881	
12,050.00	12,000.81	10,369.65	10,135.79	43.70	38.03	-4.63	400.88	-928.14	1,958.78	1,922.47	36.32	53.938	
12,100.00	12,047.48	10,376.49	10,137.80	43.85	38.04	-4.08	407.43	-928.22	1,997.51	1,961.30	36.21	55.166	
12,150.00	12,092.40	10,400.00	10,144.09	43.99	38.09	-3.47	430.07	-928.47	2,034.08	1,997.85	36.23	56.138	
12,200.00	12,135.25	10,400.00	10,144.09	44.13	38.09	-3.21	430.07	-928.47	2,067.54	2,031.52	36.03	57.386	
12,250.00	12,175.69	10,400.00	10,144.09	44.25	38.09	-2.99	430.07	-928.47	2,098.38	2,062.56	35.82	58.580	
12,300.00	12,213.41	10,400.00	10,144.09	44.37	38.09	-2.82	430.07	-928.47	2,126.48	2,090.87	35.61	59.716	
12,350.00	12,248.14	10,400.00	10,144.09	44.48	38.09	-2.68	430.07	-928.47	2,151.73	2,116.33	35.40	60.783	
12,400.00	12,279.60	10,426.47	10,150.06	44.58	38.14	-2.38	455.86	-928.75	2,173.28	2,137.90	35.37	61.442	
12,450.00	12,307.55	10,450.00	10,154.35	44.68	38.20	-2.14	478.99	-929.01	2,192.16	2,156.85	35.31	62.081	
12,500.00	12,331.79	10,450.00	10,154.35	44.77	38.20	-2.08	478.99	-929.01	2,207.35	2,172.24	35.10	62.882	
12,550.00	12,352.12	10,450.00	10,154.35	44.88	38.20	-2.03	478.99	-929.01	2,219.38	2,184.47	34.91	63.574	
12,600.00	12,368.39	10,450.00	10,154.35	44.99	38.20	-2.00	478.99	-929.01	2,228.24	2,193.50	34.74	64.148	
12,650.00	12,380.49	10,474.80	10,157.85	45.12	38.26	-1.83	503.54	-929.28	2,233.20	2,198.51	34.69	64.376	
12,700.00	12,388.31	10,500.00	10,160.31	45.25	38.33	-1.67	528.61	-929.55	2,235.21	2,200.57	34.65	64.516	
12,750.00	12,391.80	10,500.00	10,160.31	45.41	38.33	-1.68	528.61	-929.55	2,233.29	2,198.77	34.52	64.698	
12,765.03	12,392.00	10,500.00	10,160.31	45.45	38.33	-1.68	528.61	-929.55	2,232.07	2,197.59	34.49	64.722	
12,800.00	12,392.00	10,500.00	10,160.31	45.57	38.33	-1.74	528.61	-929.55	2,229.19	2,194.77	34.42	64.755	
12,900.00	12,392.00	10,524.58	10,161.65	45.95	38.39	-1.72	553.15	-929.82	2,223.38	2,188.99	34.39	64.651	
13,000.00	12,392.00	10,550.00	10,161.92	46.37	38.47	-1.65	578.57	-930.10	2,221.33	2,186.85	34.47	64.438	
13,010.07	12,392.00	10,550.00	10,161.92	46.42	38.47	-1.65	578.57	-930.10	2,221.30	2,186.82	34.48	64.417	
13,100.00	12,392.00	10,599.21	10,160.86	46.85	38.63	-1.46	627.76	-930.64	2,222.59	2,187.92	34.66	64.120	
13,200.00	12,392.00	10,698.63	10,158.63	47.36	39.03	-1.16	727.16	-931.74	2,224.59	2,189.68	34.92	63.710	
13,300.00	12,392.00	10,798.36	10,156.40	47.91	39.50	-0.93	826.86	-932.84	2,226.71	2,191.49	35.21	63.232	
13,400.00	12,392.00	10,898.28	10,154.17	48.49	40.04	-0.80	926.74	-933.94	2,228.89	2,193.34	35.56	62.687	
13,448.51	12,392.00	10,946.77	10,153.09	48.78	40.34	-0.77	975.21	-934.47	2,229.97	2,194.23	35.74	62.400	
13,500.00	12,392.00	10,998.25	10,151.94	49.10	40.66	-0.77	1,026.68	-935.04	2,231.12	2,195.18	35.94	62.087	

