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

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

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

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. **30-025-50906**

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory **[97779]**

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

KZ
01/03/2023

SL

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 11/17/2022

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 wen, 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 directionany 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 wen 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 win 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 conects this information to anow 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 11/17/2022

Additional Operator Remarks

Location of Well

0. SHL: TR M / 250 FSL / 1238 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.225474 / LONG: -103.376987 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 0 FSL / 1868 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.246561 / LONG: -103.37499 (TVD: 8803 feet, MD: 16500 feet)

PPP: SESW / 0 FSL / 1864 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.239305 / LONG: -103.374987 (TVD: 8803 feet, MD: 13800 feet)

PPP: NENW / 0 FSL / 1862 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.235674 / LONG: -103.374985 (TVD: 8803 feet, MD: 12500 feet)

PPP: SENW / 0 FSL / 1860 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.232043 / LONG: -103.374984 (TVD: 8803 feet, MD: 11200 feet)

PPP: SESW / 619 FSL / 1859 FWL / TWSP: 24S / RANGE: 35E / SECTION: 9 / LAT: 32.22649 / LONG: -103.374982 (TVD: 8803 feet, MD: 9163 feet)

BHL: LOT 3 / 150 FNL / 1877 FWL / TWSP: 24S / RANGE: 35E / SECTION: 4 / LAT: 32.253419 / LONG: -103.374993 (TVD: 8803 feet, MD: 18961 feet)

BLM Point of Contact

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

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-50906	97779	DOGIE DRAW;DELAWARE

[4] Property Code	[5] Property Name	[6] Well Number
333646	COLORADO FED COM	102H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373910	FRANKLIN MOUNTAIN ENERGY LLC	3391.9'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	9	24S	35E		250	SOUTH	1238	WEST	LEA

[11] Bottom Hole Location If Different From Surface

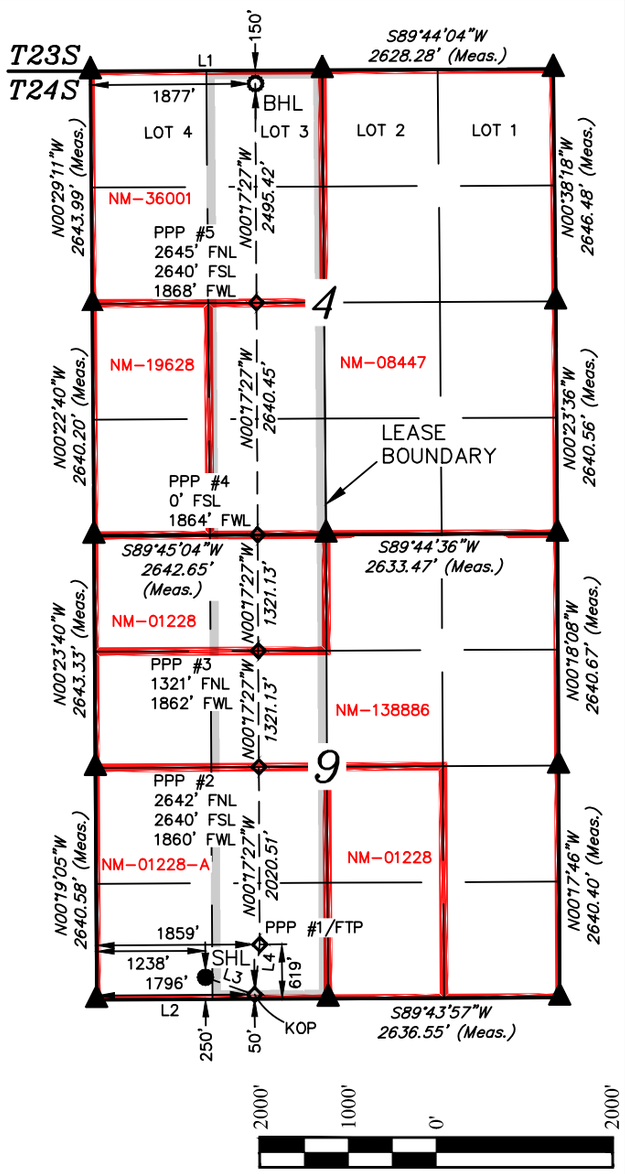
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	4	24S	35E		150	NORTH	1877	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.14			

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°22'37.15" (103.376987°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°13'31.25" (32.225348°)
LONGITUDE = 103°22'35.46" (103.376517°)
STATE PLANE NAD 83 (N.M. EAST)
N: 447077.31' E: 837071.56'
STATE PLANE NAD 27 (N.M. EAST)
N: 447018.11' E: 795886.37'
NAD 83 (KOP)
LATITUDE = 32°13'29.73" (32.224925°)
LONGITUDE = 103°22'30.66" (103.375182°)
NAD 27 (KOP)
LATITUDE = 32°13'29.28" (32.224799°)
LONGITUDE = 103°22'28.96" (103.374712°)
STATE PLANE NAD 83 (N.M. EAST)
N: 446882.56' E: 837631.56'
STATE PLANE NAD 27 (N.M. EAST)
N: 446823.36' E: 796446.35'
NAD 83 (PPP #1/FTP)
LATITUDE = 32°13'35.37" (32.226490°)
LONGITUDE = 103°22'29.93" (103.374982°)
NAD 27 (PPP #1/FTP)
LATITUDE = 32°13'34.91" (32.226365°)
LONGITUDE = 103°22'28.24" (103.374511°)
STATE PLANE NAD 83 (N.M. EAST)
N: 447452.69' E: 837688.47'
STATE PLANE NAD 27 (N.M. EAST)
N: 447393.47' E: 796503.28'
NAD 83 (PPP #2)
LATITUDE = 32°13'55.36" (32.232043°)
LONGITUDE = 103°22'29.94" (103.374984°)
NAD 27 (PPP #2)
LATITUDE = 32°13'54.90" (32.231917°)
LONGITUDE = 103°22'28.25" (103.374513°)
STATE PLANE NAD 83 (N.M. EAST)
N: 449472.81' E: 837669.75'
STATE PLANE NAD 27 (N.M. EAST)
N: 449413.54' E: 796484.64'
NAD 83 (PPP #3)
LATITUDE = 32°14'08.43" (32.235674°)
LONGITUDE = 103°22'29.95" (103.374985°)
NAD 27 (PPP #3)
LATITUDE = 32°14'07.97" (32.235548°)
LONGITUDE = 103°22'28.25" (103.374514°)
STATE PLANE NAD 83 (N.M. EAST)
N: 450793.69' E: 837657.51'
STATE PLANE NAD 27 (N.M. EAST)
N: 450734.38' E: 796472.46'
NAD 83 (PPP #4)
LATITUDE = 32°14'21.50" (32.239305°)
LONGITUDE = 103°22'29.95" (103.374987°)
NAD 27 (PPP #4)
LATITUDE = 32°14'21.04" (32.239179°)
LONGITUDE = 103°22'28.26" (103.374516°)
STATE PLANE NAD 83 (N.M. EAST)
N: 452114.56' E: 837645.26'
STATE PLANE NAD 27 (N.M. EAST)
N: 452055.22' E: 796460.27'
NAD 83 (PPP #5)
LATITUDE = 32°14'47.62" (32.246561°)
LONGITUDE = 103°22'29.96" (103.374990°)
NAD 27 (PPP #5)
LATITUDE = 32°14'47.17" (32.246436°)
LONGITUDE = 103°22'28.27" (103.374518°)
STATE PLANE NAD 83 (N.M. EAST)
N: 454754.50' E: 837620.79'
STATE PLANE NAD 27 (N.M. EAST)
N: 454695.09' E: 796435.91'
NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 32°15'12.31" (32.253419°)
LONGITUDE = 103°22'29.97" (103.374993°)
NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 32°15'11.86" (32.253293°)
LONGITUDE = 103°22'28.27" (103.374521°)
STATE PLANE NAD 83 (N.M. EAST)
N: 457249.44' E: 837597.66'
STATE PLANE NAD 27 (N.M. EAST)
N: 457189.96' E: 796412.86'



LINE TABLE		
LINE	DIRECTION	LENGTH
L2	S89°42'02"W	2634.31'
L3	S70°35'01"E	592.98'
L4	N05°56'25"E	573.05'

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

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

● = 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 10/1/2021 Date

Shelly Albrecht
Printed Name

salbrecht@fmellc.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

MAY 08, 2019
Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
PROFESSIONAL SURVEYOR
09-28-21

Certificate Number:

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: ___Franklin Mountain Energy, LLC_____ **OGRID:** ____373910_____ **Date:** __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

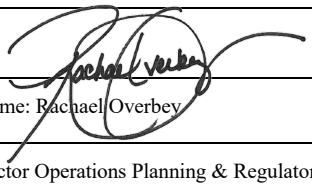
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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@fmellc.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 **30-025-50906**	TBD	M-9-24S-35E	250 FSL 1238 FWL	750 +/-	1100 +/-	500 +/-
Colorado Fed Com 801H	TBD	M-9-24S-35E	250 FSL 1273 FWL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 802H	TBD	M-9-24S-35E	250 FSL 1308 FWL	900 +/-	1100 +/-	500 +/-
Colorado Fed Com 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 **30-025-50906**	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 801H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 802H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Colorado Fed Com 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

FRANKLIN MOUNTAIN ENERGY

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.

FRANKLIN MOUNTAIN ENERGY

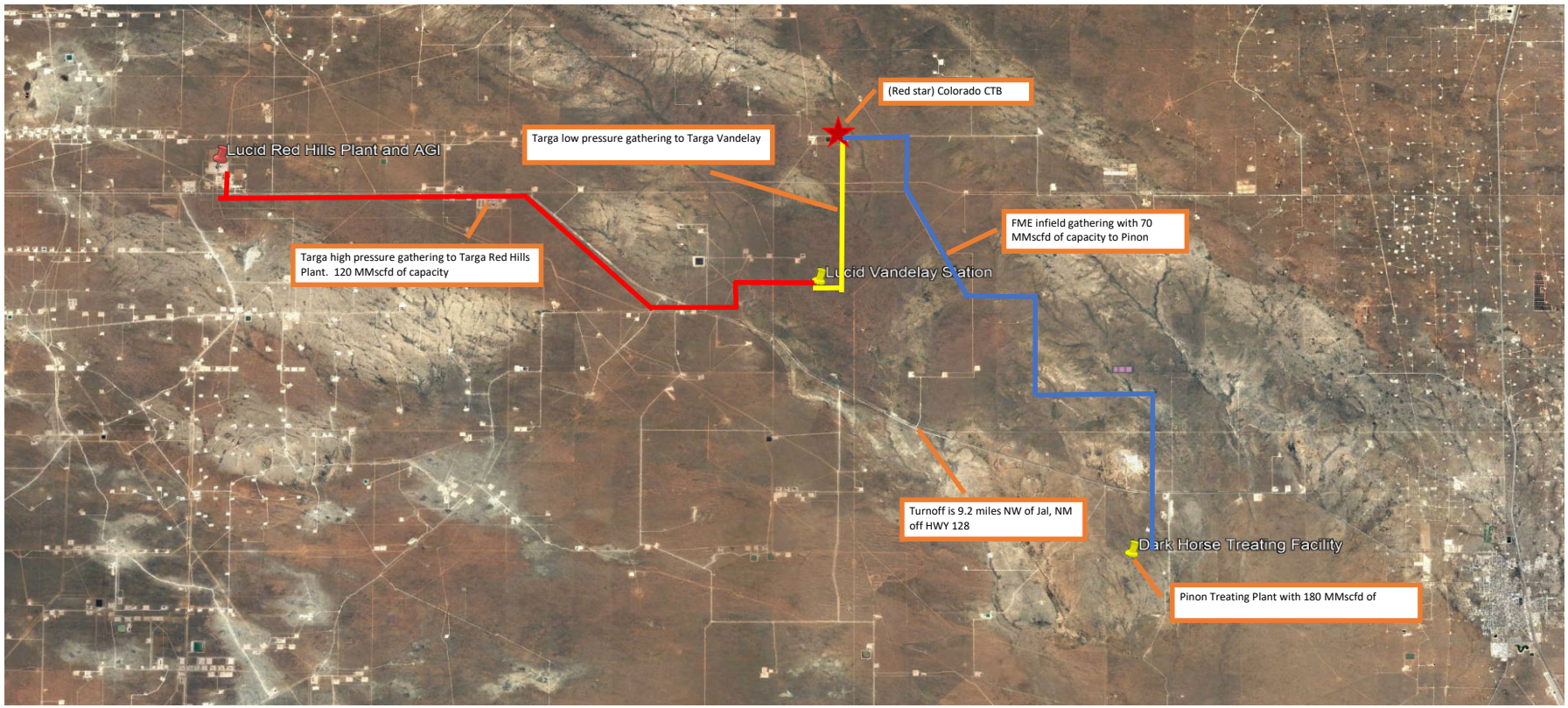
- Weekly AVOs will be performed, and any leaking thief hatches will be cleaned and properly re-sealed.

- *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



FRANKLIN MOUNTAIN ENERGY

Colorado Fed Com 102H

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	2,543'	879'			Carbonates
Salado	2,207'	1,215'			Salt, Carbonate & Clastics
Base Salt	598'	2,824'			Shaley Carbonate & Shale
Lamar	-1,825'	5,247'			Carbonate & Clastics
Bell Canyon	-1,906'	5,328'			Sandstone - oil/gas/water
Cherry Canyon	-2,853'	6,275'			Sandstone - oil/gas/water
Brushy Canyon	-4,192'	7,614'			Sand/carb/shales - oil/gas/water
Leonard	-5,262'	8,684'			Sand/carb/shales - oil/gas/water
HZ Target at Landing	-5,381'	8,803'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,522'	8,944'			Shale/Carbonates - oil/gas
Avalon	-5,549'	8,971'			Shale/Carbonates - oil/gas

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

Upper Permian Sands	0- 400’	Fresh Water
Delaware Sands	5,328’	Oil
Leonard	8,684’	Oil
Avalon	8,971’	Oil

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

4. **Casing Program:**

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

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5280	1.75	1.71	2.94	3.35
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	9163	1.45	1.67	2.22	1.52
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606	18961	1.32	1.64	1.36	1.13
						TVD	8803				2.00

7 5/8”casing will be set at 9,163’MD/8,803’ TVD at 90°Inc. Stress calculations on 5 ½” casing performed assuming 18,961’ depth. Actual max vertical depth is 8,803’.

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	Lead Type of cmt	Lead Yield ft3/sk	Lead Water gal/sk	Lead TOC ft	Tail Sacks	Tail Type of cmt	Tail Yield ft3/sk	Tail Water gal/sk	Tail TOC	Excess
Surf	17.5	13.375	1300	803	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal 0.125pps Poly-E-Flake	1.747	9.06	0	330	Tail, 14.8 ppg, Class C, 1% CaCl2, 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5280	1551	Lead, 12.8 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	1.79	9.74	0	154	Tail, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.33	6.37	4980	100%
Int2	8.75	7.625	9163	207	Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.13	5.97	4280	94	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CaICl2	1.33	6.29	8163	50%
Prod	6.75	5.5	18961	805	Tail, 14.5 ppg, Gas Migration Control	1.34	6.24	8163						20%

5. Minimum Specifications for Pressure Control:

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated, and the ram-type will be equipped with blind rams on bottom and 4 ½" x 7" variable pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.
Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5,000/250 psig and the annular preventer to 5,000/250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the second intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The second intermediate casing will be tested to 2000 psi for 30 minutes prior to drillout.
Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

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

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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' – 9,163'	Brine	8.8-10.2	28-34	N/c
9,163' – 18,961' Lateral	Oil Base	10.0-12.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 10-11 ppg. In order to maintain hole stability, mud weights up to 12 ppg may be utilized.
An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.
Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary well control and monitoring equipment:

(A) A kelly cock will be kept in the drill string at all times.
(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
(C) H2S monitoring and detection equipment will be utilized from surface casing point to TD.
(D) A wear bushing will be installed in the wellhead prior to drilling out of the surface casing.

8. Logging, testing and coring program:

GR–CCL-CNL Will be run in cased hole during completions phase of operations.
Open-hole logs are not planned for this well.

9. Abnormal conditions, pressures, temperatures and potential hazards:

The estimated bottom-hole temperature at 8,803' TVD (deepest point of the well) is 160F with an estimated maximum bottom-hole pressure (BHP) at the same point of 5,493 psig (based on 12 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

A. All personnel shall receive proper awareness H2S training.
B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
C. Required Emergency Equipment
    a. Well Control Equipment
        i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.
        ii. Choke manifold with a remotely operated hydraulic choke.
        iii. Mud/gas separator
    b. Protective equipment for essential personnel
        i. Breathing Apparatus
            1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.
            2. Work/Escape 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.

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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 ½" casing due to the tight clearance with 6 3/4" hole and 5 ½" casing due to tight clearances.

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Colorado Fed Com
Well: Colorado Fed Com 102H
Wellbore: OH
Design: Plan #1

3391.9' GE + 30' KB @ 3421.90usft

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

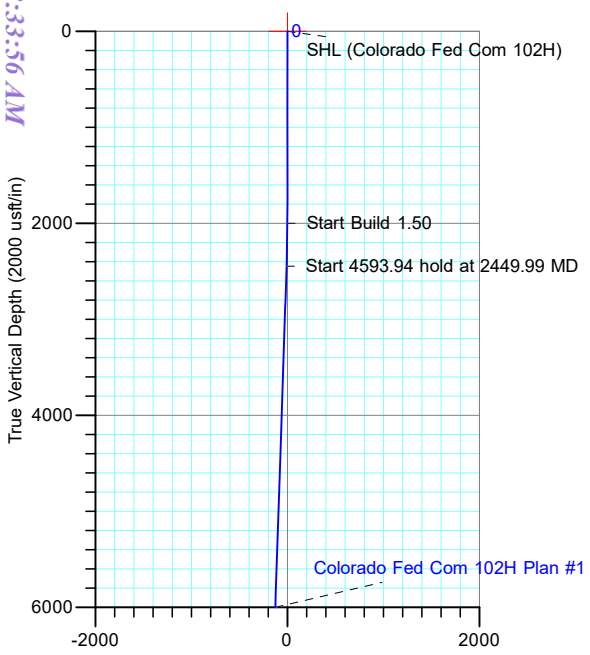
FRANKLIN MOUNTAIN ENERGY

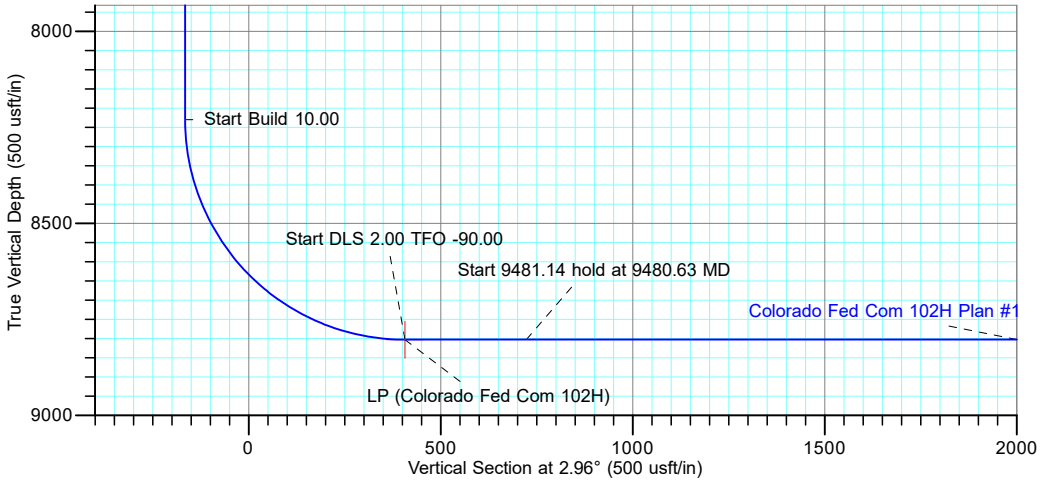
SECTION DETAILS

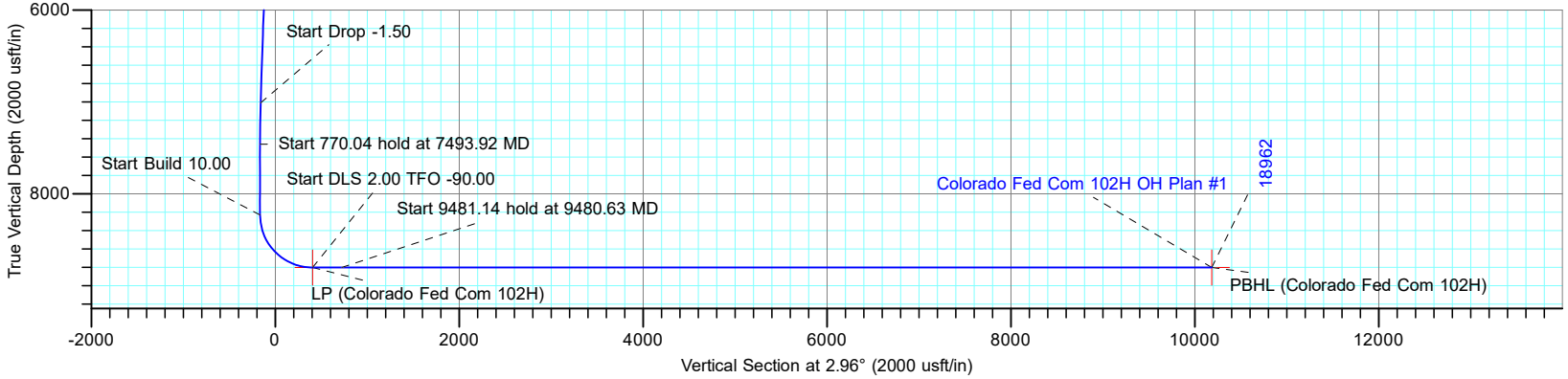
MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2449.99	6.75	109.18	2448.95	-8.70	25.01	1.50	109.18	-7.39	Start 4593.94 hold at 2449.99 MD
7043.93	6.75	109.18	7011.05	-186.05	534.99	0.00	0.00	-158.17	Start Drop -1.50
7493.92	0.00	0.00	7460.00	-194.75	560.00	1.50	180.00	-165.57	Start 770.04 hold at 7493.92 MD
8263.96	0.00	0.00	8230.04	-194.75	560.00	0.00	0.00	-165.57	Start Build 10.00
9163.96	90.00	5.70	8803.00	375.37	616.91	10.00	5.70	406.74	Start DLS 2.00 TFO -90.00
9480.63	90.00	359.37	8803.00	691.57	630.90	2.00	-90.00	723.23	Start 9481.14 hold at 9480.63 MD
18961.77	90.00	359.37	8803.00	10172.13	526.10	0.00	0.00	10185.73	TD at 18961.77

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (Colorado Fed Com 102H)	8803.00	375.37	616.91	32.226490	-103.374982
PBHL (Colorado Fed Com 102H)	8803.00	10172.13	526.10	32.253419	-103.374993
SHL (Colorado Fed Com 102H)	0.00	0.00	0.00	32.225474	-103.376987







Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Colorado Fed Com
Well: Colorado Fed Com 102H
Wellbore: OH
Design: Plan #1

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

Magnetic Field
Strength: 47492.4nT
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Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

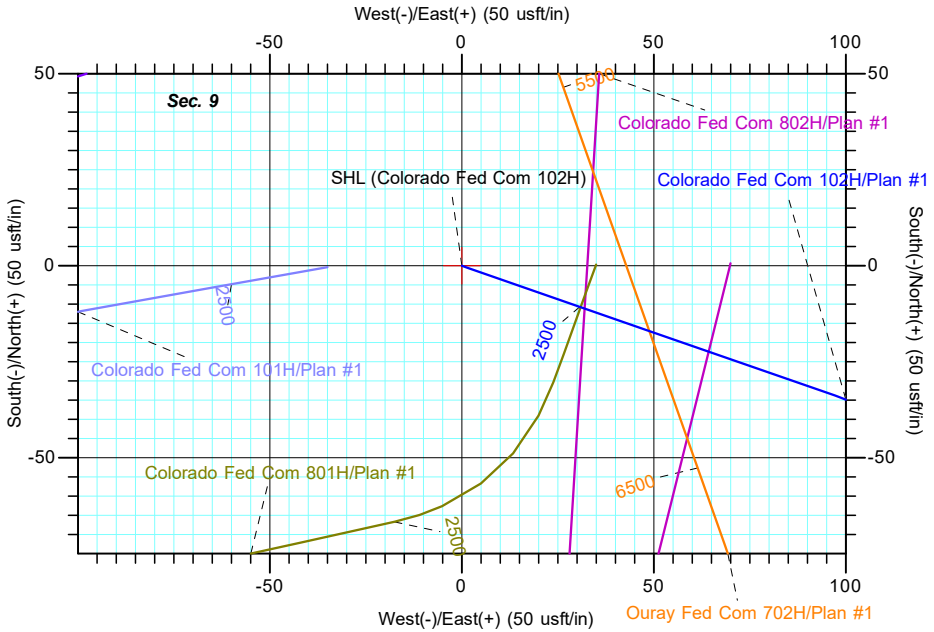
FRANKLIN MOUNTAIN ENERGY

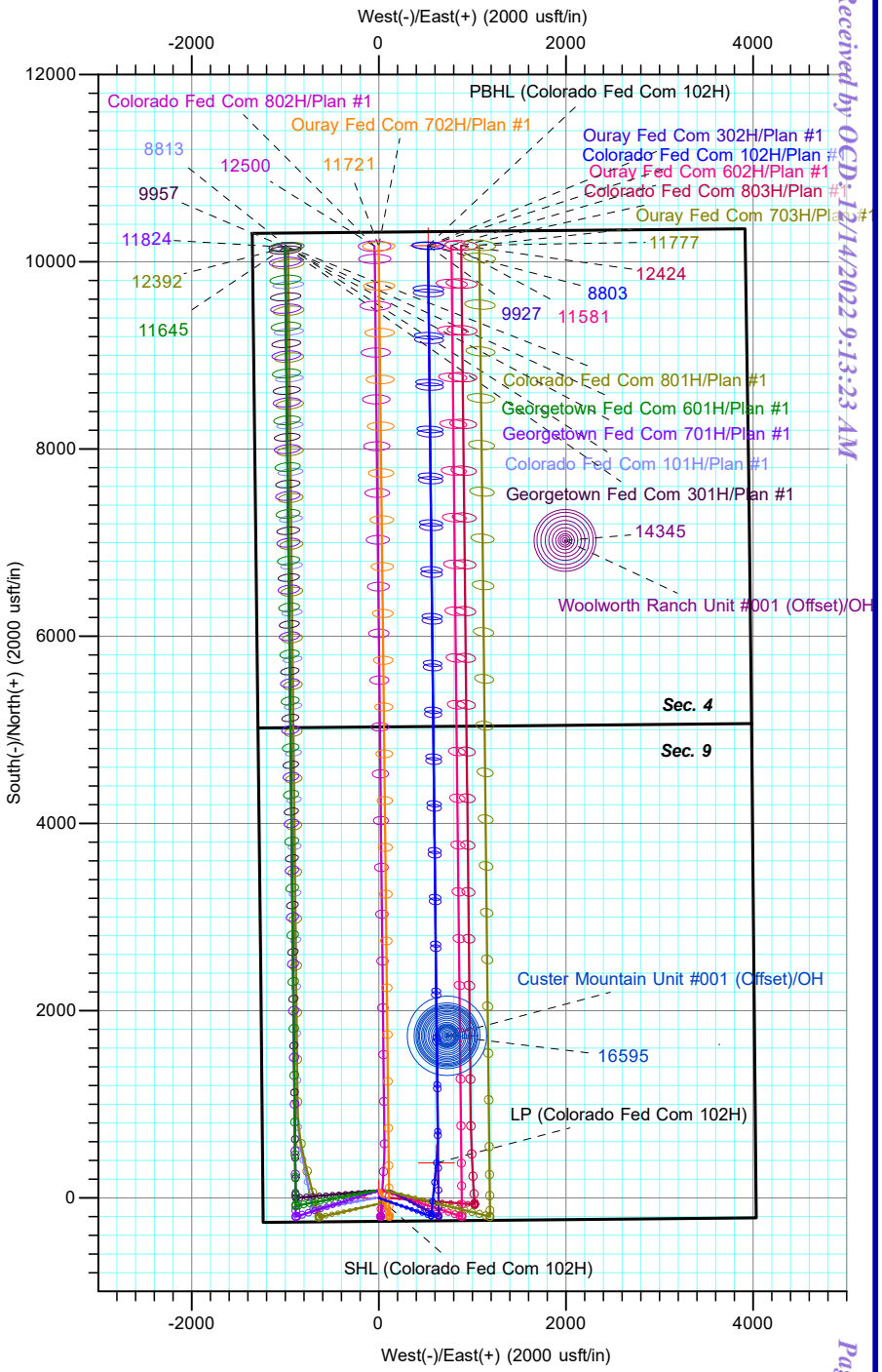
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (Colorado Fed Com 102H)	8803.00	375.37	616.91	447452.68	837688.47	32.226490	-103.374982
PBHL (Colorado Fed Com 102H)	8803.00	10172.13	526.10	457249.44	837597.66	32.253419	-103.374993
SHL (Colorado Fed Com 102H)	0.00	0.00	0.00	447077.31	837071.56	32.225474	-103.376987

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2449.99	6.75	109.18	2448.95	-8.70	25.01	1.50	109.18	-7.39	Start 4593.94 hold at 2449.99 MD
7043.93	6.75	109.18	7011.05	-186.05	534.99	0.00	0.00	-158.17	Start Drop -1.50
7493.92	0.00	0.00	7460.00	-194.75	560.00	1.50	180.00	-165.57	Start 770.04 hold at 7493.92 MD
8263.96	0.00	0.00	8230.04	-194.75	560.00	0.00	0.00	-165.57	Start Build 10.00
9163.96	90.00	5.70	8803.00	375.37	616.91	10.00	5.70	406.74	Start DLS 2.00 TFO -90.00
9480.63	90.00	359.37	8803.00	691.57	630.90	2.00	-90.00	723.23	Start 9481.14 hold at 9480.63 MD
18961.77	90.00	359.37	8803.00	10172.13	526.10	0.00	0.00	10185.73	TD at 18961.77





TOTAL DIRECTIONAL SERVICES LLC

Plan: Plan #1 (Colorado Fed Com 102H/OH)
Colorado Fed Com
Created By: Dustin Ault Date: 16:10, September 03 2021
Date: _____
Approved: _____ Date: _____

Franklin Mountain Energy

Lea County, NM (NAD83)
Colorado Fed Com
Colorado Fed Com 102H

OH

Plan: Plan #1

Standard Planning Report

31 August, 2021

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Planning Report

total

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Company:	Franklin Mountain Energy	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site:	Colorado Fed Com	**North Reference:**	Grid
Well:	Colorado Fed Com 102H	**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 102H

Well Position	**+N/-S**	0.34 usft	**Northing:**	447,077.31 usft	**Latitude:**	32.225474
	+E/-W	34.99 usft	**Easting:**	837,071.56 usft	**Longitude:**	-103.376988
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,391.90 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/31/2021	6.43	59.92	47,492.38501419

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	2.96

Plan Survey Tool Program **Date** 8/31/2021

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,961.66	Plan #1 (OH)	OWSG (Rev2) MWD	
				OWSG MWD - Standard	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,449.99	6.75	109.18	2,448.95	-8.70	25.01	1.50	1.50	0.00	109.18	
7,043.93	6.75	109.18	7,011.05	-186.05	534.99	0.00	0.00	0.00	0.00	
7,493.92	0.00	0.00	7,460.00	-194.75	560.00	1.50	-1.50	0.00	180.00	
8,263.96	0.00	0.00	8,230.04	-194.75	560.00	0.00	0.00	0.00	0.00	
9,163.96	90.00	5.70	8,803.00	375.37	616.91	10.00	10.00	0.00	5.70	
9,480.63	90.00	359.37	8,803.00	691.57	630.90	2.00	0.00	-2.00	-90.00	
18,961.77	90.00	359.37	8,803.00	10,172.13	526.10	0.00	0.00	0.00	0.00	PBHL (Colorado Fed

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Planning Report

total

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Company:	Franklin Mountain Energy	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site:	Colorado Fed Com	**North Reference:**	Grid
Well:	Colorado Fed Com 102H	**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 102H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
2,100.00	1.50	109.18	2,099.99	-0.43	1.24	-0.37	1.50	1.50	0.00
2,200.00	3.00	109.18	2,199.91	-1.72	4.94	-1.46	1.50	1.50	0.00
2,300.00	4.50	109.18	2,299.69	-3.87	11.12	-3.29	1.50	1.50	0.00
2,400.00	6.00	109.18	2,399.27	-6.87	19.76	-5.84	1.50	1.50	0.00
2,449.99	6.75	109.18	2,448.95	-8.70	25.01	-7.39	1.50	1.50	0.00
Start 4593.94 hold at 2449.99 MD									
2,500.00	6.75	109.18	2,498.61	-10.63	30.56	-9.03	0.00	0.00	0.00
2,600.00	6.75	109.18	2,597.92	-14.49	41.66	-12.32	0.00	0.00	0.00
2,700.00	6.75	109.18	2,697.23	-18.35	52.76	-15.60	0.00	0.00	0.00
2,800.00	6.75	109.18	2,796.53	-22.21	63.86	-18.88	0.00	0.00	0.00
2,900.00	6.75	109.18	2,895.84	-26.07	74.96	-22.16	0.00	0.00	0.00
3,000.00	6.75	109.18	2,995.15	-29.93	86.06	-25.45	0.00	0.00	0.00
3,100.00	6.75	109.18	3,094.45	-33.79	97.17	-28.73	0.00	0.00	0.00
3,200.00	6.75	109.18	3,193.76	-37.65	108.27	-32.01	0.00	0.00	0.00
3,300.00	6.75	109.18	3,293.07	-41.51	119.37	-35.29	0.00	0.00	0.00
3,400.00	6.75	109.18	3,392.38	-45.37	130.47	-38.57	0.00	0.00	0.00
3,500.00	6.75	109.18	3,491.68	-49.23	141.57	-41.86	0.00	0.00	0.00
3,600.00	6.75	109.18	3,590.99	-53.09	152.67	-45.14	0.00	0.00	0.00
3,700.00	6.75	109.18	3,690.30	-56.96	163.77	-48.42	0.00	0.00	0.00
3,800.00	6.75	109.18	3,789.60	-60.82	174.88	-51.70	0.00	0.00	0.00
3,900.00	6.75	109.18	3,888.91	-64.68	185.98	-54.98	0.00	0.00	0.00
4,000.00	6.75	109.18	3,988.22	-68.54	197.08	-58.27	0.00	0.00	0.00
4,100.00	6.75	109.18	4,087.52	-72.40	208.18	-61.55	0.00	0.00	0.00
4,200.00	6.75	109.18	4,186.83	-76.26	219.28	-64.83	0.00	0.00	0.00
4,300.00	6.75	109.18	4,286.14	-80.12	230.38	-68.11	0.00	0.00	0.00
4,400.00	6.75	109.18	4,385.44	-83.98	241.48	-71.40	0.00	0.00	0.00
4,500.00	6.75	109.18	4,484.75	-87.84	252.58	-74.68	0.00	0.00	0.00
4,600.00	6.75	109.18	4,584.06	-91.70	263.69	-77.96	0.00	0.00	0.00
4,700.00	6.75	109.18	4,683.36	-95.56	274.79	-81.24	0.00	0.00	0.00
4,800.00	6.75	109.18	4,782.67	-99.42	285.89	-84.52	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Planning Report

total

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Company:	Franklin Mountain Energy	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site:	Colorado Fed Com	**North Reference:**	Grid
Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	6.75	109.18	4,881.98	-103.28	296.99	-87.81	0.00	0.00	0.00
5,000.00	6.75	109.18	4,981.29	-107.14	308.09	-91.09	0.00	0.00	0.00
5,100.00	6.75	109.18	5,080.59	-111.00	319.19	-94.37	0.00	0.00	0.00
5,200.00	6.75	109.18	5,179.90	-114.87	330.29	-97.65	0.00	0.00	0.00
5,300.00	6.75	109.18	5,279.21	-118.73	341.39	-100.93	0.00	0.00	0.00
5,400.00	6.75	109.18	5,378.51	-122.59	352.50	-104.22	0.00	0.00	0.00
5,500.00	6.75	109.18	5,477.82	-126.45	363.60	-107.50	0.00	0.00	0.00
5,600.00	6.75	109.18	5,577.13	-130.31	374.70	-110.78	0.00	0.00	0.00
5,700.00	6.75	109.18	5,676.43	-134.17	385.80	-114.06	0.00	0.00	0.00
5,800.00	6.75	109.18	5,775.74	-138.03	396.90	-117.34	0.00	0.00	0.00
5,900.00	6.75	109.18	5,875.05	-141.89	408.00	-120.63	0.00	0.00	0.00
6,000.00	6.75	109.18	5,974.35	-145.75	419.10	-123.91	0.00	0.00	0.00
6,100.00	6.75	109.18	6,073.66	-149.61	430.20	-127.19	0.00	0.00	0.00
6,200.00	6.75	109.18	6,172.97	-153.47	441.31	-130.47	0.00	0.00	0.00
6,300.00	6.75	109.18	6,272.27	-157.33	452.41	-133.76	0.00	0.00	0.00
6,400.00	6.75	109.18	6,371.58	-161.19	463.51	-137.04	0.00	0.00	0.00
6,500.00	6.75	109.18	6,470.89	-165.05	474.61	-140.32	0.00	0.00	0.00
6,600.00	6.75	109.18	6,570.20	-168.91	485.71	-143.60	0.00	0.00	0.00
6,700.00	6.75	109.18	6,669.50	-172.78	496.81	-146.88	0.00	0.00	0.00
6,800.00	6.75	109.18	6,768.81	-176.64	507.91	-150.17	0.00	0.00	0.00
6,900.00	6.75	109.18	6,868.12	-180.50	519.02	-153.45	0.00	0.00	0.00
7,000.00	6.75	109.18	6,967.42	-184.36	530.12	-156.73	0.00	0.00	0.00
7,043.93	6.75	109.18	7,011.05	-186.05	534.99	-158.17	0.00	0.00	0.00
Start Drop -1.50									
7,100.00	5.91	109.18	7,066.78	-188.08	540.83	-159.90	1.50	-1.50	0.00
7,200.00	4.41	109.18	7,166.37	-191.04	549.32	-162.41	1.50	-1.50	0.00
7,300.00	2.91	109.18	7,266.16	-193.13	555.35	-164.19	1.50	-1.50	0.00
7,400.00	1.41	109.18	7,366.09	-194.37	558.91	-165.24	1.50	-1.50	0.00
7,493.92	0.00	0.00	7,460.00	-194.75	560.00	-165.57	1.50	-1.50	0.00
Start 770.04 hold at 7493.92 MD									
7,500.00	0.00	0.00	7,466.08	-194.75	560.00	-165.57	0.00	0.00	0.00
7,600.00	0.00	0.00	7,566.08	-194.75	560.00	-165.57	0.00	0.00	0.00
7,700.00	0.00	0.00	7,666.08	-194.75	560.00	-165.57	0.00	0.00	0.00
7,800.00	0.00	0.00	7,766.08	-194.75	560.00	-165.57	0.00	0.00	0.00
7,900.00	0.00	0.00	7,866.08	-194.75	560.00	-165.57	0.00	0.00	0.00
8,000.00	0.00	0.00	7,966.08	-194.75	560.00	-165.57	0.00	0.00	0.00
8,100.00	0.00	0.00	8,066.08	-194.75	560.00	-165.57	0.00	0.00	0.00
8,200.00	0.00	0.00	8,166.08	-194.75	560.00	-165.57	0.00	0.00	0.00
8,263.96	0.00	0.00	8,230.04	-194.75	560.00	-165.57	0.00	0.00	0.00
Start Build 10.00									
8,300.00	3.60	5.70	8,266.05	-193.62	560.11	-164.43	10.00	10.00	0.00
8,350.00	8.60	5.70	8,315.76	-188.33	560.64	-159.13	10.00	10.00	0.00
8,400.00	13.60	5.70	8,364.80	-178.76	561.60	-149.51	10.00	10.00	0.00
8,450.00	18.60	5.70	8,412.83	-164.96	562.97	-135.66	10.00	10.00	0.00
8,500.00	23.60	5.70	8,459.46	-147.05	564.76	-117.68	10.00	10.00	0.00
8,550.00	28.60	5.70	8,504.34	-125.17	566.95	-95.72	10.00	10.00	0.00
8,600.00	33.60	5.70	8,547.14	-99.47	569.51	-69.92	10.00	10.00	0.00
8,650.00	38.60	5.70	8,587.53	-70.17	572.44	-40.51	10.00	10.00	0.00
8,700.00	43.60	5.70	8,625.19	-37.47	575.70	-7.68	10.00	10.00	0.00
8,750.00	48.60	5.70	8,659.85	-1.63	579.28	28.30	10.00	10.00	0.00
8,800.00	53.60	5.70	8,691.23	37.08	583.14	67.15	10.00	10.00	0.00
8,850.00	58.60	5.70	8,719.11	78.37	587.26	108.59	10.00	10.00	0.00
8,900.00	63.60	5.70	8,743.26	121.91	591.61	152.31	10.00	10.00	0.00

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Planning Report

total

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Site:	Colorado Fed Com	**North Reference:**	Grid
Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,950.00	68.60	5.70	8,763.51	167.38	596.15	197.95	10.00	10.00	0.00
9,000.00	73.60	5.70	8,779.70	214.44	600.84	245.19	10.00	10.00	0.00
9,050.00	78.60	5.70	8,791.70	262.72	605.66	293.65	10.00	10.00	0.00
9,100.00	83.60	5.70	8,799.43	311.86	610.57	342.98	10.00	10.00	0.00
9,150.00	88.60	5.70	8,802.83	361.48	615.52	392.79	10.00	10.00	0.00
9,163.96	90.00	5.70	8,803.00	375.37	616.91	406.73	10.00	10.00	0.00
Start DLS 2.00 TFO -90.00 - LP (Colorado Fed Com 102H)									
9,200.00	90.00	4.98	8,803.00	411.26	620.26	442.74	2.00	0.00	-2.00
9,300.00	90.00	2.98	8,803.00	511.01	627.20	542.72	2.00	0.00	-2.00
9,400.00	90.00	0.98	8,803.00	610.95	630.65	642.70	2.00	0.00	-2.00
9,480.63	90.00	359.37	8,803.00	691.57	630.90	723.23	2.00	0.00	-2.00
Start 9481.14 hold at 9480.63 MD									
9,500.00	90.00	359.37	8,803.00	710.94	630.68	742.57	0.00	0.00	0.00
9,600.00	90.00	359.37	8,803.00	810.94	629.58	842.37	0.00	0.00	0.00
9,700.00	90.00	359.37	8,803.00	910.93	628.47	942.17	0.00	0.00	0.00
9,800.00	90.00	359.37	8,803.00	1,010.92	627.37	1,041.98	0.00	0.00	0.00
9,900.00	90.00	359.37	8,803.00	1,110.92	626.26	1,141.78	0.00	0.00	0.00
10,000.00	90.00	359.37	8,803.00	1,210.91	625.16	1,241.58	0.00	0.00	0.00
10,100.00	90.00	359.37	8,803.00	1,310.90	624.05	1,341.39	0.00	0.00	0.00
10,200.00	90.00	359.37	8,803.00	1,410.90	622.94	1,441.19	0.00	0.00	0.00
10,300.00	90.00	359.37	8,803.00	1,510.89	621.84	1,540.99	0.00	0.00	0.00
10,400.00	90.00	359.37	8,803.00	1,610.89	620.73	1,640.80	0.00	0.00	0.00
10,500.00	90.00	359.37	8,803.00	1,710.88	619.63	1,740.60	0.00	0.00	0.00
10,600.00	90.00	359.37	8,803.00	1,810.87	618.52	1,840.40	0.00	0.00	0.00
10,700.00	90.00	359.37	8,803.00	1,910.87	617.42	1,940.21	0.00	0.00	0.00
10,800.00	90.00	359.37	8,803.00	2,010.86	616.31	2,040.01	0.00	0.00	0.00
10,900.00	90.00	359.37	8,803.00	2,110.86	615.21	2,139.81	0.00	0.00	0.00
11,000.00	90.00	359.37	8,803.00	2,210.85	614.10	2,239.62	0.00	0.00	0.00
11,100.00	90.00	359.37	8,803.00	2,310.84	613.00	2,339.42	0.00	0.00	0.00
11,200.00	90.00	359.37	8,803.00	2,410.84	611.89	2,439.22	0.00	0.00	0.00
11,300.00	90.00	359.37	8,803.00	2,510.83	610.79	2,539.03	0.00	0.00	0.00
11,400.00	90.00	359.37	8,803.00	2,610.83	609.68	2,638.83	0.00	0.00	0.00
11,500.00	90.00	359.37	8,803.00	2,710.82	608.58	2,738.63	0.00	0.00	0.00
11,600.00	90.00	359.37	8,803.00	2,810.81	607.47	2,838.44	0.00	0.00	0.00
11,700.00	90.00	359.37	8,803.00	2,910.81	606.36	2,938.24	0.00	0.00	0.00
11,800.00	90.00	359.37	8,803.00	3,010.80	605.26	3,038.04	0.00	0.00	0.00
11,900.00	90.00	359.37	8,803.00	3,110.79	604.15	3,137.85	0.00	0.00	0.00
12,000.00	90.00	359.37	8,803.00	3,210.79	603.05	3,237.65	0.00	0.00	0.00
12,100.00	90.00	359.37	8,803.00	3,310.78	601.94	3,337.45	0.00	0.00	0.00
12,200.00	90.00	359.37	8,803.00	3,410.78	600.84	3,437.26	0.00	0.00	0.00
12,300.00	90.00	359.37	8,803.00	3,510.77	599.73	3,537.06	0.00	0.00	0.00
12,400.00	90.00	359.37	8,803.00	3,610.76	598.63	3,636.86	0.00	0.00	0.00
12,500.00	90.00	359.37	8,803.00	3,710.76	597.52	3,736.67	0.00	0.00	0.00
12,600.00	90.00	359.37	8,803.00	3,810.75	596.42	3,836.47	0.00	0.00	0.00
12,700.00	90.00	359.37	8,803.00	3,910.75	595.31	3,936.27	0.00	0.00	0.00
12,800.00	90.00	359.37	8,803.00	4,010.74	594.21	4,036.08	0.00	0.00	0.00
12,900.00	90.00	359.37	8,803.00	4,110.73	593.10	4,135.88	0.00	0.00	0.00
13,000.00	90.00	359.37	8,803.00	4,210.73	592.00	4,235.68	0.00	0.00	0.00
13,100.00	90.00	359.37	8,803.00	4,310.72	590.89	4,335.49	0.00	0.00	0.00
13,200.00	90.00	359.37	8,803.00	4,410.72	589.79	4,435.29	0.00	0.00	0.00
13,300.00	90.00	359.37	8,803.00	4,510.71	588.68	4,535.09	0.00	0.00	0.00
13,400.00	90.00	359.37	8,803.00	4,610.70	587.57	4,634.90	0.00	0.00	0.00
13,500.00	90.00	359.37	8,803.00	4,710.70	586.47	4,734.70	0.00	0.00	0.00
13,600.00	90.00	359.37	8,803.00	4,810.69	585.36	4,834.50	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Planning Report

total

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Company:	Franklin Mountain Energy	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site:	Colorado Fed Com	**North Reference:**	Grid
Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,700.00	90.00	359.37	8,803.00	4,910.68	584.26	4,934.31	0.00	0.00	0.00
13,800.00	90.00	359.37	8,803.00	5,010.68	583.15	5,034.11	0.00	0.00	0.00
13,900.00	90.00	359.37	8,803.00	5,110.67	582.05	5,133.91	0.00	0.00	0.00
14,000.00	90.00	359.37	8,803.00	5,210.67	580.94	5,233.72	0.00	0.00	0.00
14,100.00	90.00	359.37	8,803.00	5,310.66	579.84	5,333.52	0.00	0.00	0.00
14,200.00	90.00	359.37	8,803.00	5,410.65	578.73	5,433.32	0.00	0.00	0.00
14,300.00	90.00	359.37	8,803.00	5,510.65	577.63	5,533.13	0.00	0.00	0.00
14,400.00	90.00	359.37	8,803.00	5,610.64	576.52	5,632.93	0.00	0.00	0.00
14,500.00	90.00	359.37	8,803.00	5,710.64	575.42	5,732.73	0.00	0.00	0.00
14,600.00	90.00	359.37	8,803.00	5,810.63	574.31	5,832.54	0.00	0.00	0.00
14,700.00	90.00	359.37	8,803.00	5,910.62	573.21	5,932.34	0.00	0.00	0.00
14,800.00	90.00	359.37	8,803.00	6,010.62	572.10	6,032.14	0.00	0.00	0.00
14,900.00	90.00	359.37	8,803.00	6,110.61	571.00	6,131.95	0.00	0.00	0.00
15,000.00	90.00	359.37	8,803.00	6,210.61	569.89	6,231.75	0.00	0.00	0.00
15,100.00	90.00	359.37	8,803.00	6,310.60	568.78	6,331.55	0.00	0.00	0.00
15,200.00	90.00	359.37	8,803.00	6,410.59	567.68	6,431.36	0.00	0.00	0.00
15,300.00	90.00	359.37	8,803.00	6,510.59	566.57	6,531.16	0.00	0.00	0.00
15,400.00	90.00	359.37	8,803.00	6,610.58	565.47	6,630.96	0.00	0.00	0.00
15,500.00	90.00	359.37	8,803.00	6,710.57	564.36	6,730.77	0.00	0.00	0.00
15,600.00	90.00	359.37	8,803.00	6,810.57	563.26	6,830.57	0.00	0.00	0.00
15,700.00	90.00	359.37	8,803.00	6,910.56	562.15	6,930.37	0.00	0.00	0.00
15,800.00	90.00	359.37	8,803.00	7,010.56	561.05	7,030.18	0.00	0.00	0.00
15,900.00	90.00	359.37	8,803.00	7,110.55	559.94	7,129.98	0.00	0.00	0.00
16,000.00	90.00	359.37	8,803.00	7,210.54	558.84	7,229.78	0.00	0.00	0.00
16,100.00	90.00	359.37	8,803.00	7,310.54	557.73	7,329.59	0.00	0.00	0.00
16,200.00	90.00	359.37	8,803.00	7,410.53	556.63	7,429.39	0.00	0.00	0.00
16,300.00	90.00	359.37	8,803.00	7,510.53	555.52	7,529.19	0.00	0.00	0.00
16,400.00	90.00	359.37	8,803.00	7,610.52	554.42	7,629.00	0.00	0.00	0.00
16,500.00	90.00	359.37	8,803.00	7,710.51	553.31	7,728.80	0.00	0.00	0.00
16,600.00	90.00	359.37	8,803.00	7,810.51	552.20	7,828.60	0.00	0.00	0.00
16,700.00	90.00	359.37	8,803.00	7,910.50	551.10	7,928.41	0.00	0.00	0.00
16,800.00	90.00	359.37	8,803.00	8,010.50	549.99	8,028.21	0.00	0.00	0.00
16,900.00	90.00	359.37	8,803.00	8,110.49	548.89	8,128.01	0.00	0.00	0.00
17,000.00	90.00	359.37	8,803.00	8,210.48	547.78	8,227.82	0.00	0.00	0.00
17,100.00	90.00	359.37	8,803.00	8,310.48	546.68	8,327.62	0.00	0.00	0.00
17,200.00	90.00	359.37	8,803.00	8,410.47	545.57	8,427.42	0.00	0.00	0.00
17,300.00	90.00	359.37	8,803.00	8,510.46	544.47	8,527.23	0.00	0.00	0.00
17,400.00	90.00	359.37	8,803.00	8,610.46	543.36	8,627.03	0.00	0.00	0.00
17,500.00	90.00	359.37	8,803.00	8,710.45	542.26	8,726.83	0.00	0.00	0.00
17,600.00	90.00	359.37	8,803.00	8,810.45	541.15	8,826.64	0.00	0.00	0.00
17,700.00	90.00	359.37	8,803.00	8,910.44	540.05	8,926.44	0.00	0.00	0.00
17,800.00	90.00	359.37	8,803.00	9,010.43	538.94	9,026.24	0.00	0.00	0.00
17,900.00	90.00	359.37	8,803.00	9,110.43	537.84	9,126.05	0.00	0.00	0.00
18,000.00	90.00	359.37	8,803.00	9,210.42	536.73	9,225.85	0.00	0.00	0.00
18,100.00	90.00	359.37	8,803.00	9,310.42	535.63	9,325.65	0.00	0.00	0.00
18,200.00	90.00	359.37	8,803.00	9,410.41	534.52	9,425.46	0.00	0.00	0.00
18,300.00	90.00	359.37	8,803.00	9,510.40	533.41	9,525.26	0.00	0.00	0.00
18,400.00	90.00	359.37	8,803.00	9,610.40	532.31	9,625.06	0.00	0.00	0.00
18,500.00	90.00	359.37	8,803.00	9,710.39	531.20	9,724.87	0.00	0.00	0.00
18,600.00	90.00	359.37	8,803.00	9,810.39	530.10	9,824.67	0.00	0.00	0.00
18,700.00	90.00	359.37	8,803.00	9,910.38	528.99	9,924.47	0.00	0.00	0.00
18,800.00	90.00	359.37	8,803.00	10,010.37	527.89	10,024.28	0.00	0.00	0.00
18,900.00	90.00	359.37	8,803.00	10,110.37	526.78	10,124.08	0.00	0.00	0.00
18,961.77	90.00	359.37	8,803.00	10,172.13	526.10	10,185.73	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Planning Report

total

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Company:	Franklin Mountain Energy	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site:	Colorado Fed Com	**North Reference:**	Grid
Well:	Colorado Fed Com 102H	**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)
TD at 18961.77 - PBHL (Colorado Fed Com 102H)									

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 Com - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	447,077.31	837,071.56	32.225474	-103.376988
PBHL (Colorado Fed Co - plan hits target center - Point	0.00	0.00	8,803.00	10,172.13	526.10	457,249.44	837,597.66	32.253419	-103.374993
LP (Colorado Fed Com - plan hits target center - Point	0.00	0.00	8,803.00	375.37	616.91	447,452.68	837,688.47	32.226490	-103.374982

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,000.00	2,000.00	0.00	0.00	Start Build 1.50
2,449.99	2,448.95	-8.70	25.01	Start 4593.94 hold at 2449.99 MD
7,043.93	7,011.05	-186.05	534.99	Start Drop -1.50
7,493.92	7,460.00	-194.75	560.00	Start 770.04 hold at 7493.92 MD
8,263.96	8,230.04	-194.75	560.00	Start Build 10.00
9,163.96	8,803.00	375.37	616.91	Start DLS 2.00 TFO -90.00
9,480.63	8,803.00	691.57	630.90	Start 9481.14 hold at 9480.63 MD
18,961.77	8,803.00	10,172.13	526.10	TD at 18961.77

Franklin Mountain Energy

Lea County, NM (NAD83)
Colorado Fed Com
Colorado Fed Com 102H

OH
Plan #1

Anticollision Report

03 September, 2021

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Plan #1

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

Survey Tool Program **Date** 9/3/2021

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	18,961.66	Plan #1 (OH)	OWSG (Rev2) MWD	OWSG MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Colorado Fed Com						
Colorado Fed Com 101H - OH - Plan #1	2,000.00	1,999.60	34.99	25.18	3.567	CC, ES
Colorado Fed Com 101H - OH - Plan #1	2,100.00	2,099.22	36.43	26.12	3.536	SF
Colorado Fed Com 801H - OH - Plan #1	1,830.77	1,831.50	32.77	23.88	3.684	CC, ES
Colorado Fed Com 801H - OH - Plan #1	1,900.00	1,900.40	33.35	24.12	3.612	SF
Colorado Fed Com 802H - OH - Plan #1	1,864.16	1,865.52	67.78	58.72	7.482	CC
Colorado Fed Com 802H - OH - Plan #1	1,900.00	1,901.16	67.87	58.64	7.350	ES
Colorado Fed Com 802H - OH - Plan #1	2,200.00	2,198.12	75.67	65.00	7.089	SF
Colorado Fed Com 803H - OH - Plan #1	1,416.26	1,417.46	104.98	98.13	15.319	CC
Colorado Fed Com 803H - OH - Plan #1	1,500.00	1,500.00	104.99	97.72	14.433	ES
Colorado Fed Com 803H - OH - Plan #1	8,750.00	8,741.90	450.76	407.17	10.341	SF
Custer Mountain Unit #001 (Offset) - OH - OH	10,520.47	8,793.10	109.52	-95.28	0.535	Level 1, CC, ES, SF
Woolworth Ranch Unit #001 (Offset) - OH - OH	15,798.50	8,796.31	1,429.97	1,189.11	5.937	CC
Woolworth Ranch Unit #001 (Offset) - OH - OH	15,800.00	8,796.31	1,429.97	1,189.10	5.937	ES
Woolworth Ranch Unit #001 (Offset) - OH - OH	15,900.00	8,796.29	1,433.57	1,191.76	5.929	SF
Georgetown/Ouray						
Georgetown Fed Com 301H - OH - Plan #1	2,000.00	1,990.70	115.82	106.02	11.821	CC, ES
Georgetown Fed Com 301H - OH - Plan #1	18,961.77	20,131.78	1,913.88	1,711.95	9.478	SF
Georgetown Fed Com 601H - OH - Plan #1	2,000.00	1,991.30	92.07	82.27	9.395	CC, ES
Georgetown Fed Com 601H - OH - Plan #1	2,200.00	2,191.21	96.39	85.60	8.935	SF
Georgetown Fed Com 701H - OH - Plan #1	2,000.00	1,991.50	77.37	67.57	7.895	CC, ES
Georgetown Fed Com 701H - OH - Plan #1	2,200.00	2,191.41	80.36	69.57	7.447	SF
Ouray Fed Com 302H - OH - Plan #1	7,273.11	7,266.36	76.73	39.94	2.085	CC
Ouray Fed Com 302H - OH - Plan #1	8,350.00	8,347.23	80.22	38.50	1.923	ES, SF
Ouray Fed Com 602H - OH - Plan #1	2,424.35	2,415.68	88.31	76.41	7.419	CC
Ouray Fed Com 602H - OH - Plan #1	7,800.00	7,796.60	98.58	57.73	2.413	ES, SF
Ouray Fed Com 702H - OH - Plan #1	2,000.00	1,991.50	77.10	67.30	7.868	CC
Ouray Fed Com 702H - OH - Plan #1	2,100.00	2,091.49	77.27	66.98	7.504	ES
Ouray Fed Com 702H - OH - Plan #1	2,400.00	2,390.77	82.32	70.54	6.988	SF
Ouray Fed Com 703H - OH - Plan #1	2,705.48	2,694.87	100.10	86.79	7.516	CC, ES
Ouray Fed Com 703H - OH - Plan #1	6,900.00	6,893.11	152.40	116.24	4.215	SF

