Form 3160-3
(June 2015)

OCD – HOBBS
08/28/2020
RECEIVED

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.
NMNM101608

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.
BLUE RIBBON FED COM [329324]
702H

2. Name of Operator
FRANKLIN MOUNTAIN ENERGY LLC [373910]

9. API Well No.
30-025-47662

3a. Address
2401 E 2nd Avenue, Suite 300, Denver, CO 80206

3b. Phone No. *(include area code)*
(720) 414-7868

10. Field and Pool, or Exploratory [98187]
UPR WOLFCAMP [98187]/WC-025 G-09

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface LOT 3 / 250 FNL / 1355 FWL / LAT 32.166036 / LONG -103.342468
At proposed prod. zone SESW / 150 FSL / 1740 FWL / LAT 32.138031 / LONG -103.341242

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 2/T25S/R35E/NMP

14. Distance in miles and direction from nearest town or post office*
10 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
250 feet

16. No of acres in lease
1600

17. Spacing Unit dedicated to this well
320.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
955 feet

19. Proposed Depth
12213 feet / 22261 feet

20. BLM/BIA Bond No. in file
FED: NMB001761

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3246 feet

22. Approximate date work will start*
02/01/2020

23. Estimated duration
30 days

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
(Electronic Submission)

Name *(Printed/Typed)*
RACHAEL OVERBEY / Ph: (720) 414-7868

Date
01/12/2020

Title
þÿ D i r e c t o r O p e r a t i o n s P l a n n i n g a n d R e g u l a t o r y

Approved by *(Signature)*
(Electronic Submission)

Name *(Printed/Typed)*
Cody Layton / Ph: (575) 234-5959

Date
08/26/2020

Title
Assistant Field Manager Lands & Minerals

Office
Carlsbad Field 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.

GCP Rec 08/28/2020

APPROVED WITH CONDITIONS

KZ
09/14/2020

NSL

REQUIRES NSL

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 08/26/2020

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.

(Continued on page 3)

Additional Operator Remarks

Location of Well

0. SHL: LOT 3 / 250 FNL / 1355 FWL / TWSP: 25S / RANGE: 35E / SECTION: 2 / LAT: 32.166036 / LONG: -103.342468 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 0 FNL / 1740 FWL / TWSP: 25S / RANGE: 35E / SECTION: 11 / LAT: 32.152169 / LONG: -103.341217 (TVD: 12169 feet, MD: 17105 feet)

PPP: LOT 3 / 643 FNL / 1743 FWL / TWSP: 25S / RANGE: 35E / SECTION: 2 / LAT: 32.164946 / LONG: -103.341227 (TVD: 12128 feet, MD: 12468 feet)

BHL: SESW / 150 FSL / 1740 FWL / TWSP: 25S / RANGE: 35E / SECTION: 11 / LAT: 32.138031 / LONG: -103.341242 (TVD: 12213 feet, MD: 22261 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.

FRANKLIN MOUNTAIN ENERGY

Hydrogen Sulfide Plan

A. All personnel shall receive proper awareness H_2S 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. H_2S 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 H_2S 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 H_2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H_2S 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 H_2S 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 H_2S 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 H_2S contingency plan. This will be reevaluated during wellbore construction if H_2S is observed and after the well is on production.

Emergency Contact List:

Vladimir Roudakov, Drilling Engineer	**Cell 720 933 9784**
Rachael Overbey, Project and Regulatory Director	**Cell 303 570 4057**
Franklin Mountain Energy Afterhours Emergency Call Tree:	**720-640-7517**

EMERGENCY NUMBERS:

Agency	Telephone Number
BLM – Carlsbad Mainline	**575-234-5972**
BLM – Spill Emergency	**575-234-6235**
BLM – Engineering Emergency	**575-361-2822**
NMOCD District 1 – Hobbs Mainline	**575-393-6161**
NMOCD Emergency Line	**575-370-3186**
Wild Well Control	**281-784-4700**
H2S Emergency response:	
Air Ambulance New Mexico – Lea Co Reginal	**575-391-2934**
Lea County Sheriff's Department	**575-396-3611**
Fire Department:	
Carlsbad	**575-885-3125**
Artesia	**575-746-5050**
Lea County Regional Medical Center	**575-492-5000**
Jal Community Hospital	**505-395-2511**
Lea County Emergency Management	**575-396-8602**
Poison Control Center	**800-222-1222**

FRANKLIN MOUNTAIN ENERGY

Blue Ribbon Fed Com 702H

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)	3,246'	21'	21'	0	Sand/Gravels/unconsolidated
Rustler	2,477'	790'			Carbonates
Salado	2,310'	957'			Salt, Carbonate & Clastics
Base Salt	693'	2,574'			Shaley Carbonate & Shale
Lamar	-1,812'	5,079'			Carbonate & Clastics
Bell Canyon	-1,848'	5,115'			Sandstone - oil/gas/water
Cherry Canyon	-2,795'	6,062'			Sandstone - oil/gas/water
Brushy Canyon	-4,045'	7,312'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,482'	8,749'			Shale/Carbonates - oil/gas
Avalon	-5,526'	8,793'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,783'	10,050'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,875'	10,142'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,356'	10,623'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,805'	11,072'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,396'	11,663'			Sandstone - oil/gas/water
Wolfcamp	-8,750'	12,017'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,788'	12,055'			Overpressure Shale - Oil/Gas
HZ Target	-8,857'	12,124'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,986'	12,253'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400’	Fresh Water
Delaware Sands	5,115’	Oil
Bone Spring	10,050’	Oil
Wolfcamp	12,017’	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 casings strings will be run new. Preliminary plan is to set 7 5/8”string before entering Wolfcamp formation at 12,011’TVD/12,100’MD at 52° Inc due too potential overpressure.

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	5400	1.72	1.67	2.90	3.30
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	12100	1.10	1.26	1.80	1.23
Long string 5 1/2"	20	P-110	14520	14520	729	Anaconda 556	22261	1.15	1.07	1.18	1.06

Cementing Program:

String	Hole	Casing			Lead					Tail				Excess
Type	Size	Size	Setting Depth	Sacks	Type of cmt	Yield ft3/sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Yield ft3/sk	Water gal/sk	TOC	
Surf	17.5	13.375	1300	803	Extenda Cem, 13.5 ppg Class C, 4% Bentonite, 2%CaCl2,0.25pps Cello-Flake	1.728	9.21	0	330	HalCem TM, 14.8 ppg, Class C, 2% CaCl2, 0.25pps Celo-Flake	1.364	6.61	1000	100%
Int1	12.25	9.625	5400	1523	Econocem TM, 12.9 ppg, Class C 50:50 Poz Gel, 0.25 pps Cello-Flake, 5% Salt, 2% Sodium	1.872	10.11	0	154	HalCem TM, 14.8 ppg, Class C, 0.25 pps Cello-Flake, 2% CalCl2	1.332	6.42	5100	100%
Int2	8.5	7.625	12100	276	NeoCem, 9 ppg, Class C 60:40 Poz Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	3.501	14.21	4400	153	NeoCem 15 ppg, Class C 0.25 pps Cello-Flake, 2% CalCl2	1.049	4.31	11100	50%
Prod	6.75	5.5	22261	426	SoluCem, 15 ppg, 0.25 D-Air, 0.85% HR 601	2.619	11.3	11100						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.

FRANKLIN MOUNTAIN ENERGY

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' – 12,100'	Brine	8.8-10.2	28-34	N/c
12,100' – 22,261' Lateral	Oil Base	10.0-11.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 11 ppg. In order to maintain hole stability, mud weights up to 13.0 ppg may be utilized.
An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.
Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary well control and monitoring equipment:

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

8. Logging, testing and coring program:

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

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

The estimated bottom-hole temperature at 12,214' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 8,256 psig (based on 13 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

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

2. Work/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.

FRANKLIN MOUNTAIN ENERGY

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. The drilling rig with walking/skidding capabilities will be used.

12. Disposal/environmental concerns:

(A) Drilled cuttings will be hauled to and disposed of in a state-certified disposal site.
(B) Non-hazardous waste mud/cement from the drilling process will be 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 30 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 Cameron 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: County Fair/Blue Ribbon
Well: Blue Ribbon Fed Com 702H
Wellbore: OH
Design: Plan #1

3246.4' GE + 21' KB @ 3267.40usft

Azimuths to Grid North
True North: -0.53°
Magnetic North: 6.08°

Magnetic Field
Strength: 47708.4nT
Dip Angle: 60.02°
Date: 8/8/2019
Model: IGRF2015