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
13,600.00	12,392.00	11,098.22	10,149.70	49.75	41.33	-0.77	1,126.62	-936.14	2,233.36	2,197.01	36.35	61.445		
13,700.00	12,392.00	11,198.20	10,147.47	50.45	42.06	-0.77	1,226.57	-937.24	2,235.59	2,198.80	36.79	60.769		
13,800.00	12,392.00	11,298.17	10,145.23	51.20	42.84	-0.77	1,326.51	-938.34	2,237.83	2,200.57	37.26	60.065		
13,900.00	12,392.00	11,398.15	10,143.00	51.98	43.67	-0.77	1,426.45	-939.44	2,240.06	2,202.31	37.75	59.336		
14,000.00	12,392.00	11,498.12	10,140.76	52.81	44.55	-0.76	1,526.40	-940.54	2,242.30	2,204.02	38.27	58.586		
14,100.00	12,392.00	11,598.10	10,138.53	53.68	45.47	-0.76	1,626.34	-941.64	2,244.53	2,205.71	38.82	57.820		
14,200.00	12,392.00	11,698.07	10,136.29	54.58	46.44	-0.76	1,726.29	-942.74	2,246.77	2,207.38	39.39	57.040		
14,300.00	12,392.00	11,798.05	10,134.06	55.51	47.44	-0.76	1,826.23	-943.84	2,249.00	2,209.02	39.98	56.251		
14,400.00	12,392.00	11,898.02	10,131.82	56.48	48.47	-0.76	1,926.17	-944.94	2,251.24	2,210.64	40.60	55.455		
14,500.00	12,392.00	11,998.00	10,129.59	57.48	49.54	-0.76	2,026.12	-946.04	2,253.47	2,212.24	41.23	54.656		
14,600.00	12,392.00	12,097.97	10,127.35	58.51	50.64	-0.76	2,126.06	-947.15	2,255.71	2,213.82	41.88	53.855		
14,700.00	12,392.00	12,197.95	10,125.12	59.57	51.77	-0.76	2,226.01	-948.25	2,257.94	2,215.38	42.56	53.055		
14,800.00	12,392.00	12,297.92	10,122.88	60.65	52.93	-0.76	2,325.95	-949.35	2,260.18	2,216.93	43.25	52.258		
14,900.00	12,392.00	12,397.90	10,120.65	61.76	54.12	-0.76	2,425.89	-950.45	2,262.41	2,218.45	43.96	51.467		
15,000.00	12,392.00	12,497.87	10,118.42	62.89	55.32	-0.76	2,525.84	-951.55	2,264.65	2,219.96	44.68	50.682		
15,100.00	12,392.00	12,597.85	10,116.18	64.05	56.55	-0.76	2,625.78	-952.65	2,266.88	2,221.46	45.42	49.905		
15,200.00	12,392.00	12,697.82	10,113.95	65.23	57.80	-0.76	2,725.72	-953.75	2,269.12	2,222.94	46.18	49.137		
15,300.00	12,392.00	12,797.80	10,111.71	66.42	59.07	-0.76	2,825.67	-954.85	2,271.35	2,224.40	46.95	48.379		
15,400.00	12,392.00	12,897.77	10,109.48	67.64	60.36	-0.75	2,925.61	-955.95	2,273.59	2,225.86	47.73	47.633		
15,500.00	12,392.00	12,997.75	10,107.24	68.88	61.67	-0.75	3,025.56	-957.05	2,275.82	2,227.29	48.53	46.898		
15,600.00	12,392.00	13,097.72	10,105.01	70.13	62.99	-0.75	3,125.50	-958.15	2,278.06	2,228.72	49.33	46.176		
15,700.00	12,392.00	13,197.70	10,102.77	71.40	64.33	-0.75	3,225.44	-959.25	2,280.29	2,230.14	50.15	45.466		
15,800.00	12,392.00	13,297.67	10,100.54	72.68	65.68	-0.75	3,325.39	-960.35	2,282.53	2,231.54	50.98	44.769		
15,900.00	12,392.00	13,397.65	10,098.30	73.98	67.05	-0.75	3,425.33	-961.46	2,284.76	2,232.94	51.82	44.086		
16,000.00	12,392.00	13,497.62	10,096.07	75.29	68.43	-0.75	3,525.28	-962.56	2,287.00	2,234.32	52.68	43.417		
16,100.00	12,392.00	13,597.60	10,093.83	76.62	69.82	-0.75	3,625.22	-963.66	2,289.23	2,235.70	53.54	42.761		
16,200.00	12,392.00	13,697.57	10,091.60	77.96	71.22	-0.75	3,725.16	-964.76	2,291.47	2,237.06	54.40	42.119		
16,300.00	12,392.00	13,797.55	10,089.36	79.31	72.63	-0.75	3,825.11	-965.86	2,293.70	2,238.42	55.28	41.491		
16,400.00	12,392.00	13,897.52	10,087.13	80.67	74.05	-0.75	3,925.05	-966.96	2,295.94	2,239.77	56.17	40.876		
16,500.00	12,392.00	13,997.50	10,084.90	82.04	75.48	-0.75	4,025.00	-968.06	2,298.17	2,241.11	57.06	40.275		
16,600.00	12,392.00	14,097.47	10,082.66	83.42	76.92	-0.75	4,124.94	-969.16	2,300.41	2,242.44	57.96	39.687		
16,700.00	12,392.00	14,197.45	10,080.43	84.81	78.37	-0.75	4,224.88	-970.26	2,302.64	2,243.77	58.87	39.113		
16,800.00	12,392.00	14,297.42	10,078.19	86.21	79.83	-0.74	4,324.83	-971.36	2,304.88	2,245.09	59.79	38.552		
16,900.00	12,392.00	14,397.40	10,075.96	87.62	81.29	-0.74	4,424.77	-972.46	2,307.11	2,246.40	60.71	38.003		
17,000.00	12,392.00	14,497.37	10,073.72	89.04	82.76	-0.74	4,524.72	-973.56	2,309.35	2,247.71	61.64	37.467		
17,100.00	12,392.00	14,597.35	10,071.49	90.47	84.24	-0.74	4,624.66	-974.66	2,311.58	2,249.01	62.57	36.944		
17,200.00	12,392.00	14,697.32	10,069.25	91.90	85.73	-0.74	4,724.60	-975.77	2,313.82	2,250.31	63.51	36.433		
17,300.00	12,392.00	14,797.30	10,067.02	93.34	87.22	-0.74	4,824.55	-976.87	2,316.05	2,251.60	64.45	35.933		
17,400.00	12,392.00	14,897.27	10,064.78	94.79	88.71	-0.74	4,924.49	-977.97	2,318.29	2,252.88	65.40	35.446		
17,500.00	12,392.00	14,997.25	10,062.55	96.25	90.21	-0.74	5,024.44	-979.07	2,320.52	2,254.16	66.36	34.969		
17,600.00	12,392.00	15,097.22	10,060.31	97.71	91.72	-0.74	5,124.38	-980.17	2,322.76	2,255.44	67.32	34.504		
17,700.00	12,392.00	15,197.20	10,058.08	99.17	93.23	-0.74	5,224.32	-981.27	2,324.99	2,256.71	68.28	34.049		
17,800.00	12,392.00	15,297.17	10,055.84	100.65	94.75	-0.74	5,324.27	-982.37	2,327.23	2,257.98	69.25	33.605		
17,900.00	12,392.00	15,397.15	10,053.61	102.13	96.27	-0.74	5,424.21	-983.47	2,329.46	2,259.24	70.22	33.172		
18,000.00	12,392.00	15,497.12	10,051.38	103.61	97.80	-0.74	5,524.16	-984.57	2,331.70	2,260.50	71.20	32.748		
18,100.00	12,392.00	15,597.10	10,049.14	105.10	99.33	-0.74	5,624.10	-985.67	2,333.93	2,261.75	72.18	32.334		
18,200.00	12,392.00	15,697.07	10,046.91	106.59	100.86	-0.73	5,724.04	-986.77	2,336.17	2,263.00	73.17	31.930		
18,300.00	12,392.00	15,797.05	10,044.67	108.09	102.40	-0.73	5,823.99	-987.87	2,338.40	2,264.25	74.15	31.534		
18,400.00	12,392.00	15,897.02	10,042.44	109.59	103.94	-0.73	5,923.93	-988.97	2,340.64	2,265.49	75.15	31.148		
18,500.00	12,392.00	15,997.00	10,040.20	111.10	105.48	-0.73	6,023.88	-990.07	2,342.87	2,266.73	76.14	30.771		
18,600.00	12,392.00	16,096.97	10,037.97	112.61	107.03	-0.73	6,123.82	-991.18	2,345.11	2,267.97	77.14	30.402		
18,700.00	12,392.00	16,196.95	10,035.73	114.12	108.58	-0.73	6,223.76	-992.28	2,347.34	2,269.21	78.14	30.041		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
							+N/-S (usft)	+E/-W (usft)						
18,800.00	12,392.00	16,296.92	10,033.50	115.64	110.13	-0.73	6,323.71	-993.38	2,349.58	2,270.44	79.14	29.688		
18,900.00	12,392.00	16,396.90	10,031.26	117.17	111.69	-0.73	6,423.65	-994.48	2,351.81	2,271.67	80.15	29.343		
19,000.00	12,392.00	16,496.87	10,029.03	118.69	113.25	-0.73	6,523.60	-995.58	2,354.05	2,272.89	81.16	29.006		
19,100.00	12,392.00	16,596.85	10,026.79	120.22	114.81	-0.73	6,623.54	-996.68	2,356.28	2,274.12	82.17	28.676		
19,200.00	12,392.00	16,696.82	10,024.56	121.75	116.37	-0.73	6,723.48	-997.78	2,358.52	2,275.34	83.18	28.353		
19,300.00	12,392.00	16,796.80	10,022.32	123.29	117.94	-0.73	6,823.43	-998.88	2,360.75	2,276.56	84.20	28.038		
19,400.00	12,392.00	16,896.77	10,020.09	124.83	119.51	-0.73	6,923.37	-999.98	2,362.99	2,277.77	85.22	27.729		
19,500.00	12,392.00	16,996.75	10,017.86	126.37	121.08	-0.73	7,023.32	-1,001.08	2,365.22	2,278.99	86.24	27.426		
19,600.00	12,392.00	17,096.72	10,015.62	127.91	122.65	-0.73	7,123.26	-1,002.18	2,367.46	2,280.20	87.26	27.130		
19,700.00	12,392.00	17,196.70	10,013.39	129.46	124.23	-0.72	7,223.20	-1,003.28	2,369.70	2,281.41	88.29	26.841		
19,800.00	12,392.00	17,296.67	10,011.15	131.01	125.80	-0.72	7,323.15	-1,004.38	2,371.93	2,282.62	89.32	26.557		
19,900.00	12,392.00	17,396.65	10,008.92	132.56	127.38	-0.72	7,423.09	-1,005.49	2,374.17	2,283.82	90.34	26.279		
20,000.00	12,392.00	17,496.62	10,006.68	134.12	128.96	-0.72	7,523.04	-1,006.59	2,376.40	2,285.02	91.38	26.007		
20,100.00	12,392.00	17,596.60	10,004.45	135.67	130.55	-0.72	7,622.98	-1,007.69	2,378.64	2,286.23	92.41	25.740		
20,200.00	12,392.00	17,696.57	10,002.21	137.23	132.13	-0.72	7,722.92	-1,008.79	2,380.87	2,287.43	93.44	25.479		
20,300.00	12,392.00	17,796.55	9,999.98	138.80	133.72	-0.72	7,822.87	-1,009.89	2,383.11	2,288.63	94.48	25.223		
20,400.00	12,392.00	17,896.52	9,997.74	140.36	135.30	-0.72	7,922.81	-1,010.99	2,385.34	2,289.82	95.52	24.973		
20,500.00	12,392.00	17,996.50	9,995.51	141.92	136.89	-0.72	8,022.76	-1,012.09	2,387.58	2,291.02	96.56	24.727		
20,600.00	12,392.00	18,096.47	9,993.27	143.49	138.48	-0.72	8,122.70	-1,013.19	2,389.81	2,292.21	97.60	24.486		
20,700.00	12,392.00	18,196.45	9,991.04	145.06	140.08	-0.72	8,222.64	-1,014.29	2,392.05	2,293.40	98.64	24.250		
20,800.00	12,392.00	18,296.42	9,988.80	146.63	141.67	-0.72	8,322.59	-1,015.39	2,394.28	2,294.60	99.69	24.018		
20,900.00	12,392.00	18,396.40	9,986.57	148.21	143.27	-0.72	8,422.53	-1,016.49	2,396.52	2,295.78	100.73	23.791		
21,000.00	12,392.00	18,496.37	9,984.34	149.78	144.86	-0.72	8,522.48	-1,017.59	2,398.75	2,296.97	101.78	23.568		
21,100.00	12,392.00	18,596.35	9,982.10	151.36	146.46	-0.72	8,622.42	-1,018.69	2,400.99	2,298.16	102.83	23.350		
21,200.00	12,392.00	18,696.32	9,979.87	152.94	148.06	-0.71	8,722.36	-1,019.80	2,403.22	2,299.35	103.88	23.136		
21,300.00	12,392.00	18,796.30	9,977.63	154.51	149.66	-0.71	8,822.31	-1,020.90	2,405.46	2,300.53	104.93	22.925		
21,400.00	12,392.00	18,896.27	9,975.40	156.10	151.26	-0.71	8,922.25	-1,022.00	2,407.69	2,301.71	105.98	22.719		
21,500.00	12,392.00	18,996.25	9,973.16	157.68	152.86	-0.71	9,022.20	-1,023.10	2,409.93	2,302.90	107.03	22.516		
21,600.00	12,392.00	19,096.22	9,970.93	159.26	154.47	-0.71	9,122.14	-1,024.20	2,412.16	2,304.08	108.09	22.317		
21,700.00	12,392.00	19,196.20	9,968.69	160.85	156.07	-0.71	9,222.08	-1,025.30	2,414.40	2,305.26	109.14	22.122		
21,800.00	12,392.00	19,296.17	9,966.46	162.43	157.68	-0.71	9,322.03	-1,026.40	2,416.63	2,306.43	110.20	21.930		
21,900.00	12,392.00	19,396.15	9,964.22	164.02	159.28	-0.71	9,421.97	-1,027.50	2,418.87	2,307.61	111.25	21.742		
22,000.00	12,392.00	19,496.12	9,961.99	165.61	160.89	-0.71	9,521.92	-1,028.60	2,421.10	2,308.79	112.31	21.557		
22,100.00	12,392.00	19,596.10	9,959.75	167.20	162.50	-0.71	9,621.86	-1,029.70	2,423.34	2,309.96	113.37	21.375		
22,200.00	12,392.00	19,696.07	9,957.52	168.80	164.11	-0.71	9,721.80	-1,030.80	2,425.57	2,311.14	114.43	21.196		
22,300.00	12,392.00	19,796.05	9,955.28	170.39	165.72	-0.71	9,821.75	-1,031.90	2,427.81	2,312.31	115.49	21.021		
22,400.00	12,392.00	19,896.02	9,953.05	171.98	167.33	-0.71	9,921.69	-1,033.00	2,430.04	2,313.49	116.56	20.849		
22,500.00	12,392.00	19,996.00	9,950.82	173.58	168.94	-0.71	10,021.64	-1,034.11	2,432.28	2,314.66	117.62	20.679		
22,581.33	12,392.00	20,077.31	9,949.00	174.88	170.25	-0.71	10,102.92	-1,035.00	2,434.10	2,315.61	118.48	20.544		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	-50.01	74.42	-88.73	116.16					
100.00	100.00	90.90	90.90	0.13	0.13	-50.01	74.42	-88.73	115.81	115.63	0.18	644.289		
200.00	200.00	190.90	190.90	0.48	0.47	-50.01	74.42	-88.73	115.81	115.13	0.67	172.120		
300.00	300.00	290.90	290.90	0.84	0.83	-50.01	74.42	-88.73	115.81	114.63	1.18	98.163		
400.00	400.00	390.90	390.90	1.20	1.18	-50.01	74.42	-88.73	115.81	114.12	1.69	68.660		
500.00	500.00	490.90	490.90	1.56	1.54	-50.01	74.42	-88.73	115.81	113.61	2.19	52.793		
600.00	600.00	590.90	590.90	1.92	1.90	-50.01	74.42	-88.73	115.81	113.11	2.70	42.882		
700.00	700.00	690.90	690.90	2.28	2.26	-50.01	74.42	-88.73	115.81	112.60	3.21	36.105		
800.00	800.00	790.90	790.90	2.63	2.62	-50.01	74.42	-88.73	115.81	112.09	3.71	31.177		
900.00	900.00	890.90	890.90	2.99	2.98	-50.01	74.42	-88.73	115.81	111.59	4.22	27.433		
1,000.00	1,000.00	990.90	990.90	3.35	3.34	-50.01	74.42	-88.73	115.81	111.08	4.73	24.492		
1,100.00	1,100.00	1,090.90	1,090.90	3.71	3.69	-50.01	74.42	-88.73	115.81	110.57	5.24	22.120		
1,200.00	1,200.00	1,190.90	1,190.90	4.07	4.05	-50.01	74.42	-88.73	115.81	110.07	5.74	20.167		
1,300.00	1,300.00	1,290.90	1,290.90	4.43	4.41	-50.01	74.42	-88.73	115.81	109.56	6.25	18.531		
1,400.00	1,400.00	1,390.90	1,390.90	4.79	4.77	-50.01	74.42	-88.73	115.81	109.05	6.76	17.141		
1,500.00	1,500.00	1,490.90	1,490.90	5.14	5.13	-50.01	74.42	-88.73	115.81	108.54	7.26	15.944		
1,525.00	1,525.00	1,515.90	1,515.90	5.23	5.22	-50.01	74.42	-88.73	115.81	108.42	7.39	15.671 CC		
1,600.00	1,600.00	1,590.90	1,590.90	5.49	5.49	110.33	74.42	-88.73	116.06	108.30	7.76	14.955 ES		
1,700.00	1,699.94	1,690.84	1,690.84	5.82	5.84	111.81	74.42	-88.73	117.24	108.99	8.24	14.220		
1,800.00	1,799.76	1,790.66	1,790.66	6.15	6.20	114.39	74.42	-88.73	119.55	110.82	8.73	13.692		
1,900.00	1,899.40	1,890.30	1,890.30	6.48	6.56	117.93	74.42	-88.73	123.31	114.09	9.22	13.373		
2,000.00	1,998.78	1,989.68	1,989.68	6.82	6.92	122.20	74.42	-88.73	128.91	119.19	9.71	13.270		
2,025.00	2,023.57	2,014.47	2,014.47	6.91	7.00	123.36	74.42	-88.73	130.64	120.80	9.84	13.279		
2,100.00	2,097.97	2,088.87	2,088.87	7.17	7.27	118.78	74.42	-88.73	135.57	125.36	10.21	13.278		
2,200.00	2,197.27	2,188.17	2,188.17	7.53	7.63	111.06	74.42	-88.73	140.63	129.92	10.71	13.131		
2,300.00	2,296.60	2,287.50	2,287.50	7.89	7.98	102.53	74.42	-88.73	143.97	132.76	11.21	12.840		
2,400.00	2,395.91	2,386.81	2,386.81	8.26	8.34	94.59	74.42	-88.73	145.70	133.98	11.72	12.433		
2,504.30	2,499.40	2,490.30	2,490.30	8.64	8.71	88.21	74.42	-88.73	145.96	133.71	12.25	11.917		
2,539.58	2,534.37	2,525.27	2,525.27	8.77	8.84	90.00	74.42	-88.73	145.89	133.46	12.43	11.739		
2,600.00	2,594.28	2,585.18	2,585.18	9.00	9.05	93.07	74.42	-88.73	146.10	133.37	12.74	11.472		
2,700.00	2,693.42	2,684.32	2,684.32	9.38	9.41	98.10	74.42	-88.73	147.38	134.14	13.24	11.128		
2,800.00	2,792.57	2,783.47	2,783.47	9.75	9.76	103.01	74.42	-88.73	149.80	136.04	13.75	10.891		
2,900.00	2,891.71	2,882.61	2,882.61	10.14	10.12	107.73	74.42	-88.73	153.29	139.02	14.26	10.748		
3,000.00	2,990.86	2,981.76	2,981.76	10.52	10.47	112.21	74.42	-88.73	157.78	143.01	14.77	10.683		
3,100.00	3,090.00	3,080.90	3,080.90	10.91	10.83	116.43	74.42	-88.73	163.20	147.92	15.28	10.683		
3,200.00	3,189.15	3,180.05	3,180.05	11.30	11.18	120.36	74.42	-88.73	169.45	153.67	15.78	10.737		
3,300.00	3,288.29	3,279.19	3,279.19	11.69	11.54	124.00	74.42	-88.73	176.45	160.16	16.29	10.834		
3,400.00	3,387.44	3,378.34	3,378.34	12.08	11.89	127.35	74.42	-88.73	184.11	167.31	16.79	10.965		
3,500.00	3,486.58	3,480.00	3,480.00	12.48	12.25	130.31	74.26	-89.55	191.84	174.54	17.30	11.089		
3,600.00	3,585.72	3,582.90	3,582.83	12.87	12.60	132.48	73.60	-93.03	198.30	180.50	17.80	11.138		
3,700.00	3,684.87	3,686.27	3,686.00	13.27	12.95	133.93	72.40	-99.26	203.20	184.89	18.31	11.100		
3,800.00	3,784.01	3,789.95	3,789.27	13.67	13.31	134.76	70.67	-108.26	206.35	187.55	18.81	10.971		
3,900.00	3,883.16	3,892.78	3,891.42	14.07	13.66	135.02	68.46	-119.82	207.74	188.43	19.31	10.757		
4,000.00	3,982.30	3,992.77	3,990.67	14.47	14.02	135.12	66.16	-131.78	208.62	188.80	19.82	10.524		
4,100.00	4,081.45	4,092.77	4,089.92	14.87	14.37	135.22	63.87	-143.75	209.51	189.17	20.34	10.301		
4,200.00	4,180.59	4,192.76	4,189.17	15.27	14.73	135.32	61.57	-155.71	210.39	189.53	20.85	10.089		
4,300.00	4,279.74	4,292.76	4,288.42	15.67	15.09	135.41	59.27	-167.68	211.27	189.90	21.37	9.886		
4,400.00	4,378.88	4,392.75	4,387.67	16.08	15.45	135.51	56.98	-179.64	212.16	190.27	21.89	9.692		
4,500.00	4,478.03	4,492.75	4,486.92	16.48	15.81	135.61	54.68	-191.61	213.04	190.63	22.41	9.507		
4,600.00	4,577.17	4,592.74	4,586.17	16.89	16.18	135.70	52.39	-203.57	213.93	191.00	22.93	9.329		
4,700.00	4,676.32	4,692.74	4,685.43	17.29	16.55	135.80	50.09	-215.54	214.81	191.36	23.45	9.159		
4,800.00	4,775.46	4,792.74	4,784.68	17.70	16.92	135.89	47.80	-227.50	215.70	191.72	23.98	8.996		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	4,874.60	4,892.73	4,883.93	18.10	17.29	135.98	45.50	-239.47	216.58	192.08	24.50	8.840		
5,000.00	4,973.75	4,992.73	4,983.18	18.51	17.66	136.07	43.21	-251.44	217.47	192.45	25.03	8.690		
5,100.00	5,072.89	5,092.72	5,082.43	18.92	18.04	136.16	40.91	-263.40	218.36	192.81	25.55	8.545		
5,200.00	5,172.04	5,192.72	5,181.68	19.32	18.41	136.25	38.61	-275.37	219.25	193.17	26.08	8.407		
5,300.00	5,271.18	5,292.71	5,280.93	19.73	18.79	136.34	36.32	-287.33	220.14	193.53	26.61	8.273		
5,400.00	5,370.33	5,392.71	5,380.18	20.14	19.17	136.43	34.02	-299.30	221.03	193.89	27.14	8.145		
5,500.00	5,469.47	5,492.70	5,479.43	20.55	19.55	136.52	31.73	-311.26	221.92	194.25	27.67	8.021		
5,600.00	5,568.62	5,592.70	5,578.68	20.96	19.93	136.61	29.43	-323.23	222.81	194.61	28.20	7.902		
5,700.00	5,667.76	5,692.69	5,677.93	21.37	20.31	136.70	27.14	-335.19	223.70	194.97	28.73	7.787		
5,800.00	5,766.91	5,792.69	5,777.18	21.78	20.70	136.78	24.84	-347.16	224.59	195.34	29.26	7.677		
5,900.00	5,866.05	5,892.69	5,876.43	22.19	21.08	136.87	22.55	-359.12	225.48	195.70	29.79	7.570		
6,000.00	5,965.19	5,992.68	5,975.68	22.59	21.47	136.95	20.25	-371.09	226.38	196.06	30.32	7.466		
6,100.00	6,064.34	6,092.68	6,074.93	23.01	21.85	137.04	17.95	-383.05	227.27	196.42	30.85	7.366		
6,200.00	6,163.48	6,192.67	6,174.18	23.42	22.24	137.12	15.66	-395.02	228.16	196.78	31.39	7.270		
6,300.00	6,262.63	6,292.67	6,273.43	23.83	22.63	137.20	13.36	-406.99	229.06	197.14	31.92	7.176		
6,400.00	6,361.77	6,392.66	6,372.68	24.24	23.02	137.28	11.07	-418.95	229.95	197.50	32.45	7.086		
6,500.00	6,460.92	6,492.66	6,471.93	24.65	23.41	137.37	8.77	-430.92	230.85	197.86	32.99	6.999		
6,600.00	6,560.06	6,592.65	6,571.18	25.06	23.80	137.45	6.48	-442.88	231.74	198.22	33.52	6.914		
6,700.00	6,659.21	6,692.65	6,670.43	25.47	24.19	137.53	4.18	-454.85	232.64	198.59	34.05	6.832		
6,800.00	6,758.35	6,792.64	6,769.68	25.88	24.58	137.61	1.89	-466.81	233.54	198.95	34.59	6.752		
6,900.00	6,857.50	6,892.64	6,868.94	26.29	24.97	137.69	-0.41	-478.78	234.43	199.31	35.12	6.675		
7,000.00	6,956.64	6,992.64	6,968.19	26.70	25.36	137.76	-2.70	-490.74	235.33	199.67	35.66	6.600		
7,100.00	7,055.78	7,092.63	7,067.44	27.12	25.75	137.84	-5.00	-502.71	236.23	200.04	36.19	6.527		
7,141.02	7,096.45	7,133.65	7,108.15	27.29	25.92	137.87	-5.94	-507.62	236.60	200.18	36.41	6.498		
7,200.00	7,154.99	7,192.63	7,166.69	27.53	26.15	137.85	-7.30	-514.67	236.79	200.06	36.73	6.447		
7,300.00	7,254.46	7,292.61	7,265.92	27.92	26.54	137.45	-9.59	-526.64	235.58	198.30	37.27	6.320		
7,400.00	7,354.17	7,392.50	7,365.07	28.30	26.94	136.58	-11.88	-538.59	232.47	194.64	37.83	6.145		
7,500.00	7,454.04	7,492.23	7,464.06	28.66	27.33	135.22	-14.17	-550.52	227.54	189.15	38.39	5.926		
7,600.00	7,554.01	7,591.75	7,562.83	29.00	27.72	133.29	-16.46	-562.43	220.94	181.97	38.97	5.669		
7,640.99	7,595.00	7,632.46	7,603.24	29.13	27.88	29.74	-17.39	-567.30	217.79	178.58	39.22	5.554		
7,700.00	7,654.01	7,691.03	7,661.37	29.32	28.12	28.28	-18.74	-574.31	213.16	173.60	39.56	5.388		
7,800.00	7,754.01	7,790.28	7,759.89	29.64	28.51	25.66	-21.02	-586.19	205.66	165.50	40.16	5.121		
7,900.00	7,854.01	7,889.54	7,858.41	29.95	28.90	22.85	-23.29	-598.07	198.61	157.85	40.76	4.872		
8,000.00	7,954.01	7,988.79	7,956.92	30.27	29.30	19.84	-25.57	-609.94	192.08	150.71	41.37	4.643		
8,100.00	8,054.01	8,088.05	8,055.44	30.59	29.69	16.63	-27.85	-621.82	186.12	144.13	41.99	4.433		
8,200.00	8,154.01	8,187.30	8,153.95	30.91	30.08	13.22	-30.13	-633.70	180.78	138.18	42.61	4.243		
8,300.00	8,254.01	8,286.56	8,252.47	31.24	30.48	9.63	-32.41	-645.57	176.13	132.91	43.22	4.075		
8,400.00	8,354.01	8,385.81	8,350.98	31.56	30.87	5.85	-34.69	-657.45	172.22	128.38	43.84	3.928		
8,500.00	8,454.01	8,485.07	8,449.50	31.88	31.27	1.92	-36.97	-669.33	169.09	124.65	44.44	3.805		
8,600.00	8,554.01	8,584.32	8,548.01	32.21	31.66	-2.13	-39.24	-681.20	166.80	121.77	45.03	3.704		
8,700.00	8,654.01	8,683.58	8,646.53	32.53	32.06	-6.28	-41.52	-693.08	165.38	119.77	45.61	3.626		
8,800.00	8,754.01	8,782.83	8,745.05	32.86	32.46	-10.47	-43.80	-704.96	164.84	118.68	46.16	3.571		
8,809.27	8,763.28	8,792.03	8,754.18	32.89	32.49	-10.86	-44.01	-706.06	164.84	118.63	46.21	3.567		
8,900.00	8,854.01	8,882.09	8,843.56	33.18	32.85	-14.67	-46.08	-716.83	165.21	118.52	46.69	3.539		
9,000.00	8,954.01	8,981.34	8,942.08	33.51	33.25	-18.83	-48.36	-728.71	166.47	119.28	47.19	3.528 SF		
9,100.00	9,054.01	9,080.60	9,040.59	33.84	33.64	-22.90	-50.64	-740.59	168.60	120.93	47.67	3.537		
9,200.00	9,154.01	9,179.85	9,139.11	34.16	34.04	-26.86	-52.92	-752.46	171.58	123.45	48.13	3.565		
9,300.00	9,254.01	9,279.11	9,237.62	34.49	34.44	-30.66	-55.19	-764.34	175.35	126.78	48.57	3.611		
9,400.00	9,354.01	9,378.36	9,336.14	34.82	34.84	-34.29	-57.47	-776.22	179.87	130.88	48.99	3.672		
9,500.00	9,454.01	9,477.62	9,434.65	35.15	35.23	-37.73	-59.75	-788.09	185.08	135.68	49.40	3.746		
9,600.00	9,554.01	9,576.87	9,533.17	35.48	35.63	-40.98	-62.03	-799.97	190.93	141.12	49.81	3.833		
9,700.00	9,654.01	9,676.13	9,631.68	35.81	36.03	-44.02	-64.31	-811.85	197.36	147.14	50.22	3.930		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
9,800.00	9,754.01	9,775.38	9,730.20	36.14	36.43	-46.87	-66.59	-823.72	204.31	153.69	50.62	4.036		
9,900.00	9,854.01	9,874.64	9,828.72	36.48	36.83	-49.53	-68.86	-835.60	211.74	160.71	51.02	4.150		
10,000.00	9,954.01	9,973.89	9,927.23	36.81	37.22	-52.00	-71.14	-847.48	219.59	168.16	51.43	4.269		
10,100.00	10,054.01	10,073.15	10,025.75	37.14	37.62	-54.30	-73.42	-859.35	227.83	175.98	51.84	4.394		
10,200.00	10,154.01	10,172.40	10,124.26	37.47	38.02	-56.44	-75.70	-871.23	236.40	184.14	52.26	4.523		
10,300.00	10,254.01	10,271.66	10,222.78	37.81	38.42	-58.42	-77.98	-883.11	245.28	192.60	52.68	4.656		
10,400.00	10,354.01	10,371.00	10,321.38	38.14	38.82	-60.27	-80.26	-895.00	254.43	201.33	53.11	4.791		
10,500.00	10,454.01	10,475.89	10,425.66	38.48	39.23	-61.88	-82.39	-906.09	262.74	209.15	53.59	4.903		
10,600.00	10,554.01	10,581.33	10,530.75	38.81	39.63	-63.01	-83.98	-914.41	269.04	214.98	54.06	4.977		
10,700.00	10,654.01	10,687.16	10,636.43	39.15	40.02	-63.73	-85.04	-919.89	273.22	218.70	54.53	5.011		
10,800.00	10,754.01	10,793.22	10,742.45	39.48	40.39	-64.07	-85.54	-922.50	275.22	220.24	54.98	5.006		
10,900.00	10,854.01	10,895.67	10,844.91	39.82	40.73	-64.09	-85.58	-922.73	275.40	219.95	55.45	4.967		
11,000.00	10,954.01	10,995.67	10,944.91	40.16	41.05	-64.09	-85.58	-922.73	275.40	219.47	55.93	4.924		
11,100.00	11,054.01	11,095.67	11,044.91	40.49	41.38	-64.09	-85.58	-922.73	275.40	218.99	56.41	4.882		
11,200.00	11,154.01	11,195.67	11,144.91	40.83	41.71	-64.09	-85.58	-922.73	275.40	218.51	56.89	4.841		
11,300.00	11,254.01	11,295.67	11,244.91	41.17	42.04	-64.09	-85.58	-922.73	275.40	218.03	57.37	4.801		
11,308.39	11,262.40	11,304.06	11,253.30	41.20	42.07	-64.09	-85.58	-922.73	275.40	217.99	57.41	4.797		
11,400.00	11,354.01	11,392.15	11,341.38	41.51	42.36	-64.05	-85.35	-922.73	275.53	217.66	57.87	4.761		
11,500.00	11,454.01	11,473.52	11,422.28	41.85	42.62	-62.57	-77.26	-922.82	280.13	221.76	58.37	4.799		
11,600.00	11,554.01	11,550.00	11,496.56	42.18	42.85	-59.41	-59.29	-923.02	292.14	233.53	58.61	4.984		
11,700.00	11,654.01	11,622.62	11,564.29	42.52	43.05	-55.18	-33.22	-923.31	313.01	254.57	58.44	5.356		
11,800.00	11,754.01	11,686.80	11,620.98	42.86	43.20	-50.81	-3.22	-923.64	343.89	286.24	57.65	5.965		
11,865.03	11,819.04	11,724.44	11,652.54	43.08	43.28	-48.12	17.27	-923.86	369.47	312.61	56.86	6.498		
11,900.00	11,853.99	11,750.00	11,673.19	43.20	43.34	-31.20	32.35	-924.03	384.23	327.60	56.63	6.785		
11,950.00	11,903.70	11,771.21	11,689.79	43.37	43.38	-28.83	45.54	-924.17	404.30	348.73	55.57	7.276		
12,000.00	11,952.76	11,800.00	11,711.52	43.54	43.43	-26.33	64.42	-924.38	423.28	368.51	54.77	7.729		
12,050.00	12,000.81	11,825.54	11,729.98	43.70	43.47	-24.30	82.06	-924.58	440.93	387.17	53.76	8.201		
12,100.00	12,047.48	11,850.00	11,746.91	43.85	43.51	-22.56	99.72	-924.77	457.16	404.50	52.67	8.680		
12,150.00	12,092.40	11,879.22	11,766.12	43.99	43.55	-20.85	121.72	-925.01	471.82	420.08	51.75	9.118		
12,200.00	12,135.25	11,900.00	11,779.09	44.13	43.58	-19.63	137.96	-925.19	484.94	434.51	50.43	9.616		
12,250.00	12,175.69	11,932.35	11,798.08	44.25	43.62	-18.17	164.14	-925.48	496.24	446.64	49.60	10.004		
12,300.00	12,213.41	11,950.00	11,807.82	44.37	43.64	-17.32	178.87	-925.64	506.00	457.84	48.16	10.507		
12,350.00	12,248.14	11,985.03	11,825.76	44.48	43.67	-16.06	208.94	-925.98	513.69	466.26	47.43	10.829		
12,400.00	12,279.60	12,000.00	11,832.87	44.58	43.69	-15.47	222.12	-926.12	519.92	473.98	45.94	11.317		
12,450.00	12,307.55	12,037.35	11,849.07	44.68	43.73	-14.36	255.76	-926.49	523.85	478.53	45.32	11.560		
12,500.00	12,331.79	12,063.40	11,859.05	44.77	43.76	-13.64	279.82	-926.76	526.12	481.81	44.31	11.873		
12,550.00	12,352.12	12,100.00	11,871.21	44.88	43.79	-12.71	314.33	-927.14	526.70	483.02	43.68	12.057		
12,600.00	12,368.39	12,115.34	11,875.64	44.99	43.81	-12.37	329.01	-927.30	524.97	482.49	42.48	12.358		
12,650.00	12,380.49	12,150.00	11,884.21	45.12	43.85	-11.61	362.59	-927.67	521.68	479.79	41.88	12.455		
12,700.00	12,388.31	12,167.12	11,887.69	45.25	43.87	-11.31	379.36	-927.85	516.19	475.22	40.97	12.600		
12,750.00	12,391.80	12,200.00	11,892.96	45.41	43.92	-10.67	411.80	-928.21	509.03	468.56	40.47	12.578		
12,765.03	12,392.00	12,200.00	11,892.96	45.45	43.92	-10.72	411.80	-928.21	506.38	466.19	40.19	12.599		
12,800.00	12,392.00	12,218.95	11,895.14	45.57	43.95	-10.39	430.63	-928.42	500.85	460.98	39.87	12.562		
12,900.00	12,392.00	12,271.75	11,897.94	45.95	44.04	-9.37	483.32	-929.00	491.88	452.58	39.30	12.515		
12,944.53	12,392.00	12,298.97	11,897.54	46.13	44.10	-8.81	510.54	-929.30	491.15	451.92	39.23	12.519		
13,000.00	12,392.00	12,353.65	11,896.06	46.37	44.24	-7.74	565.20	-929.90	491.32	452.19	39.14	12.555		
13,100.00	12,392.00	12,452.65	11,893.37	46.85	44.54	-6.09	664.15	-930.99	492.36	453.28	39.07	12.600		
13,200.00	12,392.00	12,552.06	11,890.68	47.36	44.92	-4.83	763.53	-932.09	494.07	454.93	39.14	12.622		
13,300.00	12,392.00	12,651.78	11,887.98	47.91	45.38	-3.97	863.20	-933.18	496.25	456.93	39.32	12.620		
13,400.00	12,392.00	12,751.68	11,885.27	48.49	45.89	-3.51	963.06	-934.29	498.73	459.13	39.60	12.594		
13,448.51	12,392.00	12,800.17	11,883.96	48.78	46.16	-3.42	1,011.52	-934.82	500.02	460.25	39.77	12.574		
13,500.00	12,392.00	12,851.64	11,882.56	49.10	46.47	-3.42	1,062.98	-935.39	501.41	461.45	39.96	12.548		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
13,600.00	12,392.00	12,951.60	11,879.85	49.75	47.10	-3.40	1,162.90	-936.49	504.12	463.76	40.36	12.492		
13,700.00	12,392.00	13,051.57	11,877.14	50.45	47.78	-3.38	1,262.82	-937.59	506.82	466.04	40.78	12.429		
13,800.00	12,392.00	13,151.53	11,874.43	51.20	48.50	-3.36	1,362.74	-938.69	509.53	468.30	41.23	12.359		
13,900.00	12,392.00	13,251.49	11,871.72	51.98	49.28	-3.34	1,462.66	-939.79	512.24	470.54	41.70	12.284		
14,000.00	12,392.00	13,351.46	11,869.01	52.81	50.09	-3.33	1,562.58	-940.89	514.94	472.75	42.19	12.204		
14,100.00	12,392.00	13,451.42	11,866.30	53.68	50.95	-3.31	1,662.50	-941.99	517.65	474.93	42.71	12.119		
14,200.00	12,392.00	13,551.38	11,863.59	54.58	51.84	-3.29	1,762.42	-943.09	520.35	477.10	43.25	12.030		
14,300.00	12,392.00	13,651.35	11,860.88	55.51	52.77	-3.28	1,862.34	-944.19	523.06	479.24	43.82	11.937		
14,400.00	12,392.00	13,751.31	11,858.18	56.48	53.74	-3.26	1,962.26	-945.30	525.77	481.37	44.40	11.842		
14,500.00	12,392.00	13,851.27	11,855.47	57.48	54.73	-3.24	2,062.18	-946.40	528.47	483.47	45.00	11.743		
14,600.00	12,392.00	13,951.24	11,852.76	58.51	55.76	-3.23	2,162.10	-947.50	531.18	485.55	45.62	11.642		
14,700.00	12,392.00	14,051.20	11,850.05	59.57	56.82	-3.21	2,262.02	-948.60	533.88	487.62	46.26	11.540		
14,800.00	12,392.00	14,151.16	11,847.34	60.65	57.91	-3.19	2,361.94	-949.70	536.59	489.67	46.92	11.436		
14,900.00	12,392.00	14,251.13	11,844.63	61.76	59.02	-3.18	2,461.86	-950.80	539.30	491.70	47.60	11.331		
15,000.00	12,392.00	14,351.09	11,841.92	62.89	60.15	-3.16	2,561.78	-951.90	542.00	493.72	48.29	11.225		
15,100.00	12,392.00	14,451.05	11,839.21	64.05	61.31	-3.15	2,661.70	-953.00	544.71	495.72	48.99	11.118		
15,200.00	12,392.00	14,551.02	11,836.50	65.23	62.50	-3.13	2,761.62	-954.10	547.42	497.70	49.71	11.011		
15,300.00	12,392.00	14,650.98	11,833.79	66.42	63.70	-3.12	2,861.54	-955.21	550.12	499.67	50.45	10.905		
15,400.00	12,392.00	14,750.94	11,831.08	67.64	64.92	-3.10	2,961.46	-956.31	552.83	501.63	51.20	10.798		
15,500.00	12,392.00	14,850.91	11,828.37	68.88	66.16	-3.09	3,061.39	-957.41	555.54	503.58	51.96	10.692		
15,600.00	12,392.00	14,950.87	11,825.66	70.13	67.42	-3.07	3,161.31	-958.51	558.24	505.51	52.73	10.587		
15,700.00	12,392.00	15,050.83	11,822.95	71.40	68.70	-3.06	3,261.23	-959.61	560.95	507.43	53.52	10.482		
15,800.00	12,392.00	15,150.80	11,820.24	72.68	69.99	-3.04	3,361.15	-960.71	563.65	509.34	54.31	10.378		
15,900.00	12,392.00	15,250.76	11,817.53	73.98	71.29	-3.03	3,461.07	-961.81	566.36	511.24	55.12	10.275		
16,000.00	12,392.00	15,350.72	11,814.82	75.29	72.61	-3.01	3,560.99	-962.91	569.07	513.13	55.94	10.173		
16,100.00	12,392.00	15,450.69	11,812.12	76.62	73.95	-3.00	3,660.91	-964.01	571.78	515.01	56.76	10.073		
16,200.00	12,392.00	15,550.65	11,809.41	77.96	75.29	-2.98	3,760.83	-965.11	574.48	516.88	57.60	9.973		
16,300.00	12,392.00	15,650.61	11,806.70	79.31	76.65	-2.97	3,860.75	-966.22	577.19	518.74	58.45	9.875		
16,400.00	12,392.00	15,750.58	11,803.99	80.67	78.02	-2.96	3,960.67	-967.32	579.90	520.59	59.30	9.779		
16,500.00	12,392.00	15,850.54	11,801.28	82.04	79.40	-2.94	4,060.59	-968.42	582.60	522.44	60.17	9.683		
16,600.00	12,392.00	15,950.50	11,798.57	83.42	80.79	-2.93	4,160.51	-969.52	585.31	524.27	61.04	9.589		
16,700.00	12,392.00	16,050.47	11,795.86	84.81	82.19	-2.92	4,260.43	-970.62	588.02	526.10	61.92	9.497		
16,800.00	12,392.00	16,150.43	11,793.15	86.21	83.60	-2.90	4,360.35	-971.72	590.72	527.92	62.80	9.406		
16,900.00	12,392.00	16,250.39	11,790.44	87.62	85.02	-2.89	4,460.27	-972.82	593.43	529.74	63.70	9.317		
17,000.00	12,392.00	16,350.36	11,787.73	89.04	86.44	-2.88	4,560.19	-973.92	596.14	531.54	64.59	9.229		
17,100.00	12,392.00	16,450.32	11,785.02	90.47	87.88	-2.86	4,660.11	-975.02	598.84	533.34	65.50	9.143		
17,200.00	12,392.00	16,550.28	11,782.31	91.90	89.32	-2.85	4,760.03	-976.13	601.55	535.14	66.41	9.058		
17,300.00	12,392.00	16,650.25	11,779.60	93.34	90.77	-2.84	4,859.95	-977.23	604.26	536.93	67.33	8.975		
17,400.00	12,392.00	16,750.21	11,776.89	94.79	92.23	-2.83	4,959.87	-978.33	606.97	538.71	68.25	8.893		
17,500.00	12,392.00	16,850.17	11,774.18	96.25	93.69	-2.81	5,059.79	-979.43	609.67	540.49	69.18	8.812		
17,600.00	12,392.00	16,950.14	11,771.47	97.71	95.16	-2.80	5,159.71	-980.53	612.38	542.26	70.12	8.734		
17,700.00	12,392.00	17,050.10	11,768.77	99.17	96.63	-2.79	5,259.64	-981.63	615.09	544.03	71.06	8.656		
17,800.00	12,392.00	17,150.06	11,766.06	100.65	98.11	-2.78	5,359.56	-982.73	617.80	545.79	72.00	8.580		
17,900.00	12,392.00	17,250.03	11,763.35	102.13	99.60	-2.77	5,459.48	-983.83	620.50	547.55	72.95	8.506		
18,000.00	12,392.00	17,349.99	11,760.64	103.61	101.09	-2.75	5,559.40	-984.93	623.21	549.31	73.90	8.433		
18,100.00	12,392.00	17,449.95	11,757.93	105.10	102.58	-2.74	5,659.32	-986.03	625.92	551.05	74.86	8.361		
18,200.00	12,392.00	17,549.91	11,755.22	106.59	104.08	-2.73	5,759.24	-987.14	628.62	552.80	75.82	8.291		
18,300.00	12,392.00	17,649.88	11,752.51	108.09	105.59	-2.72	5,859.16	-988.24	631.33	554.54	76.79	8.222		
18,400.00	12,392.00	17,749.84	11,749.80	109.59	107.10	-2.71	5,959.08	-989.34	634.04	556.28	77.76	8.154		
18,500.00	12,392.00	17,849.80	11,747.09	111.10	108.61	-2.70	6,059.00	-990.44	636.75	558.01	78.73	8.088		
18,600.00	12,392.00	17,949.77	11,744.38	112.61	110.13	-2.68	6,158.92	-991.54	639.45	559.75	79.71	8.022		
18,700.00	12,392.00	18,049.73	11,741.67	114.12	111.65	-2.67	6,258.84	-992.64	642.16	561.47	80.69	7.958		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	
18,800.00	12,392.00	18,149.69	11,738.96	115.64	113.17	-2.66	6,358.76	-993.74	644.87	563.20	81.67	7.896		
18,900.00	12,392.00	18,249.66	11,736.25	117.17	114.70	-2.65	6,458.68	-994.84	647.58	564.92	82.66	7.834		
19,000.00	12,392.00	18,349.62	11,733.54	118.69	116.24	-2.64	6,558.60	-995.94	650.28	566.63	83.65	7.774		
19,100.00	12,392.00	18,449.58	11,730.83	120.22	117.77	-2.63	6,658.52	-997.05	652.99	568.35	84.64	7.715		
19,200.00	12,392.00	18,549.55	11,728.12	121.75	119.31	-2.62	6,758.44	-998.15	655.70	570.06	85.64	7.657		
19,300.00	12,392.00	18,649.51	11,725.41	123.29	120.85	-2.61	6,858.36	-999.25	658.41	571.77	86.64	7.600		
19,400.00	12,392.00	18,749.47	11,722.71	124.83	122.39	-2.60	6,958.28	-1,000.35	661.12	573.48	87.64	7.544		
19,500.00	12,392.00	18,849.44	11,720.00	126.37	123.94	-2.59	7,058.20	-1,001.45	663.82	575.18	88.64	7.489		
19,600.00	12,392.00	18,949.40	11,717.29	127.91	125.49	-2.58	7,158.12	-1,002.55	666.53	576.88	89.65	7.435		
19,700.00	12,392.00	19,049.36	11,714.58	129.46	127.04	-2.57	7,258.04	-1,003.65	669.24	578.58	90.65	7.382		
19,800.00	12,392.00	19,149.33	11,711.87	131.01	128.60	-2.56	7,357.97	-1,004.75	671.95	580.28	91.67	7.330		
19,900.00	12,392.00	19,249.29	11,709.16	132.56	130.16	-2.55	7,457.89	-1,005.85	674.65	581.98	92.68	7.280		
20,000.00	12,392.00	19,349.25	11,706.45	134.12	131.72	-2.54	7,557.81	-1,006.95	677.36	583.67	93.69	7.230		
20,100.00	12,392.00	19,449.22	11,703.74	135.67	133.28	-2.53	7,657.73	-1,008.06	680.07	585.36	94.71	7.181		
20,200.00	12,392.00	19,549.18	11,701.03	137.23	134.84	-2.52	7,757.65	-1,009.16	682.78	587.05	95.73	7.132		
20,300.00	12,392.00	19,649.14	11,698.32	138.80	136.41	-2.51	7,857.57	-1,010.26	685.49	588.73	96.75	7.085		
20,400.00	12,392.00	19,749.11	11,695.61	140.36	137.98	-2.50	7,957.49	-1,011.36	688.19	590.42	97.77	7.039		
20,500.00	12,392.00	19,849.07	11,692.90	141.92	139.55	-2.49	8,057.41	-1,012.46	690.90	592.10	98.80	6.993		
20,600.00	12,392.00	19,949.03	11,690.19	143.49	141.12	-2.48	8,157.33	-1,013.56	693.61	593.78	99.83	6.948		
20,700.00	12,392.00	20,049.00	11,687.48	145.06	142.69	-2.47	8,257.25	-1,014.66	696.32	595.46	100.85	6.904		
20,800.00	12,392.00	20,148.96	11,684.77	146.63	144.27	-2.46	8,357.17	-1,015.76	699.03	597.14	101.88	6.861		
20,900.00	12,392.00	20,248.92	11,682.06	148.21	145.85	-2.45	8,457.09	-1,016.86	701.73	598.82	102.92	6.818		
21,000.00	12,392.00	20,348.89	11,679.35	149.78	147.42	-2.44	8,557.01	-1,017.97	704.44	600.49	103.95	6.777		
21,100.00	12,392.00	20,448.85	11,676.65	151.36	149.01	-2.43	8,656.93	-1,019.07	707.15	602.16	104.99	6.736		
21,200.00	12,392.00	20,548.81	11,673.94	152.94	150.59	-2.42	8,756.85	-1,020.17	709.86	603.84	106.02	6.695		
21,300.00	12,392.00	20,648.78	11,671.23	154.51	152.17	-2.41	8,856.77	-1,021.27	712.57	605.51	107.06	6.656		
21,400.00	12,392.00	20,748.74	11,668.52	156.10	153.76	-2.40	8,956.69	-1,022.37	715.27	607.17	108.10	6.617		
21,500.00	12,392.00	20,848.70	11,665.81	157.68	155.34	-2.39	9,056.61	-1,023.47	717.98	608.84	109.14	6.578		
21,600.00	12,392.00	20,948.67	11,663.10	159.26	156.93	-2.38	9,156.53	-1,024.57	720.69	610.51	110.18	6.541		
21,700.00	12,392.00	21,048.63	11,660.39	160.85	158.52	-2.38	9,256.45	-1,025.67	723.40	612.17	111.23	6.504		
21,800.00	12,392.00	21,148.59	11,657.68	162.43	160.11	-2.37	9,356.37	-1,026.77	726.11	613.84	112.27	6.467		
21,900.00	12,392.00	21,248.56	11,654.97	164.02	161.70	-2.36	9,456.30	-1,027.87	728.81	615.50	113.32	6.432		
22,000.00	12,392.00	21,348.52	11,652.26	165.61	163.30	-2.35	9,556.22	-1,028.98	731.52	617.16	114.36	6.396		
22,100.00	12,392.00	21,448.48	11,649.55	167.20	164.89	-2.34	9,656.14	-1,030.08	734.23	618.82	115.41	6.362		
22,200.00	12,392.00	21,548.45	11,646.84	168.80	166.48	-2.33	9,756.06	-1,031.18	736.94	620.48	116.46	6.328		
22,300.00	12,392.00	21,648.41	11,644.13	170.39	168.08	-2.32	9,855.98	-1,032.28	739.65	622.14	117.51	6.294		
22,400.00	12,392.00	21,748.37	11,641.42	171.98	169.68	-2.32	9,955.90	-1,033.38	742.36	623.79	118.56	6.261		
22,500.00	12,392.00	21,848.34	11,638.71	173.58	171.28	-2.31	10,055.82	-1,034.48	745.06	625.45	119.61	6.229		
22,581.33	12,392.00	21,929.64	11,636.51	174.88	172.58	-2.30	10,137.08	-1,035.38	747.27	626.79	120.47	6.203		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	-35.72	74.73	-53.73	92.47					
100.00	100.00	91.10	91.10	0.13	0.13	-35.72	74.73	-53.73	92.04	91.86	0.18	511.487		
200.00	200.00	191.10	191.10	0.48	0.47	-35.72	74.73	-53.73	92.04	91.37	0.67	136.695		
300.00	300.00	291.10	291.10	0.84	0.83	-35.72	74.73	-53.73	92.04	90.86	1.18	77.984		
400.00	400.00	391.10	391.10	1.20	1.19	-35.72	74.73	-53.73	92.04	90.35	1.69	54.553		
500.00	500.00	491.10	491.10	1.56	1.54	-35.72	74.73	-53.73	92.04	89.85	2.19	41.949		
600.00	600.00	591.10	591.10	1.92	1.90	-35.72	74.73	-53.73	92.04	89.34	2.70	34.075		
700.00	700.00	691.10	691.10	2.28	2.26	-35.72	74.73	-53.73	92.04	88.83	3.21	28.691		
800.00	800.00	791.10	791.10	2.63	2.62	-35.72	74.73	-53.73	92.04	88.33	3.71	24.776		
900.00	900.00	891.10	891.10	2.99	2.98	-35.72	74.73	-53.73	92.04	87.82	4.22	21.801		
1,000.00	1,000.00	991.10	991.10	3.35	3.34	-35.72	74.73	-53.73	92.04	87.31	4.73	19.463		
1,100.00	1,100.00	1,091.10	1,091.10	3.71	3.69	-35.72	74.73	-53.73	92.04	86.80	5.24	17.579		
1,200.00	1,200.00	1,191.10	1,191.10	4.07	4.05	-35.72	74.73	-53.73	92.04	86.30	5.74	16.027		
1,300.00	1,300.00	1,291.10	1,291.10	4.43	4.41	-35.72	74.73	-53.73	92.04	85.79	6.25	14.727		
1,400.00	1,400.00	1,391.10	1,391.10	4.79	4.77	-35.72	74.73	-53.73	92.04	85.28	6.76	13.622		
1,500.00	1,500.00	1,491.10	1,491.10	5.14	5.13	-35.72	74.73	-53.73	92.04	84.78	7.26	12.671		
1,525.00	1,525.00	1,516.10	1,516.10	5.23	5.22	-35.72	74.73	-53.73	92.04	84.65	7.39	12.454		
1,600.00	1,600.00	1,591.10	1,591.10	5.49	5.49	124.66	74.73	-53.73	92.46	84.70	7.76	11.913		
1,700.00	1,699.94	1,691.04	1,691.04	5.82	5.85	126.27	74.73	-53.73	94.36	86.11	8.25	11.444		
1,800.00	1,799.76	1,790.86	1,790.86	6.15	6.20	129.00	74.73	-53.73	97.96	89.22	8.73	11.218		
1,900.00	1,899.40	1,890.50	1,890.50	6.48	6.56	132.59	74.73	-53.73	103.52	94.30	9.22	11.226		
2,000.00	1,998.78	1,989.88	1,989.88	6.82	6.92	136.70	74.73	-53.73	111.36	101.64	9.71	11.464		
2,025.00	2,023.57	2,014.67	2,014.67	6.91	7.01	137.78	74.73	-53.73	113.70	103.86	9.84	11.558		
2,100.00	2,097.97	2,089.07	2,089.07	7.17	7.27	132.94	74.73	-53.73	120.48	110.27	10.21	11.803		
2,200.00	2,197.27	2,188.37	2,188.37	7.53	7.63	124.99	74.73	-53.73	127.99	117.29	10.70	11.958		
2,300.00	2,296.60	2,287.70	2,287.70	7.89	7.98	116.32	74.73	-53.73	133.88	122.68	11.20	11.950		
2,400.00	2,395.91	2,387.01	2,387.01	8.26	8.34	108.34	74.73	-53.73	138.33	126.62	11.71	11.816		
2,504.30	2,499.40	2,490.50	2,490.50	8.64	8.71	101.97	74.73	-53.73	141.70	129.47	12.23	11.584		
2,600.00	2,594.28	2,585.38	2,585.38	9.00	9.05	106.77	74.73	-53.73	144.83	132.11	12.72	11.389		
2,700.00	2,693.42	2,684.52	2,684.52	9.38	9.41	111.54	74.73	-53.73	149.14	135.92	13.22	11.280		
2,800.00	2,792.57	2,783.67	2,783.67	9.75	9.76	116.02	74.73	-53.73	154.45	140.72	13.73	11.251		
2,900.00	2,891.71	2,882.81	2,882.81	10.14	10.12	120.18	74.73	-53.73	160.64	146.41	14.23	11.286		
3,000.00	2,990.86	2,981.96	2,981.96	10.52	10.47	124.01	74.73	-53.73	167.62	152.88	14.74	11.373		
3,100.00	3,090.00	3,081.10	3,081.10	10.91	10.83	127.53	74.73	-53.73	175.30	160.06	15.24	11.500		
3,200.00	3,189.15	3,180.25	3,180.25	11.30	11.18	130.75	74.73	-53.73	183.58	167.84	15.75	11.658		
3,300.00	3,288.29	3,279.39	3,279.39	11.69	11.54	133.68	74.73	-53.73	192.40	176.15	16.25	11.839		
3,400.00	3,387.44	3,378.54	3,378.54	12.08	11.89	136.35	74.73	-53.73	201.67	184.92	16.76	12.036		
3,500.00	3,486.58	3,477.68	3,477.68	12.48	12.25	138.79	74.73	-53.73	211.34	194.09	17.26	12.245		
3,600.00	3,585.72	3,576.82	3,576.82	12.87	12.61	141.01	74.73	-53.73	221.37	203.60	17.76	12.462		
3,700.00	3,684.87	3,680.09	3,680.08	13.27	12.97	143.00	74.48	-54.53	231.01	212.73	18.28	12.639		
3,800.00	3,784.01	3,785.16	3,785.09	13.67	13.32	144.53	73.37	-58.01	238.60	219.82	18.78	12.703		
3,900.00	3,883.16	3,890.70	3,890.42	14.07	13.68	145.63	71.39	-64.27	243.94	224.66	19.28	12.651		
4,000.00	3,982.30	3,996.57	3,995.86	14.47	14.04	146.36	68.52	-73.34	246.92	227.15	19.77	12.487		
4,100.00	4,081.45	4,102.59	4,101.14	14.87	14.41	146.75	64.76	-85.20	247.50	227.24	20.26	12.217		
4,200.00	4,180.59	4,204.35	4,201.92	15.27	14.76	146.90	60.52	-98.59	246.24	225.49	20.76	11.864		
4,300.00	4,279.74	4,304.34	4,300.94	15.67	15.11	147.03	56.31	-111.87	244.89	223.63	21.26	11.518		
4,400.00	4,378.88	4,404.32	4,399.95	16.08	15.47	147.16	52.11	-125.14	243.54	221.77	21.77	11.188		
4,500.00	4,478.03	4,504.31	4,498.97	16.48	15.83	147.30	47.90	-138.41	242.18	219.91	22.28	10.872		
4,600.00	4,577.17	4,604.30	4,597.98	16.89	16.19	147.44	43.70	-151.68	240.83	218.05	22.79	10.569		
4,700.00	4,676.32	4,704.29	4,697.00	17.29	16.56	147.57	39.49	-164.95	239.48	216.19	23.30	10.280		
4,800.00	4,775.46	4,804.28	4,796.01	17.70	16.93	147.71	35.29	-178.23	238.13	214.33	23.81	10.002		
4,900.00	4,874.60	4,904.27	4,895.03	18.10	17.30	147.85	31.08	-191.50	236.79	212.47	24.32	9.736		