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.56	-0.34	-34.99	34.99				
100.00	100.00	99.60	99.60	0.13	0.12	-90.56	-0.34	-34.99	34.99	34.81	0.18	197.604	
200.00	200.00	199.60	199.60	0.48	0.48	-90.56	-0.34	-34.99	34.99	34.31	0.68	51.204	
300.00	300.00	299.60	299.60	0.84	0.84	-90.56	-0.34	-34.99	34.99	33.80	1.19	29.397	
400.00	400.00	399.60	399.60	1.20	1.20	-90.56	-0.34	-34.99	34.99	33.29	1.70	20.616	
500.00	500.00	499.60	499.60	1.56	1.56	-90.56	-0.34	-34.99	34.99	32.79	2.20	15.875	
600.00	600.00	599.60	599.60	1.92	1.92	-90.56	-0.34	-34.99	34.99	32.28	2.71	12.906	
700.00	700.00	699.60	699.60	2.28	2.27	-90.56	-0.34	-34.99	34.99	31.77	3.22	10.873	
800.00	800.00	799.60	799.60	2.63	2.63	-90.56	-0.34	-34.99	34.99	31.27	3.73	9.393	
900.00	900.00	899.60	899.60	2.99	2.99	-90.56	-0.34	-34.99	34.99	30.76	4.23	8.268	
1,000.00	1,000.00	999.60	999.60	3.35	3.35	-90.56	-0.34	-34.99	34.99	30.25	4.74	7.384	
1,100.00	1,100.00	1,099.60	1,099.60	3.71	3.71	-90.56	-0.34	-34.99	34.99	29.75	5.25	6.670	
1,200.00	1,200.00	1,199.60	1,199.60	4.07	4.07	-90.56	-0.34	-34.99	34.99	29.24	5.75	6.082	
1,300.00	1,300.00	1,299.60	1,299.60	4.43	4.43	-90.56	-0.34	-34.99	34.99	28.73	6.26	5.590	
1,400.00	1,400.00	1,399.60	1,399.60	4.79	4.78	-90.56	-0.34	-34.99	34.99	28.22	6.77	5.171	
1,500.00	1,500.00	1,499.60	1,499.60	5.14	5.14	-90.56	-0.34	-34.99	34.99	27.72	7.27	4.811	
1,600.00	1,600.00	1,599.60	1,599.60	5.50	5.50	-90.56	-0.34	-34.99	34.99	27.21	7.78	4.497	
1,700.00	1,700.00	1,699.60	1,699.60	5.86	5.86	-90.56	-0.34	-34.99	34.99	26.70	8.29	4.222	
1,800.00	1,800.00	1,799.60	1,799.60	6.22	6.22	-90.56	-0.34	-34.99	34.99	26.20	8.79	3.979	
1,900.00	1,900.00	1,899.60	1,899.60	6.58	6.58	-90.56	-0.34	-34.99	34.99	25.69	9.30	3.762	
2,000.00	2,000.00	1,999.60	1,999.60	6.94	6.93	-90.56	-0.34	-34.99	34.99	25.18	9.81	3.567	CC, ES
2,100.00	2,099.99	2,099.22	2,099.22	7.28	7.29	160.90	-0.38	-35.19	36.43	26.12	10.30	3.536	SF
2,200.00	2,199.91	2,198.04	2,198.01	7.62	7.62	162.04	-0.78	-37.45	42.43	31.66	10.77	3.939	
2,300.00	2,299.69	2,296.22	2,296.07	7.96	7.96	163.11	-1.62	-42.18	53.44	42.21	11.23	4.758	
2,400.00	2,399.27	2,393.40	2,392.98	8.31	8.29	163.89	-2.90	-49.30	69.43	57.75	11.69	5.941	
2,449.99	2,448.95	2,441.50	2,440.87	8.48	8.46	164.18	-3.69	-53.73	79.27	67.36	11.91	6.655	
2,500.00	2,498.61	2,489.32	2,488.41	8.66	8.63	164.40	-4.58	-58.72	90.01	77.88	12.13	7.419	
2,600.00	2,597.92	2,584.35	2,582.71	9.01	8.97	164.48	-6.66	-70.36	113.26	100.69	12.57	9.009	
2,700.00	2,697.23	2,681.37	2,678.84	9.37	9.32	164.43	-8.95	-83.23	137.50	124.45	13.05	10.537	
2,800.00	2,796.53	2,778.39	2,774.97	9.74	9.67	164.40	-11.25	-96.11	161.73	148.21	13.53	11.956	
2,900.00	2,895.84	2,875.41	2,871.11	10.10	10.03	164.37	-13.55	-108.98	185.97	171.96	14.01	13.275	
3,000.00	2,995.15	2,972.43	2,967.24	10.47	10.39	164.35	-15.85	-121.85	210.20	195.71	14.49	14.505	
3,100.00	3,094.45	3,069.44	3,063.37	10.84	10.76	164.34	-18.15	-134.73	234.44	219.46	14.98	15.653	
3,200.00	3,193.76	3,166.46	3,159.51	11.22	11.12	164.33	-20.45	-147.60	258.67	243.21	15.46	16.728	
3,300.00	3,293.07	3,263.48	3,255.64	11.59	11.50	164.32	-22.75	-160.48	282.91	266.96	15.95	17.734	
3,400.00	3,392.38	3,360.50	3,351.77	11.97	11.87	164.31	-25.05	-173.35	307.14	290.70	16.44	18.680	
3,500.00	3,491.68	3,457.52	3,447.91	12.35	12.24	164.30	-27.35	-186.23	331.38	314.45	16.93	19.569	
3,600.00	3,590.99	3,554.54	3,544.04	12.73	12.62	164.29	-29.65	-199.10	355.62	338.19	17.43	20.407	
3,700.00	3,690.30	3,651.56	3,640.17	13.12	13.00	164.29	-31.94	-211.98	379.85	361.93	17.92	21.197	
3,800.00	3,789.60	3,748.58	3,736.30	13.50	13.38	164.28	-34.24	-224.85	404.09	385.67	18.42	21.943	
3,900.00	3,888.91	3,845.59	3,832.44	13.89	13.76	164.28	-36.54	-237.73	428.32	409.41	18.91	22.649	
4,000.00	3,988.22	3,942.61	3,928.57	14.27	14.15	164.27	-38.84	-250.60	452.56	433.15	19.41	23.318	
4,100.00	4,087.52	4,039.63	4,024.70	14.66	14.53	164.27	-41.14	-263.48	476.79	456.89	19.91	23.952	
4,200.00	4,186.83	4,136.65	4,120.84	15.05	14.92	164.27	-43.44	-276.35	501.03	480.62	20.40	24.554	
4,300.00	4,286.14	4,233.67	4,216.97	15.44	15.31	164.26	-45.74	-289.22	525.26	504.36	20.90	25.127	
4,400.00	4,385.44	4,330.69	4,313.10	15.83	15.69	164.26	-48.04	-302.10	549.50	528.09	21.40	25.672	
4,500.00	4,484.75	4,427.71	4,409.24	16.22	16.08	164.26	-50.34	-314.97	573.73	551.83	21.91	26.192	
4,600.00	4,584.06	4,524.73	4,505.37	16.61	16.47	164.26	-52.64	-327.85	597.97	575.56	22.41	26.687	
4,700.00	4,683.36	4,621.74	4,601.50	17.01	16.87	164.26	-54.94	-340.72	622.21	599.30	22.91	27.160	
4,800.00	4,782.67	4,718.76	4,697.64	17.40	17.26	164.25	-57.23	-353.60	646.44	623.03	23.41	27.612	
4,900.00	4,881.98	4,815.78	4,793.77	17.79	17.65	164.25	-59.53	-366.47	670.68	646.76	23.91	28.045	
5,000.00	4,981.29	4,912.80	4,889.90	18.19	18.04	164.25	-61.83	-379.35	694.91	670.49	24.42	28.459	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,080.59	5,009.82	4,986.04	18.58	18.44	164.25	-64.13	-392.22	719.15	694.22	24.92	28.856	
5,200.00	5,179.90	5,106.84	5,082.17	18.98	18.83	164.25	-66.43	-405.10	743.38	717.96	25.43	29.236	
5,300.00	5,279.21	5,203.86	5,178.30	19.37	19.22	164.25	-68.73	-417.97	767.62	741.69	25.93	29.602	
5,400.00	5,378.51	5,300.88	5,274.44	19.77	19.62	164.24	-71.03	-430.85	791.85	765.42	26.44	29.953	
5,500.00	5,477.82	5,397.89	5,370.57	20.16	20.02	164.24	-73.33	-443.72	816.09	789.15	26.94	30.290	
5,600.00	5,577.13	5,494.91	5,466.70	20.56	20.41	164.24	-75.63	-456.60	840.32	812.88	27.45	30.614	
5,700.00	5,676.43	5,591.93	5,562.84	20.96	20.81	164.24	-77.93	-469.47	864.56	836.60	27.96	30.927	
5,800.00	5,775.74	5,688.95	5,658.97	21.35	21.21	164.24	-80.22	-482.34	888.79	860.33	28.46	31.228	
5,900.00	5,875.05	5,785.97	5,755.10	21.75	21.60	164.24	-82.52	-495.22	913.03	884.06	28.97	31.518	
6,000.00	5,974.35	5,882.99	5,851.24	22.15	22.00	164.24	-84.82	-508.09	937.27	907.79	29.48	31.797	
6,100.00	6,073.66	5,980.01	5,947.37	22.55	22.40	164.24	-87.12	-520.97	961.50	931.52	29.98	32.067	
6,200.00	6,172.97	6,077.03	6,043.50	22.95	22.80	164.24	-89.42	-533.84	985.74	955.24	30.49	32.328	
6,300.00	6,272.27	6,174.04	6,139.64	23.35	23.20	164.24	-91.72	-546.72	1,009.97	978.97	31.00	32.580	
6,400.00	6,371.58	6,271.06	6,235.77	23.74	23.60	164.23	-94.02	-559.59	1,034.21	1,002.70	31.51	32.823	
6,500.00	6,470.89	6,368.08	6,331.90	24.14	23.99	164.23	-96.32	-572.47	1,058.44	1,026.43	32.02	33.058	
6,600.00	6,570.20	6,465.10	6,428.04	24.54	24.39	164.23	-98.62	-585.34	1,082.68	1,050.15	32.53	33.286	
6,700.00	6,669.50	6,562.12	6,524.17	24.94	24.79	164.23	-100.92	-598.22	1,106.91	1,073.88	33.04	33.507	
6,800.00	6,768.81	6,659.14	6,620.30	25.34	25.19	164.23	-103.22	-611.09	1,131.15	1,097.60	33.54	33.720	
6,900.00	6,868.12	6,756.16	6,716.44	25.74	25.59	164.23	-105.51	-623.97	1,155.38	1,121.33	34.05	33.927	
7,000.00	6,967.42	6,853.18	6,812.57	26.14	26.00	164.23	-107.81	-636.84	1,179.62	1,145.06	34.56	34.128	
7,043.93	7,011.05	6,895.80	6,854.80	26.32	26.17	164.23	-108.82	-642.50	1,190.27	1,155.48	34.79	34.214	
7,100.00	7,066.78	6,950.29	6,908.80	26.54	26.40	164.28	-110.11	-649.73	1,203.47	1,168.40	35.07	34.312	
7,200.00	7,166.37	7,047.92	7,005.53	26.93	26.80	164.33	-112.43	-662.68	1,225.10	1,189.52	35.58	34.429	
7,300.00	7,266.16	7,156.64	7,113.29	27.30	27.25	164.34	-114.98	-676.97	1,244.17	1,208.02	36.15	34.416	
7,400.00	7,366.09	7,301.89	7,257.68	27.65	27.82	164.29	-117.72	-692.30	1,258.20	1,221.31	36.89	34.109	
7,493.92	7,460.00	7,439.80	7,395.24	27.97	28.34	-86.58	-119.42	-701.84	1,265.73	1,228.19	37.53	33.723	
7,500.00	7,466.08	7,448.75	7,404.19	27.99	28.37	-86.59	-119.50	-702.30	1,266.03	1,228.46	37.57	33.695	
7,600.00	7,566.08	7,596.33	7,551.68	28.31	28.88	-86.64	-120.30	-706.75	1,269.01	1,230.80	38.21	33.213	
7,700.00	7,666.08	7,710.32	7,665.68	28.64	29.25	-86.64	-120.34	-706.99	1,269.17	1,230.45	38.72	32.776	
7,800.00	7,766.08	7,810.32	7,765.68	28.96	29.57	-86.64	-120.34	-706.99	1,269.17	1,229.97	39.20	32.376	
7,900.00	7,866.08	7,910.32	7,865.68	29.29	29.90	-86.64	-120.34	-706.99	1,269.17	1,229.49	39.68	31.985	
8,000.00	7,966.08	8,010.32	7,965.68	29.62	30.22	-86.64	-120.34	-706.99	1,269.17	1,229.01	40.16	31.602	
8,100.00	8,066.08	8,110.32	8,065.68	29.95	30.54	-86.64	-120.34	-706.99	1,269.17	1,228.53	40.64	31.228	
8,200.00	8,166.08	8,210.32	8,165.68	30.28	30.87	-86.64	-120.34	-706.99	1,269.17	1,228.05	41.12	30.862	
8,263.96	8,230.04	8,274.28	8,229.64	30.49	31.08	-86.64	-120.34	-706.99	1,269.17	1,227.74	41.43	30.633	
8,300.00	8,266.05	8,300.00	8,255.35	30.61	31.16	-92.35	-120.14	-707.03	1,269.31	1,227.73	41.58	30.527	
8,350.00	8,315.76	8,333.51	8,288.81	30.77	31.27	-92.33	-118.30	-707.39	1,270.24	1,228.46	41.77	30.409	
8,400.00	8,364.80	8,365.82	8,320.90	30.92	31.38	-92.27	-114.71	-708.08	1,272.04	1,230.09	41.95	30.323	
8,450.00	8,412.83	8,400.00	8,354.58	31.07	31.49	-92.18	-108.99	-709.20	1,274.71	1,232.59	42.12	30.262	
8,500.00	8,459.46	8,430.52	8,384.30	31.20	31.59	-92.04	-102.22	-710.51	1,278.25	1,235.98	42.27	30.238	
8,550.00	8,504.34	8,462.93	8,415.42	31.33	31.69	-91.86	-93.34	-712.24	1,282.64	1,240.22	42.42	30.235	
8,600.00	8,547.14	8,500.00	8,450.32	31.44	31.80	-91.68	-81.09	-714.62	1,287.88	1,245.29	42.58	30.244	
8,650.00	8,587.53	8,527.93	8,476.04	31.54	31.88	-91.38	-70.41	-716.70	1,293.91	1,251.20	42.71	30.298	
8,700.00	8,625.19	8,560.56	8,505.38	31.63	31.98	-91.09	-56.39	-719.42	1,300.75	1,257.90	42.85	30.359	
8,750.00	8,659.85	8,600.00	8,539.68	31.71	32.09	-90.85	-37.30	-723.13	1,308.39	1,265.37	43.01	30.417	
8,800.00	8,691.23	8,626.17	8,561.67	31.79	32.16	-90.39	-23.37	-725.84	1,316.73	1,273.59	43.13	30.526	
8,850.00	8,719.11	8,659.22	8,588.47	31.85	32.25	-89.99	-4.39	-729.53	1,325.80	1,282.51	43.29	30.627	
8,900.00	8,743.26	8,692.48	8,614.27	31.92	32.33	-89.57	16.20	-733.53	1,335.55	1,292.10	43.45	30.737	
8,950.00	8,763.51	8,726.00	8,639.00	31.99	32.42	-89.11	38.41	-737.85	1,345.95	1,302.33	43.62	30.854	
9,000.00	8,779.70	8,759.84	8,662.57	32.08	32.50	-88.63	62.23	-742.48	1,356.95	1,313.14	43.80	30.978	
9,050.00	8,791.70	8,794.06	8,684.92	32.18	32.58	-88.13	87.67	-747.42	1,368.50	1,324.51	43.99	31.108	
9,100.00	8,799.43	8,828.75	8,705.95	32.32	32.66	-87.62	114.74	-752.69	1,380.57	1,336.38	44.19	31.241	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,150.00	8,802.83	8,864.01	8,725.58	32.48	32.75	-87.10	143.49	-758.27	1,393.10	1,348.71	44.40	31.379	
9,163.96	8,803.00	8,873.98	8,730.80	32.53	32.77	-86.95	151.82	-759.89	1,396.68	1,352.22	44.45	31.418	
9,200.00	8,803.00	8,900.00	8,743.72	32.67	32.84	-87.52	173.99	-764.20	1,405.88	1,361.27	44.61	31.517	
9,300.00	8,803.00	8,981.97	8,777.51	33.10	33.07	-88.97	247.22	-778.44	1,430.39	1,385.30	45.09	31.723	
9,400.00	8,803.00	9,073.71	8,802.28	33.60	33.37	-89.99	333.84	-795.27	1,452.60	1,406.94	45.66	31.812	
9,480.63	8,803.00	9,152.89	8,812.12	34.05	33.69	-90.38	410.90	-810.25	1,468.26	1,422.06	46.19	31.785	
9,500.00	8,803.00	9,172.27	8,812.86	34.16	33.78	-90.41	429.91	-813.95	1,471.75	1,425.42	46.33	31.767	
9,600.00	8,803.00	9,363.99	8,813.00	34.79	34.76	-90.40	619.06	-845.00	1,487.04	1,439.54	47.50	31.306	
9,700.00	8,803.00	9,571.88	8,813.00	35.48	36.08	-90.40	826.00	-864.33	1,495.25	1,446.32	48.93	30.560	
9,800.00	8,803.00	9,740.33	8,813.00	36.23	37.28	-90.40	994.36	-869.19	1,496.68	1,446.37	50.32	29.746	
9,900.00	8,803.00	9,840.33	8,813.00	37.04	38.06	-90.40	1,094.35	-870.29	1,496.68	1,445.21	51.47	29.078	
10,000.00	8,803.00	9,940.33	8,813.00	37.91	38.90	-90.40	1,194.35	-871.40	1,496.68	1,443.98	52.71	28.397	
10,100.00	8,803.00	10,040.33	8,813.00	38.83	39.79	-90.40	1,294.34	-872.51	1,496.69	1,442.67	54.01	27.709	
10,200.00	8,803.00	10,140.33	8,813.00	39.79	40.73	-90.40	1,394.33	-873.61	1,496.69	1,441.30	55.39	27.022	
10,300.00	8,803.00	10,240.33	8,813.00	40.80	41.71	-90.40	1,494.33	-874.72	1,496.69	1,439.86	56.83	26.338	
10,400.00	8,803.00	10,340.33	8,813.00	41.84	42.73	-90.40	1,594.32	-875.83	1,496.69	1,438.37	58.32	25.662	
10,500.00	8,803.00	10,440.33	8,813.00	42.93	43.79	-90.40	1,694.32	-876.93	1,496.69	1,436.82	59.87	24.997	
10,600.00	8,803.00	10,540.33	8,813.00	44.05	44.89	-90.40	1,794.31	-878.04	1,496.69	1,435.22	61.47	24.347	
10,700.00	8,803.00	10,640.33	8,813.00	45.20	46.02	-90.40	1,894.30	-879.15	1,496.69	1,433.57	63.12	23.712	
10,800.00	8,803.00	10,740.33	8,813.00	46.38	47.18	-90.40	1,994.30	-880.25	1,496.70	1,431.89	64.81	23.094	
10,900.00	8,803.00	10,840.33	8,813.00	47.59	48.37	-90.40	2,094.29	-881.36	1,496.70	1,430.16	66.54	22.494	
11,000.00	8,803.00	10,940.33	8,813.00	48.83	49.58	-90.40	2,194.29	-882.47	1,496.70	1,428.40	68.30	21.913	
11,100.00	8,803.00	11,040.33	8,813.00	50.09	50.82	-90.40	2,294.28	-883.58	1,496.70	1,426.60	70.10	21.351	
11,200.00	8,803.00	11,140.33	8,813.00	51.37	52.09	-90.40	2,394.27	-884.68	1,496.70	1,424.77	71.93	20.808	
11,300.00	8,803.00	11,240.33	8,813.00	52.68	53.37	-90.40	2,494.27	-885.79	1,496.70	1,422.91	73.79	20.284	
11,400.00	8,803.00	11,340.33	8,813.00	54.00	54.68	-90.40	2,594.26	-886.90	1,496.70	1,421.03	75.67	19.779	
11,500.00	8,803.00	11,440.33	8,813.00	55.34	56.00	-90.40	2,694.26	-888.00	1,496.71	1,419.12	77.58	19.292	
11,600.00	8,803.00	11,540.33	8,813.00	56.69	57.34	-90.40	2,794.25	-889.11	1,496.71	1,417.19	79.51	18.823	
11,700.00	8,803.00	11,640.33	8,813.00	58.07	58.70	-90.40	2,894.24	-890.22	1,496.71	1,415.24	81.47	18.372	
11,800.00	8,803.00	11,740.33	8,813.00	59.45	60.07	-90.40	2,994.24	-891.32	1,496.71	1,413.27	83.44	17.937	
11,900.00	8,803.00	11,840.33	8,813.00	60.85	61.45	-90.40	3,094.23	-892.43	1,496.71	1,411.28	85.43	17.519	
12,000.00	8,803.00	11,940.33	8,813.00	62.26	62.85	-90.40	3,194.22	-893.54	1,496.71	1,409.27	87.44	17.117	
12,100.00	8,803.00	12,040.33	8,813.00	63.69	64.26	-90.40	3,294.22	-894.64	1,496.71	1,407.25	89.47	16.729	
12,200.00	8,803.00	12,140.33	8,813.00	65.12	65.68	-90.40	3,394.21	-895.75	1,496.72	1,405.21	91.51	16.356	
12,300.00	8,803.00	12,240.33	8,813.00	66.56	67.11	-90.40	3,494.21	-896.86	1,496.72	1,403.16	93.56	15.997	
12,400.00	8,803.00	12,340.33	8,813.00	68.02	68.56	-90.40	3,594.20	-897.96	1,496.72	1,401.09	95.63	15.651	
12,500.00	8,803.00	12,440.33	8,813.00	69.48	70.01	-90.40	3,694.19	-899.07	1,496.72	1,399.01	97.71	15.318	
12,600.00	8,803.00	12,540.33	8,813.00	70.95	71.47	-90.40	3,794.19	-900.18	1,496.72	1,396.92	99.80	14.998	
12,700.00	8,803.00	12,640.33	8,813.00	72.43	72.94	-90.40	3,894.18	-901.28	1,496.72	1,394.82	101.90	14.688	
12,800.00	8,803.00	12,740.33	8,813.00	73.91	74.41	-90.40	3,994.18	-902.39	1,496.72	1,392.71	104.01	14.390	
12,900.00	8,803.00	12,840.33	8,813.00	75.41	75.90	-90.40	4,094.17	-903.50	1,496.73	1,390.59	106.13	14.102	
13,000.00	8,803.00	12,940.33	8,813.00	76.91	77.39	-90.40	4,194.16	-904.60	1,496.73	1,388.46	108.26	13.825	
13,100.00	8,803.00	13,040.33	8,813.00	78.41	78.88	-90.40	4,294.16	-905.71	1,496.73	1,386.33	110.40	13.557	
13,200.00	8,803.00	13,140.33	8,813.00	79.92	80.39	-90.40	4,394.15	-906.82	1,496.73	1,384.18	112.55	13.299	
13,300.00	8,803.00	13,240.33	8,813.00	81.44	81.89	-90.40	4,494.14	-907.92	1,496.73	1,382.03	114.70	13.049	
13,400.00	8,803.00	13,340.33	8,813.00	82.96	83.41	-90.40	4,594.14	-909.03	1,496.73	1,379.87	116.86	12.808	
13,500.00	8,803.00	13,440.33	8,813.00	84.49	84.93	-90.40	4,694.13	-910.14	1,496.73	1,377.70	119.03	12.574	
13,600.00	8,803.00	13,540.33	8,813.00	86.02	86.45	-90.40	4,794.13	-911.24	1,496.74	1,375.53	121.20	12.349	
13,700.00	8,803.00	13,640.33	8,813.00	87.56	87.98	-90.40	4,894.12	-912.35	1,496.74	1,373.35	123.38	12.131	
13,800.00	8,803.00	13,740.33	8,813.00	89.10	89.51	-90.40	4,994.11	-913.46	1,496.74	1,371.17	125.57	11.920	
13,900.00	8,803.00	13,840.33	8,813.00	90.64	91.05	-90.40	5,094.11	-914.56	1,496.74	1,368.98	127.76	11.715	
14,000.00	8,803.00	13,940.33	8,813.00	92.19	92.59	-90.40	5,194.10	-915.67	1,496.74	1,366.78	129.96	11.517	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	8,803.00	14,040.33	8,813.00	93.74	94.14	-90.40	5,294.10	-916.78	1,496.74	1,364.58	132.16	11.325	
14,200.00	8,803.00	14,140.33	8,813.00	95.30	95.69	-90.40	5,394.09	-917.88	1,496.74	1,362.38	134.36	11.139	
14,300.00	8,803.00	14,240.33	8,813.00	96.86	97.24	-90.40	5,494.08	-918.99	1,496.74	1,360.17	136.57	10.959	
14,400.00	8,803.00	14,340.33	8,813.00	98.42	98.80	-90.40	5,594.08	-920.10	1,496.75	1,357.96	138.79	10.784	
14,500.00	8,803.00	14,440.33	8,813.00	99.98	100.35	-90.40	5,694.07	-921.20	1,496.75	1,355.74	141.01	10.615	
14,600.00	8,803.00	14,540.33	8,813.00	101.55	101.92	-90.40	5,794.07	-922.31	1,496.75	1,353.52	143.23	10.450	
14,700.00	8,803.00	14,640.33	8,813.00	103.12	103.48	-90.40	5,894.06	-923.42	1,496.75	1,351.30	145.46	10.290	
14,800.00	8,803.00	14,740.33	8,813.00	104.69	105.05	-90.40	5,994.05	-924.52	1,496.75	1,349.07	147.68	10.135	
14,900.00	8,803.00	14,840.33	8,813.00	106.27	106.62	-90.40	6,094.05	-925.63	1,496.75	1,346.84	149.92	9.984	
15,000.00	8,803.00	14,940.33	8,813.00	107.85	108.19	-90.40	6,194.04	-926.74	1,496.75	1,344.60	152.15	9.837	
15,100.00	8,803.00	15,040.33	8,813.00	109.42	109.76	-90.40	6,294.03	-927.84	1,496.76	1,342.36	154.39	9.695	
15,200.00	8,803.00	15,140.33	8,813.00	111.01	111.34	-90.40	6,394.03	-928.95	1,496.76	1,340.12	156.63	9.556	
15,300.00	8,803.00	15,240.33	8,813.00	112.59	112.92	-90.40	6,494.02	-930.06	1,496.76	1,337.88	158.88	9.421	
15,400.00	8,803.00	15,340.33	8,813.00	114.18	114.50	-90.40	6,594.02	-931.16	1,496.76	1,335.63	161.13	9.289	
15,500.00	8,803.00	15,440.33	8,813.00	115.76	116.09	-90.40	6,694.01	-932.27	1,496.76	1,333.39	163.38	9.161	
15,600.00	8,803.00	15,540.33	8,813.00	117.35	117.67	-90.40	6,794.00	-933.38	1,496.76	1,331.14	165.63	9.037	
15,700.00	8,803.00	15,640.33	8,813.00	118.94	119.26	-90.40	6,894.00	-934.48	1,496.76	1,328.88	167.88	8.916	
15,800.00	8,803.00	15,740.33	8,813.00	120.54	120.85	-90.40	6,993.99	-935.59	1,496.77	1,326.63	170.14	8.797	
15,900.00	8,803.00	15,840.33	8,813.00	122.13	122.44	-90.40	7,093.99	-936.70	1,496.77	1,324.37	172.40	8.682	
16,000.00	8,803.00	15,940.33	8,813.00	123.73	124.03	-90.40	7,193.98	-937.80	1,496.77	1,322.11	174.66	8.570	
16,100.00	8,803.00	16,040.33	8,813.00	125.33	125.62	-90.40	7,293.97	-938.91	1,496.77	1,319.85	176.92	8.460	
16,200.00	8,803.00	16,140.33	8,813.00	126.92	127.22	-90.40	7,393.97	-940.02	1,496.77	1,317.58	179.19	8.353	
16,300.00	8,803.00	16,240.33	8,813.00	128.52	128.82	-90.40	7,493.96	-941.12	1,496.77	1,315.32	181.45	8.249	
16,400.00	8,803.00	16,340.33	8,813.00	130.13	130.41	-90.40	7,593.96	-942.23	1,496.77	1,313.05	183.72	8.147	
16,500.00	8,803.00	16,440.33	8,813.00	131.73	132.01	-90.40	7,693.95	-943.34	1,496.78	1,310.78	185.99	8.047	
16,600.00	8,803.00	16,540.33	8,813.00	133.33	133.61	-90.40	7,793.94	-944.44	1,496.78	1,308.51	188.27	7.950	
16,700.00	8,803.00	16,640.33	8,813.00	134.94	135.22	-90.40	7,893.94	-945.55	1,496.78	1,306.24	190.54	7.855	
16,800.00	8,803.00	16,740.33	8,813.00	136.55	136.82	-90.40	7,993.93	-946.66	1,496.78	1,303.97	192.82	7.763	
16,900.00	8,803.00	16,840.33	8,813.00	138.15	138.42	-90.40	8,093.92	-947.77	1,496.78	1,301.69	195.09	7.672	
17,000.00	8,803.00	16,940.33	8,813.00	139.76	140.03	-90.40	8,193.92	-948.87	1,496.78	1,299.41	197.37	7.584	
17,100.00	8,803.00	17,040.33	8,813.00	141.37	141.64	-90.40	8,293.91	-949.98	1,496.78	1,297.13	199.65	7.497	
17,200.00	8,803.00	17,140.33	8,813.00	142.98	143.24	-90.40	8,393.91	-951.09	1,496.79	1,294.86	201.93	7.412	
17,300.00	8,803.00	17,240.33	8,813.00	144.59	144.85	-90.40	8,493.90	-952.19	1,496.79	1,292.57	204.21	7.330	
17,400.00	8,803.00	17,340.33	8,813.00	146.21	146.46	-90.40	8,593.89	-953.30	1,496.79	1,290.29	206.50	7.248	
17,500.00	8,803.00	17,440.33	8,813.00	147.82	148.07	-90.40	8,693.89	-954.41	1,496.79	1,288.01	208.78	7.169	
17,600.00	8,803.00	17,540.33	8,813.00	149.43	149.69	-90.40	8,793.88	-955.51	1,496.79	1,285.72	211.07	7.092	
17,700.00	8,803.00	17,640.33	8,813.00	151.05	151.30	-90.40	8,893.88	-956.62	1,496.79	1,283.44	213.35	7.016	
17,800.00	8,803.00	17,740.33	8,813.00	152.67	152.91	-90.40	8,993.87	-957.73	1,496.79	1,281.15	215.64	6.941	
17,900.00	8,803.00	17,840.33	8,813.00	154.28	154.53	-90.40	9,093.86	-958.83	1,496.80	1,278.86	217.93	6.868	
18,000.00	8,803.00	17,940.33	8,813.00	155.90	156.14	-90.40	9,193.86	-959.94	1,496.80	1,276.58	220.22	6.797	
18,100.00	8,803.00	18,040.33	8,813.00	157.52	157.76	-90.40	9,293.85	-961.05	1,496.80	1,274.29	222.51	6.727	
18,200.00	8,803.00	18,140.33	8,813.00	159.14	159.37	-90.40	9,393.84	-962.15	1,496.80	1,272.00	224.80	6.658	
18,300.00	8,803.00	18,240.33	8,813.00	160.76	160.99	-90.40	9,493.84	-963.26	1,496.80	1,269.70	227.10	6.591	
18,400.00	8,803.00	18,340.33	8,813.00	162.38	162.61	-90.40	9,593.83	-964.37	1,496.80	1,267.41	229.39	6.525	
18,500.00	8,803.00	18,440.33	8,813.00	164.00	164.23	-90.40	9,693.83	-965.47	1,496.80	1,265.12	231.69	6.460	
18,600.00	8,803.00	18,540.33	8,813.00	165.62	165.85	-90.40	9,793.82	-966.58	1,496.81	1,262.82	233.98	6.397	
18,700.00	8,803.00	18,640.33	8,813.00	167.24	167.47	-90.40	9,893.81	-967.69	1,496.81	1,260.53	236.28	6.335	
18,800.00	8,803.00	18,740.33	8,813.00	168.87	169.09	-90.40	9,993.81	-968.79	1,496.81	1,258.23	238.58	6.274	
18,900.00	8,803.00	18,840.33	8,813.00	170.49	170.71	-90.40	10,093.80	-969.90	1,496.81	1,255.93	240.88	6.214	
18,961.77	8,803.00	18,902.09	8,813.00	171.49	171.71	-90.40	10,155.57	-970.58	1,496.81	1,254.52	242.29	6.178	