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

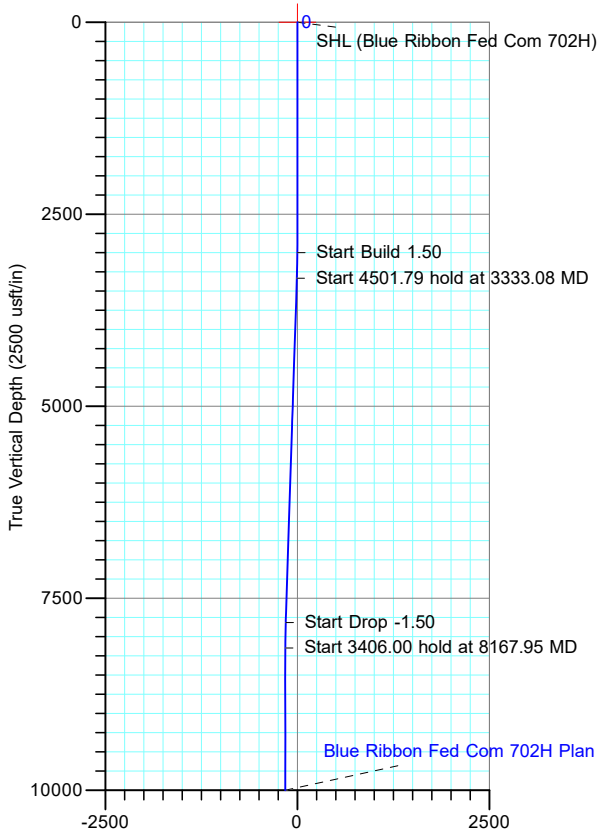
FRANKLIN MOUNTAIN ENERGY

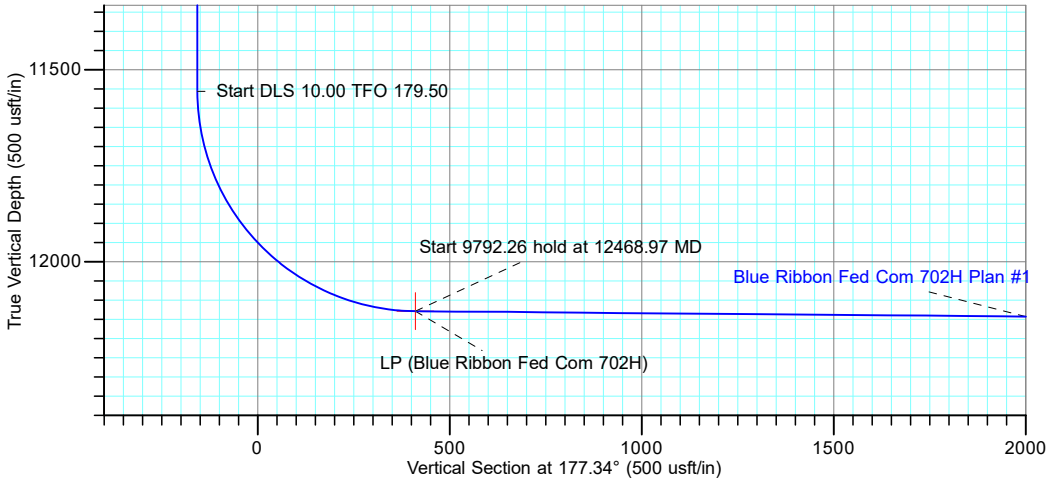
SECTION DETAILS

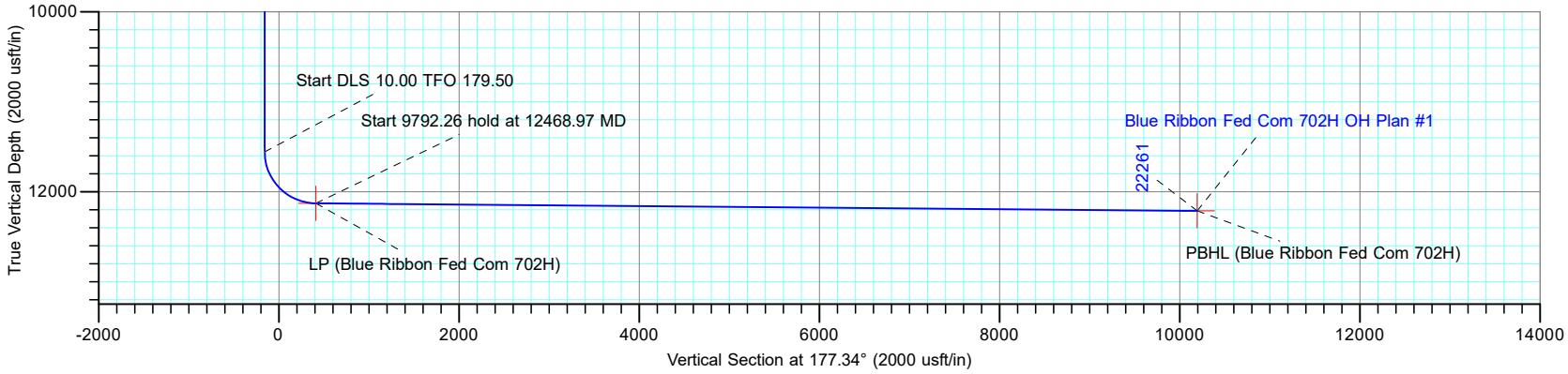
MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
3333.08	5.00	65.44	3332.66	6.03	13.20	1.50	65.44	-5.41	Start 4501.79 hold at 3333.08 MD
7834.87	5.00	65.44	7817.34	168.97	369.80	0.00	0.00	-151.61	Start Drop -1.50
8167.95	0.00	0.00	8150.00	175.00	383.00	1.50	180.00	-157.03	Start 3406.00 hold at 8167.95 MD
11573.95	0.00	0.00	11556.00	175.00	383.00	0.00	0.00	-157.03	Start DLS 10.00 TFO 179.50
12468.97	89.50	179.50	12128.94	-392.96	387.96	10.00	179.50	410.55	Start 9792.26 hold at 12468.97 MD
22261.23	89.50	179.50	12213.97	-10184.48	473.44	0.00	0.00	10195.48	TD at 22261.23

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP	12128.94	-392.96	387.96	32.164946	-103.341227
PBHL	12213.97	-10184.48	473.44	32.138031	-103.341242
SHL	0.00	0.00	0.00	32.166036	-103.342468







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

Plan: Plan #1 (Blue Ribbon Fed Com 702H/OH)
County Fair/Blue Ribbon
Created By: Dustin Ault Date: 15:22, August 09 2019
Date: _____
Approved: _____ Date: _____

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: County Fair/Blue Ribbon
Well: Blue Ribbon Fed Com 702H
Wellbore: OH
Design: Plan #1

Azimuths to Grid North
True North: -0.53°
Magnetic North: 6.08°

Magnetic Field
Strength: 47708.4nT
Dip Angle: 60.02°
Date: 8/8/2019
Model: IGRF2015

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

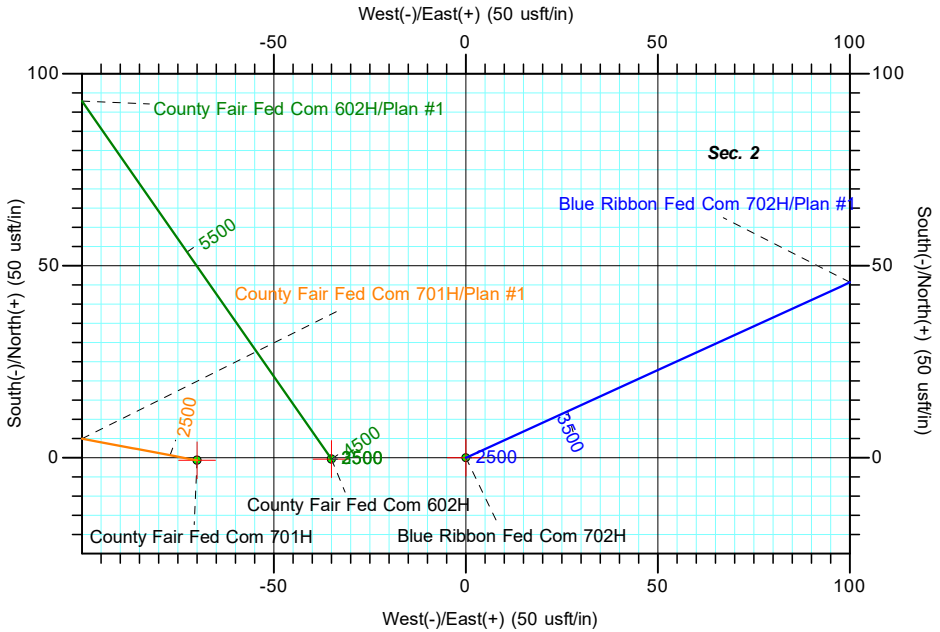
FRANKLIN MOUNTAIN ENERGY

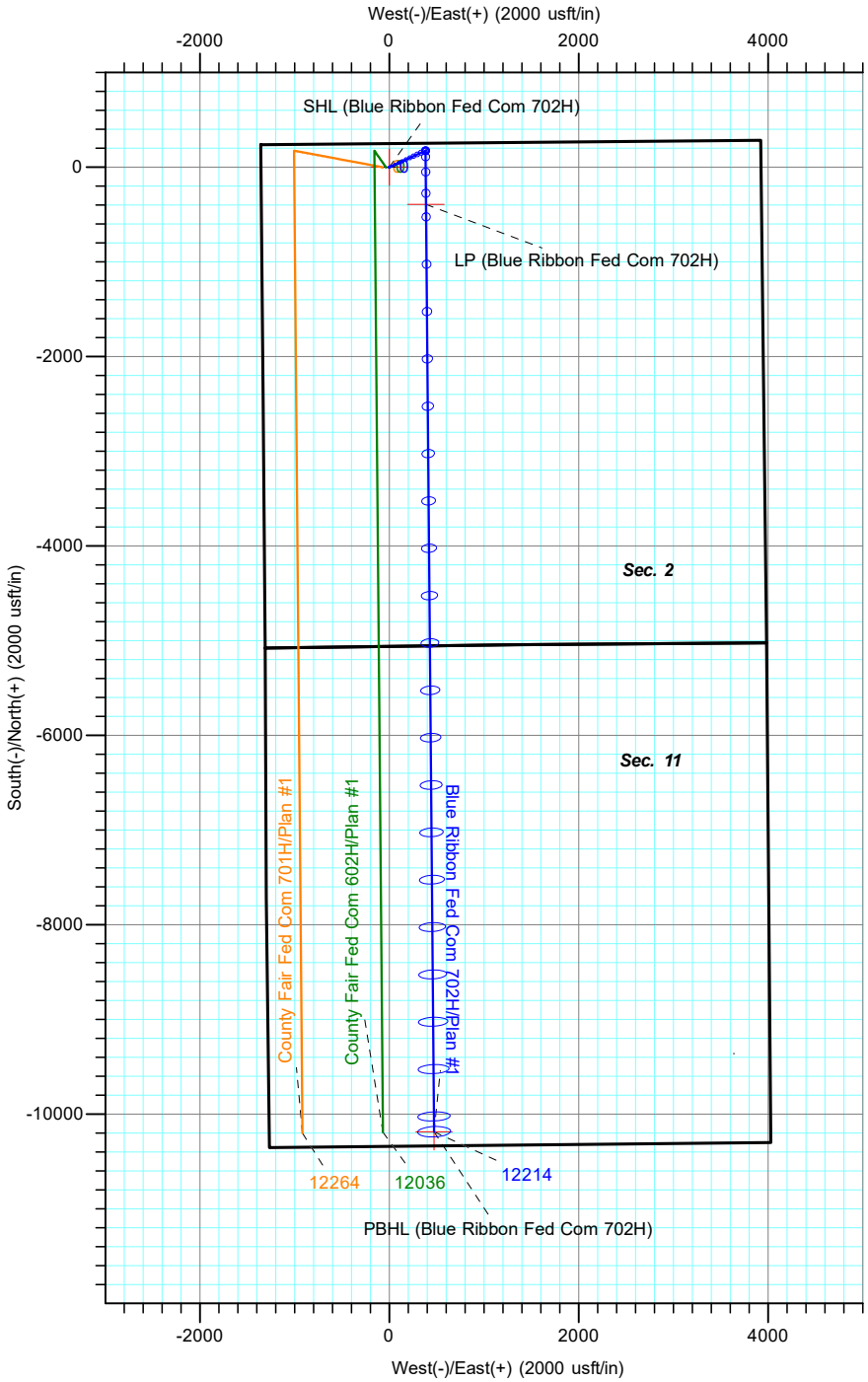
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP	12128.94	-392.96	387.96	425157.40	848333.61	32.164946	-103.341227
PBHL	12213.97	-10184.48	473.44	415365.88	848419.09	32.138031	-103.341242
SHL	0.00	0.00	0.00	425550.36	847945.65	32.166036	-103.342468

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	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
3333.08	5.00	65.44	3332.66	6.03	13.20	1.50	65.44	-5.41	Start 4501.79 hold at 3333.08 MD
7834.87	5.00	65.44	7817.34	168.97	369.80	0.00	0.00	-151.61	Start Drop -1.50
8167.95	0.00	0.00	8150.00	175.00	383.00	1.50	180.00	-157.03	Start 3406.00 hold at 8167.95 MD
11573.95	0.00	0.00	11556.00	175.00	383.00	0.00	0.00	-157.03	Start DLS 10.00 TFO 179.50
12468.97	89.50	179.50	12128.94	-392.96	387.96	10.00	179.50	410.55	Start 9792.26 hold at 12468.97 MD
22261.23	89.50	179.50	12213.97	-10184.48	473.44	0.00	0.00	10195.48	TD at 22261.23





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

Plan: Plan #1 (Blue Ribbon Fed Com 702H/OH)
County Fair/Blue Ribbon
Created By: Dustin Ault Date: 15:24, August 09 2019
Date: _____
Approved: _____ Date: _____

Franklin Mountain Energy

Lea County, NM (NAD83)
County Fair/Blue Ribbon
Blue Ribbon Fed Com 702H

OH

Plan: Plan #1

Standard Planning Report

09 August, 2019

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**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 County Fair/Blue Ribbon

Site Position:		**Northing:**	425,549.73 usft	**Latitude:**	32.166036
From:	Map	**Easting:**	847,875.66 usft	**Longitude:**	-103.342695
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.53 °

Well Blue Ribbon Fed Com 702H

Well Position	**+N/-S**	0.63 usft	**Northing:**	425,550.36 usft	**Latitude:**	32.166036
	+E/-W	69.99 usft	**Easting:**	847,945.65 usft	**Longitude:**	-103.342469
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,246.40 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/8/2019	6.61	60.02	47,708.41741054

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	177.34

Plan Survey Tool Program **Date** 8/9/2019

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,260.39	Plan #1 (OH)		

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	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,333.08	5.00	65.44	3,332.66	6.03	13.20	1.50	1.50	0.00	65.44	
7,834.87	5.00	65.44	7,817.34	168.97	369.80	0.00	0.00	0.00	0.00	
8,167.95	0.00	0.00	8,150.00	175.00	383.00	1.50	-1.50	0.00	180.00	
11,573.95	0.00	0.00	11,556.00	175.00	383.00	0.00	0.00	0.00	0.00	
12,468.97	89.50	179.50	12,128.94	-392.96	387.96	10.00	10.00	20.06	179.50	
22,261.24	89.50	179.50	12,213.97	-10,184.48	473.44	0.00	0.00	0.00	0.00	PBHL (Blue Ribbon F