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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
5,000.00	4,973.75	5,004.26	4,994.04	18.51	17.67	148.00	26.88	-204.77	235.44	210.61	24.83	9.481		
5,100.00	5,072.89	5,104.25	5,093.06	18.92	18.05	148.14	22.67	-218.04	234.10	208.75	25.35	9.235		
5,200.00	5,172.04	5,204.24	5,192.08	19.32	18.43	148.29	18.47	-231.32	232.76	206.89	25.86	8.999		
5,300.00	5,271.18	5,304.23	5,291.09	19.73	18.81	148.44	14.26	-244.59	231.41	205.04	26.38	8.773		
5,400.00	5,370.33	5,404.22	5,390.11	20.14	19.19	148.59	10.06	-257.86	230.08	203.18	26.90	8.554		
5,500.00	5,469.47	5,504.21	5,489.12	20.55	19.57	148.74	5.85	-271.13	228.74	201.33	27.41	8.344		
5,600.00	5,568.62	5,604.20	5,588.14	20.96	19.96	148.89	1.65	-284.41	227.40	199.47	27.93	8.142		
5,700.00	5,667.76	5,704.18	5,687.15	21.37	20.35	149.04	-2.56	-297.68	226.07	197.62	28.45	7.947		
5,800.00	5,766.91	5,804.17	5,786.17	21.78	20.73	149.20	-6.76	-310.95	224.73	195.77	28.97	7.759		
5,900.00	5,866.05	5,904.16	5,885.18	22.19	21.12	149.36	-10.97	-324.22	223.40	193.92	29.48	7.577		
6,000.00	5,965.19	6,004.15	5,984.20	22.59	21.51	149.52	-15.17	-337.49	222.07	192.07	30.00	7.402		
6,100.00	6,064.34	6,104.14	6,083.21	23.01	21.91	149.68	-19.38	-350.77	220.75	190.22	30.52	7.232		
6,200.00	6,163.48	6,204.13	6,182.23	23.42	22.30	149.85	-23.58	-364.04	219.42	188.38	31.04	7.069		
6,300.00	6,262.63	6,304.12	6,281.24	23.83	22.69	150.01	-27.79	-377.31	218.10	186.53	31.56	6.910		
6,400.00	6,361.77	6,404.11	6,380.26	24.24	23.09	150.18	-31.99	-390.58	216.77	184.69	32.08	6.757		
6,500.00	6,460.92	6,504.10	6,479.27	24.65	23.49	150.35	-36.20	-403.86	215.45	182.85	32.60	6.609		
6,600.00	6,560.06	6,604.09	6,578.29	25.06	23.88	150.52	-40.40	-417.13	214.13	181.01	33.12	6.465		
6,700.00	6,659.21	6,704.08	6,677.30	25.47	24.28	150.70	-44.61	-430.40	212.82	179.18	33.64	6.326		
6,800.00	6,758.35	6,804.07	6,776.32	25.88	24.68	150.88	-48.81	-443.67	211.50	177.34	34.16	6.191		
6,900.00	6,857.50	6,904.06	6,875.33	26.29	25.08	151.06	-53.02	-456.94	210.19	175.51	34.68	6.061		
7,000.00	6,956.64	7,004.04	6,974.35	26.70	25.48	151.24	-57.22	-470.22	208.88	173.68	35.20	5.934		
7,100.00	7,055.78	7,104.03	7,073.36	27.12	25.88	151.42	-61.43	-483.49	207.57	171.85	35.72	5.811		
7,141.02	7,096.45	7,145.05	7,113.98	27.29	26.05	151.50	-63.15	-488.93	207.04	171.10	35.94	5.761		
7,200.00	7,154.99	7,204.02	7,172.37	27.53	26.28	151.54	-65.63	-496.76	205.87	169.62	36.24	5.680		
7,300.00	7,254.46	7,303.94	7,271.32	27.92	26.69	151.32	-69.83	-510.02	202.06	165.29	36.77	5.495		
7,400.00	7,354.17	7,403.73	7,370.14	28.30	27.09	150.70	-74.03	-523.27	195.96	158.66	37.30	5.253		
7,500.00	7,454.04	7,503.32	7,468.76	28.66	27.49	149.63	-78.22	-536.49	187.63	149.79	37.84	4.958		
7,600.00	7,554.01	7,602.65	7,567.12	29.00	27.89	148.00	-82.40	-549.67	177.14	138.75	38.39	4.614		
7,640.99	7,595.00	7,643.27	7,607.35	29.13	28.06	44.56	-84.10	-555.07	172.25	133.63	38.62	4.460		
7,700.00	7,654.01	7,701.70	7,665.21	29.32	28.29	43.23	-86.56	-562.82	165.01	126.06	38.96	4.236		
7,800.00	7,754.01	7,800.73	7,763.27	29.64	28.70	40.69	-90.73	-575.97	152.98	113.44	39.54	3.869		
7,900.00	7,854.01	7,899.76	7,861.33	29.95	29.10	37.73	-94.89	-589.11	141.29	101.16	40.14	3.520		
8,000.00	7,954.01	7,998.78	7,959.40	30.27	29.50	34.25	-99.05	-602.26	130.05	89.28	40.76	3.190		
8,100.00	8,054.01	8,097.81	8,057.46	30.59	29.90	30.13	-103.22	-615.40	119.37	77.94	41.43	2.881		
8,200.00	8,154.01	8,196.83	8,155.52	30.91	30.31	25.25	-107.38	-628.54	109.42	67.29	42.13	2.597		
8,300.00	8,254.01	8,295.86	8,253.58	31.24	30.71	19.45	-111.55	-641.69	100.42	57.55	42.87	2.342		
8,400.00	8,354.01	8,394.88	8,351.64	31.56	31.12	12.60	-115.71	-654.83	92.65	49.00	43.65	2.123		
8,500.00	8,454.01	8,493.91	8,449.70	31.88	31.52	4.67	-119.88	-667.98	86.43	42.00	44.44	1.945		
8,600.00	8,554.01	8,592.94	8,547.76	32.21	31.93	-4.28	-124.04	-681.12	82.13	36.94	45.19	1.817		
8,700.00	8,654.01	8,691.96	8,645.82	32.53	32.33	-13.93	-128.20	-694.27	80.05	34.20	45.85	1.746		
8,736.98	8,690.98	8,728.58	8,682.08	32.65	32.48	-17.58	-129.74	-699.13	79.89	33.83	46.06	1.735 CC, ES		
8,800.00	8,754.01	8,790.99	8,743.89	32.86	32.74	-23.79	-132.37	-707.41	80.37	34.01	46.36	1.734 SF		
8,900.00	8,854.01	8,890.01	8,841.95	33.18	33.14	-33.29	-136.53	-720.56	83.05	36.32	46.72	1.777		
9,000.00	8,954.01	8,989.04	8,940.01	33.51	33.55	-42.00	-140.70	-733.70	87.88	40.89	46.99	1.870		
9,100.00	9,054.01	9,088.07	9,038.07	33.84	33.96	-49.65	-144.86	-746.84	94.53	47.32	47.21	2.002		
9,200.00	9,154.01	9,187.09	9,136.13	34.16	34.37	-56.21	-149.03	-759.99	102.66	55.21	47.45	2.164		
9,300.00	9,254.01	9,286.12	9,234.19	34.49	34.77	-61.76	-153.19	-773.13	111.93	64.22	47.71	2.346		
9,400.00	9,354.01	9,385.14	9,332.25	34.82	35.18	-66.43	-157.36	-786.28	122.08	74.08	48.00	2.543		
9,500.00	9,454.01	9,484.17	9,430.31	35.15	35.59	-70.37	-161.52	-799.42	132.93	84.59	48.34	2.750		
9,600.00	9,554.01	9,583.20	9,528.38	35.48	36.00	-73.70	-165.68	-812.57	144.30	95.60	48.70	2.963		
9,700.00	9,654.01	9,682.22	9,626.44	35.81	36.41	-76.55	-169.85	-825.71	156.08	107.00	49.08	3.180		
9,800.00	9,754.01	9,781.25	9,724.50	36.14	36.82	-78.99	-174.01	-838.85	168.20	118.71	49.49	3.399		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
9,900.00	9,854.01	9,880.27	9,822.56	36.48	37.22	-81.10	-178.18	-852.00	180.57	130.66	49.91	3.618		
10,000.00	9,954.01	9,979.30	9,920.62	36.81	37.63	-82.94	-182.34	-865.14	193.16	142.81	50.34	3.837		
10,100.00	10,054.01	10,078.32	10,018.68	37.14	38.04	-84.55	-186.51	-878.29	205.91	155.12	50.79	4.054		
10,200.00	10,154.01	10,179.54	10,118.95	37.47	38.46	-85.98	-190.70	-891.51	218.62	167.34	51.27	4.264		
10,300.00	10,254.01	10,284.64	10,223.34	37.81	38.88	-87.10	-194.34	-903.03	229.35	177.56	51.79	4.428		
10,400.00	10,354.01	10,390.33	10,328.63	38.14	39.29	-87.88	-197.14	-911.84	237.57	185.28	52.29	4.543		
10,500.00	10,454.01	10,496.46	10,434.56	38.48	39.67	-88.39	-199.05	-917.89	243.21	190.44	52.77	4.609		
10,600.00	10,554.01	10,602.85	10,540.89	38.81	40.05	-88.65	-200.08	-921.13	246.24	193.01	53.22	4.626		
10,700.00	10,654.01	10,707.07	10,645.11	39.15	40.39	-88.69	-200.27	-921.73	246.79	193.12	53.67	4.598		
10,800.00	10,754.01	10,807.07	10,745.11	39.48	40.71	-88.69	-200.27	-921.73	246.79	192.64	54.16	4.557		
10,900.00	10,854.01	10,907.07	10,845.11	39.82	41.04	-88.69	-200.27	-921.73	246.79	192.15	54.64	4.517		
11,000.00	10,954.01	11,007.07	10,945.11	40.16	41.36	-88.69	-200.27	-921.73	246.79	191.67	55.12	4.477		
11,100.00	11,054.01	11,107.07	11,045.11	40.49	41.69	-88.69	-200.27	-921.73	246.79	191.19	55.61	4.438		
11,200.00	11,154.01	11,207.07	11,145.11	40.83	42.01	-88.69	-200.27	-921.73	246.79	190.70	56.09	4.400		
11,300.00	11,254.01	11,307.07	11,245.11	41.17	42.34	-88.69	-200.27	-921.73	246.79	190.21	56.58	4.362		
11,400.00	11,354.01	11,407.07	11,345.11	41.51	42.67	-88.69	-200.27	-921.73	246.79	189.73	57.07	4.325		
11,500.00	11,454.01	11,507.07	11,445.11	41.85	43.00	-88.69	-200.27	-921.73	246.79	189.24	57.55	4.288		
11,508.84	11,462.85	11,515.91	11,453.95	41.88	43.03	-88.69	-200.27	-921.73	246.79	189.20	57.59	4.285		
11,600.00	11,554.01	11,606.49	11,544.50	42.18	43.32	-88.42	-199.11	-921.74	246.84	188.79	58.05	4.252		
11,700.00	11,654.01	11,702.68	11,639.53	42.52	43.61	-85.15	-184.97	-921.90	247.85	189.18	58.66	4.225		
11,800.00	11,754.01	11,791.86	11,724.40	42.86	43.85	-79.00	-157.84	-922.20	252.68	193.35	59.33	4.259		
11,865.03	11,819.04	11,844.60	11,772.24	43.08	43.98	-74.16	-135.70	-922.44	259.98	200.38	59.60	4.362		
11,900.00	11,853.99	11,871.49	11,795.80	43.20	44.03	-56.83	-122.75	-922.58	265.22	205.59	59.62	4.448		
11,950.00	11,903.70	11,909.16	11,827.73	43.37	44.11	-52.78	-102.77	-922.80	273.04	213.58	59.47	4.591		
12,000.00	11,952.76	11,950.00	11,860.78	43.54	44.18	-48.74	-78.79	-923.07	281.09	221.85	59.24	4.745		
12,050.00	12,000.81	11,982.08	11,885.49	43.70	44.23	-45.67	-58.35	-923.29	289.01	230.53	58.48	4.942		
12,100.00	12,047.48	12,017.51	11,911.40	43.85	44.28	-42.57	-34.19	-923.56	296.73	239.04	57.69	5.144		
12,150.00	12,092.40	12,050.00	11,933.82	43.99	44.32	-39.90	-10.68	-923.81	304.05	247.45	56.60	5.372		
12,200.00	12,135.25	12,086.68	11,957.47	44.13	44.35	-37.18	17.35	-924.12	310.80	255.19	55.61	5.589		
12,250.00	12,175.69	12,120.54	11,977.67	44.25	44.38	-34.84	44.52	-924.42	316.87	262.48	54.39	5.826		
12,300.00	12,213.41	12,150.00	11,993.92	44.37	44.40	-32.91	69.08	-924.69	322.20	269.31	52.89	6.092		
12,350.00	12,248.14	12,187.11	12,012.54	44.48	44.42	-30.75	101.16	-925.04	326.59	274.85	51.75	6.312		
12,400.00	12,279.60	12,219.90	12,027.25	44.58	44.44	-28.96	130.47	-925.37	330.07	279.69	50.38	6.552		
12,450.00	12,307.55	12,250.00	12,039.25	44.68	44.45	-27.42	158.07	-925.67	332.55	283.63	48.92	6.797		
12,500.00	12,331.79	12,284.74	12,051.28	44.77	44.46	-25.80	190.65	-926.03	333.95	286.24	47.71	6.999		
12,550.00	12,352.12	12,316.86	12,060.63	44.88	44.47	-24.39	221.38	-926.37	334.25	287.78	46.47	7.193		
12,600.00	12,368.39	12,350.00	12,068.45	44.99	44.49	-23.04	253.57	-926.72	333.42	288.07	45.36	7.351		
12,650.00	12,380.49	12,380.73	12,074.02	45.12	44.50	-21.87	283.78	-927.05	331.42	287.12	44.30	7.481		
12,700.00	12,388.31	12,412.54	12,078.08	45.25	44.52	-20.73	315.33	-927.40	328.24	284.81	43.42	7.559		
12,750.00	12,391.80	12,450.00	12,080.61	45.41	44.55	-19.43	352.70	-927.81	323.93	281.18	42.74	7.578		
12,765.03	12,392.00	12,450.00	12,080.61	45.45	44.55	-19.48	352.70	-927.81	322.33	279.80	42.53	7.579		
12,800.00	12,392.00	12,476.15	12,080.92	45.57	44.58	-18.53	378.84	-928.10	319.32	277.15	42.18	7.571		
12,900.00	12,392.00	12,569.01	12,078.48	45.95	44.71	-15.16	471.66	-929.12	315.68	274.38	41.30	7.643		
13,000.00	12,392.00	12,667.46	12,075.82	46.37	44.94	-12.06	570.07	-930.20	314.22	273.52	40.70	7.721		
13,043.25	12,392.00	12,710.22	12,074.66	46.57	45.06	-10.88	612.81	-930.67	314.09	273.57	40.52	7.751		
13,100.00	12,392.00	12,766.45	12,073.13	46.85	45.25	-9.51	669.02	-931.29	314.29	273.92	40.36	7.786		
13,200.00	12,392.00	12,865.87	12,070.44	47.36	45.65	-7.55	768.39	-932.38	315.43	275.17	40.26	7.835		
13,300.00	12,392.00	12,965.59	12,067.74	47.91	46.12	-6.21	868.07	-933.48	317.30	276.96	40.34	7.866		
13,400.00	12,392.00	13,065.48	12,065.03	48.49	46.65	-5.50	967.92	-934.57	319.64	279.06	40.58	7.877		
13,448.51	12,392.00	13,113.97	12,063.72	48.78	46.92	-5.38	1,016.39	-935.11	320.91	280.17	40.75	7.875		
13,500.00	12,392.00	13,165.45	12,062.32	49.10	47.23	-5.36	1,067.84	-935.67	322.30	281.35	40.95	7.871		
13,600.00	12,392.00	13,265.41	12,059.61	49.75	47.87	-5.31	1,167.76	-936.77	325.00	283.64	41.36	7.858		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
13,700.00	12,392.00	13,365.37	12,056.90	50.45	48.56	-5.27	1,267.68	-937.87	327.70	285.91	41.80	7.841		
13,800.00	12,392.00	13,465.34	12,054.19	51.20	49.30	-5.23	1,367.60	-938.97	330.40	288.14	42.26	7.819		
13,900.00	12,392.00	13,565.30	12,051.48	51.98	50.08	-5.18	1,467.53	-940.07	333.10	290.36	42.74	7.794		
14,000.00	12,392.00	13,665.26	12,048.77	52.81	50.90	-5.14	1,567.45	-941.16	335.80	292.55	43.25	7.765		
14,100.00	12,392.00	13,765.23	12,046.07	53.68	51.76	-5.10	1,667.37	-942.26	338.50	294.72	43.77	7.733		
14,200.00	12,392.00	13,865.19	12,043.36	54.58	52.66	-5.06	1,767.29	-943.36	341.20	296.87	44.32	7.698		
14,300.00	12,392.00	13,965.15	12,040.65	55.51	53.59	-5.02	1,867.21	-944.46	343.90	299.00	44.90	7.660		
14,400.00	12,392.00	14,065.12	12,037.94	56.48	54.56	-4.98	1,967.13	-945.56	346.59	301.11	45.49	7.620		
14,500.00	12,392.00	14,165.08	12,035.23	57.48	55.56	-4.94	2,067.05	-946.66	349.29	303.20	46.10	7.578		
14,600.00	12,392.00	14,265.04	12,032.52	58.51	56.59	-4.90	2,166.97	-947.76	351.99	305.27	46.72	7.534		
14,700.00	12,392.00	14,365.00	12,029.81	59.57	57.65	-4.87	2,266.89	-948.85	354.69	307.33	47.37	7.488		
14,800.00	12,392.00	14,464.97	12,027.10	60.65	58.74	-4.83	2,366.81	-949.95	357.40	309.36	48.03	7.441		
14,900.00	12,392.00	14,564.93	12,024.39	61.76	59.85	-4.79	2,466.73	-951.05	360.10	311.38	48.71	7.392		
15,000.00	12,392.00	14,664.89	12,021.68	62.89	60.99	-4.76	2,566.65	-952.15	362.80	313.39	49.41	7.343		
15,100.00	12,392.00	14,764.86	12,018.97	64.05	62.15	-4.72	2,666.57	-953.25	365.50	315.38	50.12	7.293		
15,200.00	12,392.00	14,864.82	12,016.27	65.23	63.33	-4.69	2,766.49	-954.35	368.20	317.36	50.84	7.242		
15,300.00	12,392.00	14,964.78	12,013.56	66.42	64.53	-4.65	2,866.41	-955.44	370.90	319.32	51.58	7.191		
15,400.00	12,392.00	15,064.75	12,010.85	67.64	65.75	-4.62	2,966.33	-956.54	373.60	321.27	52.33	7.140		
15,500.00	12,392.00	15,164.71	12,008.14	68.88	66.99	-4.59	3,066.25	-957.64	376.30	323.21	53.09	7.088		
15,600.00	12,392.00	15,264.67	12,005.43	70.13	68.25	-4.55	3,166.17	-958.74	379.00	325.14	53.86	7.036		
15,700.00	12,392.00	15,364.64	12,002.72	71.40	69.52	-4.52	3,266.09	-959.84	381.70	327.05	54.65	6.984		
15,800.00	12,392.00	15,464.60	12,000.01	72.68	70.81	-4.49	3,366.01	-960.94	384.41	328.96	55.45	6.933		
15,900.00	12,392.00	15,564.56	11,997.30	73.98	72.11	-4.46	3,465.94	-962.04	387.11	330.85	56.26	6.881		
16,000.00	12,392.00	15,664.53	11,994.59	75.29	73.43	-4.43	3,565.86	-963.13	389.81	332.74	57.07	6.830		
16,100.00	12,392.00	15,764.49	11,991.88	76.62	74.76	-4.39	3,665.78	-964.23	392.51	334.61	57.90	6.779		
16,200.00	12,392.00	15,864.45	11,989.17	77.96	76.10	-4.36	3,765.70	-965.33	395.21	336.47	58.74	6.728		
16,300.00	12,392.00	15,964.42	11,986.47	79.31	77.46	-4.33	3,865.62	-966.43	397.92	338.33	59.59	6.678		
16,400.00	12,392.00	16,064.38	11,983.76	80.67	78.83	-4.30	3,965.54	-967.53	400.62	340.18	60.44	6.628		
16,500.00	12,392.00	16,164.34	11,981.05	82.04	80.20	-4.28	4,065.46	-968.63	403.32	342.02	61.30	6.579		
16,600.00	12,392.00	16,264.31	11,978.34	83.42	81.59	-4.25	4,165.38	-969.73	406.02	343.85	62.17	6.531		
16,700.00	12,392.00	16,364.27	11,975.63	84.81	82.99	-4.22	4,265.30	-970.82	408.73	345.68	63.05	6.483		
16,800.00	12,392.00	16,464.23	11,972.92	86.21	84.40	-4.19	4,365.22	-971.92	411.43	347.49	63.94	6.435		
16,900.00	12,392.00	16,564.20	11,970.21	87.62	85.81	-4.16	4,465.14	-973.02	414.13	349.30	64.83	6.388		
17,000.00	12,392.00	16,664.16	11,967.50	89.04	87.24	-4.14	4,565.06	-974.12	416.83	351.11	65.73	6.342		
17,100.00	12,392.00	16,764.12	11,964.79	90.47	88.67	-4.11	4,664.98	-975.22	419.54	352.91	66.63	6.296		
17,200.00	12,392.00	16,864.09	11,962.08	91.90	90.11	-4.08	4,764.90	-976.32	422.24	354.70	67.54	6.252		
17,300.00	12,392.00	16,964.05	11,959.37	93.34	91.55	-4.06	4,864.82	-977.41	424.94	356.49	68.46	6.207		
17,400.00	12,392.00	17,064.01	11,956.67	94.79	93.01	-4.03	4,964.74	-978.51	427.65	358.27	69.38	6.164		
17,500.00	12,392.00	17,163.98	11,953.96	96.25	94.46	-4.01	5,064.66	-979.61	430.35	360.04	70.31	6.121		
17,600.00	12,392.00	17,263.94	11,951.25	97.71	95.93	-3.98	5,164.58	-980.71	433.05	361.81	71.24	6.079		
17,700.00	12,392.00	17,363.90	11,948.54	99.17	97.40	-3.96	5,264.50	-981.81	435.76	363.58	72.18	6.037		
17,800.00	12,392.00	17,463.87	11,945.83	100.65	98.88	-3.93	5,364.43	-982.91	438.46	365.34	73.12	5.996		
17,900.00	12,392.00	17,563.83	11,943.12	102.13	100.36	-3.91	5,464.35	-984.01	441.17	367.10	74.07	5.956		
18,000.00	12,392.00	17,663.79	11,940.41	103.61	101.85	-3.88	5,564.27	-985.10	443.87	368.85	75.02	5.917		
18,100.00	12,392.00	17,763.76	11,937.70	105.10	103.34	-3.86	5,664.19	-986.20	446.57	370.60	75.98	5.878		
18,200.00	12,392.00	17,863.72	11,934.99	106.59	104.84	-3.84	5,764.11	-987.30	449.28	372.34	76.94	5.839		
18,300.00	12,392.00	17,963.68	11,932.28	108.09	106.35	-3.81	5,864.03	-988.40	451.98	374.08	77.90	5.802		
18,400.00	12,392.00	18,063.65	11,929.57	109.59	107.85	-3.79	5,963.95	-989.50	454.68	375.82	78.87	5.765		
18,500.00	12,392.00	18,163.61	11,926.87	111.10	109.36	-3.77	6,063.87	-990.60	457.39	377.55	79.84	5.729		
18,600.00	12,392.00	18,263.57	11,924.16	112.61	110.88	-3.74	6,163.79	-991.70	460.09	379.28	80.81	5.693		
18,700.00	12,392.00	18,363.54	11,921.45	114.12	112.40	-3.72	6,263.71	-992.79	462.80	381.00	81.79	5.658		
18,800.00	12,392.00	18,463.50	11,918.74	115.64	113.92	-3.70	6,363.63	-993.89	465.50	382.73	82.77	5.624		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
18,900.00	12,392.00	18,563.46	11,916.03	117.17	115.45	-3.68	6,463.55	-994.99	468.21	384.45	83.76	5.590		
19,000.00	12,392.00	18,663.43	11,913.32	118.69	116.98	-3.66	6,563.47	-996.09	470.91	386.16	84.75	5.557		
19,100.00	12,392.00	18,763.39	11,910.61	120.22	118.51	-3.64	6,663.39	-997.19	473.62	387.88	85.74	5.524		
19,200.00	12,392.00	18,863.35	11,907.90	121.75	120.05	-3.62	6,763.31	-998.29	476.32	389.59	86.73	5.492		
19,300.00	12,392.00	18,963.32	11,905.19	123.29	121.59	-3.60	6,863.23	-999.38	479.02	391.30	87.73	5.460		
19,400.00	12,392.00	19,063.28	11,902.48	124.83	123.13	-3.57	6,963.15	-1,000.48	481.73	393.00	88.73	5.429		
19,500.00	12,392.00	19,163.24	11,899.77	126.37	124.67	-3.55	7,063.07	-1,001.58	484.43	394.71	89.73	5.399		
19,600.00	12,392.00	19,263.21	11,897.07	127.91	126.22	-3.53	7,162.99	-1,002.68	487.14	396.41	90.73	5.369		
19,700.00	12,392.00	19,363.17	11,894.36	129.46	127.77	-3.52	7,262.92	-1,003.78	489.84	398.10	91.74	5.339		
19,800.00	12,392.00	19,463.13	11,891.65	131.01	129.32	-3.50	7,362.84	-1,004.88	492.55	399.80	92.75	5.311		
19,900.00	12,392.00	19,563.09	11,888.94	132.56	130.88	-3.48	7,462.76	-1,005.98	495.25	401.49	93.76	5.282		
20,000.00	12,392.00	19,663.06	11,886.23	134.12	132.44	-3.46	7,562.68	-1,007.07	497.96	403.19	94.77	5.254		
20,100.00	12,392.00	19,763.02	11,883.52	135.67	134.00	-3.44	7,662.60	-1,008.17	500.66	404.88	95.79	5.227		
20,200.00	12,392.00	19,862.98	11,880.81	137.23	135.56	-3.42	7,762.52	-1,009.27	503.37	406.56	96.81	5.200		
20,300.00	12,392.00	19,962.95	11,878.10	138.80	137.12	-3.40	7,862.44	-1,010.37	506.07	408.25	97.82	5.173		
20,400.00	12,392.00	20,062.91	11,875.39	140.36	138.69	-3.38	7,962.36	-1,011.47	508.78	409.93	98.85	5.147		
20,500.00	12,392.00	20,162.87	11,872.68	141.92	140.26	-3.37	8,062.28	-1,012.57	511.49	411.62	99.87	5.122		
20,600.00	12,392.00	20,262.84	11,869.97	143.49	141.83	-3.35	8,162.20	-1,013.67	514.19	413.30	100.89	5.096		
20,700.00	12,392.00	20,362.80	11,867.27	145.06	143.40	-3.33	8,262.12	-1,014.76	516.90	414.98	101.92	5.072		
20,800.00	12,392.00	20,462.76	11,864.56	146.63	144.98	-3.31	8,362.04	-1,015.86	519.60	416.65	102.95	5.047		
20,900.00	12,392.00	20,562.73	11,861.85	148.21	146.55	-3.30	8,461.96	-1,016.96	522.31	418.33	103.98	5.023		
21,000.00	12,392.00	20,662.69	11,859.14	149.78	148.13	-3.28	8,561.88	-1,018.06	525.01	420.00	105.01	5.000		
21,100.00	12,392.00	20,762.65	11,856.43	151.36	149.71	-3.26	8,661.80	-1,019.16	527.72	421.67	106.04	4.976		
21,200.00	12,392.00	20,862.62	11,853.72	152.94	151.29	-3.24	8,761.72	-1,020.26	530.42	423.35	107.08	4.954		
21,300.00	12,392.00	20,962.58	11,851.01	154.51	152.87	-3.23	8,861.64	-1,021.36	533.13	425.02	108.11	4.931		
21,400.00	12,392.00	21,062.54	11,848.30	156.10	154.45	-3.21	8,961.56	-1,022.45	535.84	426.68	109.15	4.909		
21,500.00	12,392.00	21,162.51	11,845.59	157.68	156.04	-3.19	9,061.48	-1,023.55	538.54	428.35	110.19	4.887		
21,600.00	12,392.00	21,262.47	11,842.88	159.26	157.63	-3.18	9,161.40	-1,024.65	541.25	430.02	111.23	4.866		
21,700.00	12,392.00	21,362.43	11,840.17	160.85	159.21	-3.16	9,261.33	-1,025.75	543.95	431.68	112.27	4.845		
21,800.00	12,392.00	21,462.40	11,837.47	162.43	160.80	-3.15	9,361.25	-1,026.85	546.66	433.34	113.32	4.824		
21,900.00	12,392.00	21,562.36	11,834.76	164.02	162.39	-3.13	9,461.17	-1,027.95	549.37	435.00	114.36	4.804		
22,000.00	12,392.00	21,662.32	11,832.05	165.61	163.99	-3.12	9,561.09	-1,029.04	552.07	436.67	115.41	4.784		
22,100.00	12,392.00	21,762.29	11,829.34	167.20	165.58	-3.10	9,661.01	-1,030.14	554.78	438.33	116.45	4.764		
22,200.00	12,392.00	21,862.25	11,826.63	168.80	167.17	-3.09	9,760.93	-1,031.24	557.48	439.98	117.50	4.745		
22,300.00	12,392.00	21,962.21	11,823.92	170.39	168.77	-3.07	9,860.85	-1,032.34	560.19	441.64	118.55	4.725		
22,400.00	12,392.00	22,062.18	11,821.21	171.98	170.36	-3.06	9,960.77	-1,033.44	562.90	443.30	119.60	4.707		
22,500.00	12,392.00	22,162.14	11,818.50	173.58	171.96	-3.04	10,060.69	-1,034.54	565.60	444.95	120.65	4.688		
22,581.33	12,392.00	22,243.44	11,816.30	174.88	173.26	-3.03	10,141.95	-1,035.43	567.80	446.30	121.50	4.673		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	1.40	1.40	0.00	0.00	48.56	76.10	86.21	114.99				
100.00	100.00	101.40	101.40	0.13	0.13	48.56	76.10	86.21	114.99	114.81	0.18	635.257	
200.00	200.00	201.40	201.40	0.48	0.49	48.56	76.10	86.21	114.99	114.30	0.69	167.154	
300.00	300.00	301.40	301.40	0.84	0.85	48.56	76.10	86.21	114.99	113.80	1.19	96.237	
400.00	400.00	401.40	401.40	1.20	1.21	48.56	76.10	86.21	114.99	113.29	1.70	67.569	
500.00	500.00	501.40	501.40	1.56	1.56	48.56	76.10	86.21	114.99	112.78	2.21	52.061	
600.00	600.00	601.40	601.40	1.92	1.92	48.56	76.10	86.21	114.99	112.28	2.72	42.343	
700.00	700.00	701.40	701.40	2.28	2.28	48.56	76.10	86.21	114.99	111.77	3.22	35.682	
800.00	800.00	801.40	801.40	2.63	2.64	48.56	76.10	86.21	114.99	111.26	3.73	30.832	
900.00	900.00	901.40	901.40	2.99	3.00	48.56	76.10	86.21	114.99	110.76	4.24	27.143	
1,000.00	1,000.00	1,001.40	1,001.40	3.35	3.36	48.56	76.10	86.21	114.99	110.25	4.74	24.242	
1,100.00	1,100.00	1,101.40	1,101.40	3.71	3.72	48.56	76.10	86.21	114.99	109.74	5.25	21.901	
1,200.00	1,200.00	1,201.40	1,201.40	4.07	4.07	48.56	76.10	86.21	114.99	109.24	5.76	19.973	
1,300.00	1,300.00	1,301.40	1,301.40	4.43	4.43	48.56	76.10	86.21	114.99	108.73	6.26	18.356	
1,316.19	1,316.19	1,317.59	1,317.59	4.49	4.49	48.56	76.10	86.21	114.99	108.65	6.35	18.119 CC	
1,400.00	1,400.00	1,401.39	1,401.39	4.79	4.79	48.56	76.10	86.21	114.99	108.22	6.77	16.983	
1,500.00	1,500.00	1,500.68	1,500.67	5.14	5.13	48.98	75.69	86.99	115.31	108.04	7.27	15.868 ES	
1,525.00	1,525.00	1,525.49	1,525.48	5.23	5.22	49.20	75.46	87.42	115.49	108.10	7.39	15.629	
1,600.00	1,600.00	1,600.00	1,599.96	5.49	5.47	-150.00	74.47	89.29	116.92	109.17	7.75	15.093	
1,700.00	1,699.94	1,698.98	1,698.84	5.82	5.80	-148.84	72.45	93.10	121.41	113.20	8.21	14.782 SF	
1,800.00	1,799.76	1,797.80	1,797.48	6.15	6.14	-147.66	69.64	98.41	128.86	120.18	8.68	14.839	
1,900.00	1,899.40	1,896.25	1,895.63	6.48	6.48	-146.54	66.04	105.19	139.28	130.12	9.16	15.206	
2,000.00	1,998.78	1,994.24	1,993.17	6.82	6.83	-145.51	61.69	113.41	152.63	142.99	9.64	15.837	
2,025.00	2,023.57	2,018.88	2,017.68	6.91	6.92	-145.28	60.48	115.69	156.41	146.65	9.76	16.026	
2,100.00	2,097.97	2,092.94	2,091.34	7.17	7.18	-152.75	56.86	122.53	168.04	157.92	10.12	16.597	
2,200.00	2,197.27	2,191.56	2,189.41	7.53	7.54	-163.55	52.03	131.63	183.91	173.30	10.62	17.326	
2,300.00	2,296.60	2,289.96	2,287.28	7.89	7.90	-174.66	47.22	140.72	200.33	189.22	11.11	18.035	
2,400.00	2,395.91	2,388.09	2,384.87	8.26	8.26	175.03	42.42	149.78	217.50	205.90	11.60	18.748	
2,504.30	2,499.40	2,490.06	2,486.28	8.64	8.64	166.10	37.43	159.20	236.44	224.33	12.12	19.516	
2,600.00	2,594.28	2,583.43	2,579.14	9.00	8.99	168.59	32.86	167.82	254.62	242.03	12.59	20.228	
2,700.00	2,693.42	2,680.99	2,676.17	9.38	9.35	170.83	28.08	176.83	274.04	260.96	13.08	20.948	
2,800.00	2,792.57	2,778.56	2,773.20	9.75	9.72	172.78	23.31	185.84	293.81	280.23	13.58	21.639	
2,900.00	2,891.71	2,876.12	2,870.23	10.14	10.09	174.48	18.54	194.85	313.87	299.80	14.08	22.300	
3,000.00	2,990.86	2,973.69	2,967.26	10.52	10.46	175.98	13.76	203.86	334.17	319.60	14.57	22.930	
3,100.00	3,090.00	3,071.25	3,064.29	10.91	10.83	177.30	8.99	212.87	354.66	339.59	15.07	23.529	
3,200.00	3,189.15	3,168.82	3,161.32	11.30	11.20	178.48	4.22	221.88	375.32	359.74	15.57	24.099	
3,300.00	3,288.29	3,266.38	3,258.35	11.69	11.57	179.54	-0.56	230.89	396.11	380.04	16.08	24.641	
3,400.00	3,387.44	3,363.95	3,355.38	12.08	11.95	-179.50	-5.33	239.89	417.02	400.44	16.58	25.155	
3,500.00	3,486.58	3,461.51	3,452.41	12.48	12.32	-178.64	-10.11	248.90	438.03	420.95	17.08	25.644	
3,600.00	3,585.72	3,559.07	3,549.44	12.87	12.70	-177.86	-14.88	257.91	459.13	441.54	17.59	26.108	
3,700.00	3,684.87	3,656.64	3,646.47	13.27	13.07	-177.14	-19.65	266.92	480.30	462.21	18.09	26.550	
3,800.00	3,784.01	3,754.20	3,743.50	13.67	13.45	-176.49	-24.43	275.93	501.54	482.94	18.60	26.970	
3,900.00	3,883.16	3,851.77	3,840.53	14.07	13.83	-175.89	-29.20	284.94	522.84	503.73	19.10	27.370	
4,000.00	3,982.30	3,949.33	3,937.56	14.47	14.21	-175.33	-33.97	293.95	544.18	524.57	19.61	27.752	
4,100.00	4,081.45	4,046.90	4,034.59	14.87	14.58	-174.82	-38.75	302.96	565.57	545.46	20.12	28.115	
4,200.00	4,180.59	4,144.46	4,131.62	15.27	14.96	-174.34	-43.52	311.97	587.01	566.38	20.62	28.462	
4,300.00	4,279.74	4,242.03	4,228.65	15.67	15.34	-173.90	-48.30	320.98	608.47	587.34	21.13	28.794	
4,400.00	4,378.88	4,339.59	4,325.68	16.08	15.72	-173.49	-53.07	329.99	629.97	608.33	21.64	29.110	
4,500.00	4,478.03	4,437.15	4,422.71	16.48	16.10	-173.11	-57.84	339.00	651.50	629.35	22.15	29.413	
4,600.00	4,577.17	4,534.72	4,519.74	16.89	16.48	-172.75	-62.62	348.01	673.06	650.40	22.66	29.703	
4,700.00	4,676.32	4,632.28	4,616.77	17.29	16.86	-172.41	-67.39	357.02	694.64	671.47	23.17	29.981	
4,800.00	4,775.46	4,729.85	4,713.80	17.70	17.24	-172.09	-72.16	366.03	716.24	692.56	23.68	30.247	