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Colorado Fed Com - Colorado Fed Com 801H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-OWSG (Rev2) MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.40	0.40	0.00	0.00	89.44	0.34	35.00	35.00				
100.00	100.00	100.40	100.40	0.13	0.13	89.44	0.34	35.00	35.00	34.82	0.18	196.141	
200.00	200.00	200.40	200.40	0.48	0.49	89.44	0.34	35.00	35.00	34.32	0.69	51.067	
300.00	300.00	300.40	300.40	0.84	0.84	89.44	0.34	35.00	35.00	33.81	1.19	29.355	
400.00	400.00	400.40	400.40	1.20	1.20	89.44	0.34	35.00	35.00	33.30	1.70	20.598	
500.00	500.00	500.40	500.40	1.56	1.56	89.44	0.34	35.00	35.00	32.80	2.21	15.865	
600.00	600.00	600.40	600.40	1.92	1.92	89.44	0.34	35.00	35.00	32.29	2.71	12.900	
700.00	700.00	700.40	700.40	2.28	2.28	89.44	0.34	35.00	35.00	31.78	3.22	10.869	
800.00	800.00	800.40	800.40	2.63	2.64	89.44	0.34	35.00	35.00	31.27	3.73	9.391	
900.00	900.00	900.40	900.40	2.99	2.99	89.44	0.34	35.00	35.00	30.77	4.23	8.267	
1,000.00	1,000.00	1,000.40	1,000.40	3.35	3.35	89.44	0.34	35.00	35.00	30.26	4.74	7.383	
1,100.00	1,100.00	1,100.40	1,100.40	3.71	3.71	89.44	0.34	35.00	35.00	29.75	5.25	6.670	
1,200.00	1,200.00	1,200.40	1,200.40	4.07	4.07	89.44	0.34	35.00	35.00	29.25	5.75	6.082	
1,300.00	1,300.00	1,300.40	1,300.40	4.43	4.43	89.44	0.34	35.00	35.00	28.74	6.26	5.590	
1,400.00	1,400.00	1,400.40	1,400.40	4.79	4.79	89.44	0.34	35.00	35.00	28.23	6.77	5.171	
1,500.00	1,500.00	1,500.40	1,500.40	5.14	5.15	89.44	0.34	35.00	35.00	27.73	7.28	4.811	
1,600.00	1,600.00	1,600.63	1,600.63	5.50	5.49	90.60	-0.36	34.74	34.75	26.97	7.77	4.470	
1,700.00	1,700.00	1,700.84	1,700.78	5.86	5.82	95.88	-3.46	33.62	33.80	25.54	8.26	4.093	
1,800.00	1,800.00	1,800.81	1,800.57	6.22	6.15	105.92	-9.01	31.60	32.86	24.11	8.74	3.757	
1,830.77	1,830.77	1,831.50	1,831.17	6.33	6.25	110.00	-11.21	30.80	32.77	23.88	8.90	3.684	CC, ES
1,900.00	1,900.00	1,900.40	1,899.79	6.58	6.48	120.61	-16.98	28.70	33.35	24.12	9.23	3.612	SF
2,000.00	2,000.00	1,999.48	1,998.26	6.94	6.82	137.61	-27.32	24.93	37.05	27.33	9.71	3.814	
2,100.00	2,099.99	2,099.30	2,097.28	7.28	7.17	44.75	-38.94	20.03	42.96	32.77	10.19	4.216	
2,200.00	2,199.91	2,199.48	2,196.75	7.62	7.53	60.49	-48.79	13.39	47.96	37.29	10.67	4.494	
2,300.00	2,299.69	2,299.26	2,295.87	7.96	7.89	77.07	-56.64	5.06	53.29	42.14	11.15	4.780	
2,400.00	2,399.27	2,398.26	2,394.19	8.31	8.25	94.18	-62.50	-4.91	61.10	49.47	11.62	5.256	
2,449.99	2,448.95	2,447.34	2,442.90	8.48	8.43	102.46	-64.68	-10.48	66.60	54.74	11.86	5.615	
2,500.00	2,498.61	2,496.19	2,491.35	8.66	8.61	110.15	-66.39	-16.43	73.32	61.22	12.10	6.062	
2,600.00	2,597.92	2,593.36	2,587.70	9.01	8.98	122.16	-69.15	-28.80	89.81	77.25	12.57	7.147	
2,700.00	2,697.23	2,690.52	2,684.02	9.37	9.34	130.28	-71.92	-41.18	108.99	95.95	13.04	8.355	
2,800.00	2,796.53	2,787.67	2,780.34	9.74	9.71	135.94	-74.68	-53.55	129.67	116.14	13.53	9.585	
2,900.00	2,895.84	2,884.82	2,876.67	10.10	10.08	140.03	-77.44	-65.93	151.24	137.22	14.02	10.790	
3,000.00	2,995.15	2,981.98	2,972.99	10.47	10.45	143.09	-80.20	-78.31	173.36	158.85	14.51	11.950	
3,100.00	3,094.45	3,079.13	3,069.31	10.84	10.83	145.47	-82.96	-90.68	195.85	180.85	15.00	13.058	
3,200.00	3,193.76	3,176.28	3,165.63	11.22	11.21	147.35	-85.73	-103.06	218.59	203.10	15.49	14.110	
3,300.00	3,293.07	3,273.43	3,261.95	11.59	11.59	148.88	-88.49	-115.43	241.52	225.53	15.99	15.107	
3,400.00	3,392.38	3,370.59	3,358.27	11.97	11.97	150.14	-91.25	-127.81	264.58	248.10	16.48	16.051	
3,500.00	3,491.68	3,467.74	3,454.60	12.35	12.35	151.20	-94.01	-140.19	287.75	270.76	16.98	16.945	
3,600.00	3,590.99	3,564.89	3,550.92	12.73	12.73	152.10	-96.77	-152.56	310.99	293.51	17.48	17.791	
3,700.00	3,690.30	3,662.05	3,647.24	13.12	13.12	152.88	-99.54	-164.94	334.29	316.32	17.98	18.594	
3,800.00	3,789.60	3,759.20	3,743.56	13.50	13.51	153.55	-102.30	-177.31	357.65	339.17	18.48	19.354	
3,900.00	3,888.91	3,856.35	3,839.88	13.89	13.89	154.15	-105.06	-189.69	381.05	362.07	18.98	20.076	
4,000.00	3,988.22	3,953.51	3,936.21	14.27	14.28	154.67	-107.82	-202.07	404.48	385.00	19.48	20.762	
4,100.00	4,087.52	4,050.66	4,032.53	14.66	14.67	155.14	-110.58	-214.44	427.94	407.96	19.98	21.414	
4,200.00	4,186.83	4,147.81	4,128.85	15.05	15.06	155.56	-113.35	-226.82	451.43	430.94	20.49	22.035	
4,300.00	4,286.14	4,244.96	4,225.17	15.44	15.45	155.93	-116.11	-239.19	474.93	453.94	20.99	22.626	
4,400.00	4,385.44	4,342.12	4,321.49	15.83	15.84	156.28	-118.87	-251.57	498.46	476.96	21.49	23.190	
4,500.00	4,484.75	4,439.27	4,417.82	16.22	16.24	156.59	-121.63	-263.95	521.99	500.00	22.00	23.728	
4,600.00	4,584.06	4,536.42	4,514.14	16.61	16.63	156.87	-124.40	-276.32	545.55	523.04	22.50	24.242	
4,700.00	4,683.36	4,633.58	4,610.46	17.01	17.02	157.13	-127.16	-288.70	569.11	546.10	23.01	24.733	
4,800.00	4,782.67	4,730.73	4,706.78	17.40	17.42	157.37	-129.92	-301.07	592.68	569.17	23.52	25.204	
4,900.00	4,881.98	4,827.88	4,803.10	17.79	17.81	157.59	-132.68	-313.45	616.27	592.24	24.02	25.654	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Colorado Fed Com - Colorado Fed Com 801H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-OWSG (Rev2) MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,981.29	4,925.04	4,899.43	18.19	18.20	157.80	-135.44	-325.82	639.86	615.33	24.53	26.086	
5,100.00	5,080.59	5,022.19	4,995.75	18.58	18.60	157.99	-138.21	-338.20	663.45	638.42	25.04	26.500	
5,200.00	5,179.90	5,119.34	5,092.07	18.98	19.00	158.17	-140.97	-350.58	687.06	661.51	25.54	26.897	
5,300.00	5,279.21	5,216.49	5,188.39	19.37	19.39	158.33	-143.73	-362.95	710.67	684.62	26.05	27.279	
5,400.00	5,378.51	5,313.65	5,284.71	19.77	19.79	158.49	-146.49	-375.33	734.28	707.72	26.56	27.647	
5,500.00	5,477.82	5,410.80	5,381.03	20.16	20.18	158.63	-149.25	-387.70	757.90	730.84	27.07	28.000	
5,600.00	5,577.13	5,507.95	5,477.36	20.56	20.58	158.77	-152.02	-400.08	781.53	753.95	27.58	28.340	
5,700.00	5,676.43	5,605.11	5,573.68	20.96	20.98	158.90	-154.78	-412.46	805.16	777.07	28.09	28.668	
5,800.00	5,775.74	5,702.26	5,670.00	21.35	21.38	159.02	-157.54	-424.83	828.79	800.19	28.59	28.984	
5,900.00	5,875.05	5,799.41	5,766.32	21.75	21.77	159.13	-160.30	-437.21	852.42	823.32	29.10	29.288	
6,000.00	5,974.35	5,896.57	5,862.64	22.15	22.17	159.24	-163.06	-449.58	876.06	846.45	29.61	29.583	
6,100.00	6,073.66	5,993.72	5,958.97	22.55	22.57	159.34	-165.83	-461.96	899.70	869.58	30.12	29.867	
6,200.00	6,172.97	6,090.87	6,055.29	22.95	22.97	159.44	-168.59	-474.34	923.35	892.71	30.63	30.141	
6,300.00	6,272.27	6,188.02	6,151.61	23.35	23.37	159.53	-171.35	-486.71	946.99	915.85	31.14	30.406	
6,400.00	6,371.58	6,285.18	6,247.93	23.74	23.77	159.62	-174.11	-499.09	970.64	938.99	31.66	30.663	
6,500.00	6,470.89	6,382.33	6,344.25	24.14	24.16	159.71	-176.87	-511.46	994.29	962.13	32.17	30.911	
6,600.00	6,570.20	6,479.48	6,440.58	24.54	24.56	159.79	-179.64	-523.84	1,017.95	985.27	32.68	31.152	
6,700.00	6,669.50	6,576.64	6,536.90	24.94	24.96	159.86	-182.40	-536.22	1,041.60	1,008.41	33.19	31.385	
6,800.00	6,768.81	6,673.79	6,633.22	25.34	25.36	159.94	-185.16	-548.59	1,065.26	1,031.56	33.70	31.610	
6,900.00	6,868.12	6,770.94	6,729.54	25.74	25.76	160.01	-187.92	-560.97	1,088.91	1,054.70	34.21	31.829	
7,000.00	6,967.42	6,868.10	6,825.86	26.14	26.16	160.07	-190.68	-573.34	1,112.57	1,077.85	34.72	32.041	
7,043.93	7,011.05	6,910.78	6,868.18	26.32	26.34	160.10	-191.90	-578.78	1,122.97	1,088.02	34.95	32.133	
7,100.00	7,066.78	6,965.34	6,922.28	26.54	26.56	160.20	-193.45	-585.73	1,135.86	1,100.62	35.23	32.237	
7,200.00	7,166.37	7,063.08	7,019.18	26.93	26.96	160.32	-196.23	-598.18	1,156.97	1,121.22	35.75	32.367	
7,300.00	7,266.16	7,170.05	7,125.25	27.30	27.40	160.38	-199.24	-611.70	1,175.59	1,139.29	36.30	32.382	
7,400.00	7,366.09	7,312.08	7,266.49	27.65	27.96	160.39	-202.48	-626.19	1,189.34	1,152.31	37.03	32.121	
7,493.92	7,460.00	7,446.87	7,400.96	27.97	28.46	-90.47	-204.49	-635.19	1,196.70	1,159.04	37.66	31.777	
7,500.00	7,466.08	7,455.62	7,409.70	27.99	28.50	-90.47	-204.58	-635.61	1,197.00	1,159.30	37.70	31.752	
7,600.00	7,566.08	7,599.82	7,553.83	28.31	29.00	-90.51	-205.51	-639.78	1,199.90	1,161.58	38.32	31.312	
7,700.00	7,666.08	7,712.47	7,666.48	28.64	29.36	-90.52	-205.56	-640.00	1,200.05	1,161.22	38.83	30.908	
7,800.00	7,766.08	7,812.47	7,766.48	28.96	29.68	-90.52	-205.56	-640.00	1,200.05	1,160.75	39.30	30.534	
7,900.00	7,866.08	7,912.47	7,866.48	29.29	29.99	-90.52	-205.56	-640.00	1,200.05	1,160.27	39.78	30.169	
8,000.00	7,966.08	8,012.47	7,966.48	29.62	30.31	-90.52	-205.56	-640.00	1,200.05	1,159.79	40.25	29.811	
8,100.00	8,066.08	8,112.47	8,066.48	29.95	30.63	-90.52	-205.56	-640.00	1,200.05	1,159.32	40.73	29.462	
8,200.00	8,166.08	8,212.47	8,166.48	30.28	30.95	-90.52	-205.56	-640.00	1,200.05	1,158.84	41.21	29.120	
8,263.96	8,230.04	8,276.43	8,230.44	30.49	31.16	-90.52	-205.56	-640.00	1,200.05	1,158.53	41.52	28.905	
8,300.00	8,266.05	8,312.45	8,266.45	30.61	31.28	-96.26	-205.56	-640.00	1,200.17	1,158.48	41.69	28.789	
8,350.00	8,315.76	8,362.15	8,316.16	30.77	31.44	-96.45	-205.56	-640.00	1,200.76	1,158.84	41.92	28.643	
8,400.00	8,364.80	8,411.20	8,365.20	30.92	31.59	-96.78	-205.56	-640.00	1,201.90	1,159.75	42.15	28.516	
8,450.00	8,412.83	8,459.22	8,413.23	31.07	31.75	-97.24	-205.56	-640.00	1,203.66	1,161.29	42.37	28.411	
8,500.00	8,459.46	8,505.85	8,459.86	31.20	31.90	-97.78	-205.56	-640.00	1,206.18	1,163.61	42.58	28.330	
8,550.00	8,504.34	8,550.74	8,504.74	31.33	32.05	-98.37	-205.56	-640.00	1,209.62	1,166.84	42.78	28.278	
8,600.00	8,547.14	8,593.53	8,547.54	31.44	32.18	-98.95	-205.56	-640.00	1,214.15	1,171.19	42.97	28.258	
8,650.00	8,587.53	8,633.92	8,587.93	31.54	32.32	-99.49	-205.56	-640.00	1,219.97	1,176.82	43.15	28.274	
8,700.00	8,625.19	8,671.58	8,625.59	31.63	32.44	-99.92	-205.56	-640.00	1,227.26	1,183.95	43.32	28.331	
8,750.00	8,659.85	8,706.24	8,660.25	31.71	32.55	-100.18	-205.56	-640.00	1,236.21	1,192.73	43.48	28.432	
8,800.00	8,691.23	8,737.63	8,691.63	31.79	32.65	-100.23	-205.56	-640.00	1,246.98	1,203.34	43.63	28.580	
8,850.00	8,719.11	8,765.50	8,719.51	31.85	32.74	-100.02	-205.56	-640.00	1,259.68	1,215.91	43.77	28.780	
8,900.00	8,743.26	8,789.65	8,743.66	31.92	32.82	-99.48	-205.56	-640.00	1,274.40	1,230.50	43.90	29.032	
8,950.00	8,763.51	8,809.90	8,763.91	31.99	32.89	-98.59	-205.56	-640.00	1,291.18	1,247.17	44.01	29.339	
9,000.00	8,779.70	8,826.09	8,780.10	32.08	32.94	-97.30	-205.56	-640.00	1,310.00	1,265.89	44.11	29.699	
9,050.00	8,791.70	8,838.09	8,792.10	32.18	32.98	-95.58	-205.56	-640.00	1,330.78	1,286.58	44.19	30.112	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Colorado Fed Com - Colorado Fed Com 801H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-OWSG (Rev2) MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,100.00	8,799.43	8,845.82	8,799.83	32.32	33.00	-93.42	-205.56	-640.00	1,353.38	1,309.12	44.26	30.575	
9,150.00	8,802.83	8,849.22	8,803.23	32.48	33.02	-90.81	-205.56	-640.00	1,377.63	1,333.31	44.32	31.085	
9,163.96	8,803.00	8,849.39	8,803.40	32.53	33.02	-90.00	-205.56	-640.00	1,384.67	1,340.34	44.33	31.236	
9,200.00	8,803.00	8,849.39	8,803.40	32.67	33.02	-90.00	-205.56	-640.00	1,403.11	1,358.75	44.36	31.630	
9,300.00	8,803.00	8,849.39	8,803.40	33.10	33.02	-90.00	-205.56	-640.00	1,455.77	1,411.31	44.46	32.747	
9,400.00	8,803.00	8,849.39	8,803.40	33.60	33.02	-90.00	-205.56	-640.00	1,510.38	1,465.81	44.56	33.892	
9,480.63	8,803.00	8,849.39	8,803.40	34.05	33.02	-90.00	-205.56	-640.00	1,555.64	1,510.98	44.66	34.834	
9,500.00	8,803.00	8,849.39	8,803.40	34.16	33.02	-90.00	-205.56	-640.00	1,566.72	1,522.04	44.68	35.064	
9,600.00	8,803.00	8,849.39	8,803.40	34.79	33.02	-90.00	-205.56	-640.00	1,626.37	1,581.57	44.81	36.298	
9,700.00	8,803.00	8,849.39	8,803.40	35.48	33.02	-90.00	-205.56	-640.00	1,689.84	1,644.91	44.93	37.609	
9,800.00	8,803.00	8,849.39	8,803.40	36.23	33.02	-90.00	-205.56	-640.00	1,756.71	1,711.66	45.06	38.990	
9,900.00	8,803.00	8,849.39	8,803.40	37.04	33.02	-90.00	-205.56	-640.00	1,826.62	1,781.44	45.18	40.433	
10,000.00	8,803.00	8,849.39	8,803.40	37.91	33.02	-90.00	-205.56	-640.00	1,899.21	1,853.92	45.29	41.933	
10,100.00	8,803.00	8,849.39	8,803.40	38.83	33.02	-90.00	-205.56	-640.00	1,974.21	1,928.80	45.40	43.482	
10,200.00	8,803.00	8,849.39	8,803.40	39.79	33.02	-90.00	-205.56	-640.00	2,051.33	2,005.83	45.51	45.077	
10,300.00	8,803.00	8,849.39	8,803.40	40.80	33.02	-90.00	-205.56	-640.00	2,130.36	2,084.76	45.61	46.711	
10,400.00	8,803.00	8,849.39	8,803.40	41.84	33.02	-90.00	-205.56	-640.00	2,211.09	2,165.39	45.70	48.381	
10,500.00	8,803.00	8,849.39	8,803.40	42.93	33.02	-90.00	-205.56	-640.00	2,293.34	2,247.55	45.79	50.083	
10,600.00	8,803.00	8,849.39	8,803.40	44.05	33.02	-90.00	-205.56	-640.00	2,376.95	2,331.08	45.87	51.815	
10,700.00	8,803.00	8,849.39	8,803.40	45.20	33.02	-90.00	-205.56	-640.00	2,461.78	2,415.83	45.95	53.571	
10,800.00	8,803.00	8,849.39	8,803.40	46.38	33.02	-90.00	-205.56	-640.00	2,547.71	2,501.69	46.03	55.351	
10,900.00	8,803.00	8,849.39	8,803.40	47.59	33.02	-90.00	-205.56	-640.00	2,634.64	2,588.54	46.10	57.151	
11,000.00	8,803.00	8,849.39	8,803.40	48.83	33.02	-90.00	-205.56	-640.00	2,722.46	2,676.30	46.17	58.970	
11,100.00	8,803.00	8,849.39	8,803.40	50.09	33.02	-90.00	-205.56	-640.00	2,811.10	2,764.87	46.23	60.804	
11,200.00	8,803.00	8,849.39	8,803.40	51.37	33.02	-90.00	-205.56	-640.00	2,900.48	2,854.18	46.29	62.653	
11,300.00	8,803.00	8,849.39	8,803.40	52.68	33.02	-90.00	-205.56	-640.00	2,990.53	2,944.17	46.35	64.514	
11,400.00	8,803.00	8,849.39	8,803.40	54.00	33.02	-90.00	-205.56	-640.00	3,081.19	3,034.78	46.41	66.388	
11,500.00	8,803.00	8,849.39	8,803.40	55.34	33.02	-90.00	-205.56	-640.00	3,172.41	3,125.95	46.47	68.271	
11,600.00	8,803.00	8,849.39	8,803.40	56.69	33.02	-90.00	-205.56	-640.00	3,264.15	3,217.63	46.52	70.165	
11,700.00	8,803.00	8,849.39	8,803.40	58.07	33.02	-90.00	-205.56	-640.00	3,356.36	3,309.79	46.57	72.066	
11,800.00	8,803.00	8,849.39	8,803.40	59.45	33.02	-90.00	-205.56	-640.00	3,449.01	3,402.38	46.62	73.975	
11,900.00	8,803.00	8,849.39	8,803.40	60.85	33.02	-90.00	-205.56	-640.00	3,542.05	3,495.38	46.67	75.890	
12,000.00	8,803.00	8,849.39	8,803.40	62.26	33.02	-90.00	-205.56	-640.00	3,635.47	3,588.74	46.72	77.811	
12,100.00	8,803.00	8,849.39	8,803.40	63.69	33.02	-90.00	-205.56	-640.00	3,729.22	3,682.45	46.77	79.737	
12,200.00	8,803.00	8,849.39	8,803.40	65.12	33.02	-90.00	-205.56	-640.00	3,823.29	3,776.48	46.82	81.667	
12,300.00	8,803.00	15,917.23	12,392.00	66.56	74.21	-157.35	3,494.29	-897.28	3,888.36	3,828.12	60.24	64.547	
12,400.00	8,803.00	16,017.23	12,392.00	68.02	75.52	-157.36	3,594.29	-898.38	3,888.36	3,827.02	61.34	63.387	
12,500.00	8,803.00	16,117.23	12,392.00	69.48	76.85	-157.36	3,694.28	-899.48	3,888.36	3,825.90	62.46	62.258	
12,600.00	8,803.00	16,217.23	12,392.00	70.95	78.19	-157.36	3,794.28	-900.58	3,888.36	3,824.78	63.58	61.159	
12,700.00	8,803.00	16,317.23	12,392.00	72.43	79.54	-157.36	3,894.27	-901.68	3,888.35	3,823.65	64.71	60.090	
12,800.00	8,803.00	16,417.23	12,392.00	73.91	80.90	-157.36	3,994.26	-902.78	3,888.35	3,822.51	65.85	59.051	
12,900.00	8,803.00	16,517.23	12,392.00	75.41	82.28	-157.36	4,094.26	-903.88	3,888.35	3,821.36	66.99	58.043	
13,000.00	8,803.00	16,617.23	12,392.00	76.91	83.66	-157.36	4,194.25	-904.98	3,888.35	3,820.21	68.14	57.062	
13,100.00	8,803.00	16,717.23	12,392.00	78.41	85.05	-157.36	4,294.25	-906.08	3,888.35	3,819.05	69.30	56.108	
13,200.00	8,803.00	16,817.23	12,392.00	79.92	86.46	-157.36	4,394.24	-907.18	3,888.35	3,817.88	70.47	55.179	
13,300.00	8,803.00	16,917.23	12,392.00	81.44	87.87	-157.36	4,494.23	-908.28	3,888.34	3,816.70	71.64	54.277	
13,400.00	8,803.00	17,017.23	12,392.00	82.96	89.29	-157.36	4,594.23	-909.38	3,888.34	3,815.52	72.82	53.398	
13,500.00	8,803.00	17,117.23	12,392.00	84.49	90.72	-157.36	4,694.22	-910.48	3,888.34	3,814.34	74.00	52.544	
13,600.00	8,803.00	17,217.23	12,392.00	86.02	92.15	-157.36	4,794.22	-911.58	3,888.34	3,813.15	75.19	51.712	
13,700.00	8,803.00	17,317.23	12,392.00	87.56	93.59	-157.36	4,894.21	-912.68	3,888.34	3,811.95	76.39	50.903	
13,800.00	8,803.00	17,417.23	12,392.00	89.10	95.04	-157.36	4,994.20	-913.78	3,888.33	3,810.75	77.59	50.116	
13,900.00	8,803.00	17,517.23	12,392.00	90.64	96.50	-157.36	5,094.20	-914.88	3,888.33	3,809.54	78.79	49.349	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Colorado Fed Com - Colorado Fed Com 801H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-OWSG (Rev2) MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	8,803.00	17,617.23	12,392.00	92.19	97.96	-157.36	5,194.19	-915.98	3,888.33	3,808.33	80.00	48.603	
14,100.00	8,803.00	17,717.23	12,392.00	93.74	99.43	-157.36	5,294.19	-917.08	3,888.33	3,807.11	81.22	47.877	
14,200.00	8,803.00	17,817.23	12,392.00	95.30	100.90	-157.36	5,394.18	-918.18	3,888.33	3,805.89	82.43	47.170	
14,300.00	8,803.00	17,917.23	12,392.00	96.86	102.38	-157.36	5,494.17	-919.29	3,888.32	3,804.67	83.65	46.483	
14,400.00	8,803.00	18,017.23	12,392.00	98.42	103.87	-157.36	5,594.17	-920.39	3,888.32	3,803.45	84.88	45.812	
14,500.00	8,803.00	18,117.23	12,392.00	99.98	105.35	-157.36	5,694.16	-921.49	3,888.32	3,802.22	86.10	45.158	
14,600.00	8,803.00	18,217.23	12,392.00	101.55	106.85	-157.36	5,794.16	-922.59	3,888.32	3,800.99	87.33	44.523	
14,700.00	8,803.00	18,317.23	12,392.00	103.12	108.35	-157.36	5,894.15	-923.69	3,888.32	3,799.75	88.57	43.903	
14,800.00	8,803.00	18,417.23	12,392.00	104.69	109.85	-157.36	5,994.14	-924.79	3,888.32	3,798.51	89.80	43.299	
14,900.00	8,803.00	18,517.23	12,392.00	106.27	111.36	-157.36	6,094.14	-925.89	3,888.31	3,797.27	91.04	42.710	
15,000.00	8,803.00	18,617.23	12,392.00	107.85	112.87	-157.36	6,194.13	-926.99	3,888.31	3,796.03	92.28	42.135	
15,100.00	8,803.00	18,717.23	12,392.00	109.42	114.39	-157.36	6,294.13	-928.09	3,888.31	3,794.78	93.53	41.574	
15,200.00	8,803.00	18,817.23	12,392.00	111.01	115.91	-157.36	6,394.12	-929.19	3,888.31	3,793.53	94.77	41.027	
15,300.00	8,803.00	18,917.23	12,392.00	112.59	117.43	-157.36	6,494.11	-930.29	3,888.31	3,792.28	96.02	40.493	
15,400.00	8,803.00	19,017.23	12,392.00	114.18	118.96	-157.36	6,594.11	-931.39	3,888.30	3,791.03	97.28	39.972	
15,500.00	8,803.00	19,117.23	12,392.00	115.76	120.49	-157.36	6,694.10	-932.49	3,888.30	3,789.77	98.53	39.463	
15,600.00	8,803.00	19,217.23	12,392.00	117.35	122.02	-157.36	6,794.10	-933.59	3,888.30	3,788.51	99.79	38.966	
15,700.00	8,803.00	19,317.23	12,392.00	118.94	123.55	-157.36	6,894.09	-934.69	3,888.30	3,787.25	101.05	38.480	
15,800.00	8,803.00	19,417.23	12,392.00	120.54	125.09	-157.36	6,994.08	-935.79	3,888.30	3,785.99	102.31	38.005	
15,900.00	8,803.00	19,517.23	12,392.00	122.13	126.64	-157.36	7,094.08	-936.89	3,888.29	3,784.72	103.57	37.542	
16,000.00	8,803.00	19,617.23	12,392.00	123.73	128.18	-157.36	7,194.07	-937.99	3,888.29	3,783.46	104.83	37.090	
16,100.00	8,803.00	19,717.23	12,392.00	125.33	129.73	-157.36	7,294.06	-939.09	3,888.29	3,782.19	106.10	36.648	
16,200.00	8,803.00	19,817.23	12,392.00	126.92	131.28	-157.36	7,394.06	-940.19	3,888.29	3,780.92	107.37	36.215	
16,300.00	8,803.00	19,917.23	12,392.00	128.52	132.83	-157.36	7,494.05	-941.29	3,888.29	3,779.65	108.63	35.792	
16,400.00	8,803.00	20,017.23	12,392.00	130.13	134.39	-157.36	7,594.05	-942.39	3,888.28	3,778.38	109.90	35.379	
16,500.00	8,803.00	20,117.23	12,392.00	131.73	135.94	-157.36	7,694.04	-943.49	3,888.28	3,777.11	111.17	34.975	
16,600.00	8,803.00	20,217.23	12,392.00	133.33	137.50	-157.36	7,794.03	-944.59	3,888.28	3,775.84	112.45	34.579	
16,700.00	8,803.00	20,317.23	12,392.00	134.94	139.06	-157.36	7,894.03	-945.70	3,888.28	3,774.56	113.72	34.192	
16,800.00	8,803.00	20,417.23	12,392.00	136.55	140.63	-157.36	7,994.02	-946.80	3,888.28	3,773.28	114.99	33.813	
16,900.00	8,803.00	20,517.23	12,392.00	138.15	142.19	-157.36	8,094.02	-947.90	3,888.28	3,772.00	116.27	33.442	
17,000.00	8,803.00	20,617.23	12,392.00	139.76	143.76	-157.36	8,194.01	-949.00	3,888.27	3,770.72	117.55	33.078	
17,100.00	8,803.00	20,717.23	12,392.00	141.37	145.33	-157.36	8,294.00	-950.10	3,888.27	3,769.44	118.83	32.722	
17,200.00	8,803.00	20,817.23	12,392.00	142.98	146.90	-157.36	8,394.00	-951.20	3,888.27	3,768.16	120.11	32.373	
17,300.00	8,803.00	20,917.23	12,392.00	144.59	148.48	-157.36	8,493.99	-952.30	3,888.27	3,766.88	121.39	32.031	
17,400.00	8,803.00	21,017.23	12,392.00	146.21	150.05	-157.36	8,593.99	-953.40	3,888.27	3,765.59	122.67	31.696	
17,500.00	8,803.00	21,117.23	12,392.00	147.82	151.63	-157.36	8,693.98	-954.50	3,888.26	3,764.31	123.96	31.368	
17,600.00	8,803.00	21,217.23	12,392.00	149.43	153.21	-157.36	8,793.97	-955.60	3,888.26	3,763.02	125.24	31.046	
17,700.00	8,803.00	21,317.23	12,392.00	151.05	154.79	-157.36	8,893.97	-956.70	3,888.26	3,761.74	126.52	30.732	
17,800.00	8,803.00	21,417.23	12,392.00	152.67	156.37	-157.36	8,993.96	-957.80	3,888.26	3,760.45	127.81	30.423	
17,900.00	8,803.00	21,517.23	12,392.00	154.28	157.95	-157.36	9,093.96	-958.90	3,888.26	3,759.16	129.09	30.120	
18,000.00	8,803.00	21,617.23	12,392.00	155.90	159.54	-157.36	9,193.95	-960.00	3,888.25	3,757.87	130.38	29.822	
18,100.00	8,803.00	21,717.23	12,392.00	157.52	161.12	-157.36	9,293.94	-961.10	3,888.25	3,756.58	131.67	29.531	
18,200.00	8,803.00	21,817.23	12,392.00	159.14	162.71	-157.36	9,393.94	-962.20	3,888.25	3,755.29	132.96	29.244	
18,300.00	8,803.00	21,917.23	12,392.00	160.76	164.30	-157.36	9,493.93	-963.30	3,888.25	3,754.00	134.25	28.963	
18,400.00	8,803.00	22,017.23	12,392.00	162.38	165.89	-157.36	9,593.93	-964.40	3,888.25	3,752.71	135.54	28.687	
18,500.00	8,803.00	22,117.23	12,392.00	164.00	167.48	-157.36	9,693.92	-965.50	3,888.25	3,751.42	136.83	28.417	
18,600.00	8,803.00	22,217.23	12,392.00	165.62	169.07	-157.36	9,793.91	-966.60	3,888.24	3,750.13	138.12	28.152	
18,700.00	8,803.00	22,317.23	12,392.00	167.24	170.66	-157.36	9,893.91	-967.70	3,888.24	3,748.83	139.41	27.891	
18,800.00	8,803.00	22,417.23	12,392.00	168.87	172.26	-157.36	9,993.90	-968.80	3,888.24	3,747.54	140.70	27.634	
18,900.00	8,803.00	22,517.23	12,392.00	170.49	173.85	-157.36	10,093.90	-969.90	3,888.24	3,746.24	141.99	27.383	
18,961.77	8,803.00	22,579.00	12,392.00	171.49	174.84	-157.36	10,155.66	-970.58	3,888.24	3,745.45	142.79	27.230	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.80	0.80	0.00	0.00	89.44	0.68	69.99	69.99				
100.00	100.00	100.80	100.80	0.13	0.13	89.44	0.68	69.99	69.99	69.81	0.18	389.992	
200.00	200.00	200.80	200.80	0.48	0.49	89.44	0.68	69.99	69.99	69.31	0.69	101.969	
300.00	300.00	300.80	300.80	0.84	0.85	89.44	0.68	69.99	69.99	68.80	1.19	58.652	
400.00	400.00	400.80	400.80	1.20	1.20	89.44	0.68	69.99	69.99	68.29	1.70	41.165	
500.00	500.00	500.80	500.80	1.56	1.56	89.44	0.68	69.99	69.99	67.79	2.21	31.710	
600.00	600.00	600.80	600.80	1.92	1.92	89.44	0.68	69.99	69.99	67.28	2.71	25.787	
700.00	700.00	700.80	700.80	2.28	2.28	89.44	0.68	69.99	69.99	66.77	3.22	21.729	
800.00	800.00	800.80	800.80	2.63	2.64	89.44	0.68	69.99	69.99	66.27	3.73	18.774	
900.00	900.00	900.80	900.80	2.99	3.00	89.44	0.68	69.99	69.99	65.76	4.24	16.527	
1,000.00	1,000.00	1,000.80	1,000.80	3.35	3.35	89.44	0.68	69.99	69.99	65.25	4.74	14.760	
1,100.00	1,100.00	1,100.80	1,100.80	3.71	3.71	89.44	0.68	69.99	69.99	64.74	5.25	13.335	
1,200.00	1,200.00	1,200.80	1,200.80	4.07	4.07	89.44	0.68	69.99	69.99	64.24	5.76	12.160	
1,300.00	1,300.00	1,300.80	1,300.80	4.43	4.43	89.44	0.68	69.99	69.99	63.73	6.26	11.176	
1,400.00	1,400.00	1,400.80	1,400.80	4.79	4.79	89.44	0.68	69.99	69.99	63.22	6.77	10.339	
1,500.00	1,500.00	1,500.80	1,500.80	5.14	5.15	89.44	0.68	69.99	69.99	62.72	7.28	9.619	
1,600.00	1,600.00	1,601.24	1,601.23	5.50	5.49	90.51	-0.62	69.67	69.67	61.90	7.77	8.965	
1,700.00	1,700.00	1,701.54	1,701.44	5.86	5.82	93.73	-4.48	68.71	68.86	60.61	8.26	8.341	
1,800.00	1,800.00	1,801.55	1,801.24	6.22	6.15	99.20	-10.87	67.13	68.01	59.26	8.74	7.778	
1,864.16	1,864.16	1,865.52	1,864.96	6.45	6.36	103.90	-16.28	65.79	67.78	58.72	9.06	7.482	CC
1,900.00	1,900.00	1,901.16	1,900.42	6.58	6.48	106.92	-19.75	64.93	67.87	58.64	9.23	7.350	ES
2,000.00	2,000.00	2,000.22	1,998.79	6.94	6.82	116.57	-31.07	62.13	69.50	59.77	9.72	7.146	
2,100.00	2,099.99	2,099.12	2,096.75	7.28	7.17	18.08	-44.29	58.86	72.53	62.33	10.20	7.108	
2,200.00	2,199.91	2,198.12	2,194.78	7.62	7.53	28.62	-57.67	55.55	75.67	65.00	10.67	7.089	SF
2,300.00	2,299.69	2,297.01	2,292.72	7.96	7.89	39.16	-71.03	52.24	79.14	68.00	11.14	7.103	
2,400.00	2,399.27	2,395.74	2,390.48	8.31	8.26	49.82	-84.38	48.94	83.36	71.76	11.61	7.182	
2,449.99	2,448.95	2,445.01	2,439.27	8.48	8.44	55.18	-91.03	47.29	85.94	74.10	11.84	7.258	
2,500.00	2,498.61	2,494.26	2,488.04	8.66	8.63	60.41	-97.69	45.64	89.09	77.01	12.08	7.378	
2,600.00	2,597.92	2,592.75	2,585.57	9.01	9.00	69.68	-111.00	42.35	97.40	84.85	12.55	7.759	
2,700.00	2,697.23	2,691.24	2,683.11	9.37	9.38	77.36	-124.31	39.06	107.88	94.83	13.04	8.271	
2,800.00	2,796.53	2,789.73	2,780.64	9.74	9.76	83.61	-137.61	35.76	119.94	106.40	13.54	8.858	
2,900.00	2,895.84	2,888.22	2,878.17	10.10	10.15	88.68	-150.92	32.47	133.17	119.13	14.05	9.481	
3,000.00	2,995.15	2,987.01	2,976.00	10.47	10.54	92.83	-164.26	29.17	147.25	132.68	14.56	10.112	
3,100.00	3,094.45	3,089.75	3,077.94	10.84	10.94	96.50	-176.62	26.11	160.46	145.34	15.12	10.612	
3,200.00	3,193.76	3,193.05	3,180.75	11.22	11.33	99.85	-186.35	23.70	171.62	155.94	15.67	10.950	
3,300.00	3,293.07	3,296.76	3,284.20	11.59	11.71	103.06	-193.40	21.96	180.70	164.48	16.22	11.141	
3,400.00	3,392.38	3,400.72	3,388.07	11.97	12.09	106.27	-197.73	20.88	187.74	170.99	16.76	11.204	
3,500.00	3,491.68	3,504.79	3,492.12	12.35	12.45	109.58	-199.31	20.49	192.83	175.55	17.28	11.157	
3,600.00	3,590.99	3,604.46	3,591.79	12.73	12.78	112.79	-199.32	20.49	197.11	179.32	17.80	11.075	
3,700.00	3,690.30	3,703.77	3,691.10	13.12	13.11	115.85	-199.32	20.49	201.99	183.68	18.31	11.032	
3,800.00	3,789.60	3,803.08	3,790.40	13.50	13.44	118.76	-199.32	20.49	207.41	188.59	18.82	11.020	
3,900.00	3,888.91	3,902.38	3,889.71	13.89	13.78	121.51	-199.32	20.49	213.34	194.01	19.33	11.036	
4,000.00	3,988.22	4,001.69	3,989.02	14.27	14.11	124.11	-199.32	20.49	219.74	199.90	19.84	11.076	
4,100.00	4,087.52	4,101.00	4,088.32	14.66	14.45	126.57	-199.32	20.49	226.58	206.23	20.35	11.136	
4,200.00	4,186.83	4,200.30	4,187.63	15.05	14.78	128.87	-199.32	20.49	233.80	212.95	20.85	11.212	
4,300.00	4,286.14	4,299.61	4,286.94	15.44	15.12	131.03	-199.32	20.49	241.38	220.02	21.36	11.302	
4,400.00	4,385.44	4,398.92	4,386.24	15.83	15.46	133.06	-199.32	20.49	249.28	227.42	21.86	11.403	
4,500.00	4,484.75	4,498.22	4,485.55	16.22	15.80	134.97	-199.32	20.49	257.48	235.11	22.36	11.513	
4,600.00	4,584.06	4,597.53	4,584.86	16.61	16.14	136.75	-199.32	20.49	265.94	243.08	22.87	11.630	
4,700.00	4,683.36	4,696.84	4,684.16	17.01	16.48	138.43	-199.32	20.49	274.65	251.28	23.37	11.753	
4,800.00	4,782.67	4,796.14	4,783.47	17.40	16.82	140.00	-199.32	20.49	283.58	259.71	23.87	11.880	
4,900.00	4,881.98	4,895.45	4,882.78	17.79	17.16	141.48	-199.32	20.49	292.70	268.33	24.37	12.011	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,981.29	4,994.76	4,982.09	18.19	17.51	142.86	-199.32	20.49	302.01	277.14	24.87	12.143	
5,100.00	5,080.59	5,094.07	5,081.39	18.58	17.85	144.16	-199.32	20.49	311.48	286.11	25.37	12.277	
5,200.00	5,179.90	5,193.37	5,180.70	18.98	18.19	145.39	-199.32	20.49	321.11	295.24	25.87	12.412	
5,300.00	5,279.21	5,292.68	5,280.01	19.37	18.54	146.54	-199.32	20.49	330.87	304.50	26.37	12.547	
5,400.00	5,378.51	5,391.99	5,379.31	19.77	18.88	147.63	-199.32	20.49	340.76	313.89	26.87	12.681	
5,500.00	5,477.82	5,491.29	5,478.62	20.16	19.23	148.66	-199.32	20.49	350.76	323.39	27.37	12.815	
5,600.00	5,577.13	5,590.60	5,577.93	20.56	19.57	149.63	-199.32	20.49	360.87	333.00	27.87	12.948	
5,700.00	5,676.43	5,689.91	5,677.23	20.96	19.92	150.54	-199.32	20.49	371.07	342.70	28.37	13.079	
5,800.00	5,775.74	5,789.21	5,776.54	21.35	20.26	151.41	-199.32	20.49	381.37	352.50	28.87	13.209	
5,900.00	5,875.05	5,888.52	5,875.85	21.75	20.61	152.23	-199.32	20.49	391.74	362.37	29.37	13.338	
6,000.00	5,974.35	5,987.83	5,975.15	22.15	20.95	153.01	-199.32	20.49	402.20	372.32	29.87	13.464	
6,100.00	6,073.66	6,087.13	6,074.46	22.55	21.30	153.75	-199.32	20.49	412.72	382.35	30.37	13.588	
6,200.00	6,172.97	6,186.44	6,173.77	22.95	21.65	154.45	-199.32	20.49	423.31	392.43	30.87	13.711	
6,300.00	6,272.27	6,285.75	6,273.07	23.35	22.00	155.12	-199.32	20.49	433.95	402.58	31.37	13.831	
6,400.00	6,371.58	6,385.05	6,372.38	23.74	22.34	155.76	-199.32	20.49	444.66	412.78	31.88	13.949	
6,500.00	6,470.89	6,484.36	6,471.69	24.14	22.69	156.36	-199.32	20.49	455.41	423.03	32.38	14.066	
6,600.00	6,570.20	6,583.67	6,571.00	24.54	23.04	156.94	-199.32	20.49	466.21	433.33	32.88	14.179	
6,700.00	6,669.50	6,682.98	6,670.30	24.94	23.39	157.49	-199.32	20.49	477.06	443.68	33.38	14.291	
6,800.00	6,768.81	6,782.28	6,769.61	25.34	23.74	158.02	-199.32	20.49	487.95	454.07	33.88	14.401	
6,900.00	6,868.12	6,881.59	6,868.92	25.74	24.09	158.53	-199.32	20.49	498.88	464.49	34.39	14.508	
7,000.00	6,967.42	6,980.90	6,968.22	26.14	24.44	159.01	-199.32	20.49	509.85	474.96	34.89	14.613	
7,043.93	7,011.05	7,024.52	7,011.85	26.32	24.59	159.22	-199.32	20.49	514.67	479.57	35.11	14.659	
7,100.00	7,066.78	7,080.25	7,067.58	26.54	24.79	159.49	-199.32	20.49	520.46	485.07	35.39	14.706	
7,200.00	7,166.37	7,179.84	7,167.17	26.93	25.14	159.87	-199.32	20.49	528.90	493.01	35.89	14.735	
7,300.00	7,266.16	7,279.63	7,266.96	27.30	25.49	160.14	-199.32	20.49	534.90	498.50	36.39	14.697	
7,400.00	7,366.09	7,379.56	7,366.89	27.65	25.84	160.29	-199.32	20.49	538.44	501.55	36.89	14.595	
7,493.92	7,460.00	7,473.47	7,460.80	27.97	26.17	-90.49	-199.32	20.49	539.53	502.17	37.36	14.443	
7,500.00	7,466.08	7,479.55	7,466.88	27.99	26.19	-90.49	-199.32	20.49	539.53	502.14	37.39	14.432	
7,600.00	7,566.08	7,579.55	7,566.88	28.31	26.54	-90.49	-199.32	20.49	539.53	501.66	37.87	14.246	
7,700.00	7,666.08	7,679.55	7,666.88	28.64	26.90	-90.49	-199.32	20.49	539.53	501.17	38.36	14.064	
7,800.00	7,766.08	7,779.55	7,766.88	28.96	27.25	-90.49	-199.32	20.49	539.53	500.68	38.85	13.887	
7,900.00	7,866.08	7,879.55	7,866.88	29.29	27.60	-90.49	-199.32	20.49	539.53	500.19	39.34	13.715	
8,000.00	7,966.08	7,979.55	7,966.88	29.62	27.96	-90.49	-199.32	20.49	539.53	499.70	39.83	13.546	
8,100.00	8,066.08	8,079.55	8,066.88	29.95	28.31	-90.49	-199.32	20.49	539.53	499.21	40.32	13.381	
8,200.00	8,166.08	8,179.55	8,166.88	30.28	28.66	-90.49	-199.32	20.49	539.53	498.72	40.81	13.221	
8,263.96	8,230.04	8,243.51	8,230.84	30.49	28.89	-90.49	-199.32	20.49	539.53	498.41	41.12	13.120	
8,300.00	8,266.05	8,279.53	8,266.85	30.61	29.02	-96.29	-199.32	20.49	539.65	498.35	41.30	13.066	
8,350.00	8,315.76	8,329.23	8,316.56	30.77	29.19	-96.79	-199.32	20.49	540.26	498.72	41.55	13.004	
8,400.00	8,364.80	8,378.28	8,365.60	30.92	29.37	-97.66	-199.32	20.49	541.50	499.71	41.79	12.957	
8,450.00	8,412.83	8,426.30	8,413.63	31.07	29.54	-98.84	-199.32	20.49	543.57	501.54	42.03	12.933	
8,500.00	8,459.46	8,472.93	8,460.26	31.20	29.70	-100.27	-199.32	20.49	546.78	504.51	42.27	12.937	
8,550.00	8,504.34	8,517.82	8,505.14	31.33	29.86	-101.84	-199.32	20.49	551.46	508.97	42.49	12.977	
8,600.00	8,547.14	8,560.62	8,547.94	31.44	30.01	-103.44	-199.32	20.49	558.03	515.31	42.71	13.064	
8,650.00	8,587.53	8,601.00	8,588.33	31.54	30.16	-104.95	-199.32	20.49	566.85	523.93	42.92	13.206	
8,700.00	8,625.19	8,638.66	8,625.99	31.63	30.29	-106.27	-199.32	20.49	578.32	535.20	43.12	13.412	
8,750.00	8,659.85	8,673.32	8,660.65	31.71	30.41	-107.27	-199.32	20.49	592.73	549.42	43.30	13.688	
8,800.00	8,691.23	8,704.71	8,692.03	31.79	30.52	-107.85	-199.32	20.49	610.30	566.83	43.47	14.040	
8,850.00	8,719.11	8,732.58	8,719.91	31.85	30.62	-107.90	-199.32	20.49	631.14	587.53	43.61	14.472	
8,900.00	8,743.26	8,756.74	8,744.06	31.92	30.71	-107.33	-199.32	20.49	655.26	611.52	43.73	14.983	
8,950.00	8,763.51	8,776.98	8,764.31	31.99	30.78	-106.02	-199.32	20.49	682.53	638.70	43.83	15.571	
9,000.00	8,779.70	8,793.17	8,780.50	32.08	30.84	-103.87	-199.32	20.49	712.75	668.84	43.91	16.232	
9,050.00	8,791.70	8,805.17	8,792.50	32.18	30.88	-100.80	-199.32	20.49	745.59	701.63	43.96	16.960	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,100.00	8,799.43	8,812.90	8,800.23	32.32	30.91	-96.72	-199.32	20.49	780.70	736.71	43.99	17.746	
9,150.00	8,802.83	8,816.30	8,803.63	32.48	30.92	-91.61	-199.32	20.49	817.66	773.65	44.00	18.581	
9,163.96	8,803.00	8,816.47	8,803.80	32.53	30.92	-90.00	-199.32	20.49	828.24	784.24	44.00	18.822	
9,200.00	8,803.00	8,816.47	8,803.80	32.67	30.92	-90.00	-199.32	20.49	855.88	811.88	44.00	19.452	
9,300.00	8,803.00	8,816.47	8,803.80	33.10	30.92	-90.00	-199.32	20.49	934.17	890.17	43.99	21.236	
9,400.00	8,803.00	8,816.47	8,803.80	33.60	30.92	-90.00	-199.32	20.49	1,014.31	970.33	43.98	23.062	
9,480.63	8,803.00	8,816.47	8,803.80	34.05	30.92	-90.00	-199.32	20.49	1,079.94	1,035.97	43.98	24.557	
9,500.00	8,803.00	8,816.47	8,803.80	34.16	30.92	-90.00	-199.32	20.49	1,095.86	1,051.88	43.98	24.919	
9,600.00	8,803.00	8,816.47	8,803.80	34.79	30.92	-90.00	-199.32	20.49	1,179.66	1,135.69	43.97	26.826	
9,700.00	8,803.00	8,816.47	8,803.80	35.48	30.92	-90.00	-199.32	20.49	1,265.82	1,221.84	43.97	28.785	
9,800.00	8,803.00	8,816.47	8,803.80	36.23	30.92	-90.00	-199.32	20.49	1,353.88	1,309.90	43.98	30.787	
9,900.00	8,803.00	8,816.47	8,803.80	37.04	30.92	-90.00	-199.32	20.49	1,443.50	1,399.52	43.98	32.823	
10,000.00	8,803.00	8,816.47	8,803.80	37.91	30.92	-90.00	-199.32	20.49	1,534.40	1,490.41	43.98	34.886	
10,100.00	8,803.00	8,816.47	8,803.80	38.83	30.92	-90.00	-199.32	20.49	1,626.36	1,582.38	43.99	36.973	
10,200.00	8,803.00	8,816.47	8,803.80	39.79	30.92	-90.00	-199.32	20.49	1,719.23	1,675.24	43.99	39.078	
10,300.00	8,803.00	8,816.47	8,803.80	40.80	30.92	-90.00	-199.32	20.49	1,812.86	1,768.85	44.00	41.199	
10,400.00	8,803.00	8,816.47	8,803.80	41.84	30.92	-90.00	-199.32	20.49	1,907.13	1,863.12	44.01	43.333	
10,500.00	8,803.00	8,816.47	8,803.80	42.93	30.92	-90.00	-199.32	20.49	2,001.96	1,957.94	44.02	45.477	
10,600.00	8,803.00	8,816.47	8,803.80	44.05	30.92	-90.00	-199.32	20.49	2,097.27	2,053.23	44.03	47.631	
10,700.00	8,803.00	8,816.47	8,803.80	45.20	30.92	-90.00	-199.32	20.49	2,192.99	2,148.95	44.04	49.792	
10,800.00	8,803.00	8,816.47	8,803.80	46.38	30.92	-90.00	-199.32	20.49	2,289.08	2,245.03	44.06	51.959	
10,900.00	8,803.00	8,816.47	8,803.80	47.59	30.92	-90.00	-199.32	20.49	2,385.50	2,341.43	44.07	54.131	
11,000.00	8,803.00	8,816.47	8,803.80	48.83	30.92	-90.00	-199.32	20.49	2,482.20	2,438.11	44.08	56.307	
11,100.00	8,803.00	8,816.47	8,803.80	50.09	30.92	-90.00	-199.32	20.49	2,579.14	2,535.05	44.10	58.486	
11,200.00	8,803.00	8,816.47	8,803.80	51.37	30.92	-90.00	-199.32	20.49	2,676.32	2,632.20	44.11	60.668	
11,300.00	8,803.00	8,816.47	8,803.80	52.68	30.92	-90.00	-199.32	20.49	2,773.69	2,729.56	44.13	62.851	
11,400.00	8,803.00	8,816.47	8,803.80	54.00	30.92	-90.00	-199.32	20.49	2,871.25	2,827.10	44.15	65.036	
11,500.00	8,803.00	8,816.47	8,803.80	55.34	30.92	-90.00	-199.32	20.49	2,968.97	2,924.80	44.17	67.222	
11,600.00	8,803.00	8,816.47	8,803.80	56.69	30.92	-90.00	-199.32	20.49	3,066.83	3,022.64	44.19	69.408	
11,700.00	8,803.00	8,816.47	8,803.80	58.07	30.92	-90.00	-199.32	20.49	3,164.83	3,120.62	44.21	71.594	
11,800.00	8,803.00	8,816.47	8,803.80	59.45	30.92	-90.00	-199.32	20.49	3,262.95	3,218.72	44.23	73.779	
11,900.00	8,803.00	8,816.47	8,803.80	60.85	30.92	-90.00	-199.32	20.49	3,361.18	3,316.93	44.25	75.964	
12,000.00	8,803.00	8,816.47	8,803.80	62.26	30.92	-90.00	-199.32	20.49	3,459.51	3,415.24	44.27	78.147	
12,100.00	8,803.00	8,816.47	8,803.80	63.69	30.92	-90.00	-199.32	20.49	3,557.94	3,513.64	44.29	80.329	
12,200.00	8,803.00	8,816.47	8,803.80	65.12	30.92	-90.00	-199.32	20.49	3,656.45	3,612.13	44.32	82.510	
12,300.00	8,803.00	15,972.92	12,501.00	66.56	72.96	-171.22	3,504.49	28.47	3,741.08	3,687.94	53.14	70.396	
12,400.00	8,803.00	16,072.92	12,501.00	68.02	74.29	-171.22	3,604.48	27.37	3,741.08	3,687.02	54.06	69.201	
12,500.00	8,803.00	16,172.92	12,501.00	69.48	75.63	-171.22	3,704.48	26.27	3,741.08	3,686.09	54.99	68.037	
12,600.00	8,803.00	16,272.92	12,501.00	70.95	76.98	-171.22	3,804.47	25.17	3,741.08	3,685.16	55.92	66.901	
12,700.00	8,803.00	16,372.92	12,501.00	72.43	78.35	-171.22	3,904.46	24.07	3,741.08	3,684.21	56.86	65.793	
12,800.00	8,803.00	16,472.92	12,501.00	73.91	79.72	-171.22	4,004.46	22.97	3,741.07	3,683.26	57.81	64.713	
12,900.00	8,803.00	16,572.92	12,501.00	75.41	81.10	-171.22	4,104.45	21.87	3,741.07	3,682.31	58.77	63.660	
13,000.00	8,803.00	16,672.92	12,501.00	76.91	82.50	-171.22	4,204.45	20.77	3,741.07	3,681.34	59.73	62.634	
13,100.00	8,803.00	16,772.92	12,501.00	78.41	83.90	-171.22	4,304.44	19.67	3,741.07	3,680.37	60.70	61.633	
13,200.00	8,803.00	16,872.92	12,501.00	79.92	85.32	-171.22	4,404.43	18.57	3,741.07	3,679.40	61.67	60.658	
13,300.00	8,803.00	16,972.92	12,501.00	81.44	86.74	-171.22	4,504.43	17.47	3,741.07	3,678.41	62.66	59.708	
13,400.00	8,803.00	17,072.92	12,501.00	82.96	88.17	-171.22	4,604.42	16.37	3,741.07	3,677.43	63.64	58.782	
13,500.00	8,803.00	17,172.92	12,501.00	84.49	89.60	-171.22	4,704.42	15.27	3,741.07	3,676.43	64.64	57.879	
13,600.00	8,803.00	17,272.92	12,501.00	86.02	91.05	-171.22	4,804.41	14.17	3,741.07	3,675.43	65.63	56.999	
13,700.00	8,803.00	17,372.92	12,501.00	87.56	92.50	-171.22	4,904.40	13.08	3,741.07	3,674.43	66.64	56.142	
13,800.00	8,803.00	17,472.92	12,501.00	89.10	93.96	-171.22	5,004.40	11.98	3,741.07	3,673.42	67.64	55.306	
13,900.00	8,803.00	17,572.92	12,501.00	90.64	95.42	-171.22	5,104.39	10.88	3,741.06	3,672.41	68.66	54.490	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	8,803.00	17,672.92	12,501.00	92.19	96.89	-171.22	5,204.39	9.78	3,741.06	3,671.39	69.67	53.696	
14,100.00	8,803.00	17,772.92	12,501.00	93.74	98.37	-171.22	5,304.38	8.68	3,741.06	3,670.37	70.69	52.921	
14,200.00	8,803.00	17,872.92	12,501.00	95.30	99.85	-171.22	5,404.37	7.58	3,741.06	3,669.35	71.72	52.165	
14,300.00	8,803.00	17,972.92	12,501.00	96.86	101.34	-171.22	5,504.37	6.48	3,741.06	3,668.32	72.74	51.429	
14,400.00	8,803.00	18,072.92	12,501.00	98.42	102.83	-171.22	5,604.36	5.38	3,741.06	3,667.29	73.77	50.711	
14,500.00	8,803.00	18,172.92	12,501.00	99.98	104.33	-171.22	5,704.35	4.28	3,741.06	3,666.25	74.81	50.010	
14,600.00	8,803.00	18,272.92	12,501.00	101.55	105.83	-171.22	5,804.35	3.18	3,741.06	3,665.22	75.84	49.327	
14,700.00	8,803.00	18,372.92	12,501.00	103.12	107.34	-171.22	5,904.34	2.08	3,741.06	3,664.18	76.88	48.659	
14,800.00	8,803.00	18,472.92	12,501.00	104.69	108.85	-171.22	6,004.34	0.98	3,741.06	3,663.13	77.93	48.008	
14,900.00	8,803.00	18,572.92	12,501.00	106.27	110.36	-171.22	6,104.33	-0.12	3,741.06	3,662.08	78.97	47.373	
15,000.00	8,803.00	18,672.92	12,501.00	107.85	111.88	-171.22	6,204.32	-1.22	3,741.06	3,661.03	80.02	46.751	
15,100.00	8,803.00	18,772.92	12,501.00	109.42	113.40	-171.22	6,304.32	-2.32	3,741.05	3,659.98	81.07	46.145	
15,200.00	8,803.00	18,872.92	12,501.00	111.01	114.93	-171.22	6,404.31	-3.42	3,741.05	3,658.93	82.13	45.552	
15,300.00	8,803.00	18,972.92	12,501.00	112.59	116.46	-171.22	6,504.31	-4.52	3,741.05	3,657.87	83.19	44.973	
15,400.00	8,803.00	19,072.92	12,501.00	114.18	117.99	-171.22	6,604.30	-5.62	3,741.05	3,656.81	84.24	44.407	
15,500.00	8,803.00	19,172.92	12,501.00	115.76	119.53	-171.22	6,704.29	-6.72	3,741.05	3,655.74	85.31	43.854	
15,600.00	8,803.00	19,272.92	12,501.00	117.35	121.07	-171.22	6,804.29	-7.82	3,741.05	3,654.68	86.37	43.313	
15,700.00	8,803.00	19,372.92	12,501.00	118.94	122.61	-171.22	6,904.28	-8.92	3,741.05	3,653.61	87.44	42.785	
15,800.00	8,803.00	19,472.92	12,501.00	120.54	124.15	-171.22	7,004.28	-10.02	3,741.05	3,652.54	88.50	42.270	
15,900.00	8,803.00	19,572.92	12,501.00	122.13	125.70	-171.22	7,104.27	-11.11	3,741.05	3,651.47	89.57	41.765	
16,000.00	8,803.00	19,672.92	12,501.00	123.73	127.25	-171.22	7,204.26	-12.21	3,741.05	3,650.40	90.64	41.272	
16,100.00	8,803.00	19,772.92	12,501.00	125.33	128.81	-171.22	7,304.26	-13.31	3,741.05	3,649.33	91.72	40.789	
16,200.00	8,803.00	19,872.92	12,501.00	126.92	130.36	-171.22	7,404.25	-14.41	3,741.04	3,648.25	92.79	40.317	
16,300.00	8,803.00	19,972.92	12,501.00	128.52	131.92	-171.22	7,504.25	-15.51	3,741.04	3,647.18	93.87	39.854	
16,400.00	8,803.00	20,072.92	12,501.00	130.13	133.48	-171.22	7,604.24	-16.61	3,741.04	3,646.10	94.95	39.402	
16,500.00	8,803.00	20,172.92	12,501.00	131.73	135.04	-171.22	7,704.23	-17.71	3,741.04	3,645.02	96.03	38.959	
16,600.00	8,803.00	20,272.92	12,501.00	133.33	136.61	-171.22	7,804.23	-18.81	3,741.04	3,643.93	97.11	38.525	
16,700.00	8,803.00	20,372.92	12,501.00	134.94	138.17	-171.22	7,904.22	-19.91	3,741.04	3,642.85	98.19	38.101	
16,800.00	8,803.00	20,472.92	12,501.00	136.55	139.74	-171.22	8,004.22	-21.01	3,741.04	3,641.77	99.27	37.684	
16,900.00	8,803.00	20,572.92	12,501.00	138.15	141.31	-171.22	8,104.21	-22.11	3,741.04	3,640.68	100.36	37.277	
17,000.00	8,803.00	20,672.92	12,501.00	139.76	142.88	-171.22	8,204.20	-23.21	3,741.04	3,639.59	101.45	36.877	
17,100.00	8,803.00	20,772.92	12,501.00	141.37	144.46	-171.22	8,304.20	-24.31	3,741.04	3,638.50	102.53	36.486	
17,200.00	8,803.00	20,872.92	12,501.00	142.98	146.03	-171.22	8,404.19	-25.41	3,741.04	3,637.41	103.62	36.102	
17,300.00	8,803.00	20,972.92	12,501.00	144.59	147.61	-171.22	8,504.19	-26.51	3,741.03	3,636.32	104.71	35.726	
17,400.00	8,803.00	21,072.92	12,501.00	146.21	149.19	-171.22	8,604.18	-27.61	3,741.03	3,635.23	105.81	35.358	
17,500.00	8,803.00	21,172.92	12,501.00	147.82	150.77	-171.22	8,704.17	-28.71	3,741.03	3,634.13	106.90	34.996	
17,600.00	8,803.00	21,272.92	12,501.00	149.43	152.36	-171.22	8,804.17	-29.81	3,741.03	3,633.04	107.99	34.642	
17,700.00	8,803.00	21,372.92	12,501.00	151.05	153.94	-171.22	8,904.16	-30.91	3,741.03	3,631.94	109.09	34.294	
17,800.00	8,803.00	21,472.92	12,501.00	152.67	155.52	-171.22	9,004.16	-32.01	3,741.03	3,630.85	110.18	33.953	
17,900.00	8,803.00	21,572.92	12,501.00	154.28	157.11	-171.22	9,104.15	-33.11	3,741.03	3,629.75	111.28	33.618	
18,000.00	8,803.00	21,672.92	12,501.00	155.90	158.70	-171.22	9,204.14	-34.21	3,741.03	3,628.65	112.38	33.290	
18,100.00	8,803.00	21,772.92	12,501.00	157.52	160.29	-171.22	9,304.14	-35.30	3,741.03	3,627.55	113.47	32.968	
18,200.00	8,803.00	21,872.92	12,501.00	159.14	161.88	-171.22	9,404.13	-36.40	3,741.03	3,626.45	114.57	32.652	
18,300.00	8,803.00	21,972.92	12,501.00	160.76	163.47	-171.22	9,504.13	-37.50	3,741.03	3,625.35	115.67	32.341	
18,400.00	8,803.00	22,072.92	12,501.00	162.38	165.06	-171.22	9,604.12	-38.60	3,741.03	3,624.25	116.77	32.037	
18,500.00	8,803.00	22,172.92	12,501.00	164.00	166.66	-171.22	9,704.11	-39.70	3,741.02	3,623.15	117.87	31.737	
18,600.00	8,803.00	22,272.92	12,501.00	165.62	168.25	-171.22	9,804.11	-40.80	3,741.02	3,622.05	118.98	31.443	
18,700.00	8,803.00	22,372.92	12,501.00	167.24	169.85	-171.22	9,904.10	-41.90	3,741.02	3,620.94	120.08	31.154	
18,800.00	8,803.00	22,472.92	12,501.00	168.87	171.45	-171.22	10,004.09	-43.00	3,741.02	3,619.83	121.19	30.870	
18,900.00	8,803.00	22,572.92	12,501.00	170.49	173.05	-171.22	10,104.09	-44.10	3,741.02	3,618.73	122.29	30.591	
18,961.77	8,803.00	22,634.69	12,501.00	171.49	174.04	-171.22	10,165.85	-44.78	3,741.02	3,618.04	122.98	30.421	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.20	1.20	0.00	0.00	89.44	1.02	104.98	104.98				
100.00	100.00	101.20	101.20	0.13	0.13	89.44	1.02	104.98	104.98	104.80	0.18	581.628	
200.00	200.00	201.20	201.20	0.48	0.49	89.44	1.02	104.98	104.98	104.30	0.69	152.719	
300.00	300.00	301.20	301.20	0.84	0.85	89.44	1.02	104.98	104.98	103.79	1.19	87.898	
400.00	400.00	401.20	401.20	1.20	1.21	89.44	1.02	104.98	104.98	103.28	1.70	61.707	
500.00	500.00	501.20	501.20	1.56	1.56	89.44	1.02	104.98	104.98	102.78	2.21	47.541	
600.00	600.00	601.20	601.20	1.92	1.92	89.44	1.02	104.98	104.98	102.27	2.72	38.665	
700.00	700.00	701.20	701.20	2.28	2.28	89.44	1.02	104.98	104.98	101.76	3.22	32.582	
800.00	800.00	801.20	801.20	2.63	2.64	89.44	1.02	104.98	104.98	101.26	3.73	28.152	
900.00	900.00	901.20	901.20	2.99	3.00	89.44	1.02	104.98	104.98	100.75	4.24	24.783	
1,000.00	1,000.00	1,001.20	1,001.20	3.35	3.36	89.44	1.02	104.98	104.98	100.24	4.74	22.134	
1,100.00	1,100.00	1,101.20	1,101.20	3.71	3.71	89.44	1.02	104.98	104.98	99.73	5.25	19.997	
1,200.00	1,200.00	1,201.20	1,201.20	4.07	4.07	89.44	1.02	104.98	104.98	99.23	5.76	18.236	
1,300.00	1,300.00	1,301.20	1,301.20	4.43	4.43	89.44	1.02	104.98	104.98	98.72	6.26	16.760	
1,400.00	1,400.00	1,401.20	1,401.20	4.79	4.79	89.44	1.02	104.98	104.98	98.21	6.77	15.505	
1,416.26	1,416.26	1,417.46	1,417.46	4.84	4.85	89.44	1.02	104.98	104.98	98.13	6.85	15.319	CC
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.44	1.02	104.98	104.99	97.72	7.27	14.433	ES
1,600.00	1,600.00	1,598.48	1,598.47	5.50	5.49	89.50	0.92	106.25	106.28	98.52	7.77	13.680	
1,700.00	1,700.00	1,695.67	1,695.58	5.86	5.82	89.67	0.64	109.98	110.12	101.87	8.25	13.347	
1,800.00	1,800.00	1,792.60	1,792.31	6.22	6.16	89.92	0.17	116.15	116.49	107.76	8.73	13.348	
1,900.00	1,900.00	1,889.15	1,888.48	6.58	6.50	90.22	-0.48	124.73	125.38	116.18	9.20	13.631	
2,000.00	2,000.00	1,985.21	1,983.91	6.94	6.84	90.56	-1.31	135.67	136.77	127.11	9.66	14.155	
2,100.00	2,099.99	2,080.83	2,078.60	7.28	7.19	-18.37	-2.32	148.93	149.42	139.31	10.11	14.777	
2,200.00	2,199.91	2,176.15	2,172.62	7.62	7.55	-18.39	-3.51	164.50	162.08	151.54	10.55	15.367	
2,300.00	2,299.69	2,274.40	2,269.25	7.96	7.93	-18.63	-4.86	182.28	174.06	163.04	11.02	15.797	
2,400.00	2,399.27	2,373.93	2,367.10	8.31	8.32	-19.11	-6.24	200.36	183.66	172.15	11.51	15.961	
2,449.99	2,448.95	2,423.75	2,416.09	8.48	8.52	-19.44	-6.93	209.42	187.54	175.78	11.75	15.957	
2,500.00	2,498.61	2,473.62	2,465.13	8.66	8.72	-19.80	-7.62	218.48	191.12	179.12	12.00	15.927	
2,600.00	2,597.92	2,573.33	2,563.17	9.01	9.13	-20.49	-8.99	236.60	198.30	185.80	12.50	15.867	
2,700.00	2,697.23	2,673.05	2,661.21	9.37	9.54	-21.12	-10.37	254.72	205.51	192.51	13.00	15.810	
2,800.00	2,796.53	2,772.76	2,759.26	9.74	9.95	-21.72	-11.75	272.84	212.75	199.24	13.50	15.755	
2,900.00	2,895.84	2,872.48	2,857.30	10.10	10.38	-22.27	-13.13	290.96	220.00	205.99	14.01	15.703	
3,000.00	2,995.15	2,972.19	2,955.35	10.47	10.80	-22.79	-14.51	309.08	227.27	212.76	14.52	15.653	
3,100.00	3,094.45	3,071.91	3,053.39	10.84	11.23	-23.28	-15.89	327.20	234.57	219.54	15.03	15.606	
3,200.00	3,193.76	3,171.62	3,151.44	11.22	11.66	-23.74	-17.27	345.32	241.87	226.33	15.54	15.560	
3,300.00	3,293.07	3,271.34	3,249.48	11.59	12.09	-24.17	-18.65	363.44	249.20	233.14	16.06	15.516	
3,400.00	3,392.38	3,371.05	3,347.53	11.97	12.52	-24.58	-20.02	381.56	256.53	239.95	16.58	15.474	
3,500.00	3,491.68	3,470.76	3,445.57	12.35	12.96	-24.96	-21.40	399.68	263.88	246.78	17.10	15.433	
3,600.00	3,590.99	3,570.48	3,543.62	12.73	13.40	-25.33	-22.78	417.80	271.24	253.62	17.62	15.395	
3,700.00	3,690.30	3,670.19	3,641.66	13.12	13.84	-25.67	-24.16	435.92	278.61	260.46	18.14	15.357	
3,800.00	3,789.60	3,769.91	3,739.71	13.50	14.28	-26.00	-25.54	454.04	285.98	267.32	18.67	15.322	
3,900.00	3,888.91	3,869.62	3,837.75	13.89	14.72	-26.31	-26.92	472.16	293.37	274.18	19.19	15.287	
4,000.00	3,988.22	3,969.34	3,935.80	14.27	15.17	-26.60	-28.30	490.28	300.77	281.05	19.72	15.254	
4,100.00	4,087.52	4,069.05	4,033.84	14.66	15.61	-26.88	-29.67	508.40	308.17	287.93	20.24	15.223	
4,200.00	4,186.83	4,168.77	4,131.88	15.05	16.06	-27.15	-31.05	526.52	315.58	294.81	20.77	15.192	
4,300.00	4,286.14	4,268.48	4,229.93	15.44	16.50	-27.41	-32.43	544.64	323.00	301.69	21.30	15.163	
4,400.00	4,385.44	4,368.20	4,327.97	15.83	16.95	-27.65	-33.81	562.76	330.42	308.59	21.83	15.134	
4,500.00	4,484.75	4,467.91	4,426.02	16.22	17.40	-27.88	-35.19	580.88	337.85	315.48	22.36	15.107	
4,600.00	4,584.06	4,567.62	4,524.06	16.61	17.85	-28.11	-36.57	599.00	345.28	322.38	22.90	15.081	
4,700.00	4,683.36	4,667.34	4,622.11	17.01	18.30	-28.32	-37.95	617.12	352.72	329.29	23.43	15.055	
4,800.00	4,782.67	4,767.05	4,720.15	17.40	18.75	-28.52	-39.33	635.24	360.16	336.20	23.96	15.030	
4,900.00	4,881.98	4,866.77	4,818.20	17.79	19.20	-28.72	-40.70	653.36	367.61	343.11	24.50	15.007	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,981.29	4,966.48	4,916.24	18.19	19.65	-28.91	-42.08	671.48	375.06	350.03	25.03	14.984	
5,100.00	5,080.59	5,066.20	5,014.29	18.58	20.11	-29.09	-43.46	689.60	382.52	356.95	25.57	14.961	
5,200.00	5,179.90	5,165.91	5,112.33	18.98	20.56	-29.27	-44.84	707.72	389.98	363.87	26.10	14.940	
5,300.00	5,279.21	5,265.63	5,210.38	19.37	21.01	-29.43	-46.22	725.84	397.44	370.80	26.64	14.919	
5,400.00	5,378.51	5,365.34	5,308.42	19.77	21.47	-29.60	-47.60	743.96	404.90	377.73	27.18	14.899	
5,500.00	5,477.82	5,465.05	5,406.46	20.16	21.92	-29.75	-48.98	762.08	412.37	384.66	27.71	14.879	
5,600.00	5,577.13	5,564.77	5,504.51	20.56	22.38	-29.90	-50.36	780.20	419.85	391.59	28.25	14.860	
5,700.00	5,676.43	5,664.48	5,602.55	20.96	22.83	-30.05	-51.73	798.32	427.32	398.53	28.79	14.842	
5,800.00	5,775.74	5,764.20	5,700.60	21.35	23.29	-30.19	-53.11	816.44	434.80	405.47	29.33	14.824	
5,900.00	5,875.05	5,863.91	5,798.64	21.75	23.74	-30.32	-54.49	834.56	442.28	412.41	29.87	14.807	
6,000.00	5,974.35	5,963.63	5,896.69	22.15	24.20	-30.45	-55.87	852.68	449.76	419.35	30.41	14.790	
6,100.00	6,073.66	6,063.34	5,994.73	22.55	24.66	-30.58	-57.25	870.80	457.24	426.29	30.95	14.774	
6,200.00	6,172.97	6,163.06	6,092.78	22.95	25.11	-30.70	-58.63	888.92	464.73	433.24	31.49	14.758	
6,300.00	6,272.27	6,262.77	6,190.82	23.35	25.57	-30.82	-60.01	907.04	472.22	440.19	32.03	14.743	
6,400.00	6,371.58	6,362.49	6,288.87	23.74	26.03	-30.93	-61.38	925.16	479.71	447.14	32.57	14.728	
6,500.00	6,470.89	6,462.20	6,386.91	24.14	26.48	-31.05	-62.76	943.28	487.20	454.09	33.11	14.713	
6,600.00	6,570.20	6,562.07	6,485.11	24.54	26.94	-31.15	-64.14	961.42	494.70	461.04	33.66	14.698	
6,700.00	6,669.50	6,676.13	6,597.55	24.94	27.45	-31.33	-65.59	980.44	500.73	466.45	34.29	14.604	
6,800.00	6,768.81	6,790.45	6,710.78	25.34	27.93	-31.62	-66.79	996.13	503.92	469.02	34.90	14.441	
6,900.00	6,868.12	6,904.83	6,824.50	25.74	28.38	-32.01	-67.72	1,008.45	504.25	468.77	35.48	14.213	
7,000.00	6,967.42	7,019.08	6,938.39	26.14	28.80	-32.52	-68.40	1,017.35	501.76	465.72	36.03	13.924	
7,043.93	7,011.05	7,069.17	6,988.40	26.32	28.98	-32.79	-68.62	1,020.19	499.77	463.50	36.27	13.779	
7,100.00	7,066.78	7,133.02	7,052.19	26.54	29.19	-33.11	-68.82	1,022.85	496.80	460.24	36.56	13.588	
7,200.00	7,166.37	7,246.70	7,165.85	26.93	29.56	-33.64	-68.98	1,024.95	491.04	453.99	37.05	13.252	
7,300.00	7,266.16	7,348.21	7,267.36	27.30	29.86	-34.02	-68.98	1,024.98	485.76	448.21	37.55	12.935	
7,400.00	7,366.09	7,448.14	7,367.29	27.65	30.16	-34.24	-68.98	1,024.98	482.64	444.59	38.05	12.685	
7,493.92	7,460.00	7,542.05	7,461.20	27.97	30.45	74.86	-68.98	1,024.98	481.69	443.19	38.50	12.512	
7,500.00	7,466.08	7,548.13	7,467.28	27.99	30.46	74.86	-68.98	1,024.98	481.69	443.16	38.53	12.502	
7,600.00	7,566.08	7,648.13	7,567.28	28.31	30.77	74.86	-68.98	1,024.98	481.69	442.69	39.00	12.352	
7,700.00	7,666.08	7,748.13	7,667.28	28.64	31.07	74.86	-68.98	1,024.98	481.69	442.22	39.47	12.205	
7,800.00	7,766.08	7,848.13	7,767.28	28.96	31.38	74.86	-68.98	1,024.98	481.69	441.75	39.94	12.061	
7,900.00	7,866.08	7,948.13	7,867.28	29.29	31.68	74.86	-68.98	1,024.98	481.69	441.28	40.41	11.921	
8,000.00	7,966.08	8,048.13	7,967.28	29.62	31.99	74.86	-68.98	1,024.98	481.69	440.81	40.88	11.783	
8,100.00	8,066.08	8,148.13	8,067.28	29.95	32.30	74.86	-68.98	1,024.98	481.69	440.34	41.35	11.648	
8,200.00	8,166.08	8,248.13	8,167.28	30.28	32.61	74.86	-68.98	1,024.98	481.69	439.86	41.83	11.516	
8,263.96	8,230.04	8,312.09	8,231.24	30.49	32.81	74.86	-68.98	1,024.98	481.69	439.56	42.13	11.433	
8,300.00	8,266.05	8,348.11	8,267.25	30.61	32.92	69.33	-68.98	1,024.98	481.29	438.99	42.30	11.379	
8,350.00	8,315.76	8,397.81	8,316.96	30.77	33.07	70.09	-68.98	1,024.98	479.43	436.93	42.50	11.281	
8,400.00	8,364.80	8,446.86	8,366.00	30.92	33.23	71.47	-68.98	1,024.98	476.21	433.53	42.68	11.159	
8,450.00	8,412.83	8,494.88	8,414.03	31.07	33.38	73.42	-68.98	1,024.98	471.87	429.05	42.83	11.018	
8,500.00	8,459.46	8,541.51	8,460.66	31.20	33.52	75.90	-68.98	1,024.98	466.79	423.84	42.95	10.867	
8,550.00	8,504.34	8,586.40	8,505.54	31.33	33.66	78.81	-68.98	1,024.98	461.47	418.40	43.07	10.716	
8,600.00	8,547.14	8,629.19	8,548.34	31.44	33.80	82.04	-68.98	1,024.98	456.49	413.32	43.17	10.574	
8,650.00	8,587.53	8,669.58	8,588.73	31.54	33.92	85.42	-68.98	1,024.98	452.55	409.26	43.28	10.455	
8,700.00	8,625.19	8,707.24	8,626.39	31.63	34.04	88.78	-68.98	1,024.98	450.38	406.97	43.42	10.373	
8,718.91	8,638.66	8,720.72	8,639.86	31.66	34.09	90.00	-68.98	1,024.98	450.19	406.71	43.48	10.354	
8,750.00	8,659.85	8,741.90	8,661.05	31.71	34.15	91.91	-68.98	1,024.98	450.76	407.17	43.59	10.341	SF
8,800.00	8,691.23	8,773.29	8,692.43	31.79	34.25	94.65	-68.98	1,024.98	454.39	410.58	43.81	10.372	
8,850.00	8,719.11	8,801.16	8,720.31	31.85	34.34	96.81	-68.98	1,024.98	461.85	417.77	44.09	10.476	
8,900.00	8,743.26	8,825.31	8,744.46	31.92	34.41	98.25	-68.98	1,024.98	473.55	429.14	44.41	10.663	
8,950.00	8,763.51	8,845.56	8,764.71	31.99	34.48	98.87	-68.98	1,024.98	489.66	444.89	44.77	10.937	
9,000.00	8,779.70	8,861.75	8,780.90	32.08	34.53	98.55	-68.98	1,024.98	510.12	464.97	45.15	11.299	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,050.00	8,791.70	8,873.75	8,792.90	32.18	34.57	97.21	-68.98	1,024.98	534.65	489.14	45.52	11.746	
9,100.00	8,799.43	8,881.48	8,800.63	32.32	34.59	94.78	-68.98	1,024.98	562.83	516.97	45.86	12.272	
9,150.00	8,802.83	8,884.88	8,804.03	32.48	34.60	91.20	-68.98	1,024.98	594.10	547.92	46.18	12.866	
9,163.96	8,803.00	8,885.05	8,804.20	32.53	34.60	90.00	-68.98	1,024.98	603.30	557.05	46.26	13.042	
9,200.00	8,803.00	8,885.05	8,804.20	32.67	34.60	90.00	-68.98	1,024.98	628.03	581.58	46.45	13.520	
9,300.00	8,803.00	8,885.05	8,804.20	33.10	34.60	90.00	-68.98	1,024.98	703.29	656.38	46.91	14.993	
9,400.00	8,803.00	8,885.05	8,804.20	33.60	34.60	90.00	-68.98	1,024.98	786.00	738.75	47.24	16.637	
9,480.63	8,803.00	8,885.05	8,804.20	34.05	34.60	90.00	-68.98	1,024.98	856.59	809.14	47.45	18.053	
9,500.00	8,803.00	8,885.05	8,804.20	34.16	34.60	90.00	-68.98	1,024.98	873.93	826.43	47.49	18.401	
9,600.00	8,803.00	8,885.05	8,804.20	34.79	34.60	90.00	-68.98	1,024.98	964.67	916.99	47.68	20.233	
9,700.00	8,803.00	8,885.05	8,804.20	35.48	34.60	90.00	-68.98	1,024.98	1,057.09	1,009.26	47.83	22.102	
9,800.00	8,803.00	8,885.05	8,804.20	36.23	34.60	90.00	-68.98	1,024.98	1,150.78	1,102.83	47.95	24.000	
9,900.00	8,803.00	8,885.05	8,804.20	37.04	34.60	90.00	-68.98	1,024.98	1,245.45	1,197.40	48.05	25.920	
10,000.00	8,803.00	8,885.05	8,804.20	37.91	34.60	90.00	-68.98	1,024.98	1,340.89	1,292.76	48.13	27.859	
10,100.00	8,803.00	8,885.05	8,804.20	38.83	34.60	90.00	-68.98	1,024.98	1,436.95	1,388.75	48.20	29.811	
10,200.00	8,803.00	8,885.05	8,804.20	39.79	34.60	90.00	-68.98	1,024.98	1,533.52	1,485.25	48.26	31.773	
10,300.00	8,803.00	8,885.05	8,804.20	40.80	34.60	90.00	-68.98	1,024.98	1,630.50	1,582.18	48.32	33.745	
10,400.00	8,803.00	8,885.05	8,804.20	41.84	34.60	90.00	-68.98	1,024.98	1,727.82	1,679.45	48.37	35.723	
10,500.00	8,803.00	8,885.05	8,804.20	42.93	34.60	90.00	-68.98	1,024.98	1,825.43	1,777.02	48.41	37.707	
10,600.00	8,803.00	8,885.05	8,804.20	44.05	34.60	90.00	-68.98	1,024.98	1,923.29	1,874.84	48.45	39.696	
10,700.00	8,803.00	8,885.05	8,804.20	45.20	34.60	90.00	-68.98	1,024.98	2,021.36	1,972.87	48.49	41.688	
10,800.00	8,803.00	8,885.05	8,804.20	46.38	34.60	90.00	-68.98	1,024.98	2,119.61	2,071.09	48.52	43.683	
10,900.00	8,803.00	8,885.05	8,804.20	47.59	34.60	90.00	-68.98	1,024.98	2,218.02	2,169.46	48.56	45.680	
11,000.00	8,803.00	8,885.05	8,804.20	48.83	34.60	90.00	-68.98	1,024.98	2,316.56	2,267.97	48.59	47.678	
11,100.00	8,803.00	8,885.05	8,804.20	50.09	34.60	90.00	-68.98	1,024.98	2,415.22	2,366.60	48.62	49.678	
11,200.00	8,803.00	8,885.05	8,804.20	51.37	34.60	90.00	-68.98	1,024.98	2,513.99	2,465.34	48.65	51.679	
11,300.00	8,803.00	8,885.05	8,804.20	52.68	34.60	90.00	-68.98	1,024.98	2,612.85	2,564.17	48.68	53.679	
11,400.00	8,803.00	8,885.05	8,804.20	54.00	34.60	90.00	-68.98	1,024.98	2,711.79	2,663.09	48.70	55.680	
11,500.00	8,803.00	8,885.05	8,804.20	55.34	34.60	90.00	-68.98	1,024.98	2,810.81	2,762.08	48.73	57.681	
11,600.00	8,803.00	8,885.05	8,804.20	56.69	34.60	90.00	-68.98	1,024.98	2,909.90	2,861.14	48.76	59.681	
11,700.00	8,803.00	8,885.05	8,804.20	58.07	34.60	90.00	-68.98	1,024.98	3,009.05	2,960.26	48.78	61.680	
11,800.00	8,803.00	8,885.05	8,804.20	59.45	34.60	90.00	-68.98	1,024.98	3,108.25	3,059.44	48.81	63.678	
11,900.00	8,803.00	8,885.05	8,804.20	60.85	34.60	90.00	-68.98	1,024.98	3,207.50	3,158.66	48.84	65.675	
12,000.00	8,803.00	8,885.05	8,804.20	62.26	34.60	90.00	-68.98	1,024.98	3,306.80	3,257.93	48.87	67.671	
12,100.00	8,803.00	8,885.05	8,804.20	63.69	34.60	90.00	-68.98	1,024.98	3,406.13	3,357.24	48.89	69.665	
12,200.00	8,803.00	8,885.05	8,804.20	65.12	34.60	90.00	-68.98	1,024.98	3,505.51	3,456.59	48.92	71.658	
12,300.00	8,803.00	8,885.05	8,804.20	66.56	34.60	90.00	-68.98	1,024.98	3,604.92	3,555.97	48.95	73.649	
12,400.00	8,803.00	15,944.88	12,425.00	68.02	74.73	174.40	3,614.67	953.36	3,638.14	3,586.32	51.81	70.217	
12,500.00	8,803.00	16,044.88	12,425.00	69.48	76.05	174.40	3,714.67	952.25	3,638.14	3,585.42	52.72	69.014	
12,600.00	8,803.00	16,144.88	12,425.00	70.95	77.39	174.40	3,814.66	951.15	3,638.14	3,584.51	53.63	67.841	
12,700.00	8,803.00	16,244.88	12,425.00	72.43	78.74	174.40	3,914.66	950.05	3,638.14	3,583.59	54.55	66.698	
12,800.00	8,803.00	16,344.88	12,425.00	73.91	80.09	174.40	4,014.65	948.95	3,638.14	3,582.66	55.47	65.583	
12,900.00	8,803.00	16,444.88	12,425.00	75.41	81.46	174.40	4,114.64	947.85	3,638.14	3,581.73	56.41	64.498	
13,000.00	8,803.00	16,544.88	12,425.00	76.91	82.84	174.40	4,214.64	946.74	3,638.14	3,580.79	57.35	63.439	
13,100.00	8,803.00	16,644.88	12,425.00	78.41	84.23	174.40	4,314.63	945.64	3,638.14	3,579.84	58.30	62.408	
13,200.00	8,803.00	16,744.88	12,425.00	79.92	85.63	174.40	4,414.62	944.54	3,638.14	3,578.89	59.25	61.404	
13,300.00	8,803.00	16,844.88	12,425.00	81.44	87.04	174.40	4,514.62	943.44	3,638.14	3,577.93	60.21	60.425	
13,400.00	8,803.00	16,944.88	12,425.00	82.96	88.45	174.40	4,614.61	942.34	3,638.14	3,576.97	61.17	59.471	
13,500.00	8,803.00	17,044.88	12,425.00	84.49	89.88	174.40	4,714.61	941.23	3,638.14	3,576.00	62.15	58.542	
13,600.00	8,803.00	17,144.88	12,425.00	86.02	91.31	174.40	4,814.60	940.13	3,638.14	3,575.02	63.12	57.637	
13,700.00	8,803.00	17,244.88	12,425.00	87.56	92.75	174.40	4,914.59	939.03	3,638.14	3,574.04	64.10	56.755	
13,800.00	8,803.00	17,344.88	12,425.00	89.10	94.19	174.40	5,014.59	937.93	3,638.14	3,573.05	65.09	55.896	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.00	8,803.00	17,444.88	12,425.00	90.64	95.65	174.40	5,114.58	936.82	3,638.14	3,572.06	66.08	55.058	
14,000.00	8,803.00	17,544.88	12,425.00	92.19	97.11	174.40	5,214.58	935.72	3,638.14	3,571.07	67.07	54.242	
14,100.00	8,803.00	17,644.88	12,425.00	93.74	98.57	174.40	5,314.57	934.62	3,638.14	3,570.07	68.07	53.446	
14,200.00	8,803.00	17,744.88	12,425.00	95.30	100.04	174.40	5,414.56	933.52	3,638.14	3,569.07	69.07	52.670	
14,300.00	8,803.00	17,844.88	12,425.00	96.86	101.52	174.40	5,514.56	932.42	3,638.14	3,568.06	70.08	51.914	
14,400.00	8,803.00	17,944.88	12,425.00	98.42	103.00	174.40	5,614.55	931.31	3,638.14	3,567.05	71.09	51.177	
14,500.00	8,803.00	18,044.88	12,425.00	99.98	104.49	174.40	5,714.55	930.21	3,638.14	3,566.04	72.10	50.457	
14,600.00	8,803.00	18,144.88	12,425.00	101.55	105.98	174.40	5,814.54	929.11	3,638.14	3,565.02	73.12	49.756	
14,700.00	8,803.00	18,244.88	12,425.00	103.12	107.48	174.40	5,914.53	928.01	3,638.14	3,564.00	74.14	49.071	
14,800.00	8,803.00	18,344.88	12,425.00	104.69	108.98	174.40	6,014.53	926.90	3,638.14	3,562.98	75.16	48.403	
14,900.00	8,803.00	18,444.88	12,425.00	106.27	110.48	174.40	6,114.52	925.80	3,638.14	3,561.96	76.19	47.752	
15,000.00	8,803.00	18,544.88	12,425.00	107.85	111.99	174.40	6,214.52	924.70	3,638.14	3,560.93	77.22	47.116	
15,100.00	8,803.00	18,644.88	12,425.00	109.42	113.51	174.40	6,314.51	923.60	3,638.15	3,559.90	78.25	46.495	
15,200.00	8,803.00	18,744.88	12,425.00	111.01	115.03	174.40	6,414.50	922.50	3,638.15	3,558.86	79.28	45.888	
15,300.00	8,803.00	18,844.88	12,425.00	112.59	116.55	174.40	6,514.50	921.39	3,638.15	3,557.83	80.32	45.296	
15,400.00	8,803.00	18,944.88	12,425.00	114.18	118.07	174.40	6,614.49	920.29	3,638.15	3,556.79	81.36	44.718	
15,500.00	8,803.00	19,044.88	12,425.00	115.76	119.60	174.40	6,714.49	919.19	3,638.15	3,555.75	82.40	44.153	
15,600.00	8,803.00	19,144.88	12,425.00	117.35	121.13	174.40	6,814.48	918.09	3,638.15	3,554.70	83.44	43.601	
15,700.00	8,803.00	19,244.88	12,425.00	118.94	122.67	174.40	6,914.47	916.98	3,638.15	3,553.66	84.49	43.061	
15,800.00	8,803.00	19,344.88	12,425.00	120.54	124.21	174.40	7,014.47	915.88	3,638.15	3,552.61	85.54	42.534	
15,900.00	8,803.00	19,444.88	12,425.00	122.13	125.75	174.40	7,114.46	914.78	3,638.15	3,551.56	86.58	42.018	
16,000.00	8,803.00	19,544.88	12,425.00	123.73	127.29	174.40	7,214.45	913.68	3,638.15	3,550.51	87.64	41.514	
16,100.00	8,803.00	19,644.88	12,425.00	125.33	128.84	174.40	7,314.45	912.58	3,638.15	3,549.46	88.69	41.021	
16,200.00	8,803.00	19,744.88	12,425.00	126.92	130.39	174.40	7,414.44	911.47	3,638.15	3,548.40	89.74	40.539	
16,300.00	8,803.00	19,844.88	12,425.00	128.52	131.94	174.40	7,514.44	910.37	3,638.15	3,547.35	90.80	40.067	
16,400.00	8,803.00	19,944.88	12,425.00	130.13	133.49	174.40	7,614.43	909.27	3,638.15	3,546.29	91.86	39.605	
16,500.00	8,803.00	20,044.88	12,425.00	131.73	135.05	174.40	7,714.42	908.17	3,638.15	3,545.23	92.92	39.154	
16,600.00	8,803.00	20,144.88	12,425.00	133.33	136.61	174.40	7,814.42	907.07	3,638.15	3,544.17	93.98	38.712	
16,700.00	8,803.00	20,244.88	12,425.00	134.94	138.17	174.40	7,914.41	905.96	3,638.15	3,543.11	95.04	38.280	
16,800.00	8,803.00	20,344.88	12,425.00	136.55	139.73	174.40	8,014.41	904.86	3,638.15	3,542.04	96.11	37.856	
16,900.00	8,803.00	20,444.88	12,425.00	138.15	141.29	174.40	8,114.40	903.76	3,638.15	3,540.98	97.17	37.441	
17,000.00	8,803.00	20,544.88	12,425.00	139.76	142.86	174.40	8,214.39	902.66	3,638.15	3,539.91	98.24	37.034	
17,100.00	8,803.00	20,644.88	12,425.00	141.37	144.43	174.40	8,314.39	901.55	3,638.15	3,538.85	99.31	36.636	
17,200.00	8,803.00	20,744.88	12,425.00	142.98	146.00	174.40	8,414.38	900.45	3,638.15	3,537.78	100.37	36.246	
17,300.00	8,803.00	20,844.88	12,425.00	144.59	147.57	174.40	8,514.38	899.35	3,638.15	3,536.71	101.45	35.863	
17,400.00	8,803.00	20,944.88	12,425.00	146.21	149.15	174.40	8,614.37	898.25	3,638.15	3,535.64	102.52	35.488	
17,500.00	8,803.00	21,044.88	12,425.00	147.82	150.72	174.40	8,714.36	897.15	3,638.15	3,534.56	103.59	35.121	
17,600.00	8,803.00	21,144.88	12,425.00	149.43	152.30	174.40	8,814.36	896.04	3,638.15	3,533.49	104.66	34.760	
17,700.00	8,803.00	21,244.88	12,425.00	151.05	153.88	174.40	8,914.35	894.94	3,638.15	3,532.41	105.74	34.407	
17,800.00	8,803.00	21,344.88	12,425.00	152.67	155.46	174.40	9,014.35	893.84	3,638.15	3,531.34	106.81	34.060	
17,900.00	8,803.00	21,444.88	12,425.00	154.28	157.04	174.40	9,114.34	892.74	3,638.15	3,530.26	107.89	33.720	
18,000.00	8,803.00	21,544.88	12,425.00	155.90	158.63	174.40	9,214.33	891.63	3,638.15	3,529.18	108.97	33.387	
18,100.00	8,803.00	21,644.88	12,425.00	157.52	160.21	174.40	9,314.33	890.53	3,638.15	3,528.11	110.05	33.060	
18,200.00	8,803.00	21,744.88	12,425.00	159.14	161.80	174.40	9,414.32	889.43	3,638.15	3,527.03	111.13	32.739	
18,300.00	8,803.00	21,844.88	12,425.00	160.76	163.39	174.40	9,514.32	888.33	3,638.16	3,525.95	112.21	32.423	
18,400.00	8,803.00	21,944.88	12,425.00	162.38	164.98	174.40	9,614.31	887.23	3,638.16	3,524.87	113.29	32.114	
18,500.00	8,803.00	22,044.88	12,425.00	164.00	166.57	174.40	9,714.30	886.12	3,638.16	3,523.78	114.37	31.810	
18,600.00	8,803.00	22,144.88	12,425.00	165.62	168.16	174.40	9,814.30	885.02	3,638.16	3,522.70	115.45	31.512	
18,700.00	8,803.00	22,244.88	12,425.00	167.24	169.75	174.40	9,914.29	883.92	3,638.16	3,521.62	116.54	31.219	
18,800.00	8,803.00	22,344.88	12,425.00	168.87	171.34	174.40	10,014.28	882.82	3,638.16	3,520.53	117.62	30.931	
18,900.00	8,803.00	22,444.88	12,425.00	170.49	172.94	174.40	10,114.28	881.71	3,638.16	3,519.45	118.71	30.648	
18,906.08	8,803.00	22,450.96	12,425.00	170.59	173.04	174.40	10,120.36	881.65	3,638.16	3,519.38	118.77	30.631	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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