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**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 (Blue Ribbon Fed Com 702H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
3,100.00	1.50	65.44	3,099.99	0.54	1.19	-0.49	1.50	1.50	0.00
3,200.00	3.00	65.44	3,199.91	2.18	4.76	-1.95	1.50	1.50	0.00
3,300.00	4.50	65.44	3,299.69	4.89	10.71	-4.39	1.50	1.50	0.00
3,333.08	5.00	65.44	3,332.66	6.03	13.20	-5.41	1.50	1.50	0.00
Start 4501.79 hold at 3333.08 MD									
3,400.00	5.00	65.44	3,399.32	8.45	18.50	-7.59	0.00	0.00	0.00
3,500.00	5.00	65.44	3,498.94	12.07	26.42	-10.83	0.00	0.00	0.00
3,600.00	5.00	65.44	3,598.56	15.69	34.34	-14.08	0.00	0.00	0.00
3,700.00	5.00	65.44	3,698.18	19.31	42.27	-17.33	0.00	0.00	0.00
3,800.00	5.00	65.44	3,797.80	22.93	50.19	-20.58	0.00	0.00	0.00
3,900.00	5.00	65.44	3,897.42	26.55	58.11	-23.82	0.00	0.00	0.00
4,000.00	5.00	65.44	3,997.04	30.17	66.03	-27.07	0.00	0.00	0.00
4,100.00	5.00	65.44	4,096.66	33.79	73.95	-30.32	0.00	0.00	0.00
4,200.00	5.00	65.44	4,196.28	37.41	81.87	-33.57	0.00	0.00	0.00
4,300.00	5.00	65.44	4,295.90	41.03	89.79	-36.81	0.00	0.00	0.00
4,400.00	5.00	65.44	4,395.52	44.65	97.71	-40.06	0.00	0.00	0.00
4,500.00	5.00	65.44	4,495.14	48.27	105.64	-43.31	0.00	0.00	0.00
4,600.00	5.00	65.44	4,594.76	51.89	113.56	-46.56	0.00	0.00	0.00
4,700.00	5.00	65.44	4,694.38	55.51	121.48	-49.80	0.00	0.00	0.00
4,800.00	5.00	65.44	4,794.00	59.12	129.40	-53.05	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**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	5.00	65.44	4,893.62	62.74	137.32	-56.30	0.00	0.00	0.00
5,000.00	5.00	65.44	4,993.24	66.36	145.24	-59.55	0.00	0.00	0.00
5,100.00	5.00	65.44	5,092.86	69.98	153.16	-62.80	0.00	0.00	0.00
5,200.00	5.00	65.44	5,192.48	73.60	161.08	-66.04	0.00	0.00	0.00
5,300.00	5.00	65.44	5,292.10	77.22	169.01	-69.29	0.00	0.00	0.00
5,400.00	5.00	65.44	5,391.72	80.84	176.93	-72.54	0.00	0.00	0.00
5,500.00	5.00	65.44	5,491.34	84.46	184.85	-75.79	0.00	0.00	0.00
5,600.00	5.00	65.44	5,590.96	88.08	192.77	-79.03	0.00	0.00	0.00
5,700.00	5.00	65.44	5,690.58	91.70	200.69	-82.28	0.00	0.00	0.00
5,800.00	5.00	65.44	5,790.20	95.32	208.61	-85.53	0.00	0.00	0.00
5,900.00	5.00	65.44	5,889.83	98.94	216.53	-88.78	0.00	0.00	0.00
6,000.00	5.00	65.44	5,989.45	102.56	224.45	-92.02	0.00	0.00	0.00
6,100.00	5.00	65.44	6,089.07	106.18	232.38	-95.27	0.00	0.00	0.00
6,200.00	5.00	65.44	6,188.69	109.80	240.30	-98.52	0.00	0.00	0.00
6,300.00	5.00	65.44	6,288.31	113.42	248.22	-101.77	0.00	0.00	0.00
6,400.00	5.00	65.44	6,387.93	117.04	256.14	-105.01	0.00	0.00	0.00
6,500.00	5.00	65.44	6,487.55	120.65	264.06	-108.26	0.00	0.00	0.00
6,600.00	5.00	65.44	6,587.17	124.27	271.98	-111.51	0.00	0.00	0.00
6,700.00	5.00	65.44	6,686.79	127.89	279.90	-114.76	0.00	0.00	0.00
6,800.00	5.00	65.44	6,786.41	131.51	287.82	-118.01	0.00	0.00	0.00
6,900.00	5.00	65.44	6,886.03	135.13	295.75	-121.25	0.00	0.00	0.00
7,000.00	5.00	65.44	6,985.65	138.75	303.67	-124.50	0.00	0.00	0.00
7,100.00	5.00	65.44	7,085.27	142.37	311.59	-127.75	0.00	0.00	0.00
7,200.00	5.00	65.44	7,184.89	145.99	319.51	-131.00	0.00	0.00	0.00
7,300.00	5.00	65.44	7,284.51	149.61	327.43	-134.24	0.00	0.00	0.00
7,400.00	5.00	65.44	7,384.13	153.23	335.35	-137.49	0.00	0.00	0.00
7,500.00	5.00	65.44	7,483.75	156.85	343.27	-140.74	0.00	0.00	0.00
7,600.00	5.00	65.44	7,583.37	160.47	351.19	-143.99	0.00	0.00	0.00
7,700.00	5.00	65.44	7,682.99	164.09	359.12	-147.23	0.00	0.00	0.00
7,800.00	5.00	65.44	7,782.61	167.71	367.04	-150.48	0.00	0.00	0.00
7,834.87	5.00	65.44	7,817.34	168.97	369.80	-151.61	0.00	0.00	0.00
Start Drop -1.50									
7,900.00	4.02	65.44	7,882.27	171.10	374.46	-153.52	1.50	-1.50	0.00
8,000.00	2.52	65.44	7,982.11	173.47	379.64	-155.65	1.50	-1.50	0.00
8,100.00	1.02	65.44	8,082.06	174.75	382.45	-156.80	1.50	-1.50	0.00
8,167.95	0.00	0.00	8,150.00	175.00	383.00	-157.03	1.50	-1.50	0.00
Start 3406.00 hold at 8167.95 MD									
8,200.00	0.00	0.00	8,182.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,300.00	0.00	0.00	8,282.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,400.00	0.00	0.00	8,382.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,500.00	0.00	0.00	8,482.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,600.00	0.00	0.00	8,582.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,700.00	0.00	0.00	8,682.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,800.00	0.00	0.00	8,782.05	175.00	383.00	-157.03	0.00	0.00	0.00
8,900.00	0.00	0.00	8,882.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,000.00	0.00	0.00	8,982.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,100.00	0.00	0.00	9,082.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,200.00	0.00	0.00	9,182.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,300.00	0.00	0.00	9,282.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,400.00	0.00	0.00	9,382.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,500.00	0.00	0.00	9,482.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,600.00	0.00	0.00	9,582.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,700.00	0.00	0.00	9,682.05	175.00	383.00	-157.03	0.00	0.00	0.00
9,800.00	0.00	0.00	9,782.05	175.00	383.00	-157.03	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,900.00	0.00	0.00	9,882.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,000.00	0.00	0.00	9,982.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,100.00	0.00	0.00	10,082.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,200.00	0.00	0.00	10,182.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,300.00	0.00	0.00	10,282.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,400.00	0.00	0.00	10,382.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,500.00	0.00	0.00	10,482.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,600.00	0.00	0.00	10,582.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,700.00	0.00	0.00	10,682.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,800.00	0.00	0.00	10,782.05	175.00	383.00	-157.03	0.00	0.00	0.00
10,900.00	0.00	0.00	10,882.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,000.00	0.00	0.00	10,982.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,100.00	0.00	0.00	11,082.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,200.00	0.00	0.00	11,182.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,300.00	0.00	0.00	11,282.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,400.00	0.00	0.00	11,382.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,500.00	0.00	0.00	11,482.05	175.00	383.00	-157.03	0.00	0.00	0.00
11,573.95	0.00	0.00	11,556.00	175.00	383.00	-157.03	0.00	0.00	0.00
Start DLS 10.00 TFO 179.50									
11,600.00	2.61	179.50	11,582.04	174.41	383.01	-156.43	10.00	10.00	0.00
11,650.00	7.61	179.50	11,631.83	169.96	383.04	-151.99	10.00	10.00	0.00
11,700.00	12.61	179.50	11,681.04	161.19	383.12	-143.23	10.00	10.00	0.00
11,750.00	17.61	179.50	11,729.29	148.17	383.23	-130.21	10.00	10.00	0.00
11,800.00	22.61	179.50	11,776.23	130.98	383.38	-113.04	10.00	10.00	0.00
11,850.00	27.61	179.50	11,821.49	109.78	383.57	-91.85	10.00	10.00	0.00
11,900.00	32.61	179.50	11,864.74	84.71	383.79	-66.79	10.00	10.00	0.00
11,950.00	37.61	179.50	11,905.63	55.96	384.04	-38.07	10.00	10.00	0.00
12,000.00	42.61	179.50	11,943.86	23.77	384.32	-5.89	10.00	10.00	0.00
12,050.00	47.61	179.50	11,979.14	-11.64	384.63	29.49	10.00	10.00	0.00
12,100.00	52.61	179.50	12,011.20	-49.99	384.96	67.81	10.00	10.00	0.00
12,150.00	57.61	179.50	12,039.79	-90.98	385.32	108.78	10.00	10.00	0.00
12,200.00	62.61	179.50	12,064.70	-134.32	385.70	152.08	10.00	10.00	0.00
12,250.00	67.61	179.50	12,085.75	-179.65	386.10	197.39	10.00	10.00	0.00
12,300.00	72.61	179.50	12,102.76	-226.65	386.51	244.36	10.00	10.00	0.00
12,350.00	77.61	179.50	12,115.60	-274.96	386.93	292.63	10.00	10.00	0.00
12,400.00	82.61	179.50	12,124.19	-324.20	387.36	341.83	10.00	10.00	0.00
12,450.00	87.61	179.50	12,128.46	-374.00	387.79	391.60	10.00	10.00	0.00
12,468.97	89.50	179.50	12,128.94	-392.96	387.96	410.55	10.00	10.00	0.00
Start 9792.26 hold at 12468.97 MD - LP (Blue Ribbon Fed Com 702H)									
12,500.00	89.50	179.50	12,129.21	-423.99	388.23	441.56	0.00	0.00	0.00
12,600.00	89.50	179.50	12,130.07	-523.98	389.10	541.48	0.00	0.00	0.00
12,700.00	89.50	179.50	12,130.94	-623.97	389.98	641.41	0.00	0.00	0.00
12,800.00	89.50	179.50	12,131.81	-723.96	390.85	741.33	0.00	0.00	0.00
12,900.00	89.50	179.50	12,132.68	-823.95	391.72	841.26	0.00	0.00	0.00
13,000.00	89.50	179.50	12,133.55	-923.95	392.59	941.18	0.00	0.00	0.00
13,100.00	89.50	179.50	12,134.42	-1,023.94	393.47	1,041.11	0.00	0.00	0.00
13,200.00	89.50	179.50	12,135.28	-1,123.93	394.34	1,141.03	0.00	0.00	0.00
13,300.00	89.50	179.50	12,136.15	-1,223.92	395.21	1,240.96	0.00	0.00	0.00
13,400.00	89.50	179.50	12,137.02	-1,323.92	396.09	1,340.88	0.00	0.00	0.00
13,500.00	89.50	179.50	12,137.89	-1,423.91	396.96	1,440.81	0.00	0.00	0.00
13,600.00	89.50	179.50	12,138.76	-1,523.90	397.83	1,540.73	0.00	0.00	0.00
13,700.00	89.50	179.50	12,139.63	-1,623.89	398.70	1,640.66	0.00	0.00	0.00
13,800.00	89.50	179.50	12,140.49	-1,723.89	399.58	1,740.58	0.00	0.00	0.00
13,900.00	89.50	179.50	12,141.36	-1,823.88	400.45	1,840.51	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,000.00	89.50	179.50	12,142.23	-1,923.87	401.32	1,940.43	0.00	0.00	0.00
14,100.00	89.50	179.50	12,143.10	-2,023.86	402.20	2,040.36	0.00	0.00	0.00
14,200.00	89.50	179.50	12,143.97	-2,123.86	403.07	2,140.28	0.00	0.00	0.00
14,300.00	89.50	179.50	12,144.84	-2,223.85	403.94	2,240.21	0.00	0.00	0.00
14,400.00	89.50	179.50	12,145.71	-2,323.84	404.82	2,340.13	0.00	0.00	0.00
14,500.00	89.50	179.50	12,146.57	-2,423.83	405.69	2,440.06	0.00	0.00	0.00
14,600.00	89.50	179.50	12,147.44	-2,523.83	406.56	2,539.98	0.00	0.00	0.00
14,700.00	89.50	179.50	12,148.31	-2,623.82	407.43	2,639.91	0.00	0.00	0.00
14,800.00	89.50	179.50	12,149.18	-2,723.81	408.31	2,739.83	0.00	0.00	0.00
14,900.00	89.50	179.50	12,150.05	-2,823.80	409.18	2,839.76	0.00	0.00	0.00
15,000.00	89.50	179.50	12,150.92	-2,923.80	410.05	2,939.68	0.00	0.00	0.00
15,100.00	89.50	179.50	12,151.78	-3,023.79	410.93	3,039.61	0.00	0.00	0.00
15,200.00	89.50	179.50	12,152.65	-3,123.78	411.80	3,139.53	0.00	0.00	0.00
15,300.00	89.50	179.50	12,153.52	-3,223.77	412.67	3,239.46	0.00	0.00	0.00
15,400.00	89.50	179.50	12,154.39	-3,323.77	413.54	3,339.38	0.00	0.00	0.00
15,500.00	89.50	179.50	12,155.26	-3,423.76	414.42	3,439.31	0.00	0.00	0.00
15,600.00	89.50	179.50	12,156.13	-3,523.75	415.29	3,539.23	0.00	0.00	0.00
15,700.00	89.50	179.50	12,156.99	-3,623.74	416.16	3,639.16	0.00	0.00	0.00
15,800.00	89.50	179.50	12,157.86	-3,723.74	417.04	3,739.08	0.00	0.00	0.00
15,900.00	89.50	179.50	12,158.73	-3,823.73	417.91	3,839.01	0.00	0.00	0.00
16,000.00	89.50	179.50	12,159.60	-3,923.72	418.78	3,938.93	0.00	0.00	0.00
16,100.00	89.50	179.50	12,160.47	-4,023.71	419.66	4,038.86	0.00	0.00	0.00
16,200.00	89.50	179.50	12,161.34	-4,123.70	420.53	4,138.78	0.00	0.00	0.00
16,300.00	89.50	179.50	12,162.20	-4,223.70	421.40	4,238.71	0.00	0.00	0.00
16,400.00	89.50	179.50	12,163.07	-4,323.69	422.27	4,338.63	0.00	0.00	0.00
16,500.00	89.50	179.50	12,163.94	-4,423.68	423.15	4,438.56	0.00	0.00	0.00
16,600.00	89.50	179.50	12,164.81	-4,523.67	424.02	4,538.48	0.00	0.00	0.00
16,700.00	89.50	179.50	12,165.68	-4,623.67	424.89	4,638.41	0.00	0.00	0.00
16,800.00	89.50	179.50	12,166.55	-4,723.66	425.77	4,738.33	0.00	0.00	0.00
16,900.00	89.50	179.50	12,167.41	-4,823.65	426.64	4,838.26	0.00	0.00	0.00
17,000.00	89.50	179.50	12,168.28	-4,923.64	427.51	4,938.18	0.00	0.00	0.00
17,100.00	89.50	179.50	12,169.15	-5,023.64	428.38	5,038.11	0.00	0.00	0.00
17,200.00	89.50	179.50	12,170.02	-5,123.63	429.26	5,138.04	0.00	0.00	0.00
17,300.00	89.50	179.50	12,170.89	-5,223.62	430.13	5,237.96	0.00	0.00	0.00
17,400.00	89.50	179.50	12,171.76	-5,323.61	431.00	5,337.89	0.00	0.00	0.00
17,500.00	89.50	179.50	12,172.62	-5,423.61	431.88	5,437.81	0.00	0.00	0.00
17,600.00	89.50	179.50	12,173.49	-5,523.60	432.75	5,537.74	0.00	0.00	0.00
17,700.00	89.50	179.50	12,174.36	-5,623.59	433.62	5,637.66	0.00	0.00	0.00
17,800.00	89.50	179.50	12,175.23	-5,723.58	434.50	5,737.59	0.00	0.00	0.00
17,900.00	89.50	179.50	12,176.10	-5,823.58	435.37	5,837.51	0.00	0.00	0.00
18,000.00	89.50	179.50	12,176.97	-5,923.57	436.24	5,937.44	0.00	0.00	0.00
18,100.00	89.50	179.50	12,177.84	-6,023.56	437.11	6,037.36	0.00	0.00	0.00
18,200.00	89.50	179.50	12,178.70	-6,123.55	437.99	6,137.29	0.00	0.00	0.00
18,300.00	89.50	179.50	12,179.57	-6,223.55	438.86	6,237.21	0.00	0.00	0.00
18,400.00	89.50	179.50	12,180.44	-6,323.54	439.73	6,337.14	0.00	0.00	0.00
18,500.00	89.50	179.50	12,181.31	-6,423.53	440.61	6,437.06	0.00	0.00	0.00
18,600.00	89.50	179.50	12,182.18	-6,523.52	441.48	6,536.99	0.00	0.00	0.00
18,700.00	89.50	179.50	12,183.05	-6,623.52	442.35	6,636.91	0.00	0.00	0.00
18,800.00	89.50	179.50	12,183.91	-6,723.51	443.23	6,736.84	0.00	0.00	0.00
18,900.00	89.50	179.50	12,184.78	-6,823.50	444.10	6,836.76	0.00	0.00	0.00
19,000.00	89.50	179.50	12,185.65	-6,923.49	444.97	6,936.69	0.00	0.00	0.00
19,100.00	89.50	179.50	12,186.52	-7,023.48	445.84	7,036.61	0.00	0.00	0.00
19,200.00	89.50	179.50	12,187.39	-7,123.48	446.72	7,136.54	0.00	0.00	0.00
19,300.00	89.50	179.50	12,188.26	-7,223.47	447.59	7,236.46	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,400.00	89.50	179.50	12,189.12	-7,323.46	448.46	7,336.39	0.00	0.00	0.00
19,500.00	89.50	179.50	12,189.99	-7,423.45	449.34	7,436.31	0.00	0.00	0.00
19,600.00	89.50	179.50	12,190.86	-7,523.45	450.21	7,536.24	0.00	0.00	0.00
19,700.00	89.50	179.50	12,191.73	-7,623.44	451.08	7,636.16	0.00	0.00	0.00
19,800.00	89.50	179.50	12,192.60	-7,723.43	451.95	7,736.09	0.00	0.00	0.00
19,900.00	89.50	179.50	12,193.47	-7,823.42	452.83	7,836.01	0.00	0.00	0.00
20,000.00	89.50	179.50	12,194.33	-7,923.42	453.70	7,935.94	0.00	0.00	0.00
20,100.00	89.50	179.50	12,195.20	-8,023.41	454.57	8,035.86	0.00	0.00	0.00
20,200.00	89.50	179.50	12,196.07	-8,123.40	455.45	8,135.79	0.00	0.00	0.00
20,300.00	89.50	179.50	12,196.94	-8,223.39	456.32	8,235.71	0.00	0.00	0.00
20,400.00	89.50	179.50	12,197.81	-8,323.39	457.19	8,335.64	0.00	0.00	0.00
20,500.00	89.50	179.50	12,198.68	-8,423.38	458.07	8,435.56	0.00	0.00	0.00
20,600.00	89.50	179.50	12,199.54	-8,523.37	458.94	8,535.49	0.00	0.00	0.00
20,700.00	89.50	179.50	12,200.41	-8,623.36	459.81	8,635.41	0.00	0.00	0.00
20,800.00	89.50	179.50	12,201.28	-8,723.36	460.68	8,735.34	0.00	0.00	0.00
20,900.00	89.50	179.50	12,202.15	-8,823.35	461.56	8,835.26	0.00	0.00	0.00
21,000.00	89.50	179.50	12,203.02	-8,923.34	462.43	8,935.19	0.00	0.00	0.00
21,100.00	89.50	179.50	12,203.89	-9,023.33	463.30	9,035.11	0.00	0.00	0.00
21,200.00	89.50	179.50	12,204.75	-9,123.33	464.18	9,135.04	0.00	0.00	0.00
21,300.00	89.50	179.50	12,205.62	-9,223.32	465.05	9,234.96	0.00	0.00	0.00
21,400.00	89.50	179.50	12,206.49	-9,323.31	465.92	9,334.89	0.00	0.00	0.00
21,500.00	89.50	179.50	12,207.36	-9,423.30	466.79	9,434.81	0.00	0.00	0.00
21,600.00	89.50	179.50	12,208.23	-9,523.30	467.67	9,534.74	0.00	0.00	0.00
21,700.00	89.50	179.50	12,209.10	-9,623.29	468.54	9,634.66	0.00	0.00	0.00
21,800.00	89.50	179.50	12,209.97	-9,723.28	469.41	9,734.59	0.00	0.00	0.00
21,900.00	89.50	179.50	12,210.83	-9,823.27	470.29	9,834.51	0.00	0.00	0.00
22,000.00	89.50	179.50	12,211.70	-9,923.27	471.16	9,934.44	0.00	0.00	0.00
22,100.00	89.50	179.50	12,212.57	-10,023.26	472.03	10,034.36	0.00	0.00	0.00
22,200.00	89.50	179.50	12,213.44	-10,123.25	472.91	10,134.29	0.00	0.00	0.00
22,261.24	89.50	179.50	12,213.97	-10,184.48	473.44	10,195.48	0.00	0.00	0.00
TD at 22261.23 - PBHL (Blue Ribbon Fed Com 702H)									