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
4,900.00	4,874.60	4,827.41	4,810.83	18.10	17.62	-171.79	-76.94	375.04	737.86	713.67	24.19	30.503		
5,000.00	4,973.75	4,924.98	4,907.87	18.51	18.01	-171.51	-81.71	384.05	759.50	734.80	24.70	30.748		
5,100.00	5,072.89	5,022.54	5,004.90	18.92	18.39	-171.24	-86.49	393.05	781.15	755.94	25.21	30.984		
5,200.00	5,172.04	5,120.11	5,101.93	19.32	18.77	-170.99	-91.26	402.06	802.82	777.10	25.72	31.210		
5,300.00	5,271.18	5,217.67	5,198.96	19.73	19.15	-170.75	-96.03	411.07	824.51	798.27	26.23	31.428		
5,400.00	5,370.33	5,315.24	5,295.99	20.14	19.53	-170.53	-100.81	420.08	846.20	819.46	26.75	31.638		
5,500.00	5,469.47	5,412.80	5,393.02	20.55	19.91	-170.31	-105.58	429.09	867.91	840.65	27.26	31.840		
5,600.00	5,568.62	5,510.36	5,490.05	20.96	20.30	-170.11	-110.35	438.10	889.63	861.86	27.77	32.034		
5,700.00	5,667.76	5,607.93	5,587.08	21.37	20.68	-169.91	-115.13	447.11	911.36	883.08	28.28	32.222		
5,800.00	5,766.91	5,705.49	5,684.11	21.78	21.06	-169.73	-119.90	456.12	933.10	904.31	28.80	32.403		
5,900.00	5,866.05	5,803.06	5,781.14	22.19	21.45	-169.55	-124.68	465.13	954.85	925.54	29.31	32.578		
6,000.00	5,965.19	5,900.62	5,878.17	22.59	21.83	-169.38	-129.45	474.14	976.61	946.79	29.82	32.747		
6,100.00	6,064.34	5,998.19	5,975.20	23.01	22.21	-169.22	-134.22	483.15	998.38	968.04	30.34	32.910		
6,200.00	6,163.48	6,095.75	6,072.23	23.42	22.60	-169.06	-139.00	492.16	1,020.15	989.30	30.85	33.068		
6,300.00	6,262.63	6,193.32	6,169.26	23.83	22.98	-168.91	-143.77	501.17	1,041.93	1,010.56	31.36	33.221		
6,400.00	6,361.77	6,290.88	6,266.29	24.24	23.36	-168.77	-148.54	510.18	1,063.71	1,031.84	31.88	33.369		
6,500.00	6,460.92	6,388.44	6,363.32	24.65	23.75	-168.63	-153.32	519.19	1,085.51	1,053.11	32.39	33.512		
6,600.00	6,560.06	6,486.01	6,460.35	25.06	24.13	-168.50	-158.09	528.20	1,107.30	1,074.40	32.91	33.650		
6,700.00	6,659.21	6,583.57	6,557.38	25.47	24.51	-168.38	-162.87	537.20	1,129.11	1,095.69	33.42	33.785		
6,800.00	6,758.35	6,681.14	6,654.41	25.88	24.90	-168.25	-167.64	546.21	1,150.91	1,116.98	33.94	33.915		
6,900.00	6,857.50	6,778.70	6,751.44	26.29	25.28	-168.14	-172.41	555.22	1,172.73	1,138.28	34.45	34.042		
7,000.00	6,956.64	6,876.27	6,848.47	26.70	25.67	-168.02	-177.19	564.23	1,194.54	1,159.58	34.96	34.164		
7,100.00	7,055.78	6,973.83	6,945.50	27.12	26.05	-167.91	-181.96	573.24	1,216.37	1,180.89	35.48	34.283		
7,141.02	7,096.45	7,013.85	6,985.30	27.29	26.21	-167.87	-183.92	576.94	1,225.32	1,189.63	35.69	34.331		
7,200.00	7,154.99	7,083.61	7,054.71	27.53	26.48	-167.84	-187.17	583.07	1,237.50	1,201.45	36.06	34.323		
7,300.00	7,254.46	7,205.40	7,176.08	27.92	26.95	-167.79	-191.89	591.98	1,254.72	1,218.05	36.67	34.213		
7,400.00	7,354.17	7,328.40	7,298.85	28.30	27.40	-167.76	-195.43	598.67	1,267.55	1,230.27	37.28	34.001		
7,500.00	7,454.04	7,422.25	7,422.60	28.66	27.84	-167.74	-197.75	603.05	1,275.95	1,238.08	37.87	33.691		
7,600.00	7,554.01	7,576.61	7,546.93	29.00	28.27	-167.73	-198.82	605.07	1,279.90	1,241.45	38.45	33.290		
7,640.99	7,595.00	7,626.08	7,596.40	29.13	28.44	89.69	-198.90	605.21	1,280.23	1,241.56	38.67	33.107		
7,700.00	7,654.01	7,685.09	7,655.41	29.32	28.63	89.69	-198.90	605.21	1,280.23	1,241.28	38.95	32.872		
7,800.00	7,754.01	7,785.09	7,755.41	29.64	28.95	89.69	-198.90	605.21	1,280.23	1,240.81	39.42	32.480		
7,900.00	7,854.01	7,885.09	7,855.41	29.95	29.27	89.69	-198.90	605.21	1,280.23	1,240.34	39.89	32.096		
8,000.00	7,954.01	7,985.09	7,955.41	30.27	29.60	89.69	-198.90	605.21	1,280.23	1,239.87	40.36	31.721		
8,100.00	8,054.01	8,085.09	8,055.41	30.59	29.92	89.69	-198.90	605.21	1,280.23	1,239.40	40.83	31.354		
8,200.00	8,154.01	8,185.09	8,155.41	30.91	30.25	89.69	-198.90	605.21	1,280.23	1,238.92	41.30	30.995		
8,300.00	8,254.01	8,285.09	8,255.41	31.24	30.57	89.69	-198.90	605.21	1,280.23	1,238.45	41.78	30.643		
8,400.00	8,354.01	8,385.09	8,355.41	31.56	30.90	89.69	-198.90	605.21	1,280.23	1,237.98	42.25	30.299		
8,500.00	8,454.01	8,485.09	8,455.41	31.88	31.22	89.69	-198.90	605.21	1,280.23	1,237.50	42.73	29.961		
8,600.00	8,554.01	8,585.09	8,555.41	32.21	31.55	89.69	-198.90	605.21	1,280.23	1,237.02	43.21	29.631		
8,700.00	8,654.01	8,685.09	8,655.41	32.53	31.88	89.69	-198.90	605.21	1,280.23	1,236.55	43.68	29.308		
8,800.00	8,754.01	8,785.09	8,755.41	32.86	32.21	89.69	-198.90	605.21	1,280.23	1,236.07	44.16	28.991		
8,900.00	8,854.01	8,885.09	8,855.41	33.18	32.54	89.69	-198.90	605.21	1,280.23	1,235.59	44.64	28.680		
9,000.00	8,954.01	8,985.09	8,955.41	33.51	32.87	89.69	-198.90	605.21	1,280.23	1,235.11	45.12	28.375		
9,100.00	9,054.01	9,085.09	9,055.41	33.84	33.20	89.69	-198.90	605.21	1,280.23	1,234.63	45.60	28.077		
9,200.00	9,154.01	9,185.09	9,155.41	34.16	33.53	89.69	-198.90	605.21	1,280.23	1,234.15	46.08	27.784		
9,300.00	9,254.01	9,285.09	9,255.41	34.49	33.86	89.69	-198.90	605.21	1,280.23	1,233.67	46.56	27.497		
9,400.00	9,354.01	9,385.09	9,355.41	34.82	34.20	89.69	-198.90	605.21	1,280.23	1,233.19	47.04	27.216		
9,500.00	9,454.01	9,485.09	9,455.41	35.15	34.53	89.69	-198.90	605.21	1,280.23	1,232.71	47.52	26.940		
9,600.00	9,554.01	9,585.09	9,555.41	35.48	34.86	89.69	-198.90	605.21	1,280.23	1,232.23	48.00	26.670		
9,700.00	9,654.01	9,685.55	9,655.60	35.81	35.19	89.43	-193.20	605.15	1,280.21	1,231.73	48.48	26.407		
9,709.42	9,663.43	9,694.88	9,664.83	35.84	35.22	89.37	-191.82	605.13	1,280.21	1,231.69	48.52	26.383		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
9,800.00	9,754.01	9,781.51	9,749.04	36.14	35.47	88.48	-171.83	604.91	1,280.38	1,231.46	48.92	26.172		
9,900.00	9,854.01	9,868.28	9,829.40	36.48	35.68	87.02	-139.33	604.55	1,281.55	1,232.23	49.32	25.986		
10,000.00	9,954.01	9,943.79	9,894.66	36.81	35.84	85.33	-101.45	604.14	1,284.83	1,235.18	49.65	25.878		
10,100.00	10,054.01	10,007.98	9,945.81	37.14	35.94	83.61	-62.73	603.71	1,291.36	1,241.47	49.89	25.883		
10,200.00	10,154.01	10,061.94	9,985.25	37.47	36.01	81.99	-25.93	603.31	1,302.08	1,252.06	50.02	26.032		
10,300.00	10,254.01	10,100.00	10,010.89	37.81	36.06	80.75	2.18	603.00	1,317.71	1,267.73	49.98	26.365		
10,400.00	10,354.01	10,150.00	10,041.64	38.14	36.10	79.04	41.59	602.56	1,338.61	1,288.71	49.90	26.826		
10,500.00	10,454.01	10,177.37	10,056.99	38.48	36.11	78.06	64.25	602.31	1,365.01	1,315.42	49.59	27.523		
10,600.00	10,554.01	10,200.00	10,068.84	38.81	36.13	77.23	83.52	602.10	1,396.96	1,347.80	49.17	28.413		
10,700.00	10,654.01	10,228.24	10,082.56	39.15	36.14	76.18	108.20	601.83	1,434.27	1,385.57	48.70	29.454		
10,800.00	10,754.01	10,250.00	10,092.28	39.48	36.14	75.36	127.66	601.62	1,476.74	1,428.61	48.13	30.682		
10,900.00	10,854.01	10,266.25	10,099.06	39.82	36.15	74.74	142.43	601.45	1,524.05	1,476.56	47.49	32.090		
11,000.00	10,954.01	10,281.78	10,105.14	40.16	36.15	74.14	156.71	601.30	1,575.87	1,529.03	46.84	33.645		
11,100.00	11,054.01	10,300.00	10,111.79	40.49	36.15	73.43	173.68	601.11	1,631.86	1,585.65	46.21	35.316		
11,200.00	11,154.01	10,300.00	10,111.79	40.83	36.15	73.43	173.68	601.11	1,691.65	1,646.18	45.48	37.199		
11,300.00	11,254.01	10,318.57	10,118.00	41.17	36.15	72.71	191.18	600.92	1,754.81	1,709.91	44.90	39.086		
11,400.00	11,354.01	10,328.36	10,121.04	41.51	36.15	72.33	200.48	600.82	1,821.13	1,776.83	44.30	41.110		
11,500.00	11,454.01	10,350.00	10,127.21	41.85	36.15	71.49	221.23	600.59	1,890.42	1,846.60	43.82	43.142		
11,600.00	11,554.01	10,350.00	10,127.21	42.18	36.15	71.49	221.23	600.59	1,961.97	1,918.71	43.26	45.356		
11,700.00	11,654.01	10,350.00	10,127.21	42.52	36.15	71.49	221.23	600.59	2,035.92	1,993.17	42.75	47.625		
11,800.00	11,754.01	10,350.00	10,127.21	42.86	36.15	71.49	221.23	600.59	2,112.01	2,069.72	42.29	49.936		
11,865.03	11,819.04	10,350.00	10,127.21	43.08	36.15	71.49	221.23	600.59	2,162.55	2,120.52	42.03	51.458		
11,900.00	11,853.99	10,350.00	10,127.21	43.20	36.15	81.40	221.23	600.59	2,189.97	2,148.08	41.89	52.280		
11,950.00	11,903.70	10,369.60	10,132.11	43.37	36.15	74.56	240.20	600.38	2,228.82	2,187.02	41.80	53.318		
12,000.00	11,952.76	10,374.40	10,133.21	43.54	36.15	68.60	244.87	600.33	2,267.58	2,225.93	41.65	54.443		
12,050.00	12,000.81	10,379.90	10,134.42	43.70	36.15	63.07	250.24	600.27	2,305.72	2,264.21	41.51	55.541		
12,100.00	12,047.48	10,400.00	10,138.42	43.85	36.16	57.80	269.93	600.05	2,343.16	2,301.70	41.45	56.523		
12,150.00	12,092.40	10,400.00	10,138.42	43.99	36.16	53.52	269.93	600.05	2,379.12	2,337.81	41.31	57.586		
12,200.00	12,135.25	10,400.00	10,138.42	44.13	36.16	49.75	269.93	600.05	2,413.78	2,372.59	41.19	58.603		
12,250.00	12,175.69	10,400.00	10,138.42	44.25	36.16	46.46	269.93	600.05	2,446.93	2,405.85	41.08	59.567		
12,300.00	12,213.41	10,400.00	10,138.42	44.37	36.16	43.60	269.93	600.05	2,478.37	2,437.39	40.99	60.468		
12,350.00	12,248.14	10,424.22	10,142.32	44.48	36.18	41.01	293.83	599.79	2,507.41	2,466.40	41.00	61.156		
12,400.00	12,279.60	10,450.00	10,145.35	44.58	36.23	38.85	319.43	599.51	2,534.76	2,493.74	41.03	61.784		
12,450.00	12,307.55	10,450.00	10,145.35	44.68	36.23	37.12	319.43	599.51	2,559.31	2,518.32	40.99	62.444		
12,500.00	12,331.79	10,450.00	10,145.35	44.77	36.23	35.65	319.43	599.51	2,581.54	2,540.57	40.97	63.013		
12,550.00	12,352.12	10,450.00	10,145.35	44.88	36.23	34.41	319.43	599.51	2,601.36	2,560.38	40.98	63.484		
12,600.00	12,368.39	10,470.42	10,146.93	44.99	36.28	33.42	339.79	599.28	2,618.27	2,577.21	41.06	63.768		
12,650.00	12,380.49	10,500.00	10,147.94	45.12	36.37	32.68	369.35	598.96	2,632.89	2,591.71	41.18	63.938		
12,700.00	12,388.31	10,500.00	10,147.94	45.25	36.37	32.07	369.35	598.96	2,644.03	2,602.77	41.26	64.081		
12,750.00	12,391.80	10,500.00	10,147.94	45.41	36.37	31.62	369.35	598.96	2,652.45	2,611.08	41.37	64.112		
12,765.03	12,392.00	10,500.00	10,147.94	45.45	36.37	31.51	369.35	598.96	2,654.44	2,613.03	41.41	64.100		
12,800.00	12,392.00	10,509.74	10,147.94	45.57	36.40	31.63	379.08	598.85	2,658.82	2,617.30	41.52	64.033		
12,900.00	12,392.00	10,577.21	10,146.48	45.95	36.63	32.08	446.53	598.11	2,671.60	2,629.69	41.91	63.745		
13,000.00	12,392.00	10,675.67	10,144.28	46.37	37.02	32.56	544.96	597.03	2,682.85	2,640.48	42.37	63.326		
13,100.00	12,392.00	10,774.67	10,142.07	46.85	37.47	32.94	643.94	595.94	2,692.28	2,649.43	42.85	62.830		
13,200.00	12,392.00	10,874.10	10,139.85	47.36	37.99	33.22	743.33	594.84	2,699.84	2,656.48	43.36	62.263		
13,300.00	12,392.00	10,973.83	10,137.62	47.91	38.57	33.42	843.03	593.75	2,705.52	2,661.62	43.90	61.631		
13,400.00	12,392.00	11,073.74	10,135.39	48.49	39.20	33.51	942.91	592.65	2,709.28	2,664.82	44.46	60.942		
13,448.51	12,392.00	11,122.24	10,134.31	48.78	39.53	33.53	991.39	592.11	2,710.41	2,665.67	44.73	60.589		
13,500.00	12,392.00	11,173.72	10,133.16	49.10	39.90	33.51	1,042.86	591.55	2,711.37	2,666.33	45.04	60.203		
13,600.00	12,392.00	11,273.69	10,130.93	49.75	40.64	33.49	1,142.80	590.45	2,713.23	2,667.57	45.66	59.421		
13,700.00	12,392.00	11,373.67	10,128.70	50.45	41.44	33.46	1,242.74	589.35	2,715.09	2,668.76	46.33	58.605		