Survey Program: 0-OWSG (Rev2) MWD

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,961.77	8,803.00	22,506.08	12,425.00	171.49	173.92	174.40	10,175.48	881.04	3,638.16	3,518.78	119.37	30.477	

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	22.82	1,732.28	728.92	1,879.43				
100.00	100.00	87.10	87.10	0.13	0.85	22.82	1,732.28	728.92	1,879.39	1,878.53	0.86	2,178.034	
200.00	200.00	189.50	189.50	0.48	2.83	22.82	1,732.47	728.92	1,879.57	1,876.70	2.87	655.567	
300.00	300.00	290.99	290.97	0.84	4.75	22.82	1,732.39	728.92	1,879.50	1,874.67	4.83	389.411	
400.00	400.00	387.12	387.10	1.20	6.46	22.82	1,732.28	728.92	1,879.39	1,872.82	6.57	286.033	
500.00	500.00	490.18	490.16	1.56	8.36	22.82	1,732.30	728.92	1,879.41	1,870.90	8.51	220.879	
513.91	513.91	504.99	504.98	1.61	8.64	22.82	1,732.27	728.92	1,879.39	1,870.60	8.79	213.879	
600.00	600.00	590.68	590.66	1.92	10.27	22.82	1,732.47	728.92	1,879.58	1,869.13	10.45	179.916	
700.00	700.00	687.13	687.10	2.28	12.13	22.82	1,732.28	728.92	1,879.39	1,867.04	12.34	152.245	
800.00	800.00	788.87	788.84	2.63	14.13	22.82	1,732.53	728.92	1,879.62	1,865.25	14.37	130.795	
900.00	900.00	887.15	887.10	2.99	16.06	22.82	1,732.28	728.92	1,879.39	1,863.05	16.34	115.042	
1,000.00	1,000.00	1,004.22	1,004.16	3.35	18.58	22.82	1,732.21	728.92	1,879.40	1,860.53	18.88	99.556	
1,009.51	1,009.51	1,017.22	1,017.16	3.39	18.86	22.82	1,732.07	728.92	1,879.31	1,860.15	19.16	98.091	
1,100.00	1,100.00	1,087.19	1,087.10	3.71	20.38	22.82	1,732.28	728.92	1,879.39	1,858.68	20.71	90.737	
1,200.00	1,200.00	1,187.21	1,187.10	4.07	22.54	22.82	1,732.28	728.92	1,879.39	1,856.49	22.90	82.071	
1,300.00	1,300.00	1,287.23	1,287.10	4.43	24.65	22.82	1,732.28	728.92	1,879.39	1,854.35	25.04	75.054	
1,400.00	1,400.00	1,387.23	1,387.10	4.79	26.46	22.82	1,732.28	728.92	1,879.39	1,852.49	26.89	69.881	
1,500.00	1,500.00	1,488.94	1,488.81	5.14	28.19	22.82	1,732.34	728.92	1,879.45	1,850.79	28.66	65.586	
1,600.00	1,600.00	1,590.49	1,590.35	5.50	29.96	22.82	1,732.28	728.92	1,879.40	1,848.94	30.46	61.700	
1,607.77	1,607.77	1,599.28	1,599.14	5.53	30.11	22.82	1,732.27	728.92	1,879.38	1,848.77	30.62	61.381	
1,700.00	1,700.00	1,689.76	1,689.63	5.86	31.78	22.82	1,732.41	728.92	1,879.52	1,847.20	32.32	58.158	
1,800.00	1,800.00	1,787.24	1,787.10	6.22	33.54	22.82	1,732.28	728.92	1,879.39	1,845.27	34.12	55.090	
1,900.00	1,900.00	1,892.38	1,892.24	6.58	35.41	22.82	1,732.38	728.92	1,879.50	1,843.48	36.02	52.181	
2,000.00	2,000.00	1,987.24	1,987.10	6.94	37.22	22.82	1,732.28	728.92	1,879.39	1,841.53	37.86	49.636	
2,100.00	2,099.99	2,089.54	2,089.40	7.28	39.23	-86.40	1,732.35	728.92	1,879.37	1,839.47	39.90	47.097	
2,200.00	2,199.91	2,187.17	2,187.01	7.62	41.23	-86.52	1,732.28	728.92	1,879.06	1,837.14	41.93	44.820	
2,300.00	2,299.69	2,286.97	2,286.79	7.96	43.29	-86.72	1,732.28	728.92	1,878.68	1,834.66	44.01	42.685	
2,400.00	2,399.27	2,394.49	2,394.30	8.31	45.40	-87.04	1,732.41	728.92	1,878.31	1,832.16	46.16	40.695	
2,449.99	2,448.95	2,436.24	2,436.05	8.48	46.26	-87.18	1,732.28	728.92	1,877.89	1,830.86	47.03	39.928	
2,500.00	2,498.61	2,485.91	2,485.71	8.66	47.34	-87.36	1,732.28	728.92	1,877.61	1,829.49	48.12	39.018	
2,600.00	2,597.92	2,595.50	2,595.30	9.01	49.71	-87.75	1,732.33	728.92	1,877.18	1,826.66	50.52	37.156	
2,700.00	2,697.23	2,684.58	2,684.33	9.37	51.81	-88.07	1,732.28	728.92	1,876.67	1,824.01	52.65	35.642	
2,800.00	2,796.53	2,814.99	2,814.72	9.74	54.93	-88.54	1,731.94	728.92	1,876.24	1,820.47	55.78	33.637	
2,868.02	2,864.08	2,851.48	2,851.18	9.98	55.85	-88.67	1,732.28	728.92	1,876.10	1,819.36	56.74	33.065	
2,900.00	2,895.84	2,903.89	2,903.58	10.10	57.15	-88.86	1,732.35	728.92	1,876.20	1,818.17	58.04	32.329	
3,000.00	2,995.15	2,982.60	2,982.25	10.47	59.11	-89.14	1,732.28	728.92	1,875.80	1,815.77	60.03	31.246	
3,056.35	3,051.10	3,038.58	3,038.20	10.68	60.57	-89.34	1,732.28	728.92	1,875.71	1,814.20	61.51	30.495	
3,100.00	3,094.45	3,090.20	3,089.81	10.84	61.95	-89.53	1,732.66	728.92	1,876.04	1,813.15	62.89	29.830	
3,176.65	3,170.57	3,158.13	3,157.67	11.13	63.84	-89.77	1,732.28	728.92	1,875.60	1,810.80	64.81	28.941	
3,200.00	3,193.76	3,186.83	3,186.37	11.22	64.71	-89.88	1,732.72	728.92	1,876.02	1,810.35	65.67	28.566	
3,242.31	3,235.78	3,223.35	3,222.88	11.38	65.81	-90.00	1,732.28	728.92	1,875.59	1,808.81	66.78	28.085	
3,300.00	3,293.07	3,280.70	3,280.17	11.59	67.65	-90.21	1,732.28	728.92	1,875.60	1,806.97	68.63	27.328	
3,400.00	3,392.38	3,380.17	3,379.48	11.97	70.85	-90.57	1,732.28	728.92	1,875.68	1,803.82	71.86	26.104	
3,500.00	3,491.68	3,479.57	3,478.78	12.35	74.19	-90.92	1,732.28	728.92	1,875.83	1,800.62	75.21	24.940	
3,600.00	3,590.99	3,578.98	3,578.09	12.73	77.48	-91.28	1,732.28	728.92	1,876.06	1,797.54	78.52	23.893	
3,700.00	3,690.30	3,678.38	3,677.40	13.12	80.60	-91.64	1,732.28	728.92	1,876.36	1,794.70	81.66	22.977	
3,800.00	3,789.60	3,806.86	3,805.81	13.50	84.47	-92.10	1,732.33	728.92	1,877.01	1,791.48	85.53	21.946	
3,807.52	3,797.07	3,785.21	3,784.17	13.53	83.82	-92.02	1,732.28	728.92	1,876.77	1,791.86	84.91	22.104	
3,900.00	3,888.91	3,905.37	3,904.26	13.89	87.23	-92.45	1,732.46	728.92	1,877.58	1,789.26	88.32	21.260	
3,911.35	3,900.18	3,888.40	3,887.28	13.93	86.75	-92.39	1,732.28	728.92	1,877.24	1,789.38	87.86	21.365	
4,000.00	3,988.22	3,976.48	3,975.32	14.27	89.16	-92.70	1,732.28	728.92	1,877.71	1,787.41	90.29	20.796	
4,100.00	4,087.52	4,075.84	4,074.62	14.66	92.00	-93.06	1,732.28	728.92	1,878.30	1,785.14	93.16	20.161	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,200.00	4,186.83	4,190.00	4,188.72	15.05	94.93	-93.47	1,732.28	728.92	1,879.03	1,782.92	96.11	19.551	
4,201.44	4,188.26	4,190.00	4,188.72	15.06	94.93	-93.47	1,732.28	728.92	1,879.03	1,782.92	96.11	19.551	
4,300.00	4,286.14	4,274.52	4,273.24	15.44	96.48	-93.77	1,732.28	728.92	1,879.71	1,782.00	97.71	19.237	
4,400.00	4,385.44	4,373.84	4,372.54	15.83	98.47	-94.12	1,732.28	728.92	1,880.53	1,780.79	99.74	18.855	
4,500.00	4,484.75	4,494.90	4,493.58	16.22	101.48	-94.56	1,732.24	728.92	1,881.51	1,778.75	102.76	18.310	
4,503.61	4,488.33	4,476.75	4,475.43	16.24	100.98	-94.49	1,732.28	728.92	1,881.45	1,779.17	102.28	18.395	
4,600.00	4,584.06	4,572.58	4,571.16	16.61	104.45	-94.83	1,732.28	728.92	1,882.37	1,776.61	105.77	17.798	
4,700.00	4,683.36	4,672.19	4,670.46	17.01	109.29	-95.19	1,732.28	728.92	1,883.41	1,772.80	110.61	17.028	
4,800.00	4,782.67	4,771.87	4,769.77	17.40	114.54	-95.54	1,732.28	728.92	1,884.51	1,768.66	115.85	16.267	
4,900.00	4,881.98	4,871.44	4,869.08	17.79	119.37	-95.89	1,732.28	728.92	1,885.69	1,765.00	120.69	15.624	
5,000.00	4,981.29	4,970.88	4,968.39	18.19	123.01	-96.25	1,732.28	728.92	1,886.94	1,762.60	124.34	15.176	
5,100.00	5,080.59	5,070.24	5,067.69	18.58	125.64	-96.60	1,732.28	728.92	1,888.27	1,761.26	127.01	14.867	
5,200.00	5,179.90	5,169.57	5,167.00	18.98	127.92	-96.95	1,732.28	728.92	1,889.66	1,760.35	129.32	14.612	
5,300.00	5,279.21	5,268.89	5,266.31	19.37	129.93	-97.30	1,732.28	728.92	1,891.13	1,759.77	131.36	14.397	
5,400.00	5,378.51	5,370.49	5,367.90	19.77	131.83	-97.66	1,732.64	728.92	1,893.03	1,759.72	133.31	14.201	
5,500.00	5,477.82	5,467.52	5,464.92	20.16	133.66	-98.00	1,732.28	728.92	1,894.28	1,759.12	135.17	14.014	
5,600.00	5,577.13	5,568.38	5,565.78	20.56	135.56	-98.36	1,732.58	728.92	1,896.26	1,759.16	137.10	13.831	
5,700.00	5,676.43	5,666.15	5,663.53	20.96	137.42	-98.70	1,732.28	728.92	1,897.72	1,758.72	139.00	13.653	
5,800.00	5,775.74	5,769.90	5,767.28	21.35	139.49	-99.06	1,732.53	728.92	1,899.80	1,758.69	141.10	13.464	
5,900.00	5,875.05	5,864.79	5,862.15	21.75	141.42	-99.40	1,732.28	728.92	1,901.44	1,758.37	143.08	13.290	
6,000.00	5,974.35	5,968.58	5,965.93	22.15	143.60	-99.76	1,732.73	728.92	1,903.86	1,758.57	145.29	13.104	
6,100.00	6,073.66	6,063.44	6,060.76	22.55	145.59	-100.09	1,732.28	728.92	1,905.45	1,758.12	147.32	12.934	
6,200.00	6,172.97	6,173.60	6,170.92	22.95	147.91	-100.47	1,732.46	728.92	1,907.77	1,758.10	149.67	12.746	
6,300.00	6,272.27	6,262.07	6,259.37	23.35	149.77	-100.78	1,732.28	728.92	1,909.73	1,758.16	151.57	12.599	
6,400.00	6,371.58	6,370.94	6,368.23	23.74	152.06	-101.16	1,732.59	728.92	1,912.32	1,758.42	153.90	12.426	
6,500.00	6,470.89	6,460.72	6,457.99	24.14	153.95	-101.46	1,732.28	728.92	1,914.30	1,758.47	155.83	12.285	
6,600.00	6,570.20	6,570.91	6,568.17	24.54	156.27	-101.84	1,732.51	728.92	1,916.94	1,758.77	158.18	12.119	
6,700.00	6,669.50	6,659.36	6,656.60	24.94	158.08	-102.15	1,732.28	728.92	1,919.14	1,759.12	160.02	11.993	
6,800.00	6,768.81	6,764.54	6,761.77	25.34	160.19	-102.51	1,732.73	728.92	1,922.13	1,759.96	162.17	11.853	
6,900.00	6,868.12	6,858.00	6,855.22	25.74	162.04	-102.83	1,732.28	728.92	1,924.26	1,760.19	164.06	11.729	
7,000.00	6,967.42	6,957.31	6,954.52	26.14	163.93	-103.17	1,732.28	728.92	1,926.92	1,760.93	165.99	11.609	
7,043.93	7,011.05	7,003.97	7,001.18	26.32	164.82	-103.33	1,732.68	728.92	1,928.51	1,761.61	166.89	11.555	
7,100.00	7,066.78	7,065.65	7,062.85	26.54	166.00	-103.54	1,732.48	728.92	1,929.78	1,761.69	168.09	11.481	
7,200.00	7,166.37	7,156.28	7,153.47	26.93	167.72	-103.80	1,732.28	728.92	1,931.68	1,761.83	169.85	11.373	
7,300.00	7,266.16	7,262.13	7,259.32	27.30	169.74	-104.02	1,732.55	728.92	1,933.50	1,761.59	171.90	11.248	
7,400.00	7,366.09	7,356.02	7,353.19	27.65	171.53	-104.13	1,732.28	728.92	1,934.13	1,760.40	173.73	11.133	
7,493.92	7,460.00	7,453.01	7,450.18	27.97	173.39	5.01	1,732.61	728.92	1,934.75	1,759.14	175.61	11.017	
7,500.00	7,466.08	7,459.89	7,457.06	27.99	173.52	5.01	1,732.60	728.92	1,934.74	1,759.00	175.74	11.009	
7,600.00	7,566.08	7,556.03	7,553.18	28.31	175.35	5.01	1,732.28	728.92	1,934.41	1,756.81	177.61	10.892	
7,700.00	7,666.08	7,660.43	7,657.58	28.64	177.35	5.01	1,732.54	728.92	1,934.69	1,755.06	179.63	10.770	
7,800.00	7,766.08	7,756.04	7,753.18	28.96	179.18	5.01	1,732.28	728.92	1,934.41	1,752.93	181.49	10.659	
7,900.00	7,866.08	7,859.45	7,856.59	29.29	181.16	5.01	1,732.61	728.92	1,934.75	1,751.25	183.50	10.544	
8,000.00	7,966.08	7,956.06	7,953.18	29.62	183.03	5.01	1,732.28	728.92	1,934.41	1,749.02	185.39	10.434	
8,100.00	8,066.08	8,056.44	8,053.56	29.95	185.05	5.01	1,732.65	728.92	1,934.79	1,747.34	187.44	10.322	
8,200.00	8,166.08	8,168.90	8,166.01	30.28	187.32	5.01	1,732.26	728.92	1,934.44	1,744.71	189.73	10.196	
8,208.83	8,174.91	8,178.84	8,175.95	30.31	187.52	5.01	1,732.19	728.92	1,934.38	1,744.45	189.93	10.184	
8,263.96	8,230.04	8,220.05	8,217.14	30.49	188.46	5.01	1,732.28	728.92	1,934.41	1,743.52	190.89	10.133	
8,300.00	8,266.05	8,256.06	8,253.15	30.61	189.26	-0.69	1,732.28	728.92	1,933.28	1,741.58	191.70	10.085	
8,350.00	8,315.76	8,309.11	8,306.20	30.77	190.43	-0.70	1,732.77	728.92	1,928.46	1,735.58	192.89	9.998	
8,400.00	8,364.80	8,366.19	8,363.27	30.92	191.70	-0.72	1,732.55	728.92	1,918.65	1,724.49	194.16	9.882	
8,450.00	8,412.83	8,421.94	8,419.01	31.07	192.93	-0.74	1,732.11	728.92	1,904.41	1,709.01	195.40	9.746	
8,500.00	8,459.46	8,449.51	8,446.56	31.20	193.50	-0.77	1,732.28	728.92	1,886.48	1,690.49	195.99	9.625	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,550.00	8,504.34	8,494.40	8,491.44	31.33	194.45	-0.82	1,732.28	728.92	1,864.49	1,667.54	196.95	9.467	
8,600.00	8,547.14	8,539.18	8,536.22	31.44	195.40	-0.87	1,732.94	728.92	1,839.33	1,641.43	197.91	9.294	
8,650.00	8,587.53	8,587.23	8,584.26	31.54	196.42	-0.95	1,732.79	728.92	1,809.75	1,610.83	198.93	9.098	
8,700.00	8,625.19	8,631.72	8,628.75	31.63	197.36	-1.05	1,732.46	728.92	1,776.62	1,576.75	199.87	8.889	
8,750.00	8,659.85	8,672.31	8,669.33	31.71	198.22	-1.18	1,732.01	728.92	1,740.23	1,539.50	200.72	8.670	
8,800.00	8,691.23	8,681.33	8,678.33	31.79	198.35	-1.32	1,732.28	728.92	1,701.45	1,500.57	200.88	8.470	
8,850.00	8,719.11	8,709.20	8,706.21	31.85	198.88	-1.54	1,732.28	728.92	1,659.96	1,458.55	201.42	8.241	
8,900.00	8,743.26	8,733.35	8,730.36	31.92	199.35	-1.86	1,732.28	728.92	1,616.21	1,414.32	201.88	8.006	
8,950.00	8,763.51	8,753.73	8,750.73	31.99	199.74	-2.33	1,732.61	728.92	1,570.85	1,368.57	202.28	7.766	
9,000.00	8,779.70	8,771.65	8,768.65	32.08	200.08	-3.12	1,732.60	728.92	1,523.55	1,320.93	202.62	7.519	
9,050.00	8,791.70	8,784.83	8,781.84	32.18	200.34	-4.63	1,732.58	728.92	1,475.02	1,272.14	202.88	7.271	
9,100.00	8,799.43	8,793.22	8,790.23	32.32	200.50	-8.55	1,732.56	728.92	1,425.62	1,222.59	203.04	7.021	
9,150.00	8,802.83	8,796.80	8,793.81	32.48	200.57	-38.22	1,732.55	728.92	1,375.75	1,172.65	203.11	6.774	
9,163.96	8,803.00	8,796.95	8,793.95	32.53	200.57	-99.38	1,732.55	728.92	1,361.79	1,158.68	203.11	6.705	
9,200.00	8,803.00	8,796.84	8,793.84	32.67	200.57	-120.19	1,732.55	728.92	1,325.76	1,122.65	203.11	6.527	
9,300.00	8,803.00	8,796.53	8,793.53	33.10	200.56	95.15	1,732.55	728.92	1,225.77	1,022.67	203.10	6.035	
9,400.00	8,803.00	8,796.23	8,793.23	33.60	200.56	92.27	1,732.55	728.92	1,125.91	922.81	203.09	5.544	
9,480.63	8,803.00	8,795.99	8,792.99	34.05	200.55	91.51	1,732.55	728.92	1,045.59	842.51	203.08	5.149	
9,500.00	8,803.00	8,795.93	8,792.93	34.16	200.55	91.48	1,732.55	728.92	1,026.33	823.24	203.08	5.054	
9,600.00	8,803.00	8,795.63	8,792.64	34.79	200.54	91.33	1,732.55	728.92	926.96	723.89	203.07	4.565	
9,700.00	8,803.00	8,795.34	8,792.35	35.48	200.54	91.18	1,732.55	728.92	827.74	624.69	203.05	4.077	
9,800.00	8,803.00	8,795.06	8,792.06	36.23	200.53	91.03	1,732.55	728.92	728.74	525.71	203.03	3.589	
9,900.00	8,803.00	8,794.77	8,791.78	37.04	200.53	90.88	1,732.55	728.92	630.06	427.05	203.01	3.104	
10,000.00	8,803.00	8,794.49	8,791.50	37.91	200.52	90.73	1,732.55	728.92	531.87	328.87	202.99	2.620	
10,100.00	8,803.00	8,794.22	8,791.22	38.83	200.52	90.59	1,732.56	728.92	434.50	231.53	202.97	2.141	
10,200.00	8,803.00	8,793.95	8,790.95	39.79	200.51	90.45	1,732.56	728.92	338.67	135.71	202.96	1.669	
10,300.00	8,803.00	8,793.68	8,790.68	40.80	200.51	90.31	1,732.56	728.92	246.17	43.18	203.00	1.213	Level 2
10,400.00	8,803.00	8,793.41	8,790.42	41.84	200.50	90.17	1,732.56	728.92	162.81	-40.42	203.23	0.801	Level 1
10,500.00	8,803.00	8,793.15	8,790.16	42.93	200.50	90.03	1,732.56	728.92	111.42	-93.06	204.48	0.545	Level 1
10,520.47	8,803.00	8,793.10	8,790.10	43.16	200.50	90.00	1,732.56	728.92	109.52	-95.28	204.81	0.535	Level 1, CC, ES, SF
10,600.00	8,803.00	8,792.89	8,789.90	44.05	200.49	89.89	1,732.56	728.92	135.35	-69.58	204.93	0.660	Level 1
10,700.00	8,803.00	8,792.64	8,789.64	45.20	200.49	89.76	1,732.56	728.92	210.30	6.08	204.22	1.030	Level 2
10,800.00	8,803.00	8,792.39	8,789.39	46.38	200.48	89.63	1,732.56	728.92	300.22	96.38	203.84	1.473	Level 3
10,900.00	8,803.00	8,792.14	8,789.14	47.59	200.48	89.50	1,732.56	728.92	395.02	191.37	203.64	1.940	
11,000.00	8,803.00	8,791.89	8,788.90	48.83	200.47	89.37	1,732.56	728.92	491.88	288.35	203.53	2.417	
11,100.00	8,803.00	8,791.65	8,788.65	50.09	200.47	89.24	1,732.56	728.92	589.79	386.33	203.46	2.899	
11,200.00	8,803.00	8,791.41	8,788.41	51.37	200.46	89.12	1,732.56	728.92	688.30	484.89	203.41	3.384	
11,300.00	8,803.00	8,791.17	8,788.18	52.68	200.46	88.99	1,732.56	728.92	787.19	583.81	203.37	3.871	
11,400.00	8,803.00	8,790.94	8,787.94	54.00	200.45	88.87	1,732.56	728.92	886.32	682.98	203.35	4.359	
11,500.00	8,803.00	8,790.71	8,787.71	55.34	200.45	88.75	1,732.56	728.92	985.63	782.31	203.32	4.848	
11,600.00	8,803.00	8,790.48	8,787.48	56.69	200.44	88.63	1,732.56	728.92	1,085.07	881.76	203.31	5.337	
11,700.00	8,803.00	8,790.25	8,787.26	58.07	200.44	88.51	1,732.57	728.92	1,184.60	981.31	203.29	5.827	
11,800.00	8,803.00	8,790.03	8,787.03	59.45	200.44	88.40	1,732.57	728.92	1,284.21	1,080.92	203.28	6.317	
11,900.00	8,803.00	8,789.81	8,786.81	60.85	200.43	88.28	1,732.57	728.92	1,383.87	1,180.59	203.27	6.808	
12,000.00	8,803.00	8,789.59	8,786.60	62.26	200.43	88.17	1,732.57	728.92	1,483.58	1,280.31	203.27	7.299	
12,100.00	8,803.00	8,789.38	8,786.38	63.69	200.42	88.06	1,732.57	728.92	1,583.32	1,380.06	203.26	7.790	
12,200.00	8,803.00	8,789.16	8,786.17	65.12	200.42	87.95	1,732.57	728.92	1,683.09	1,479.84	203.26	8.281	
12,300.00	8,803.00	8,788.95	8,785.96	66.56	200.42	87.84	1,732.57	728.92	1,782.89	1,579.64	203.25	8.772	
12,400.00	8,803.00	8,788.75	8,785.75	68.02	200.41	87.73	1,732.57	728.92	1,882.71	1,679.46	203.25	9.263	
12,500.00	8,803.00	8,788.54	8,785.55	69.48	200.41	87.62	1,732.57	728.92	1,982.55	1,779.31	203.25	9.754	
12,600.00	8,803.00	8,788.34	8,785.34	70.95	200.40	87.51	1,732.57	728.92	2,082.41	1,879.16	203.25	10.246	
12,700.00	8,803.00	8,788.14	8,785.14	72.43	200.40	87.41	1,732.57	728.92	2,182.28	1,979.03	203.24	10.737	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,800.00	8,803.00	8,787.94	8,784.94	73.91	200.40	87.30	1,732.57	728.92	2,282.15	2,078.91	203.24	11.229	
12,900.00	8,803.00	8,787.74	8,784.75	75.41	200.39	87.20	1,732.57	728.92	2,382.04	2,178.80	203.24	11.720	
13,000.00	8,803.00	8,787.55	8,784.55	76.91	200.39	87.10	1,732.57	728.92	2,481.94	2,278.70	203.24	12.212	
13,100.00	8,803.00	8,787.36	8,784.36	78.41	200.38	87.00	1,732.57	728.92	2,581.85	2,378.61	203.24	12.703	
13,200.00	8,803.00	8,787.17	8,784.17	79.92	200.38	86.90	1,732.57	728.92	2,681.76	2,478.52	203.24	13.195	
13,300.00	8,803.00	8,786.98	8,783.98	81.44	200.38	86.80	1,732.57	728.92	2,781.68	2,578.44	203.25	13.686	
13,400.00	8,803.00	8,786.79	8,783.80	82.96	200.37	86.71	1,732.57	728.92	2,881.61	2,678.36	203.25	14.178	
13,500.00	8,803.00	8,786.61	8,783.61	84.49	200.37	86.61	1,732.57	728.92	2,981.54	2,778.29	203.25	14.669	
13,600.00	8,803.00	8,786.43	8,783.43	86.02	200.37	86.52	1,732.57	728.92	3,081.47	2,878.22	203.25	15.161	
13,700.00	8,803.00	8,786.24	8,783.25	87.56	200.36	86.42	1,732.57	728.92	3,181.41	2,978.15	203.25	15.652	
13,800.00	8,803.00	8,786.07	8,783.07	89.10	200.36	86.33	1,732.57	728.92	3,281.35	3,078.09	203.26	16.144	
13,900.00	8,803.00	8,785.89	8,782.89	90.64	200.36	86.24	1,732.58	728.92	3,381.30	3,178.04	203.26	16.635	
14,000.00	8,803.00	8,785.72	8,782.72	92.19	200.35	86.15	1,732.58	728.92	3,481.25	3,277.98	203.26	17.127	
14,100.00	8,803.00	8,785.54	8,782.55	93.74	200.35	86.06	1,732.58	728.92	3,581.20	3,377.93	203.27	17.618	
14,200.00	8,803.00	8,785.37	8,782.38	95.30	200.35	85.97	1,732.58	728.92	3,681.15	3,477.88	203.27	18.110	
14,300.00	8,803.00	8,785.20	8,782.21	96.86	200.34	85.88	1,732.58	728.92	3,781.11	3,577.83	203.27	18.601	
14,400.00	8,803.00	8,785.04	8,782.04	98.42	200.34	85.79	1,732.58	728.92	3,881.07	3,677.79	203.28	19.092	
14,500.00	8,803.00	8,784.87	8,781.87	99.98	200.34	85.71	1,732.58	728.92	3,981.03	3,777.74	203.28	19.584	
14,600.00	8,803.00	8,784.71	8,781.71	101.55	200.33	85.62	1,732.58	728.92	4,080.99	3,877.70	203.29	20.075	
14,700.00	8,803.00	8,784.54	8,781.55	103.12	200.33	85.54	1,732.58	728.92	4,180.96	3,977.66	203.29	20.566	
14,800.00	8,803.00	8,784.38	8,781.39	104.69	200.33	85.45	1,732.58	728.92	4,280.92	4,077.62	203.30	21.057	
14,900.00	8,803.00	8,784.22	8,781.23	106.27	200.32	85.37	1,732.58	728.92	4,380.89	4,177.59	203.30	21.548	
15,000.00	8,803.00	8,784.07	8,781.07	107.85	200.32	85.29	1,732.58	728.92	4,480.86	4,277.55	203.31	22.040	
15,100.00	8,803.00	8,783.91	8,780.91	109.42	200.32	85.21	1,732.58	728.92	4,580.83	4,377.51	203.32	22.531	
15,200.00	8,803.00	8,783.76	8,780.76	111.01	200.32	85.13	1,732.58	728.92	4,680.80	4,477.48	203.32	23.022	
15,300.00	8,803.00	8,783.60	8,780.61	112.59	200.31	85.05	1,732.58	728.92	4,780.77	4,577.45	203.33	23.513	
15,400.00	8,803.00	8,783.45	8,780.46	114.18	200.31	84.97	1,732.58	728.92	4,880.75	4,677.41	203.33	24.004	
15,500.00	8,803.00	8,783.30	8,780.31	115.76	200.31	84.89	1,732.58	728.92	4,980.72	4,777.38	203.34	24.494	

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,100.00	8,803.00	8,797.49	8,794.28	50.09	208.72	90.05	7,024.86	1,990.94	4,911.28	4,700.17	211.12	23.263	
11,200.00	8,803.00	8,797.46	8,794.25	51.37	208.72	90.05	7,024.86	1,990.94	4,815.70	4,604.57	211.14	22.809	
11,300.00	8,803.00	8,797.44	8,794.23	52.68	208.72	90.05	7,024.86	1,990.94	4,720.31	4,509.15	211.16	22.355	
11,400.00	8,803.00	8,797.41	8,794.20	54.00	208.71	90.04	7,024.86	1,990.94	4,625.11	4,413.93	211.18	21.901	
11,500.00	8,803.00	8,797.38	8,794.18	55.34	208.71	90.04	7,024.86	1,990.94	4,530.11	4,318.91	211.21	21.449	
11,600.00	8,803.00	8,797.36	8,794.15	56.69	208.71	90.04	7,024.86	1,990.94	4,435.34	4,224.10	211.24	20.997	
11,700.00	8,803.00	8,797.33	8,794.12	58.07	208.71	90.04	7,024.86	1,990.94	4,340.80	4,129.52	211.27	20.546	
11,800.00	8,803.00	8,797.31	8,794.10	59.45	208.71	90.04	7,024.86	1,990.94	4,246.51	4,035.19	211.32	20.095	
11,900.00	8,803.00	8,797.28	8,794.07	60.85	208.71	90.04	7,024.86	1,990.94	4,152.48	3,941.12	211.37	19.646	
12,000.00	8,803.00	8,797.25	8,794.05	62.26	208.71	90.04	7,024.86	1,990.94	4,058.74	3,847.32	211.42	19.197	
12,100.00	8,803.00	8,797.23	8,794.02	63.69	208.71	90.04	7,024.86	1,990.94	3,965.31	3,753.83	211.48	18.750	
12,200.00	8,803.00	8,797.20	8,794.00	65.12	208.71	90.04	7,024.86	1,990.94	3,872.21	3,660.65	211.56	18.303	
12,300.00	8,803.00	8,797.18	8,793.97	66.56	208.71	90.03	7,024.86	1,990.94	3,779.46	3,567.82	211.64	17.858	
12,400.00	8,803.00	8,797.15	8,793.95	68.02	208.71	90.03	7,024.86	1,990.94	3,687.09	3,475.36	211.73	17.414	
12,500.00	8,803.00	8,797.13	8,793.92	69.48	208.71	90.03	7,024.86	1,990.94	3,595.12	3,383.29	211.83	16.971	
12,600.00	8,803.00	8,797.10	8,793.89	70.95	208.71	90.03	7,024.86	1,990.94	3,503.60	3,291.65	211.95	16.530	
12,700.00	8,803.00	8,797.08	8,793.87	72.43	208.71	90.03	7,024.86	1,990.94	3,412.55	3,200.47	212.08	16.091	
12,800.00	8,803.00	8,797.05	8,793.84	73.91	208.71	90.03	7,024.86	1,990.94	3,322.02	3,109.79	212.23	15.653	
12,900.00	8,803.00	8,797.03	8,793.82	75.41	208.71	90.03	7,024.86	1,990.94	3,232.04	3,019.65	212.40	15.217	
13,000.00	8,803.00	8,797.00	8,793.79	76.91	208.71	90.03	7,024.86	1,990.94	3,142.68	2,930.09	212.59	14.783	
13,100.00	8,803.00	8,796.97	8,793.77	78.41	208.71	90.03	7,024.86	1,990.94	3,053.97	2,841.17	212.80	14.352	
13,200.00	8,803.00	8,796.95	8,793.74	79.92	208.71	90.03	7,024.86	1,990.94	2,965.98	2,752.94	213.04	13.922	
13,300.00	8,803.00	8,796.92	8,793.72	81.44	208.71	90.02	7,024.86	1,990.94	2,878.77	2,665.46	213.31	13.496	
13,400.00	8,803.00	8,796.90	8,793.69	82.96	208.71	90.02	7,024.86	1,990.94	2,792.42	2,578.81	213.61	13.073	
13,500.00	8,803.00	8,796.87	8,793.67	84.49	208.71	90.02	7,024.86	1,990.94	2,707.01	2,493.06	213.95	12.653	
13,600.00	8,803.00	8,796.85	8,793.64	86.02	208.71	90.02	7,024.86	1,990.94	2,622.63	2,408.31	214.33	12.236	
13,700.00	8,803.00	8,796.82	8,793.62	87.56	208.70	90.02	7,024.86	1,990.94	2,539.39	2,324.63	214.76	11.824	
13,800.00	8,803.00	8,796.80	8,793.59	89.10	208.70	90.02	7,024.86	1,990.94	2,457.40	2,242.15	215.25	11.417	
13,900.00	8,803.00	8,796.77	8,793.57	90.64	208.70	90.02	7,024.86	1,990.94	2,376.79	2,161.00	215.79	11.014	
14,000.00	8,803.00	8,796.75	8,793.54	92.19	208.70	90.02	7,024.86	1,990.94	2,297.70	2,081.30	216.40	10.618	
14,100.00	8,803.00	8,796.73	8,793.52	93.74	208.70	90.02	7,024.86	1,990.94	2,220.30	2,003.21	217.08	10.228	
14,200.00	8,803.00	8,796.70	8,793.49	95.30	208.70	90.02	7,024.86	1,990.94	2,144.76	1,926.91	217.86	9.845	
14,300.00	8,803.00	8,796.68	8,793.47	96.86	208.70	90.01	7,024.86	1,990.94	2,071.31	1,852.59	218.72	9.470	
14,400.00	8,803.00	8,796.65	8,793.44	98.42	208.70	90.01	7,024.86	1,990.94	2,000.15	1,780.47	219.68	9.105	
14,500.00	8,803.00	8,796.63	8,793.42	99.98	208.70	90.01	7,024.86	1,990.94	1,931.56	1,710.81	220.75	8.750	
14,600.00	8,803.00	8,796.60	8,793.39	101.55	208.70	90.01	7,024.86	1,990.94	1,865.80	1,643.87	221.93	8.407	
14,700.00	8,803.00	8,796.58	8,793.37	103.12	208.70	90.01	7,024.86	1,990.94	1,803.19	1,579.97	223.22	8.078	
14,800.00	8,803.00	8,796.55	8,793.35	104.69	208.70	90.01	7,024.86	1,990.94	1,744.08	1,519.44	224.64	7.764	
14,900.00	8,803.00	8,796.53	8,793.32	106.27	208.70	90.01	7,024.86	1,990.94	1,688.82	1,462.65	226.17	7.467	
15,000.00	8,803.00	8,796.50	8,793.30	107.85	208.70	90.01	7,024.86	1,990.94	1,637.81	1,410.00	227.80	7.190	
15,100.00	8,803.00	8,796.48	8,793.27	109.42	208.70	90.01	7,024.86	1,990.94	1,591.45	1,361.92	229.53	6.934	
15,200.00	8,803.00	8,796.45	8,793.25	111.01	208.70	90.01	7,024.86	1,990.94	1,550.16	1,318.85	231.31	6.702	
15,300.00	8,803.00	8,796.43	8,793.22	112.59	208.70	90.00	7,024.86	1,990.94	1,514.37	1,281.24	233.13	6.496	
15,400.00	8,803.00	8,796.41	8,793.20	114.18	208.70	90.00	7,024.86	1,990.94	1,484.46	1,249.54	234.92	6.319	
15,500.00	8,803.00	8,796.38	8,793.17	115.76	208.70	90.00	7,024.86	1,990.94	1,460.79	1,224.14	236.65	6.173	
15,600.00	8,803.00	8,796.36	8,793.15	117.35	208.70	90.00	7,024.86	1,990.94	1,443.68	1,205.43	238.25	6.060	
15,700.00	8,803.00	8,796.33	8,793.13	118.94	208.70	90.00	7,024.86	1,990.94	1,433.36	1,193.68	239.68	5.980	
15,798.50	8,803.00	8,796.31	8,793.10	120.51	208.70	90.00	7,024.86	1,990.94	1,429.97	1,189.11	240.86	5.937	CC
15,800.00	8,803.00	8,796.31	8,793.10	120.54	208.70	90.00	7,024.86	1,990.94	1,429.97	1,189.10	240.87	5.937	ES
15,900.00	8,803.00	8,796.29	8,793.08	122.13	208.70	90.00	7,024.86	1,990.94	1,433.57	1,191.76	241.80	5.929	SF
16,000.00	8,803.00	8,796.26	8,793.05	123.73	208.70	90.00	7,024.86	1,990.94	1,444.09	1,201.64	242.45	5.956	
16,100.00	8,803.00	8,796.24	8,793.03	125.33	208.69	90.00	7,024.86	1,990.94	1,461.41	1,218.60	242.81	6.019	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,200.00	8,803.00	8,796.21	8,793.01	126.92	208.69	90.00	7,024.86	1,990.94	1,485.26	1,242.38	242.89	6.115	
16,300.00	8,803.00	8,796.19	8,792.98	128.52	208.69	90.00	7,024.86	1,990.94	1,515.36	1,272.65	242.71	6.243	
16,400.00	8,803.00	8,796.17	8,792.96	130.13	208.69	89.99	7,024.86	1,990.94	1,551.33	1,309.01	242.32	6.402	
16,500.00	8,803.00	8,796.14	8,792.93	131.73	208.69	89.99	7,024.86	1,990.94	1,592.77	1,351.03	241.74	6.589	
16,600.00	8,803.00	8,796.12	8,792.91	133.33	208.69	89.99	7,024.86	1,990.94	1,639.27	1,398.25	241.02	6.801	
16,700.00	8,803.00	8,796.09	8,792.89	134.94	208.69	89.99	7,024.86	1,990.94	1,690.42	1,450.22	240.20	7.038	
16,800.00	8,803.00	8,796.07	8,792.86	136.55	208.69	89.99	7,024.86	1,990.94	1,745.80	1,506.49	239.30	7.295	
16,900.00	8,803.00	8,796.05	8,792.84	138.15	208.69	89.99	7,024.86	1,990.94	1,805.02	1,566.65	238.37	7.572	
17,000.00	8,803.00	8,796.02	8,792.82	139.76	208.69	89.99	7,024.86	1,990.94	1,867.73	1,630.31	237.42	7.867	
17,100.00	8,803.00	8,796.00	8,792.79	141.37	208.69	89.99	7,024.86	1,990.94	1,933.57	1,697.11	236.47	8.177	
17,200.00	8,803.00	8,795.98	8,792.77	142.98	208.69	89.99	7,024.86	1,990.94	2,002.25	1,766.72	235.53	8.501	
17,300.00	8,803.00	8,795.95	8,792.74	144.59	208.69	89.99	7,024.86	1,990.94	2,073.48	1,838.86	234.62	8.838	
17,400.00	8,803.00	8,795.93	8,792.72	146.21	208.69	89.98	7,024.86	1,990.94	2,147.00	1,913.26	233.74	9.185	
17,500.00	8,803.00	8,795.90	8,792.70	147.82	208.69	89.98	7,024.86	1,990.94	2,222.59	1,989.69	232.90	9.543	
17,600.00	8,803.00	8,795.88	8,792.67	149.43	208.69	89.98	7,024.86	1,990.94	2,300.05	2,067.95	232.09	9.910	
17,700.00	8,803.00	8,795.86	8,792.65	151.05	208.69	89.98	7,024.86	1,990.94	2,379.18	2,147.85	231.33	10.285	
17,800.00	8,803.00	8,795.83	8,792.63	152.67	208.69	89.98	7,024.86	1,990.94	2,459.84	2,229.23	230.61	10.667	
17,900.00	8,803.00	8,795.81	8,792.60	154.28	208.69	89.98	7,024.86	1,990.94	2,541.87	2,311.95	229.92	11.055	
18,000.00	8,803.00	8,795.79	8,792.58	155.90	208.69	89.98	7,024.86	1,990.94	2,625.15	2,395.87	229.28	11.450	
18,100.00	8,803.00	8,795.76	8,792.56	157.52	208.69	89.98	7,024.86	1,990.94	2,709.56	2,480.88	228.67	11.849	
18,200.00	8,803.00	8,795.74	8,792.53	159.14	208.69	89.98	7,024.86	1,990.94	2,795.00	2,566.89	228.10	12.253	
18,300.00	8,803.00	8,795.72	8,792.51	160.76	208.69	89.98	7,024.86	1,990.94	2,881.37	2,653.81	227.57	12.662	
18,400.00	8,803.00	8,795.69	8,792.49	162.38	208.69	89.98	7,024.86	1,990.94	2,968.60	2,741.54	227.06	13.074	
18,500.00	8,803.00	8,795.67	8,792.46	164.00	208.69	89.97	7,024.86	1,990.94	3,056.62	2,830.03	226.59	13.490	
18,600.00	8,803.00	8,795.65	8,792.44	165.62	208.69	89.97	7,024.86	1,990.94	3,145.35	2,919.21	226.14	13.909	
18,700.00	8,803.00	8,795.63	8,792.42	167.24	208.68	89.97	7,024.86	1,990.94	3,234.73	3,009.02	225.72	14.331	
18,800.00	8,803.00	8,795.60	8,792.40	168.87	208.68	89.97	7,024.86	1,990.94	3,324.73	3,099.41	225.32	14.756	
18,900.00	8,803.00	8,795.58	8,792.37	170.49	208.68	89.97	7,024.86	1,990.94	3,415.28	3,190.33	224.95	15.183	
18,961.77	8,803.00	8,795.57	8,792.36	171.49	208.68	89.97	7,024.86	1,990.94	3,471.46	3,246.74	224.73	15.447	