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 (Blue Ribbon Fed C - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	425,550.36	847,945.65	32.166036	-103.342469
LP (Blue Ribbon Fed Co - plan hits target center - Point	0.00	0.00	12,128.94	-392.96	387.96	425,157.40	848,333.61	32.164946	-103.341227
PBHL (Blue Ribbon Fed - plan hits target center - Point	0.00	0.00	12,213.97	-10,184.48	473.44	415,365.88	848,419.09	32.138032	-103.341242

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Company:	Franklin Mountain Energy	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Project:	Lea County, NM (NAD83)	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site:	County Fair/Blue Ribbon	**North Reference:**	Grid
Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
3,000.00	3,000.00	0.00	0.00	Start Build 1.50
3,333.08	3,332.66	6.03	13.20	Start 4501.79 hold at 3333.08 MD
7,834.87	7,817.34	168.97	369.80	Start Drop -1.50
8,167.95	8,150.00	175.00	383.00	Start 3406.00 hold at 8167.95 MD
11,573.95	11,556.00	175.00	383.00	Start DLS 10.00 TFO 179.50
12,468.97	12,128.94	-392.96	387.96	Start 9792.26 hold at 12468.97 MD
22,261.24	12,213.97	-10,184.48	473.44	TD at 22261.23

Franklin Mountain Energy

Lea County, NM (NAD83)
County Fair/Blue Ribbon
Blue Ribbon Fed Com 702H

OH
Plan #1

Anticollision Report

09 August, 2019

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors 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:	MD + Stations Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.00 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 8/9/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	22,260.39	Plan #1 (OH)		

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
County Fair/Blue Ribbon						
County Fair Fed Com 602H - OH - Plan #1	3,000.00	3,001.70	34.99	24.45	3.321	CC, ES, SF
County Fair Fed Com 701H - OH - Plan #1	2,215.74	2,218.44	69.99	62.27	9.059	CC
County Fair Fed Com 701H - OH - Plan #1	2,300.00	2,302.64	69.99	61.97	8.719	ES
County Fair Fed Com 701H - OH - Plan #1	22,261.24	22,341.66	1,390.72	1,216.79	7.996	SF