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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	12,392.00	11,473.64	10,126.46	51.20	42.28	33.44	1,342.69	588.25	2,716.96	2,669.92	47.04	57.759		
13,900.00	12,392.00	11,573.62	10,124.23	51.98	43.17	33.41	1,442.63	587.15	2,718.82	2,671.03	47.79	56.890		
14,000.00	12,392.00	11,673.59	10,122.00	52.81	44.11	33.38	1,542.58	586.05	2,720.68	2,672.10	48.58	56.003		
14,100.00	12,392.00	11,773.57	10,119.77	53.68	45.08	33.36	1,642.52	584.95	2,722.55	2,673.14	49.41	55.104		
14,200.00	12,392.00	11,873.54	10,117.53	54.58	46.09	33.33	1,742.46	583.85	2,724.42	2,674.15	50.27	54.198		
14,300.00	12,392.00	11,973.52	10,115.30	55.51	47.14	33.31	1,842.41	582.75	2,726.28	2,675.12	51.16	53.290		
14,400.00	12,392.00	12,073.49	10,113.07	56.48	48.22	33.28	1,942.35	581.65	2,728.15	2,676.07	52.08	52.383		
14,500.00	12,392.00	12,173.47	10,110.84	57.48	49.33	33.25	2,042.30	580.55	2,730.02	2,676.98	53.03	51.478		
14,600.00	12,392.00	12,273.44	10,108.60	58.51	50.48	33.23	2,142.24	579.45	2,731.88	2,677.87	54.01	50.579		
14,700.00	12,392.00	12,373.42	10,106.37	59.57	51.65	33.20	2,242.18	578.35	2,733.75	2,678.73	55.02	49.689		
14,800.00	12,392.00	12,473.39	10,104.14	60.65	52.84	33.18	2,342.13	577.25	2,735.62	2,679.57	56.05	48.810		
14,900.00	12,392.00	12,573.37	10,101.91	61.76	54.06	33.15	2,442.07	576.15	2,737.49	2,680.39	57.10	47.942		
15,000.00	12,392.00	12,673.34	10,099.67	62.89	55.30	33.13	2,542.02	575.05	2,739.36	2,681.19	58.17	47.089		
15,100.00	12,392.00	12,773.32	10,097.44	64.05	56.56	33.10	2,641.96	573.95	2,741.23	2,681.96	59.27	46.250		
15,200.00	12,392.00	12,873.29	10,095.21	65.23	57.85	33.08	2,741.90	572.85	2,743.10	2,682.72	60.38	45.428		
15,300.00	12,392.00	12,973.27	10,092.98	66.42	59.15	33.05	2,841.85	571.75	2,744.97	2,683.46	61.52	44.622		
15,400.00	12,392.00	13,073.24	10,090.74	67.64	60.46	33.02	2,941.79	570.65	2,746.85	2,684.18	62.67	43.833		
15,500.00	12,392.00	13,173.22	10,088.51	68.88	61.80	33.00	3,041.74	569.55	2,748.72	2,684.89	63.83	43.063		
15,600.00	12,392.00	13,273.19	10,086.28	70.13	63.15	32.97	3,141.68	568.45	2,750.59	2,685.58	65.01	42.311		
15,700.00	12,392.00	13,373.17	10,084.04	71.40	64.51	32.95	3,241.63	567.35	2,752.47	2,686.27	66.20	41.578		
15,800.00	12,392.00	13,473.14	10,081.81	72.68	65.88	32.92	3,341.57	566.25	2,754.34	2,686.94	67.41	40.862		
15,900.00	12,392.00	13,573.12	10,079.58	73.98	67.27	32.90	3,441.51	565.15	2,756.22	2,687.59	68.62	40.165		
16,000.00	12,392.00	13,673.09	10,077.35	75.29	68.67	32.87	3,541.46	564.05	2,758.09	2,688.24	69.85	39.485		
16,100.00	12,392.00	13,773.07	10,075.11	76.62	70.08	32.85	3,641.40	562.95	2,759.97	2,688.87	71.09	38.822		
16,200.00	12,392.00	13,873.04	10,072.88	77.96	71.50	32.82	3,741.35	561.85	2,761.84	2,689.50	72.34	38.177		
16,300.00	12,392.00	13,973.02	10,070.65	79.31	72.93	32.80	3,841.29	560.76	2,763.72	2,690.12	73.60	37.550		
16,400.00	12,392.00	14,072.99	10,068.42	80.67	74.38	32.77	3,941.23	559.66	2,765.60	2,690.73	74.87	36.939		
16,500.00	12,392.00	14,172.97	10,066.18	82.04	75.82	32.75	4,041.18	558.56	2,767.48	2,691.33	76.15	36.344		
16,600.00	12,392.00	14,272.94	10,063.95	83.42	77.28	32.72	4,141.12	557.46	2,769.36	2,691.92	77.43	35.765		
16,700.00	12,392.00	14,372.92	10,061.72	84.81	78.75	32.70	4,241.07	556.36	2,771.24	2,692.51	78.73	35.201		
16,800.00	12,392.00	14,472.89	10,059.49	86.21	80.22	32.67	4,341.01	555.26	2,773.11	2,693.09	80.02	34.654		
16,900.00	12,392.00	14,572.87	10,057.25	87.62	81.70	32.65	4,440.95	554.16	2,775.00	2,693.67	81.33	34.121		
17,000.00	12,392.00	14,672.84	10,055.02	89.04	83.18	32.62	4,540.90	553.06	2,776.88	2,694.24	82.64	33.602		
17,100.00	12,392.00	14,772.82	10,052.79	90.47	84.67	32.60	4,640.84	551.96	2,778.76	2,694.80	83.96	33.097		
17,200.00	12,392.00	14,872.79	10,050.56	91.90	86.17	32.57	4,740.79	550.86	2,780.64	2,695.36	85.28	32.606		
17,300.00	12,392.00	14,972.77	10,048.32	93.34	87.67	32.55	4,840.73	549.76	2,782.52	2,695.91	86.61	32.127		
17,400.00	12,392.00	15,072.74	10,046.09	94.79	89.18	32.52	4,940.67	548.66	2,784.40	2,696.46	87.94	31.661		
17,500.00	12,392.00	15,172.72	10,043.86	96.25	90.70	32.50	5,040.62	547.56	2,786.29	2,697.01	89.28	31.208		
17,600.00	12,392.00	15,272.69	10,041.63	97.71	92.22	32.47	5,140.56	546.46	2,788.17	2,697.55	90.63	30.766		
17,700.00	12,392.00	15,372.67	10,039.39	99.17	93.74	32.45	5,240.51	545.36	2,790.06	2,698.08	91.97	30.335		
17,800.00	12,392.00	15,472.64	10,037.16	100.65	95.27	32.43	5,340.45	544.26	2,791.94	2,698.62	93.32	29.917		
17,900.00	12,392.00	15,572.62	10,034.93	102.13	96.80	32.40	5,440.40	543.16	2,793.83	2,699.15	94.68	29.509		
18,000.00	12,392.00	15,672.59	10,032.70	103.61	98.33	32.38	5,540.34	542.06	2,795.71	2,699.68	96.03	29.112		
18,100.00	12,392.00	15,772.57	10,030.46	105.10	99.87	32.35	5,640.28	540.96	2,797.60	2,700.21	97.39	28.725		
18,200.00	12,392.00	15,872.54	10,028.23	106.59	101.41	32.33	5,740.23	539.86	2,799.49	2,700.73	98.76	28.347		
18,300.00	12,392.00	15,972.52	10,026.00	108.09	102.96	32.30	5,840.17	538.76	2,801.37	2,701.25	100.12	27.979		
18,400.00	12,392.00	16,072.49	10,023.77	109.59	104.51	32.28	5,940.12	537.66	2,803.26	2,701.77	101.49	27.621		
18,500.00	12,392.00	16,172.47	10,021.53	111.10	106.06	32.25	6,040.06	536.56	2,805.15	2,702.29	102.86	27.271		
18,600.00	12,392.00	16,272.44	10,019.30	112.61	107.62	32.23	6,140.00	535.46	2,807.04	2,702.81	104.23	26.930		
18,700.00	12,392.00	16,372.42	10,017.07	114.12	109.18	32.21	6,239.95	534.36	2,808.93	2,703.32	105.61	26.598		
18,800.00	12,392.00	16,472.39	10,014.84	115.64	110.74	32.18	6,339.89	533.26	2,810.82	2,703.83	106.99	26.273		
18,900.00	12,392.00	16,572.37	10,012.60	117.17	112.30	32.16	6,439.84	532.16	2,812.71	2,704.34	108.37	25.956		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
19,000.00	12,392.00	16,672.34	10,010.37	118.69	113.87	32.13	6,539.78	531.06	2,814.60	2,704.85	109.75	25.646		
19,100.00	12,392.00	16,772.32	10,008.14	120.22	115.44	32.11	6,639.72	529.96	2,816.49	2,705.36	111.13	25.344		
19,200.00	12,392.00	16,872.29	10,005.91	121.75	117.01	32.08	6,739.67	528.86	2,818.38	2,705.87	112.51	25.050		
19,300.00	12,392.00	16,972.27	10,003.67	123.29	118.58	32.06	6,839.61	527.76	2,820.28	2,706.38	113.90	24.762		
19,400.00	12,392.00	17,072.24	10,001.44	124.83	120.15	32.04	6,939.56	526.66	2,822.17	2,706.89	115.28	24.481		
19,500.00	12,392.00	17,172.22	9,999.21	126.37	121.73	32.01	7,039.50	525.56	2,824.06	2,707.39	116.67	24.206		
19,600.00	12,392.00	17,272.19	9,996.98	127.91	123.31	31.99	7,139.44	524.47	2,825.96	2,707.90	118.06	23.937		
19,700.00	12,392.00	17,372.17	9,994.74	129.46	124.89	31.96	7,239.39	523.37	2,827.85	2,708.40	119.45	23.674		
19,800.00	12,392.00	17,472.14	9,992.51	131.01	126.48	31.94	7,339.33	522.27	2,829.75	2,708.90	120.84	23.417		
19,900.00	12,392.00	17,572.12	9,990.28	132.56	128.06	31.92	7,439.28	521.17	2,831.64	2,709.41	122.23	23.166		
20,000.00	12,392.00	17,672.09	9,988.05	134.12	129.65	31.89	7,539.22	520.07	2,833.54	2,709.91	123.63	22.920		
20,100.00	12,392.00	17,772.07	9,985.81	135.67	131.24	31.87	7,639.16	518.97	2,835.43	2,710.41	125.02	22.680		
20,200.00	12,392.00	17,872.04	9,983.58	137.23	132.83	31.84	7,739.11	517.87	2,837.33	2,710.92	126.41	22.445		
20,300.00	12,392.00	17,972.02	9,981.35	138.80	134.42	31.82	7,839.05	516.77	2,839.23	2,711.42	127.81	22.215		
20,400.00	12,392.00	18,072.00	9,979.12	140.36	136.01	31.80	7,939.00	515.67	2,841.13	2,711.93	129.20	21.990		
20,500.00	12,392.00	18,171.97	9,976.88	141.92	137.60	31.77	8,038.94	514.57	2,843.02	2,712.43	130.59	21.770		
20,600.00	12,392.00	18,271.95	9,974.65	143.49	139.20	31.75	8,138.89	513.47	2,844.92	2,712.93	131.99	21.554		
20,700.00	12,392.00	18,371.92	9,972.42	145.06	140.80	31.73	8,238.83	512.37	2,846.82	2,713.44	133.39	21.343		
20,800.00	12,392.00	18,471.90	9,970.19	146.63	142.40	31.70	8,338.77	511.27	2,848.72	2,713.94	134.78	21.136		
20,900.00	12,392.00	18,571.87	9,967.95	148.21	144.00	31.68	8,438.72	510.17	2,850.62	2,714.44	136.18	20.933		
21,000.00	12,392.00	18,671.85	9,965.72	149.78	145.60	31.66	8,538.66	509.07	2,852.52	2,714.95	137.58	20.734		
21,100.00	12,392.00	18,771.82	9,963.49	151.36	147.20	31.63	8,638.61	507.97	2,854.43	2,715.45	138.97	20.540		
21,200.00	12,392.00	18,871.80	9,961.26	152.94	148.80	31.61	8,738.55	506.87	2,856.33	2,715.96	140.37	20.349		
21,300.00	12,392.00	18,971.77	9,959.02	154.51	150.41	31.59	8,838.49	505.77	2,858.23	2,716.46	141.77	20.161		
21,400.00	12,392.00	19,071.75	9,956.79	156.10	152.01	31.56	8,938.44	504.67	2,860.13	2,716.97	143.16	19.978		
21,500.00	12,392.00	19,171.72	9,954.56	157.68	153.62	31.54	9,038.38	503.57	2,862.04	2,717.48	144.56	19.798		
21,600.00	12,392.00	19,271.70	9,952.33	159.26	155.22	31.52	9,138.33	502.47	2,863.94	2,717.98	145.95	19.622		
21,700.00	12,392.00	19,371.67	9,950.09	160.85	156.83	31.49	9,238.27	501.37	2,865.84	2,718.49	147.35	19.449		
21,800.00	12,392.00	19,471.65	9,947.86	162.43	158.44	31.47	9,338.21	500.27	2,867.75	2,719.00	148.75	19.279		
21,900.00	12,392.00	19,571.62	9,945.63	164.02	160.05	31.45	9,438.16	499.17	2,869.65	2,719.51	150.14	19.113		
22,000.00	12,392.00	19,671.60	9,943.40	165.61	161.66	31.42	9,538.10	498.07	2,871.56	2,720.02	151.54	18.949		
22,100.00	12,392.00	19,771.57	9,941.16	167.20	163.27	31.40	9,638.05	496.97	2,873.46	2,720.53	152.94	18.788		
22,200.00	12,392.00	19,871.55	9,938.93	168.80	164.89	31.38	9,737.99	495.87	2,875.37	2,721.04	154.33	18.631		
22,300.00	12,392.00	19,971.52	9,936.70	170.39	166.50	31.35	9,837.93	494.77	2,877.28	2,721.55	155.73	18.476		
22,400.00	12,392.00	20,071.50	9,934.47	171.98	168.11	31.33	9,937.88	493.67	2,879.19	2,722.06	157.12	18.325		
22,500.00	12,392.00	20,171.47	9,932.23	173.58	169.73	31.31	10,037.82	492.57	2,881.09	2,722.58	158.52	18.175		
22,581.33	12,392.00	20,252.78	9,930.42	174.88	171.04	31.29	10,119.11	491.68	2,882.65	2,722.99	159.65	18.056		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	12.17	75.34	16.25	77.51					
100.00	100.00	91.80	91.80	0.13	0.13	12.17	75.34	16.25	77.07	76.89	0.18	426.618		
200.00	200.00	191.80	191.80	0.48	0.47	12.17	75.34	16.25	77.07	76.40	0.68	114.169		
300.00	300.00	291.80	291.80	0.84	0.83	12.17	75.34	16.25	77.07	75.89	1.18	65.205		
400.00	400.00	391.80	391.80	1.20	1.19	12.17	75.34	16.25	77.07	75.38	1.69	45.633		
500.00	500.00	491.80	491.80	1.56	1.55	12.17	75.34	16.25	77.07	74.88	2.20	35.098		
600.00	600.00	591.80	591.80	1.92	1.90	12.17	75.34	16.25	77.07	74.37	2.70	28.515		
700.00	700.00	691.80	691.80	2.28	2.26	12.17	75.34	16.25	77.07	73.86	3.21	24.012		
800.00	800.00	791.80	791.80	2.63	2.62	12.17	75.34	16.25	77.07	73.36	3.72	20.737		
900.00	900.00	891.80	891.80	2.99	2.98	12.17	75.34	16.25	77.07	72.85	4.22	18.248		
1,000.00	1,000.00	991.80	991.80	3.35	3.34	12.17	75.34	16.25	77.07	72.34	4.73	16.292		
1,100.00	1,100.00	1,091.80	1,091.80	3.71	3.70	12.17	75.34	16.25	77.07	71.83	5.24	14.715		
1,200.00	1,200.00	1,191.80	1,191.80	4.07	4.06	12.17	75.34	16.25	77.07	71.33	5.74	13.417		
1,300.00	1,300.00	1,291.80	1,291.80	4.43	4.41	12.17	75.34	16.25	77.07	70.82	6.25	12.329		
1,400.00	1,400.00	1,391.80	1,391.80	4.79	4.77	12.17	75.34	16.25	77.07	70.31	6.76	11.404		
1,500.00	1,500.00	1,491.80	1,491.80	5.14	5.13	12.17	75.34	16.25	77.07	69.81	7.27	10.608		
1,525.00	1,525.00	1,516.80	1,516.80	5.23	5.22	12.17	75.34	16.25	77.07	69.68	7.39	10.426 CC, ES		
1,600.00	1,600.00	1,591.80	1,591.80	5.49	5.49	172.24	75.34	16.25	77.80	70.04	7.76	10.022		
1,700.00	1,699.94	1,691.74	1,691.74	5.82	5.85	172.55	75.34	16.25	81.05	72.80	8.25	9.827		
1,800.00	1,799.76	1,791.56	1,791.56	6.15	6.21	173.04	75.34	16.25	86.89	78.15	8.73	9.948		
1,900.00	1,899.40	1,891.20	1,891.20	6.48	6.56	173.65	75.34	16.25	95.33	86.10	9.22	10.337		
2,000.00	1,998.78	1,990.58	1,990.58	6.82	6.92	174.29	75.34	16.25	106.37	96.66	9.71	10.953		
2,025.00	2,023.57	2,015.37	2,015.37	6.91	7.01	174.45	75.34	16.25	109.54	99.70	9.83	11.138		
2,100.00	2,097.97	2,089.77	2,089.77	7.17	7.27	167.05	75.34	16.25	118.88	108.68	10.20	11.653		
2,200.00	2,197.27	2,189.07	2,189.07	7.53	7.63	156.47	75.34	16.25	130.16	119.46	10.69	12.171		
2,300.00	2,296.60	2,288.40	2,288.40	7.89	7.99	145.76	75.34	16.25	140.23	129.04	11.19	12.532		
2,400.00	2,395.91	2,387.71	2,387.71	8.26	8.34	136.08	75.34	16.25	149.31	137.62	11.69	12.775		
2,504.30	2,499.40	2,491.20	2,491.20	8.64	8.71	128.11	75.34	16.25	158.02	145.81	12.21	12.943		
2,600.00	2,594.28	2,586.08	2,586.08	9.00	9.05	131.49	75.34	16.25	166.06	153.37	12.69	13.087		
2,700.00	2,693.42	2,685.22	2,685.22	9.38	9.41	134.68	75.34	16.25	175.02	161.83	13.19	13.268		
2,800.00	2,792.57	2,784.37	2,784.37	9.75	9.76	137.55	75.34	16.25	184.47	170.78	13.69	13.471		
2,900.00	2,891.71	2,883.51	2,883.51	10.14	10.12	140.14	75.34	16.25	194.34	180.14	14.20	13.688		
3,000.00	2,990.86	2,982.66	2,982.66	10.52	10.48	142.48	75.34	16.25	204.56	189.86	14.70	13.915		
3,100.00	3,090.00	3,081.80	3,081.80	10.91	10.83	144.59	75.34	16.25	215.09	199.88	15.20	14.146		
3,200.00	3,189.15	3,180.95	3,180.95	11.30	11.19	146.50	75.34	16.25	225.88	210.17	15.71	14.379		
3,300.00	3,288.29	3,280.09	3,280.09	11.69	11.54	148.24	75.34	16.25	236.90	220.69	16.21	14.612		
3,400.00	3,387.44	3,379.24	3,379.24	12.08	11.90	149.82	75.34	16.25	248.12	231.40	16.72	14.842		
3,500.00	3,486.58	3,475.74	3,475.74	12.48	12.23	151.38	75.11	16.96	259.91	242.70	17.20	15.107		
3,600.00	3,585.72	3,570.97	3,570.97	12.87	12.56	153.20	74.15	19.88	273.18	255.51	17.67	15.456		
3,700.00	3,684.87	3,665.45	3,665.24	13.27	12.88	155.23	72.47	25.01	288.11	269.97	18.13	15.887		
3,800.00	3,784.01	3,759.08	3,758.55	13.67	13.20	157.40	70.08	32.27	304.84	286.25	18.59	16.400		
3,900.00	3,883.16	3,851.75	3,850.70	14.07	13.51	159.65	67.02	41.60	323.50	304.47	19.03	16.999		
4,000.00	3,982.30	3,943.99	3,942.15	14.47	13.83	161.95	63.29	52.98	344.19	324.72	19.47	17.680		
4,100.00	4,081.45	4,040.61	4,037.83	14.87	14.17	164.19	59.09	65.75	366.05	346.10	19.94	18.354		
4,200.00	4,180.59	4,137.23	4,133.51	15.27	14.52	166.18	54.90	78.53	388.38	367.96	20.42	19.017		
4,300.00	4,279.74	4,233.84	4,229.19	15.67	14.87	167.95	50.71	91.31	411.13	390.22	20.91	19.666		
4,400.00	4,378.88	4,330.46	4,324.87	16.08	15.21	169.54	46.52	104.08	434.21	412.82	21.39	20.300		
4,500.00	4,478.03	4,427.08	4,420.55	16.48	15.57	170.97	42.32	116.86	457.58	435.70	21.88	20.917		
4,600.00	4,577.17	4,523.70	4,516.22	16.89	15.92	172.27	38.13	129.63	481.20	458.83	22.36	21.516		
4,700.00	4,676.32	4,620.32	4,611.90	17.29	16.28	173.44	33.94	142.41	505.02	482.17	22.85	22.098		
4,800.00	4,775.46	4,716.94	4,707.58	17.70	16.64	174.51	29.75	155.19	529.04	505.69	23.35	22.661		
4,900.00	4,874.60	4,813.56	4,803.26	18.10	17.00	175.48	25.55	167.96	553.21	529.37	23.84	23.206		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	
5,000.00	4,973.75	4,910.18	4,898.94	18.51	17.37	176.38	21.36	180.74	577.52	553.19	24.33	23.734		
5,100.00	5,072.89	5,006.79	4,994.62	18.92	17.74	177.20	17.17	193.51	601.95	577.13	24.83	24.245		
5,200.00	5,172.04	5,103.41	5,090.30	19.32	18.10	177.96	12.98	206.29	626.50	601.17	25.32	24.739		
5,300.00	5,271.18	5,200.03	5,185.97	19.73	18.47	178.66	8.78	219.06	651.13	625.31	25.82	25.217		
5,400.00	5,370.33	5,296.65	5,281.65	20.14	18.85	179.31	4.59	231.84	675.86	649.54	26.32	25.679		
5,500.00	5,469.47	5,393.27	5,377.33	20.55	19.22	179.91	0.40	244.62	700.66	673.84	26.82	26.126		
5,600.00	5,568.62	5,489.89	5,473.01	20.96	19.59	-179.52	-3.79	257.39	725.53	698.21	27.32	26.558		
5,700.00	5,667.76	5,586.51	5,568.69	21.37	19.97	-179.00	-7.99	270.17	750.46	722.64	27.82	26.977		
5,800.00	5,766.91	5,683.13	5,664.37	21.78	20.35	-178.50	-12.18	282.94	775.44	747.12	28.32	27.382		
5,900.00	5,866.05	5,779.74	5,760.05	22.19	20.73	-178.04	-16.37	295.72	800.48	771.66	28.82	27.774		
6,000.00	5,965.19	5,876.36	5,855.72	22.59	21.10	-177.61	-20.56	308.49	825.56	796.24	29.32	28.153		
6,100.00	6,064.34	5,972.98	5,951.40	23.01	21.49	-177.20	-24.76	321.27	850.69	820.86	29.83	28.521		
6,200.00	6,163.48	6,069.60	6,047.08	23.42	21.87	-176.82	-28.95	334.05	875.85	845.52	30.33	28.877		
6,300.00	6,262.63	6,166.22	6,142.76	23.83	22.25	-176.45	-33.14	346.82	901.05	870.22	30.83	29.222		
6,400.00	6,361.77	6,262.84	6,238.44	24.24	22.63	-176.11	-37.33	359.60	926.28	894.94	31.34	29.557		
6,500.00	6,460.92	6,359.46	6,334.12	24.65	23.02	-175.78	-41.53	372.37	951.54	919.70	31.84	29.882		
6,600.00	6,560.06	6,456.08	6,429.80	25.06	23.40	-175.47	-45.72	385.15	976.83	944.48	32.35	30.197		
6,700.00	6,659.21	6,552.69	6,525.47	25.47	23.79	-175.18	-49.91	397.93	1,002.14	969.29	32.85	30.502		
6,800.00	6,758.35	6,649.31	6,621.15	25.88	24.18	-174.90	-54.10	410.70	1,027.48	994.12	33.36	30.799		
6,900.00	6,857.50	6,745.93	6,716.83	26.29	24.56	-174.64	-58.30	423.48	1,052.83	1,018.97	33.87	31.087		
7,000.00	6,956.64	6,842.55	6,812.51	26.70	24.95	-174.38	-62.49	436.25	1,078.21	1,043.84	34.37	31.367		
7,100.00	7,055.78	6,939.17	6,908.19	27.12	25.34	-174.14	-66.68	449.03	1,103.61	1,068.73	34.88	31.638		
7,141.02	7,096.45	6,978.80	6,947.43	27.29	25.50	-174.05	-68.40	454.27	1,114.03	1,078.94	35.09	31.748		
7,200.00	7,154.99	7,035.90	7,003.98	27.53	25.73	-173.93	-70.88	461.82	1,128.59	1,093.20	35.39	31.890		
7,300.00	7,254.46	7,133.18	7,100.31	27.92	26.12	-173.73	-75.10	474.68	1,151.26	1,115.37	35.90	32.071		
7,400.00	7,354.17	7,231.01	7,197.19	28.30	26.52	-173.52	-79.35	487.62	1,171.42	1,135.02	36.40	32.178		
7,500.00	7,454.04	7,329.31	7,294.53	28.66	26.92	-173.31	-83.61	500.62	1,189.04	1,152.13	36.91	32.213		
7,600.00	7,554.01	7,428.02	7,392.28	29.00	27.32	-173.08	-87.89	513.67	1,204.12	1,166.70	37.42	32.181		
7,640.99	7,595.00	7,468.59	7,432.46	29.13	27.48	84.44	-89.65	519.03	1,209.57	1,171.94	37.62	32.151		
7,700.00	7,654.01	7,527.02	7,490.32	29.32	27.72	84.59	-92.19	526.76	1,217.10	1,179.19	37.91	32.102		
7,800.00	7,754.01	7,626.05	7,588.38	29.64	28.12	84.85	-96.49	539.85	1,229.89	1,191.48	38.41	32.021		
7,900.00	7,854.01	7,725.08	7,686.45	29.95	28.52	85.11	-100.78	552.95	1,242.70	1,203.79	38.90	31.942		
8,000.00	7,954.01	7,824.10	7,784.51	30.27	28.93	85.36	-105.08	566.04	1,255.53	1,216.13	39.40	31.866		
8,100.00	8,054.01	7,923.13	7,882.57	30.59	29.33	85.60	-109.38	579.14	1,268.39	1,228.50	39.90	31.792		
8,200.00	8,154.01	8,022.16	7,980.64	30.91	29.74	85.84	-113.68	592.23	1,281.27	1,240.88	40.39	31.719		
8,300.00	8,254.01	8,121.18	8,078.70	31.24	30.14	86.07	-117.97	605.33	1,294.17	1,253.28	40.89	31.649		
8,400.00	8,354.01	8,220.21	8,176.76	31.56	30.55	86.30	-122.27	618.42	1,307.10	1,265.71	41.39	31.581		
8,500.00	8,454.01	8,319.24	8,274.83	31.88	30.95	86.53	-126.57	631.51	1,320.04	1,278.15	41.89	31.514		
8,600.00	8,554.01	8,418.26	8,372.89	32.21	31.36	86.75	-130.86	644.61	1,333.00	1,290.62	42.39	31.450		
8,700.00	8,654.01	8,517.29	8,470.95	32.53	31.76	86.96	-135.16	657.70	1,345.98	1,303.10	42.88	31.387		
8,800.00	8,754.01	8,616.32	8,569.02	32.86	32.17	87.17	-139.46	670.80	1,358.98	1,315.60	43.38	31.325		
8,900.00	8,854.01	8,715.35	8,667.08	33.18	32.58	87.38	-143.75	683.89	1,372.00	1,328.12	43.88	31.265		
9,000.00	8,954.01	8,814.37	8,765.14	33.51	32.98	87.59	-148.05	696.98	1,385.04	1,340.66	44.38	31.207		
9,100.00	9,054.01	8,913.40	8,863.21	33.84	33.39	87.79	-152.35	710.08	1,398.09	1,353.21	44.88	31.150		
9,200.00	9,154.01	9,012.43	8,961.27	34.16	33.80	87.98	-156.65	723.17	1,411.16	1,365.78	45.38	31.095		
9,300.00	9,254.01	9,111.45	9,059.33	34.49	34.21	88.18	-160.94	736.27	1,424.24	1,378.36	45.88	31.041		
9,400.00	9,354.01	9,210.48	9,157.40	34.82	34.62	88.36	-165.24	749.36	1,437.34	1,390.96	46.38	30.988		
9,500.00	9,454.01	9,309.51	9,255.46	35.15	35.02	88.55	-169.54	762.46	1,450.46	1,403.58	46.88	30.937		
9,600.00	9,554.01	9,408.53	9,353.52	35.48	35.43	88.73	-173.83	775.55	1,463.59	1,416.20	47.39	30.887		
9,700.00	9,654.01	9,507.56	9,451.59	35.81	35.84	88.91	-178.13	788.64	1,476.74	1,428.85	47.89	30.838		
9,800.00	9,754.01	9,606.59	9,549.65	36.14	36.25	89.09	-182.43	801.74	1,489.89	1,441.51	48.39	30.790		
9,900.00	9,854.01	9,705.61	9,647.71	36.48	36.66	89.26	-186.72	814.83	1,503.07	1,454.18	48.89	30.743		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	9,954.01	9,845.65	9,786.59	36.81	37.23	89.48	-192.32	831.88	1,515.33	1,465.72	49.61	30.542		
10,100.00	10,054.01	10,005.58	9,945.85	37.14	37.85	89.66	-196.81	845.56	1,523.87	1,473.48	50.39	30.244		
10,200.00	10,154.01	10,166.44	10,106.52	37.47	38.42	89.75	-199.22	852.92	1,528.44	1,477.34	51.09	29.915		
10,300.00	10,254.01	10,305.74	10,245.81	37.81	38.88	89.77	-199.66	854.25	1,529.26	1,477.58	51.68	29.588		
10,400.00	10,354.01	10,405.74	10,345.81	38.14	39.21	89.77	-199.66	854.25	1,529.26	1,477.10	52.17	29.315		
10,500.00	10,454.01	10,505.74	10,445.81	38.48	39.53	89.77	-199.66	854.25	1,529.26	1,476.61	52.65	29.046		
10,600.00	10,554.01	10,605.74	10,545.81	38.81	39.86	89.77	-199.66	854.25	1,529.26	1,476.13	53.13	28.781		
10,700.00	10,654.01	10,705.74	10,645.81	39.15	40.18	89.77	-199.66	854.25	1,529.26	1,475.64	53.62	28.521		
10,800.00	10,754.01	10,805.74	10,745.81	39.48	40.51	89.77	-199.66	854.25	1,529.26	1,475.16	54.10	28.266		
10,900.00	10,854.01	10,905.74	10,845.81	39.82	40.84	89.77	-199.66	854.25	1,529.26	1,474.68	54.59	28.015		
11,000.00	10,954.01	11,005.74	10,945.81	40.16	41.16	89.77	-199.66	854.25	1,529.26	1,474.19	55.07	27.768		
11,100.00	11,054.01	11,105.74	11,045.81	40.49	41.49	89.77	-199.66	854.25	1,529.26	1,473.70	55.56	27.525		
11,200.00	11,154.01	11,205.74	11,145.81	40.83	41.82	89.77	-199.66	854.25	1,529.26	1,473.22	56.04	27.287		
11,300.00	11,254.01	11,305.74	11,245.81	41.17	42.15	89.77	-199.66	854.25	1,529.26	1,472.73	56.53	27.052		
11,400.00	11,354.01	11,405.81	11,345.88	41.51	42.48	89.77	-199.65	854.25	1,529.26	1,472.24	57.02	26.821		
11,500.00	11,454.01	11,506.52	11,446.01	41.85	42.80	89.41	-190.14	854.15	1,529.23	1,471.73	57.50	26.596		
11,505.86	11,459.86	11,512.28	11,451.66	41.87	42.81	89.37	-189.07	854.13	1,529.23	1,471.70	57.52	26.584		
11,600.00	11,554.01	11,601.15	11,537.22	42.18	43.06	88.48	-165.38	853.87	1,529.43	1,471.49	57.95	26.394		
11,700.00	11,654.01	11,685.73	11,614.33	42.52	43.26	87.19	-130.81	853.49	1,530.66	1,472.31	58.35	26.231		
11,800.00	11,754.01	11,758.74	11,676.18	42.86	43.40	85.74	-92.11	853.07	1,533.88	1,475.17	58.71	26.129		
11,865.03	11,819.04	11,800.00	11,708.81	43.08	43.46	84.80	-66.86	852.79	1,537.49	1,478.60	58.90	26.106		
11,900.00	11,853.99	11,821.01	11,724.70	43.20	43.49	98.34	-53.12	852.64	1,540.18	1,481.20	58.98	26.112		
11,950.00	11,903.70	11,850.00	11,745.77	43.37	43.53	97.18	-33.22	852.42	1,545.29	1,486.20	59.09	26.151		
12,000.00	11,952.76	11,879.61	11,766.23	43.54	43.56	95.89	-11.82	852.18	1,551.77	1,492.59	59.18	26.221		
12,050.00	12,000.81	11,908.36	11,785.02	43.70	43.59	94.53	9.94	851.94	1,559.51	1,500.26	59.25	26.321		
12,100.00	12,047.48	11,936.80	11,802.50	43.85	43.62	93.10	32.37	851.70	1,568.37	1,509.07	59.30	26.447		
12,150.00	12,092.40	11,964.97	11,818.70	43.99	43.63	91.60	55.41	851.44	1,578.23	1,518.89	59.34	26.596		
12,200.00	12,135.25	12,000.00	11,837.23	44.13	43.66	89.95	85.13	851.12	1,588.98	1,529.58	59.39	26.753		
12,250.00	12,175.69	12,020.62	11,847.27	44.25	43.66	88.48	103.13	850.92	1,600.39	1,541.01	59.39	26.948		
12,300.00	12,213.41	12,050.00	11,860.46	44.37	43.67	86.87	129.38	850.63	1,612.42	1,553.01	59.41	27.140		
12,350.00	12,248.14	12,075.51	11,870.80	44.48	43.68	85.29	152.70	850.37	1,624.90	1,565.48	59.42	27.346		
12,400.00	12,279.60	12,100.00	11,879.74	44.58	43.69	83.74	175.50	850.12	1,637.69	1,578.26	59.43	27.556		
12,450.00	12,307.55	12,129.82	11,889.30	44.68	43.69	82.16	203.74	849.81	1,650.67	1,591.20	59.47	27.757		
12,500.00	12,331.79	12,150.00	11,894.93	44.77	43.70	80.69	223.11	849.60	1,663.73	1,604.25	59.49	27.967		
12,550.00	12,352.12	12,183.72	11,902.81	44.88	43.70	79.20	255.89	849.24	1,676.70	1,617.13	59.57	28.149		
12,600.00	12,368.39	12,200.00	11,905.91	44.99	43.71	77.84	271.87	849.06	1,689.58	1,629.97	59.61	28.345		
12,650.00	12,380.49	12,237.33	11,911.32	45.12	43.72	76.51	308.80	848.65	1,702.07	1,642.34	59.73	28.498		
12,700.00	12,388.31	12,264.08	11,913.71	45.25	43.73	75.29	335.44	848.36	1,714.25	1,654.41	59.83	28.651		
12,750.00	12,391.80	12,300.00	11,914.95	45.41	43.76	74.18	371.33	847.96	1,726.02	1,666.04	59.98	28.777		
12,765.03	12,392.00	12,300.00	11,914.95	45.45	43.76	73.84	371.33	847.96	1,729.40	1,669.39	60.00	28.822		
12,800.00	12,392.00	12,321.91	11,914.61	45.57	43.78	73.92	393.23	847.72	1,737.26	1,677.15	60.11	28.901		
12,900.00	12,392.00	12,411.73	11,911.48	45.95	43.91	74.11	482.99	846.74	1,758.13	1,697.62	60.51	29.055		
13,000.00	12,392.00	12,510.16	11,908.05	46.37	44.14	74.25	581.35	845.65	1,775.73	1,714.73	61.00	29.110		
13,100.00	12,392.00	12,609.12	11,904.60	46.85	44.48	74.34	680.26	844.56	1,790.01	1,728.45	61.56	29.076		
13,200.00	12,392.00	12,708.52	11,901.13	47.36	44.90	74.39	779.58	843.47	1,800.96	1,738.77	62.20	28.955		
13,300.00	12,392.00	12,808.21	11,897.66	47.91	45.38	74.38	879.21	842.37	1,808.57	1,745.67	62.90	28.753		
13,400.00	12,392.00	12,908.09	11,894.18	48.49	45.93	74.33	979.02	841.28	1,812.82	1,749.15	63.66	28.475		
13,448.51	12,392.00	12,956.56	11,892.49	48.78	46.22	74.28	1,027.46	840.74	1,813.67	1,749.61	64.06	28.313		
13,500.00	12,392.00	13,008.02	11,890.69	49.10	46.54	74.23	1,078.89	840.18	1,814.16	1,749.67	64.49	28.132		
13,600.00	12,392.00	13,107.96	11,887.21	49.75	47.20	74.12	1,178.76	839.08	1,815.11	1,749.73	65.38	27.763		
13,700.00	12,392.00	13,207.90	11,883.73	50.45	47.90	74.02	1,278.63	837.98	1,816.06	1,749.73	66.33	27.379		
13,800.00	12,392.00	13,307.84	11,880.24	51.20	48.65	73.91	1,378.50	836.88	1,817.03	1,749.68	67.35	26.980		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
13,900.00	12,392.00	13,407.78	11,876.76	51.98	49.45	73.80	1,478.38	835.78	1,818.00	1,749.58	68.42	26.571		
14,000.00	12,392.00	13,507.72	11,873.28	52.81	50.29	73.70	1,578.25	834.68	1,818.97	1,749.42	69.55	26.154		
14,100.00	12,392.00	13,607.66	11,869.79	53.68	51.16	73.59	1,678.12	833.58	1,819.95	1,749.23	70.73	25.732		
14,200.00	12,392.00	13,707.60	11,866.31	54.58	52.07	73.49	1,777.99	832.48	1,820.94	1,748.98	71.96	25.306		
14,300.00	12,392.00	13,807.54	11,862.82	55.51	53.02	73.38	1,877.87	831.38	1,821.94	1,748.70	73.24	24.878		
14,400.00	12,392.00	13,907.48	11,859.34	56.48	54.00	73.28	1,977.74	830.28	1,822.94	1,748.38	74.56	24.450		
14,500.00	12,392.00	14,007.42	11,855.86	57.48	55.02	73.17	2,077.61	829.18	1,823.94	1,748.02	75.92	24.024		
14,600.00	12,392.00	14,107.35	11,852.37	58.51	56.06	73.07	2,177.48	828.08	1,824.95	1,747.63	77.32	23.601		
14,700.00	12,392.00	14,207.29	11,848.89	59.57	57.13	72.96	2,277.36	826.98	1,825.97	1,747.21	78.76	23.183		
14,800.00	12,392.00	14,307.23	11,845.41	60.65	58.23	72.86	2,377.23	825.88	1,827.00	1,746.76	80.24	22.770		
14,900.00	12,392.00	14,407.17	11,841.92	61.76	59.35	72.76	2,477.10	824.79	1,828.03	1,746.28	81.74	22.363		
15,000.00	12,392.00	14,507.11	11,838.44	62.89	60.50	72.65	2,576.97	823.69	1,829.06	1,745.78	83.28	21.962		
15,100.00	12,392.00	14,607.05	11,834.95	64.05	61.67	72.55	2,676.85	822.59	1,830.11	1,745.26	84.85	21.569		
15,200.00	12,392.00	14,706.99	11,831.47	65.23	62.86	72.44	2,776.72	821.49	1,831.16	1,744.71	86.44	21.183		
15,300.00	12,392.00	14,806.93	11,827.99	66.42	64.07	72.34	2,876.59	820.39	1,832.21	1,744.15	88.06	20.806		
15,400.00	12,392.00	14,906.87	11,824.50	67.64	65.30	72.24	2,976.46	819.29	1,833.27	1,743.56	89.71	20.436		
15,500.00	12,392.00	15,006.81	11,821.02	68.88	66.55	72.13	3,076.34	818.19	1,834.34	1,742.97	91.37	20.075		
15,600.00	12,392.00	15,106.75	11,817.54	70.13	67.82	72.03	3,176.21	817.09	1,835.41	1,742.35	93.06	19.723		
15,700.00	12,392.00	15,206.69	11,814.05	71.40	69.10	71.93	3,276.08	815.99	1,836.49	1,741.72	94.77	19.379		
15,800.00	12,392.00	15,306.63	11,810.57	72.68	70.40	71.82	3,375.95	814.89	1,837.58	1,741.08	96.49	19.044		
15,900.00	12,392.00	15,406.56	11,807.09	73.98	71.71	71.72	3,475.83	813.79	1,838.67	1,740.43	98.23	18.717		
16,000.00	12,392.00	15,506.50	11,803.60	75.29	73.04	71.62	3,575.70	812.69	1,839.76	1,739.77	99.99	18.399		
16,100.00	12,392.00	15,606.44	11,800.12	76.62	74.38	71.51	3,675.57	811.59	1,840.87	1,739.10	101.77	18.089		
16,200.00	12,392.00	15,706.38	11,796.63	77.96	75.73	71.41	3,775.44	810.49	1,841.97	1,738.42	103.55	17.787		
16,300.00	12,392.00	15,806.32	11,793.15	79.31	77.09	71.31	3,875.32	809.39	1,843.09	1,737.73	105.36	17.494		
16,400.00	12,392.00	15,906.26	11,789.67	80.67	78.46	71.21	3,975.19	808.30	1,844.21	1,737.04	107.17	17.208		
16,500.00	12,392.00	16,006.20	11,786.18	82.04	79.85	71.10	4,075.06	807.20	1,845.34	1,736.34	109.00	16.930		
16,600.00	12,392.00	16,106.14	11,782.70	83.42	81.24	71.00	4,174.93	806.10	1,846.47	1,735.63	110.84	16.659		
16,700.00	12,392.00	16,206.08	11,779.22	84.81	82.65	70.90	4,274.81	805.00	1,847.61	1,734.92	112.68	16.396		
16,800.00	12,392.00	16,306.02	11,775.73	86.21	84.06	70.80	4,374.68	803.90	1,848.75	1,734.21	114.54	16.140		
16,900.00	12,392.00	16,405.96	11,772.25	87.62	85.48	70.69	4,474.55	802.80	1,849.90	1,733.49	116.41	15.892		
17,000.00	12,392.00	16,505.90	11,768.77	89.04	86.91	70.59	4,574.42	801.70	1,851.06	1,732.77	118.28	15.649		
17,100.00	12,392.00	16,605.83	11,765.28	90.47	88.35	70.49	4,674.30	800.60	1,852.22	1,732.05	120.17	15.414		
17,200.00	12,392.00	16,705.77	11,761.80	91.90	89.79	70.39	4,774.17	799.50	1,853.38	1,731.33	122.06	15.185		
17,300.00	12,392.00	16,805.71	11,758.31	93.34	91.24	70.29	4,874.04	798.40	1,854.56	1,730.60	123.95	14.962		
17,400.00	12,392.00	16,905.65	11,754.83	94.79	92.70	70.19	4,973.91	797.30	1,855.74	1,729.88	125.86	14.745		
17,500.00	12,392.00	17,005.59	11,751.35	96.25	94.17	70.09	5,073.79	796.20	1,856.92	1,729.16	127.77	14.534		
17,600.00	12,392.00	17,105.53	11,747.86	97.71	95.64	69.98	5,173.66	795.10	1,858.11	1,728.43	129.68	14.328		
17,700.00	12,392.00	17,205.47	11,744.38	99.17	97.12	69.88	5,273.53	794.00	1,859.31	1,727.71	131.60	14.128		
17,800.00	12,392.00	17,305.41	11,740.90	100.65	98.60	69.78	5,373.40	792.90	1,860.51	1,726.98	133.53	13.934		
17,900.00	12,392.00	17,405.35	11,737.41	102.13	100.08	69.68	5,473.27	791.80	1,861.72	1,726.26	135.46	13.744		
18,000.00	12,392.00	17,505.29	11,733.93	103.61	101.58	69.58	5,573.15	790.71	1,862.93	1,725.54	137.39	13.560		
18,100.00	12,392.00	17,605.23	11,730.44	105.10	103.07	69.48	5,673.02	789.61	1,864.15	1,724.83	139.32	13.380		
18,200.00	12,392.00	17,705.17	11,726.96	106.59	104.58	69.38	5,772.89	788.51	1,865.38	1,724.11	141.27	13.205		
18,300.00	12,392.00	17,805.11	11,723.48	108.09	106.08	69.28	5,872.76	787.41	1,866.61	1,723.40	143.21	13.034		
18,400.00	12,392.00	17,905.04	11,719.99	109.59	107.59	69.18	5,972.64	786.31	1,867.84	1,722.69	145.16	12.868		
18,500.00	12,392.00	18,004.98	11,716.51	111.10	109.11	69.08	6,072.51	785.21	1,869.09	1,721.98	147.11	12.706		
18,600.00	12,392.00	18,104.92	11,713.03	112.61	110.63	68.98	6,172.38	784.11	1,870.33	1,721.27	149.06	12.548		
18,700.00	12,392.00	18,204.86	11,709.54	114.12	112.15	68.88	6,272.25	783.01	1,871.59	1,720.57	151.01	12.393		
18,800.00	12,392.00	18,304.80	11,706.06	115.64	113.68	68.78	6,372.13	781.91	1,872.85	1,719.88	152.97	12.243		
18,900.00	12,392.00	18,404.74	11,702.58	117.17	115.21	68.68	6,472.00	780.81	1,874.11	1,719.18	154.93	12.097		
19,000.00	12,392.00	18,504.68	11,699.09	118.69	116.74	68.58	6,571.87	779.71	1,875.38	1,718.49	156.89	11.954		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
19,100.00	12,392.00	18,604.62	11,695.61	120.22	118.28	68.49	6,671.74	778.61	1,876.66	1,717.81	158.85	11.814		
19,200.00	12,392.00	18,704.56	11,692.12	121.75	119.81	68.39	6,771.62	777.51	1,877.94	1,717.13	160.81	11.678		
19,300.00	12,392.00	18,804.50	11,688.64	123.29	121.36	68.29	6,871.49	776.41	1,879.23	1,716.45	162.78	11.545		
19,400.00	12,392.00	18,904.44	11,685.16	124.83	122.90	68.19	6,971.36	775.31	1,880.52	1,715.78	164.74	11.415		
19,500.00	12,392.00	19,004.38	11,681.67	126.37	124.45	68.09	7,071.23	774.22	1,881.82	1,715.11	166.70	11.288		
19,600.00	12,392.00	19,104.32	11,678.19	127.91	126.00	67.99	7,171.11	773.12	1,883.12	1,714.45	168.67	11.165		
19,700.00	12,392.00	19,204.25	11,674.71	129.46	127.55	67.89	7,270.98	772.02	1,884.43	1,713.80	170.64	11.044		
19,800.00	12,392.00	19,304.19	11,671.22	131.01	129.11	67.80	7,370.85	770.92	1,885.75	1,713.14	172.60	10.925		
19,900.00	12,392.00	19,404.13	11,667.74	132.56	130.67	67.70	7,470.72	769.82	1,887.07	1,712.50	174.57	10.810		
20,000.00	12,392.00	19,504.07	11,664.25	134.12	132.23	67.60	7,570.60	768.72	1,888.39	1,711.86	176.54	10.697		
20,100.00	12,392.00	19,604.01	11,660.77	135.67	133.79	67.50	7,670.47	767.62	1,889.72	1,711.22	178.50	10.587		
20,200.00	12,392.00	19,703.95	11,657.29	137.23	135.35	67.40	7,770.34	766.52	1,891.06	1,710.59	180.47	10.479		
20,300.00	12,392.00	19,803.89	11,653.80	138.80	136.92	67.31	7,870.21	765.42	1,892.40	1,709.97	182.43	10.373		
20,400.00	12,392.00	19,903.83	11,650.32	140.36	138.49	67.21	7,970.09	764.32	1,893.75	1,709.35	184.40	10.270		
20,500.00	12,392.00	20,003.77	11,646.84	141.92	140.06	67.11	8,069.96	763.22	1,895.10	1,708.74	186.37	10.169		
20,600.00	12,392.00	20,103.71	11,643.35	143.49	141.63	67.02	8,169.83	762.12	1,896.46	1,708.13	188.33	10.070		
20,700.00	12,392.00	20,203.65	11,639.87	145.06	143.21	66.92	8,269.70	761.02	1,897.83	1,707.54	190.29	9.973		
20,800.00	12,392.00	20,303.59	11,636.39	146.63	144.78	66.82	8,369.58	759.92	1,899.20	1,706.94	192.26	9.878		
20,900.00	12,392.00	20,403.53	11,632.90	148.21	146.36	66.73	8,469.45	758.82	1,900.57	1,706.36	194.22	9.786		
21,000.00	12,392.00	20,503.46	11,629.42	149.78	147.94	66.63	8,569.32	757.73	1,901.95	1,705.78	196.18	9.695		
21,100.00	12,392.00	20,603.40	11,625.93	151.36	149.52	66.53	8,669.19	756.63	1,903.34	1,705.20	198.14	9.606		
21,200.00	12,392.00	20,703.34	11,622.45	152.94	151.10	66.44	8,769.07	755.53	1,904.73	1,704.63	200.10	9.519		
21,300.00	12,392.00	20,803.28	11,618.97	154.51	152.69	66.34	8,868.94	754.43	1,906.13	1,704.07	202.05	9.434		
21,400.00	12,392.00	20,903.22	11,615.48	156.10	154.27	66.25	8,968.81	753.33	1,907.53	1,703.52	204.01	9.350		
21,500.00	12,392.00	21,003.16	11,612.00	157.68	155.86	66.15	9,068.68	752.23	1,908.94	1,702.97	205.96	9.268		
21,600.00	12,392.00	21,103.10	11,608.52	159.26	157.45	66.05	9,168.56	751.13	1,910.35	1,702.43	207.92	9.188		
21,700.00	12,392.00	21,203.04	11,605.03	160.85	159.04	65.96	9,268.43	750.03	1,911.77	1,701.90	209.87	9.109		
21,800.00	12,392.00	21,302.98	11,601.55	162.43	160.63	65.86	9,368.30	748.93	1,913.19	1,701.37	211.82	9.032		
21,900.00	12,392.00	21,402.92	11,598.07	164.02	162.22	65.77	9,468.17	747.83	1,914.62	1,700.85	213.77	8.956		
22,000.00	12,392.00	21,502.86	11,594.58	165.61	163.81	65.67	9,568.05	746.73	1,916.05	1,700.34	215.72	8.882		
22,100.00	12,392.00	21,602.80	11,591.10	167.20	165.41	65.58	9,667.92	745.63	1,917.49	1,699.83	217.66	8.809		
22,200.00	12,392.00	21,702.74	11,587.61	168.80	167.00	65.48	9,767.79	744.53	1,918.94	1,699.33	219.61	8.738		
22,300.00	12,392.00	21,802.67	11,584.13	170.39	168.60	65.39	9,867.66	743.43	1,920.39	1,698.84	221.55	8.668		
22,400.00	12,392.00	21,902.61	11,580.65	171.98	170.19	65.29	9,967.53	742.33	1,921.84	1,698.35	223.49	8.599		
22,500.00	12,392.00	22,002.55	11,577.16	173.58	171.79	65.20	10,067.41	741.23	1,923.30	1,697.87	225.43	8.532		
22,581.33	12,392.00	22,083.83	11,574.33	174.88	173.09	65.12	10,148.63	740.34	1,924.49	1,697.49	227.00	8.478 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	-14.02	75.03	-18.74	77.85					
100.00	100.00	91.10	91.10	0.13	0.13	-14.02	75.03	-18.74	77.33	77.15	0.18	429.764		
200.00	200.00	191.10	191.10	0.48	0.47	-14.02	75.03	-18.74	77.33	76.66	0.67	114.855		
300.00	300.00	291.10	291.10	0.84	0.83	-14.02	75.03	-18.74	77.33	76.15	1.18	65.524		
400.00	400.00	391.10	391.10	1.20	1.19	-14.02	75.03	-18.74	77.33	75.65	1.69	45.837		
500.00	500.00	491.10	491.10	1.56	1.54	-14.02	75.03	-18.74	77.33	75.14	2.19	35.246		
600.00	600.00	591.10	591.10	1.92	1.90	-14.02	75.03	-18.74	77.33	74.63	2.70	28.631		
700.00	700.00	691.10	691.10	2.28	2.26	-14.02	75.03	-18.74	77.33	74.13	3.21	24.107		
800.00	800.00	791.10	791.10	2.63	2.62	-14.02	75.03	-18.74	77.33	73.62	3.71	20.817		
900.00	900.00	891.10	891.10	2.99	2.98	-14.02	75.03	-18.74	77.33	73.11	4.22	18.317		
1,000.00	1,000.00	991.10	991.10	3.35	3.34	-14.02	75.03	-18.74	77.33	72.61	4.73	16.354		
1,100.00	1,100.00	1,091.10	1,091.10	3.71	3.69	-14.02	75.03	-18.74	77.33	72.10	5.24	14.770		
1,200.00	1,200.00	1,191.10	1,191.10	4.07	4.05	-14.02	75.03	-18.74	77.33	71.59	5.74	13.466		
1,300.00	1,300.00	1,291.10	1,291.10	4.43	4.41	-14.02	75.03	-18.74	77.33	71.09	6.25	12.374		
1,400.00	1,400.00	1,391.10	1,391.10	4.79	4.77	-14.02	75.03	-18.74	77.33	70.58	6.76	11.446		
1,500.00	1,500.00	1,491.10	1,491.10	5.14	5.13	-14.02	75.03	-18.74	77.33	70.07	7.26	10.647		
1,525.00	1,525.00	1,516.10	1,516.10	5.23	5.22	-14.02	75.03	-18.74	77.33	69.94	7.39	10.464 CC, ES		
1,600.00	1,600.00	1,591.10	1,591.10	5.49	5.49	146.27	75.03	-18.74	77.95	70.18	7.76	10.043		
1,700.00	1,699.94	1,691.04	1,691.04	5.82	5.85	147.54	75.03	-18.74	80.69	72.44	8.25	9.786		
1,800.00	1,799.76	1,790.86	1,790.86	6.15	6.20	149.62	75.03	-18.74	85.71	76.98	8.73	9.816		
1,900.00	1,899.40	1,890.50	1,890.50	6.48	6.56	152.21	75.03	-18.74	93.15	83.93	9.22	10.102		
2,000.00	1,998.78	1,989.88	1,989.88	6.82	6.92	155.02	75.03	-18.74	103.11	93.40	9.71	10.617		
2,025.00	2,023.57	2,014.67	2,014.67	6.91	7.01	155.72	75.03	-18.74	106.01	96.17	9.83	10.779		
2,100.00	2,097.97	2,089.07	2,089.07	7.17	7.27	149.85	75.03	-18.74	114.45	104.24	10.20	11.217		
2,200.00	2,197.27	2,188.37	2,188.37	7.53	7.63	140.84	75.03	-18.74	124.24	113.54	10.70	11.615		
2,300.00	2,296.60	2,287.70	2,287.70	7.89	7.98	131.37	75.03	-18.74	132.54	121.35	11.19	11.841		
2,400.00	2,395.91	2,387.01	2,387.01	8.26	8.34	122.73	75.03	-18.74	139.60	127.90	11.69	11.938		
2,504.30	2,499.40	2,490.50	2,490.50	8.64	8.71	115.75	75.03	-18.74	145.94	133.72	12.22	11.945		
2,600.00	2,594.28	2,585.38	2,585.38	9.00	9.05	119.97	75.03	-18.74	151.82	139.12	12.70	11.956		
2,700.00	2,693.42	2,684.52	2,684.52	9.38	9.41	124.03	75.03	-18.74	158.78	145.58	13.20	12.027		
2,800.00	2,792.57	2,783.67	2,783.67	9.75	9.76	127.73	75.03	-18.74	166.48	152.77	13.71	12.146		
2,900.00	2,891.71	2,882.81	2,882.81	10.14	10.12	131.10	75.03	-18.74	174.81	160.60	14.21	12.302		
3,000.00	2,990.86	2,981.96	2,981.96	10.52	10.47	134.16	75.03	-18.74	183.70	168.98	14.71	12.485		
3,100.00	3,090.00	3,081.10	3,081.10	10.91	10.83	136.93	75.03	-18.74	193.06	177.84	15.22	12.686		
3,200.00	3,189.15	3,180.25	3,180.25	11.30	11.18	139.44	75.03	-18.74	202.82	187.10	15.72	12.900		
3,300.00	3,288.29	3,279.39	3,279.39	11.69	11.54	141.71	75.03	-18.74	212.94	196.71	16.23	13.123		
3,400.00	3,387.44	3,378.54	3,378.54	12.08	11.89	143.78	75.03	-18.74	223.36	206.63	16.73	13.350		
3,500.00	3,486.58	3,477.68	3,477.68	12.48	12.25	145.67	75.03	-18.74	234.05	216.82	17.24	13.579		
3,600.00	3,585.72	3,576.82	3,576.82	12.87	12.61	147.38	75.03	-18.74	244.97	227.23	17.74	13.808		
3,700.00	3,684.87	3,675.97	3,675.97	13.27	12.96	148.95	75.03	-18.74	256.08	237.84	18.25	14.035		
3,800.00	3,784.01	3,775.11	3,775.11	13.67	13.32	150.39	75.03	-18.74	267.38	248.62	18.75	14.259		
3,900.00	3,883.16	3,874.26	3,874.26	14.07	13.67	151.72	75.03	-18.74	278.82	259.56	19.26	14.480		
4,000.00	3,982.30	3,973.40	3,973.40	14.47	14.03	152.93	75.03	-18.74	290.40	270.64	19.76	14.695		
4,100.00	4,081.45	4,072.55	4,072.55	14.87	14.38	154.06	75.03	-18.74	302.10	281.83	20.27	14.906		
4,200.00	4,180.59	4,171.69	4,171.69	15.27	14.74	155.10	75.03	-18.74	313.91	293.14	20.77	15.111		
4,300.00	4,279.74	4,270.84	4,270.84	15.67	15.09	156.06	75.03	-18.74	325.81	304.53	21.28	15.311		
4,400.00	4,378.88	4,369.98	4,369.98	16.08	15.45	156.96	75.03	-18.74	337.80	316.01	21.79	15.505		
4,500.00	4,478.03	4,469.13	4,469.13	16.48	15.80	157.80	75.03	-18.74	349.86	327.57	22.29	15.694		
4,600.00	4,577.17	4,568.27	4,568.27	16.89	16.16	158.58	75.03	-18.74	361.99	339.19	22.80	15.877		
4,700.00	4,676.32	4,667.42	4,667.42	17.29	16.51	159.31	75.03	-18.74	374.19	350.88	23.31	16.055		
4,800.00	4,775.46	4,766.56	4,766.56	17.70	16.87	159.99	75.03	-18.74	386.44	362.62	23.81	16.227		
4,900.00	4,874.60	4,865.70	4,865.70	18.10	17.23	160.63	75.03	-18.74	398.74	374.42	24.32	16.394		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	
5,000.00	4,973.75	4,964.85	4,964.85	18.51	17.58	161.23	75.03	-18.74	411.09	386.26	24.83	16.557	
5,100.00	5,072.89	5,065.40	5,065.39	18.92	17.93	161.88	74.50	-18.55	423.37	398.04	25.33	16.711	
5,200.00	5,172.04	5,166.55	5,166.50	19.32	18.26	162.83	71.61	-17.53	435.26	409.43	25.83	16.852	
5,300.00	5,271.18	5,267.40	5,267.18	19.73	18.59	164.05	66.21	-15.63	446.84	420.52	26.32	16.980	
5,400.00	5,370.33	5,367.78	5,367.22	20.14	18.92	165.54	58.35	-12.85	458.25	431.45	26.80	17.099	
5,500.00	5,469.47	5,466.73	5,465.63	20.55	19.24	167.18	48.72	-9.46	469.74	442.46	27.28	17.218	
5,600.00	5,568.62	5,565.17	5,563.53	20.96	19.56	168.74	39.02	-6.04	481.58	453.82	27.76	17.346	
5,700.00	5,667.76	5,663.61	5,661.43	21.37	19.89	170.23	29.31	-2.61	493.77	465.52	28.25	17.480	
5,800.00	5,766.91	5,762.05	5,759.33	21.78	20.22	171.65	19.61	0.81	506.27	477.54	28.73	17.619	
5,900.00	5,866.05	5,860.49	5,857.23	22.19	20.55	173.01	9.91	4.23	519.07	489.85	29.22	17.762	
6,000.00	5,965.19	5,958.92	5,955.13	22.59	20.88	174.29	0.20	7.65	532.15	502.43	29.71	17.909	
6,100.00	6,064.34	6,057.36	6,053.03	23.01	21.22	175.52	-9.50	11.08	545.48	515.27	30.21	18.057	
6,200.00	6,163.48	6,155.80	6,150.93	23.42	21.55	176.68	-19.20	14.50	559.04	528.34	30.70	18.208	
6,300.00	6,262.63	6,254.24	6,248.83	23.83	21.89	177.80	-28.90	17.92	572.83	541.63	31.20	18.359	
6,400.00	6,361.77	6,352.68	6,346.73	24.24	22.23	178.86	-38.61	21.34	586.82	555.12	31.70	18.511	
6,500.00	6,460.92	6,451.12	6,444.63	24.65	22.58	179.87	-48.31	24.77	601.00	568.79	32.20	18.664	
6,600.00	6,560.06	6,549.56	6,542.53	25.06	22.92	-179.17	-58.01	28.19	615.35	582.65	32.70	18.816	
6,700.00	6,659.21	6,648.00	6,640.43	25.47	23.27	-178.25	-67.72	31.61	629.87	596.66	33.21	18.967	
6,800.00	6,758.35	6,746.44	6,738.33	25.88	23.61	-177.37	-77.42	35.03	644.55	610.83	33.71	19.118	
6,900.00	6,857.50	6,844.87	6,836.23	26.29	23.96	-176.53	-87.12	38.46	659.36	625.14	34.22	19.267	
7,000.00	6,956.64	6,943.31	6,934.13	26.70	24.31	-175.73	-96.82	41.88	674.31	639.58	34.73	19.415	
7,100.00	7,055.78	7,041.75	7,032.03	27.12	24.66	-174.96	-106.53	45.30	689.39	654.15	35.24	19.562	
7,141.02	7,096.45	7,082.13	7,072.19	27.29	24.80	-174.65	-110.51	46.70	695.61	660.16	35.45	19.622	
7,200.00	7,154.99	7,140.25	7,129.99	27.53	25.01	-174.23	-116.24	48.73	704.14	668.38	35.75	19.695	
7,300.00	7,254.46	7,239.05	7,228.25	27.92	25.37	-173.52	-125.98	52.16	716.63	680.37	36.26	19.762	
7,400.00	7,354.17	7,338.12	7,326.77	28.30	25.72	-172.80	-135.74	55.60	726.66	689.89	36.77	19.761	
7,500.00	7,454.04	7,437.38	7,425.49	28.66	26.08	-172.08	-145.52	59.06	734.22	696.94	37.28	19.693	
7,600.00	7,554.01	7,536.78	7,524.34	29.00	26.44	-171.34	-155.32	62.51	739.32	701.53	37.79	19.563	
7,640.99	7,595.00	7,577.54	7,564.88	29.13	26.59	86.39	-159.34	63.93	740.70	702.70	38.00	19.494	
7,700.00	7,654.01	7,636.22	7,623.25	29.32	26.80	86.85	-165.12	65.97	742.41	704.12	38.29	19.390	
7,800.00	7,754.01	7,735.68	7,722.15	29.64	27.16	87.62	-174.93	69.43	745.42	706.64	38.79	19.219	
7,900.00	7,854.01	7,838.05	7,823.99	29.95	27.54	88.38	-184.73	72.88	748.48	709.18	39.30	19.046	
8,000.00	7,954.01	7,944.24	7,929.86	30.27	27.92	88.98	-192.54	75.64	750.91	711.09	39.83	18.854	
8,100.00	8,054.01	8,050.82	8,036.30	30.59	28.29	89.37	-197.59	77.42	752.52	712.17	40.35	18.649	
8,200.00	8,154.01	8,157.61	8,143.06	30.91	28.67	89.54	-199.84	78.22	753.24	712.38	40.87	18.432	
8,300.00	8,254.01	8,259.66	8,245.11	31.24	29.02	89.55	-199.97	78.26	753.28	711.92	41.36	18.213	
8,400.00	8,354.01	8,359.66	8,345.11	31.56	29.37	89.55	-199.97	78.26	753.28	711.44	41.84	18.002	
8,500.00	8,454.01	8,459.66	8,445.11	31.88	29.72	89.55	-199.97	78.26	753.28	710.95	42.33	17.796	
8,600.00	8,554.01	8,559.66	8,545.11	32.21	30.07	89.55	-199.97	78.26	753.28	710.47	42.81	17.594	
8,700.00	8,654.01	8,659.66	8,645.11	32.53	30.41	89.55	-199.97	78.26	753.28	709.98	43.30	17.397	
8,800.00	8,754.01	8,759.66	8,745.11	32.86	30.76	89.55	-199.97	78.26	753.28	709.50	43.79	17.203	
8,900.00	8,854.01	8,859.66	8,845.11	33.18	31.11	89.55	-199.97	78.26	753.28	709.01	44.27	17.014	
9,000.00	8,954.01	8,959.66	8,945.11	33.51	31.46	89.55	-199.97	78.26	753.28	708.52	44.76	16.829	
9,100.00	9,054.01	9,059.66	9,045.11	33.84	31.81	89.55	-199.97	78.26	753.28	708.03	45.25	16.647	
9,200.00	9,154.01	9,159.66	9,145.11	34.16	32.16	89.55	-199.97	78.26	753.28	707.55	45.74	16.470	
9,300.00	9,254.01	9,259.66	9,245.11	34.49	32.51	89.55	-199.97	78.26	753.28	707.06	46.23	16.296	
9,400.00	9,354.01	9,359.66	9,345.11	34.82	32.86	89.55	-199.97	78.26	753.28	706.57	46.72	16.125	
9,500.00	9,454.01	9,459.66	9,445.11	35.15	33.21	89.55	-199.97	78.26	753.28	706.08	47.20	15.958	
9,600.00	9,554.01	9,559.66	9,545.11	35.48	33.56	89.55	-199.97	78.26	753.28	705.59	47.69	15.794	
9,700.00	9,654.01	9,659.66	9,645.11	35.81	33.91	89.55	-199.97	78.26	753.28	705.10	48.18	15.633	
9,800.00	9,754.01	9,759.66	9,745.11	36.14	34.26	89.55	-199.97	78.26	753.28	704.61	48.68	15.476	
9,900.00	9,854.01	9,859.66	9,845.11	36.48	34.61	89.55	-199.97	78.26	753.28	704.12	49.17	15.321	