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-50.00	74.45	-88.72	116.19				
100.00	100.00	90.70	90.70	0.13	0.13	-50.00	74.45	-88.72	115.82	115.64	0.18	645.081	
200.00	200.00	190.70	190.70	0.48	0.47	-50.00	74.45	-88.72	115.82	115.15	0.67	172.264	
300.00	300.00	290.70	290.70	0.84	0.83	-50.00	74.45	-88.72	115.82	114.64	1.18	98.215	
400.00	400.00	390.70	390.70	1.20	1.18	-50.00	74.45	-88.72	115.82	114.13	1.69	68.687	
500.00	500.00	490.70	490.70	1.56	1.54	-50.00	74.45	-88.72	115.82	113.63	2.19	52.810	
600.00	600.00	590.70	590.70	1.92	1.90	-50.00	74.45	-88.72	115.82	113.12	2.70	42.895	
700.00	700.00	690.70	690.70	2.28	2.26	-50.00	74.45	-88.72	115.82	112.61	3.21	36.114	
800.00	800.00	790.70	790.70	2.63	2.62	-50.00	74.45	-88.72	115.82	112.11	3.71	31.185	
900.00	900.00	890.70	890.70	2.99	2.98	-50.00	74.45	-88.72	115.82	111.60	4.22	27.439	
1,000.00	1,000.00	990.70	990.70	3.35	3.33	-50.00	74.45	-88.72	115.82	111.09	4.73	24.497	
1,100.00	1,100.00	1,090.70	1,090.70	3.71	3.69	-50.00	74.45	-88.72	115.82	110.58	5.23	22.125	
1,200.00	1,200.00	1,190.70	1,190.70	4.07	4.05	-50.00	74.45	-88.72	115.82	110.08	5.74	20.171	
1,300.00	1,300.00	1,290.70	1,290.70	4.43	4.41	-50.00	74.45	-88.72	115.82	109.57	6.25	18.535	
1,400.00	1,400.00	1,390.70	1,390.70	4.79	4.77	-50.00	74.45	-88.72	115.82	109.06	6.76	17.144	
1,500.00	1,500.00	1,490.70	1,490.70	5.14	5.13	-50.00	74.45	-88.72	115.82	108.56	7.26	15.947	
1,600.00	1,600.00	1,590.70	1,590.70	5.50	5.49	-50.00	74.45	-88.72	115.82	108.05	7.77	14.907	
1,700.00	1,700.00	1,690.70	1,690.70	5.86	5.84	-50.00	74.45	-88.72	115.82	107.54	8.28	13.994	
1,800.00	1,800.00	1,790.70	1,790.70	6.22	6.20	-50.00	74.45	-88.72	115.82	107.04	8.78	13.186	
1,900.00	1,900.00	1,890.70	1,890.70	6.58	6.56	-50.00	74.45	-88.72	115.82	106.53	9.29	12.466	
2,000.00	2,000.00	1,990.70	1,990.70	6.94	6.92	-50.00	74.45	-88.72	115.82	106.02	9.80	11.821	CC, ES
2,100.00	2,099.99	2,090.69	2,090.69	7.28	7.28	-159.40	74.45	-88.72	117.04	106.75	10.30	11.368	
2,200.00	2,199.91	2,190.61	2,190.61	7.62	7.64	-160.03	74.45	-88.72	120.73	109.94	10.79	11.192	
2,300.00	2,299.69	2,290.39	2,290.39	7.96	7.99	-161.01	74.45	-88.72	126.89	115.61	11.28	11.250	
2,400.00	2,399.27	2,389.97	2,389.97	8.31	8.35	-162.23	74.45	-88.72	135.58	123.81	11.77	11.517	
2,449.99	2,448.95	2,439.65	2,439.65	8.48	8.53	-162.89	74.45	-88.72	140.88	128.86	12.02	11.721	
2,500.00	2,498.61	2,489.31	2,489.31	8.66	8.71	-163.57	74.45	-88.72	146.51	134.25	12.27	11.945	
2,600.00	2,597.92	2,588.62	2,588.62	9.01	9.06	-164.78	74.45	-88.72	157.82	145.07	12.76	12.370	
2,700.00	2,697.23	2,687.93	2,687.93	9.37	9.42	-165.82	74.45	-88.72	169.20	155.95	13.25	12.766	
2,800.00	2,796.53	2,787.23	2,787.23	9.74	9.77	-166.73	74.45	-88.72	180.62	166.87	13.75	13.137	
2,900.00	2,895.84	2,886.54	2,886.54	10.10	10.13	-167.54	74.45	-88.72	192.08	177.84	14.25	13.484	
3,000.00	2,995.15	2,985.85	2,985.85	10.47	10.49	-168.25	74.45	-88.72	203.58	188.84	14.74	13.809	
3,100.00	3,094.45	3,085.15	3,085.15	10.84	10.84	-168.89	74.45	-88.72	215.10	199.86	15.24	14.113	
3,200.00	3,193.76	3,184.46	3,184.46	11.22	11.20	-169.46	74.45	-88.72	226.65	210.91	15.74	14.399	
3,300.00	3,293.07	3,279.66	3,279.66	11.59	11.53	-170.07	74.37	-89.55	238.94	222.72	16.22	14.733	
3,400.00	3,392.38	3,373.54	3,373.48	11.97	11.85	-170.91	74.08	-92.64	253.26	236.58	16.68	15.186	
3,500.00	3,491.68	3,466.72	3,466.50	12.35	12.17	-171.92	73.58	-97.99	269.67	252.55	17.13	15.745	
3,600.00	3,590.99	3,559.09	3,558.56	12.73	12.49	-173.05	72.88	-105.51	288.21	270.64	17.57	16.406	
3,700.00	3,690.30	3,650.56	3,649.51	13.12	12.81	-174.26	71.97	-115.15	308.88	290.89	18.00	17.163	
3,800.00	3,789.60	3,741.61	3,739.80	13.50	13.13	-175.50	70.87	-126.88	331.72	313.30	18.42	18.008	
3,900.00	3,888.91	3,838.46	3,835.70	13.89	13.47	-176.73	69.61	-140.30	355.55	336.65	18.90	18.812	
4,000.00	3,988.22	3,935.31	3,931.61	14.27	13.82	-177.81	68.36	-153.73	379.53	360.14	19.38	19.582	
4,100.00	4,087.52	4,032.16	4,027.52	14.66	14.17	-178.76	67.10	-167.15	403.61	383.75	19.86	20.318	
4,200.00	4,186.83	4,129.01	4,123.43	15.05	14.53	-179.60	65.84	-180.57	427.79	407.44	20.35	21.022	
4,300.00	4,286.14	4,225.86	4,219.34	15.44	14.89	179.64	64.58	-194.00	452.04	431.21	20.84	21.696	
4,400.00	4,385.44	4,322.72	4,315.25	15.83	15.25	178.97	63.32	-207.42	476.36	455.04	21.32	22.340	
4,500.00	4,484.75	4,419.57	4,411.15	16.22	15.61	178.36	62.06	-220.85	500.74	478.93	21.81	22.957	
4,600.00	4,584.06	4,516.42	4,507.06	16.61	15.97	177.80	60.80	-234.27	525.17	502.86	22.30	23.547	
4,700.00	4,683.36	4,613.27	4,602.97	17.01	16.34	177.30	59.55	-247.69	549.63	526.84	22.79	24.113	
4,800.00	4,782.67	4,710.12	4,698.88	17.40	16.71	176.84	58.29	-261.12	574.14	550.85	23.29	24.656	
4,900.00	4,881.98	4,806.97	4,794.79	17.79	17.08	176.41	57.03	-274.54	598.68	574.90	23.78	25.176	
5,000.00	4,981.29	4,903.82	4,890.70	18.19	17.45	176.02	55.77	-287.97	623.24	598.97	24.27	25.675	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,080.59	5,000.68	4,986.60	18.58	17.83	175.66	54.51	-301.39	647.83	623.06	24.77	26.155	
5,200.00	5,179.90	5,097.53	5,082.51	18.98	18.20	175.33	53.25	-314.81	672.45	647.18	25.26	26.616	
5,300.00	5,279.21	5,194.38	5,178.42	19.37	18.58	175.01	52.00	-328.24	697.08	671.32	25.76	27.059	
5,400.00	5,378.51	5,291.23	5,274.33	19.77	18.96	174.72	50.74	-341.66	721.73	695.47	26.26	27.485	
5,500.00	5,477.82	5,388.08	5,370.24	20.16	19.34	174.45	49.48	-355.09	746.40	719.64	26.76	27.896	
5,600.00	5,577.13	5,484.93	5,466.15	20.56	19.72	174.20	48.22	-368.51	771.08	743.83	27.26	28.291	
5,700.00	5,676.43	5,581.78	5,562.05	20.96	20.10	173.96	46.96	-381.93	795.78	768.02	27.75	28.672	
5,800.00	5,775.74	5,678.63	5,657.96	21.35	20.49	173.74	45.70	-395.36	820.49	792.23	28.25	29.039	
5,900.00	5,875.05	5,775.49	5,753.87	21.75	20.87	173.53	44.44	-408.78	845.21	816.45	28.75	29.394	
6,000.00	5,974.35	5,872.34	5,849.78	22.15	21.26	173.33	43.19	-422.20	869.93	840.68	29.26	29.736	
6,100.00	6,073.66	5,969.19	5,945.69	22.55	21.64	173.14	41.93	-435.63	894.67	864.92	29.76	30.066	
6,200.00	6,172.97	6,066.04	6,041.59	22.95	22.03	172.97	40.67	-449.05	919.42	889.16	30.26	30.386	
6,300.00	6,272.27	6,162.89	6,137.50	23.35	22.42	172.80	39.41	-462.48	944.17	913.41	30.76	30.694	
6,400.00	6,371.58	6,259.74	6,233.41	23.74	22.81	172.64	38.15	-475.90	968.94	937.67	31.26	30.993	
6,500.00	6,470.89	6,356.59	6,329.32	24.14	23.19	172.49	36.89	-489.32	993.70	961.94	31.77	31.282	
6,600.00	6,570.20	6,453.45	6,425.23	24.54	23.58	172.34	35.63	-502.75	1,018.48	986.21	32.27	31.562	
6,700.00	6,669.50	6,550.30	6,521.14	24.94	23.98	172.21	34.38	-516.17	1,043.26	1,010.49	32.77	31.833	
6,800.00	6,768.81	6,647.15	6,617.04	25.34	24.37	172.07	33.12	-529.60	1,068.05	1,034.77	33.28	32.095	
6,900.00	6,868.12	6,744.00	6,712.95	25.74	24.76	171.95	31.86	-543.02	1,092.84	1,059.05	33.78	32.350	
7,000.00	6,967.42	6,840.85	6,808.86	26.14	25.15	171.83	30.60	-556.44	1,117.63	1,083.35	34.29	32.597	
7,043.93	7,011.05	6,883.40	6,851.00	26.32	25.32	171.78	30.05	-562.34	1,128.53	1,094.02	34.51	32.703	
7,100.00	7,066.78	6,937.80	6,904.87	26.54	25.54	171.74	29.34	-569.88	1,142.04	1,107.25	34.79	32.825	
7,200.00	7,166.37	7,035.28	7,001.40	26.93	25.94	171.66	28.07	-583.39	1,164.17	1,128.87	35.30	32.982	
7,300.00	7,266.16	7,133.30	7,098.46	27.30	26.34	171.56	26.80	-596.98	1,183.78	1,147.97	35.80	33.065	
7,400.00	7,366.09	7,231.77	7,195.98	27.65	26.74	171.44	25.52	-610.63	1,200.85	1,164.54	36.31	33.075	
7,493.92	7,460.00	7,324.63	7,287.92	27.97	27.12	-79.51	24.31	-623.50	1,214.56	1,177.78	36.78	33.025	
7,500.00	7,466.08	7,330.64	7,293.88	27.99	27.14	-79.52	24.24	-624.33	1,215.37	1,178.57	36.81	33.020	
7,600.00	7,566.08	7,429.67	7,391.95	28.31	27.55	-79.70	22.95	-638.06	1,228.78	1,191.48	37.30	32.940	
7,700.00	7,666.08	7,528.70	7,490.01	28.64	27.95	-79.87	21.66	-651.78	1,242.20	1,204.40	37.80	32.862	
7,800.00	7,766.08	7,627.72	7,588.07	28.96	28.36	-80.04	20.38	-665.51	1,255.63	1,217.33	38.30	32.786	
7,900.00	7,866.08	7,726.75	7,686.13	29.29	28.76	-80.21	19.09	-679.23	1,269.07	1,230.28	38.80	32.712	
8,000.00	7,966.08	7,825.78	7,784.20	29.62	29.17	-80.37	17.80	-692.96	1,282.52	1,243.23	39.29	32.640	
8,100.00	8,066.08	7,924.80	7,882.26	29.95	29.58	-80.53	16.52	-706.68	1,295.99	1,256.19	39.79	32.569	
8,200.00	8,166.08	8,023.83	7,980.32	30.28	29.98	-80.69	15.23	-720.41	1,309.46	1,269.17	40.29	32.500	
8,263.96	8,230.04	8,087.17	8,043.04	30.49	30.24	-80.78	14.41	-729.19	1,318.08	1,277.47	40.61	32.457	
8,300.00	8,266.05	8,122.80	8,078.33	30.61	30.39	-86.11	13.94	-734.13	1,322.87	1,282.08	40.79	32.432	
8,350.00	8,315.76	8,171.88	8,126.92	30.77	30.59	-85.76	13.31	-740.93	1,329.28	1,288.24	41.03	32.396	
8,400.00	8,364.80	8,220.19	8,174.77	30.92	30.79	-85.62	12.68	-747.63	1,335.43	1,294.16	41.27	32.359	
8,450.00	8,412.83	8,267.37	8,221.49	31.07	30.99	-85.65	12.06	-754.17	1,341.39	1,299.89	41.50	32.325	
8,500.00	8,459.46	8,313.07	8,266.75	31.20	31.17	-85.83	11.47	-760.50	1,347.25	1,305.54	41.72	32.296	
8,550.00	8,504.34	8,356.93	8,310.18	31.33	31.35	-86.11	10.90	-766.58	1,353.14	1,311.21	41.92	32.275	
8,600.00	8,547.14	8,398.63	8,351.47	31.44	31.53	-86.46	10.36	-772.36	1,359.19	1,317.07	42.12	32.267	
8,650.00	8,587.53	8,437.83	8,390.29	31.54	31.69	-86.84	9.85	-777.79	1,365.59	1,323.28	42.31	32.274	
8,700.00	8,625.19	8,474.25	8,426.36	31.63	31.84	-87.18	9.38	-782.84	1,372.50	1,330.00	42.49	32.301	
8,750.00	8,659.85	8,507.61	8,459.39	31.71	31.98	-87.45	8.94	-787.46	1,380.08	1,337.42	42.66	32.351	
8,800.00	8,691.23	8,537.65	8,489.14	31.79	32.10	-87.60	8.55	-791.63	1,388.51	1,345.69	42.82	32.428	
8,850.00	8,719.11	8,564.15	8,515.38	31.85	32.21	-87.57	8.21	-795.30	1,397.93	1,354.96	42.97	32.536	
8,900.00	8,743.26	8,586.90	8,537.90	31.92	32.30	-87.34	7.91	-798.45	1,408.44	1,365.34	43.10	32.676	
8,950.00	8,763.51	8,605.73	8,556.55	31.99	32.38	-86.86	7.67	-801.06	1,420.13	1,376.90	43.23	32.850	
9,000.00	8,779.70	8,620.49	8,571.18	32.08	32.44	-86.11	7.48	-803.11	1,433.04	1,389.70	43.35	33.061	
9,050.00	8,791.70	8,631.09	8,581.66	32.18	32.48	-85.07	7.34	-804.58	1,447.17	1,403.72	43.45	33.308	
9,100.00	8,799.43	8,637.42	8,587.94	32.32	32.51	-83.73	7.26	-805.46	1,462.46	1,418.92	43.54	33.591	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,150.00	8,802.83	8,639.45	8,589.95	32.48	32.52	-82.09	7.23	-805.74	1,478.82	1,435.21	43.61	33.907	
9,163.96	8,803.00	8,639.25	8,589.75	32.53	32.52	-81.59	7.23	-805.71	1,483.56	1,439.93	43.63	34.002	
9,200.00	8,803.00	8,638.32	8,588.83	32.67	32.51	-81.59	7.24	-805.58	1,496.07	1,452.39	43.68	34.250	
9,300.00	8,803.00	8,636.06	8,586.59	33.10	32.51	-81.61	7.27	-805.27	1,532.52	1,488.68	43.83	34.962	
9,400.00	8,803.00	8,634.28	8,584.83	33.60	32.50	-81.66	7.30	-805.02	1,571.36	1,527.35	44.01	35.706	
9,480.63	8,803.00	8,633.20	8,583.76	34.05	32.49	-81.72	7.31	-804.87	1,604.28	1,560.12	44.16	36.327	
9,500.00	8,803.00	8,632.98	8,583.54	34.16	32.49	-81.71	7.31	-804.84	1,612.45	1,568.25	44.20	36.481	
9,600.00	8,803.00	8,631.83	8,582.41	34.79	32.49	-81.67	7.33	-804.68	1,657.57	1,613.16	44.40	37.330	
9,700.00	8,803.00	8,630.69	8,581.27	35.48	32.48	-81.62	7.34	-804.52	1,707.36	1,662.75	44.61	38.275	
9,800.00	8,803.00	8,629.54	8,580.14	36.23	32.48	-81.58	7.36	-804.36	1,761.42	1,716.61	44.81	39.309	
9,900.00	8,803.00	8,628.40	8,579.00	37.04	32.47	-81.53	7.37	-804.20	1,819.38	1,774.37	45.01	40.425	
10,000.00	8,803.00	8,627.25	8,577.87	37.91	32.47	-81.49	7.39	-804.05	1,880.87	1,835.67	45.20	41.615	
10,100.00	8,803.00	8,626.10	8,576.73	38.83	32.46	-81.44	7.40	-803.89	1,945.56	1,900.18	45.38	42.874	
10,200.00	8,803.00	8,624.96	8,575.60	39.79	32.46	-81.40	7.42	-803.73	2,013.14	1,967.59	45.55	44.198	
10,300.00	8,803.00	11,495.58	10,140.82	40.80	44.53	-131.42	1,524.19	-905.51	2,036.59	1,988.45	48.15	42.298	
10,400.00	8,803.00	11,595.55	10,138.58	41.84	45.45	-131.37	1,624.14	-906.61	2,035.11	1,985.81	49.30	41.281	
10,500.00	8,803.00	11,695.53	10,136.35	42.93	46.41	-131.32	1,724.08	-907.71	2,033.63	1,983.14	50.50	40.273	
10,600.00	8,803.00	11,795.50	10,134.12	44.05	47.41	-131.28	1,824.02	-908.82	2,032.15	1,980.42	51.74	39.279	
10,700.00	8,803.00	11,895.48	10,131.88	45.20	48.45	-131.23	1,923.97	-909.92	2,030.68	1,977.66	53.02	38.301	
10,800.00	8,803.00	11,995.45	10,129.65	46.38	49.52	-131.18	2,023.91	-911.02	2,029.20	1,974.86	54.34	37.344	
10,900.00	8,803.00	12,095.43	10,127.41	47.59	50.62	-131.13	2,123.86	-912.12	2,027.73	1,972.04	55.69	36.410	
11,000.00	8,803.00	12,195.40	10,125.18	48.83	51.75	-131.09	2,223.80	-913.22	2,026.26	1,969.18	57.08	35.499	
11,100.00	8,803.00	12,295.38	10,122.94	50.09	52.90	-131.04	2,323.74	-914.32	2,024.78	1,966.29	58.49	34.615	
11,200.00	8,803.00	12,395.35	10,120.71	51.37	54.09	-130.99	2,423.69	-915.42	2,023.31	1,963.37	59.94	33.756	
11,300.00	8,803.00	12,495.33	10,118.47	52.68	55.29	-130.94	2,523.63	-916.52	2,021.84	1,960.43	61.41	32.923	
11,400.00	8,803.00	12,595.30	10,116.24	54.00	56.52	-130.89	2,623.58	-917.62	2,020.38	1,957.47	62.91	32.116	
11,500.00	8,803.00	12,695.28	10,114.00	55.34	57.77	-130.85	2,723.52	-918.72	2,018.91	1,954.48	64.43	31.336	
11,600.00	8,803.00	12,795.25	10,111.77	56.69	59.04	-130.80	2,823.46	-919.82	2,017.45	1,951.48	65.97	30.580	
11,700.00	8,803.00	12,895.23	10,109.53	58.07	60.33	-130.75	2,923.41	-920.92	2,015.98	1,948.45	67.54	29.851	
11,800.00	8,803.00	12,995.20	10,107.30	59.45	61.64	-130.70	3,023.35	-922.02	2,014.52	1,945.40	69.12	29.146	
11,900.00	8,803.00	13,095.18	10,105.06	60.85	62.96	-130.65	3,123.29	-923.13	2,013.06	1,942.34	70.72	28.466	
12,000.00	8,803.00	13,195.15	10,102.83	62.26	64.30	-130.61	3,223.24	-924.23	2,011.60	1,939.27	72.34	27.809	
12,100.00	8,803.00	13,295.13	10,100.60	63.69	65.65	-130.56	3,323.18	-925.33	2,010.15	1,936.18	73.97	27.176	
12,200.00	8,803.00	13,395.10	10,098.36	65.12	67.01	-130.51	3,423.13	-926.43	2,008.69	1,933.08	75.61	26.565	
12,300.00	8,803.00	13,495.08	10,096.13	66.56	68.39	-130.46	3,523.07	-927.53	2,007.24	1,929.96	77.28	25.975	
12,400.00	8,803.00	13,595.05	10,093.89	68.02	69.78	-130.41	3,623.01	-928.63	2,005.78	1,926.83	78.95	25.405	
12,500.00	8,803.00	13,695.03	10,091.66	69.48	71.18	-130.36	3,722.96	-929.73	2,004.33	1,923.69	80.64	24.855	
12,600.00	8,803.00	13,795.00	10,089.42	70.95	72.60	-130.32	3,822.90	-930.83	2,002.88	1,920.54	82.34	24.324	
12,700.00	8,803.00	13,894.98	10,087.19	72.43	74.02	-130.27	3,922.85	-931.93	2,001.43	1,917.38	84.05	23.811	
12,800.00	8,803.00	13,994.95	10,084.95	73.91	75.45	-130.22	4,022.79	-933.03	1,999.98	1,914.21	85.77	23.317	
12,900.00	8,803.00	14,094.93	10,082.72	75.41	76.89	-130.17	4,122.73	-934.13	1,998.54	1,911.03	87.50	22.839	
13,000.00	8,803.00	14,194.90	10,080.48	76.91	78.34	-130.12	4,222.68	-935.23	1,997.09	1,907.85	89.25	22.377	
13,100.00	8,803.00	14,294.88	10,078.25	78.41	79.79	-130.07	4,322.62	-936.33	1,995.65	1,904.65	91.00	21.930	
13,200.00	8,803.00	14,394.85	10,076.01	79.92	81.26	-130.02	4,422.57	-937.43	1,994.21	1,901.45	92.76	21.499	
13,300.00	8,803.00	14,494.83	10,073.78	81.44	82.73	-129.97	4,522.51	-938.54	1,992.77	1,898.24	94.53	21.082	
13,400.00	8,803.00	14,594.80	10,071.54	82.96	84.21	-129.92	4,622.45	-939.64	1,991.33	1,895.03	96.30	20.678	
13,500.00	8,803.00	14,694.78	10,069.31	84.49	85.69	-129.87	4,722.40	-940.74	1,989.89	1,891.81	98.08	20.288	
13,600.00	8,803.00	14,794.75	10,067.08	86.02	87.18	-129.83	4,822.34	-941.84	1,988.46	1,888.58	99.87	19.910	
13,700.00	8,803.00	14,894.73	10,064.84	87.56	88.68	-129.78	4,922.29	-942.94	1,987.02	1,885.35	101.67	19.543	
13,800.00	8,803.00	14,994.70	10,062.61	89.10	90.18	-129.73	5,022.23	-944.04	1,985.59	1,882.12	103.48	19.189	
13,900.00	8,803.00	15,094.68	10,060.37	90.64	91.68	-129.68	5,122.17	-945.14	1,984.16	1,878.88	105.29	18.845	
14,000.00	8,803.00	15,194.65	10,058.14	92.19	93.19	-129.63	5,222.12	-946.24	1,982.73	1,875.63	107.10	18.513	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	8,803.00	15,294.63	10,055.90	93.74	94.71	-129.58	5,322.06	-947.34	1,981.30	1,872.38	108.93	18.190	
14,200.00	8,803.00	15,394.60	10,053.67	95.30	96.23	-129.53	5,422.01	-948.44	1,979.88	1,869.12	110.75	17.876	
14,300.00	8,803.00	15,494.58	10,051.43	96.86	97.76	-129.48	5,521.95	-949.54	1,978.45	1,865.86	112.59	17.572	
14,400.00	8,803.00	15,594.55	10,049.20	98.42	99.29	-129.43	5,621.89	-950.64	1,977.03	1,862.60	114.43	17.278	
14,500.00	8,803.00	15,694.53	10,046.96	99.98	100.82	-129.38	5,721.84	-951.74	1,975.61	1,859.33	116.27	16.991	
14,600.00	8,803.00	15,794.50	10,044.73	101.55	102.36	-129.33	5,821.78	-952.85	1,974.18	1,856.06	118.12	16.713	
14,700.00	8,803.00	15,894.48	10,042.49	103.12	103.90	-129.28	5,921.73	-953.95	1,972.77	1,852.79	119.98	16.443	
14,800.00	8,803.00	15,994.45	10,040.26	104.69	105.44	-129.23	6,021.67	-955.05	1,971.35	1,849.51	121.83	16.181	
14,900.00	8,803.00	16,094.43	10,038.02	106.27	106.99	-129.18	6,121.61	-956.15	1,969.93	1,846.23	123.70	15.925	
15,000.00	8,803.00	16,194.40	10,035.79	107.85	108.54	-129.13	6,221.56	-957.25	1,968.52	1,842.95	125.57	15.677	
15,100.00	8,803.00	16,294.38	10,033.55	109.42	110.09	-129.08	6,321.50	-958.35	1,967.10	1,839.67	127.44	15.436	
15,200.00	8,803.00	16,394.35	10,031.32	111.01	111.65	-129.03	6,421.45	-959.45	1,965.69	1,836.38	129.31	15.201	
15,300.00	8,803.00	16,494.33	10,029.09	112.59	113.21	-128.98	6,521.39	-960.55	1,964.28	1,833.09	131.19	14.973	
15,400.00	8,803.00	16,594.30	10,026.85	114.18	114.77	-128.92	6,621.33	-961.65	1,962.87	1,829.80	133.08	14.750	
15,500.00	8,803.00	16,694.28	10,024.62	115.76	116.33	-128.87	6,721.28	-962.75	1,961.47	1,826.50	134.96	14.533	
15,600.00	8,803.00	16,794.25	10,022.38	117.35	117.90	-128.82	6,821.22	-963.85	1,960.06	1,823.21	136.85	14.322	
15,700.00	8,803.00	16,894.23	10,020.15	118.94	119.47	-128.77	6,921.17	-964.95	1,958.66	1,819.91	138.75	14.117	
15,800.00	8,803.00	16,994.20	10,017.91	120.54	121.04	-128.72	7,021.11	-966.05	1,957.26	1,816.61	140.65	13.916	
15,900.00	8,803.00	17,094.18	10,015.68	122.13	122.61	-128.67	7,121.05	-967.16	1,955.85	1,813.30	142.55	13.720	
16,000.00	8,803.00	17,194.15	10,013.44	123.73	124.19	-128.62	7,221.00	-968.26	1,954.46	1,810.00	144.45	13.530	
16,100.00	8,803.00	17,294.13	10,011.21	125.33	125.76	-128.57	7,320.94	-969.36	1,953.06	1,806.69	146.36	13.344	
16,200.00	8,803.00	17,394.10	10,008.97	126.92	127.34	-128.52	7,420.89	-970.46	1,951.66	1,803.39	148.28	13.162	
16,300.00	8,803.00	17,494.08	10,006.74	128.52	128.92	-128.47	7,520.83	-971.56	1,950.27	1,800.08	150.19	12.985	
16,400.00	8,803.00	17,594.05	10,004.50	130.13	130.51	-128.41	7,620.77	-972.66	1,948.87	1,796.77	152.11	12.812	
16,500.00	8,803.00	17,694.03	10,002.27	131.73	132.09	-128.36	7,720.72	-973.76	1,947.48	1,793.45	154.03	12.644	
16,600.00	8,803.00	17,794.00	10,000.03	133.33	133.68	-128.31	7,820.66	-974.86	1,946.09	1,790.14	155.95	12.479	
16,700.00	8,803.00	17,893.98	9,997.80	134.94	135.26	-128.26	7,920.61	-975.96	1,944.70	1,786.82	157.88	12.318	
16,800.00	8,803.00	17,993.95	9,995.57	136.55	136.85	-128.21	8,020.55	-977.06	1,943.32	1,783.51	159.81	12.160	
16,900.00	8,803.00	18,093.93	9,993.33	138.15	138.44	-128.16	8,120.49	-978.16	1,941.93	1,780.19	161.74	12.006	
17,000.00	8,803.00	18,193.90	9,991.10	139.76	140.04	-128.10	8,220.44	-979.26	1,940.55	1,776.87	163.68	11.856	
17,100.00	8,803.00	18,293.88	9,988.86	141.37	141.63	-128.05	8,320.38	-980.36	1,939.17	1,773.55	165.62	11.709	
17,200.00	8,803.00	18,393.85	9,986.63	142.98	143.23	-128.00	8,420.33	-981.46	1,937.79	1,770.23	167.56	11.565	
17,300.00	8,803.00	18,493.83	9,984.39	144.59	144.82	-127.95	8,520.27	-982.57	1,936.41	1,766.91	169.50	11.424	
17,400.00	8,803.00	18,593.80	9,982.16	146.21	146.42	-127.90	8,620.21	-983.67	1,935.03	1,763.58	171.45	11.286	
17,500.00	8,803.00	18,693.78	9,979.92	147.82	148.02	-127.84	8,720.16	-984.77	1,933.66	1,760.26	173.39	11.152	
17,600.00	8,803.00	18,793.75	9,977.69	149.43	149.62	-127.79	8,820.10	-985.87	1,932.28	1,756.94	175.35	11.020	
17,700.00	8,803.00	18,893.73	9,975.45	151.05	151.22	-127.74	8,920.05	-986.97	1,930.91	1,753.61	177.30	10.891	
17,800.00	8,803.00	18,993.70	9,973.22	152.67	152.82	-127.69	9,019.99	-988.07	1,929.54	1,750.28	179.26	10.764	
17,900.00	8,803.00	19,093.68	9,970.98	154.28	154.42	-127.63	9,119.93	-989.17	1,928.17	1,746.95	181.21	10.640	
18,000.00	8,803.00	19,193.65	9,968.75	155.90	156.03	-127.58	9,219.88	-990.27	1,926.80	1,743.63	183.18	10.519	
18,100.00	8,803.00	19,293.63	9,966.51	157.52	157.63	-127.53	9,319.82	-991.37	1,925.44	1,740.30	185.14	10.400	
18,200.00	8,803.00	19,393.60	9,964.28	159.14	159.24	-127.48	9,419.77	-992.47	1,924.07	1,736.97	187.11	10.283	
18,300.00	8,803.00	19,493.58	9,962.05	160.76	160.85	-127.42	9,519.71	-993.57	1,922.71	1,733.64	189.07	10.169	
18,400.00	8,803.00	19,593.55	9,959.81	162.38	162.46	-127.37	9,619.65	-994.67	1,921.35	1,730.30	191.04	10.057	
18,500.00	8,803.00	19,693.53	9,957.58	164.00	164.07	-127.32	9,719.60	-995.77	1,919.99	1,726.97	193.02	9.947	
18,600.00	8,803.00	19,793.50	9,955.34	165.62	165.68	-127.27	9,819.54	-996.88	1,918.63	1,723.64	194.99	9.840	
18,700.00	8,803.00	19,893.48	9,953.11	167.24	167.29	-127.21	9,919.49	-997.98	1,917.27	1,720.31	196.97	9.734	
18,800.00	8,803.00	19,993.45	9,950.87	168.87	168.90	-127.16	10,019.43	-999.08	1,915.92	1,716.97	198.95	9.630	
18,900.00	8,803.00	20,093.43	9,948.64	170.49	170.51	-127.11	10,119.37	-1,000.18	1,914.57	1,713.64	200.93	9.529	
18,961.77	8,803.00	20,131.78	9,947.78	171.49	171.13	-127.09	10,157.71	-1,000.60	1,913.88	1,711.95	201.93	9.478	SF