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - Plan #1

Survey Program: 0-

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
0.00	0.00	1.70	1.70	0.00	0.00	-90.51	-0.31	-34.99	34.99				
100.00	100.00	101.70	101.70	0.14	0.00	-90.51	-0.31	-34.99	34.99	34.85	0.14	246.772	
200.00	200.00	201.70	201.70	0.50	0.00	-90.51	-0.31	-34.99	34.99	34.49	0.50	69.945	
300.00	300.00	301.70	301.70	0.86	0.00	-90.51	-0.31	-34.99	34.99	34.13	0.86	40.747	
400.00	400.00	401.70	401.70	1.22	0.00	-90.51	-0.31	-34.99	34.99	33.77	1.22	28.747	
500.00	500.00	501.70	501.70	1.58	0.00	-90.51	-0.31	-34.99	34.99	33.42	1.58	22.207	
600.00	600.00	601.70	601.70	1.93	0.00	-90.51	-0.31	-34.99	34.99	33.06	1.93	18.091	
700.00	700.00	701.70	701.70	2.29	0.00	-90.51	-0.31	-34.99	34.99	32.70	2.29	15.263	
800.00	800.00	801.70	801.70	2.65	0.00	-90.51	-0.31	-34.99	34.99	32.34	2.65	13.199	
900.00	900.00	901.70	901.70	3.01	0.00	-90.51	-0.31	-34.99	34.99	31.98	3.01	11.627	
1,000.00	1,000.00	1,001.70	1,001.70	3.37	0.00	-90.51	-0.31	-34.99	34.99	31.62	3.37	10.389	
1,100.00	1,100.00	1,101.70	1,101.70	3.73	0.00	-90.51	-0.31	-34.99	34.99	31.26	3.73	9.390	
1,200.00	1,200.00	1,201.70	1,201.70	4.08	0.00	-90.51	-0.31	-34.99	34.99	30.91	4.08	8.566	
1,300.00	1,300.00	1,301.70	1,301.70	4.44	0.00	-90.51	-0.31	-34.99	34.99	30.55	4.44	7.875	
1,400.00	1,400.00	1,401.70	1,401.70	4.80	0.00	-90.51	-0.31	-34.99	34.99	30.19	4.80	7.287	
1,500.00	1,500.00	1,501.70	1,501.70	5.16	0.00	-90.51	-0.31	-34.99	34.99	29.83	5.16	6.781	
1,600.00	1,600.00	1,601.70	1,601.70	5.52	0.00	-90.51	-0.31	-34.99	34.99	29.47	5.52	6.340	
1,700.00	1,700.00	1,701.70	1,701.70	5.88	0.00	-90.51	-0.31	-34.99	34.99	29.11	5.88	5.954	
1,800.00	1,800.00	1,801.70	1,801.70	6.24	0.00	-90.51	-0.31	-34.99	34.99	28.76	6.24	5.611	
1,900.00	1,900.00	1,901.70	1,901.70	6.59	0.00	-90.51	-0.31	-34.99	34.99	28.40	6.59	5.306	
2,000.00	2,000.00	2,001.70	2,001.70	6.95	0.00	-90.51	-0.31	-34.99	34.99	28.04	6.95	5.033	
2,100.00	2,100.00	2,101.70	2,101.70	7.31	0.00	-90.51	-0.31	-34.99	34.99	27.68	7.31	4.786	
2,200.00	2,200.00	2,201.70	2,201.70	7.67	0.00	-90.51	-0.31	-34.99	34.99	27.32	7.67	4.562	

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

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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
2,300.00	2,300.00	2,301.70	2,301.70	8.03	0.00	-90.51	-0.31	-34.99	34.99	26.96	8.03	4.359	
2,400.00	2,400.00	2,401.70	2,401.70	8.39	0.00	-90.51	-0.31	-34.99	34.99	26.60	8.39	4.172	
2,500.00	2,500.00	2,501.70	2,501.70	8.74	0.00	-90.51	-0.31	-34.99	34.99	26.25	8.75	4.001	
2,600.00	2,600.00	2,601.70	2,601.70	9.10	0.00	-90.51	-0.31	-34.99	34.99	25.89	9.10	3.844	
2,700.00	2,700.00	2,701.70	2,701.70	9.46	0.00	-90.51	-0.31	-34.99	34.99	25.53	9.46	3.698	
2,800.00	2,800.00	2,801.70	2,801.70	9.82	0.00	-90.51	-0.31	-34.99	34.99	25.17	9.82	3.563	
2,900.00	2,900.00	2,901.70	2,901.70	10.18	0.00	-90.51	-0.31	-34.99	34.99	24.81	10.18	3.438	
3,000.00	3,000.00	3,001.70	3,001.70	10.54	0.00	-90.51	-0.31	-34.99	34.99	24.45	10.54	3.321	CC, ES, SF
3,100.00	3,099.99	3,101.69	3,101.69	10.89	0.00	-156.79	-0.31	-34.99	36.19	25.30	10.89	3.323	
3,200.00	3,199.91	3,201.61	3,201.61	11.24	0.00	-159.00	-0.31	-34.99	39.83	28.59	11.24	3.544	
3,300.00	3,299.69	3,301.39	3,301.39	11.59	0.00	-161.89	-0.31	-34.99	46.00	34.41	11.59	3.970	
3,333.08	3,332.66	3,334.36	3,334.36	11.71	0.00	-162.88	-0.31	-34.99	48.61	36.90	11.70	4.154	
3,400.00	3,399.32	3,401.02	3,401.02	11.94	0.00	-164.69	-0.31	-34.99	54.20	42.27	11.93	4.542	
3,500.00	3,498.94	3,500.64	3,500.64	12.30	0.00	-166.80	-0.31	-34.99	62.65	50.37	12.28	5.100	
3,600.00	3,598.56	3,600.26	3,600.26	12.65	0.00	-168.40	-0.31	-34.99	71.16	58.52	12.63	5.633	
3,700.00	3,698.18	3,699.88	3,699.88	13.01	0.00	-169.66	-0.31	-34.99	79.71	66.73	12.98	6.140	
3,800.00	3,797.80	3,799.50	3,799.50	13.37	0.00	-170.67	-0.31	-34.99	88.29	74.96	13.33	6.622	
3,900.00	3,897.42	3,899.12	3,899.12	13.73	0.00	-171.51	-0.31	-34.99	96.90	83.21	13.68	7.081	
4,000.00	3,997.04	3,998.74	3,998.74	14.09	0.00	-172.20	-0.31	-34.99	105.52	91.48	14.04	7.518	
4,100.00	4,096.66	4,098.36	4,098.36	14.45	0.00	-172.80	-0.31	-34.99	114.15	99.76	14.39	7.934	
4,200.00	4,196.28	4,197.98	4,197.98	14.82	0.00	-173.31	-0.31	-34.99	122.80	108.06	14.74	8.331	
4,300.00	4,295.90	4,297.60	4,297.60	15.18	0.00	-173.75	-0.31	-34.99	131.45	116.36	15.09	8.709	
4,400.00	4,395.52	4,397.22	4,397.22	15.55	0.00	-174.14	-0.31	-34.99	140.11	124.67	15.45	9.070	
4,500.00	4,495.14	4,496.84	4,496.84	15.91	0.00	-174.48	-0.31	-34.99	148.78	132.98	15.80	9.416	
4,600.00	4,594.76	4,595.75	4,595.75	16.28	0.00	-174.50	0.35	-35.45	157.67	141.51	16.15	9.760	
4,700.00	4,694.38	4,694.53	4,694.49	16.65	0.00	-173.96	2.40	-36.88	167.03	150.53	16.51	10.119	
4,800.00	4,794.00	4,793.13	4,793.00	17.02	0.00	-172.94	5.84	-39.28	176.91	160.06	16.86	10.494	
4,900.00	4,893.62	4,891.51	4,891.21	17.39	0.00	-171.54	10.66	-42.64	187.39	170.18	17.21	10.889	
5,000.00	4,993.24	4,989.61	4,989.01	17.76	0.00	-169.83	16.84	-46.95	198.55	181.00	17.56	11.308	
5,100.00	5,092.86	5,088.59	5,087.62	18.13	0.00	-168.03	23.90	-51.87	210.26	192.35	17.91	11.739	
5,200.00	5,192.48	5,187.69	5,186.35	18.50	0.00	-166.42	30.99	-56.81	222.16	203.89	18.27	12.162	
5,300.00	5,292.10	5,286.80	5,285.08	18.87	0.00	-164.97	38.07	-61.74	234.21	215.59	18.62	12.577	
5,400.00	5,391.72	5,385.91	5,383.80	19.24	0.00	-163.67	45.15	-66.68	246.40	227.42	18.98	12.984	
5,500.00	5,491.34	5,485.01	5,482.53	19.61	0.00	-162.48	52.23	-71.62	258.70	239.36	19.33	13.380	
5,600.00	5,590.96	5,584.12	5,581.26	19.98	0.00	-161.41	59.31	-76.55	271.10	251.40	19.69	13.767	
5,700.00	5,690.58	5,683.22	5,679.99	20.36	0.00	-160.43	66.39	-81.49	283.58	263.53	20.05	14.144	
5,800.00	5,790.20	5,782.33	5,778.72	20.73	0.00	-159.53	73.47	-86.43	296.14	275.73	20.41	14.511	
5,900.00	5,889.83	5,881.43	5,877.45	21.10	0.00	-158.70	80.55	-91.36	308.77	288.00	20.77	14.869	
6,000.00	5,989.45	5,980.54	5,976.18	21.48	0.00	-157.94	87.63	-96.30	321.45	300.32	21.13	15.216	
6,100.00	6,089.07	6,079.64	6,074.91	21.85	0.00	-157.24	94.71	-101.24	334.18	312.70	21.49	15.554	
6,200.00	6,188.69	6,178.75	6,173.64	22.23	0.00	-156.59	101.79	-106.17	346.97	325.12	21.84	15.883	
6,300.00	6,288.31	6,277.86	6,272.36	22.60	0.00	-155.99	108.88	-111.11	359.79	337.58	22.21	16.203	
6,400.00	6,387.93	6,376.96	6,371.09	22.98	0.00	-155.42	115.96	-116.04	372.65	350.08	22.57	16.514	
6,500.00	6,487.55	6,476.07	6,469.82	23.35	0.00	-154.90	123.04	-120.98	385.54	362.61	22.93	16.816	
6,600.00	6,587.17	6,575.17	6,568.55	23.73	0.00	-154.41	130.12	-125.92	398.46	375.17	23.29	17.110	
6,700.00	6,686.79	6,674.28	6,667.28	24.10	0.00	-153.95	137.20	-130.85	411.41	387.76	23.65	17.396	
6,800.00	6,786.41	6,773.38	6,766.01	24.48	0.00	-153.51	144.28	-135.79	424.38	400.37	24.01	17.675	
6,900.00	6,886.03	6,872.49	6,864.74	24.86	0.00	-153.11	151.36	-140.73	437.38	413.01	24.37	17.945	
7,000.00	6,985.65	6,972.73	6,964.60	25.23	0.00	-152.72	158.48	-145.69	450.37	425.63	24.74	18.204	
7,100.00	7,085.27	7,077.03	7,068.62	25.61	0.00	-152.48	164.81	-150.10	462.60	437.48	25.12	18.415	
7,200.00	7,184.89	7,181.65	7,173.07	25.99	0.00	-152.43	169.59	-153.43	473.72	448.22	25.50	18.577	
7,300.00	7,284.51	7,286.50	7,277.84	26.36	0.00	-152.57	172.81	-155.68	483.74	457.86	25.88	18.694	