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	
10,000.00	9,954.01	9,959.66	9,945.11	36.81	34.97	89.55	-199.97	78.26	753.28	703.63	49.66	15.170		
10,100.00	10,054.01	10,059.66	10,045.11	37.14	35.32	89.55	-199.97	78.26	753.28	703.13	50.15	15.021		
10,200.00	10,154.01	10,159.66	10,145.11	37.47	35.67	89.55	-199.97	78.26	753.28	702.64	50.64	14.875		
10,300.00	10,254.01	10,259.66	10,245.11	37.81	36.02	89.55	-199.97	78.26	753.28	702.15	51.13	14.732		
10,400.00	10,354.01	10,359.66	10,345.11	38.14	36.37	89.55	-199.97	78.26	753.28	701.66	51.62	14.592		
10,500.00	10,454.01	10,459.66	10,445.11	38.48	36.72	89.55	-199.97	78.26	753.28	701.17	52.12	14.454		
10,600.00	10,554.01	10,559.66	10,545.11	38.81	37.08	89.55	-199.97	78.26	753.28	700.67	52.61	14.318		
10,700.00	10,654.01	10,659.66	10,645.11	39.15	37.43	89.55	-199.97	78.26	753.28	700.18	53.10	14.185		
10,800.00	10,754.01	10,759.66	10,745.11	39.48	37.78	89.55	-199.97	78.26	753.28	699.69	53.60	14.055		
10,900.00	10,854.01	10,859.66	10,845.11	39.82	38.13	89.55	-199.97	78.26	753.28	699.19	54.09	13.926		
11,000.00	10,954.01	10,959.66	10,945.11	40.16	38.49	89.55	-199.97	78.26	753.28	698.70	54.58	13.800		
11,100.00	11,054.01	11,059.66	11,045.11	40.49	38.84	89.55	-199.97	78.26	753.28	698.20	55.08	13.677		
11,200.00	11,154.01	11,159.66	11,145.11	40.83	39.19	89.55	-199.97	78.26	753.28	697.71	55.57	13.555		
11,300.00	11,254.01	11,259.66	11,245.11	41.17	39.54	89.55	-199.97	78.26	753.28	697.22	56.07	13.435		
11,400.00	11,354.01	11,359.66	11,345.11	41.51	39.90	89.55	-199.97	78.26	753.28	696.72	56.56	13.318		
11,500.00	11,454.01	11,459.76	11,445.19	41.85	40.25	89.48	-199.01	78.25	753.28	696.23	57.06	13.203		
11,519.04	11,473.05	11,478.77	11,464.15	41.91	40.31	89.37	-197.59	78.23	753.28	696.13	57.15	13.181		
11,600.00	11,554.01	11,557.86	11,542.16	42.18	40.57	88.41	-184.99	78.10	753.39	695.87	57.52	13.099		
11,700.00	11,654.01	11,650.00	11,629.83	42.52	40.85	86.28	-156.95	77.79	754.53	696.62	57.91	13.028		
11,800.00	11,754.01	11,729.31	11,700.86	42.86	41.06	83.62	-121.83	77.40	758.37	700.18	58.19	13.033		
11,865.03	11,819.04	11,775.61	11,739.86	43.08	41.17	81.75	-96.90	77.13	763.23	704.94	58.28	13.095		
11,900.00	11,853.99	11,800.00	11,759.56	43.20	41.23	94.66	-82.52	76.97	766.90	708.59	58.31	13.153		
11,950.00	11,903.70	11,831.95	11,784.41	43.37	41.30	92.70	-62.44	76.75	773.64	715.35	58.29	13.273		
12,000.00	11,952.76	11,864.24	11,808.34	43.54	41.37	90.65	-40.78	76.51	781.96	723.73	58.23	13.430		
12,050.00	12,000.81	11,900.00	11,833.38	43.70	41.45	88.41	-15.25	76.23	791.67	733.51	58.17	13.610		
12,100.00	12,047.48	11,927.26	11,851.37	43.85	41.51	86.44	5.23	76.00	802.54	744.54	58.00	13.837		
12,150.00	12,092.40	11,958.11	11,870.52	43.99	41.57	84.33	29.41	75.74	814.40	756.55	57.84	14.079		
12,200.00	12,135.25	11,988.59	11,888.14	44.13	41.64	82.25	54.27	75.46	827.03	769.35	57.68	14.339		
12,250.00	12,175.69	12,018.75	11,904.25	44.25	41.70	80.21	79.76	75.18	840.25	782.75	57.50	14.612		
12,300.00	12,213.41	12,050.00	11,919.50	44.37	41.76	78.22	107.03	74.88	853.87	796.53	57.35	14.890		
12,350.00	12,248.14	12,078.23	11,931.98	44.48	41.82	76.36	132.35	74.60	867.73	810.55	57.18	15.176		
12,400.00	12,279.60	12,100.00	11,940.75	44.58	41.87	74.66	152.27	74.38	881.71	824.73	56.98	15.474		
12,450.00	12,307.55	12,136.84	11,953.84	44.68	41.95	72.90	186.71	74.01	895.52	838.57	56.94	15.726		
12,500.00	12,331.79	12,165.90	11,962.58	44.77	42.01	71.34	214.41	73.70	909.17	852.30	56.88	15.985		
12,550.00	12,352.12	12,200.00	11,971.04	44.88	42.08	69.89	247.44	73.34	922.53	865.65	56.88	16.218		
12,600.00	12,368.39	12,223.65	11,975.74	44.99	42.14	68.61	270.61	73.08	935.41	878.54	56.87	16.447		
12,650.00	12,380.49	12,250.00	11,979.85	45.12	42.19	67.44	296.64	72.80	947.79	890.86	56.93	16.648		
12,700.00	12,388.31	12,281.08	11,983.16	45.25	42.26	66.41	327.54	72.46	959.56	902.50	57.06	16.818		
12,750.00	12,391.80	12,309.75	11,984.71	45.41	42.33	65.52	356.16	72.14	970.64	913.43	57.22	16.964		
12,765.03	12,392.00	12,318.37	11,984.90	45.45	42.35	65.28	364.77	72.05	973.83	916.56	57.27	17.003		
12,800.00	12,392.00	12,342.52	11,984.74	45.57	42.41	65.47	388.92	71.78	981.25	923.83	57.42	17.090		
12,900.00	12,392.00	12,433.38	11,982.20	45.95	42.67	65.96	479.74	70.78	1,001.30	943.43	57.87	17.302		
13,000.00	12,392.00	12,531.83	11,979.46	46.37	43.00	66.35	578.15	69.70	1,018.28	959.89	58.39	17.439		
13,100.00	12,392.00	12,630.82	11,976.70	46.85	43.39	66.63	677.09	68.61	1,032.10	973.14	58.96	17.505		
13,200.00	12,392.00	12,730.24	11,973.93	47.36	43.84	66.80	776.46	67.52	1,042.76	983.17	59.58	17.501		
13,300.00	12,392.00	12,829.95	11,971.15	47.91	44.35	66.86	876.13	66.42	1,050.22	989.96	60.25	17.430		
13,400.00	12,392.00	12,929.85	11,968.37	48.49	44.92	66.83	975.99	65.32	1,054.47	993.50	60.97	17.296		
13,448.51	12,392.00	12,978.33	11,967.02	48.78	45.21	66.78	1,024.45	64.79	1,055.38	994.06	61.33	17.209		
13,500.00	12,392.00	13,029.81	11,965.58	49.10	45.54	66.71	1,075.90	64.22	1,055.95	994.23	61.72	17.108		
13,600.00	12,392.00	13,129.77	11,962.80	49.75	46.20	66.57	1,175.82	63.12	1,057.05	994.52	62.54	16.903		
13,700.00	12,392.00	13,229.73	11,960.01	50.45	46.92	66.43	1,275.73	62.03	1,058.17	994.75	63.41	16.686		
13,800.00	12,392.00	13,329.69	11,957.22	51.20	47.69	66.29	1,375.65	60.93	1,059.28	994.93	64.35	16.461		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
13,900.00	12,392.00	13,429.65	11,954.44	51.98	48.50	66.15	1,475.56	59.83	1,060.41	995.07	65.34	16.229		
14,000.00	12,392.00	13,529.61	11,951.65	52.81	49.35	66.02	1,575.48	58.73	1,061.54	995.16	66.38	15.991		
14,100.00	12,392.00	13,629.57	11,948.87	53.68	50.24	65.88	1,675.40	57.63	1,062.68	995.20	67.48	15.749		
14,200.00	12,392.00	13,729.54	11,946.08	54.58	51.17	65.74	1,775.31	56.53	1,063.82	995.20	68.62	15.504		
14,300.00	12,392.00	13,829.50	11,943.29	55.51	52.13	65.61	1,875.23	55.43	1,064.97	995.16	69.80	15.257		
14,400.00	12,392.00	13,929.46	11,940.51	56.48	53.13	65.47	1,975.15	54.33	1,066.12	995.09	71.03	15.010		
14,500.00	12,392.00	14,029.42	11,937.72	57.48	54.16	65.33	2,075.06	53.23	1,067.28	994.99	72.29	14.763		
14,600.00	12,392.00	14,129.38	11,934.94	58.51	55.22	65.20	2,174.98	52.13	1,068.45	994.85	73.59	14.518		
14,700.00	12,392.00	14,229.34	11,932.15	59.57	56.31	65.06	2,274.89	51.03	1,069.62	994.69	74.93	14.275		
14,800.00	12,392.00	14,329.30	11,929.37	60.65	57.43	64.93	2,374.81	49.93	1,070.80	994.50	76.30	14.035		
14,900.00	12,392.00	14,429.26	11,926.58	61.76	58.57	64.79	2,474.73	48.83	1,071.99	994.29	77.70	13.797		
15,000.00	12,392.00	14,529.22	11,923.79	62.89	59.74	64.66	2,574.64	47.74	1,073.18	994.05	79.12	13.563		
15,100.00	12,392.00	14,629.19	11,921.01	64.05	60.93	64.52	2,674.56	46.64	1,074.37	993.80	80.58	13.333		
15,200.00	12,392.00	14,729.15	11,918.22	65.23	62.13	64.39	2,774.48	45.54	1,075.57	993.52	82.05	13.108		
15,300.00	12,392.00	14,829.11	11,915.44	66.42	63.36	64.26	2,874.39	44.44	1,076.78	993.23	83.55	12.887		
15,400.00	12,392.00	14,929.07	11,912.65	67.64	64.61	64.12	2,974.31	43.34	1,078.00	992.92	85.07	12.671		
15,500.00	12,392.00	15,029.03	11,909.86	68.88	65.88	63.99	3,074.22	42.24	1,079.22	992.60	86.62	12.460		
15,600.00	12,392.00	15,128.99	11,907.08	70.13	67.16	63.86	3,174.14	41.14	1,080.44	992.27	88.18	12.253		
15,700.00	12,392.00	15,228.95	11,904.29	71.40	68.46	63.72	3,274.06	40.04	1,081.67	991.92	89.75	12.052		
15,800.00	12,392.00	15,328.91	11,901.51	72.68	69.78	63.59	3,373.97	38.94	1,082.91	991.56	91.35	11.855		
15,900.00	12,392.00	15,428.88	11,898.72	73.98	71.10	63.46	3,473.89	37.84	1,084.15	991.20	92.96	11.663		
16,000.00	12,392.00	15,528.84	11,895.94	75.29	72.44	63.33	3,573.81	36.74	1,085.40	990.83	94.58	11.476		
16,100.00	12,392.00	15,628.80	11,893.15	76.62	73.80	63.20	3,673.72	35.64	1,086.66	990.45	96.21	11.294		
16,200.00	12,392.00	15,728.76	11,890.36	77.96	75.17	63.07	3,773.64	34.54	1,087.92	990.06	97.86	11.117		
16,300.00	12,392.00	15,828.72	11,887.58	79.31	76.54	62.94	3,873.56	33.45	1,089.18	989.67	99.51	10.945		
16,400.00	12,392.00	15,928.68	11,884.79	80.67	77.93	62.81	3,973.47	32.35	1,090.46	989.27	101.18	10.777		
16,500.00	12,392.00	16,028.64	11,882.01	82.04	79.33	62.68	4,073.39	31.25	1,091.73	988.87	102.86	10.614		
16,600.00	12,392.00	16,128.60	11,879.22	83.42	80.74	62.55	4,173.30	30.15	1,093.02	988.47	104.54	10.455		
16,700.00	12,392.00	16,228.56	11,876.43	84.81	82.15	62.42	4,273.22	29.05	1,094.30	988.07	106.24	10.300		
16,800.00	12,392.00	16,328.53	11,873.65	86.21	83.58	62.29	4,373.14	27.95	1,095.60	987.66	107.94	10.150		
16,900.00	12,392.00	16,428.49	11,870.86	87.62	85.01	62.16	4,473.05	26.85	1,096.90	987.25	109.64	10.004		
17,000.00	12,392.00	16,528.45	11,868.08	89.04	86.46	62.03	4,572.97	25.75	1,098.20	986.85	111.36	9.862		
17,100.00	12,392.00	16,628.41	11,865.29	90.47	87.90	61.90	4,672.89	24.65	1,099.51	986.44	113.08	9.724		
17,200.00	12,392.00	16,728.37	11,862.50	91.90	89.36	61.77	4,772.80	23.55	1,100.83	986.03	114.80	9.589		
17,300.00	12,392.00	16,828.33	11,859.72	93.34	90.82	61.65	4,872.72	22.45	1,102.15	985.62	116.53	9.458		
17,400.00	12,392.00	16,928.29	11,856.93	94.79	92.29	61.52	4,972.63	21.35	1,103.48	985.22	118.26	9.331		
17,500.00	12,392.00	17,028.25	11,854.15	96.25	93.77	61.39	5,072.55	20.25	1,104.81	984.82	119.99	9.207		
17,600.00	12,392.00	17,128.21	11,851.36	97.71	95.25	61.27	5,172.47	19.16	1,106.15	984.42	121.73	9.087		
17,700.00	12,392.00	17,228.18	11,848.58	99.17	96.74	61.14	5,272.38	18.06	1,107.49	984.02	123.47	8.969		
17,800.00	12,392.00	17,328.14	11,845.79	100.65	98.23	61.01	5,372.30	16.96	1,108.84	983.62	125.22	8.855		
17,900.00	12,392.00	17,428.10	11,843.00	102.13	99.73	60.89	5,472.22	15.86	1,110.19	983.23	126.96	8.744		
18,000.00	12,392.00	17,528.06	11,840.22	103.61	101.23	60.76	5,572.13	14.76	1,111.55	982.84	128.71	8.636		
18,100.00	12,392.00	17,628.02	11,837.43	105.10	102.74	60.64	5,672.05	13.66	1,112.92	982.46	130.46	8.531		
18,200.00	12,392.00	17,727.98	11,834.65	106.59	104.25	60.51	5,771.96	12.56	1,114.29	982.08	132.21	8.428		
18,300.00	12,392.00	17,827.94	11,831.86	108.09	105.76	60.39	5,871.88	11.46	1,115.66	981.70	133.96	8.328		
18,400.00	12,392.00	17,927.90	11,829.07	109.59	107.28	60.26	5,971.80	10.36	1,117.04	981.33	135.71	8.231		
18,500.00	12,392.00	18,027.87	11,826.29	111.10	108.81	60.14	6,071.71	9.26	1,118.43	980.97	137.46	8.136		
18,600.00	12,392.00	18,127.83	11,823.50	112.61	110.33	60.02	6,171.63	8.16	1,119.82	980.61	139.21	8.044		
18,700.00	12,392.00	18,227.79	11,820.72	114.12	111.86	59.89	6,271.55	7.06	1,121.22	980.25	140.97	7.954		
18,800.00	12,392.00	18,327.75	11,817.93	115.64	113.40	59.77	6,371.46	5.96	1,122.62	979.90	142.72	7.866		
18,900.00	12,392.00	18,427.71	11,815.15	117.17	114.94	59.65	6,471.38	4.87	1,124.02	979.56	144.47	7.780		
19,000.00	12,392.00	18,527.67	11,812.36	118.69	116.48	59.52	6,571.29	3.77	1,125.44	979.22	146.22	7.697		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	
19,100.00	12,392.00	18,627.63	11,809.57	120.22	118.02	59.40	6,671.21	2.67	1,126.85	978.88	147.97	7.615		
19,200.00	12,392.00	18,727.59	11,806.79	121.75	119.57	59.28	6,771.13	1.57	1,128.27	978.56	149.72	7.536		
19,300.00	12,392.00	18,827.55	11,804.00	123.29	121.12	59.16	6,871.04	0.47	1,129.70	978.24	151.46	7.459		
19,400.00	12,392.00	18,927.52	11,801.22	124.83	122.67	59.04	6,970.96	-0.63	1,131.13	977.92	153.21	7.383		
19,500.00	12,392.00	19,027.48	11,798.43	126.37	124.22	58.92	7,070.88	-1.73	1,132.57	977.62	154.95	7.309		
19,600.00	12,392.00	19,127.44	11,795.64	127.91	125.78	58.80	7,170.79	-2.83	1,134.01	977.31	156.70	7.237		
19,700.00	12,392.00	19,227.40	11,792.86	129.46	127.34	58.68	7,270.71	-3.93	1,135.46	977.02	158.44	7.167		
19,800.00	12,392.00	19,327.36	11,790.07	131.01	128.90	58.56	7,370.63	-5.03	1,136.91	976.73	160.18	7.098		
19,900.00	12,392.00	19,427.32	11,787.29	132.56	130.47	58.44	7,470.54	-6.13	1,138.37	976.45	161.92	7.031		
20,000.00	12,392.00	19,527.28	11,784.50	134.12	132.03	58.32	7,570.46	-7.23	1,139.83	976.18	163.65	6.965		
20,100.00	12,392.00	19,627.24	11,781.72	135.67	133.60	58.20	7,670.37	-8.33	1,141.30	975.92	165.38	6.901		
20,200.00	12,392.00	19,727.21	11,778.93	137.23	135.17	58.08	7,770.29	-9.42	1,142.77	975.66	167.11	6.838		
20,300.00	12,392.00	19,827.17	11,776.14	138.80	136.74	57.96	7,870.21	-10.52	1,144.25	975.41	168.84	6.777		
20,400.00	12,392.00	19,927.13	11,773.36	140.36	138.32	57.84	7,970.12	-11.62	1,145.73	975.16	170.57	6.717		
20,500.00	12,392.00	20,027.09	11,770.57	141.92	139.89	57.72	8,070.04	-12.72	1,147.21	974.93	172.29	6.659		
20,600.00	12,392.00	20,127.05	11,767.79	143.49	141.47	57.61	8,169.96	-13.82	1,148.71	974.70	174.01	6.601		
20,700.00	12,392.00	20,227.01	11,765.00	145.06	143.05	57.49	8,269.87	-14.92	1,150.20	974.48	175.72	6.545		
20,800.00	12,392.00	20,326.97	11,762.21	146.63	144.63	57.37	8,369.79	-16.02	1,151.70	974.26	177.44	6.491		
20,900.00	12,392.00	20,426.93	11,759.43	148.21	146.22	57.26	8,469.70	-17.12	1,153.21	974.06	179.15	6.437		
21,000.00	12,392.00	20,526.89	11,756.64	149.78	147.80	57.14	8,569.62	-18.22	1,154.72	973.86	180.86	6.385		
21,100.00	12,392.00	20,626.86	11,753.86	151.36	149.39	57.02	8,669.54	-19.32	1,156.23	973.67	182.56	6.333		
21,200.00	12,392.00	20,726.82	11,751.07	152.94	150.97	56.91	8,769.45	-20.42	1,157.75	973.49	184.27	6.283		
21,300.00	12,392.00	20,826.78	11,748.29	154.51	152.56	56.79	8,869.37	-21.52	1,159.28	973.31	185.96	6.234		
21,400.00	12,392.00	20,926.74	11,745.50	156.10	154.15	56.68	8,969.29	-22.62	1,160.81	973.15	187.66	6.186		
21,500.00	12,392.00	21,026.70	11,742.71	157.68	155.74	56.56	9,069.20	-23.71	1,162.34	972.99	189.35	6.139		
21,600.00	12,392.00	21,126.66	11,739.93	159.26	157.34	56.45	9,169.12	-24.81	1,163.88	972.84	191.04	6.092		
21,700.00	12,392.00	21,226.62	11,737.14	160.85	158.93	56.34	9,269.03	-25.91	1,165.42	972.70	192.72	6.047		
21,800.00	12,392.00	21,326.58	11,734.36	162.43	160.53	56.22	9,368.95	-27.01	1,166.97	972.57	194.41	6.003		
21,900.00	12,392.00	21,426.54	11,731.57	164.02	162.12	56.11	9,468.87	-28.11	1,168.52	972.44	196.08	5.959		
22,000.00	12,392.00	21,526.51	11,728.78	165.61	163.72	55.99	9,568.78	-29.21	1,170.08	972.32	197.76	5.917		
22,100.00	12,392.00	21,626.47	11,726.00	167.20	165.32	55.88	9,668.70	-30.31	1,171.64	972.21	199.43	5.875		
22,200.00	12,392.00	21,726.43	11,723.21	168.80	166.92	55.77	9,768.62	-31.41	1,173.21	972.11	201.10	5.834		
22,300.00	12,392.00	21,826.39	11,720.43	170.39	168.52	55.66	9,868.53	-32.51	1,174.78	972.02	202.76	5.794		
22,400.00	12,392.00	21,926.35	11,717.64	171.98	170.12	55.54	9,968.45	-33.61	1,176.36	971.93	204.42	5.755		
22,500.00	12,392.00	22,026.31	11,714.86	173.58	171.72	55.43	10,068.36	-34.71	1,177.93	971.86	206.08	5.716		
22,581.33	12,392.00	22,107.61	11,712.59	174.88	173.03	55.34	10,149.63	-35.60	1,179.22	971.80	207.42	5.685 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	34.12	75.65	51.25	91.74				
100.00	100.00	91.80	91.80	0.13	0.13	34.12	75.65	51.25	91.38	91.19	0.18	505.789	
200.00	200.00	191.80	191.80	0.48	0.47	34.12	75.65	51.25	91.38	90.70	0.68	135.356	
300.00	300.00	291.80	291.80	0.84	0.83	34.12	75.65	51.25	91.38	90.19	1.18	77.306	
400.00	400.00	391.80	391.80	1.20	1.19	34.12	75.65	51.25	91.38	89.69	1.69	54.102	
500.00	500.00	491.80	491.80	1.56	1.55	34.12	75.65	51.25	91.38	89.18	2.20	41.612	
600.00	600.00	591.80	591.80	1.92	1.90	34.12	75.65	51.25	91.38	88.67	2.70	33.807	
700.00	700.00	691.80	691.80	2.28	2.26	34.12	75.65	51.25	91.38	88.17	3.21	28.468	
800.00	800.00	791.80	791.80	2.63	2.62	34.12	75.65	51.25	91.38	87.66	3.72	24.585	
900.00	900.00	891.80	891.80	2.99	2.98	34.12	75.65	51.25	91.38	87.15	4.22	21.634	
1,000.00	1,000.00	991.80	991.80	3.35	3.34	34.12	75.65	51.25	91.38	86.64	4.73	19.316	
1,100.00	1,100.00	1,091.80	1,091.80	3.71	3.70	34.12	75.65	51.25	91.38	86.14	5.24	17.446	
1,200.00	1,200.00	1,191.80	1,191.80	4.07	4.06	34.12	75.65	51.25	91.38	85.63	5.74	15.906	
1,300.00	1,300.00	1,291.80	1,291.80	4.43	4.41	34.12	75.65	51.25	91.38	85.12	6.25	14.617	
1,400.00	1,400.00	1,391.80	1,391.80	4.79	4.77	34.12	75.65	51.25	91.38	84.62	6.76	13.520	
1,500.00	1,500.00	1,491.80	1,491.80	5.14	5.13	34.12	75.65	51.25	91.38	84.11	7.27	12.577	
1,525.00	1,525.00	1,516.80	1,516.80	5.23	5.22	34.12	75.65	51.25	91.38	83.98	7.39	12.361 CC, ES	
1,600.00	1,600.00	1,591.80	1,591.80	5.49	5.49	-165.99	75.65	51.25	92.09	84.33	7.76	11.863	
1,700.00	1,699.94	1,691.74	1,691.74	5.82	5.85	-166.46	75.65	51.25	95.27	87.02	8.25	11.552	
1,800.00	1,799.76	1,791.56	1,791.56	6.15	6.21	-167.22	75.65	51.25	101.00	92.27	8.73	11.565	
1,900.00	1,899.40	1,891.20	1,891.20	6.48	6.56	-168.18	75.65	51.25	109.31	100.08	9.22	11.853	
2,000.00	1,998.78	1,990.58	1,990.58	6.82	6.92	-169.23	75.65	51.25	120.20	110.49	9.71	12.377	
2,025.00	2,023.57	2,015.37	2,015.37	6.91	7.01	-169.50	75.65	51.25	123.32	113.49	9.83	12.540	
2,100.00	2,097.97	2,089.77	2,089.77	7.17	7.27	-178.14	75.65	51.25	132.73	122.53	10.20	13.011	
2,200.00	2,197.27	2,189.07	2,189.07	7.53	7.63	169.90	75.65	51.25	144.55	133.86	10.69	13.518	
2,300.00	2,296.60	2,288.40	2,288.40	7.89	7.99	158.03	75.65	51.25	155.59	144.40	11.19	13.907	
2,400.00	2,395.91	2,387.71	2,387.71	8.26	8.34	147.32	75.65	51.25	165.98	154.29	11.69	14.204	
2,504.30	2,499.40	2,491.20	2,491.20	8.64	8.71	138.36	75.65	51.25	176.33	164.13	12.21	14.447	
2,600.00	2,594.28	2,586.08	2,586.08	9.00	9.05	140.91	75.65	51.25	185.89	173.20	12.68	14.655	
2,700.00	2,693.42	2,685.22	2,685.22	9.38	9.41	143.31	75.65	51.25	196.22	183.04	13.19	14.882	
2,800.00	2,792.57	2,784.37	2,784.37	9.75	9.76	145.46	75.65	51.25	206.87	193.18	13.69	15.114	
2,900.00	2,891.71	2,883.51	2,883.51	10.14	10.12	147.40	75.65	51.25	217.77	203.58	14.19	15.347	
3,000.00	2,990.86	2,982.66	2,982.66	10.52	10.48	149.16	75.65	51.25	228.90	214.21	14.69	15.579	
3,100.00	3,090.00	3,081.80	3,081.80	10.91	10.83	150.75	75.65	51.25	240.23	225.03	15.20	15.808	
3,200.00	3,189.15	3,180.95	3,180.95	11.30	11.19	152.20	75.65	51.25	251.72	236.02	15.70	16.033	
3,300.00	3,288.29	3,276.88	3,276.88	11.69	11.52	153.62	75.46	52.00	263.84	247.66	16.18	16.302	
3,400.00	3,387.44	3,371.46	3,371.40	12.08	11.84	155.27	74.72	54.98	277.63	260.98	16.65	16.672	
3,500.00	3,486.58	3,465.27	3,465.06	12.48	12.16	157.11	73.42	60.18	293.23	276.12	17.11	17.137	
3,600.00	3,585.72	3,558.23	3,557.70	12.87	12.48	159.07	71.59	67.54	310.75	293.19	17.56	17.695	
3,700.00	3,684.87	3,650.22	3,649.18	13.27	12.80	161.09	69.23	76.96	330.30	312.29	18.00	18.347	
3,800.00	3,784.01	3,741.17	3,739.36	13.67	13.12	163.13	66.38	88.38	351.94	333.51	18.43	19.093	
3,900.00	3,883.16	3,833.28	3,830.40	14.07	13.44	165.18	63.00	101.93	375.64	356.77	18.87	19.904	
4,000.00	3,982.30	3,929.37	3,925.31	14.47	13.79	167.11	59.36	116.52	400.17	380.82	19.35	20.681	
4,100.00	4,081.45	4,025.47	4,020.23	14.87	14.14	168.82	55.72	131.11	425.08	405.25	19.83	21.436	
4,200.00	4,180.59	4,121.57	4,115.14	15.27	14.49	170.35	52.08	145.70	450.32	430.00	20.31	22.169	
4,300.00	4,279.74	4,217.66	4,210.05	15.67	14.85	171.71	48.44	160.29	475.82	455.02	20.80	22.879	
4,400.00	4,378.88	4,313.76	4,304.96	16.08	15.21	172.94	44.80	174.88	501.56	480.27	21.28	23.564	
4,500.00	4,478.03	4,409.86	4,399.88	16.48	15.57	174.05	41.16	189.47	527.49	505.71	21.77	24.227	
4,600.00	4,577.17	4,505.95	4,494.79	16.89	15.94	175.05	37.52	204.06	553.58	531.32	22.26	24.866	
4,700.00	4,676.32	4,602.05	4,589.70	17.29	16.31	175.97	33.87	218.66	579.83	557.07	22.75	25.482	
4,800.00	4,775.46	4,698.15	4,684.62	17.70	16.68	176.80	30.23	233.25	606.20	582.95	23.25	26.076	
4,900.00	4,874.60	4,794.24	4,779.53	18.10	17.05	177.57	26.59	247.84	632.68	608.94	23.74	26.649	