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-35.70	74.76	-53.73	92.48				
100.00	100.00	91.30	91.30	0.13	0.13	-35.70	74.76	-53.73	92.07	91.88	0.18	511.045	
200.00	200.00	191.30	191.30	0.48	0.47	-35.70	74.76	-53.73	92.07	91.39	0.67	136.630	
300.00	300.00	291.30	291.30	0.84	0.83	-35.70	74.76	-53.73	92.07	90.88	1.18	77.972	
400.00	400.00	391.30	391.30	1.20	1.19	-35.70	74.76	-53.73	92.07	90.38	1.69	54.551	
500.00	500.00	491.30	491.30	1.56	1.54	-35.70	74.76	-53.73	92.07	89.87	2.19	41.950	
600.00	600.00	591.30	591.30	1.92	1.90	-35.70	74.76	-53.73	92.07	89.36	2.70	34.078	
700.00	700.00	691.30	691.30	2.28	2.26	-35.70	74.76	-53.73	92.07	88.86	3.21	28.694	
800.00	800.00	791.30	791.30	2.63	2.62	-35.70	74.76	-53.73	92.07	88.35	3.72	24.779	
900.00	900.00	891.30	891.30	2.99	2.98	-35.70	74.76	-53.73	92.07	87.84	4.22	21.804	
1,000.00	1,000.00	991.30	991.30	3.35	3.34	-35.70	74.76	-53.73	92.07	87.34	4.73	19.467	
1,100.00	1,100.00	1,091.30	1,091.30	3.71	3.70	-35.70	74.76	-53.73	92.07	86.83	5.24	17.582	
1,200.00	1,200.00	1,191.30	1,191.30	4.07	4.05	-35.70	74.76	-53.73	92.07	86.32	5.74	16.030	
1,300.00	1,300.00	1,291.30	1,291.30	4.43	4.41	-35.70	74.76	-53.73	92.07	85.81	6.25	14.730	
1,400.00	1,400.00	1,391.30	1,391.30	4.79	4.77	-35.70	74.76	-53.73	92.07	85.31	6.76	13.625	
1,500.00	1,500.00	1,491.30	1,491.30	5.14	5.13	-35.70	74.76	-53.73	92.07	84.80	7.26	12.674	
1,600.00	1,600.00	1,591.30	1,591.30	5.50	5.49	-35.70	74.76	-53.73	92.07	84.29	7.77	11.847	
1,700.00	1,700.00	1,691.30	1,691.30	5.86	5.85	-35.70	74.76	-53.73	92.07	83.79	8.28	11.122	
1,800.00	1,800.00	1,791.30	1,791.30	6.22	6.20	-35.70	74.76	-53.73	92.07	83.28	8.79	10.480	
1,900.00	1,900.00	1,891.30	1,891.30	6.58	6.56	-35.70	74.76	-53.73	92.07	82.77	9.29	9.908	
2,000.00	2,000.00	1,991.30	1,991.30	6.94	6.92	-35.70	74.76	-53.73	92.07	82.27	9.80	9.395	CC, ES
2,100.00	2,099.99	2,091.29	2,091.29	7.28	7.28	-145.33	74.76	-53.73	93.14	82.84	10.30	9.045	
2,200.00	2,199.91	2,191.21	2,191.21	7.62	7.64	-146.64	74.76	-53.73	96.39	85.60	10.79	8.935	SF
2,300.00	2,299.69	2,290.99	2,290.99	7.96	8.00	-148.61	74.76	-53.73	101.92	90.64	11.28	9.034	
2,400.00	2,399.27	2,390.57	2,390.57	8.31	8.35	-151.04	74.76	-53.73	109.84	98.07	11.78	9.328	
2,449.99	2,448.95	2,440.25	2,440.25	8.48	8.53	-152.35	74.76	-53.73	114.74	102.71	12.02	9.544	
2,500.00	2,498.61	2,489.91	2,489.91	8.66	8.71	-153.65	74.76	-53.73	119.98	107.71	12.27	9.779	
2,600.00	2,597.92	2,589.22	2,589.22	9.01	9.06	-155.93	74.76	-53.73	130.63	117.87	12.76	10.235	
2,700.00	2,697.23	2,688.53	2,688.53	9.37	9.42	-157.87	74.76	-53.73	141.45	128.20	13.26	10.669	
2,800.00	2,796.53	2,787.83	2,787.83	9.74	9.78	-159.54	74.76	-53.73	152.42	138.66	13.75	11.082	
2,900.00	2,895.84	2,887.14	2,887.14	10.10	10.13	-160.98	74.76	-53.73	163.49	149.24	14.25	11.472	
3,000.00	2,995.15	2,986.45	2,986.45	10.47	10.49	-162.23	74.76	-53.73	174.65	159.90	14.75	11.842	
3,100.00	3,094.45	3,085.75	3,085.75	10.84	10.84	-163.34	74.76	-53.73	185.88	170.64	15.25	12.191	
3,200.00	3,193.76	3,185.06	3,185.06	11.22	11.20	-164.32	74.76	-53.73	197.18	181.43	15.75	12.522	
3,300.00	3,293.07	3,284.37	3,284.37	11.59	11.56	-165.19	74.76	-53.73	208.52	192.28	16.25	12.835	
3,400.00	3,392.38	3,383.68	3,383.68	11.97	11.91	-165.97	74.76	-53.73	219.91	203.17	16.75	13.132	
3,500.00	3,491.68	3,479.47	3,479.46	12.35	12.25	-166.79	74.60	-54.54	231.97	214.74	17.23	13.466	
3,600.00	3,590.99	3,574.03	3,573.96	12.73	12.57	-167.90	74.01	-57.62	245.87	228.18	17.69	13.900	
3,700.00	3,690.30	3,667.89	3,667.67	13.12	12.89	-169.22	72.99	-62.95	261.70	243.56	18.14	14.426	
3,800.00	3,789.60	3,760.97	3,760.43	13.50	13.21	-170.69	71.55	-70.47	279.52	260.94	18.58	15.042	
3,900.00	3,888.91	3,853.14	3,852.08	13.89	13.53	-172.24	69.70	-80.10	299.41	280.39	19.02	15.745	
4,000.00	3,988.22	3,949.64	3,947.86	14.27	13.86	-173.83	67.49	-91.62	320.71	301.22	19.49	16.458	
4,100.00	4,087.52	4,046.96	4,044.46	14.66	14.21	-175.24	65.26	-103.27	342.24	322.27	19.97	17.140	
4,200.00	4,186.83	4,144.29	4,141.06	15.05	14.55	-176.48	63.02	-114.91	363.95	343.50	20.45	17.797	
4,300.00	4,286.14	4,241.62	4,237.66	15.44	14.90	-177.59	60.79	-126.56	385.80	364.87	20.93	18.429	
4,400.00	4,385.44	4,338.95	4,334.27	15.83	15.25	-178.57	58.55	-138.20	407.78	386.36	21.42	19.037	
4,500.00	4,484.75	4,436.27	4,430.87	16.22	15.61	-179.46	56.32	-149.85	429.86	407.95	21.91	19.621	
4,600.00	4,584.06	4,533.60	4,527.47	16.61	15.96	179.74	54.09	-161.50	452.02	429.63	22.40	20.182	
4,700.00	4,683.36	4,630.93	4,624.07	17.01	16.32	179.02	51.85	-173.14	474.27	451.38	22.89	20.721	
4,800.00	4,782.67	4,728.25	4,720.68	17.40	16.68	178.36	49.62	-184.79	496.58	473.20	23.38	21.240	
4,900.00	4,881.98	4,825.58	4,817.28	17.79	17.04	177.76	47.38	-196.43	518.94	495.07	23.87	21.738	
5,000.00	4,981.29	4,922.91	4,913.88	18.19	17.40	177.21	45.15	-208.08	541.36	517.00	24.37	22.218	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,080.59	5,020.24	5,010.48	18.58	17.76	176.70	42.91	-219.73	563.82	538.96	24.86	22.679	
5,200.00	5,179.90	5,117.56	5,107.08	18.98	18.13	176.23	40.68	-231.37	586.32	560.97	25.36	23.123	
5,300.00	5,279.21	5,214.89	5,203.69	19.37	18.50	175.79	38.45	-243.02	608.86	583.00	25.85	23.551	
5,400.00	5,378.51	5,312.22	5,300.29	19.77	18.86	175.39	36.21	-254.67	631.42	605.07	26.35	23.963	
5,500.00	5,477.82	5,409.55	5,396.89	20.16	19.23	175.01	33.98	-266.31	654.02	627.17	26.85	24.360	
5,600.00	5,577.13	5,506.87	5,493.49	20.56	19.60	174.66	31.74	-277.96	676.64	649.29	27.35	24.743	
5,700.00	5,676.43	5,604.20	5,590.09	20.96	19.97	174.33	29.51	-289.60	699.28	671.43	27.85	25.112	
5,800.00	5,775.74	5,701.53	5,686.70	21.35	20.35	174.03	27.27	-301.25	721.94	693.59	28.35	25.469	
5,900.00	5,875.05	5,798.85	5,783.30	21.75	20.72	173.74	25.04	-312.90	744.62	715.77	28.85	25.814	
6,000.00	5,974.35	5,896.18	5,879.90	22.15	21.09	173.46	22.81	-324.54	767.32	737.97	29.35	26.146	
6,100.00	6,073.66	5,993.51	5,976.50	22.55	21.47	173.21	20.57	-336.19	790.03	760.18	29.85	26.468	
6,200.00	6,172.97	6,090.84	6,073.10	22.95	21.85	172.97	18.34	-347.83	812.76	782.41	30.35	26.779	
6,300.00	6,272.27	6,188.16	6,169.71	23.35	22.22	172.74	16.10	-359.48	835.50	804.64	30.85	27.080	
6,400.00	6,371.58	6,285.49	6,266.31	23.74	22.60	172.52	13.87	-371.13	858.25	826.89	31.36	27.371	
6,500.00	6,470.89	6,382.82	6,362.91	24.14	22.98	172.31	11.63	-382.77	881.01	849.15	31.86	27.653	
6,600.00	6,570.20	6,480.14	6,459.51	24.54	23.36	172.12	9.40	-394.42	903.78	871.42	32.36	27.927	
6,700.00	6,669.50	6,577.47	6,556.12	24.94	23.74	171.93	7.17	-406.06	926.57	893.70	32.87	28.192	
6,800.00	6,768.81	6,674.80	6,652.72	25.34	24.12	171.76	4.93	-417.71	949.36	915.99	33.37	28.448	
6,900.00	6,868.12	6,772.13	6,749.32	25.74	24.50	171.59	2.70	-429.36	972.16	938.28	33.88	28.698	
7,000.00	6,967.42	6,869.45	6,845.92	26.14	24.88	171.43	0.46	-441.00	994.97	960.58	34.38	28.939	
7,043.93	7,011.05	6,912.21	6,888.36	26.32	25.05	171.36	-0.52	-446.12	1,004.99	970.38	34.60	29.043	
7,100.00	7,066.78	6,966.87	6,942.61	26.54	25.26	171.30	-1.77	-452.66	1,017.38	982.50	34.89	29.163	
7,200.00	7,166.37	7,064.77	7,039.78	26.93	25.65	171.17	-4.02	-464.37	1,037.52	1,002.13	35.39	29.315	
7,300.00	7,266.16	7,163.15	7,137.43	27.30	26.03	171.03	-6.28	-476.15	1,055.14	1,019.24	35.90	29.393	
7,400.00	7,366.09	7,261.93	7,235.48	27.65	26.42	170.86	-8.55	-487.97	1,070.21	1,033.81	36.40	29.400	
7,493.92	7,460.00	7,355.02	7,327.87	27.97	26.79	-80.14	-10.68	-499.11	1,082.04	1,045.17	36.87	29.347	
7,500.00	7,466.08	7,361.06	7,333.86	27.99	26.81	-80.15	-10.82	-499.83	1,082.74	1,045.84	36.90	29.342	
7,600.00	7,566.08	7,460.31	7,432.38	28.31	27.20	-80.38	-13.10	-511.70	1,094.15	1,056.76	37.40	29.258	
7,700.00	7,666.08	7,559.57	7,530.89	28.64	27.60	-80.60	-15.38	-523.58	1,105.59	1,067.69	37.89	29.177	
7,800.00	7,766.08	7,658.82	7,629.41	28.96	27.99	-80.82	-17.66	-535.46	1,117.03	1,078.65	38.39	29.098	
7,900.00	7,866.08	7,758.08	7,727.92	29.29	28.38	-81.03	-19.94	-547.34	1,128.50	1,089.61	38.89	29.021	
8,000.00	7,966.08	7,857.33	7,826.44	29.62	28.77	-81.24	-22.21	-559.21	1,139.98	1,100.59	39.38	28.946	
8,100.00	8,066.08	7,956.59	7,924.95	29.95	29.17	-81.44	-24.49	-571.09	1,151.47	1,111.59	39.88	28.873	
8,200.00	8,166.08	8,055.84	8,023.47	30.28	29.56	-81.64	-26.77	-582.97	1,162.98	1,122.60	40.38	28.802	
8,263.96	8,230.04	8,119.33	8,086.48	30.49	29.81	-81.76	-28.23	-590.56	1,170.35	1,129.65	40.70	28.758	
8,300.00	8,266.05	8,155.03	8,121.92	30.61	29.96	-87.18	-29.05	-594.83	1,174.45	1,133.57	40.88	28.732	
8,350.00	8,315.76	8,204.18	8,170.70	30.77	30.15	-86.97	-30.18	-600.72	1,179.98	1,138.86	41.12	28.697	
8,400.00	8,364.80	8,252.53	8,218.69	30.92	30.34	-86.98	-31.29	-606.50	1,185.36	1,144.01	41.35	28.664	
8,450.00	8,412.83	8,299.71	8,265.52	31.07	30.53	-87.16	-32.37	-612.15	1,190.67	1,149.09	41.58	28.635	
8,500.00	8,459.46	8,345.37	8,310.84	31.20	30.71	-87.49	-33.42	-617.61	1,196.03	1,154.23	41.80	28.613	
8,550.00	8,504.34	8,389.16	8,354.30	31.33	30.89	-87.93	-34.42	-622.85	1,201.59	1,159.58	42.01	28.604	
8,600.00	8,547.14	8,430.74	8,395.58	31.44	31.05	-88.42	-35.38	-627.83	1,207.53	1,165.33	42.21	28.611	
8,650.00	8,587.53	8,469.80	8,434.35	31.54	31.21	-88.91	-36.27	-632.50	1,214.04	1,171.65	42.39	28.638	
8,700.00	8,625.19	8,506.04	8,470.32	31.63	31.35	-89.34	-37.11	-636.84	1,221.31	1,178.75	42.57	28.690	
8,750.00	8,659.85	8,539.19	8,503.22	31.71	31.48	-89.67	-37.87	-640.80	1,229.55	1,186.81	42.73	28.772	
8,800.00	8,691.23	8,568.99	8,532.80	31.79	31.60	-89.83	-38.55	-644.37	1,238.92	1,196.03	42.89	28.887	
8,850.00	8,719.11	8,595.22	8,558.83	31.85	31.71	-89.78	-39.15	-647.51	1,249.58	1,206.54	43.03	29.038	
8,900.00	8,743.26	8,617.67	8,581.12	31.92	31.80	-89.48	-39.67	-650.19	1,261.64	1,218.47	43.16	29.230	
8,950.00	8,763.51	8,636.18	8,599.49	31.99	31.87	-88.87	-40.09	-652.41	1,275.17	1,231.89	43.28	29.462	
9,000.00	8,779.70	8,650.61	8,613.81	32.08	31.93	-87.94	-40.43	-654.13	1,290.21	1,246.82	43.39	29.737	
9,050.00	8,791.70	8,660.84	8,623.96	32.18	31.97	-86.66	-40.66	-655.36	1,306.72	1,263.24	43.48	30.054	
9,100.00	8,799.43	8,666.80	8,629.87	32.32	31.99	-85.02	-40.80	-656.07	1,324.62	1,281.06	43.56	30.412	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,150.00	8,802.83	8,668.43	8,631.50	32.48	32.00	-83.03	-40.83	-656.27	1,343.78	1,300.17	43.62	30.809	
9,163.96	8,803.00	8,668.12	8,631.19	32.53	32.00	-82.42	-40.83	-656.23	1,349.34	1,305.70	43.63	30.926	
9,200.00	8,803.00	8,666.89	8,629.97	32.67	31.99	-82.40	-40.80	-656.08	1,363.97	1,320.30	43.67	31.235	
9,300.00	8,803.00	8,663.77	8,626.87	33.10	31.98	-82.39	-40.73	-655.71	1,406.52	1,362.74	43.78	32.124	
9,400.00	8,803.00	8,661.07	8,624.19	33.60	31.97	-82.40	-40.67	-655.39	1,451.70	1,407.78	43.92	33.055	
9,480.63	8,803.00	8,659.19	8,622.32	34.05	31.96	-82.43	-40.62	-655.16	1,489.84	1,445.81	44.03	33.834	
9,500.00	8,803.00	8,658.77	8,621.90	34.16	31.96	-82.41	-40.61	-655.11	1,499.27	1,455.21	44.06	34.027	
9,600.00	8,803.00	8,656.60	8,619.76	34.79	31.95	-82.32	-40.56	-654.85	1,550.89	1,506.68	44.21	35.077	
9,700.00	8,803.00	8,654.44	8,617.61	35.48	31.94	-82.22	-40.51	-654.59	1,607.08	1,562.72	44.37	36.224	
9,800.00	8,803.00	8,652.28	8,615.46	36.23	31.93	-82.13	-40.46	-654.33	1,667.38	1,622.87	44.51	37.459	
9,900.00	8,803.00	8,650.11	8,613.32	37.04	31.93	-82.03	-40.41	-654.08	1,731.35	1,686.70	44.65	38.772	
10,000.00	8,803.00	8,647.95	8,611.17	37.91	31.92	-81.94	-40.36	-653.82	1,798.61	1,753.82	44.79	40.156	
10,100.00	8,803.00	8,645.79	8,609.02	38.83	31.91	-81.84	-40.31	-653.56	1,868.80	1,823.88	44.92	41.605	
10,200.00	8,803.00	8,643.62	8,606.87	39.79	31.90	-81.75	-40.27	-653.30	1,941.60	1,896.56	45.04	43.111	
10,300.00	8,803.00	8,641.46	8,604.73	40.80	31.89	-81.65	-40.22	-653.04	2,016.73	1,971.58	45.15	44.669	
10,400.00	8,803.00	8,639.30	8,602.58	41.84	31.88	-81.56	-40.17	-652.78	2,093.94	2,048.69	45.25	46.274	
10,500.00	8,803.00	8,637.13	8,600.43	42.93	31.87	-81.46	-40.12	-652.52	2,173.00	2,127.66	45.35	47.920	
10,600.00	8,803.00	8,634.97	8,598.29	44.05	31.87	-81.37	-40.07	-652.26	2,253.73	2,208.29	45.44	49.603	
10,700.00	8,803.00	8,632.81	8,596.14	45.20	31.86	-81.27	-40.02	-652.00	2,335.95	2,290.43	45.52	51.318	
10,800.00	8,803.00	8,630.65	8,593.99	46.38	31.85	-81.18	-39.97	-651.75	2,419.50	2,373.91	45.60	53.064	
10,900.00	8,803.00	8,628.48	8,591.84	47.59	31.84	-81.08	-39.92	-651.49	2,504.26	2,458.59	45.67	54.836	
11,000.00	8,803.00	8,626.32	8,589.70	48.83	31.83	-80.99	-39.87	-651.23	2,590.11	2,544.37	45.74	56.631	
11,100.00	8,803.00	8,624.16	8,587.55	50.09	31.82	-80.89	-39.82	-650.97	2,676.93	2,631.13	45.80	58.448	
11,200.00	8,803.00	8,621.99	8,585.40	51.37	31.81	-80.80	-39.77	-650.71	2,764.65	2,718.79	45.86	60.285	
11,300.00	8,803.00	8,619.83	8,583.26	52.68	31.81	-80.70	-39.72	-650.45	2,853.17	2,807.25	45.92	62.138	
11,400.00	8,803.00	8,617.67	8,581.11	54.00	31.80	-80.61	-39.67	-650.19	2,942.42	2,896.45	45.97	64.007	
11,500.00	8,803.00	8,615.50	8,578.96	55.34	31.79	-80.51	-39.62	-649.93	3,032.35	2,986.33	46.02	65.890	
11,600.00	8,803.00	8,613.34	8,576.81	56.69	31.78	-80.42	-39.57	-649.68	3,122.88	3,076.81	46.07	67.785	
11,700.00	8,803.00	8,611.18	8,574.67	58.07	31.77	-80.33	-39.52	-649.42	3,213.98	3,167.86	46.12	69.691	
11,800.00	8,803.00	8,609.01	8,572.52	59.45	31.76	-80.23	-39.47	-649.16	3,305.59	3,259.42	46.16	71.608	
11,900.00	8,803.00	14,965.38	11,825.27	60.85	67.61	-153.26	3,176.15	-923.67	3,394.89	3,337.51	57.39	59.158	
12,000.00	8,803.00	15,065.34	11,822.56	62.26	68.88	-153.24	3,276.07	-924.77	3,392.47	3,333.93	58.54	57.953	
12,100.00	8,803.00	15,165.30	11,819.85	63.69	70.18	-153.22	3,375.99	-925.87	3,390.05	3,330.34	59.70	56.781	
12,200.00	8,803.00	15,265.27	11,817.14	65.12	71.49	-153.20	3,475.91	-926.97	3,387.63	3,326.75	60.88	55.642	
12,300.00	8,803.00	15,365.23	11,814.43	66.56	72.81	-153.18	3,575.83	-928.07	3,385.21	3,323.13	62.07	54.537	
12,400.00	8,803.00	15,465.19	11,811.72	68.02	74.14	-153.16	3,675.75	-929.17	3,382.79	3,319.51	63.27	53.463	
12,500.00	8,803.00	15,565.16	11,809.01	69.48	75.49	-153.14	3,775.67	-930.27	3,380.37	3,315.88	64.49	52.420	
12,600.00	8,803.00	15,665.12	11,806.30	70.95	76.85	-153.12	3,875.59	-931.38	3,377.95	3,312.24	65.71	51.408	
12,700.00	8,803.00	15,765.08	11,803.59	72.43	78.22	-153.10	3,975.51	-932.48	3,375.53	3,308.59	66.94	50.425	
12,800.00	8,803.00	15,865.05	11,800.88	73.91	79.60	-153.08	4,075.43	-933.58	3,373.11	3,304.93	68.18	49.471	
12,900.00	8,803.00	15,965.01	11,798.18	75.41	80.99	-153.05	4,175.35	-934.68	3,370.69	3,301.26	69.43	48.545	
13,000.00	8,803.00	16,064.97	11,795.47	76.91	82.40	-153.03	4,275.27	-935.78	3,368.27	3,297.58	70.69	47.647	
13,100.00	8,803.00	16,164.94	11,792.76	78.41	83.81	-153.01	4,375.19	-936.88	3,365.86	3,293.90	71.96	46.776	
13,200.00	8,803.00	16,264.90	11,790.05	79.92	85.23	-152.99	4,475.11	-937.98	3,363.44	3,290.21	73.23	45.931	
13,300.00	8,803.00	16,364.86	11,787.34	81.44	86.65	-152.97	4,575.03	-939.08	3,361.02	3,286.52	74.51	45.111	
13,400.00	8,803.00	16,464.83	11,784.63	82.96	88.09	-152.95	4,674.95	-940.18	3,358.61	3,282.82	75.79	44.315	
13,500.00	8,803.00	16,564.79	11,781.92	84.49	89.53	-152.93	4,774.87	-941.29	3,356.19	3,279.11	77.08	43.542	
13,600.00	8,803.00	16,664.75	11,779.21	86.02	90.98	-152.91	4,874.79	-942.39	3,353.78	3,275.40	78.38	42.790	
13,700.00	8,803.00	16,764.72	11,776.50	87.56	92.44	-152.89	4,974.71	-943.49	3,351.36	3,271.68	79.68	42.060	
13,800.00	8,803.00	16,864.68	11,773.79	89.10	93.90	-152.87	5,074.63	-944.59	3,348.95	3,267.96	80.99	41.350	
13,900.00	8,803.00	16,964.64	11,771.08	90.64	95.37	-152.84	5,174.56	-945.69	3,346.53	3,264.23	82.31	40.660	
14,000.00	8,803.00	17,064.61	11,768.37	92.19	96.85	-152.82	5,274.48	-946.79	3,344.12	3,260.50	83.63	39.989	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	8,803.00	17,164.57	11,765.66	93.74	98.33	-152.80	5,374.40	-947.89	3,341.71	3,256.76	84.95	39.337	
14,200.00	8,803.00	17,264.53	11,762.95	95.30	99.81	-152.78	5,474.32	-948.99	3,339.30	3,253.01	86.28	38.702	
14,300.00	8,803.00	17,364.49	11,760.24	96.86	101.30	-152.76	5,574.24	-950.09	3,336.88	3,249.27	87.62	38.085	
14,400.00	8,803.00	17,464.46	11,757.53	98.42	102.80	-152.74	5,674.16	-951.19	3,334.47	3,245.52	88.95	37.485	
14,500.00	8,803.00	17,564.42	11,754.82	99.98	104.30	-152.72	5,774.08	-952.30	3,332.06	3,241.77	90.30	36.902	
14,600.00	8,803.00	17,664.38	11,752.12	101.55	105.81	-152.70	5,874.00	-953.40	3,329.65	3,238.01	91.64	36.334	
14,700.00	8,803.00	17,764.35	11,749.41	103.12	107.32	-152.67	5,973.92	-954.50	3,327.24	3,234.25	92.99	35.782	
14,800.00	8,803.00	17,864.31	11,746.70	104.69	108.83	-152.65	6,073.84	-955.60	3,324.83	3,230.49	94.34	35.243	
14,900.00	8,803.00	17,964.27	11,743.99	106.27	110.35	-152.63	6,173.76	-956.70	3,322.42	3,226.73	95.70	34.718	
15,000.00	8,803.00	18,064.24	11,741.28	107.85	111.87	-152.61	6,273.68	-957.80	3,320.02	3,222.96	97.06	34.207	
15,100.00	8,803.00	18,164.20	11,738.57	109.42	113.40	-152.59	6,373.60	-958.90	3,317.61	3,219.19	98.42	33.709	
15,200.00	8,803.00	18,264.16	11,735.86	111.01	114.93	-152.57	6,473.52	-960.00	3,315.20	3,215.41	99.79	33.223	
15,300.00	8,803.00	18,364.13	11,733.15	112.59	116.46	-152.55	6,573.44	-961.10	3,312.79	3,211.63	101.16	32.748	
15,400.00	8,803.00	18,464.09	11,730.44	114.18	117.99	-152.52	6,673.36	-962.20	3,310.39	3,207.85	102.53	32.286	
15,500.00	8,803.00	18,564.05	11,727.73	115.76	119.53	-152.50	6,773.28	-963.31	3,307.98	3,204.07	103.91	31.835	
15,600.00	8,803.00	18,664.02	11,725.02	117.35	121.07	-152.48	6,873.20	-964.41	3,305.57	3,200.29	105.29	31.396	
15,700.00	8,803.00	18,763.98	11,722.31	118.94	122.62	-152.46	6,973.12	-965.51	3,303.17	3,196.50	106.67	30.967	
15,800.00	8,803.00	18,863.94	11,719.60	120.54	124.17	-152.44	7,073.04	-966.61	3,300.76	3,192.71	108.05	30.549	
15,900.00	8,803.00	18,963.91	11,716.89	122.13	125.72	-152.42	7,172.96	-967.71	3,298.36	3,188.92	109.44	30.140	
16,000.00	8,803.00	19,063.87	11,714.18	123.73	127.27	-152.39	7,272.89	-968.81	3,295.96	3,185.13	110.83	29.740	
16,100.00	8,803.00	19,163.83	11,711.47	125.33	128.83	-152.37	7,372.81	-969.91	3,293.55	3,181.33	112.22	29.350	
16,200.00	8,803.00	19,263.80	11,708.77	126.92	130.38	-152.35	7,472.73	-971.01	3,291.15	3,177.54	113.61	28.969	
16,300.00	8,803.00	19,363.76	11,706.06	128.52	131.94	-152.33	7,572.65	-972.11	3,288.75	3,173.74	115.01	28.596	
16,400.00	8,803.00	19,463.72	11,703.35	130.13	133.50	-152.31	7,672.57	-973.22	3,286.34	3,169.94	116.40	28.232	
16,500.00	8,803.00	19,563.69	11,700.64	131.73	135.07	-152.28	7,772.49	-974.32	3,283.94	3,166.14	117.80	27.877	
16,600.00	8,803.00	19,663.65	11,697.93	133.33	136.64	-152.26	7,872.41	-975.42	3,281.54	3,162.34	119.20	27.529	
16,700.00	8,803.00	19,763.61	11,695.22	134.94	138.20	-152.24	7,972.33	-976.52	3,279.14	3,158.53	120.61	27.189	
16,800.00	8,803.00	19,863.58	11,692.51	136.55	139.77	-152.22	8,072.25	-977.62	3,276.74	3,154.73	122.01	26.856	
16,900.00	8,803.00	19,963.54	11,689.80	138.15	141.35	-152.20	8,172.17	-978.72	3,274.34	3,150.92	123.42	26.529	
17,000.00	8,803.00	20,063.50	11,687.09	139.76	142.92	-152.17	8,272.09	-979.82	3,271.94	3,147.11	124.83	26.210	
17,100.00	8,803.00	20,163.47	11,684.38	141.37	144.50	-152.15	8,372.01	-980.92	3,269.54	3,143.30	126.24	25.899	
17,200.00	8,803.00	20,263.43	11,681.67	142.98	146.07	-152.13	8,471.93	-982.02	3,267.15	3,139.49	127.66	25.593	
17,300.00	8,803.00	20,363.39	11,678.96	144.59	147.65	-152.11	8,571.85	-983.12	3,264.75	3,135.68	129.07	25.294	
17,400.00	8,803.00	20,463.36	11,676.25	146.21	149.23	-152.09	8,671.77	-984.23	3,262.35	3,131.86	130.49	25.001	
17,500.00	8,803.00	20,563.32	11,673.54	147.82	150.82	-152.06	8,771.69	-985.33	3,259.95	3,128.05	131.91	24.714	
17,600.00	8,803.00	20,663.28	11,670.83	149.43	152.40	-152.04	8,871.61	-986.43	3,257.56	3,124.23	133.33	24.433	
17,700.00	8,803.00	20,763.25	11,668.12	151.05	153.99	-152.02	8,971.53	-987.53	3,255.16	3,120.41	134.75	24.157	
17,800.00	8,803.00	20,863.21	11,665.41	152.67	155.57	-152.00	9,071.45	-988.63	3,252.77	3,116.59	136.17	23.887	
17,900.00	8,803.00	20,963.17	11,662.71	154.28	157.16	-151.97	9,171.37	-989.73	3,250.37	3,112.78	137.60	23.623	
18,000.00	8,803.00	21,063.14	11,660.00	155.90	158.75	-151.95	9,271.29	-990.83	3,247.98	3,108.96	139.02	23.363	
18,100.00	8,803.00	21,163.10	11,657.29	157.52	160.34	-151.93	9,371.22	-991.93	3,245.59	3,105.14	140.45	23.109	
18,200.00	8,803.00	21,263.06	11,654.58	159.14	161.93	-151.91	9,471.14	-993.03	3,243.19	3,101.31	141.88	22.859	
18,300.00	8,803.00	21,363.03	11,651.87	160.76	163.53	-151.88	9,571.06	-994.14	3,240.80	3,097.49	143.31	22.614	
18,400.00	8,803.00	21,462.99	11,649.16	162.38	165.12	-151.86	9,670.98	-995.24	3,238.41	3,093.66	144.74	22.374	
18,500.00	8,803.00	21,562.95	11,646.45	164.00	166.72	-151.84	9,770.90	-996.34	3,236.02	3,089.84	146.17	22.138	
18,600.00	8,803.00	21,662.92	11,643.74	165.62	168.31	-151.82	9,870.82	-997.44	3,233.62	3,086.02	147.61	21.907	
18,700.00	8,803.00	21,762.88	11,641.03	167.24	169.91	-151.79	9,970.74	-998.54	3,231.23	3,082.19	149.05	21.679	
18,800.00	8,803.00	21,862.84	11,638.32	168.87	171.51	-151.77	10,070.66	-999.64	3,228.84	3,078.36	150.48	21.456	
18,900.00	8,803.00	21,949.93	11,635.96	170.49	172.90	-151.75	10,157.71	-1,000.60	3,226.48	3,074.66	151.82	21.251	
18,961.77	8,803.00	21,949.93	11,635.96	171.49	172.90	-151.75	10,157.71	-1,000.60	3,225.84	3,073.62	152.22	21.192	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-14.01	75.07	-18.73	77.84				
100.00	100.00	91.50	91.50	0.13	0.13	-14.01	75.07	-18.73	77.37	77.19	0.18	428.997	
200.00	200.00	191.50	191.50	0.48	0.47	-14.01	75.07	-18.73	77.37	76.70	0.67	114.739	
300.00	300.00	291.50	291.50	0.84	0.83	-14.01	75.07	-18.73	77.37	76.19	1.18	65.500	
400.00	400.00	391.50	391.50	1.20	1.19	-14.01	75.07	-18.73	77.37	75.68	1.69	45.831	
500.00	500.00	491.50	491.50	1.56	1.55	-14.01	75.07	-18.73	77.37	75.18	2.20	35.247	
600.00	600.00	591.50	591.50	1.92	1.90	-14.01	75.07	-18.73	77.37	74.67	2.70	28.634	
700.00	700.00	691.50	691.50	2.28	2.26	-14.01	75.07	-18.73	77.37	74.16	3.21	24.110	
800.00	800.00	791.50	791.50	2.63	2.62	-14.01	75.07	-18.73	77.37	73.66	3.72	20.821	
900.00	900.00	891.50	891.50	2.99	2.98	-14.01	75.07	-18.73	77.37	73.15	4.22	18.322	
1,000.00	1,000.00	991.50	991.50	3.35	3.34	-14.01	75.07	-18.73	77.37	72.64	4.73	16.358	
1,100.00	1,100.00	1,091.50	1,091.50	3.71	3.70	-14.01	75.07	-18.73	77.37	72.13	5.24	14.774	
1,200.00	1,200.00	1,191.50	1,191.50	4.07	4.05	-14.01	75.07	-18.73	77.37	71.63	5.74	13.470	
1,300.00	1,300.00	1,291.50	1,291.50	4.43	4.41	-14.01	75.07	-18.73	77.37	71.12	6.25	12.378	
1,400.00	1,400.00	1,391.50	1,391.50	4.79	4.77	-14.01	75.07	-18.73	77.37	70.61	6.76	11.449	
1,500.00	1,500.00	1,491.50	1,491.50	5.14	5.13	-14.01	75.07	-18.73	77.37	70.11	7.26	10.650	
1,600.00	1,600.00	1,591.50	1,591.50	5.50	5.49	-14.01	75.07	-18.73	77.37	69.60	7.77	9.956	
1,700.00	1,700.00	1,691.50	1,691.50	5.86	5.85	-14.01	75.07	-18.73	77.37	69.09	8.28	9.346	
1,800.00	1,800.00	1,791.50	1,791.50	6.22	6.21	-14.01	75.07	-18.73	77.37	68.59	8.79	8.807	
1,900.00	1,900.00	1,891.50	1,891.50	6.58	6.56	-14.01	75.07	-18.73	77.37	68.08	9.29	8.326	
2,000.00	2,000.00	1,991.50	1,991.50	6.94	6.92	-14.01	75.07	-18.73	77.37	67.57	9.80	7.895	CC, ES
2,100.00	2,099.99	2,091.49	2,091.49	7.28	7.28	-123.98	75.07	-18.73	78.10	67.80	10.30	7.583	
2,200.00	2,199.91	2,191.41	2,191.41	7.62	7.64	-126.27	75.07	-18.73	80.36	69.57	10.79	7.447	SF
2,300.00	2,299.69	2,291.19	2,291.19	7.96	8.00	-129.80	75.07	-18.73	84.39	73.11	11.28	7.480	
2,400.00	2,399.27	2,390.77	2,390.77	8.31	8.35	-134.18	75.07	-18.73	90.53	78.76	11.78	7.687	
2,449.99	2,448.95	2,440.45	2,440.45	8.48	8.53	-136.55	75.07	-18.73	94.50	82.47	12.03	7.858	
2,500.00	2,498.61	2,490.11	2,490.11	8.66	8.71	-138.88	75.07	-18.73	98.86	86.59	12.27	8.055	
2,600.00	2,597.92	2,589.42	2,589.42	9.01	9.07	-142.98	75.07	-18.73	108.02	95.25	12.77	8.459	
2,700.00	2,697.23	2,688.73	2,688.73	9.37	9.42	-146.42	75.07	-18.73	117.63	104.37	13.26	8.868	
2,800.00	2,796.53	2,788.03	2,788.03	9.74	9.78	-149.33	75.07	-18.73	127.61	113.85	13.76	9.273	
2,900.00	2,895.84	2,887.34	2,887.34	10.10	10.13	-151.82	75.07	-18.73	137.87	123.61	14.26	9.669	
3,000.00	2,995.15	2,986.65	2,986.65	10.47	10.49	-153.96	75.07	-18.73	148.35	133.59	14.76	10.052	
3,100.00	3,094.45	3,085.95	3,085.95	10.84	10.85	-155.82	75.07	-18.73	159.01	143.75	15.26	10.422	
3,200.00	3,193.76	3,185.26	3,185.26	11.22	11.20	-157.44	75.07	-18.73	169.81	154.05	15.76	10.778	
3,300.00	3,293.07	3,284.57	3,284.57	11.59	11.56	-158.87	75.07	-18.73	180.73	164.47	16.25	11.118	
3,400.00	3,392.38	3,383.88	3,383.88	11.97	11.91	-160.14	75.07	-18.73	191.75	174.99	16.76	11.444	
3,500.00	3,491.68	3,483.18	3,483.18	12.35	12.27	-161.26	75.07	-18.73	202.85	185.59	17.26	11.755	
3,600.00	3,590.99	3,582.49	3,582.49	12.73	12.63	-162.27	75.07	-18.73	214.02	196.26	17.76	12.053	
3,700.00	3,690.30	3,679.01	3,679.00	13.12	12.96	-163.33	74.82	-19.51	225.76	207.52	18.24	12.377	
3,800.00	3,789.60	3,774.42	3,774.36	13.50	13.29	-164.72	73.87	-22.53	239.07	220.36	18.70	12.781	
3,900.00	3,888.91	3,869.17	3,868.95	13.89	13.61	-166.38	72.21	-27.77	254.08	234.92	19.16	13.260	
4,000.00	3,988.22	3,963.14	3,962.59	14.27	13.93	-168.22	69.86	-35.17	270.90	251.29	19.61	13.816	
4,100.00	4,087.52	4,056.23	4,055.14	14.66	14.25	-170.17	66.85	-44.67	289.65	269.60	20.04	14.450	
4,200.00	4,186.83	4,149.20	4,147.32	15.05	14.57	-172.19	63.18	-56.27	310.38	289.90	20.48	15.156	
4,300.00	4,286.14	4,246.23	4,243.40	15.44	14.91	-174.14	59.10	-69.15	332.07	311.12	20.95	15.848	
4,400.00	4,385.44	4,343.26	4,339.48	15.83	15.25	-175.85	55.01	-82.03	354.10	332.67	21.43	16.522	
4,500.00	4,484.75	4,440.29	4,435.57	16.22	15.60	-177.35	50.93	-94.91	376.39	354.47	21.91	17.176	
4,600.00	4,584.06	4,537.31	4,531.65	16.61	15.95	-178.70	46.85	-107.79	398.90	376.50	22.40	17.811	
4,700.00	4,683.36	4,634.34	4,627.73	17.01	16.30	-179.89	42.77	-120.67	421.60	398.72	22.88	18.425	
4,800.00	4,782.67	4,731.37	4,723.81	17.40	16.66	179.03	38.69	-133.55	444.45	421.08	23.37	19.019	
4,900.00	4,881.98	4,828.40	4,819.90	17.79	17.02	178.06	34.61	-146.43	467.45	443.59	23.86	19.593	
5,000.00	4,981.29	4,925.43	4,915.98	18.19	17.38	177.18	30.53	-159.31	490.55	466.20	24.35	20.147	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,080.59	5,022.46	5,012.06	18.58	17.74	176.38	26.45	-172.19	513.76	488.92	24.84	20.682	
5,200.00	5,179.90	5,119.48	5,108.15	18.98	18.11	175.64	22.37	-185.07	537.06	511.72	25.33	21.199	
5,300.00	5,279.21	5,216.51	5,204.23	19.37	18.48	174.97	18.29	-197.95	560.43	534.60	25.83	21.698	
5,400.00	5,378.51	5,313.54	5,300.31	19.77	18.84	174.35	14.21	-210.82	583.87	557.54	26.32	22.180	
5,500.00	5,477.82	5,410.57	5,396.40	20.16	19.21	173.78	10.13	-223.70	607.37	580.55	26.82	22.646	
5,600.00	5,577.13	5,507.60	5,492.48	20.56	19.59	173.26	6.05	-236.58	630.92	603.60	27.32	23.096	
5,700.00	5,676.43	5,604.63	5,588.56	20.96	19.96	172.77	1.97	-249.46	654.52	626.70	27.82	23.530	
5,800.00	5,775.74	5,701.65	5,684.65	21.35	20.34	172.31	-2.11	-262.34	678.16	649.84	28.32	23.950	
5,900.00	5,875.05	5,798.68	5,780.73	21.75	20.71	171.88	-6.19	-275.22	701.84	673.02	28.82	24.356	
6,000.00	5,974.35	5,895.71	5,876.81	22.15	21.09	171.49	-10.27	-288.10	725.55	696.23	29.32	24.749	
6,100.00	6,073.66	5,992.74	5,972.90	22.55	21.47	171.11	-14.35	-300.98	749.29	719.47	29.82	25.129	
6,200.00	6,172.97	6,089.77	6,068.98	22.95	21.85	170.77	-18.43	-313.86	773.06	742.74	30.32	25.497	
6,300.00	6,272.27	6,186.80	6,165.06	23.35	22.23	170.44	-22.51	-326.74	796.86	766.04	30.82	25.853	
6,400.00	6,371.58	6,283.82	6,261.14	23.74	22.61	170.13	-26.59	-339.62	820.68	789.36	31.33	26.199	
6,500.00	6,470.89	6,380.85	6,357.23	24.14	23.00	169.83	-30.67	-352.50	844.52	812.70	31.83	26.533	
6,600.00	6,570.20	6,477.88	6,453.31	24.54	23.38	169.56	-34.75	-365.38	868.39	836.05	32.33	26.857	
6,700.00	6,669.50	6,574.91	6,549.39	24.94	23.77	169.30	-38.83	-378.25	892.27	859.43	32.84	27.171	
6,800.00	6,768.81	6,671.94	6,645.48	25.34	24.15	169.05	-42.92	-391.13	916.16	882.82	33.34	27.476	
6,900.00	6,868.12	6,768.97	6,741.56	25.74	24.54	168.81	-47.00	-404.01	940.08	906.23	33.85	27.772	
7,000.00	6,967.42	6,865.99	6,837.64	26.14	24.93	168.59	-51.08	-416.89	964.00	929.65	34.36	28.059	
7,043.93	7,011.05	6,908.62	6,879.86	26.32	25.10	168.49	-52.87	-422.55	974.52	939.94	34.58	28.182	
7,100.00	7,066.78	6,963.11	6,933.82	26.54	25.32	168.41	-55.16	-429.78	987.55	952.69	34.86	28.327	
7,200.00	7,166.37	7,060.73	7,030.48	26.93	25.71	168.24	-59.27	-442.74	1,008.85	973.48	35.37	28.523	
7,300.00	7,266.16	7,158.84	7,127.64	27.30	26.10	168.04	-63.39	-455.76	1,027.66	991.79	35.88	28.645	
7,400.00	7,366.09	7,257.37	7,225.21	27.65	26.50	167.82	-67.54	-468.84	1,043.98	1,007.59	36.38	28.695	
7,493.92	7,460.00	7,350.24	7,317.18	27.97	26.87	-83.25	-71.44	-481.17	1,057.02	1,020.17	36.85	28.683	
7,500.00	7,466.08	7,356.26	7,323.14	27.99	26.90	-83.26	-71.69	-481.97	1,057.79	1,020.91	36.88	28.681	
7,600.00	7,566.08	7,455.29	7,421.20	28.31	27.30	-83.57	-75.86	-495.11	1,070.51	1,033.14	37.38	28.640	
7,700.00	7,666.08	7,554.31	7,519.26	28.64	27.70	-83.87	-80.02	-508.26	1,083.27	1,045.39	37.87	28.601	
7,800.00	7,766.08	7,653.34	7,617.32	28.96	28.10	-84.16	-84.19	-521.40	1,096.05	1,057.68	38.37	28.564	
7,900.00	7,866.08	7,752.37	7,715.38	29.29	28.50	-84.45	-88.35	-534.55	1,108.86	1,069.99	38.87	28.528	
8,000.00	7,966.08	7,851.39	7,813.44	29.62	28.90	-84.73	-92.52	-547.69	1,121.70	1,082.33	39.37	28.493	
8,100.00	8,066.08	7,950.42	7,911.50	29.95	29.30	-85.00	-96.68	-560.84	1,134.56	1,094.70	39.87	28.459	
8,200.00	8,166.08	8,049.44	8,009.56	30.28	29.71	-85.27	-100.84	-573.98	1,147.45	1,107.08	40.36	28.427	
8,263.96	8,230.04	8,112.78	8,072.29	30.49	29.97	-85.43	-103.51	-582.39	1,155.70	1,115.02	40.68	28.407	
8,300.00	8,266.05	8,148.38	8,107.54	30.61	30.11	-90.81	-105.01	-587.11	1,160.38	1,119.52	40.86	28.397	
8,350.00	8,315.76	8,197.31	8,155.99	30.77	30.31	-90.53	-107.06	-593.61	1,166.95	1,125.85	41.10	28.390	
8,400.00	8,364.80	8,245.35	8,203.56	30.92	30.51	-90.43	-109.08	-599.98	1,173.65	1,132.31	41.34	28.392	
8,450.00	8,412.83	8,292.14	8,249.90	31.07	30.70	-90.49	-111.05	-606.20	1,180.56	1,138.99	41.56	28.405	
8,500.00	8,459.46	8,337.33	8,294.64	31.20	30.88	-90.66	-112.95	-612.19	1,187.78	1,146.00	41.78	28.432	
8,550.00	8,504.34	8,380.57	8,337.46	31.33	31.06	-90.89	-114.77	-617.93	1,195.46	1,153.48	41.98	28.478	
8,600.00	8,547.14	8,421.53	8,378.02	31.44	31.23	-91.15	-116.49	-623.37	1,203.76	1,161.60	42.17	28.547	
8,650.00	8,587.53	8,459.90	8,416.02	31.54	31.38	-91.39	-118.11	-628.46	1,212.86	1,170.51	42.35	28.641	
8,700.00	8,625.19	8,495.39	8,451.16	31.63	31.53	-91.53	-119.60	-633.17	1,222.91	1,180.40	42.51	28.765	
8,750.00	8,659.85	8,527.72	8,483.18	31.71	31.66	-91.54	-120.96	-637.47	1,234.09	1,191.42	42.67	28.922	
8,800.00	8,691.23	8,556.66	8,511.84	31.79	31.78	-91.36	-122.18	-641.31	1,246.53	1,203.72	42.81	29.116	
8,850.00	8,719.11	8,581.98	8,536.92	31.85	31.88	-90.95	-123.24	-644.67	1,260.34	1,217.40	42.94	29.349	
8,900.00	8,743.26	8,603.49	8,558.22	31.92	31.97	-90.26	-124.14	-647.52	1,275.60	1,232.54	43.06	29.623	
8,950.00	8,763.51	8,621.03	8,575.58	31.99	32.04	-89.25	-124.88	-649.85	1,292.33	1,249.17	43.17	29.939	
9,000.00	8,779.70	8,634.46	8,588.88	32.08	32.10	-87.91	-125.45	-651.63	1,310.52	1,267.26	43.26	30.296	
9,050.00	8,791.70	8,643.67	8,598.01	32.18	32.13	-86.21	-125.83	-652.86	1,330.09	1,286.76	43.33	30.694	
9,100.00	8,799.43	8,648.61	8,602.89	32.32	32.15	-84.15	-126.04	-653.51	1,350.93	1,307.53	43.40	31.130	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,150.00	8,802.83	8,649.23	8,603.51	32.48	32.16	-81.76	-126.07	-653.59	1,372.87	1,329.43	43.44	31.601	
9,163.96	8,803.00	8,648.63	8,602.91	32.53	32.15	-81.03	-126.04	-653.51	1,379.16	1,335.71	43.45	31.739	
9,200.00	8,803.00	8,646.68	8,600.98	32.67	32.15	-81.00	-125.96	-653.26	1,395.67	1,352.19	43.48	32.098	
9,300.00	8,803.00	8,641.56	8,595.91	33.10	32.13	-80.94	-125.75	-652.58	1,443.16	1,399.59	43.57	33.121	
9,400.00	8,803.00	8,636.90	8,591.30	33.60	32.11	-80.91	-125.55	-651.96	1,492.92	1,449.23	43.68	34.176	
9,480.63	8,803.00	8,633.48	8,587.91	34.05	32.09	-80.91	-125.41	-651.50	1,534.50	1,490.71	43.78	35.049	
9,500.00	8,803.00	8,632.69	8,587.13	34.16	32.09	-80.88	-125.37	-651.40	1,544.72	1,500.91	43.81	35.263	
9,600.00	8,803.00	8,628.63	8,583.11	34.79	32.07	-80.70	-125.20	-650.86	1,600.17	1,556.23	43.94	36.418	
9,700.00	8,803.00	8,624.57	8,579.09	35.48	32.06	-80.52	-125.03	-650.32	1,659.80	1,615.72	44.08	37.658	
9,800.00	8,803.00	8,620.51	8,575.07	36.23	32.04	-80.34	-124.86	-649.78	1,723.15	1,678.95	44.21	38.978	
9,900.00	8,803.00	8,616.46	8,571.05	37.04	32.02	-80.17	-124.69	-649.24	1,789.85	1,745.51	44.34	40.368	
10,000.00	8,803.00	8,612.40	8,567.03	37.91	32.01	-79.99	-124.52	-648.71	1,859.52	1,815.06	44.46	41.822	
10,100.00	8,803.00	8,608.34	8,563.02	38.83	31.99	-79.81	-124.35	-648.17	1,931.86	1,887.27	44.58	43.332	
10,200.00	8,803.00	8,604.28	8,559.00	39.79	31.97	-79.63	-124.18	-647.63	2,006.56	1,961.86	44.70	44.893	
10,300.00	8,803.00	8,600.22	8,554.98	40.80	31.96	-79.46	-124.01	-647.09	2,083.37	2,038.57	44.80	46.501	
10,400.00	8,803.00	8,596.16	8,550.96	41.84	31.94	-79.28	-123.84	-646.55	2,162.08	2,117.18	44.90	48.151	
10,500.00	8,803.00	8,592.11	8,546.94	42.93	31.92	-79.10	-123.67	-646.01	2,242.47	2,197.48	45.00	49.838	
10,600.00	8,803.00	8,588.05	8,542.92	44.05	31.91	-78.93	-123.49	-645.47	2,324.38	2,279.30	45.08	51.558	
10,700.00	8,803.00	8,583.99	8,538.90	45.20	31.89	-78.75	-123.32	-644.93	2,407.65	2,362.49	45.16	53.309	
10,800.00	8,803.00	8,579.93	8,534.88	46.38	31.87	-78.57	-123.15	-644.40	2,492.15	2,446.91	45.24	55.086	
10,900.00	8,803.00	8,575.87	8,530.86	47.59	31.86	-78.39	-122.98	-643.86	2,577.75	2,532.43	45.31	56.888	
11,000.00	8,803.00	8,571.81	8,526.85	48.83	31.84	-78.22	-122.81	-643.32	2,664.34	2,618.96	45.38	58.711	
11,100.00	8,803.00	8,567.75	8,522.83	50.09	31.82	-78.04	-122.64	-642.78	2,751.84	2,706.40	45.44	60.554	
11,200.00	8,803.00	8,563.70	8,518.81	51.37	31.81	-77.86	-122.47	-642.24	2,840.16	2,794.65	45.50	62.415	
11,300.00	8,803.00	8,559.64	8,514.79	52.68	31.79	-77.69	-122.30	-641.70	2,929.22	2,883.66	45.56	64.292	
11,400.00	8,803.00	8,555.58	8,510.77	54.00	31.77	-77.51	-122.13	-641.16	3,018.97	2,973.35	45.62	66.182	
11,500.00	8,803.00	8,551.52	8,506.75	55.34	31.76	-77.33	-121.96	-640.62	3,109.33	3,063.66	45.67	68.086	
11,600.00	8,803.00	8,547.46	8,502.73	56.69	31.74	-77.16	-121.79	-640.09	3,200.26	3,154.54	45.72	70.001	
11,700.00	8,803.00	8,543.40	8,498.71	58.07	31.72	-76.98	-121.62	-639.55	3,291.71	3,245.95	45.76	71.927	
11,800.00	8,803.00	8,539.35	8,494.69	59.45	31.71	-76.81	-121.45	-639.01	3,383.65	3,337.84	45.81	73.862	
11,900.00	8,803.00	8,535.29	8,490.68	60.85	31.69	-76.63	-121.28	-638.47	3,476.02	3,430.16	45.85	75.806	
12,000.00	8,803.00	15,379.17	12,002.33	62.26	69.71	-154.54	3,280.96	-925.00	3,553.87	3,495.51	58.37	60.888	
12,100.00	8,803.00	15,479.13	11,999.62	63.69	71.00	-154.52	3,380.88	-926.10	3,551.42	3,491.91	59.51	59.679	
12,200.00	8,803.00	15,579.10	11,996.91	65.12	72.30	-154.50	3,480.80	-927.20	3,548.97	3,488.31	60.66	58.505	
12,300.00	8,803.00	15,679.06	11,994.20	66.56	73.62	-154.49	3,580.72	-928.29	3,546.53	3,484.70	61.83	57.364	
12,400.00	8,803.00	15,779.02	11,991.49	68.02	74.96	-154.47	3,680.64	-929.39	3,544.08	3,481.08	63.00	56.255	
12,500.00	8,803.00	15,878.99	11,988.78	69.48	76.30	-154.45	3,780.56	-930.49	3,541.63	3,477.44	64.19	55.177	
12,600.00	8,803.00	15,978.95	11,986.07	70.95	77.66	-154.43	3,880.48	-931.59	3,539.18	3,473.80	65.38	54.131	
12,700.00	8,803.00	16,078.91	11,983.36	72.43	79.03	-154.41	3,980.41	-932.69	3,536.73	3,470.15	66.59	53.114	
12,800.00	8,803.00	16,178.88	11,980.65	73.91	80.41	-154.39	4,080.33	-933.79	3,534.29	3,466.49	67.80	52.127	
12,900.00	8,803.00	16,278.84	11,977.94	75.41	81.79	-154.37	4,180.25	-934.88	3,531.84	3,462.82	69.02	51.168	
13,000.00	8,803.00	16,378.80	11,975.24	76.91	83.19	-154.35	4,280.17	-935.98	3,529.39	3,459.14	70.26	50.236	
13,100.00	8,803.00	16,478.77	11,972.53	78.41	84.60	-154.33	4,380.09	-937.08	3,526.95	3,455.45	71.49	49.332	
13,200.00	8,803.00	16,578.73	11,969.82	79.92	86.02	-154.32	4,480.01	-938.18	3,524.50	3,451.76	72.74	48.453	
13,300.00	8,803.00	16,678.69	11,967.11	81.44	87.44	-154.30	4,579.93	-939.28	3,522.06	3,448.06	73.99	47.599	
13,400.00	8,803.00	16,778.66	11,964.40	82.96	88.88	-154.28	4,679.85	-940.38	3,519.61	3,444.36	75.26	46.769	
13,500.00	8,803.00	16,878.62	11,961.69	84.49	90.32	-154.26	4,779.77	-941.48	3,517.17	3,440.65	76.52	45.964	
13,600.00	8,803.00	16,978.58	11,958.98	86.02	91.76	-154.24	4,879.69	-942.57	3,514.73	3,436.94	77.79	45.184	
13,700.00	8,803.00	17,078.55	11,956.27	87.56	93.22	-154.22	4,979.61	-943.67	3,512.28	3,433.22	79.06	44.425	
13,800.00	8,803.00	17,178.51	11,953.56	89.10	94.68	-154.20	5,079.53	-944.77	3,509.84	3,429.50	80.34	43.686	
13,900.00	8,803.00	17,278.47	11,950.85	90.64	96.14	-154.18	5,179.45	-945.87	3,507.40	3,425.77	81.63	42.968	
14,000.00	8,803.00	17,378.44	11,948.14	92.19	97.62	-154.16	5,279.37	-946.97	3,504.96	3,422.04	82.92	42.270	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	8,803.00	17,478.40	11,945.44	93.74	99.10	-154.14	5,379.29	-948.07	3,502.51	3,418.30	84.21	41.591	
14,200.00	8,803.00	17,578.36	11,942.73	95.30	100.58	-154.12	5,479.21	-949.17	3,500.07	3,414.56	85.51	40.929	
14,300.00	8,803.00	17,678.33	11,940.02	96.86	102.07	-154.11	5,579.13	-950.26	3,497.63	3,410.81	86.82	40.286	
14,400.00	8,803.00	17,778.29	11,937.31	98.42	103.56	-154.09	5,679.05	-951.36	3,495.19	3,407.06	88.13	39.659	
14,500.00	8,803.00	17,878.25	11,934.60	99.98	105.06	-154.07	5,778.97	-952.46	3,492.75	3,403.31	89.44	39.049	
14,600.00	8,803.00	17,978.22	11,931.89	101.55	106.56	-154.05	5,878.90	-953.56	3,490.31	3,399.55	90.76	38.455	
14,700.00	8,803.00	18,078.18	11,929.18	103.12	108.07	-154.03	5,978.82	-954.66	3,487.87	3,395.78	92.09	37.876	
14,800.00	8,803.00	18,178.14	11,926.47	104.69	109.58	-154.01	6,078.74	-955.76	3,485.43	3,392.02	93.41	37.313	
14,900.00	8,803.00	18,278.11	11,923.76	106.27	111.10	-153.99	6,178.66	-956.86	3,482.99	3,388.25	94.74	36.764	
15,000.00	8,803.00	18,378.07	11,921.05	107.85	112.62	-153.97	6,278.58	-957.95	3,480.56	3,384.49	96.07	36.230	
15,100.00	8,803.00	18,478.03	11,918.34	109.42	114.14	-153.95	6,378.50	-959.05	3,478.12	3,380.72	97.40	35.709	
15,200.00	8,803.00	18,578.00	11,915.64	111.01	115.67	-153.93	6,478.42	-960.15	3,475.68	3,376.94	98.74	35.201	
15,300.00	8,803.00	18,677.96	11,912.93	112.59	117.20	-153.91	6,578.34	-961.25	3,473.24	3,373.17	100.08	34.706	
15,400.00	8,803.00	18,777.92	11,910.22	114.18	118.73	-153.89	6,678.26	-962.35	3,470.81	3,369.39	101.42	34.222	
15,500.00	8,803.00	18,877.89	11,907.51	115.76	120.27	-153.87	6,778.18	-963.45	3,468.37	3,365.60	102.77	33.750	
15,600.00	8,803.00	18,977.85	11,904.80	117.35	121.81	-153.85	6,878.10	-964.54	3,465.93	3,361.82	104.12	33.289	
15,700.00	8,803.00	19,077.81	11,902.09	118.94	123.35	-153.83	6,978.02	-965.64	3,463.50	3,358.03	105.47	32.840	
15,800.00	8,803.00	19,177.78	11,899.38	120.54	124.90	-153.81	7,077.94	-966.74	3,461.06	3,354.24	106.82	32.400	
15,900.00	8,803.00	19,277.74	11,896.67	122.13	126.45	-153.79	7,177.86	-967.84	3,458.63	3,350.45	108.18	31.971	
16,000.00	8,803.00	19,377.70	11,893.96	123.73	128.00	-153.77	7,277.78	-968.94	3,456.20	3,346.65	109.54	31.551	
16,100.00	8,803.00	19,477.67	11,891.25	125.33	129.55	-153.75	7,377.70	-970.04	3,453.76	3,342.86	110.90	31.143	
16,200.00	8,803.00	19,577.63	11,888.54	126.92	131.11	-153.73	7,477.62	-971.14	3,451.33	3,339.07	112.26	30.743	
16,300.00	8,803.00	19,677.59	11,885.84	128.52	132.66	-153.71	7,577.54	-972.23	3,448.90	3,335.27	113.63	30.353	
16,400.00	8,803.00	19,777.56	11,883.13	130.13	134.22	-153.69	7,677.46	-973.33	3,446.46	3,331.47	115.00	29.970	
16,500.00	8,803.00	19,877.52	11,880.42	131.73	135.79	-153.67	7,777.39	-974.43	3,444.03	3,327.66	116.37	29.596	
16,600.00	8,803.00	19,977.48	11,877.71	133.33	137.35	-153.65	7,877.31	-975.53	3,441.60	3,323.86	117.74	29.230	
16,700.00	8,803.00	20,077.44	11,875.00	134.94	138.92	-153.63	7,977.23	-976.63	3,439.17	3,320.06	119.11	28.873	
16,800.00	8,803.00	20,177.41	11,872.29	136.55	140.49	-153.61	8,077.15	-977.73	3,436.74	3,316.25	120.49	28.524	
16,900.00	8,803.00	20,277.37	11,869.58	138.15	142.06	-153.59	8,177.07	-978.83	3,434.31	3,312.44	121.87	28.181	
17,000.00	8,803.00	20,377.33	11,866.87	139.76	143.63	-153.57	8,276.99	-979.92	3,431.88	3,308.63	123.24	27.846	
17,100.00	8,803.00	20,477.30	11,864.16	141.37	145.20	-153.55	8,376.91	-981.02	3,429.45	3,304.82	124.62	27.518	
17,200.00	8,803.00	20,577.26	11,861.45	142.98	146.78	-153.53	8,476.83	-982.12	3,427.02	3,301.01	126.01	27.197	
17,300.00	8,803.00	20,677.22	11,858.74	144.59	148.36	-153.51	8,576.75	-983.22	3,424.59	3,297.20	127.39	26.883	
17,400.00	8,803.00	20,777.19	11,856.04	146.21	149.94	-153.49	8,676.67	-984.32	3,422.16	3,293.38	128.78	26.574	
17,500.00	8,803.00	20,877.15	11,853.33	147.82	151.52	-153.47	8,776.59	-985.42	3,419.73	3,289.57	130.17	26.272	
17,600.00	8,803.00	20,977.11	11,850.62	149.43	153.10	-153.45	8,876.51	-986.51	3,417.31	3,285.75	131.56	25.976	
17,700.00	8,803.00	21,077.08	11,847.91	151.05	154.69	-153.43	8,976.43	-987.61	3,414.88	3,281.93	132.95	25.686	
17,800.00	8,803.00	21,177.04	11,845.20	152.67	156.27	-153.41	9,076.35	-988.71	3,412.45	3,278.12	134.34	25.402	
17,900.00	8,803.00	21,277.00	11,842.49	154.28	157.86	-153.39	9,176.27	-989.81	3,410.03	3,274.30	135.73	25.124	
18,000.00	8,803.00	21,376.97	11,839.78	155.90	159.45	-153.37	9,276.19	-990.91	3,407.60	3,270.48	137.12	24.850	
18,100.00	8,803.00	21,476.93	11,837.07	157.52	161.03	-153.35	9,376.11	-992.01	3,405.18	3,266.65	138.52	24.582	
18,200.00	8,803.00	21,576.89	11,834.36	159.14	162.63	-153.33	9,476.03	-993.11	3,402.75	3,262.83	139.92	24.319	
18,300.00	8,803.00	21,676.86	11,831.65	160.76	164.22	-153.31	9,575.95	-994.20	3,400.33	3,259.01	141.32	24.061	
18,400.00	8,803.00	21,776.82	11,828.94	162.38	165.81	-153.29	9,675.87	-995.30	3,397.90	3,255.18	142.72	23.808	
18,500.00	8,803.00	21,876.78	11,826.23	164.00	167.40	-153.27	9,775.80	-996.40	3,395.48	3,251.35	144.12	23.560	
18,600.00	8,803.00	21,976.75	11,823.53	165.62	169.00	-153.25	9,875.72	-997.50	3,393.05	3,247.53	145.52	23.316	
18,700.00	8,803.00	22,076.71	11,820.82	167.24	170.60	-153.23	9,975.64	-998.60	3,390.63	3,243.70	146.93	23.077	
18,800.00	8,803.00	22,176.67	11,818.11	168.87	172.19	-153.21	10,075.56	-999.70	3,388.21	3,239.87	148.33	22.842	
18,900.00	8,803.00	22,258.86	11,815.88	170.49	173.51	-153.19	10,157.71	-1,000.60	3,385.83	3,236.23	149.61	22.632	