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

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Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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
7,400.00	7,384.13	7,391.52	7,382.84	26.74	0.00	-152.87	174.46	-156.83	492.65	466.40	26.25	18.768	
7,500.00	7,483.75	7,494.12	7,485.45	27.12	0.00	-153.31	174.69	-156.99	500.58	473.97	26.61	18.809	
7,600.00	7,583.37	7,593.74	7,585.07	27.49	0.00	-153.75	174.69	-156.99	508.38	481.41	26.97	18.848	
7,700.00	7,682.99	7,693.36	7,684.69	27.87	0.00	-154.18	174.69	-156.99	516.22	488.88	27.33	18.886	
7,800.00	7,782.61	7,792.98	7,784.31	28.25	0.00	-154.60	174.69	-156.99	524.07	496.38	27.69	18.925	
7,834.87	7,817.34	7,827.72	7,819.04	28.38	0.00	-154.74	174.69	-156.99	526.82	499.00	27.82	18.938	
7,900.00	7,882.27	7,892.65	7,883.97	28.63	0.00	-155.00	174.69	-156.99	531.46	503.41	28.05	18.946	
8,000.00	7,982.11	7,992.48	7,983.81	28.99	0.00	-155.29	174.69	-156.99	536.63	508.22	28.41	18.889	
8,100.00	8,082.06	8,092.43	8,083.76	29.35	0.00	-155.45	174.69	-156.99	539.44	510.68	28.76	18.753	
8,167.95	8,150.00	8,160.37	8,151.70	29.59	0.00	-90.03	174.69	-156.99	539.99	510.99	29.00	18.617	
8,200.00	8,182.05	8,192.43	8,183.75	29.70	0.00	-90.03	174.69	-156.99	539.99	510.87	29.12	18.546	
8,300.00	8,282.05	8,292.43	8,283.75	30.05	0.00	-90.03	174.69	-156.99	539.99	510.52	29.47	18.325	
8,400.00	8,382.05	8,392.43	8,383.75	30.39	0.00	-90.03	174.69	-156.99	539.99	510.17	29.82	18.109	
8,500.00	8,482.05	8,492.43	8,483.75	30.74	0.00	-90.03	174.69	-156.99	539.99	509.82	30.17	17.898	
8,600.00	8,582.05	8,592.43	8,583.75	31.08	0.00	-90.03	174.69	-156.99	539.99	509.47	30.52	17.692	
8,700.00	8,682.05	8,692.43	8,683.75	31.43	0.00	-90.03	174.69	-156.99	539.99	509.12	30.87	17.491	
8,800.00	8,782.05	8,792.43	8,783.75	31.78	0.00	-90.03	174.69	-156.99	539.99	508.77	31.22	17.294	
8,900.00	8,882.05	8,892.43	8,883.75	32.13	0.00	-90.03	174.69	-156.99	539.99	508.41	31.58	17.101	
9,000.00	8,982.05	8,992.43	8,983.75	32.47	0.00	-90.03	174.69	-156.99	539.99	508.06	31.93	16.913	
9,100.00	9,082.05	9,092.43	9,083.75	32.82	0.00	-90.03	174.69	-156.99	539.99	507.71	32.28	16.728	
9,200.00	9,182.05	9,192.43	9,183.75	33.17	0.00	-90.03	174.69	-156.99	539.99	507.36	32.63	16.548	
9,300.00	9,282.05	9,292.43	9,283.75	33.52	0.00	-90.03	174.69	-156.99	539.99	507.01	32.98	16.371	
9,400.00	9,382.05	9,392.43	9,383.75	33.87	0.00	-90.03	174.69	-156.99	539.99	506.65	33.34	16.198	
9,500.00	9,482.05	9,492.43	9,483.75	34.22	0.00	-90.03	174.69	-156.99	539.99	506.30	33.69	16.028	
9,600.00	9,582.05	9,592.43	9,583.75	34.57	0.00	-90.03	174.69	-156.99	539.99	505.95	34.04	15.862	
9,700.00	9,682.05	9,692.43	9,683.75	34.92	0.00	-90.03	174.69	-156.99	539.99	505.59	34.40	15.700	
9,800.00	9,782.05	9,792.43	9,783.75	35.26	0.00	-90.03	174.69	-156.99	539.99	505.24	34.75	15.540	
9,900.00	9,882.05	9,892.43	9,883.75	35.61	0.00	-90.03	174.69	-156.99	539.99	504.89	35.10	15.384	
10,000.00	9,982.05	9,992.43	9,983.75	35.96	0.00	-90.03	174.69	-156.99	539.99	504.54	35.45	15.231	
10,100.00	10,082.05	10,092.43	10,083.75	36.31	0.00	-90.03	174.69	-156.99	539.99	504.18	35.81	15.080	
10,200.00	10,182.05	10,192.43	10,183.75	36.66	0.00	-90.03	174.69	-156.99	539.99	503.83	36.16	14.933	
10,300.00	10,282.05	10,292.43	10,283.75	37.01	0.00	-90.03	174.69	-156.99	539.99	503.48	36.51	14.788	
10,400.00	10,382.05	10,392.43	10,383.75	37.36	0.00	-90.03	174.69	-156.99	539.99	503.12	36.87	14.646	
10,500.00	10,482.05	10,492.43	10,483.75	37.72	0.00	-90.03	174.69	-156.99	539.99	502.77	37.22	14.507	
10,600.00	10,582.05	10,592.43	10,583.75	38.07	0.00	-90.03	174.69	-156.99	539.99	502.41	37.58	14.371	
10,700.00	10,682.05	10,692.43	10,683.75	38.42	0.00	-90.03	174.69	-156.99	539.99	502.06	37.93	14.237	
10,800.00	10,782.05	10,792.43	10,783.75	38.77	0.00	-90.03	174.69	-156.99	539.99	501.71	38.28	14.105	
10,900.00	10,882.05	10,892.43	10,883.75	39.12	0.00	-90.03	174.69	-156.99	539.99	501.35	38.64	13.976	
11,000.00	10,982.05	10,992.43	10,983.75	39.47	0.00	-90.03	174.69	-156.99	539.99	501.00	38.99	13.849	
11,100.00	11,082.05	11,092.43	11,083.75	39.82	0.00	-90.03	174.69	-156.99	539.99	500.64	39.35	13.724	
11,200.00	11,182.05	11,192.43	11,183.75	40.17	0.00	-90.03	174.69	-156.99	539.99	500.29	39.70	13.602	
11,300.00	11,282.05	11,292.43	11,283.75	40.53	0.00	-90.03	174.69	-156.99	539.99	499.94	40.05	13.481	
11,400.00	11,382.05	11,392.51	11,383.83	40.88	0.00	-90.04	174.59	-156.99	539.99	499.58	40.41	13.363	
11,460.17	11,442.22	11,452.78	11,443.92	41.09	0.00	-90.50	170.28	-156.95	539.97	499.35	40.62	13.293	
11,500.00	11,482.05	11,491.90	11,482.55	41.23	0.00	-91.15	164.12	-156.90	540.01	499.25	40.76	13.250	
11,573.95	11,556.00	11,561.64	11,550.02	41.49	0.00	-93.01	146.66	-156.75	540.54	499.55	41.00	13.186	
11,600.00	11,582.04	11,585.25	11,572.32	41.58	0.00	86.68	138.90	-156.68	540.97	499.90	41.07	13.172	
11,650.00	11,631.83	11,629.80	11,613.44	41.73	0.00	85.16	121.80	-156.53	542.09	500.89	41.20	13.159	
11,700.00	11,681.04	11,673.44	11,652.32	41.89	0.00	83.68	102.00	-156.36	543.57	502.26	41.30	13.160	
11,750.00	11,729.29	11,716.26	11,688.89	42.03	0.00	82.25	79.74	-156.16	545.34	503.95	41.39	13.175	
11,800.00	11,776.23	11,758.35	11,723.12	42.17	0.00	80.89	55.27	-155.95	547.37	505.91	41.46	13.204	
11,850.00	11,821.49	11,800.00	11,755.14	42.29	0.00	79.58	28.65	-155.71	549.58	508.08	41.50	13.243	

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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
11,900.00	11,864.74	11,840.62	11,784.42	42.41	0.00	78.37	0.50	-155.47	551.92	510.40	41.52	13.294	
11,950.00	11,905.63	11,880.95	11,811.44	42.51	0.00	77.23	-29.41	-155.21	554.32	512.80	41.52	13.352	
12,000.00	11,943.86	11,920.81	11,836.02	42.61	0.00	76.17	-60.78	-154.93	556.72	515.22	41.50	13.415	
12,050.00	11,979.14	11,960.26	11,858.15	42.69	0.00	75.21	-93.44	-154.65	559.07	517.60	41.47	13.481	
12,100.00	12,011.20	12,000.00	11,878.10	42.77	0.00	74.33	-127.79	-154.35	561.32	519.88	41.44	13.545	
12,150.00	12,039.79	12,038.16	11,894.98	42.84	0.00	73.57	-162.01	-154.05	563.41	522.01	41.40	13.608	
12,200.00	12,064.70	12,076.70	11,909.68	42.91	0.00	72.90	-197.62	-153.74	565.30	523.92	41.38	13.663	
12,250.00	12,085.75	12,115.01	11,921.89	43.00	0.00	72.34	-233.93	-153.42	566.95	525.59	41.36	13.708	
12,300.00	12,102.76	12,150.00	11,930.89	43.11	0.00	71.90	-267.73	-153.13	568.34	527.00	41.34	13.747	
12,350.00	12,115.60	12,191.15	11,938.82	43.23	0.00	71.52	-308.11	-152.77	569.41	528.04	41.38	13.761	
12,400.00	12,124.19	12,229.06	11,943.54	43.35	0.00	71.28	-345.70	-152.44	570.18	528.75	41.42	13.764	
12,450.00	12,128.46	12,266.89	11,945.77	43.49	0.00	71.14	-383.47	-152.11	570.60	529.11	41.50	13.750	
12,468.97	12,128.94	12,282.84	11,945.99	43.54	0.00	71.12	-399.41	-151.98	570.67	529.13	41.54	13.739	
12,500.00	12,129.21	12,313.87	11,946.29	43.63	0.00	71.12	-430.44	-151.70	570.66	529.05	41.61	13.714	
12,600.00	12,130.07	12,413.87	11,947.23	43.95	0.00	71.13	-530.43	-150.83	570.64	528.74	41.89	13.621	
12,700.00	12,130.94	12,513.87	11,948.17	44.33	0.00	71.14	-630.42	-149.96	570.61	528.38	42.23	13.511	
12,800.00	12,131.81	12,613.87	11,949.11	44.77	0.00	71.14	-730.41	-149.08	570.59	527.96	42.63	13.384	
12,900.00	12,132.68	12,713.87	11,950.05	45.26	0.00	71.15	-830.40	-148.21	570.57	527.48	43.08	13.243	
13,000.00	12,133.55	12,813.87	11,950.99	45.80	0.00	71.16	-930.40	-147.34	570.54	526.96	43.59	13.089	
13,100.00	12,134.42	12,913.87	11,951.93	46.40	0.00	71.16	-1,030.39	-146.46	570.52	526.38	44.14	12.924	
13,200.00	12,135.28	13,013.87	11,952.87	47.04	0.00	71.17	-1,130.38	-145.59	570.50	525.75	44.75	12.749	
13,300.00	12,136.15	13,113.87	11,953.81	47.73	0.00	71.18	-1,230.37	-144.72	570.47	525.07	45.40	12.565	
13,400.00	12,137.02	13,213.87	11,954.75	48.47	0.00	71.18	-1,330.36	-143.84	570.45	524.35	46.10	12.374	
13,500.00	12,137.89	13,313.87	11,955.69	49.25	0.00	71.19	-1,430.35	-142.97	570.43	523.59	46.84	12.178	
13,600.00	12,138.76	13,413.87	11,956.63	50.08	0.00	71.20	-1,530.35	-142.10	570.40	522.78	47.62	11.977	
13,700.00	12,139.63	13,513.87	11,957.57	50.94	0.00	71.20	-1,630.34	-141.22	570.38	521.93	48.45	11.774	
13,800.00	12,140.49	13,613.87	11,958.51	51.85	0.00	71.21	-1,730.33	-140.35	570.36	521.05	49.31	11.568	
13,900.00	12,141.36	13,713.87	11,959.45	52.78	0.00	71.22	-1,830.32	-139.48	570.33	520.13	50.20	11.361	
14,000.00	12,142.23	13,813.87	11,960.39	53.76	0.00	71.23	-1,930.31	-138.60	570.31	519.18	51.13	11.154	
14,100.00	12,143.10	13,913.87	11,961.33	54.76	0.00	71.23	-2,030.30	-137.73	570.29	518.20	52.09	10.948	
14,200.00	12,143.97	14,013.87	11,962.27	55.80	0.00	71.24	-2,130.30	-136.86	570.26	517.18	53.08	10.744	
14,300.00	12,144.84	14,113.87	11,963.21	56.87	0.00	71.25	-2,230.29	-135.98	570.24	516.14	54.10	10.541	
14,400.00	12,145.71	14,213.87	11,964.15	57.96	0.00	71.25	-2,330.28	-135.11	570.22	515.07	55.14	10.341	
14,500.00	12,146.57	14,313.87	11,965.09	59.08	0.00	71.26	-2,430.27	-134.24	570.19	513.98	56.21	10.143	
14,600.00	12,147.44	14,413.87	11,966.03	60.22	0.00	71.27	-2,530.26	-133.36	570.17	512.86	57.31	9.949	
14,700.00	12,148.31	14,513.87	11,966.97	61.39	0.00	71.27	-2,630.26	-132.49	570.14	511.72	58.43	9.758	
14,800.00	12,149.18	14,613.87	11,967.91	62.58	0.00	71.28	-2,730.25	-131.62	570.12	510.55	59.57	9.571	
14,900.00	12,150.05	14,713.87	11,968.85	63.79	0.00	71.29	-2,830.24	-130.74	570.10	509.37	60.73	9.388	
15,000.00	12,150.92	14,813.87	11,969.79	65.02	0.00	71.29	-2,930.23	-129.87	570.07	508.17	61.90	9.209	
15,100.00	12,151.78	14,913.87	11,970.73	66.26	0.00	71.30	-3,030.22	-129.00	570.05	506.95	63.10	9.034	
15,200.00	12,152.65	15,013.87	11,971.67	67.53	0.00	71.31	-3,130.21	-128.12	570.03	505.71	64.31	8.863	
15,300.00	12,153.52	15,113.87	11,972.61	68.81	0.00	71.31	-3,230.21	-127.25	570.00	504.46	65.54	8.697	
15,400.00	12,154.39	15,213.87	11,973.55	70.10	0.00	71.32	-3,330.20	-126.38	569.98	503.19	66.79	8.534	
15,500.00	12,155.26	15,313.87	11,974.49	71.42	0.00	71.33	-3,430.19	-125.50	569.96	501.91	68.05	8.376	
15,600.00	12,156.13	15,413.87	11,975.43	72.74	0.00	71.33	-3,530.18	-124.63	569.93	500.62	69.32	8.222	
15,700.00	12,156.99	15,513.87	11,976.37	74.08	0.00	71.34	-3,630.17	-123.76	569.91	499.31	70.60	8.072	
15,800.00	12,157.86	15,613.87	11,977.31	75.43	0.00	71.35	-3,730.16	-122.88	569.89	497.99	71.90	7.926	
15,900.00	12,158.73	15,713.87	11,978.25	76.79	0.00	71.35	-3,830.16	-122.01	569.86	496.65	73.21	7.784	
16,000.00	12,159.60	15,813.87	11,979.18	78.17	0.00	71.36	-3,930.15	-121.14	569.84	495.31	74.53	7.646	
16,100.00	12,160.47	15,913.87	11,980.12	79.55	0.00	71.37	-4,030.14	-120.26	569.82	493.96	75.86	7.511	
16,200.00	12,161.34	16,013.87	11,981.06	80.95	0.00	71.37	-4,130.13	-119.39	569.79	492.59	77.20	7.381	
16,300.00	12,162.20	16,113.87	11,982.00	82.35	0.00	71.38	-4,230.12	-118.52	569.77	491.22	78.55	7.254	