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,973.75	4,890.34	4,874.44	18.51	17.43	178.27	22.95	262.43	659.25	635.02	24.24	27.202		
5,100.00	5,072.89	4,986.44	4,969.35	18.92	17.81	178.92	19.31	277.02	685.92	661.19	24.73	27.734		
5,200.00	5,172.04	5,082.53	5,064.27	19.32	18.19	179.52	15.67	291.61	712.66	687.43	25.23	28.248		
5,300.00	5,271.18	5,178.63	5,159.18	19.73	18.57	-179.92	12.03	306.20	739.47	713.74	25.73	28.744		
5,400.00	5,370.33	5,274.73	5,254.09	20.14	18.95	-179.40	8.39	320.79	766.34	740.11	26.22	29.222		
5,500.00	5,469.47	5,370.82	5,349.00	20.55	19.34	-178.91	4.75	335.38	793.26	766.54	26.72	29.684		
5,600.00	5,568.62	5,466.92	5,443.92	20.96	19.72	-178.46	1.11	349.97	820.24	793.01	27.22	30.130		
5,700.00	5,667.76	5,563.02	5,538.83	21.37	20.11	-178.04	-2.54	364.56	847.25	819.53	27.72	30.560		
5,800.00	5,766.91	5,659.11	5,633.74	21.78	20.50	-177.64	-6.18	379.15	874.31	846.09	28.23	30.976		
5,900.00	5,866.05	5,755.21	5,728.66	22.19	20.89	-177.26	-9.82	393.74	901.41	872.68	28.73	31.378		
6,000.00	5,965.19	5,851.31	5,823.57	22.59	21.28	-176.91	-13.46	408.33	928.54	899.31	29.23	31.767		
6,100.00	6,064.34	5,947.40	5,918.48	23.01	21.68	-176.58	-17.10	422.92	955.70	925.97	29.73	32.144		
6,200.00	6,163.48	6,043.50	6,013.39	23.42	22.07	-176.26	-20.74	437.52	982.89	952.65	30.24	32.508		
6,300.00	6,262.63	6,139.60	6,108.31	23.83	22.47	-175.97	-24.38	452.11	1,010.10	979.36	30.74	32.860		
6,400.00	6,361.77	6,235.69	6,203.22	24.24	22.86	-175.69	-28.02	466.70	1,037.34	1,006.10	31.24	33.202		
6,500.00	6,460.92	6,331.79	6,298.13	24.65	23.26	-175.42	-31.66	481.29	1,064.60	1,032.85	31.75	33.533		
6,600.00	6,560.06	6,427.89	6,393.04	25.06	23.66	-175.16	-35.31	495.88	1,091.88	1,059.63	32.25	33.853		
6,700.00	6,659.21	6,523.98	6,487.96	25.47	24.06	-174.92	-38.95	510.47	1,119.18	1,086.42	32.76	34.164		
6,800.00	6,758.35	6,620.08	6,582.87	25.88	24.45	-174.69	-42.59	525.06	1,146.50	1,113.23	33.26	34.466		
6,900.00	6,857.50	6,716.18	6,677.78	26.29	24.85	-174.47	-46.23	539.65	1,173.83	1,140.06	33.77	34.758		
7,000.00	6,956.64	6,812.27	6,772.70	26.70	25.26	-174.26	-49.87	554.24	1,201.18	1,166.90	34.28	35.043		
7,100.00	7,055.78	6,908.37	6,867.61	27.12	25.66	-174.06	-53.51	568.83	1,228.54	1,193.76	34.78	35.318		
7,141.02	7,096.45	6,947.79	6,906.54	27.29	25.82	-173.98	-55.00	574.82	1,239.77	1,204.78	34.99	35.429		
7,200.00	7,154.99	7,004.58	6,962.64	27.53	26.06	-173.90	-57.16	583.44	1,255.48	1,220.19	35.29	35.574		
7,300.00	7,254.46	7,101.40	7,058.26	27.92	26.47	-173.74	-60.82	598.14	1,280.13	1,244.34	35.80	35.759		
7,400.00	7,354.17	7,198.82	7,154.48	28.30	26.87	-173.57	-64.52	612.93	1,302.27	1,265.96	36.31	35.868		
7,500.00	7,454.04	7,296.76	7,251.21	28.66	27.29	-173.40	-68.23	627.80	1,321.88	1,285.06	36.81	35.907		
7,600.00	7,554.01	7,395.16	7,348.41	29.00	27.70	-173.21	-71.95	642.74	1,338.95	1,301.63	37.32	35.877		
7,640.99	7,595.00	7,435.62	7,388.36	29.13	27.87	84.29	-73.49	648.89	1,345.21	1,307.68	37.53	35.848		
7,700.00	7,654.01	7,493.90	7,445.93	29.32	28.12	84.42	-75.70	657.73	1,353.92	1,316.10	37.82	35.801		
7,800.00	7,754.01	7,592.67	7,543.48	29.64	28.53	84.64	-79.44	672.73	1,368.69	1,330.37	38.31	35.723		
7,900.00	7,854.01	7,691.44	7,641.03	29.95	28.95	84.85	-83.18	687.73	1,383.48	1,344.67	38.81	35.647		
8,000.00	7,954.01	7,790.20	7,738.58	30.27	29.37	85.06	-86.92	702.72	1,398.29	1,358.98	39.31	35.573		
8,100.00	8,054.01	7,888.97	7,836.13	30.59	29.79	85.27	-90.66	717.72	1,413.12	1,373.32	39.80	35.501		
8,200.00	8,154.01	7,987.74	7,933.68	30.91	30.21	85.47	-94.41	732.72	1,427.97	1,387.66	40.30	35.431		
8,300.00	8,254.01	8,086.51	8,031.23	31.24	30.62	85.67	-98.15	747.71	1,442.83	1,402.03	40.80	35.363		
8,400.00	8,354.01	8,185.28	8,128.78	31.56	31.04	85.86	-101.89	762.71	1,457.71	1,416.41	41.30	35.296		
8,500.00	8,454.01	8,284.04	8,226.33	31.88	31.46	86.05	-105.63	777.70	1,472.61	1,430.81	41.80	35.231		
8,600.00	8,554.01	8,382.81	8,323.89	32.21	31.88	86.24	-109.38	792.70	1,487.52	1,445.22	42.30	35.167		
8,700.00	8,654.01	8,481.58	8,421.44	32.53	32.30	86.42	-113.12	807.70	1,502.44	1,459.65	42.80	35.105		
8,800.00	8,754.01	8,580.35	8,518.99	32.86	32.72	86.60	-116.86	822.69	1,517.39	1,474.09	43.30	35.045		
8,900.00	8,854.01	8,679.12	8,616.54	33.18	33.15	86.77	-120.60	837.69	1,532.34	1,488.54	43.80	34.986		
9,000.00	8,954.01	8,777.88	8,714.09	33.51	33.57	86.94	-124.35	852.69	1,547.31	1,503.01	44.30	34.929		
9,100.00	9,054.01	8,876.65	8,811.64	33.84	33.99	87.11	-128.09	867.68	1,562.29	1,517.49	44.80	34.872		
9,200.00	9,154.01	8,975.42	8,909.19	34.16	34.41	87.28	-131.83	882.68	1,577.29	1,531.98	45.30	34.817		
9,300.00	9,254.01	9,074.19	9,006.74	34.49	34.83	87.44	-135.57	897.67	1,592.29	1,546.49	45.80	34.764		
9,400.00	9,354.01	9,172.95	9,104.29	34.82	35.26	87.60	-139.31	912.67	1,607.31	1,561.01	46.31	34.711		
9,500.00	9,454.01	9,271.72	9,201.85	35.15	35.68	87.75	-143.06	927.67	1,622.35	1,575.54	46.81	34.660		
9,600.00	9,554.01	9,370.49	9,299.40	35.48	36.10	87.91	-146.80	942.66	1,637.39	1,590.08	47.31	34.610		
9,700.00	9,654.01	9,469.26	9,396.95	35.81	36.53	88.06	-150.54	957.66	1,652.44	1,604.63	47.81	34.561		
9,800.00	9,754.01	9,568.03	9,494.50	36.14	36.95	88.21	-154.28	972.66	1,667.51	1,619.19	48.32	34.513		
9,900.00	9,854.01	9,666.79	9,592.05	36.48	37.37	88.35	-158.03	987.65	1,682.59	1,633.77	48.82	34.466		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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		
10,000.00	9,954.01	9,765.56	9,689.60	36.81	37.80	88.49	-161.77	1,002.65	1,697.67	1,648.35	49.32	34.420		
10,100.00	10,054.01	9,864.33	9,787.15	37.14	38.22	88.63	-165.51	1,017.64	1,712.77	1,662.94	49.83	34.375		
10,200.00	10,154.01	9,963.10	9,884.70	37.47	38.65	88.77	-169.25	1,032.64	1,727.88	1,677.54	50.33	34.331		
10,300.00	10,254.01	10,061.87	9,982.25	37.81	39.07	88.91	-172.99	1,047.64	1,742.99	1,692.16	50.83	34.287		
10,400.00	10,354.01	10,160.63	10,079.81	38.14	39.50	89.04	-176.74	1,062.63	1,758.12	1,706.78	51.34	34.245		
10,500.00	10,454.01	10,259.40	10,177.36	38.48	39.92	89.17	-180.48	1,077.63	1,773.25	1,721.41	51.84	34.204		
10,600.00	10,554.01	10,358.17	10,274.91	38.81	40.35	89.30	-184.22	1,092.63	1,788.39	1,736.05	52.35	34.163		
10,700.00	10,654.01	10,457.11	10,372.63	39.15	40.77	89.42	-187.97	1,107.65	1,803.55	1,750.69	52.85	34.123		
10,800.00	10,754.01	10,640.35	10,554.23	39.48	41.53	89.62	-193.86	1,131.23	1,816.40	1,762.62	53.78	33.776		
10,900.00	10,854.01	10,825.53	10,738.73	39.82	42.23	89.74	-197.65	1,146.45	1,824.61	1,770.00	54.61	33.410		
11,000.00	10,954.01	11,011.81	10,924.87	40.16	42.88	89.79	-199.29	1,152.99	1,828.12	1,772.77	55.36	33.024		
11,100.00	11,054.01	11,132.75	11,045.81	40.49	43.26	89.79	-199.35	1,153.25	1,828.26	1,772.38	55.89	32.714		
11,200.00	11,154.01	11,232.75	11,145.81	40.83	43.57	89.79	-199.35	1,153.25	1,828.26	1,771.89	56.37	32.435		
11,300.00	11,254.01	11,332.75	11,245.81	41.17	43.89	89.79	-199.35	1,153.25	1,828.26	1,771.41	56.85	32.160		
11,400.00	11,354.01	11,432.75	11,345.81	41.51	44.21	89.79	-199.35	1,153.25	1,828.26	1,770.93	57.33	31.889		
11,500.00	11,454.01	11,532.75	11,445.81	41.85	44.52	89.79	-199.35	1,153.25	1,828.26	1,770.45	57.82	31.622		
11,600.00	11,554.01	11,632.94	11,545.99	42.18	44.84	89.79	-199.29	1,153.25	1,828.26	1,769.96	58.30	31.360		
11,700.00	11,654.01	11,734.00	11,646.40	42.52	45.14	89.47	-189.00	1,153.14	1,828.22	1,769.44	58.78	31.104		
11,715.40	11,669.41	11,749.12	11,661.21	42.58	45.19	89.37	-185.95	1,153.10	1,828.21	1,769.36	58.85	31.066		
11,800.00	11,754.01	11,828.68	11,737.47	42.86	45.39	88.67	-163.51	1,152.86	1,828.37	1,769.14	59.23	30.870		
11,865.03	11,819.04	11,884.88	11,789.11	43.08	45.52	87.98	-141.39	1,152.62	1,828.88	1,769.38	59.50	30.736		
11,900.00	11,853.99	11,913.53	11,814.53	43.20	45.58	101.82	-128.20	1,152.47	1,829.61	1,769.97	59.64	30.675		
11,950.00	11,903.70	11,953.55	11,848.88	43.37	45.66	101.08	-107.68	1,152.25	1,831.71	1,771.88	59.84	30.612		
12,000.00	11,952.76	11,992.58	11,880.93	43.54	45.72	100.26	-85.40	1,152.01	1,835.04	1,775.02	60.01	30.577		
12,050.00	12,000.81	12,030.74	11,910.71	43.70	45.78	99.35	-61.57	1,151.75	1,839.52	1,779.35	60.18	30.568		
12,100.00	12,047.48	12,068.10	11,938.28	43.85	45.83	98.36	-36.35	1,151.47	1,845.12	1,784.79	60.33	30.584		
12,150.00	12,092.40	12,100.00	11,960.47	43.99	45.86	97.35	-13.45	1,151.22	1,851.75	1,791.29	60.46	30.629		
12,200.00	12,135.25	12,140.81	11,986.94	44.13	45.90	96.18	17.60	1,150.88	1,859.33	1,798.73	60.60	30.683		
12,250.00	12,175.69	12,176.31	12,008.12	44.25	45.92	95.00	46.07	1,150.57	1,867.78	1,807.06	60.72	30.763		
12,300.00	12,213.41	12,211.31	12,027.24	44.37	45.94	93.76	75.39	1,150.25	1,877.01	1,816.19	60.83	30.858		
12,350.00	12,248.14	12,250.00	12,046.25	44.48	45.96	92.46	109.08	1,149.88	1,886.94	1,826.00	60.94	30.962		
12,400.00	12,279.60	12,280.09	12,059.43	44.58	45.97	91.19	136.11	1,149.59	1,897.44	1,836.40	61.04	31.087		
12,450.00	12,307.55	12,313.97	12,072.55	44.68	45.98	89.88	167.34	1,149.25	1,908.43	1,847.29	61.14	31.214		
12,500.00	12,331.79	12,350.00	12,084.46	44.77	45.98	88.54	201.35	1,148.88	1,919.81	1,858.56	61.25	31.344		
12,550.00	12,352.12	12,380.96	12,092.96	44.88	45.99	87.23	231.11	1,148.55	1,931.47	1,870.12	61.35	31.483		
12,600.00	12,368.39	12,414.16	12,100.28	44.99	45.99	85.93	263.49	1,148.20	1,943.32	1,881.85	61.47	31.616		
12,650.00	12,380.49	12,450.00	12,106.06	45.12	46.01	84.65	298.85	1,147.81	1,955.26	1,893.67	61.59	31.746		
12,700.00	12,388.31	12,480.20	12,109.21	45.25	46.01	83.41	328.88	1,147.48	1,967.18	1,905.47	61.71	31.876		
12,750.00	12,391.80	12,513.13	12,110.84	45.41	46.03	82.21	361.76	1,147.13	1,979.01	1,917.16	61.85	31.997		
12,765.03	12,392.00	12,523.02	12,110.95	45.45	46.04	81.86	371.65	1,147.02	1,982.53	1,920.64	61.89	32.032		
12,800.00	12,392.00	12,546.61	12,110.55	45.57	46.05	81.90	395.24	1,146.76	1,990.59	1,928.60	61.99	32.109		
12,900.00	12,392.00	12,644.37	12,107.15	45.95	46.16	81.94	492.93	1,145.69	2,011.61	1,949.20	62.41	32.235		
13,000.00	12,392.00	12,742.80	12,103.72	46.37	46.34	81.96	591.29	1,144.62	2,029.24	1,966.35	62.89	32.265		
13,100.00	12,392.00	12,841.76	12,100.27	46.85	46.60	81.96	690.19	1,143.54	2,043.46	1,980.00	63.46	32.200		
13,200.00	12,392.00	12,941.15	12,096.81	47.36	46.94	81.94	789.51	1,142.46	2,054.25	1,990.14	64.11	32.045		
13,300.00	12,392.00	13,040.85	12,093.33	47.91	47.36	81.89	889.14	1,141.37	2,061.60	1,996.78	64.82	31.804		
13,400.00	12,392.00	13,140.72	12,089.85	48.49	47.85	81.82	988.95	1,140.28	2,065.50	1,999.90	65.61	31.482		
13,448.51	12,392.00	13,189.20	12,088.17	48.78	48.11	81.77	1,037.39	1,139.75	2,066.16	2,000.15	66.01	31.300		
13,500.00	12,392.00	13,240.66	12,086.37	49.10	48.40	81.72	1,088.82	1,139.19	2,066.42	1,999.96	66.46	31.093		
13,600.00	12,392.00	13,340.60	12,082.89	49.75	49.02	81.63	1,188.69	1,138.10	2,066.93	1,999.55	67.38	30.676		
13,700.00	12,392.00	13,440.54	12,079.41	50.45	49.69	81.53	1,288.57	1,137.01	2,067.45	1,999.09	68.36	30.242		
13,800.00	12,392.00	13,540.48	12,075.93	51.20	50.41	81.44	1,388.44	1,135.92	2,067.98	1,998.57	69.41	29.793		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	12,392.00	13,640.42	12,072.45	51.98	51.17	81.34	1,488.31	1,134.83	2,068.51	1,997.99	70.52	29.333		
14,000.00	12,392.00	13,740.36	12,068.97	52.81	51.98	81.25	1,588.18	1,133.74	2,069.04	1,997.36	71.68	28.864		
14,100.00	12,392.00	13,840.30	12,065.48	53.68	52.83	81.15	1,688.06	1,132.65	2,069.59	1,996.69	72.90	28.389		
14,200.00	12,392.00	13,940.24	12,062.00	54.58	53.71	81.06	1,787.93	1,131.56	2,070.13	1,995.96	74.17	27.911		
14,300.00	12,392.00	14,040.17	12,058.52	55.51	54.63	80.96	1,887.80	1,130.47	2,070.69	1,995.20	75.49	27.430		
14,400.00	12,392.00	14,140.11	12,055.04	56.48	55.59	80.87	1,987.67	1,129.38	2,071.25	1,994.39	76.85	26.951		
14,500.00	12,392.00	14,240.05	12,051.56	57.48	56.58	80.77	2,087.55	1,128.29	2,071.81	1,993.55	78.26	26.473		
14,600.00	12,392.00	14,339.99	12,048.08	58.51	57.60	80.68	2,187.42	1,127.20	2,072.38	1,992.67	79.71	25.999		
14,700.00	12,392.00	14,439.93	12,044.60	59.57	58.64	80.58	2,287.29	1,126.11	2,072.96	1,991.76	81.20	25.530		
14,800.00	12,392.00	14,539.87	12,041.11	60.65	59.72	80.49	2,387.17	1,125.02	2,073.54	1,990.82	82.72	25.067		
14,900.00	12,392.00	14,639.81	12,037.63	61.76	60.82	80.39	2,487.04	1,123.93	2,074.13	1,989.85	84.28	24.610		
15,000.00	12,392.00	14,739.75	12,034.15	62.89	61.94	80.30	2,586.91	1,122.84	2,074.72	1,988.85	85.87	24.161		
15,100.00	12,392.00	14,839.69	12,030.67	64.05	63.09	80.20	2,686.78	1,121.75	2,075.32	1,987.83	87.49	23.720		
15,200.00	12,392.00	14,939.63	12,027.19	65.23	64.26	80.11	2,786.66	1,120.66	2,075.93	1,986.78	89.14	23.288		
15,300.00	12,392.00	15,039.57	12,023.71	66.42	65.45	80.01	2,886.53	1,119.57	2,076.54	1,985.72	90.82	22.864		
15,400.00	12,392.00	15,139.51	12,020.23	67.64	66.66	79.92	2,986.40	1,118.48	2,077.15	1,984.63	92.52	22.450		
15,500.00	12,392.00	15,239.45	12,016.74	68.88	67.89	79.82	3,086.27	1,117.39	2,077.78	1,983.52	94.25	22.045		
15,600.00	12,392.00	15,339.39	12,013.26	70.13	69.14	79.73	3,186.15	1,116.30	2,078.40	1,982.40	96.00	21.649		
15,700.00	12,392.00	15,439.33	12,009.78	71.40	70.40	79.64	3,286.02	1,115.21	2,079.04	1,981.26	97.77	21.264		
15,800.00	12,392.00	15,539.26	12,006.30	72.68	71.68	79.54	3,385.89	1,114.12	2,079.68	1,980.11	99.57	20.887		
15,900.00	12,392.00	15,639.20	12,002.82	73.98	72.97	79.45	3,485.77	1,113.03	2,080.32	1,978.94	101.38	20.520		
16,000.00	12,392.00	15,739.14	11,999.34	75.29	74.28	79.35	3,585.64	1,111.94	2,080.97	1,977.76	103.21	20.163		
16,100.00	12,392.00	15,839.08	11,995.86	76.62	75.60	79.26	3,685.51	1,110.85	2,081.63	1,976.57	105.05	19.815		
16,200.00	12,392.00	15,939.02	11,992.37	77.96	76.93	79.16	3,785.38	1,109.76	2,082.29	1,975.37	106.91	19.476		
16,300.00	12,392.00	16,038.96	11,988.89	79.31	78.28	79.07	3,885.26	1,108.67	2,082.95	1,974.16	108.79	19.147		
16,400.00	12,392.00	16,138.90	11,985.41	80.67	79.64	78.98	3,985.13	1,107.58	2,083.63	1,972.95	110.68	18.826		
16,500.00	12,392.00	16,238.84	11,981.93	82.04	81.00	78.88	4,085.00	1,106.49	2,084.30	1,971.72	112.58	18.514		
16,600.00	12,392.00	16,338.78	11,978.45	83.42	82.38	78.79	4,184.87	1,105.40	2,084.99	1,970.49	114.50	18.210		
16,700.00	12,392.00	16,438.72	11,974.97	84.81	83.77	78.70	4,284.75	1,104.31	2,085.68	1,969.25	116.43	17.914		
16,800.00	12,392.00	16,538.66	11,971.49	86.21	85.17	78.60	4,384.62	1,103.22	2,086.37	1,968.01	118.36	17.627		
16,900.00	12,392.00	16,638.60	11,968.00	87.62	86.57	78.51	4,484.49	1,102.13	2,087.07	1,966.76	120.31	17.347		
17,000.00	12,392.00	16,738.54	11,964.52	89.04	87.99	78.41	4,584.36	1,101.04	2,087.78	1,965.51	122.27	17.075		
17,100.00	12,392.00	16,838.48	11,961.04	90.47	89.41	78.32	4,684.24	1,099.95	2,088.49	1,964.25	124.24	16.810		
17,200.00	12,392.00	16,938.41	11,957.56	91.90	90.84	78.23	4,784.11	1,098.86	2,089.21	1,962.99	126.22	16.552		
17,300.00	12,392.00	17,038.35	11,954.08	93.34	92.28	78.13	4,883.98	1,097.77	2,089.93	1,961.73	128.20	16.302		
17,400.00	12,392.00	17,138.29	11,950.60	94.79	93.72	78.04	4,983.86	1,096.68	2,090.66	1,960.46	130.20	16.058		
17,500.00	12,392.00	17,238.23	11,947.12	96.25	95.18	77.95	5,083.73	1,095.59	2,091.39	1,959.20	132.20	15.820		
17,600.00	12,392.00	17,338.17	11,943.63	97.71	96.63	77.85	5,183.60	1,094.50	2,092.13	1,957.93	134.20	15.589		
17,700.00	12,392.00	17,438.11	11,940.15	99.17	98.10	77.76	5,283.47	1,093.41	2,092.88	1,956.66	136.22	15.364		
17,800.00	12,392.00	17,538.05	11,936.67	100.65	99.57	77.67	5,383.35	1,092.32	2,093.63	1,955.39	138.24	15.145		
17,900.00	12,392.00	17,637.99	11,933.19	102.13	101.04	77.58	5,483.22	1,091.23	2,094.38	1,954.12	140.26	14.932		
18,000.00	12,392.00	17,737.93	11,929.71	103.61	102.53	77.48	5,583.09	1,090.14	2,095.15	1,952.85	142.30	14.724		
18,100.00	12,392.00	17,837.87	11,926.23	105.10	104.01	77.39	5,682.96	1,089.05	2,095.91	1,951.58	144.33	14.521		
18,200.00	12,392.00	17,937.81	11,922.74	106.59	105.50	77.30	5,782.84	1,087.96	2,096.69	1,950.31	146.37	14.324		
18,300.00	12,392.00	18,037.75	11,919.26	108.09	107.00	77.20	5,882.71	1,086.87	2,097.46	1,949.04	148.42	14.132		
18,400.00	12,392.00	18,137.69	11,915.78	109.59	108.50	77.11	5,982.58	1,085.78	2,098.25	1,947.78	150.47	13.945		
18,500.00	12,392.00	18,237.63	11,912.30	111.10	110.00	77.02	6,082.46	1,084.69	2,099.04	1,946.51	152.52	13.762		
18,600.00	12,392.00	18,337.56	11,908.82	112.61	111.51	76.93	6,182.33	1,083.60	2,099.83	1,945.25	154.58	13.584		
18,700.00	12,392.00	18,437.50	11,905.34	114.12	113.03	76.83	6,282.20	1,082.51	2,100.63	1,943.99	156.64	13.411		
18,800.00	12,392.00	18,537.44	11,901.86	115.64	114.54	76.74	6,382.07	1,081.42	2,101.44	1,942.73	158.70	13.241		
18,900.00	12,392.00	18,637.38	11,898.37	117.17	116.06	76.65	6,481.95	1,080.33	2,102.25	1,941.48	160.77	13.076		
19,000.00	12,392.00	18,737.32	11,894.89	118.69	117.59	76.56	6,581.82	1,079.24	2,103.06	1,940.22	162.84	12.915		