18,961.77	8,803.00	22,258.86	11,815.88	171.49	173.51	-153.19	10,157.71	-1,000.60	3,385.23	3,235.24	149.98	22.571	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.80	1.80	0.00	0.00	57.76	76.44	121.21	143.30				
100.00	100.00	101.80	101.80	0.13	0.13	57.76	76.44	121.21	143.30	143.12	0.18	787.128	
200.00	200.00	201.80	201.80	0.48	0.49	57.76	76.44	121.21	143.30	142.61	0.69	207.993	
300.00	300.00	301.80	301.80	0.84	0.85	57.76	76.44	121.21	143.30	142.10	1.20	119.825	
400.00	400.00	401.80	401.80	1.20	1.21	57.76	76.44	121.21	143.30	141.60	1.70	84.152	
500.00	500.00	501.80	501.80	1.56	1.57	57.76	76.44	121.21	143.30	141.09	2.21	64.847	
600.00	600.00	601.80	601.80	1.92	1.92	57.76	76.44	121.21	143.30	140.58	2.72	52.746	
700.00	700.00	701.80	701.80	2.28	2.28	57.76	76.44	121.21	143.30	140.08	3.22	44.452	
800.00	800.00	801.80	801.80	2.63	2.64	57.76	76.44	121.21	143.30	139.57	3.73	38.411	
900.00	900.00	901.80	901.80	2.99	3.00	57.76	76.44	121.21	143.30	139.06	4.24	33.816	
1,000.00	1,000.00	1,001.80	1,001.80	3.35	3.36	57.76	76.44	121.21	143.30	138.56	4.74	30.203	
1,100.00	1,100.00	1,101.80	1,101.80	3.71	3.72	57.76	76.44	121.21	143.30	138.05	5.25	27.287	
1,200.00	1,200.00	1,201.80	1,201.80	4.07	4.08	57.76	76.44	121.21	143.30	137.54	5.76	24.885	
1,300.00	1,300.00	1,301.80	1,301.80	4.43	4.43	57.76	76.44	121.21	143.30	137.03	6.27	22.871	
1,316.06	1,316.06	1,317.86	1,317.86	4.48	4.49	57.76	76.44	121.21	143.30	136.95	6.35	22.578	
1,400.00	1,400.00	1,401.78	1,401.78	4.79	4.79	57.76	76.44	121.21	143.30	136.53	6.77	21.160	
1,500.00	1,500.00	1,500.00	1,499.99	5.14	5.13	58.06	76.03	121.98	143.75	136.48	7.27	19.786	
1,600.00	1,600.00	1,599.24	1,599.20	5.50	5.46	58.95	74.82	124.27	145.08	137.33	7.75	18.712	
1,700.00	1,700.00	1,697.82	1,697.69	5.86	5.80	60.37	72.82	128.05	147.36	139.12	8.24	17.881	
1,800.00	1,800.00	1,796.23	1,795.91	6.22	6.14	62.29	70.03	133.31	150.70	141.97	8.73	17.263	
1,900.00	1,900.00	1,894.40	1,893.79	6.58	6.48	64.61	66.46	140.05	155.22	146.00	9.22	16.838	
2,000.00	2,000.00	1,992.28	1,991.23	6.94	6.82	67.26	62.12	148.24	161.07	151.37	9.71	16.594	
2,100.00	2,099.99	2,091.72	2,090.13	7.28	7.18	-39.39	57.26	157.41	166.90	156.70	10.20	16.369	
2,200.00	2,199.91	2,191.50	2,189.36	7.62	7.54	-37.58	52.37	166.63	170.94	160.26	10.68	16.004	
2,300.00	2,299.69	2,291.41	2,288.72	7.96	7.90	-36.38	47.49	175.85	173.02	161.85	11.17	15.488	
2,400.00	2,399.27	2,391.39	2,388.15	8.31	8.27	-35.72	42.59	185.09	173.05	161.38	11.67	14.834	
2,449.99	2,448.95	2,441.37	2,437.86	8.48	8.46	-35.59	40.15	189.70	172.27	160.35	11.91	14.459	
2,500.00	2,498.61	2,491.37	2,487.59	8.66	8.64	-35.51	37.70	194.32	171.22	159.06	12.16	14.076	
2,600.00	2,597.92	2,591.35	2,587.02	9.01	9.02	-35.36	32.81	203.55	169.14	156.47	12.67	13.354	
2,700.00	2,697.23	2,691.33	2,686.45	9.37	9.39	-35.20	27.92	212.78	167.05	153.88	13.17	12.683	
2,800.00	2,796.53	2,791.30	2,785.87	9.74	9.77	-35.03	23.03	222.02	164.97	151.29	13.68	12.061	
2,900.00	2,895.84	2,891.28	2,885.30	10.10	10.14	-34.86	18.13	231.25	162.88	148.70	14.19	11.480	
3,000.00	2,995.15	2,991.26	2,984.73	10.47	10.52	-34.69	13.24	240.48	160.80	146.10	14.70	10.939	
3,100.00	3,094.45	3,091.24	3,084.16	10.84	10.90	-34.51	8.35	249.71	158.72	143.51	15.21	10.433	
3,200.00	3,193.76	3,191.21	3,183.59	11.22	11.29	-34.33	3.46	258.94	156.64	140.91	15.73	9.960	
3,300.00	3,293.07	3,291.19	3,283.02	11.59	11.67	-34.14	-1.43	268.18	154.57	138.32	16.24	9.515	
3,400.00	3,392.38	3,391.17	3,382.45	11.97	12.05	-33.95	-6.32	277.41	152.49	135.73	16.76	9.098	
3,500.00	3,491.68	3,491.14	3,481.88	12.35	12.44	-33.75	-11.22	286.64	150.42	133.14	17.28	8.705	
3,600.00	3,590.99	3,591.12	3,581.31	12.73	12.82	-33.55	-16.11	295.87	148.34	130.55	17.80	8.334	
3,700.00	3,690.30	3,691.10	3,680.74	13.12	13.21	-33.34	-21.00	305.11	146.27	127.96	18.32	7.985	
3,800.00	3,789.60	3,791.08	3,780.17	13.50	13.59	-33.13	-25.89	314.34	144.21	125.37	18.84	7.654	
3,900.00	3,888.91	3,891.05	3,879.60	13.89	13.98	-32.91	-30.78	323.57	142.14	122.78	19.36	7.342	
4,000.00	3,988.22	3,991.03	3,979.03	14.27	14.37	-32.68	-35.68	332.80	140.08	120.19	19.88	7.045	
4,100.00	4,087.52	4,091.01	4,078.46	14.66	14.76	-32.45	-40.57	342.03	138.02	117.61	20.40	6.764	
4,200.00	4,186.83	4,190.98	4,177.89	15.05	15.14	-32.21	-45.46	351.27	135.96	115.03	20.93	6.497	
4,300.00	4,286.14	4,290.96	4,277.32	15.44	15.53	-31.96	-50.35	360.50	133.90	112.45	21.45	6.242	
4,400.00	4,385.44	4,390.94	4,376.75	15.83	15.92	-31.70	-55.24	369.73	131.85	109.87	21.97	6.000	
4,500.00	4,484.75	4,490.91	4,476.18	16.22	16.31	-31.44	-60.13	378.96	129.79	107.30	22.50	5.770	
4,600.00	4,584.06	4,590.89	4,575.61	16.61	16.70	-31.16	-65.03	388.19	127.75	104.73	23.02	5.550	
4,700.00	4,683.36	4,690.87	4,675.04	17.01	17.09	-30.88	-69.92	397.43	125.70	102.16	23.54	5.340	
4,800.00	4,782.67	4,790.85	4,774.47	17.40	17.48	-30.59	-74.81	406.66	123.66	99.60	24.06	5.139	
4,900.00	4,881.98	4,890.82	4,873.90	17.79	17.87	-30.29	-79.70	415.89	121.62	97.03	24.59	4.947	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,981.29	4,990.80	4,973.33	18.19	18.26	-29.98	-84.59	425.12	119.58	94.48	25.11	4.763	
5,100.00	5,080.59	5,090.78	5,072.76	18.58	18.65	-29.66	-89.48	434.36	117.55	91.92	25.63	4.586	
5,200.00	5,179.90	5,190.75	5,172.19	18.98	19.04	-29.32	-94.38	443.59	115.52	89.37	26.15	4.417	
5,300.00	5,279.21	5,290.73	5,271.62	19.37	19.44	-28.98	-99.27	452.82	113.50	86.83	26.67	4.255	
5,400.00	5,378.51	5,390.71	5,371.05	19.77	19.83	-28.62	-104.16	462.05	111.48	84.29	27.19	4.099	
5,500.00	5,477.82	5,490.69	5,470.48	20.16	20.22	-28.25	-109.05	471.28	109.47	81.75	27.71	3.950	
5,600.00	5,577.13	5,590.66	5,569.91	20.56	20.61	-27.87	-113.94	480.52	107.46	79.22	28.23	3.806	
5,700.00	5,676.43	5,690.64	5,669.34	20.96	21.00	-27.47	-118.84	489.75	105.45	76.70	28.75	3.667	
5,800.00	5,775.74	5,790.62	5,768.77	21.35	21.40	-27.05	-123.73	498.98	103.45	74.18	29.27	3.534	
5,900.00	5,875.05	5,890.59	5,868.20	21.75	21.79	-26.62	-128.62	508.21	101.45	71.66	29.79	3.406	
6,000.00	5,974.35	5,990.57	5,967.63	22.15	22.18	-26.17	-133.51	517.45	99.47	69.16	30.31	3.282	
6,100.00	6,073.66	6,090.55	6,067.05	22.55	22.58	-25.71	-138.40	526.68	97.48	66.66	30.82	3.163	
6,200.00	6,172.97	6,190.53	6,166.48	22.95	22.97	-25.22	-143.29	535.91	95.51	64.17	31.34	3.048	
6,300.00	6,272.27	6,290.50	6,265.91	23.35	23.36	-24.71	-148.19	545.14	93.54	61.69	31.85	2.937	
6,400.00	6,371.58	6,390.48	6,365.34	23.74	23.75	-24.18	-153.08	554.37	91.58	59.21	32.37	2.829	
6,500.00	6,470.89	6,490.46	6,464.77	24.14	24.15	-23.63	-157.97	563.61	89.63	56.75	32.88	2.726	
6,600.00	6,570.20	6,590.43	6,564.20	24.54	24.54	-23.06	-162.86	572.84	87.68	54.29	33.39	2.626	
6,700.00	6,669.50	6,690.41	6,663.63	24.94	24.93	-22.46	-167.75	582.07	85.75	51.85	33.90	2.529	
6,800.00	6,768.81	6,790.39	6,763.06	25.34	25.33	-21.83	-172.65	591.30	83.82	49.41	34.41	2.436	
6,900.00	6,868.12	6,890.37	6,862.49	25.74	25.72	-21.17	-177.54	600.53	81.91	46.99	34.92	2.346	
7,000.00	6,967.42	6,990.34	6,961.92	26.14	26.12	-20.48	-182.43	609.77	80.01	44.58	35.42	2.259	
7,043.93	7,011.05	7,034.44	7,005.78	26.32	26.29	-20.17	-184.58	613.82	79.16	43.51	35.65	2.221	
7,100.00	7,066.78	7,091.18	7,062.25	26.54	26.51	-19.79	-187.16	618.69	78.12	42.18	35.94	2.174	
7,200.00	7,166.37	7,192.38	7,163.09	26.93	26.90	-19.08	-191.10	626.14	76.98	40.54	36.44	2.113	
7,273.11	7,239.31	7,266.36	7,236.90	27.20	27.17	-18.54	-193.46	630.59	76.73	39.94	36.80	2.085	CC
7,300.00	7,266.16	7,293.58	7,264.07	27.30	27.27	-18.34	-194.22	632.01	76.77	39.84	36.92	2.079	
7,400.00	7,366.09	7,394.78	7,365.16	27.65	27.64	-17.59	-196.49	636.31	77.48	40.09	37.39	2.072	
7,493.92	7,460.00	7,489.85	7,460.19	27.97	27.98	92.27	-197.87	638.91	78.99	41.18	37.81	2.089	
7,500.00	7,466.08	7,496.01	7,466.34	27.99	28.00	92.31	-197.94	639.03	79.11	41.27	37.84	2.091	
7,600.00	7,566.08	7,597.27	7,567.59	28.31	28.35	92.71	-198.54	640.17	80.26	41.99	38.27	2.097	
7,700.00	7,666.08	7,697.56	7,667.88	28.64	28.67	92.72	-198.56	640.21	80.30	41.57	38.73	2.073	
7,800.00	7,766.08	7,797.56	7,767.88	28.96	28.99	92.72	-198.56	640.21	80.30	41.09	39.21	2.048	
7,900.00	7,866.08	7,897.56	7,867.88	29.29	29.31	92.72	-198.56	640.21	80.30	40.62	39.68	2.024	
8,000.00	7,966.08	7,997.56	7,967.88	29.62	29.64	92.72	-198.56	640.21	80.30	40.14	40.16	2.000	
8,100.00	8,066.08	8,097.56	8,067.88	29.95	29.96	92.72	-198.56	640.21	80.30	39.66	40.64	1.976	
8,200.00	8,166.08	8,197.56	8,167.88	30.28	30.29	92.72	-198.56	640.21	80.30	39.19	41.11	1.953	
8,263.96	8,230.04	8,261.52	8,231.84	30.49	30.49	92.72	-198.56	640.21	80.30	38.88	41.42	1.939	
8,300.00	8,266.05	8,297.53	8,267.85	30.61	30.61	87.83	-198.56	640.21	80.25	38.68	41.57	1.930	
8,333.17	8,299.08	8,330.56	8,300.88	30.71	30.72	90.00	-198.56	640.21	80.19	38.51	41.68	1.924	
8,350.00	8,315.76	8,347.23	8,317.56	30.77	30.77	91.61	-198.56	640.21	80.22	38.50	41.73	1.923	ES, SF
8,400.00	8,364.80	8,396.28	8,366.60	30.92	30.93	98.21	-198.56	640.21	81.07	39.22	41.85	1.937	
8,450.00	8,412.83	8,444.30	8,414.63	31.07	31.09	106.93	-198.56	640.21	84.23	42.21	42.02	2.004	
8,500.00	8,459.46	8,490.94	8,461.26	31.20	31.24	116.57	-198.56	640.21	91.35	49.04	42.31	2.159	
8,550.00	8,504.34	8,535.82	8,506.14	31.33	31.39	125.75	-198.56	640.21	103.70	60.97	42.73	2.427	
8,600.00	8,547.14	8,578.62	8,548.94	31.44	31.53	133.56	-198.56	640.21	121.72	78.53	43.20	2.818	
8,650.00	8,587.53	8,619.00	8,589.33	31.54	31.66	139.71	-198.56	640.21	145.18	101.55	43.64	3.327	
8,700.00	8,625.19	8,656.67	8,626.99	31.63	31.79	144.26	-198.56	640.21	173.53	129.51	44.02	3.942	
8,750.00	8,659.85	8,691.33	8,661.65	31.71	31.90	147.44	-198.56	640.21	206.14	161.81	44.33	4.650	
8,800.00	8,691.23	8,722.71	8,693.03	31.79	32.00	149.43	-198.56	640.21	242.45	197.86	44.59	5.437	
8,850.00	8,719.11	8,750.59	8,720.91	31.85	32.10	150.34	-198.56	640.21	281.94	237.15	44.80	6.294	
8,900.00	8,743.26	8,774.74	8,745.06	31.92	32.18	150.13	-198.56	640.21	324.14	279.17	44.96	7.209	
8,950.00	8,763.51	8,794.99	8,765.31	31.99	32.24	148.57	-198.56	640.21	368.59	323.49	45.10	8.173	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.00	8,779.70	8,811.18	8,781.50	32.08	32.30	145.09	-198.56	640.21	414.87	369.67	45.20	9.178	
9,050.00	8,791.70	8,823.18	8,793.50	32.18	32.34	138.30	-198.56	640.21	462.57	417.30	45.28	10.216	
9,100.00	8,799.43	8,830.91	8,801.23	32.32	32.36	125.05	-198.56	640.21	511.28	465.95	45.34	11.278	
9,150.00	8,802.83	8,834.31	8,804.63	32.48	32.37	99.57	-198.56	640.21	560.59	515.21	45.37	12.355	
9,163.96	8,803.00	8,834.48	8,804.80	32.53	32.37	90.00	-198.56	640.21	574.41	529.03	45.38	12.658	
9,200.00	8,803.00	8,834.48	8,804.80	32.67	32.37	90.00	-198.56	640.21	610.14	564.75	45.40	13.441	
9,300.00	8,803.00	8,834.48	8,804.80	33.10	32.37	90.00	-198.56	640.21	709.69	664.26	45.42	15.623	
9,400.00	8,803.00	8,834.48	8,804.80	33.60	32.37	90.00	-198.56	640.21	809.56	764.12	45.44	17.816	
9,480.63	8,803.00	8,834.48	8,804.80	34.05	32.37	-90.02	-198.56	640.21	890.18	844.73	45.45	19.587	
9,500.00	8,803.00	8,834.48	8,804.80	34.16	32.37	-90.02	-198.56	640.21	909.55	864.10	45.45	20.013	
9,600.00	8,803.00	8,834.48	8,804.80	34.79	32.37	-90.03	-198.56	640.21	1,009.55	964.10	45.45	22.210	
9,700.00	8,803.00	8,834.48	8,804.80	35.48	32.37	-90.03	-198.56	640.21	1,109.55	1,064.09	45.46	24.407	
9,800.00	8,803.00	8,834.48	8,804.80	36.23	32.37	-90.03	-198.56	640.21	1,209.55	1,164.08	45.47	26.602	
9,900.00	8,803.00	8,834.48	8,804.80	37.04	32.37	-90.03	-198.56	640.21	1,309.55	1,264.07	45.48	28.796	
10,000.00	8,803.00	11,371.06	10,128.75	37.91	41.42	-179.98	1,240.48	624.38	1,324.29	1,295.26	29.03	45.621	
10,100.00	8,803.00	11,471.03	10,126.52	38.83	42.26	-179.98	1,340.42	623.28	1,322.05	1,292.43	29.62	44.631	
10,200.00	8,803.00	11,571.01	10,124.29	39.79	43.15	-179.98	1,440.36	622.18	1,319.82	1,289.57	30.25	43.637	
10,300.00	8,803.00	11,670.98	10,122.06	40.80	44.08	-179.98	1,540.31	621.08	1,317.59	1,286.69	30.90	42.646	
10,400.00	8,803.00	11,770.96	10,119.82	41.84	45.05	-179.98	1,640.25	619.98	1,315.35	1,283.78	31.57	41.662	
10,500.00	8,803.00	11,870.93	10,117.59	42.93	46.07	-179.98	1,740.20	618.88	1,313.12	1,280.85	32.27	40.689	
10,600.00	8,803.00	11,970.91	10,115.36	44.05	47.11	-179.98	1,840.14	617.78	1,310.89	1,277.89	32.99	39.730	
10,700.00	8,803.00	12,070.88	10,113.13	45.20	48.19	-179.98	1,940.09	616.68	1,308.65	1,274.92	33.74	38.788	
10,800.00	8,803.00	12,170.86	10,110.89	46.38	49.31	-179.98	2,040.03	615.58	1,306.42	1,271.92	34.50	37.866	
10,900.00	8,803.00	12,270.83	10,108.66	47.59	50.45	-179.98	2,139.97	614.48	1,304.19	1,268.90	35.28	36.963	
11,000.00	8,803.00	12,370.81	10,106.43	48.83	51.62	-179.98	2,239.92	613.38	1,301.95	1,265.87	36.08	36.083	
11,100.00	8,803.00	12,470.78	10,104.20	50.09	52.81	-179.98	2,339.86	612.28	1,299.72	1,262.82	36.90	35.226	
11,200.00	8,803.00	12,570.76	10,101.96	51.37	54.03	-179.98	2,439.81	611.18	1,297.49	1,259.76	37.73	34.391	
11,300.00	8,803.00	12,670.73	10,099.73	52.68	55.27	-179.98	2,539.75	610.08	1,295.26	1,256.68	38.57	33.581	
11,400.00	8,803.00	12,770.71	10,097.50	54.00	56.53	-179.98	2,639.69	608.98	1,293.02	1,253.59	39.43	32.794	
11,500.00	8,803.00	12,870.68	10,095.27	55.34	57.81	-179.98	2,739.64	607.88	1,290.79	1,250.49	40.30	32.031	
11,600.00	8,803.00	12,970.66	10,093.03	56.69	59.11	-179.98	2,839.58	606.78	1,288.56	1,247.38	41.18	31.292	
11,700.00	8,803.00	13,070.63	10,090.80	58.07	60.43	-179.98	2,939.53	605.68	1,286.32	1,244.25	42.07	30.575	
11,800.00	8,803.00	13,170.61	10,088.57	59.45	61.76	-179.98	3,039.47	604.58	1,284.09	1,241.12	42.97	29.882	
11,900.00	8,803.00	13,270.58	10,086.34	60.85	63.11	-179.98	3,139.41	603.48	1,281.86	1,237.97	43.88	29.210	
12,000.00	8,803.00	13,370.56	10,084.10	62.26	64.47	-179.98	3,239.36	602.38	1,279.62	1,234.82	44.80	28.560	
12,100.00	8,803.00	13,470.53	10,081.87	63.69	65.85	-179.98	3,339.30	601.28	1,277.39	1,231.66	45.73	27.931	
12,200.00	8,803.00	13,570.51	10,079.64	65.12	67.24	-179.98	3,439.25	600.18	1,275.16	1,228.49	46.67	27.323	
12,300.00	8,803.00	13,670.48	10,077.41	66.56	68.64	-179.98	3,539.19	599.08	1,272.92	1,225.31	47.61	26.734	
12,400.00	8,803.00	13,770.46	10,075.17	68.02	70.05	-179.99	3,639.13	597.98	1,270.69	1,222.13	48.57	26.165	
12,500.00	8,803.00	13,870.43	10,072.94	69.48	71.47	-179.99	3,739.08	596.88	1,268.46	1,218.94	49.52	25.614	
12,600.00	8,803.00	13,970.41	10,070.71	70.95	72.90	-179.99	3,839.02	595.78	1,266.23	1,215.74	50.49	25.080	
12,700.00	8,803.00	14,070.38	10,068.48	72.43	74.34	-179.99	3,938.97	594.68	1,263.99	1,212.54	51.46	24.564	
12,800.00	8,803.00	14,170.36	10,066.24	73.91	75.79	-179.99	4,038.91	593.58	1,261.76	1,209.33	52.43	24.065	
12,900.00	8,803.00	14,270.33	10,064.01	75.41	77.24	-179.99	4,138.85	592.48	1,259.53	1,206.11	53.41	23.581	
13,000.00	8,803.00	14,370.31	10,061.78	76.91	78.71	-179.99	4,238.80	591.39	1,257.29	1,202.89	54.40	23.113	
13,100.00	8,803.00	14,470.28	10,059.55	78.41	80.18	-179.99	4,338.74	590.29	1,255.06	1,199.67	55.39	22.659	
13,200.00	8,803.00	14,570.26	10,057.31	79.92	81.66	-179.99	4,438.69	589.19	1,252.83	1,196.44	56.38	22.220	
13,300.00	8,803.00	14,670.24	10,055.08	81.44	83.14	-179.99	4,538.63	588.09	1,250.59	1,193.21	57.38	21.794	
13,400.00	8,803.00	14,770.21	10,052.85	82.96	84.64	-179.99	4,638.58	586.99	1,248.36	1,189.98	58.38	21.382	
13,500.00	8,803.00	14,870.19	10,050.62	84.49	86.13	-179.99	4,738.52	585.89	1,246.13	1,186.74	59.39	20.982	
13,600.00	8,803.00	14,970.16	10,048.38	86.02	87.64	-179.99	4,838.46	584.79	1,243.89	1,183.49	60.40	20.594	
13,700.00	8,803.00	15,070.14	10,046.15	87.56	89.14	-179.99	4,938.41	583.69	1,241.66	1,180.25	61.42	20.217	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.00	8,803.00	15,170.11	10,043.92	89.10	90.66	-179.99	5,038.35	582.59	1,239.43	1,177.00	62.43	19.852	
13,900.00	8,803.00	15,270.09	10,041.69	90.64	92.18	-179.99	5,138.30	581.49	1,237.19	1,173.74	63.45	19.498	
14,000.00	8,803.00	15,370.06	10,039.45	92.19	93.70	-179.99	5,238.24	580.39	1,234.96	1,170.49	64.48	19.154	
14,100.00	8,803.00	15,470.04	10,037.22	93.74	95.23	-179.99	5,338.18	579.29	1,232.73	1,167.23	65.50	18.820	
14,200.00	8,803.00	15,570.01	10,034.99	95.30	96.76	-179.99	5,438.13	578.19	1,230.50	1,163.97	66.53	18.495	
14,300.00	8,803.00	15,669.99	10,032.75	96.86	98.29	-179.99	5,538.07	577.09	1,228.26	1,160.70	67.56	18.180	
14,400.00	8,803.00	15,769.96	10,030.52	98.42	99.83	-179.99	5,638.02	575.99	1,226.03	1,157.43	68.59	17.874	
14,500.00	8,803.00	15,869.94	10,028.29	99.98	101.37	-179.99	5,737.96	574.89	1,223.80	1,154.17	69.63	17.576	
14,600.00	8,803.00	15,969.91	10,026.06	101.55	102.92	-179.99	5,837.90	573.79	1,221.56	1,150.89	70.67	17.286	
14,700.00	8,803.00	16,069.89	10,023.82	103.12	104.47	-179.99	5,937.85	572.69	1,219.33	1,147.62	71.71	17.004	
14,800.00	8,803.00	16,169.86	10,021.59	104.69	106.02	-179.99	6,037.79	571.59	1,217.10	1,144.35	72.75	16.730	
14,900.00	8,803.00	16,269.84	10,019.36	106.27	107.58	-179.99	6,137.74	570.49	1,214.86	1,141.07	73.80	16.463	
15,000.00	8,803.00	16,369.81	10,017.13	107.85	109.13	-179.99	6,237.68	569.39	1,212.63	1,137.79	74.84	16.203	
15,100.00	8,803.00	16,469.79	10,014.89	109.42	110.70	-179.99	6,337.62	568.29	1,210.40	1,134.51	75.89	15.950	
15,200.00	8,803.00	16,569.76	10,012.66	111.01	112.26	-179.99	6,437.57	567.19	1,208.16	1,131.23	76.94	15.703	
15,300.00	8,803.00	16,669.74	10,010.43	112.59	113.83	-179.99	6,537.51	566.09	1,205.93	1,127.94	77.99	15.463	
15,400.00	8,803.00	16,769.71	10,008.20	114.18	115.39	-179.99	6,637.46	564.99	1,203.70	1,124.65	79.04	15.228	
15,500.00	8,803.00	16,869.69	10,005.96	115.76	116.97	-179.99	6,737.40	563.89	1,201.46	1,121.37	80.10	15.000	
15,600.00	8,803.00	16,969.66	10,003.73	117.35	118.54	-179.99	6,837.35	562.79	1,199.23	1,118.08	81.15	14.777	
15,700.00	8,803.00	17,069.64	10,001.50	118.94	120.11	-179.99	6,937.29	561.69	1,197.00	1,114.79	82.21	14.560	
15,800.00	8,803.00	17,169.61	9,999.27	120.54	121.69	-179.99	7,037.23	560.59	1,194.77	1,111.50	83.27	14.348	
15,900.00	8,803.00	17,269.59	9,997.03	122.13	123.27	-179.99	7,137.18	559.49	1,192.53	1,108.20	84.33	14.141	
16,000.00	8,803.00	17,369.56	9,994.80	123.73	124.85	-179.99	7,237.12	558.39	1,190.30	1,104.91	85.39	13.939	
16,100.00	8,803.00	17,469.54	9,992.57	125.33	126.43	-179.99	7,337.07	557.29	1,188.07	1,101.61	86.45	13.742	
16,200.00	8,803.00	17,569.51	9,990.34	126.92	128.02	-179.99	7,437.01	556.19	1,185.83	1,098.32	87.52	13.550	
16,300.00	8,803.00	17,669.49	9,988.10	128.52	129.61	-179.99	7,536.95	555.10	1,183.60	1,095.02	88.58	13.362	
16,400.00	8,803.00	17,769.46	9,985.87	130.13	131.19	-179.99	7,636.90	554.00	1,181.37	1,091.72	89.65	13.178	
16,500.00	8,803.00	17,869.44	9,983.64	131.73	132.78	-179.99	7,736.84	552.90	1,179.13	1,088.42	90.71	12.998	
16,600.00	8,803.00	17,969.41	9,981.41	133.33	134.38	-179.99	7,836.79	551.80	1,176.90	1,085.12	91.78	12.823	
16,700.00	8,803.00	18,069.39	9,979.17	134.94	135.97	-179.99	7,936.73	550.70	1,174.67	1,081.82	92.85	12.651	
16,800.00	8,803.00	18,169.36	9,976.94	136.55	137.56	-179.99	8,036.67	549.60	1,172.43	1,078.51	93.92	12.483	
16,900.00	8,803.00	18,269.34	9,974.71	138.15	139.16	-179.99	8,136.62	548.50	1,170.20	1,075.21	94.99	12.319	
17,000.00	8,803.00	18,369.31	9,972.48	139.76	140.76	-180.00	8,236.56	547.40	1,167.97	1,071.91	96.06	12.158	
17,100.00	8,803.00	18,469.29	9,970.24	141.37	142.35	-180.00	8,336.51	546.30	1,165.73	1,068.60	97.14	12.001	
17,200.00	8,803.00	18,569.26	9,968.01	142.98	143.95	-180.00	8,436.45	545.20	1,163.50	1,065.29	98.21	11.847	
17,300.00	8,803.00	18,669.24	9,965.78	144.59	145.55	-180.00	8,536.39	544.10	1,161.27	1,061.99	99.28	11.697	
17,400.00	8,803.00	18,769.21	9,963.55	146.21	147.16	-180.00	8,636.34	543.00	1,159.04	1,058.68	100.36	11.549	
17,500.00	8,803.00	18,869.19	9,961.31	147.82	148.76	-180.00	8,736.28	541.90	1,156.80	1,055.37	101.43	11.405	
17,600.00	8,803.00	18,969.16	9,959.08	149.43	150.36	-180.00	8,836.23	540.80	1,154.57	1,052.06	102.51	11.263	
17,700.00	8,803.00	19,069.14	9,956.85	151.05	151.97	-180.00	8,936.17	539.70	1,152.34	1,048.75	103.59	11.124	
17,800.00	8,803.00	19,169.11	9,954.62	152.67	153.57	-180.00	9,036.12	538.60	1,150.10	1,045.44	104.66	10.988	
17,900.00	8,803.00	19,269.09	9,952.38	154.28	155.18	-180.00	9,136.06	537.50	1,147.87	1,042.13	105.74	10.855	
18,000.00	8,803.00	19,369.06	9,950.15	155.90	156.79	-180.00	9,236.00	536.40	1,145.64	1,038.82	106.82	10.725	
18,100.00	8,803.00	19,469.04	9,947.92	157.52	158.40	-180.00	9,335.95	535.30	1,143.40	1,035.50	107.90	10.597	
18,200.00	8,803.00	19,569.01	9,945.69	159.14	160.01	-180.00	9,435.89	534.20	1,141.17	1,032.19	108.98	10.471	
18,300.00	8,803.00	19,668.99	9,943.45	160.76	161.62	-180.00	9,535.84	533.10	1,138.94	1,028.88	110.06	10.348	
18,400.00	8,803.00	19,768.96	9,941.22	162.38	163.23	-180.00	9,635.78	532.00	1,136.70	1,025.56	111.14	10.227	
18,500.00	8,803.00	19,868.94	9,938.99	164.00	164.84	-180.00	9,735.72	530.90	1,134.47	1,022.25	112.23	10.109	
18,600.00	8,803.00	19,968.91	9,936.76	165.62	166.46	-180.00	9,835.67	529.80	1,132.24	1,018.93	113.31	9.993	
18,700.00	8,803.00	20,068.89	9,934.52	167.24	168.07	-180.00	9,935.61	528.70	1,130.01	1,015.61	114.39	9.878	
18,800.00	8,803.00	20,168.86	9,932.29	168.87	169.69	-180.00	10,035.56	527.60	1,127.77	1,012.30	115.47	9.766	
18,900.00	8,803.00	20,268.84	9,930.06	170.49	171.30	-180.00	10,135.50	526.50	1,125.54	1,008.98	116.56	9.656	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,961.77	8,803.00	20,305.48	9,929.24	171.49	171.89	180.00	10,172.13	526.10	1,124.44	1,007.46	116.98	9.612	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	34.11	75.68	51.25	91.73				
100.00	100.00	92.20	92.20	0.13	0.13	34.11	75.68	51.25	91.40	91.22	0.18	504.787	
200.00	200.00	192.20	192.20	0.48	0.47	34.11	75.68	51.25	91.40	90.72	0.68	135.192	
300.00	300.00	292.20	292.20	0.84	0.83	34.11	75.68	51.25	91.40	90.22	1.18	77.261	
400.00	400.00	392.20	392.20	1.20	1.19	34.11	75.68	51.25	91.40	89.71	1.69	54.084	
500.00	500.00	492.20	492.20	1.56	1.55	34.11	75.68	51.25	91.40	89.20	2.20	41.604	
600.00	600.00	592.20	592.20	1.92	1.91	34.11	75.68	51.25	91.40	88.70	2.70	33.804	
700.00	700.00	692.20	692.20	2.28	2.26	34.11	75.68	51.25	91.40	88.19	3.21	28.466	
800.00	800.00	792.20	792.20	2.63	2.62	34.11	75.68	51.25	91.40	87.68	3.72	24.585	
900.00	900.00	892.20	892.20	2.99	2.98	34.11	75.68	51.25	91.40	87.18	4.22	21.635	
1,000.00	1,000.00	992.20	992.20	3.35	3.34	34.11	75.68	51.25	91.40	86.67	4.73	19.317	
1,100.00	1,100.00	1,092.20	1,092.20	3.71	3.70	34.11	75.68	51.25	91.40	86.16	5.24	17.447	
1,200.00	1,200.00	1,192.20	1,192.20	4.07	4.06	34.11	75.68	51.25	91.40	85.65	5.75	15.908	
1,300.00	1,300.00	1,292.20	1,292.20	4.43	4.42	34.11	75.68	51.25	91.40	85.15	6.25	14.618	
1,400.00	1,400.00	1,392.20	1,392.20	4.79	4.77	34.11	75.68	51.25	91.40	84.64	6.76	13.522	
1,500.00	1,500.00	1,492.20	1,492.20	5.14	5.13	34.11	75.68	51.25	91.40	84.13	7.27	12.578	
1,600.00	1,600.00	1,592.20	1,592.20	5.50	5.49	34.11	75.68	51.25	91.40	83.63	7.77	11.758	
1,700.00	1,700.00	1,692.20	1,692.20	5.86	5.85	34.11	75.68	51.25	91.40	83.12	8.28	11.038	
1,800.00	1,800.00	1,792.20	1,792.20	6.22	6.21	34.11	75.68	51.25	91.40	82.61	8.79	10.401	
1,900.00	1,900.00	1,892.20	1,892.20	6.58	6.57	34.11	75.68	51.25	91.40	82.11	9.29	9.834	
2,000.00	2,000.00	1,992.20	1,992.20	6.94	6.92	34.11	75.68	51.25	91.40	81.60	9.80	9.325	
2,100.00	2,099.99	2,092.19	2,092.19	7.28	7.28	-75.87	75.68	51.25	91.07	80.77	10.30	8.842	
2,200.00	2,199.91	2,192.11	2,192.11	7.62	7.64	-78.30	75.68	51.25	90.19	79.40	10.79	8.358	
2,300.00	2,299.69	2,291.89	2,291.89	7.96	8.00	-82.43	75.68	51.25	89.10	77.81	11.29	7.895	
2,400.00	2,399.27	2,391.47	2,391.47	8.31	8.36	-88.31	75.68	51.25	88.35	76.57	11.78	7.499	
2,424.35	2,423.48	2,415.68	2,415.68	8.39	8.44	-90.00	75.68	51.25	88.31	76.41	11.90	7.419	CC
2,449.99	2,448.95	2,441.15	2,441.15	8.48	8.53	-91.89	75.68	51.25	88.36	76.33	12.03	7.344	
2,500.00	2,498.61	2,490.81	2,490.81	8.66	8.71	-95.65	75.68	51.25	88.75	76.47	12.28	7.226	
2,600.00	2,597.92	2,590.12	2,590.12	9.01	9.07	-103.02	75.68	51.25	90.68	77.89	12.78	7.093	
2,700.00	2,697.23	2,689.43	2,689.43	9.37	9.42	-109.97	75.68	51.25	94.04	80.75	13.29	7.077	
2,800.00	2,796.53	2,788.73	2,788.73	9.74	9.78	-116.36	75.68	51.25	98.70	84.91	13.79	7.157	
2,900.00	2,895.84	2,888.04	2,888.04	10.10	10.14	-122.12	75.68	51.25	104.48	90.18	14.29	7.310	
3,000.00	2,995.15	2,987.35	2,987.35	10.47	10.49	-127.23	75.68	51.25	111.20	96.41	14.79	7.516	
3,100.00	3,094.45	3,086.65	3,086.65	10.84	10.85	-131.73	75.68	51.25	118.71	103.42	15.30	7.761	
3,200.00	3,193.76	3,185.96	3,185.96	11.22	11.20	-135.68	75.68	51.25	126.87	111.07	15.80	8.032	
3,300.00	3,293.07	3,285.27	3,285.27	11.59	11.56	-139.15	75.68	51.25	135.55	119.26	16.30	8.318	
3,400.00	3,392.38	3,384.58	3,384.58	11.97	11.92	-142.18	75.68	51.25	144.67	127.87	16.80	8.613	
3,500.00	3,491.68	3,486.70	3,486.69	12.35	12.27	-144.71	75.37	52.18	153.38	136.08	17.30	8.867	
3,600.00	3,590.99	3,589.82	3,589.74	12.73	12.62	-146.43	74.21	55.73	160.15	142.36	17.79	9.002	
3,700.00	3,690.30	3,693.33	3,693.04	13.12	12.97	-147.49	72.17	61.95	164.78	146.51	18.28	9.016	
3,800.00	3,789.60	3,797.06	3,796.35	13.50	13.33	-147.96	69.25	70.84	167.19	148.43	18.76	8.912	
3,900.00	3,888.91	3,900.87	3,899.44	13.89	13.68	-147.91	65.46	82.41	167.32	148.09	19.24	8.698	
4,000.00	3,988.22	4,002.04	3,999.64	14.27	14.04	-147.46	61.11	95.66	165.72	145.99	19.73	8.399	
4,100.00	4,087.52	4,102.02	4,098.64	14.66	14.39	-146.97	56.77	108.87	164.02	143.79	20.24	8.105	
4,200.00	4,186.83	4,201.99	4,197.65	15.05	14.75	-146.48	52.43	122.09	162.34	141.59	20.74	7.825	
4,300.00	4,286.14	4,301.97	4,296.65	15.44	15.11	-145.98	48.09	135.31	160.66	139.40	21.26	7.558	
4,400.00	4,385.44	4,401.94	4,395.65	15.83	15.48	-145.47	43.76	148.53	159.00	137.23	21.77	7.304	
4,500.00	4,484.75	4,501.92	4,494.66	16.22	15.84	-144.95	39.42	161.75	157.35	135.06	22.28	7.061	
4,600.00	4,584.06	4,601.90	4,593.66	16.61	16.21	-144.41	35.08	174.97	155.71	132.91	22.80	6.829	
4,700.00	4,683.36	4,701.87	4,692.66	17.01	16.59	-143.87	30.74	188.19	154.09	130.77	23.32	6.607	
4,800.00	4,782.67	4,801.85	4,791.66	17.40	16.96	-143.31	26.40	201.41	152.48	128.64	23.84	6.395	
4,900.00	4,881.98	4,901.82	4,890.67	17.79	17.34	-142.74	22.06	214.63	150.89	126.52	24.37	6.192	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,981.29	5,001.80	4,989.67	18.19	17.72	-142.16	17.73	227.85	149.31	124.41	24.89	5.998	
5,100.00	5,080.59	5,101.78	5,088.67	18.58	18.10	-141.57	13.39	241.07	147.74	122.32	25.42	5.812	
5,200.00	5,179.90	5,201.75	5,187.68	18.98	18.48	-140.96	9.05	254.29	146.20	120.25	25.95	5.633	
5,300.00	5,279.21	5,301.73	5,286.68	19.37	18.87	-140.34	4.71	267.51	144.67	118.18	26.48	5.462	
5,400.00	5,378.51	5,401.70	5,385.68	19.77	19.25	-139.71	0.37	280.73	143.16	116.14	27.02	5.298	
5,500.00	5,477.82	5,501.68	5,484.69	20.16	19.64	-139.06	-3.97	293.95	141.66	114.10	27.56	5.141	
5,600.00	5,577.13	5,601.66	5,583.69	20.56	20.03	-138.40	-8.30	307.17	140.18	112.09	28.10	4.990	
5,700.00	5,676.43	5,701.63	5,682.69	20.96	20.42	-137.73	-12.64	320.39	138.73	110.09	28.64	4.844	
5,800.00	5,775.74	5,801.61	5,781.70	21.35	20.81	-137.04	-16.98	333.61	137.29	108.11	29.18	4.705	
5,900.00	5,875.05	5,901.58	5,880.70	21.75	21.20	-136.34	-21.32	346.83	135.87	106.14	29.73	4.571	
6,000.00	5,974.35	6,001.56	5,979.70	22.15	21.60	-135.63	-25.66	360.05	134.47	104.20	30.27	4.442	
6,100.00	6,073.66	6,101.54	6,078.71	22.55	21.99	-134.89	-29.99	373.27	133.10	102.27	30.82	4.318	
6,200.00	6,172.97	6,201.51	6,177.71	22.95	22.39	-134.15	-34.33	386.49	131.74	100.37	31.38	4.199	
6,300.00	6,272.27	6,301.49	6,276.71	23.35	22.79	-133.39	-38.67	399.71	130.41	98.48	31.93	4.084	
6,400.00	6,371.58	6,401.46	6,375.71	23.74	23.19	-132.61	-43.01	412.93	129.11	96.62	32.49	3.974	
6,500.00	6,470.89	6,501.44	6,474.72	24.14	23.58	-131.82	-47.35	426.15	127.82	94.78	33.05	3.868	
6,600.00	6,570.20	6,601.41	6,573.72	24.54	23.98	-131.01	-51.69	439.37	126.57	92.96	33.61	3.766	
6,700.00	6,669.50	6,701.39	6,672.72	24.94	24.38	-130.18	-56.02	452.59	125.33	91.16	34.17	3.668	
6,800.00	6,768.81	6,801.37	6,771.73	25.34	24.79	-129.34	-60.36	465.81	124.13	89.39	34.74	3.573	
6,900.00	6,868.12	6,901.34	6,870.73	25.74	25.19	-128.48	-64.70	479.03	122.95	87.64	35.31	3.482	
7,000.00	6,967.42	7,001.32	6,969.73	26.14	25.59	-127.61	-69.04	492.25	121.80	85.92	35.88	3.395	
7,043.93	7,011.05	7,045.24	7,013.23	26.32	25.77	-127.22	-70.94	498.05	121.30	85.17	36.13	3.357	
7,100.00	7,066.78	7,101.28	7,068.73	26.54	25.99	-126.55	-73.38	505.46	120.43	83.97	36.46	3.303	
7,200.00	7,166.37	7,201.16	7,167.63	26.93	26.40	-124.51	-77.71	518.67	117.75	80.69	37.06	3.177	
7,300.00	7,266.16	7,300.87	7,266.37	27.30	26.80	-121.26	-82.04	531.86	113.84	76.14	37.69	3.020	
7,400.00	7,366.09	7,400.35	7,364.88	27.65	27.21	-116.58	-86.35	545.01	109.11	70.75	38.36	2.845	
7,493.92	7,460.00	7,493.51	7,457.13	27.97	27.58	-1.47	-90.40	557.33	104.50	65.51	39.00	2.680	
7,500.00	7,466.08	7,499.52	7,463.09	27.99	27.61	-1.03	-90.66	558.12	104.22	65.18	39.04	2.670	
7,600.00	7,566.08	7,598.55	7,561.15	28.31	28.01	6.41	-94.95	571.22	100.47	60.76	39.71	2.530	
7,700.00	7,666.08	7,697.58	7,659.22	28.64	28.41	14.28	-99.25	584.31	98.55	58.23	40.32	2.444	
7,748.44	7,714.52	7,745.55	7,706.72	28.80	28.61	18.17	-101.33	590.66	98.32	57.73	40.59	2.422	
7,800.00	7,766.08	7,796.60	7,757.28	28.96	28.82	22.30	-103.55	597.41	98.58	57.73	40.85	2.413	ES, SF
7,900.00	7,866.08	7,895.63	7,855.34	29.29	29.22	30.16	-107.84	610.50	100.56	59.24	41.31	2.434	
8,000.00	7,966.08	7,994.66	7,953.41	29.62	29.62	37.59	-112.14	623.59	104.37	62.66	41.70	2.503	
8,100.00	8,066.08	8,093.69	8,051.47	29.95	30.03	44.40	-116.44	636.69	109.82	67.77	42.05	2.612	
8,200.00	8,166.08	8,192.71	8,149.53	30.28	30.43	50.50	-120.74	649.78	116.69	74.31	42.38	2.754	
8,263.96	8,230.04	8,256.05	8,212.26	30.49	30.69	54.02	-123.48	658.16	121.71	79.13	42.58	2.858	
8,300.00	8,266.05	8,291.68	8,247.54	30.61	30.84	50.39	-125.03	662.87	124.01	81.32	42.69	2.905	
8,350.00	8,315.76	8,340.74	8,296.12	30.77	31.04	54.57	-127.16	669.36	125.31	82.53	42.77	2.930	
8,400.00	8,364.80	8,389.02	8,343.93	30.92	31.24	60.31	-129.25	675.74	125.10	82.32	42.78	2.924	
8,450.00	8,412.83	8,436.16	8,390.61	31.07	31.43	67.55	-131.30	681.97	124.51	81.78	42.73	2.914	
8,462.29	8,424.44	8,447.53	8,401.88	31.10	31.48	69.54	-131.79	683.48	124.47	81.76	42.71	2.914	
8,500.00	8,459.46	8,481.80	8,435.80	31.20	31.62	76.05	-133.28	688.01	125.02	82.39	42.64	2.932	
8,550.00	8,504.34	8,525.59	8,479.17	31.33	31.80	85.22	-135.18	693.80	128.43	85.83	42.59	3.015	
8,600.00	8,547.14	8,567.19	8,520.37	31.44	31.97	94.24	-136.99	699.30	136.43	93.74	42.69	3.196	
8,650.00	8,587.53	8,606.30	8,559.09	31.54	32.13	102.31	-138.68	704.47	150.18	107.22	42.96	3.496	
8,700.00	8,625.19	8,642.61	8,595.05	31.63	32.28	108.92	-140.26	709.27	170.02	126.67	43.35	3.922	
8,750.00	8,659.85	8,675.85	8,627.96	31.71	32.42	113.85	-141.70	713.67	195.61	151.81	43.80	4.466	
8,800.00	8,691.23	8,705.76	8,657.58	31.79	32.54	117.09	-143.00	717.62	226.24	182.01	44.22	5.116	
8,850.00	8,719.11	8,732.11	8,683.69	31.85	32.65	118.65	-144.14	721.11	261.13	216.53	44.60	5.856	
8,900.00	8,743.26	8,754.72	8,706.07	31.92	32.74	118.49	-145.12	724.10	299.54	254.63	44.91	6.670	
8,950.00	8,763.51	8,773.40	8,724.57	31.99	32.82	116.44	-145.93	726.57	340.80	295.64	45.17	7.546	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.00	8,779.70	8,788.01	8,739.03	32.08	32.88	112.15	-146.57	728.50	384.32	338.95	45.37	8.470	
9,050.00	8,791.70	8,798.43	8,749.36	32.18	32.92	105.08	-147.02	729.88	429.55	384.01	45.53	9.434	
9,100.00	8,799.43	8,804.61	8,755.47	32.32	32.94	94.72	-147.29	730.69	475.98	430.32	45.66	10.425	
9,150.00	8,802.83	8,806.47	8,757.32	32.48	32.95	81.19	-147.37	730.94	523.14	477.39	45.75	11.436	
9,163.96	8,803.00	8,806.22	8,757.07	32.53	32.95	77.02	-147.36	730.91	536.38	490.61	45.77	11.720	
9,200.00	8,803.00	8,805.11	8,755.97	32.67	32.95	76.10	-147.31	730.76	570.74	524.93	45.81	12.458	
9,300.00	8,803.00	8,801.70	8,752.59	33.10	32.93	72.74	-147.16	730.31	667.56	621.66	45.90	14.544	
9,400.00	8,803.00	8,797.82	8,748.75	33.60	32.92	67.49	-146.99	729.80	765.81	719.86	45.95	16.666	
9,480.63	8,803.00	8,794.35	8,745.31	34.05	32.90	60.78	-146.84	729.34	845.64	799.67	45.97	18.395	
9,500.00	8,803.00	8,793.48	8,744.45	34.16	32.90	60.33	-146.80	729.22	864.88	818.90	45.98	18.811	
9,600.00	8,803.00	8,789.00	8,740.01	34.79	32.88	58.04	-146.61	728.63	964.24	918.24	45.99	20.965	
9,700.00	8,803.00	8,784.51	8,735.57	35.48	32.86	55.84	-146.42	728.04	1,063.69	1,017.69	46.01	23.121	
9,800.00	8,803.00	8,780.02	8,731.13	36.23	32.84	53.72	-146.22	727.44	1,163.23	1,117.21	46.02	25.279	
9,900.00	8,803.00	8,775.54	8,726.69	37.04	32.82	51.68	-146.03	726.85	1,262.82	1,216.80	46.02	27.438	
10,000.00	8,803.00	8,771.05	8,722.25	37.91	32.81	49.73	-145.83	726.26	1,362.46	1,316.43	46.03	29.599	
10,100.00	8,803.00	8,766.57	8,717.81	38.83	32.79	47.85	-145.64	725.66	1,462.13	1,416.10	46.04	31.760	
10,200.00	8,803.00	8,762.08	8,713.36	39.79	32.77	46.06	-145.44	725.07	1,561.83	1,515.79	46.04	33.923	
10,300.00	8,803.00	8,757.60	8,708.92	40.80	32.75	44.35	-145.25	724.48	1,661.56	1,615.51	46.05	36.085	
10,400.00	8,803.00	8,753.11	8,704.48	41.84	32.73	42.71	-145.05	723.88	1,761.30	1,715.25	46.05	38.247	
10,500.00	8,803.00	8,748.63	8,700.04	42.93	32.71	41.15	-144.86	723.29	1,861.07	1,815.01	46.06	40.409	
10,600.00	8,803.00	8,744.14	8,695.60	44.05	32.70	39.65	-144.66	722.70	1,960.84	1,914.78	46.06	42.571	
10,700.00	8,803.00	8,739.66	8,691.16	45.20	32.68	38.23	-144.47	722.11	2,060.63	2,014.56	46.07	44.733	
10,800.00	8,803.00	8,735.17	8,686.72	46.38	32.66	36.87	-144.27	721.51	2,160.43	2,114.36	46.07	46.894	
10,900.00	8,803.00	8,730.69	8,682.27	47.59	32.64	35.58	-144.08	720.92	2,260.24	2,214.16	46.08	49.055	
11,000.00	8,803.00	8,726.20	8,677.83	48.83	32.62	34.34	-143.89	720.33	2,360.05	2,313.97	46.08	51.214	
11,100.00	8,803.00	8,721.72	8,673.39	50.09	32.60	33.16	-143.69	719.73	2,459.87	2,413.78	46.09	53.373	
11,200.00	8,803.00	8,717.23	8,668.95	51.37	32.59	32.04	-143.50	719.14	2,559.70	2,513.60	46.10	55.531	
11,300.00	8,803.00	8,712.75	8,664.51	52.68	32.57	30.97	-143.30	718.55	2,659.53	2,613.43	46.10	57.687	
11,400.00	8,803.00	8,708.26	8,660.07	54.00	32.55	29.94	-143.11	717.95	2,759.37	2,713.26	46.11	59.842	
11,500.00	8,803.00	8,703.78	8,655.63	55.34	32.53	28.96	-142.91	717.36	2,859.21	2,813.09	46.12	61.996	
11,600.00	8,803.00	8,699.29	8,651.18	56.69	32.51	28.02	-142.72	716.77	2,959.06	2,912.93	46.13	64.148	
11,700.00	8,803.00	14,949.24	11,823.03	58.07	65.83	175.31	3,019.15	853.82	3,039.85	2,994.38	45.47	66.854	
11,800.00	8,803.00	15,049.18	11,819.54	59.45	67.09	175.30	3,119.02	852.72	3,036.38	2,990.06	46.33	65.545	
11,900.00	8,803.00	15,149.12	11,816.06	60.85	68.36	175.29	3,218.89	851.62	3,032.91	2,985.72	47.19	64.267	
12,000.00	8,803.00	15,249.06	11,812.58	62.26	69.65	175.29	3,318.76	850.52	3,029.43	2,981.36	48.07	63.022	
12,100.00	8,803.00	15,348.99	11,809.09	63.69	70.96	175.28	3,418.63	849.43	3,025.96	2,977.00	48.96	61.809	
12,200.00	8,803.00	15,448.93	11,805.61	65.12	72.27	175.28	3,518.51	848.33	3,022.49	2,972.63	49.85	60.628	
12,300.00	8,803.00	15,548.87	11,802.12	66.56	73.61	175.27	3,618.38	847.23	3,019.01	2,968.25	50.76	59.478	
12,400.00	8,803.00	15,648.81	11,798.64	68.02	74.95	175.27	3,718.25	846.13	3,015.54	2,963.87	51.67	58.358	
12,500.00	8,803.00	15,748.75	11,795.16	69.48	76.31	175.26	3,818.12	845.03	3,012.07	2,959.47	52.60	57.269	
12,600.00	8,803.00	15,848.69	11,791.67	70.95	77.67	175.26	3,918.00	843.93	3,008.59	2,955.07	53.53	56.209	
12,700.00	8,803.00	15,948.63	11,788.19	72.43	79.05	175.25	4,017.87	842.83	3,005.12	2,950.66	54.46	55.178	
12,800.00	8,803.00	16,048.57	11,784.71	73.91	80.44	175.24	4,117.74	841.73	3,001.65	2,946.24	55.41	54.175	
12,900.00	8,803.00	16,148.51	11,781.22	75.41	81.84	175.24	4,217.61	840.63	2,998.17	2,941.82	56.36	53.200	
13,000.00	8,803.00	16,248.45	11,777.74	76.91	83.25	175.23	4,317.49	839.53	2,994.70	2,937.38	57.31	52.251	
13,100.00	8,803.00	16,348.39	11,774.26	78.41	84.66	175.23	4,417.36	838.43	2,991.22	2,932.95	58.28	51.328	
13,200.00	8,803.00	16,448.33	11,770.77	79.92	86.09	175.22	4,517.23	837.33	2,987.75	2,928.51	59.24	50.431	
13,300.00	8,803.00	16,548.27	11,767.29	81.44	87.52	175.22	4,617.10	836.23	2,984.28	2,924.06	60.22	49.558	
13,400.00	8,803.00	16,648.20	11,763.80	82.96	88.96	175.21	4,716.98	835.13	2,980.80	2,919.61	61.20	48.708	
13,500.00	8,803.00	16,748.14	11,760.32	84.49	90.41	175.21	4,816.85	834.03	2,977.33	2,915.15	62.18	47.882	
13,600.00	8,803.00	16,848.08	11,756.84	86.02	91.86	175.20	4,916.72	832.93	2,973.86	2,910.69	63.17	47.078	
13,700.00	8,803.00	16,948.02	11,753.35	87.56	93.32	175.19	5,016.59	831.84	2,970.39	2,906.22	64.16	46.295	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.00	8,803.00	17,047.96	11,749.87	89.10	94.79	175.19	5,116.47	830.74	2,966.91	2,901.75	65.16	45.534	
13,900.00	8,803.00	17,147.90	11,746.39	90.64	96.26	175.18	5,216.34	829.64	2,963.44	2,897.28	66.16	44.792	
14,000.00	8,803.00	17,247.84	11,742.90	92.19	97.74	175.18	5,316.21	828.54	2,959.97	2,892.80	67.16	44.071	
14,100.00	8,803.00	17,347.78	11,739.42	93.74	99.23	175.17	5,416.08	827.44	2,956.49	2,888.32	68.17	43.368	
14,200.00	8,803.00	17,447.72	11,735.94	95.30	100.72	175.16	5,515.96	826.34	2,953.02	2,883.84	69.18	42.683	
14,300.00	8,803.00	17,547.66	11,732.45	96.86	102.21	175.16	5,615.83	825.24	2,949.55	2,879.35	70.20	42.016	
14,400.00	8,803.00	17,647.60	11,728.97	98.42	103.71	175.15	5,715.70	824.14	2,946.07	2,874.86	71.22	41.367	
14,500.00	8,803.00	17,747.54	11,725.48	99.98	105.22	175.15	5,815.57	823.04	2,942.60	2,870.36	72.24	40.733	
14,600.00	8,803.00	17,847.48	11,722.00	101.55	106.72	175.14	5,915.45	821.94	2,939.13	2,865.86	73.27	40.116	
14,700.00	8,803.00	17,947.41	11,718.52	103.12	108.24	175.14	6,015.32	820.84	2,935.65	2,861.36	74.29	39.515	
14,800.00	8,803.00	18,047.35	11,715.03	104.69	109.75	175.13	6,115.19	819.74	2,932.18	2,856.86	75.32	38.928	
14,900.00	8,803.00	18,147.29	11,711.55	106.27	111.27	175.12	6,215.06	818.64	2,928.71	2,852.35	76.36	38.356	
15,000.00	8,803.00	18,247.23	11,708.07	107.85	112.80	175.12	6,314.94	817.54	2,925.24	2,847.85	77.39	37.798	
15,100.00	8,803.00	18,347.17	11,704.58	109.42	114.33	175.11	6,414.81	816.44	2,921.76	2,843.33	78.43	37.254	
15,200.00	8,803.00	18,447.11	11,701.10	111.01	115.86	175.11	6,514.68	815.35	2,918.29	2,838.82	79.47	36.722	
15,300.00	8,803.00	18,547.05	11,697.61	112.59	117.39	175.10	6,614.55	814.25	2,914.82	2,834.31	80.51	36.204	
15,400.00	8,803.00	18,646.99	11,694.13	114.18	118.93	175.09	6,714.43	813.15	2,911.35	2,829.79	81.56	35.697	
15,500.00	8,803.00	18,746.93	11,690.65	115.76	120.47	175.09	6,814.30	812.05	2,907.87	2,825.27	82.60	35.203	
15,600.00	8,803.00	18,846.87	11,687.16	117.35	122.01	175.08	6,914.17	810.95	2,904.40	2,820.75	83.65	34.720	
15,700.00	8,803.00	18,946.81	11,683.68	118.94	123.56	175.08	7,014.04	809.85	2,900.93	2,816.23	84.70	34.249	
15,800.00	8,803.00	19,046.75	11,680.20	120.54	125.11	175.07	7,113.92	808.75	2,897.46	2,811.70	85.75	33.788	
15,900.00	8,803.00	19,146.69	11,676.71	122.13	126.66	175.06	7,213.79	807.65	2,893.98	2,807.17	86.81	33.337	
16,000.00	8,803.00	19,246.62	11,673.23	123.73	128.21	175.06	7,313.66	806.55	2,890.51	2,802.65	87.86	32.897	
16,100.00	8,803.00	19,346.56	11,669.75	125.33	129.77	175.05	7,413.53	805.45	2,887.04	2,798.12	88.92	32.467	
16,200.00	8,803.00	19,446.50	11,666.26	126.92	131.33	175.05	7,513.41	804.35	2,883.57	2,793.58	89.98	32.046	
16,300.00	8,803.00	19,546.44	11,662.78	128.52	132.89	175.04	7,613.28	803.25	2,880.09	2,789.05	91.04	31.635	
16,400.00	8,803.00	19,646.38	11,659.29	130.13	134.45	175.03	7,713.15	802.15	2,876.62	2,784.52	92.10	31.232	
16,500.00	8,803.00	19,746.32	11,655.81	131.73	136.02	175.03	7,813.02	801.05	2,873.15	2,779.98	93.17	30.838	
16,600.00	8,803.00	19,846.26	11,652.33	133.33	137.59	175.02	7,912.89	799.95	2,869.68	2,775.44	94.23	30.453	
16,700.00	8,803.00	19,946.20	11,648.84	134.94	139.16	175.02	8,012.77	798.86	2,866.20	2,770.90	95.30	30.076	
16,800.00	8,803.00	20,046.14	11,645.36	136.55	140.73	175.01	8,112.64	797.76	2,862.73	2,766.36	96.37	29.706	
16,900.00	8,803.00	20,146.08	11,641.88	138.15	142.30	175.00	8,212.51	796.66	2,859.26	2,761.82	97.44	29.345	
17,000.00	8,803.00	20,246.02	11,638.39	139.76	143.87	175.00	8,312.38	795.56	2,855.79	2,757.28	98.51	28.991	
17,100.00	8,803.00	20,345.96	11,634.91	141.37	145.45	174.99	8,412.26	794.46	2,852.31	2,752.74	99.58	28.644	
17,200.00	8,803.00	20,445.90	11,631.43	142.98	147.03	174.98	8,512.13	793.36	2,848.84	2,748.19	100.65	28.304	
17,300.00	8,803.00	20,545.83	11,627.94	144.59	148.61	174.98	8,612.00	792.26	2,845.37	2,743.65	101.72	27.971	
17,400.00	8,803.00	20,645.77	11,624.46	146.21	150.19	174.97	8,711.87	791.16	2,841.90	2,739.10	102.80	27.645	
17,500.00	8,803.00	20,745.71	11,620.97	147.82	151.77	174.97	8,811.75	790.06	2,838.43	2,734.55	103.88	27.325	
17,600.00	8,803.00	20,845.65	11,617.49	149.43	153.36	174.96	8,911.62	788.96	2,834.95	2,730.00	104.95	27.012	
17,700.00	8,803.00	20,945.59	11,614.01	151.05	154.94	174.95	9,011.49	787.86	2,831.48	2,725.45	106.03	26.704	
17,800.00	8,803.00	21,045.53	11,610.52	152.67	156.53	174.95	9,111.36	786.76	2,828.01	2,720.90	107.11	26.403	
17,900.00	8,803.00	21,145.47	11,607.04	154.28	158.12	174.94	9,211.24	785.66	2,824.54	2,716.35	108.19	26.107	
18,000.00	8,803.00	21,245.41	11,603.56	155.90	159.71	174.93	9,311.11	784.56	2,821.07	2,711.80	109.27	25.817	
18,100.00	8,803.00	21,345.35	11,600.07	157.52	161.30	174.93	9,410.98	783.46	2,817.60	2,707.24	110.35	25.533	
18,200.00	8,803.00	21,445.29	11,596.59	159.14	162.89	174.92	9,510.85	782.36	2,814.12	2,702.69	111.43	25.254	
18,300.00	8,803.00	21,545.23	11,593.10	160.76	164.49	174.92	9,610.73	781.27	2,810.65	2,698.13	112.52	24.980	
18,400.00	8,803.00	21,645.17	11,589.62	162.38	166.08	174.91	9,710.60	780.17	2,807.18	2,693.58	113.60	24.711	
18,500.00	8,803.00	21,745.11	11,586.14	164.00	167.68	174.90	9,810.47	779.07	2,803.71	2,689.02	114.69	24.447	
18,600.00	8,803.00	21,845.04	11,582.65	165.62	169.27	174.90	9,910.34	777.97	2,800.24	2,684.46	115.77	24.187	
18,700.00	8,803.00	21,944.98	11,579.17	167.24	170.87	174.89	10,010.22	776.87	2,796.77	2,679.91	116.86	23.933	
18,800.00	8,803.00	22,044.92	11,575.69	168.87	172.47	174.88	10,110.09	775.77	2,793.29	2,675.35	117.95	23.683	
18,900.00	8,803.00	22,109.36	11,573.44	170.49	173.50	174.88	10,174.48	775.06	2,790.05	2,671.25	118.80	23.485	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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