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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
16,400.00	12,163.07	16,213.87	11,982.94	83.76	0.00	71.39	-4,330.11	-117.64	569.75	489.84	79.91	7.130	
16,500.00	12,163.94	16,313.87	11,983.88	85.19	0.00	71.40	-4,430.11	-116.77	569.73	488.45	81.28	7.010	
16,600.00	12,164.81	16,413.87	11,984.82	86.62	0.00	71.40	-4,530.10	-115.90	569.70	487.05	82.65	6.893	
16,700.00	12,165.68	16,513.87	11,985.76	88.05	0.00	71.41	-4,630.09	-115.02	569.68	485.65	84.03	6.779	
16,800.00	12,166.55	16,613.87	11,986.70	89.50	0.00	71.42	-4,730.08	-114.15	569.66	484.23	85.42	6.669	
16,900.00	12,167.41	16,713.87	11,987.64	90.95	0.00	71.42	-4,830.07	-113.28	569.63	482.81	86.82	6.561	
17,000.00	12,168.28	16,813.87	11,988.58	92.41	0.00	71.43	-4,930.07	-112.40	569.61	481.39	88.22	6.457	
17,100.00	12,169.15	16,913.87	11,989.52	93.88	0.00	71.44	-5,030.06	-111.53	569.59	479.95	89.63	6.355	
17,200.00	12,170.02	17,013.87	11,990.46	95.35	0.00	71.44	-5,130.05	-110.66	569.56	478.52	91.05	6.256	
17,300.00	12,170.89	17,113.87	11,991.40	96.83	0.00	71.45	-5,230.04	-109.78	569.54	477.07	92.47	6.159	
17,400.00	12,171.76	17,213.87	11,992.34	98.31	0.00	71.46	-5,330.03	-108.91	569.52	475.62	93.90	6.065	
17,500.00	12,172.62	17,313.87	11,993.28	99.80	0.00	71.46	-5,430.02	-108.04	569.49	474.17	95.33	5.974	
17,600.00	12,173.49	17,413.87	11,994.22	101.29	0.00	71.47	-5,530.02	-107.16	569.47	472.71	96.76	5.885	
17,700.00	12,174.36	17,513.87	11,995.16	102.79	0.00	71.48	-5,630.01	-106.29	569.45	471.24	98.21	5.799	
17,800.00	12,175.23	17,613.87	11,996.10	104.29	0.00	71.48	-5,730.00	-105.42	569.42	469.77	99.65	5.714	
17,900.00	12,176.10	17,713.87	11,997.04	105.80	0.00	71.49	-5,829.99	-104.54	569.40	468.30	101.10	5.632	
18,000.00	12,176.97	17,813.87	11,997.98	107.31	0.00	71.50	-5,929.98	-103.67	569.38	466.82	102.56	5.552	
18,100.00	12,177.84	17,913.87	11,998.92	108.83	0.00	71.50	-6,029.97	-102.80	569.35	465.34	104.02	5.474	
18,200.00	12,178.70	18,013.87	11,999.86	110.35	0.00	71.51	-6,129.97	-101.92	569.33	463.85	105.48	5.398	
18,300.00	12,179.57	18,113.87	12,000.80	111.87	0.00	71.52	-6,229.96	-101.05	569.31	462.36	106.95	5.323	
18,400.00	12,180.44	18,213.87	12,001.74	113.40	0.00	71.52	-6,329.95	-100.18	569.28	460.87	108.42	5.251	
18,500.00	12,181.31	18,313.87	12,002.68	114.93	0.00	71.53	-6,429.94	-99.30	569.26	459.37	109.89	5.180	
18,600.00	12,182.18	18,413.87	12,003.62	116.46	0.00	71.54	-6,529.93	-98.43	569.24	457.87	111.37	5.111	
18,700.00	12,183.05	18,513.87	12,004.56	118.00	0.00	71.55	-6,629.92	-97.56	569.22	456.37	112.85	5.044	
18,800.00	12,183.91	18,613.87	12,005.50	119.54	0.00	71.55	-6,729.92	-96.68	569.19	454.86	114.33	4.979	
18,900.00	12,184.78	18,713.87	12,006.44	121.09	0.00	71.56	-6,829.91	-95.81	569.17	453.35	115.82	4.914	
19,000.00	12,185.65	18,813.87	12,007.38	122.63	0.00	71.57	-6,929.90	-94.93	569.15	451.84	117.30	4.852	
19,100.00	12,186.52	18,913.87	12,008.32	124.18	0.00	71.57	-7,029.89	-94.06	569.12	450.33	118.80	4.791	
19,200.00	12,187.39	19,013.87	12,009.26	125.73	0.00	71.58	-7,129.88	-93.19	569.10	448.81	120.29	4.731	
19,300.00	12,188.26	19,113.87	12,010.20	127.29	0.00	71.59	-7,229.88	-92.31	569.08	447.29	121.79	4.673	
19,400.00	12,189.12	19,213.87	12,011.14	128.84	0.00	71.59	-7,329.87	-91.44	569.05	445.77	123.29	4.616	
19,500.00	12,189.99	19,313.87	12,012.08	130.40	0.00	71.60	-7,429.86	-90.57	569.03	444.24	124.79	4.560	
19,600.00	12,190.86	19,413.87	12,013.02	131.96	0.00	71.61	-7,529.85	-89.69	569.01	442.72	126.29	4.505	
19,700.00	12,191.73	19,513.87	12,013.96	133.53	0.00	71.61	-7,629.84	-88.82	568.99	441.19	127.80	4.452	
19,800.00	12,192.60	19,613.87	12,014.90	135.09	0.00	71.62	-7,729.83	-87.95	568.96	439.66	129.31	4.400	
19,900.00	12,193.47	19,713.87	12,015.84	136.66	0.00	71.63	-7,829.83	-87.07	568.94	438.12	130.82	4.349	
20,000.00	12,194.33	19,813.87	12,016.78	138.23	0.00	71.63	-7,929.82	-86.20	568.92	436.59	132.33	4.299	
20,100.00	12,195.20	19,913.87	12,017.72	139.80	0.00	71.64	-8,029.81	-85.33	568.89	435.05	133.84	4.250	
20,200.00	12,196.07	20,013.87	12,018.66	141.38	0.00	71.65	-8,129.80	-84.45	568.87	433.51	135.36	4.203	
20,300.00	12,196.94	20,113.87	12,019.60	142.95	0.00	71.65	-8,229.79	-83.58	568.85	431.97	136.88	4.156	
20,400.00	12,197.81	20,213.87	12,020.54	144.53	0.00	71.66	-8,329.78	-82.71	568.82	430.43	138.40	4.110	
20,500.00	12,198.68	20,313.87	12,021.48	146.11	0.00	71.67	-8,429.78	-81.83	568.80	428.88	139.92	4.065	
20,600.00	12,199.54	20,413.87	12,022.42	147.69	0.00	71.67	-8,529.77	-80.96	568.78	427.34	141.44	4.021	
20,700.00	12,200.41	20,513.87	12,023.36	149.27	0.00	71.68	-8,629.76	-80.09	568.76	425.79	142.97	3.978	
20,800.00	12,201.28	20,613.87	12,024.30	150.85	0.00	71.69	-8,729.75	-79.21	568.73	424.24	144.49	3.936	
20,900.00	12,202.15	20,713.87	12,025.24	152.44	0.00	71.70	-8,829.74	-78.34	568.71	422.69	146.02	3.895	
21,000.00	12,203.02	20,813.87	12,026.18	154.02	0.00	71.70	-8,929.74	-77.47	568.69	421.14	147.55	3.854	
21,100.00	12,203.89	20,913.87	12,027.12	155.61	0.00	71.71	-9,029.73	-76.59	568.66	419.58	149.08	3.814	
21,200.00	12,204.75	21,013.87	12,028.06	157.20	0.00	71.72	-9,129.72	-75.72	568.64	418.03	150.61	3.776	
21,300.00	12,205.62	21,113.87	12,029.00	158.79	0.00	71.72	-9,229.71	-74.85	568.62	416.47	152.15	3.737	
21,400.00	12,206.49	21,213.87	12,029.94	160.38	0.00	71.73	-9,329.70	-73.97	568.60	414.92	153.68	3.700	
21,500.00	12,207.36	21,313.87	12,030.88	161.98	0.00	71.74	-9,429.69	-73.10	568.57	413.36	155.22	3.663	

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

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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
21,600.00	12,208.23	21,413.87	12,031.82	163.57	0.00	71.74	-9,529.69	-72.23	568.55	411.80	156.75	3.627	
21,700.00	12,209.10	21,513.87	12,032.76	165.17	0.00	71.75	-9,629.68	-71.35	568.53	410.24	158.29	3.592	
21,800.00	12,209.97	21,613.87	12,033.70	166.76	0.00	71.76	-9,729.67	-70.48	568.50	408.67	159.83	3.557	
21,900.00	12,210.83	21,713.87	12,034.64	168.36	0.00	71.76	-9,829.66	-69.61	568.48	407.11	161.37	3.523	
22,000.00	12,211.70	21,813.87	12,035.58	169.96	0.00	71.77	-9,929.65	-68.73	568.46	405.55	162.91	3.489	
22,100.00	12,212.57	21,913.87	12,036.52	171.56	0.00	71.78	-10,029.64	-67.86	568.44	403.98	164.46	3.456	
22,200.00	12,213.44	22,013.87	12,037.46	173.16	0.00	71.78	-10,129.64	-66.99	568.41	402.41	166.00	3.424	
22,244.59	12,213.83	22,058.45	12,037.88	173.79	0.00	71.79	-10,174.22	-66.60	568.40	401.80	166.61	3.412	
22,261.24	12,213.97	22,074.19	12,038.03	174.03	0.00	71.79	-10,189.96	-66.46	568.40	401.58	166.82	3.407	