CC - Min centre to center distance or 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 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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	12,392.00	18,837.26	11,891.41	120.22	119.11	76.46	6,681.69	1,078.15	2,103.89	1,938.97	164.92	12.757		
19,200.00	12,392.00	18,937.20	11,887.93	121.75	120.64	76.37	6,781.56	1,077.06	2,104.71	1,937.72	166.99	12.604		
19,300.00	12,392.00	19,037.14	11,884.45	123.29	122.18	76.28	6,881.44	1,075.97	2,105.55	1,936.47	169.07	12.454		
19,400.00	12,392.00	19,137.08	11,880.97	124.83	123.72	76.19	6,981.31	1,074.88	2,106.38	1,935.23	171.15	12.307		
19,500.00	12,392.00	19,237.02	11,877.49	126.37	125.26	76.10	7,081.18	1,073.79	2,107.23	1,933.99	173.23	12.164		
19,600.00	12,392.00	19,336.96	11,874.00	127.91	126.80	76.00	7,181.05	1,072.70	2,108.08	1,932.76	175.32	12.024		
19,700.00	12,392.00	19,436.90	11,870.52	129.46	128.34	75.91	7,280.93	1,071.61	2,108.93	1,931.53	177.40	11.888		
19,800.00	12,392.00	19,536.84	11,867.04	131.01	129.89	75.82	7,380.80	1,070.52	2,109.79	1,930.30	179.49	11.754		
19,900.00	12,392.00	19,636.78	11,863.56	132.56	131.44	75.73	7,480.67	1,069.43	2,110.66	1,929.08	181.58	11.624		
20,000.00	12,392.00	19,736.72	11,860.08	134.12	132.99	75.64	7,580.55	1,068.34	2,111.53	1,927.86	183.67	11.497		
20,100.00	12,392.00	19,836.65	11,856.60	135.67	134.55	75.55	7,680.42	1,067.25	2,112.40	1,926.64	185.76	11.372		
20,200.00	12,392.00	19,936.59	11,853.12	137.23	136.11	75.46	7,780.29	1,066.16	2,113.28	1,925.43	187.85	11.250		
20,300.00	12,392.00	20,036.53	11,849.63	138.80	137.67	75.36	7,880.16	1,065.07	2,114.17	1,924.23	189.94	11.131		
20,400.00	12,392.00	20,136.47	11,846.15	140.36	139.23	75.27	7,980.04	1,063.98	2,115.06	1,923.03	192.03	11.014		
20,500.00	12,392.00	20,236.41	11,842.67	141.92	140.79	75.18	8,079.91	1,062.89	2,115.96	1,921.83	194.13	10.900		
20,600.00	12,392.00	20,336.35	11,839.19	143.49	142.36	75.09	8,179.78	1,061.80	2,116.86	1,920.64	196.22	10.788		
20,700.00	12,392.00	20,436.29	11,835.71	145.06	143.93	75.00	8,279.65	1,060.71	2,117.77	1,919.46	198.32	10.679		
20,800.00	12,392.00	20,536.23	11,832.23	146.63	145.50	74.91	8,379.53	1,059.62	2,118.68	1,918.27	200.41	10.572		
20,900.00	12,392.00	20,636.17	11,828.75	148.21	147.07	74.82	8,479.40	1,058.53	2,119.60	1,917.10	202.51	10.467		
21,000.00	12,392.00	20,736.11	11,825.26	149.78	148.64	74.73	8,579.27	1,057.44	2,120.53	1,915.93	204.60	10.364		
21,100.00	12,392.00	20,836.05	11,821.78	151.36	150.22	74.64	8,679.15	1,056.35	2,121.46	1,914.76	206.69	10.264		
21,200.00	12,392.00	20,935.99	11,818.30	152.94	151.79	74.55	8,779.02	1,055.26	2,122.39	1,913.60	208.79	10.165		
21,300.00	12,392.00	21,035.93	11,814.82	154.51	153.37	74.46	8,878.89	1,054.17	2,123.33	1,912.45	210.88	10.069		
21,400.00	12,392.00	21,135.87	11,811.34	156.10	154.95	74.37	8,978.76	1,053.08	2,124.28	1,911.30	212.98	9.974		
21,500.00	12,392.00	21,235.80	11,807.86	157.68	156.53	74.28	9,078.64	1,051.99	2,125.23	1,910.15	215.07	9.881		
21,600.00	12,392.00	21,335.74	11,804.38	159.26	158.12	74.19	9,178.51	1,050.90	2,126.18	1,909.02	217.17	9.790		
21,700.00	12,392.00	21,435.68	11,800.89	160.85	159.70	74.09	9,278.38	1,049.81	2,127.15	1,907.88	219.26	9.701		
21,800.00	12,392.00	21,535.62	11,797.41	162.43	161.28	74.00	9,378.25	1,048.72	2,128.11	1,906.75	221.36	9.614		
21,900.00	12,392.00	21,635.56	11,793.93	164.02	162.87	73.91	9,478.13	1,047.63	2,129.08	1,905.63	223.45	9.528		
22,000.00	12,392.00	21,735.50	11,790.45	165.61	164.46	73.82	9,578.00	1,046.54	2,130.06	1,904.52	225.55	9.444		
22,100.00	12,392.00	21,835.44	11,786.97	167.20	166.05	73.74	9,677.87	1,045.45	2,131.04	1,903.41	227.64	9.362		
22,200.00	12,392.00	21,935.38	11,783.49	168.80	167.64	73.65	9,777.75	1,044.36	2,132.03	1,902.30	229.73	9.281		
22,300.00	12,392.00	22,035.32	11,780.01	170.39	169.23	73.56	9,877.62	1,043.27	2,133.02	1,901.21	231.82	9.201		
22,400.00	12,392.00	22,135.26	11,776.52	171.98	170.82	73.47	9,977.49	1,042.18	2,134.02	1,900.11	233.91	9.123		
22,500.00	12,392.00	22,235.20	11,773.04	173.58	172.42	73.38	10,077.36	1,041.09	2,135.03	1,899.03	236.00	9.047		
22,581.33	12,392.00	22,316.48	11,770.21	174.88	173.70	73.30	10,158.59	1,040.20	2,135.85	1,898.17	237.67	8.987 SF		

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



Total Directional Services

Anticollision Report

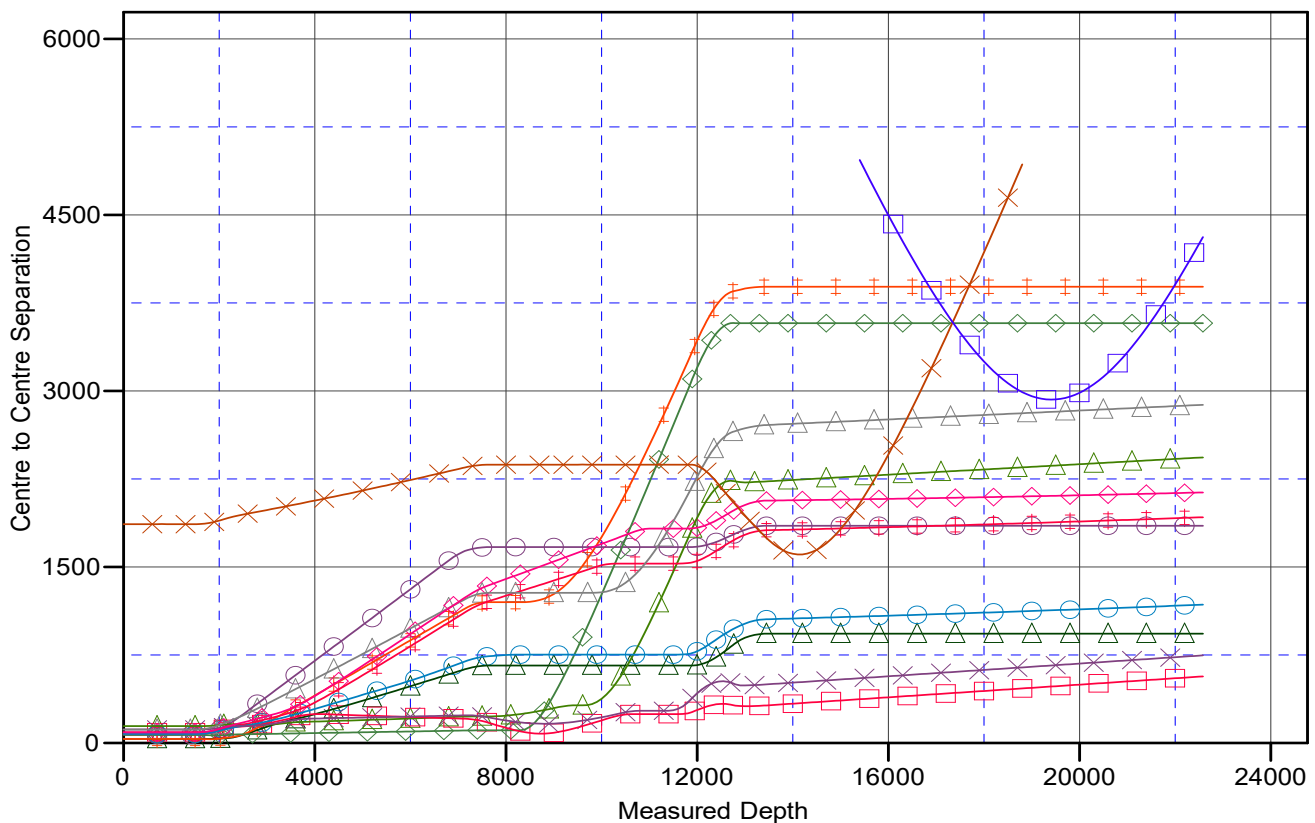


Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
Project:	Lea County, NM (NAD83)	TVD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Reference Site:	Colorado Fed Com	MD Reference:	3392.3' GE + 30' KB @ 3422.30usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Colorado Fed Com 801H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors 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 3392.3' GE + 30' KB @ 3422.30usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Colorado Fed Com 801H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.51°

Ladder Plot



LEGEND

Colorado Fed Com 802H, OH, Plan #1 V0	Ourray Fed Com 602H, OH, Plan #1 V0	Ourray Fed Com 703H, OH, Plan #1 V0
Colorado Fed Com 102H, OH, Plan #1 V0	Georgetown Fed Com 701H, OH, Plan #1 V0	Custer Mountain Unit #001 (Offset), OH, OH V0
Colorado Fed Com 803H, OH, Plan #1 V0	Ourray Fed Com 702H, OH, Plan #1 V0	Woolworth Ranch Unit #001 (Offset), OH, OH V0
Colorado Fed Com 101H, 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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Colorado Fed Com 801H
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Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3392.3' GE + 30' KB @ 3422.30usft

Offset Depths are relative to Offset Datum

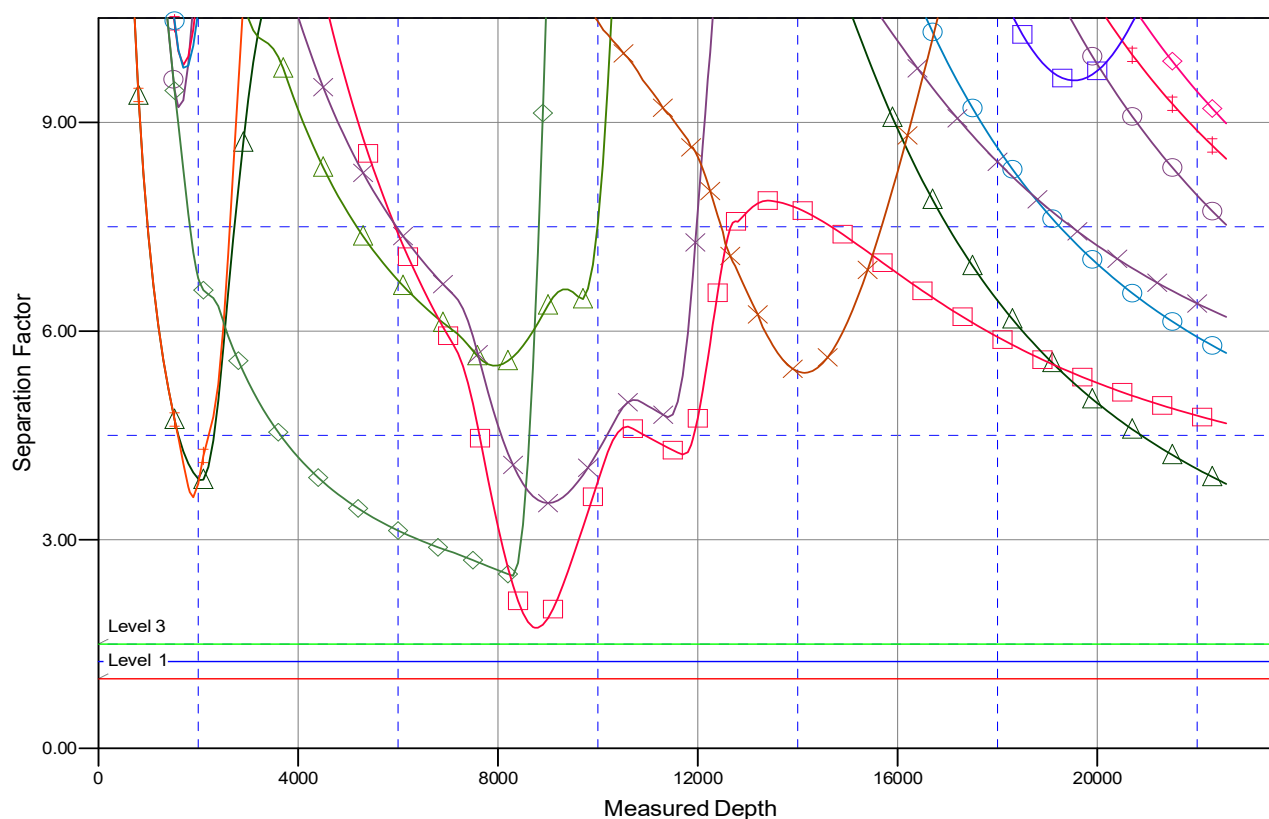
Central Meridian is -104.333334

Coordinates are relative to: Colorado Fed Com 801H

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 802H, OH, Plan #1 V0	Ourray Fed Com 602H, OH, Plan #1 V0	Ourray Fed Com 703H, OH, Plan #1 V0
Colorado Fed Com 102H, OH, Plan #1 V0	Georgetown Fed Com 701H, OH, Plan #1 V0	Custer Mountain Unit #001 (Offset), OH, OH V0
Colorado Fed Com 803H, OH, Plan #1 V0	Ourray Fed Com 702H, OH, Plan #1 V0	Woolworth Ranch Unit #001 (Offset), OH, OH V0
Colorado Fed Com 101H, 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 166786

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 166786
	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