Survey Program: 0-OWSG (Rev2) MWD

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,961.37	8,803.00	22,109.36	11,573.44	171.49	173.50	174.88	10,174.48	775.06	2,789.37	2,670.34	119.03	23.434	
18,961.77	8,803.00	22,109.36	11,573.44	171.49	173.50	174.88	10,174.48	775.06	2,789.37	2,670.34	119.03	23.433	

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	12.17	75.37	16.26	77.57				
100.00	100.00	91.50	91.50	0.13	0.13	12.17	75.37	16.26	77.10	76.92	0.18	427.515	
200.00	200.00	191.50	191.50	0.48	0.47	12.17	75.37	16.26	77.10	76.43	0.67	114.342	
300.00	300.00	291.50	291.50	0.84	0.83	12.17	75.37	16.26	77.10	75.92	1.18	65.273	
400.00	400.00	391.50	391.50	1.20	1.19	12.17	75.37	16.26	77.10	75.42	1.69	45.673	
500.00	500.00	491.50	491.50	1.56	1.55	12.17	75.37	16.26	77.10	74.91	2.20	35.125	
600.00	600.00	591.50	591.50	1.92	1.90	12.17	75.37	16.26	77.10	74.40	2.70	28.535	
700.00	700.00	691.50	691.50	2.28	2.26	12.17	75.37	16.26	77.10	73.89	3.21	24.027	
800.00	800.00	791.50	791.50	2.63	2.62	12.17	75.37	16.26	77.10	73.39	3.72	20.749	
900.00	900.00	891.50	891.50	2.99	2.98	12.17	75.37	16.26	77.10	72.88	4.22	18.258	
1,000.00	1,000.00	991.50	991.50	3.35	3.34	12.17	75.37	16.26	77.10	72.37	4.73	16.301	
1,100.00	1,100.00	1,091.50	1,091.50	3.71	3.70	12.17	75.37	16.26	77.10	71.87	5.24	14.723	
1,200.00	1,200.00	1,191.50	1,191.50	4.07	4.05	12.17	75.37	16.26	77.10	71.36	5.74	13.424	
1,300.00	1,300.00	1,291.50	1,291.50	4.43	4.41	12.17	75.37	16.26	77.10	70.85	6.25	12.335	
1,400.00	1,400.00	1,391.50	1,391.50	4.79	4.77	12.17	75.37	16.26	77.10	70.35	6.76	11.410	
1,500.00	1,500.00	1,491.50	1,491.50	5.14	5.13	12.17	75.37	16.26	77.10	69.84	7.26	10.614	
1,600.00	1,600.00	1,591.50	1,591.50	5.50	5.49	12.17	75.37	16.26	77.10	69.33	7.77	9.921	
1,700.00	1,700.00	1,691.50	1,691.50	5.86	5.85	12.17	75.37	16.26	77.10	68.83	8.28	9.314	
1,800.00	1,800.00	1,791.50	1,791.50	6.22	6.21	12.17	75.37	16.26	77.10	68.32	8.79	8.776	
1,900.00	1,900.00	1,891.50	1,891.50	6.58	6.56	12.17	75.37	16.26	77.10	67.81	9.29	8.297	
2,000.00	2,000.00	1,991.50	1,991.50	6.94	6.92	12.17	75.37	16.26	77.10	67.30	9.80	7.868	CC
2,100.00	2,099.99	2,091.49	2,091.49	7.28	7.28	-97.96	75.37	16.26	77.27	66.98	10.30	7.504	ES
2,200.00	2,199.91	2,191.41	2,191.41	7.62	7.64	-100.81	75.37	16.26	77.92	67.13	10.79	7.221	
2,300.00	2,299.69	2,291.19	2,291.19	7.96	8.00	-105.42	75.37	16.26	79.40	68.12	11.28	7.037	
2,400.00	2,399.27	2,390.77	2,390.77	8.31	8.35	-111.51	75.37	16.26	82.32	70.54	11.78	6.988	SF
2,449.99	2,448.95	2,440.45	2,440.45	8.48	8.53	-114.96	75.37	16.26	84.52	72.49	12.03	7.027	
2,500.00	2,498.61	2,490.11	2,490.11	8.66	8.71	-118.45	75.37	16.26	87.18	74.90	12.28	7.100	
2,600.00	2,597.92	2,589.42	2,589.42	9.01	9.07	-124.77	75.37	16.26	93.38	80.60	12.78	7.309	
2,700.00	2,697.23	2,688.73	2,688.73	9.37	9.42	-130.26	75.37	16.26	100.58	87.30	13.28	7.576	
2,800.00	2,796.53	2,788.03	2,788.03	9.74	9.78	-134.98	75.37	16.26	108.57	94.80	13.77	7.882	
2,900.00	2,895.84	2,887.34	2,887.34	10.10	10.13	-139.04	75.37	16.26	117.20	102.93	14.27	8.212	
3,000.00	2,995.15	2,986.65	2,986.65	10.47	10.49	-142.52	75.37	16.26	126.34	111.56	14.77	8.553	
3,100.00	3,094.45	3,085.95	3,085.95	10.84	10.85	-145.53	75.37	16.26	135.87	120.60	15.27	8.898	
3,200.00	3,193.76	3,185.26	3,185.26	11.22	11.20	-148.15	75.37	16.26	145.74	129.97	15.77	9.241	
3,300.00	3,293.07	3,284.57	3,284.57	11.59	11.56	-150.42	75.37	16.26	155.86	139.59	16.27	9.580	
3,400.00	3,392.38	3,383.88	3,383.88	11.97	11.91	-152.42	75.37	16.26	166.20	149.43	16.77	9.911	
3,500.00	3,491.68	3,483.18	3,483.18	12.35	12.27	-154.18	75.37	16.26	176.72	159.45	17.27	10.232	
3,600.00	3,590.99	3,582.49	3,582.49	12.73	12.63	-155.75	75.37	16.26	187.38	169.61	17.77	10.544	
3,700.00	3,690.30	3,681.80	3,681.80	13.12	12.98	-157.14	75.37	16.26	198.17	179.89	18.27	10.845	
3,800.00	3,789.60	3,781.10	3,781.10	13.50	13.34	-158.39	75.37	16.26	209.06	190.28	18.77	11.135	
3,900.00	3,888.91	3,880.41	3,880.41	13.89	13.69	-159.52	75.37	16.26	220.04	200.76	19.28	11.415	
4,000.00	3,988.22	3,979.72	3,979.72	14.27	14.05	-160.54	75.37	16.26	231.09	211.31	19.78	11.684	
4,100.00	4,087.52	4,079.02	4,079.02	14.66	14.41	-161.46	75.37	16.26	242.22	221.93	20.28	11.943	
4,200.00	4,186.83	4,178.33	4,178.33	15.05	14.76	-162.31	75.37	16.26	253.39	232.61	20.78	12.191	
4,300.00	4,286.14	4,277.64	4,277.64	15.44	15.12	-163.08	75.37	16.26	264.62	243.33	21.29	12.430	
4,400.00	4,385.44	4,376.94	4,376.94	15.83	15.47	-163.79	75.37	16.26	275.89	254.10	21.79	12.660	
4,500.00	4,484.75	4,476.25	4,476.25	16.22	15.83	-164.44	75.37	16.26	287.21	264.91	22.30	12.881	
4,600.00	4,584.06	4,575.56	4,575.56	16.61	16.19	-165.05	75.37	16.26	298.55	275.75	22.80	13.094	
4,700.00	4,683.36	4,674.86	4,674.86	17.01	16.54	-165.61	75.37	16.26	309.93	286.62	23.31	13.299	
4,800.00	4,782.67	4,774.17	4,774.17	17.40	16.90	-166.13	75.37	16.26	321.33	297.52	23.81	13.495	
4,900.00	4,881.98	4,873.48	4,873.48	17.79	17.25	-166.61	75.37	16.26	332.76	308.44	24.32	13.685	
5,000.00	4,981.29	4,972.79	4,972.79	18.19	17.61	-167.07	75.37	16.26	344.20	319.38	24.82	13.868	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,080.59	5,077.71	5,077.70	18.58	17.97	-167.59	74.62	16.52	355.10	329.76	25.34	14.015	
5,200.00	5,179.90	5,185.01	5,184.94	18.98	18.32	-168.39	71.15	17.75	363.96	338.12	25.84	14.084	
5,300.00	5,279.21	5,292.47	5,292.19	19.37	18.67	-169.45	64.82	19.98	370.75	344.41	26.33	14.079	
5,400.00	5,378.51	5,399.92	5,399.18	19.77	19.02	-170.77	55.65	23.22	375.56	348.74	26.82	14.004	
5,500.00	5,477.82	5,499.45	5,498.17	20.16	19.35	-172.11	45.83	26.68	379.51	352.21	27.30	13.900	
5,600.00	5,577.13	5,598.98	5,597.16	20.56	19.68	-173.42	36.02	30.14	383.67	355.88	27.79	13.807	
5,700.00	5,676.43	5,698.51	5,696.14	20.96	20.01	-174.70	26.21	33.60	388.03	359.75	28.28	13.722	
5,800.00	5,775.74	5,798.04	5,795.13	21.35	20.34	-175.95	16.40	37.06	392.57	363.80	28.77	13.646	
5,900.00	5,875.05	5,897.57	5,894.11	21.75	20.67	-177.18	6.59	40.52	397.30	368.04	29.26	13.578	
6,000.00	5,974.35	5,997.10	5,993.09	22.15	21.01	-178.37	-3.22	43.98	402.21	372.46	29.75	13.518	
6,100.00	6,073.66	6,096.63	6,092.08	22.55	21.35	-179.54	-13.03	47.44	407.29	377.04	30.25	13.464	
6,200.00	6,172.97	6,196.15	6,191.06	22.95	21.69	179.33	-22.84	50.90	412.54	381.79	30.75	13.416	
6,300.00	6,272.27	6,295.68	6,290.05	23.35	22.04	178.22	-32.65	54.36	417.94	386.69	31.25	13.374	
6,400.00	6,371.58	6,395.21	6,389.03	23.74	22.38	177.14	-42.46	57.82	423.50	391.75	31.75	13.337	
6,500.00	6,470.89	6,494.74	6,488.02	24.14	22.73	176.09	-52.27	61.28	429.21	396.95	32.26	13.306	
6,600.00	6,570.20	6,594.27	6,587.00	24.54	23.08	175.06	-62.08	64.74	435.05	402.29	32.76	13.278	
6,700.00	6,669.50	6,693.80	6,685.98	24.94	23.43	174.07	-71.89	68.20	441.03	407.76	33.27	13.255	
6,800.00	6,768.81	6,793.33	6,784.97	25.34	23.78	173.10	-81.70	71.66	447.14	413.36	33.78	13.236	
6,900.00	6,868.12	6,892.86	6,883.95	25.74	24.13	172.16	-91.51	75.12	453.38	419.08	34.29	13.220	
7,000.00	6,967.42	6,992.39	6,982.94	26.14	24.48	171.24	-101.32	78.58	459.73	424.92	34.81	13.208	
7,043.93	7,011.05	7,036.12	7,026.42	26.32	24.64	170.84	-105.63	80.10	462.56	427.53	35.03	13.203	
7,100.00	7,066.78	7,091.94	7,081.94	26.54	24.84	170.35	-111.13	82.05	465.80	430.47	35.32	13.187	
7,200.00	7,166.37	7,191.57	7,181.03	26.93	25.20	169.43	-120.96	85.51	469.65	433.81	35.84	13.105	
7,300.00	7,266.16	7,291.24	7,280.15	27.30	25.55	168.45	-130.78	88.97	471.06	434.71	36.35	12.958	
7,400.00	7,366.09	7,390.86	7,379.22	27.65	25.91	167.41	-140.60	92.44	470.06	433.19	36.87	12.750	
7,493.92	7,460.00	7,484.33	7,472.19	27.97	26.25	-84.47	-149.81	95.69	466.94	429.59	37.35	12.503	
7,500.00	7,466.08	7,490.38	7,478.20	27.99	26.27	-84.54	-150.41	95.90	466.67	429.29	37.38	12.485	
7,600.00	7,566.08	7,589.83	7,577.11	28.31	26.63	-85.71	-160.21	99.36	462.35	424.47	37.88	12.205	
7,700.00	7,666.08	7,689.28	7,676.01	28.64	26.99	-86.90	-170.01	102.81	458.23	419.84	38.39	11.936	
7,800.00	7,766.08	7,788.73	7,774.92	28.96	27.36	-88.11	-179.82	106.27	454.31	415.40	38.90	11.679	
7,900.00	7,866.08	7,884.31	7,870.09	29.29	27.70	-89.16	-188.13	109.21	451.02	411.62	39.40	11.448	
8,000.00	7,966.08	7,980.24	7,965.79	29.62	28.05	-89.93	-194.22	111.35	448.72	408.84	39.88	11.251	
8,100.00	8,066.08	8,076.43	8,061.89	29.95	28.38	-90.42	-198.05	112.70	447.33	406.97	40.36	11.084	
8,200.00	8,166.08	8,172.76	8,158.21	30.28	28.72	-90.62	-199.60	113.25	446.78	405.95	40.83	10.942	
8,229.30	8,195.38	8,201.43	8,186.88	30.38	28.82	-90.63	-199.63	113.26	446.77	405.80	40.97	10.905	
8,263.96	8,230.04	8,236.09	8,221.54	30.49	28.94	-90.63	-199.63	113.26	446.77	405.63	41.14	10.860	
8,300.00	8,266.05	8,272.10	8,257.55	30.61	29.06	-96.46	-199.63	113.26	446.89	405.58	41.32	10.817	
8,350.00	8,315.76	8,321.80	8,307.26	30.77	29.24	-97.07	-199.63	113.26	447.52	405.96	41.56	10.767	
8,400.00	8,364.80	8,370.85	8,356.30	30.92	29.41	-98.13	-199.63	113.26	448.82	407.01	41.81	10.734	
8,450.00	8,412.83	8,418.88	8,404.33	31.07	29.57	-99.59	-199.63	113.26	451.05	408.99	42.06	10.724	
8,500.00	8,459.46	8,465.51	8,450.96	31.20	29.74	-101.34	-199.63	113.26	454.55	412.25	42.30	10.745	
8,550.00	8,504.34	8,510.39	8,495.84	31.33	29.89	-103.26	-199.63	113.26	459.76	417.21	42.54	10.806	
8,600.00	8,547.14	8,553.19	8,538.64	31.44	30.04	-105.21	-199.63	113.26	467.11	424.34	42.78	10.920	
8,650.00	8,587.53	8,593.58	8,579.03	31.54	30.18	-107.07	-199.63	113.26	477.08	434.08	43.00	11.095	
8,700.00	8,625.19	8,631.24	8,616.69	31.63	30.32	-108.68	-199.63	113.26	490.05	446.84	43.21	11.341	
8,750.00	8,659.85	8,665.90	8,651.35	31.71	30.44	-109.92	-199.63	113.26	506.34	462.94	43.40	11.667	
8,800.00	8,691.23	8,697.28	8,682.73	31.79	30.55	-110.66	-199.63	113.26	526.14	482.57	43.57	12.076	
8,850.00	8,719.11	8,725.16	8,710.61	31.85	30.64	-110.79	-199.63	113.26	549.51	505.79	43.72	12.570	
8,900.00	8,743.26	8,749.31	8,734.76	31.92	30.73	-110.20	-199.63	113.26	576.37	532.53	43.84	13.148	
8,950.00	8,763.51	8,769.56	8,755.01	31.99	30.80	-108.75	-199.63	113.26	606.53	562.60	43.93	13.806	
9,000.00	8,779.70	8,785.75	8,771.20	32.08	30.85	-106.32	-199.63	113.26	639.68	595.68	44.00	14.537	
9,050.00	8,791.70	8,797.75	8,783.20	32.18	30.90	-102.76	-199.63	113.26	675.45	631.40	44.05	15.334	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,100.00	8,799.43	8,805.48	8,790.93	32.32	30.92	-97.97	-199.63	113.26	713.40	669.33	44.07	16.187	
9,150.00	8,802.83	8,808.88	8,794.33	32.48	30.94	-91.91	-199.63	113.26	753.07	708.99	44.07	17.086	
9,163.96	8,803.00	8,809.05	8,794.50	32.53	30.94	-90.00	-199.63	113.26	764.39	720.32	44.07	17.344	
9,200.00	8,803.00	8,809.05	8,794.50	32.67	30.94	-90.00	-199.63	113.26	793.87	749.81	44.06	18.016	
9,300.00	8,803.00	8,809.05	8,794.50	33.10	30.94	-90.00	-199.63	113.26	877.01	832.97	44.04	19.913	
9,400.00	8,803.00	8,809.05	8,794.50	33.60	30.94	-90.00	-199.63	113.26	961.63	917.61	44.02	21.845	
9,480.63	8,803.00	8,809.05	8,794.50	34.05	30.94	-90.00	-199.63	113.26	1,030.62	986.62	44.01	23.420	
9,500.00	8,803.00	8,809.05	8,794.50	34.16	30.94	-90.00	-199.63	113.26	1,047.31	1,003.31	44.00	23.802	
9,600.00	8,803.00	8,809.05	8,794.50	34.79	30.94	-90.00	-199.63	113.26	1,134.82	1,090.84	43.99	25.798	
9,700.00	8,803.00	8,809.05	8,794.50	35.48	30.94	-90.00	-199.63	113.26	1,224.25	1,180.27	43.98	27.838	
9,800.00	8,803.00	8,809.05	8,794.50	36.23	30.94	-90.00	-199.63	113.26	1,315.20	1,271.23	43.97	29.911	
9,900.00	8,803.00	8,809.05	8,794.50	37.04	30.94	-90.00	-199.63	113.26	1,407.37	1,363.41	43.96	32.011	
10,000.00	8,803.00	8,809.05	8,794.50	37.91	30.94	-90.00	-199.63	113.26	1,500.55	1,456.59	43.96	34.133	
10,100.00	8,803.00	8,809.05	8,794.50	38.83	30.94	-90.00	-199.63	113.26	1,594.56	1,550.60	43.96	36.272	
10,200.00	8,803.00	8,809.05	8,794.50	39.79	30.94	-90.00	-199.63	113.26	1,689.25	1,645.29	43.96	38.426	
10,300.00	8,803.00	8,809.05	8,794.50	40.80	30.94	-90.00	-199.63	113.26	1,784.53	1,740.56	43.96	40.591	
10,400.00	8,803.00	8,809.05	8,794.50	41.84	30.94	-90.00	-199.63	113.26	1,880.29	1,836.32	43.97	42.765	
10,500.00	8,803.00	8,809.05	8,794.50	42.93	30.94	-90.00	-199.63	113.26	1,976.48	1,932.50	43.97	44.947	
10,600.00	8,803.00	8,809.05	8,794.50	44.05	30.94	-90.00	-199.63	113.26	2,073.02	2,029.04	43.98	47.135	
10,700.00	8,803.00	8,809.05	8,794.50	45.20	30.94	-90.00	-199.63	113.26	2,169.88	2,125.89	43.99	49.329	
10,800.00	8,803.00	8,809.05	8,794.50	46.38	30.94	-90.00	-199.63	113.26	2,267.01	2,223.01	44.00	51.526	
10,900.00	8,803.00	8,809.05	8,794.50	47.59	30.94	-90.00	-199.63	113.26	2,364.38	2,320.37	44.01	53.726	
11,000.00	8,803.00	8,809.05	8,794.50	48.83	30.94	-90.00	-199.63	113.26	2,461.96	2,417.94	44.02	55.929	
11,100.00	8,803.00	8,809.05	8,794.50	50.09	30.94	-90.00	-199.63	113.26	2,559.73	2,515.70	44.03	58.133	
11,200.00	8,803.00	8,809.05	8,794.50	51.37	30.94	-90.00	-199.63	113.26	2,657.66	2,613.62	44.05	60.339	
11,300.00	8,803.00	8,809.05	8,794.50	52.68	30.94	-90.00	-199.63	113.26	2,755.75	2,711.69	44.06	62.545	
11,400.00	8,803.00	8,809.05	8,794.50	54.00	30.94	-90.00	-199.63	113.26	2,853.96	2,809.89	44.08	64.752	
11,500.00	8,803.00	8,809.05	8,794.50	55.34	30.94	-90.00	-199.63	113.26	2,952.30	2,908.20	44.09	66.958	
11,600.00	8,803.00	8,809.05	8,794.50	56.69	30.94	-90.00	-199.63	113.26	3,050.74	3,006.63	44.11	69.163	
11,700.00	8,803.00	8,809.05	8,794.50	58.07	30.94	-90.00	-199.63	113.26	3,149.28	3,105.15	44.13	71.368	
11,800.00	8,803.00	15,046.31	11,909.38	59.45	66.10	-170.39	3,091.84	77.05	3,160.39	3,111.89	48.50	65.158	
11,900.00	8,803.00	15,146.27	11,906.60	60.85	67.39	-170.38	3,191.75	75.95	3,157.64	3,108.24	49.40	63.916	
12,000.00	8,803.00	15,246.23	11,903.81	62.26	68.69	-170.38	3,291.67	74.85	3,154.89	3,104.58	50.31	62.706	
12,100.00	8,803.00	15,346.20	11,901.03	63.69	70.00	-170.37	3,391.59	73.75	3,152.15	3,100.91	51.23	61.525	
12,200.00	8,803.00	15,446.16	11,898.24	65.12	71.33	-170.36	3,491.50	72.65	3,149.40	3,097.23	52.16	60.375	
12,300.00	8,803.00	15,546.12	11,895.45	66.56	72.68	-170.35	3,591.42	71.55	3,146.65	3,093.54	53.10	59.254	
12,400.00	8,803.00	15,646.08	11,892.67	68.02	74.03	-170.34	3,691.34	70.45	3,143.90	3,089.85	54.05	58.163	
12,500.00	8,803.00	15,746.04	11,889.88	69.48	75.40	-170.33	3,791.25	69.35	3,141.15	3,086.14	55.01	57.101	
12,600.00	8,803.00	15,846.00	11,887.10	70.95	76.78	-170.32	3,891.17	68.26	3,138.40	3,082.43	55.98	56.068	
12,700.00	8,803.00	15,945.96	11,884.31	72.43	78.17	-170.32	3,991.08	67.16	3,135.66	3,078.71	56.95	55.062	
12,800.00	8,803.00	16,045.92	11,881.52	73.91	79.57	-170.31	4,091.00	66.06	3,132.91	3,074.98	57.93	54.085	
12,900.00	8,803.00	16,145.88	11,878.74	75.41	80.98	-170.30	4,190.92	64.96	3,130.16	3,071.25	58.91	53.135	
13,000.00	8,803.00	16,245.85	11,875.95	76.91	82.40	-170.29	4,290.83	63.86	3,127.41	3,067.51	59.90	52.209	
13,100.00	8,803.00	16,345.81	11,873.17	78.41	83.83	-170.28	4,390.75	62.76	3,124.66	3,063.76	60.90	51.308	
13,200.00	8,803.00	16,445.77	11,870.38	79.92	85.26	-170.27	4,490.67	61.66	3,121.92	3,060.01	61.90	50.432	
13,300.00	8,803.00	16,545.73	11,867.60	81.44	86.71	-170.27	4,590.58	60.56	3,119.17	3,056.26	62.91	49.580	
13,400.00	8,803.00	16,645.69	11,864.81	82.96	88.16	-170.26	4,690.50	59.46	3,116.42	3,052.50	63.93	48.751	
13,500.00	8,803.00	16,745.65	11,862.02	84.49	89.61	-170.25	4,790.42	58.36	3,113.67	3,048.73	64.94	47.944	
13,600.00	8,803.00	16,845.61	11,859.24	86.02	91.08	-170.24	4,890.33	57.26	3,110.93	3,044.96	65.97	47.159	
13,700.00	8,803.00	16,945.57	11,856.45	87.56	92.55	-170.23	4,990.25	56.16	3,108.18	3,041.18	67.00	46.393	
13,800.00	8,803.00	17,045.54	11,853.67	89.10	94.02	-170.22	5,090.16	55.06	3,105.43	3,037.40	68.03	45.648	
13,900.00	8,803.00	17,145.50	11,850.88	90.64	95.51	-170.21	5,190.08	53.97	3,102.68	3,033.62	69.07	44.923	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	8,803.00	17,245.46	11,848.09	92.19	97.00	-170.21	5,290.00	52.87	3,099.94	3,029.83	70.11	44.216	
14,100.00	8,803.00	17,345.42	11,845.31	93.74	98.49	-170.20	5,389.91	51.77	3,097.19	3,026.03	71.15	43.528	
14,200.00	8,803.00	17,445.38	11,842.52	95.30	99.99	-170.19	5,489.83	50.67	3,094.44	3,022.24	72.20	42.858	
14,300.00	8,803.00	17,545.34	11,839.74	96.86	101.49	-170.18	5,589.75	49.57	3,091.69	3,018.44	73.26	42.204	
14,400.00	8,803.00	17,645.30	11,836.95	98.42	103.00	-170.17	5,689.66	48.47	3,088.95	3,014.64	74.31	41.568	
14,500.00	8,803.00	17,745.26	11,834.16	99.98	104.51	-170.16	5,789.58	47.37	3,086.20	3,010.83	75.37	40.949	
14,600.00	8,803.00	17,845.22	11,831.38	101.55	106.03	-170.15	5,889.49	46.27	3,083.45	3,007.03	76.43	40.344	
14,700.00	8,803.00	17,945.19	11,828.59	103.12	107.55	-170.14	5,989.41	45.17	3,080.71	3,003.21	77.49	39.755	
14,800.00	8,803.00	18,045.15	11,825.81	104.69	109.07	-170.14	6,089.33	44.07	3,077.96	2,999.40	78.56	39.180	
14,900.00	8,803.00	18,145.11	11,823.02	106.27	110.60	-170.13	6,189.24	42.97	3,075.21	2,995.59	79.63	38.620	
15,000.00	8,803.00	18,245.07	11,820.24	107.85	112.13	-170.12	6,289.16	41.87	3,072.47	2,991.77	80.70	38.073	
15,100.00	8,803.00	18,345.03	11,817.45	109.42	113.66	-170.11	6,389.08	40.77	3,069.72	2,987.95	81.78	37.538	
15,200.00	8,803.00	18,444.99	11,814.66	111.01	115.20	-170.10	6,488.99	39.68	3,066.97	2,984.12	82.85	37.017	
15,300.00	8,803.00	18,544.95	11,811.88	112.59	116.74	-170.09	6,588.91	38.58	3,064.23	2,980.29	83.93	36.508	
15,400.00	8,803.00	18,644.91	11,809.09	114.18	118.29	-170.08	6,688.82	37.48	3,061.48	2,976.47	85.01	36.011	
15,500.00	8,803.00	18,744.87	11,806.31	115.76	119.83	-170.07	6,788.74	36.38	3,058.74	2,972.64	86.10	35.526	
15,600.00	8,803.00	18,844.84	11,803.52	117.35	121.38	-170.06	6,888.66	35.28	3,055.99	2,968.80	87.19	35.051	
15,700.00	8,803.00	18,944.80	11,800.73	118.94	122.94	-170.06	6,988.57	34.18	3,053.24	2,964.97	88.28	34.588	
15,800.00	8,803.00	19,044.76	11,797.95	120.54	124.49	-170.05	7,088.49	33.08	3,050.50	2,961.13	89.37	34.135	
15,900.00	8,803.00	19,144.72	11,795.16	122.13	126.05	-170.04	7,188.41	31.98	3,047.75	2,957.29	90.46	33.692	
16,000.00	8,803.00	19,244.68	11,792.38	123.73	127.61	-170.03	7,288.32	30.88	3,045.01	2,953.45	91.55	33.259	
16,100.00	8,803.00	19,344.64	11,789.59	125.33	129.17	-170.02	7,388.24	29.78	3,042.26	2,949.61	92.65	32.836	
16,200.00	8,803.00	19,444.60	11,786.81	126.92	130.74	-170.01	7,488.15	28.68	3,039.51	2,945.76	93.75	32.422	
16,300.00	8,803.00	19,544.56	11,784.02	128.52	132.30	-170.00	7,588.07	27.58	3,036.77	2,941.92	94.85	32.017	
16,400.00	8,803.00	19,644.53	11,781.23	130.13	133.87	-169.99	7,687.99	26.48	3,034.02	2,938.07	95.95	31.620	
16,500.00	8,803.00	19,744.49	11,778.45	131.73	135.44	-169.98	7,787.90	25.39	3,031.28	2,934.22	97.05	31.233	
16,600.00	8,803.00	19,844.45	11,775.66	133.33	137.02	-169.97	7,887.82	24.29	3,028.53	2,930.37	98.16	30.854	
16,700.00	8,803.00	19,944.41	11,772.88	134.94	138.59	-169.97	7,987.74	23.19	3,025.79	2,926.52	99.26	30.483	
16,800.00	8,803.00	20,044.37	11,770.09	136.55	140.17	-169.96	8,087.65	22.09	3,023.04	2,922.67	100.37	30.120	
16,900.00	8,803.00	20,144.33	11,767.30	138.15	141.75	-169.95	8,187.57	20.99	3,020.30	2,918.82	101.48	29.764	
17,000.00	8,803.00	20,244.29	11,764.52	139.76	143.33	-169.94	8,287.49	19.89	3,017.55	2,914.97	102.58	29.416	
17,100.00	8,803.00	20,344.25	11,761.73	141.37	144.91	-169.93	8,387.40	18.79	3,014.81	2,911.11	103.69	29.074	
17,200.00	8,803.00	20,444.21	11,758.95	142.98	146.49	-169.92	8,487.32	17.69	3,012.06	2,907.26	104.80	28.740	
17,300.00	8,803.00	20,544.18	11,756.16	144.59	148.07	-169.91	8,587.23	16.59	3,009.32	2,903.40	105.92	28.412	
17,400.00	8,803.00	20,644.14	11,753.38	146.21	149.66	-169.90	8,687.15	15.49	3,006.57	2,899.54	107.03	28.091	
17,500.00	8,803.00	20,744.10	11,750.59	147.82	151.25	-169.89	8,787.07	14.39	3,003.83	2,895.68	108.15	27.776	
17,600.00	8,803.00	20,844.06	11,747.80	149.43	152.84	-169.88	8,886.98	13.29	3,001.08	2,891.82	109.26	27.467	
17,700.00	8,803.00	20,944.02	11,745.02	151.05	154.43	-169.87	8,986.90	12.19	2,998.34	2,887.96	110.38	27.164	
17,800.00	8,803.00	21,043.98	11,742.23	152.67	156.02	-169.86	9,086.82	11.10	2,995.59	2,884.09	111.50	26.867	
17,900.00	8,803.00	21,143.94	11,739.45	154.28	157.61	-169.85	9,186.73	10.00	2,992.85	2,880.23	112.62	26.575	
18,000.00	8,803.00	21,243.90	11,736.66	155.90	159.21	-169.85	9,286.65	8.90	2,990.10	2,876.36	113.74	26.289	
18,100.00	8,803.00	21,343.86	11,733.87	157.52	160.80	-169.84	9,386.56	7.80	2,987.36	2,872.50	114.86	26.008	
18,200.00	8,803.00	21,443.83	11,731.09	159.14	162.40	-169.83	9,486.48	6.70	2,984.62	2,868.63	115.98	25.733	
18,300.00	8,803.00	21,543.79	11,728.30	160.76	164.00	-169.82	9,586.40	5.60	2,981.87	2,864.76	117.11	25.462	
18,400.00	8,803.00	21,643.75	11,725.52	162.38	165.59	-169.81	9,686.31	4.50	2,979.13	2,860.89	118.23	25.197	
18,500.00	8,803.00	21,743.71	11,722.73	164.00	167.19	-169.80	9,786.23	3.40	2,976.38	2,857.02	119.36	24.936	
18,600.00	8,803.00	21,843.67	11,719.95	165.62	168.79	-169.79	9,886.15	2.30	2,973.64	2,853.16	120.49	24.681	
18,700.00	8,803.00	21,943.63	11,717.16	167.24	170.40	-169.78	9,986.06	1.20	2,970.90	2,849.29	121.61	24.430	
18,800.00	8,803.00	22,043.59	11,714.37	168.87	172.00	-169.77	10,085.98	0.10	2,968.15	2,845.42	122.74	24.183	
18,900.00	8,803.00	22,124.80	11,712.11	170.49	173.30	-169.76	10,167.15	-0.79	2,965.47	2,841.75	123.72	23.969	
18,961.77	8,803.00	22,124.80	11,712.11	171.49	173.30	-169.76	10,167.15	-0.79	2,964.81	2,840.91	123.89	23.930	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	48.62	75.99	86.25	115.21				
100.00	100.00	92.20	92.20	0.13	0.13	48.62	75.99	86.25	114.95	114.77	0.18	634.848	
200.00	200.00	192.20	192.20	0.48	0.47	48.62	75.99	86.25	114.95	114.27	0.68	170.025	
300.00	300.00	292.20	292.20	0.84	0.83	48.62	75.99	86.25	114.95	113.77	1.18	97.168	
400.00	400.00	392.20	392.20	1.20	1.19	48.62	75.99	86.25	114.95	113.26	1.69	68.020	
500.00	500.00	492.20	492.20	1.56	1.55	48.62	75.99	86.25	114.95	112.75	2.20	52.324	
600.00	600.00	592.20	592.20	1.92	1.91	48.62	75.99	86.25	114.95	112.25	2.70	42.513	
700.00	700.00	692.20	692.20	2.28	2.26	48.62	75.99	86.25	114.95	111.74	3.21	35.801	
800.00	800.00	792.20	792.20	2.63	2.62	48.62	75.99	86.25	114.95	111.23	3.72	30.919	
900.00	900.00	892.20	892.20	2.99	2.98	48.62	75.99	86.25	114.95	110.73	4.22	27.209	
1,000.00	1,000.00	992.20	992.20	3.35	3.34	48.62	75.99	86.25	114.95	110.22	4.73	24.294	
1,100.00	1,100.00	1,092.20	1,092.20	3.71	3.70	48.62	75.99	86.25	114.95	109.71	5.24	21.943	
1,200.00	1,200.00	1,192.20	1,192.20	4.07	4.06	48.62	75.99	86.25	114.95	109.20	5.75	20.007	
1,300.00	1,300.00	1,292.20	1,292.20	4.43	4.42	48.62	75.99	86.25	114.95	108.70	6.25	18.385	
1,400.00	1,400.00	1,392.20	1,392.20	4.79	4.77	48.62	75.99	86.25	114.95	108.19	6.76	17.006	
1,500.00	1,500.00	1,492.20	1,492.20	5.14	5.13	48.62	75.99	86.25	114.95	107.68	7.27	15.819	
1,600.00	1,600.00	1,592.20	1,592.20	5.50	5.49	48.62	75.99	86.25	114.95	107.18	7.77	14.788	
1,700.00	1,700.00	1,692.20	1,692.20	5.86	5.85	48.62	75.99	86.25	114.95	106.67	8.28	13.882	
1,800.00	1,800.00	1,792.20	1,792.20	6.22	6.21	48.62	75.99	86.25	114.95	106.16	8.79	13.081	
1,900.00	1,900.00	1,892.20	1,892.20	6.58	6.57	48.62	75.99	86.25	114.95	105.66	9.29	12.368	
2,000.00	2,000.00	1,992.20	1,992.20	6.94	6.92	48.62	75.99	86.25	114.95	105.15	9.80	11.728	
2,100.00	2,099.99	2,092.19	2,092.19	7.28	7.28	-61.14	75.99	86.25	114.31	104.01	10.30	11.099	
2,200.00	2,199.91	2,192.11	2,192.11	7.62	7.64	-62.91	75.99	86.25	112.47	101.68	10.79	10.422	
2,300.00	2,299.69	2,291.89	2,291.89	7.96	8.00	-65.99	75.99	86.25	109.64	98.36	11.28	9.716	
2,400.00	2,399.27	2,391.47	2,391.47	8.31	8.36	-70.53	75.99	86.25	106.24	94.46	11.78	9.018	
2,449.99	2,448.95	2,441.15	2,441.15	8.48	8.53	-73.41	75.99	86.25	104.51	92.48	12.03	8.687	
2,500.00	2,498.61	2,490.81	2,490.81	8.66	8.71	-76.53	75.99	86.25	102.98	90.70	12.28	8.385	
2,600.00	2,597.92	2,590.12	2,590.12	9.01	9.07	-82.99	75.99	86.25	100.87	88.08	12.78	7.890	
2,700.00	2,697.23	2,689.43	2,689.43	9.37	9.42	-89.63	75.99	86.25	100.11	86.82	13.29	7.532	
2,705.48	2,702.67	2,694.87	2,694.87	9.39	9.44	-90.00	75.99	86.25	100.10	86.79	13.32	7.516	CC, ES
2,800.00	2,796.53	2,788.73	2,788.73	9.74	9.78	-96.29	75.99	86.25	100.72	86.92	13.80	7.299	
2,900.00	2,895.84	2,888.04	2,888.04	10.10	10.14	-102.78	75.99	86.25	102.68	88.37	14.31	7.177	
3,000.00	2,995.15	2,987.35	2,987.35	10.47	10.49	-108.95	75.99	86.25	105.92	91.11	14.82	7.149	
3,100.00	3,094.45	3,086.65	3,086.65	10.84	10.85	-114.70	75.99	86.25	110.32	95.00	15.32	7.201	
3,200.00	3,193.76	3,185.96	3,185.96	11.22	11.20	-119.97	75.99	86.25	115.76	99.93	15.83	7.314	
3,300.00	3,293.07	3,286.63	3,286.62	11.59	11.56	-124.39	75.75	87.20	121.60	105.28	16.33	7.448	
3,400.00	3,392.38	3,387.98	3,387.91	11.97	11.90	-127.41	74.87	90.74	126.68	109.86	16.82	7.531	
3,500.00	3,491.68	3,489.71	3,489.43	12.35	12.24	-129.23	73.33	96.90	130.57	113.25	17.32	7.540	
3,600.00	3,590.99	3,591.66	3,590.97	12.73	12.59	-129.99	71.13	105.71	133.03	115.22	17.81	7.469	
3,700.00	3,690.30	3,693.69	3,692.31	13.12	12.95	-129.78	68.28	117.16	133.99	115.67	18.31	7.317	
3,800.00	3,789.60	3,795.65	3,793.24	13.50	13.31	-128.60	64.77	131.22	133.45	114.63	18.82	7.092	
3,900.00	3,888.91	3,895.66	3,892.01	13.89	13.67	-126.91	60.98	146.40	132.19	112.85	19.34	6.835	
4,000.00	3,988.22	3,995.57	3,990.70	14.27	14.03	-125.19	57.19	161.57	131.05	111.18	19.87	6.595	
4,100.00	4,087.52	4,095.49	4,089.38	14.66	14.39	-123.44	53.41	176.74	130.03	109.63	20.41	6.372	
4,200.00	4,186.83	4,195.40	4,188.07	15.05	14.76	-121.67	49.62	191.91	129.14	108.19	20.95	6.165	
4,300.00	4,286.14	4,295.32	4,286.75	15.44	15.14	-119.87	45.84	207.08	128.37	106.88	21.49	5.973	
4,400.00	4,385.44	4,395.23	4,385.43	15.83	15.52	-118.05	42.05	222.25	127.73	105.69	22.04	5.795	
4,500.00	4,484.75	4,495.15	4,484.12	16.22	15.90	-116.22	38.27	237.42	127.22	104.62	22.59	5.631	
4,600.00	4,584.06	4,595.06	4,582.80	16.61	16.28	-114.37	34.48	252.59	126.84	103.69	23.15	5.479	
4,700.00	4,683.36	4,694.98	4,681.49	17.01	16.67	-112.51	30.69	267.77	126.59	102.88	23.71	5.339	
4,800.00	4,782.67	4,794.89	4,780.17	17.40	17.06	-110.65	26.91	282.94	126.48	102.20	24.27	5.210	
4,834.48	4,816.92	4,829.35	4,814.20	17.53	17.19	-110.01	25.60	288.17	126.47	102.00	24.47	5.169	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,881.98	4,894.81	4,878.86	17.79	17.45	-108.79	23.12	298.11	126.50	101.66	24.84	5.093	
5,000.00	4,981.29	4,994.72	4,977.54	18.19	17.84	-106.92	19.34	313.28	126.65	101.24	25.41	4.985	
5,100.00	5,080.59	5,094.64	5,076.22	18.58	18.23	-105.07	15.55	328.45	126.94	100.96	25.98	4.887	
5,200.00	5,179.90	5,194.55	5,174.91	18.98	18.63	-103.23	11.76	343.62	127.36	100.81	26.55	4.797	
5,300.00	5,279.21	5,294.47	5,273.59	19.37	19.03	-101.40	7.98	358.79	127.91	100.79	27.12	4.717	
5,400.00	5,378.51	5,394.38	5,372.28	19.77	19.43	-99.58	4.19	373.96	128.59	100.90	27.69	4.644	
5,500.00	5,477.82	5,494.30	5,470.96	20.16	19.83	-97.79	0.41	389.13	129.40	101.14	28.27	4.578	
5,600.00	5,577.13	5,594.22	5,569.65	20.56	20.24	-96.02	-3.38	404.30	130.34	101.50	28.84	4.520	
5,700.00	5,676.43	5,694.13	5,668.33	20.96	20.64	-94.28	-7.16	419.47	131.39	101.98	29.41	4.468	
5,800.00	5,775.74	5,794.05	5,767.01	21.35	21.05	-92.57	-10.95	434.64	132.57	102.59	29.98	4.422	
5,900.00	5,875.05	5,893.96	5,865.70	21.75	21.46	-90.89	-14.74	449.81	133.86	103.31	30.55	4.382	
6,000.00	5,974.35	5,993.88	5,964.38	22.15	21.87	-89.24	-18.52	464.98	135.27	104.15	31.12	4.347	
6,100.00	6,073.66	6,093.79	6,063.07	22.55	22.28	-87.63	-22.31	480.15	136.78	105.09	31.69	4.317	
6,200.00	6,172.97	6,193.71	6,161.75	22.95	22.69	-86.06	-26.09	495.32	138.40	106.15	32.25	4.291	
6,300.00	6,272.27	6,293.62	6,260.44	23.35	23.10	-84.52	-29.88	510.49	140.12	107.31	32.82	4.270	
6,400.00	6,371.58	6,393.54	6,359.12	23.74	23.51	-83.02	-33.66	525.66	141.95	108.57	33.38	4.253	
6,500.00	6,470.89	6,493.45	6,457.80	24.14	23.93	-81.56	-37.45	540.83	143.86	109.92	33.94	4.239	
6,600.00	6,570.20	6,593.37	6,556.49	24.54	24.34	-80.14	-41.24	556.00	145.87	111.37	34.50	4.228	
6,700.00	6,669.50	6,693.28	6,655.17	24.94	24.76	-78.76	-45.02	571.17	147.96	112.91	35.05	4.221	
6,800.00	6,768.81	6,793.20	6,753.86	25.34	25.18	-77.41	-48.81	586.34	150.14	114.53	35.61	4.217	
6,900.00	6,868.12	6,893.11	6,852.54	25.74	25.59	-76.11	-52.59	601.51	152.40	116.24	36.16	4.215 SF	
7,000.00	6,967.42	6,993.03	6,951.22	26.14	26.01	-74.85	-56.38	616.69	154.74	118.02	36.71	4.215	
7,043.93	7,011.05	7,036.92	6,994.58	26.32	26.20	-74.30	-58.04	623.35	155.79	118.83	36.95	4.216	
7,100.00	7,066.78	7,092.93	7,049.89	26.54	26.43	-73.50	-60.16	631.85	157.26	120.01	37.26	4.221	
7,200.00	7,166.37	7,192.69	7,148.43	26.93	26.85	-71.42	-63.94	647.00	160.61	122.84	37.77	4.252	
7,300.00	7,266.16	7,292.25	7,246.76	27.30	27.27	-68.60	-67.72	662.12	165.12	126.87	38.25	4.317	
7,400.00	7,366.09	7,391.53	7,344.82	27.65	27.69	-65.18	-71.48	677.19	171.10	132.42	38.68	4.423	
7,493.92	7,460.00	7,484.47	7,436.61	27.97	28.08	47.63	-75.00	691.30	178.39	139.34	39.05	4.568	
7,500.00	7,466.08	7,490.47	7,442.54	27.99	28.10	47.89	-75.23	692.21	178.92	139.85	39.08	4.579	
7,600.00	7,566.08	7,589.24	7,540.09	28.31	28.52	51.81	-78.97	707.21	188.17	148.72	39.45	4.770	
7,700.00	7,666.08	7,688.01	7,637.64	28.64	28.94	55.37	-82.71	722.21	198.22	158.39	39.82	4.977	
7,800.00	7,766.08	7,786.77	7,735.19	28.96	29.35	58.57	-86.45	737.20	208.95	168.75	40.21	5.197	
7,900.00	7,866.08	7,885.54	7,832.74	29.29	29.77	61.45	-90.19	752.20	220.28	179.68	40.60	5.426	
8,000.00	7,966.08	7,984.31	7,930.29	29.62	30.19	64.05	-93.94	767.19	232.11	191.11	41.00	5.661	
8,100.00	8,066.08	8,083.08	8,027.85	29.95	30.61	66.40	-97.68	782.19	244.37	202.96	41.41	5.901	
8,200.00	8,166.08	8,181.85	8,125.40	30.28	31.03	68.52	-101.42	797.19	257.00	215.17	41.83	6.144	
8,263.96	8,230.04	8,245.02	8,187.79	30.49	31.30	69.77	-103.82	806.78	265.25	223.14	42.10	6.300	
8,300.00	8,266.05	8,280.57	8,222.90	30.61	31.45	64.57	-105.16	812.18	269.46	227.22	42.25	6.379	
8,350.00	8,315.76	8,329.53	8,271.26	30.77	31.66	66.04	-107.02	819.61	273.91	231.49	42.41	6.458	
8,400.00	8,364.80	8,377.76	8,318.90	30.92	31.86	68.32	-108.84	826.93	277.03	234.49	42.54	6.512	
8,450.00	8,412.83	8,424.88	8,365.43	31.07	32.06	71.32	-110.63	834.09	279.32	236.69	42.64	6.551	
8,500.00	8,459.46	8,470.53	8,410.52	31.20	32.26	74.90	-112.36	841.02	281.45	238.74	42.71	6.590	
8,550.00	8,504.34	8,514.36	8,453.82	31.33	32.44	78.88	-114.02	847.67	284.18	241.41	42.77	6.644	
8,600.00	8,547.14	8,556.05	8,494.99	31.44	32.62	83.05	-115.60	854.00	288.38	245.53	42.85	6.729	
8,650.00	8,587.53	8,595.27	8,533.73	31.54	32.79	87.14	-117.09	859.96	294.94	251.96	42.97	6.863	
8,700.00	8,625.19	8,631.73	8,569.73	31.63	32.94	90.90	-118.47	865.49	304.65	261.50	43.15	7.060	
8,750.00	8,659.85	8,665.14	8,602.74	31.71	33.09	94.10	-119.73	870.57	318.17	274.78	43.39	7.332	
8,800.00	8,691.23	8,695.26	8,632.49	31.79	33.21	96.53	-120.87	875.14	335.87	292.17	43.70	7.686	
8,850.00	8,719.11	8,721.85	8,658.75	31.85	33.33	98.04	-121.88	879.18	357.88	313.84	44.04	8.125	
8,900.00	8,743.26	8,744.72	8,681.34	31.92	33.43	98.50	-122.75	882.65	384.05	339.64	44.41	8.648	
8,950.00	8,763.51	8,763.68	8,700.07	31.99	33.51	97.78	-123.47	885.53	414.05	369.28	44.76	9.249	
9,000.00	8,779.70	8,778.60	8,714.80	32.08	33.57	95.77	-124.03	887.79	447.40	402.30	45.10	9.921	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

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Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
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Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,050.00	8,791.70	8,789.36	8,725.43	32.18	33.62	92.36	-124.44	889.43	483.57	438.18	45.39	10.653	
9,100.00	8,799.43	8,795.88	8,731.86	32.32	33.64	87.49	-124.69	890.42	521.98	476.34	45.64	11.436	
9,150.00	8,802.83	8,798.11	8,734.06	32.48	33.65	81.21	-124.77	890.76	562.06	516.21	45.85	12.257	
9,163.96	8,803.00	8,797.96	8,733.92	32.53	33.65	79.23	-124.77	890.73	573.48	527.57	45.91	12.492	
9,200.00	8,803.00	8,797.11	8,733.08	32.67	33.65	78.87	-124.73	890.60	603.51	557.49	46.03	13.112	
9,300.00	8,803.00	8,794.38	8,730.38	33.10	33.64	77.64	-124.63	890.19	690.94	644.65	46.29	14.926	
9,400.00	8,803.00	8,791.12	8,727.16	33.60	33.62	75.94	-124.51	889.69	782.70	736.23	46.47	16.843	
9,480.63	8,803.00	8,788.10	8,724.18	34.05	33.61	74.10	-124.39	889.24	858.82	812.25	46.57	18.441	
9,500.00	8,803.00	8,787.34	8,723.43	34.16	33.61	73.93	-124.36	889.12	877.31	830.72	46.59	18.830	
9,600.00	8,803.00	8,783.38	8,719.52	34.79	33.59	73.07	-124.21	888.52	973.28	926.60	46.68	20.850	
9,700.00	8,803.00	8,779.42	8,715.61	35.48	33.57	72.21	-124.06	887.92	1,069.98	1,023.23	46.75	22.888	
9,800.00	8,803.00	8,775.47	8,711.70	36.23	33.56	71.35	-123.91	887.32	1,167.22	1,120.41	46.80	24.938	
9,900.00	8,803.00	8,771.51	8,707.79	37.04	33.54	70.50	-123.76	886.72	1,264.88	1,218.03	46.85	26.999	
10,000.00	8,803.00	8,767.55	8,703.89	37.91	33.52	69.65	-123.61	886.12	1,362.86	1,315.98	46.89	29.067	
10,100.00	8,803.00	8,763.60	8,699.98	38.83	33.51	68.81	-123.46	885.52	1,461.11	1,414.19	46.92	31.142	
10,200.00	8,803.00	8,759.64	8,696.07	39.79	33.49	67.97	-123.31	884.92	1,559.57	1,512.63	46.94	33.221	
10,300.00	8,803.00	8,755.68	8,692.16	40.80	33.47	67.14	-123.16	884.31	1,658.21	1,611.24	46.97	35.305	
10,400.00	8,803.00	8,751.73	8,688.26	41.84	33.46	66.32	-123.01	883.71	1,756.99	1,710.00	46.99	37.391	
10,500.00	8,803.00	8,747.77	8,684.35	42.93	33.44	65.50	-122.86	883.11	1,855.89	1,808.88	47.01	39.480	
10,600.00	8,803.00	8,743.81	8,680.44	44.05	33.42	64.68	-122.71	882.51	1,954.90	1,907.87	47.03	41.571	
10,700.00	8,803.00	8,739.86	8,676.53	45.20	33.41	63.88	-122.56	881.91	2,053.99	2,006.95	47.04	43.663	
10,800.00	8,803.00	8,735.90	8,672.62	46.38	33.39	63.08	-122.41	881.31	2,153.16	2,106.11	47.06	45.756	
10,900.00	8,803.00	8,731.94	8,668.72	47.59	33.37	62.29	-122.26	880.71	2,252.40	2,205.33	47.07	47.851	
11,000.00	8,803.00	8,727.99	8,664.81	48.83	33.35	61.51	-122.11	880.11	2,351.70	2,304.61	47.09	49.945	
11,100.00	8,803.00	8,724.03	8,660.90	50.09	33.34	60.73	-121.96	879.51	2,451.04	2,403.95	47.10	52.040	
11,200.00	8,803.00	8,720.07	8,656.99	51.37	33.32	59.96	-121.81	878.91	2,550.44	2,503.32	47.11	54.135	
11,300.00	8,803.00	8,716.12	8,653.09	52.68	33.30	59.20	-121.66	878.31	2,649.87	2,602.74	47.13	56.230	
11,400.00	8,803.00	8,712.16	8,649.18	54.00	33.29	58.45	-121.51	877.71	2,749.34	2,702.20	47.14	58.324	
11,500.00	8,803.00	8,708.20	8,645.27	55.34	33.27	57.71	-121.37	877.11	2,848.83	2,801.68	47.15	60.417	
11,600.00	8,803.00	8,704.25	8,641.36	56.69	33.25	56.97	-121.22	876.50	2,948.36	2,901.20	47.17	62.510	
11,700.00	8,803.00	8,700.29	8,637.45	58.07	33.24	56.24	-121.07	875.90	3,047.91	3,000.73	47.18	64.602	
11,800.00	8,803.00	8,696.34	8,633.55	59.45	33.22	55.52	-120.92	875.30	3,147.49	3,100.30	47.19	66.693	
11,900.00	8,803.00	8,692.38	8,629.64	60.85	33.20	54.81	-120.77	874.70	3,247.09	3,199.88	47.21	68.783	
12,000.00	8,803.00	15,481.75	12,008.30	62.26	70.94	170.32	3,328.76	1,149.75	3,261.42	3,212.34	49.08	66.456	
12,100.00	8,803.00	15,581.69	12,004.82	63.69	72.22	170.31	3,428.63	1,148.66	3,257.98	3,208.00	49.99	65.174	
12,200.00	8,803.00	15,681.63	12,001.34	65.12	73.52	170.30	3,528.51	1,147.57	3,254.55	3,203.64	50.91	63.924	
12,300.00	8,803.00	15,781.57	11,997.86	66.56	74.84	170.29	3,628.38	1,146.48	3,251.12	3,199.28	51.85	62.708	
12,400.00	8,803.00	15,881.51	11,994.38	68.02	76.16	170.28	3,728.25	1,145.39	3,247.69	3,194.90	52.79	61.524	
12,500.00	8,803.00	15,981.45	11,990.90	69.48	77.50	170.27	3,828.12	1,144.30	3,244.26	3,190.52	53.74	60.371	
12,600.00	8,803.00	16,081.39	11,987.41	70.95	78.85	170.26	3,928.00	1,143.21	3,240.83	3,186.13	54.70	59.249	
12,700.00	8,803.00	16,181.33	11,983.93	72.43	80.21	170.25	4,027.87	1,142.12	3,237.40	3,181.73	55.67	58.158	
12,800.00	8,803.00	16,281.27	11,980.45	73.91	81.59	170.24	4,127.74	1,141.03	3,233.97	3,177.33	56.64	57.097	
12,900.00	8,803.00	16,381.21	11,976.97	75.41	82.97	170.23	4,227.62	1,139.94	3,230.54	3,172.91	57.62	56.064	
13,000.00	8,803.00	16,481.15	11,973.49	76.91	84.36	170.22	4,327.49	1,138.85	3,227.10	3,168.49	58.61	55.060	
13,100.00	8,803.00	16,581.09	11,970.01	78.41	85.76	170.20	4,427.36	1,137.76	3,223.67	3,164.07	59.61	54.084	
13,200.00	8,803.00	16,681.03	11,966.53	79.92	87.17	170.19	4,527.23	1,136.67	3,220.24	3,159.64	60.61	53.133	
13,300.00	8,803.00	16,780.97	11,963.04	81.44	88.59	170.18	4,627.11	1,135.58	3,216.81	3,155.20	61.61	52.209	
13,400.00	8,803.00	16,880.90	11,959.56	82.96	90.02	170.17	4,726.98	1,134.49	3,213.38	3,150.76	62.63	51.310	
13,500.00	8,803.00	16,980.84	11,956.08	84.49	91.45	170.16	4,826.85	1,133.40	3,209.95	3,146.31	63.64	50.436	
13,600.00	8,803.00	17,080.78	11,952.60	86.02	92.89	170.15	4,926.72	1,132.31	3,206.52	3,141.86	64.67	49.584	
13,700.00	8,803.00	17,180.72	11,949.12	87.56	94.34	170.14	5,026.60	1,131.22	3,203.09	3,137.40	65.70	48.756	
13,800.00	8,803.00	17,280.66	11,945.64	89.10	95.79	170.13	5,126.47	1,130.13	3,199.66	3,132.93	66.73	47.950	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.00	8,803.00	17,380.60	11,942.16	90.64	97.26	170.12	5,226.34	1,129.04	3,196.23	3,128.47	67.77	47.166	
14,000.00	8,803.00	17,480.54	11,938.67	92.19	98.72	170.11	5,326.21	1,127.95	3,192.80	3,124.00	68.81	46.402	
14,100.00	8,803.00	17,580.48	11,935.19	93.74	100.19	170.10	5,426.09	1,126.86	3,189.38	3,119.52	69.85	45.660	
14,200.00	8,803.00	17,680.42	11,931.71	95.30	101.67	170.08	5,525.96	1,125.77	3,185.95	3,115.05	70.90	44.937	
14,300.00	8,803.00	17,780.36	11,928.23	96.86	103.16	170.07	5,625.83	1,124.68	3,182.52	3,110.57	71.95	44.234	
14,400.00	8,803.00	17,880.30	11,924.75	98.42	104.64	170.06	5,725.71	1,123.59	3,179.09	3,106.08	73.00	43.547	
14,500.00	8,803.00	17,980.24	11,921.27	99.98	106.14	170.05	5,825.58	1,122.50	3,175.66	3,101.60	74.06	42.878	
14,600.00	8,803.00	18,080.18	11,917.79	101.55	107.64	170.04	5,925.45	1,121.41	3,172.23	3,097.10	75.13	42.226	
14,700.00	8,803.00	18,180.12	11,914.30	103.12	109.14	170.03	6,025.32	1,120.32	3,168.80	3,092.61	76.19	41.590	
14,800.00	8,803.00	18,280.06	11,910.82	104.69	110.64	170.02	6,125.20	1,119.23	3,165.37	3,088.11	77.26	40.971	
14,900.00	8,803.00	18,379.99	11,907.34	106.27	112.15	170.01	6,225.07	1,118.14	3,161.94	3,083.61	78.33	40.366	
15,000.00	8,803.00	18,479.93	11,903.86	107.85	113.67	170.00	6,324.94	1,117.05	3,158.52	3,079.11	79.41	39.777	
15,100.00	8,803.00	18,579.87	11,900.38	109.42	115.19	169.98	6,424.81	1,115.96	3,155.09	3,074.60	80.48	39.202	
15,200.00	8,803.00	18,679.81	11,896.90	111.01	116.71	169.97	6,524.69	1,114.87	3,151.66	3,070.10	81.56	38.642	
15,300.00	8,803.00	18,779.75	11,893.42	112.59	118.23	169.96	6,624.56	1,113.78	3,148.23	3,065.59	82.64	38.095	
15,400.00	8,803.00	18,879.69	11,889.93	114.18	119.76	169.95	6,724.43	1,112.69	3,144.80	3,061.08	83.72	37.562	
15,500.00	8,803.00	18,979.63	11,886.45	115.76	121.30	169.94	6,824.31	1,111.60	3,141.38	3,056.57	84.81	37.041	
15,600.00	8,803.00	19,079.57	11,882.97	117.35	122.83	169.93	6,924.18	1,110.51	3,137.95	3,052.05	85.90	36.532	
15,700.00	8,803.00	19,179.51	11,879.49	118.94	124.37	169.92	7,024.05	1,109.42	3,134.52	3,047.53	86.99	36.034	
15,800.00	8,803.00	19,279.45	11,876.01	120.54	125.91	169.91	7,123.92	1,108.33	3,131.09	3,043.01	88.08	35.548	
15,900.00	8,803.00	19,379.39	11,872.53	122.13	127.45	169.89	7,223.80	1,107.24	3,127.67	3,038.49	89.18	35.073	
16,000.00	8,803.00	19,479.33	11,869.05	123.73	129.00	169.88	7,323.67	1,106.15	3,124.24	3,033.96	90.27	34.608	
16,100.00	8,803.00	19,579.27	11,865.56	125.33	130.55	169.87	7,423.54	1,105.06	3,120.81	3,029.44	91.37	34.155	
16,200.00	8,803.00	19,679.21	11,862.08	126.92	132.10	169.86	7,523.41	1,103.97	3,117.39	3,024.91	92.47	33.712	
16,300.00	8,803.00	19,779.14	11,858.60	128.52	133.65	169.85	7,623.29	1,102.88	3,113.96	3,020.39	93.57	33.279	
16,400.00	8,803.00	19,879.08	11,855.12	130.13	135.21	169.84	7,723.16	1,101.79	3,110.53	3,015.86	94.67	32.855	
16,500.00	8,803.00	19,979.02	11,851.64	131.73	136.77	169.82	7,823.03	1,100.70	3,107.11	3,011.33	95.78	32.441	
16,600.00	8,803.00	20,078.96	11,848.16	133.33	138.33	169.81	7,922.90	1,099.61	3,103.68	3,006.79	96.88	32.035	
16,700.00	8,803.00	20,178.90	11,844.67	134.94	139.89	169.80	8,022.78	1,098.52	3,100.25	3,002.26	97.99	31.638	
16,800.00	8,803.00	20,278.84	11,841.19	136.55	141.46	169.79	8,122.65	1,097.43	3,096.83	2,997.73	99.10	31.249	
16,900.00	8,803.00	20,378.78	11,837.71	138.15	143.02	169.78	8,222.52	1,096.34	3,093.40	2,993.19	100.21	30.869	
17,000.00	8,803.00	20,478.72	11,834.23	139.76	144.59	169.77	8,322.40	1,095.25	3,089.98	2,988.65	101.32	30.496	
17,100.00	8,803.00	20,578.66	11,830.75	141.37	146.16	169.75	8,422.27	1,094.16	3,086.55	2,984.11	102.44	30.131	
17,200.00	8,803.00	20,678.60	11,827.27	142.98	147.74	169.74	8,522.14	1,093.06	3,083.12	2,979.57	103.55	29.773	
17,300.00	8,803.00	20,778.54	11,823.79	144.59	149.31	169.73	8,622.01	1,091.97	3,079.70	2,975.03	104.67	29.423	
17,400.00	8,803.00	20,878.48	11,820.30	146.21	150.89	169.72	8,721.89	1,090.88	3,076.27	2,970.48	105.79	29.079	
17,500.00	8,803.00	20,978.42	11,816.82	147.82	152.46	169.71	8,821.76	1,089.79	3,072.85	2,965.94	106.91	28.743	
17,600.00	8,803.00	21,078.36	11,813.34	149.43	154.04	169.70	8,921.63	1,088.70	3,069.42	2,961.40	108.03	28.414	
17,700.00	8,803.00	21,178.29	11,809.86	151.05	155.62	169.68	9,021.50	1,087.61	3,066.00	2,956.85	109.15	28.091	
17,800.00	8,803.00	21,278.23	11,806.38	152.67	157.20	169.67	9,121.38	1,086.52	3,062.57	2,952.31	110.27	27.774	
17,900.00	8,803.00	21,378.17	11,802.90	154.28	158.79	169.66	9,221.25	1,085.43	3,059.15	2,947.76	111.39	27.463	
18,000.00	8,803.00	21,478.11	11,799.42	155.90	160.37	169.65	9,321.12	1,084.34	3,055.72	2,943.21	112.52	27.158	
18,100.00	8,803.00	21,578.05	11,795.93	157.52	161.96	169.64	9,421.00	1,083.25	3,052.30	2,938.66	113.64	26.859	
18,200.00	8,803.00	21,677.99	11,792.45	159.14	163.55	169.62	9,520.87	1,082.16	3,048.88	2,934.11	114.77	26.566	
18,300.00	8,803.00	21,777.93	11,788.97	160.76	165.13	169.61	9,620.74	1,081.07	3,045.45	2,929.56	115.89	26.278	
18,400.00	8,803.00	21,877.87	11,785.49	162.38	166.72	169.60	9,720.61	1,079.98	3,042.03	2,925.01	117.02	25.996	
18,500.00	8,803.00	21,977.81	11,782.01	164.00	168.32	169.59	9,820.49	1,078.89	3,038.60	2,920.46	118.15	25.719	
18,600.00	8,803.00	22,077.75	11,778.53	165.62	169.91	169.58	9,920.36	1,077.80	3,035.18	2,915.90	119.28	25.446	
18,700.00	8,803.00	22,177.69	11,775.05	167.24	171.50	169.56	10,020.23	1,076.71	3,031.76	2,911.35	120.41	25.179	
18,800.00	8,803.00	22,277.63	11,771.56	168.87	173.10	169.55	10,120.10	1,075.62	3,028.33	2,906.79	121.54	24.916	
18,900.00	8,803.00	22,334.87	11,769.57	170.49	173.97	169.54	10,177.31	1,075.00	3,025.21	2,902.83	122.38	24.720	
18,960.88	8,803.00	22,334.87	11,769.57	171.48	173.97	169.54	10,177.31	1,075.00	3,024.60	2,901.85	122.75	24.641	

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

FRANKLIN MOUNTAIN ENERGY

Total Directional Services

Anticollision Report

total

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,961.77	8,803.00	22,334.87	11,769.57	171.49	173.97	169.54	10,177.31	1,075.00	3,024.60	2,901.84	122.75	24.640	

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

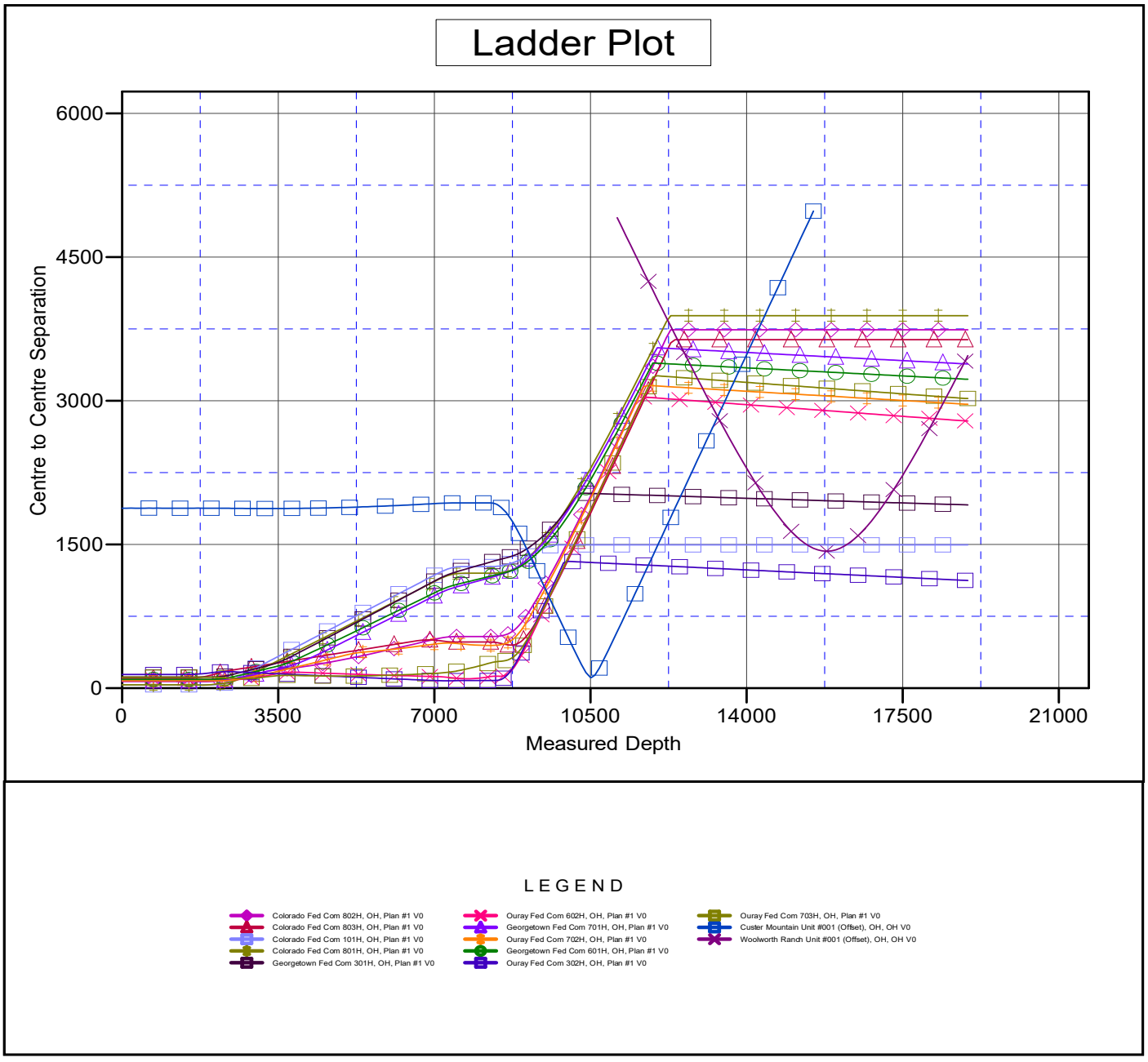
Total Directional Services

Anticollision Report

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Colorado Fed Com 102H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Reference Site:	Colorado Fed Com	**MD Reference:**	3391.9' GE + 30' KB @ 3421.90usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Colorado Fed Com 102H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors 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 3391.9' GE + 30' KB @ 3421.90usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Colorado Fed Com 102H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.51°



Total Directional Services

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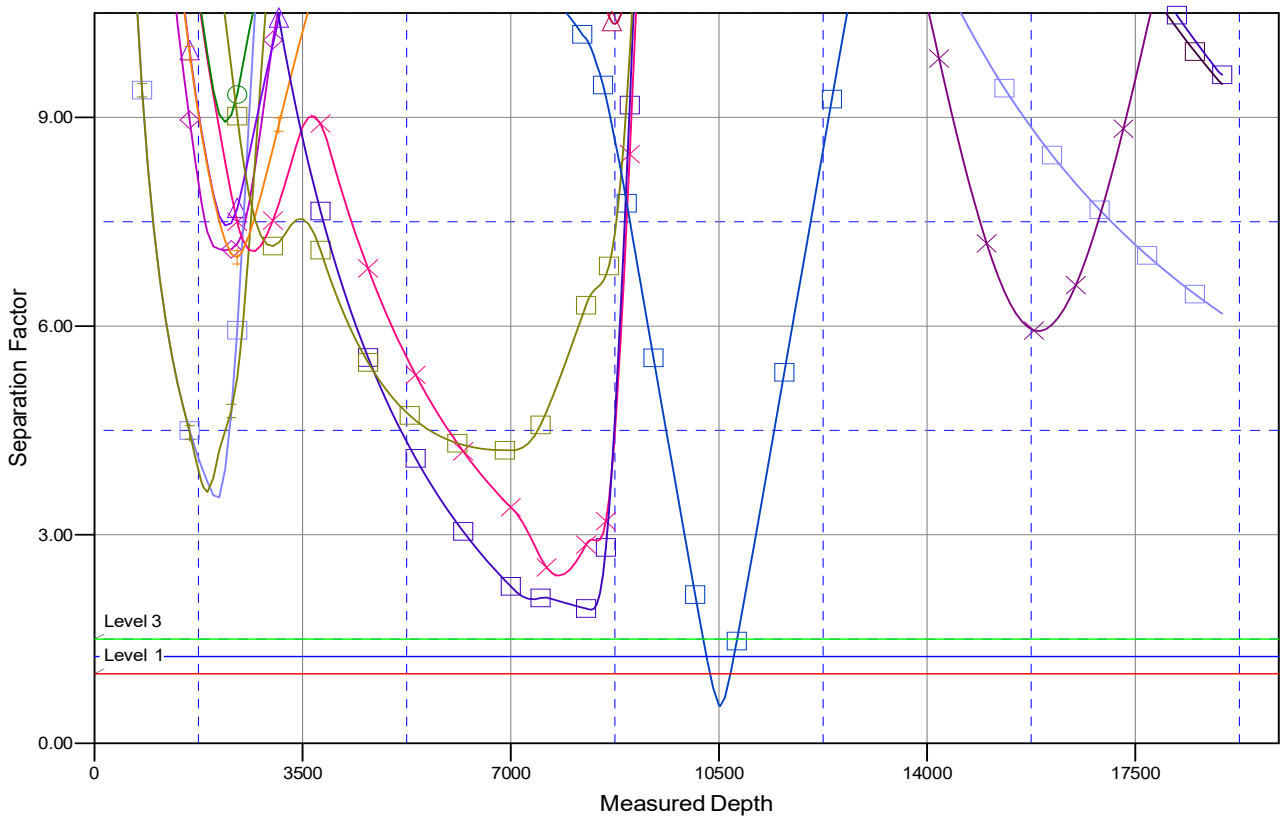
Separation Factor Plot



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.

Approval Date: 11/17/2022

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."

Approval Date: 11/17/2022

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

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

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

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **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.

Approval Date: 11/17/2022

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:

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

*Pounds of pure live seed:

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

Approval Date: 11/17/2022

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	

Approval Date: 11/17/2022

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.**

Approval Date: 11/17/2022

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.

Approval Date: 11/17/2022

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 intergrity 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 intergrity 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

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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.

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1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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811 S. First St., Artesia, NM 88210
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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 166784

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 166784
	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