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 701H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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	2.70	2.70	0.00	0.00	-90.52	-0.63	-69.99	69.99				
100.00	100.00	102.70	102.70	0.14	0.00	-90.52	-0.63	-69.99	69.99	69.85	0.14	493.615	
200.00	200.00	202.70	202.70	0.50	0.00	-90.52	-0.63	-69.99	69.99	69.49	0.50	139.911	
300.00	300.00	302.70	302.70	0.86	0.00	-90.52	-0.63	-69.99	69.99	69.13	0.86	81.506	
400.00	400.00	402.70	402.70	1.22	0.00	-90.52	-0.63	-69.99	69.99	68.78	1.22	57.503	
500.00	500.00	502.70	502.70	1.58	0.00	-90.52	-0.63	-69.99	69.99	68.42	1.58	44.421	
600.00	600.00	602.70	602.70	1.93	0.00	-90.52	-0.63	-69.99	69.99	68.06	1.93	36.188	
700.00	700.00	702.70	702.70	2.29	0.00	-90.52	-0.63	-69.99	69.99	67.70	2.29	30.530	
800.00	800.00	802.70	802.70	2.65	0.00	-90.52	-0.63	-69.99	69.99	67.34	2.65	26.401	
900.00	900.00	902.70	902.70	3.01	0.00	-90.52	-0.63	-69.99	69.99	66.98	3.01	23.257	
1,000.00	1,000.00	1,002.70	1,002.70	3.37	0.00	-90.52	-0.63	-69.99	69.99	66.62	3.37	20.781	
1,100.00	1,100.00	1,102.70	1,102.70	3.73	0.00	-90.52	-0.63	-69.99	69.99	66.27	3.73	18.782	
1,200.00	1,200.00	1,202.70	1,202.70	4.08	0.00	-90.52	-0.63	-69.99	69.99	65.91	4.08	17.134	
1,300.00	1,300.00	1,302.70	1,302.70	4.44	0.00	-90.52	-0.63	-69.99	69.99	65.55	4.44	15.752	
1,400.00	1,400.00	1,402.70	1,402.70	4.80	0.00	-90.52	-0.63	-69.99	69.99	65.19	4.80	14.576	
1,500.00	1,500.00	1,502.70	1,502.70	5.16	0.00	-90.52	-0.63	-69.99	69.99	64.83	5.16	13.563	
1,600.00	1,600.00	1,602.70	1,602.70	5.52	0.00	-90.52	-0.63	-69.99	69.99	64.47	5.52	12.682	
1,700.00	1,700.00	1,702.70	1,702.70	5.88	0.00	-90.52	-0.63	-69.99	69.99	64.12	5.88	11.909	
1,800.00	1,800.00	1,802.70	1,802.70	6.24	0.00	-90.52	-0.63	-69.99	69.99	63.76	6.24	11.224	
1,900.00	1,900.00	1,902.70	1,902.70	6.59	0.00	-90.52	-0.63	-69.99	69.99	63.40	6.59	10.614	
2,000.00	2,000.00	2,002.70	2,002.70	6.95	0.00	-90.52	-0.63	-69.99	69.99	63.04	6.95	10.067	
2,100.00	2,100.00	2,102.70	2,102.70	7.31	0.00	-90.52	-0.63	-69.99	69.99	62.68	7.31	9.573	
2,200.00	2,200.00	2,202.70	2,202.70	7.67	0.00	-90.52	-0.63	-69.99	69.99	62.32	7.67	9.126	
2,215.74	2,215.74	2,218.44	2,218.44	7.73	0.00	-90.52	-0.63	-69.99	69.99	62.27	7.73	9.059	CC
2,300.00	2,300.00	2,302.64	2,302.64	8.03	0.00	-90.52	-0.63	-69.99	69.99	61.97	8.03	8.719	ES
2,400.00	2,400.00	2,400.00	2,399.98	8.39	0.00	-90.25	-0.31	-71.71	71.76	63.38	8.38	8.561	
2,500.00	2,500.00	2,497.64	2,497.48	8.74	0.00	-89.53	0.62	-76.69	76.87	68.14	8.73	8.806	
2,600.00	2,600.00	2,594.57	2,594.05	9.10	0.00	-88.55	2.15	-84.86	85.33	76.27	9.07	9.413	
2,700.00	2,700.00	2,693.45	2,692.35	9.46	0.00	-87.53	4.12	-95.39	96.04	86.62	9.42	10.199	
2,800.00	2,800.00	2,792.86	2,791.17	9.82	0.00	-86.70	6.11	-106.02	106.82	97.05	9.77	10.930	
2,900.00	2,900.00	2,892.26	2,889.98	10.18	0.00	-86.03	8.10	-116.66	117.63	107.50	10.13	11.612	
3,000.00	3,000.00	2,991.67	2,988.80	10.54	0.00	-85.47	10.08	-127.29	128.44	117.96	10.49	12.249	
3,100.00	3,099.99	3,090.95	3,087.49	10.89	0.00	-150.62	12.07	-137.91	140.40	129.57	10.84	12.956	
3,200.00	3,199.91	3,189.93	3,185.88	11.24	0.00	-150.82	14.05	-148.50	154.63	143.45	11.18	13.826	
3,300.00	3,299.69	3,288.53	3,283.90	11.59	0.00	-151.38	16.02	-159.05	171.13	159.60	11.53	14.843	
3,333.08	3,332.66	3,321.06	3,316.23	11.71	0.00	-151.63	16.67	-162.53	177.09	165.44	11.64	15.208	
3,400.00	3,399.32	3,386.81	3,381.59	11.94	0.00	-152.20	17.99	-169.56	189.41	177.54	11.87	15.951	
3,500.00	3,498.94	3,485.06	3,479.26	12.30	0.00	-152.92	19.95	-180.07	207.86	195.64	12.22	17.011	
3,600.00	3,598.56	3,583.32	3,576.93	12.65	0.00	-153.53	21.92	-190.59	226.33	213.76	12.56	18.013	
3,700.00	3,698.18	3,681.57	3,674.60	13.01	0.00	-154.05	23.88	-201.10	244.82	231.91	12.91	18.963	
3,800.00	3,797.80	3,779.82	3,772.27	13.37	0.00	-154.49	25.85	-211.61	263.33	250.07	13.26	19.862	
3,900.00	3,897.42	3,878.08	3,869.94	13.73	0.00	-154.87	27.81	-222.12	281.85	268.25	13.61	20.716	
4,000.00	3,997.04	3,976.33	3,967.61	14.09	0.00	-155.21	29.78	-232.63	300.38	286.43	13.95	21.527	
4,100.00	4,096.66	4,074.58	4,065.28	14.45	0.00	-155.51	31.74	-243.14	318.93	304.62	14.30	22.298	
4,200.00	4,196.28	4,172.84	4,162.95	14.82	0.00	-155.77	33.71	-253.65	337.47	322.82	14.65	23.033	
4,300.00	4,295.90	4,271.09	4,260.62	15.18	0.00	-156.01	35.67	-264.16	356.03	341.03	15.00	23.732	
4,400.00	4,395.52	4,369.34	4,358.29	15.55	0.00	-156.23	37.64	-274.68	374.59	359.24	15.35	24.399	
4,500.00	4,495.14	4,467.60	4,455.96	15.91	0.00	-156.42	39.60	-285.19	393.16	377.45	15.70	25.036	
4,600.00	4,594.76	4,565.85	4,553.63	16.28	0.00	-156.60	41.57	-295.70	411.72	395.67	16.05	25.645	
4,700.00	4,694.38	4,664.10	4,651.30	16.65	0.00	-156.76	43.53	-306.21	430.30	413.89	16.41	26.227	
4,800.00	4,794.00	4,762.36	4,748.97	17.02	0.00	-156.90	45.50	-316.72	448.87	432.11	16.76	26.784	
4,900.00	4,893.62	4,860.61	4,846.64	17.39	0.00	-157.04	47.47	-327.23	467.45	450.34	17.11	27.318	

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

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 701H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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	4,993.24	4,958.86	4,944.31	17.76	0.00	-157.17	49.43	-337.74	486.03	468.57	17.46	27.830	
5,100.00	5,092.86	5,057.12	5,041.98	18.13	0.00	-157.28	51.40	-348.25	504.61	486.80	17.82	28.321	
5,200.00	5,192.48	5,155.37	5,139.65	18.50	0.00	-157.39	53.36	-358.76	523.20	505.03	18.17	28.793	
5,300.00	5,292.10	5,253.62	5,237.32	18.87	0.00	-157.49	55.33	-369.28	541.79	523.26	18.52	29.246	
5,400.00	5,391.72	5,351.88	5,334.99	19.24	0.00	-157.59	57.29	-379.79	560.37	541.49	18.88	29.682	
5,500.00	5,491.34	5,450.13	5,432.65	19.61	0.00	-157.67	59.26	-390.30	578.96	559.73	19.23	30.102	
5,600.00	5,590.96	5,548.38	5,530.32	19.98	0.00	-157.76	61.22	-400.81	597.55	577.97	19.59	30.506	
5,700.00	5,690.58	5,646.64	5,627.99	20.36	0.00	-157.83	63.19	-411.32	616.14	596.20	19.94	30.896	
5,800.00	5,790.20	5,744.89	5,725.66	20.73	0.00	-157.91	65.15	-421.83	634.74	614.44	20.30	31.271	
5,900.00	5,889.83	5,843.14	5,823.33	21.10	0.00	-157.98	67.12	-432.34	653.33	632.68	20.65	31.633	
6,000.00	5,989.45	5,941.40	5,921.00	21.48	0.00	-158.04	69.08	-442.85	671.92	650.92	21.01	31.983	
6,100.00	6,089.07	6,039.65	6,018.67	21.85	0.00	-158.10	71.05	-453.37	690.52	669.16	21.36	32.321	
6,200.00	6,188.69	6,137.90	6,116.34	22.23	0.00	-158.16	73.01	-463.88	709.12	687.40	21.72	32.647	
6,300.00	6,288.31	6,236.16	6,214.01	22.60	0.00	-158.22	74.98	-474.39	727.71	705.64	22.08	32.963	
6,400.00	6,387.93	6,334.41	6,311.68	22.98	0.00	-158.27	76.94	-484.90	746.31	723.88	22.43	33.269	
6,500.00	6,487.55	6,432.66	6,409.35	23.35	0.00	-158.32	78.91	-495.41	764.91	742.12	22.79	33.564	
6,600.00	6,587.17	6,530.92	6,507.02	23.73	0.00	-158.37	80.87	-505.92	783.51	760.36	23.15	33.850	
6,700.00	6,686.79	6,629.17	6,604.69	24.10	0.00	-158.41	82.84	-516.43	802.10	778.60	23.50	34.128	
6,800.00	6,786.41	6,727.42	6,702.36	24.48	0.00	-158.46	84.80	-526.94	820.70	796.84	23.86	34.397	
6,900.00	6,886.03	6,825.68	6,800.03	24.86	0.00	-158.50	86.77	-537.46	839.30	815.09	24.22	34.657	
7,000.00	6,985.65	6,923.93	6,897.70	25.23	0.00	-158.54	88.74	-547.97	857.90	833.33	24.57	34.910	
7,100.00	7,085.27	7,022.18	6,995.37	25.61	0.00	-158.57	90.70	-558.48	876.50	851.57	24.93	35.156	
7,200.00	7,184.89	7,120.44	7,093.04	25.99	0.00	-158.61	92.67	-568.99	895.10	869.81	25.29	35.394	
7,300.00	7,284.51	7,218.69	7,190.71	26.36	0.00	-158.65	94.63	-579.50	913.71	888.06	25.65	35.626	
7,400.00	7,384.13	7,316.94	7,288.38	26.74	0.00	-158.68	96.60	-590.01	932.31	906.30	26.01	35.851	
7,500.00	7,483.75	7,415.20	7,386.05	27.12	0.00	-158.71	98.56	-600.52	950.91	924.55	26.36	36.069	
7,600.00	7,583.37	7,513.45	7,483.72	27.49	0.00	-158.74	100.53	-611.03	969.51	942.79	26.72	36.282	
7,700.00	7,682.99	7,611.70	7,581.39	27.87	0.00	-158.77	102.49	-621.54	988.11	961.03	27.08	36.489	
7,800.00	7,782.61	7,709.96	7,679.06	28.25	0.00	-158.80	104.46	-632.06	1,006.72	979.28	27.44	36.690	
7,834.87	7,817.34	7,744.21	7,713.11	28.38	0.00	-158.81	105.14	-635.72	1,013.20	985.64	27.56	36.759	
7,900.00	7,882.27	7,808.30	7,776.82	28.63	0.00	-158.88	106.42	-642.58	1,024.81	997.01	27.80	36.868	
8,000.00	7,982.11	7,907.04	7,874.97	28.99	0.00	-158.93	108.40	-653.14	1,040.64	1,012.49	28.15	36.964	
8,100.00	8,082.06	8,006.12	7,973.46	29.35	0.00	-158.92	110.38	-663.74	1,054.06	1,025.55	28.51	36.974	
8,167.95	8,150.00	8,073.61	8,040.55	29.59	0.00	-93.44	111.73	-670.96	1,061.80	1,033.05	28.75	36.935	
8,200.00	8,182.05	8,105.47	8,072.22	29.70	0.00	-93.39	112.37	-674.37	1,065.18	1,036.32	28.86	36.908	
8,300.00	8,282.05	8,204.87	8,171.03	30.05	0.00	-93.25	114.36	-685.00	1,075.75	1,046.54	29.21	36.827	
8,400.00	8,382.05	8,304.28	8,269.85	30.39	0.00	-93.11	116.34	-695.64	1,086.32	1,056.76	29.56	36.747	
8,500.00	8,482.05	8,403.68	8,368.66	30.74	0.00	-92.98	118.33	-706.27	1,096.90	1,066.99	29.91	36.669	
8,600.00	8,582.05	8,503.09	8,467.48	31.08	0.00	-92.85	120.32	-716.91	1,107.49	1,077.22	30.27	36.592	
8,700.00	8,682.05	8,602.50	8,566.30	31.43	0.00	-92.72	122.31	-727.54	1,118.08	1,087.46	30.62	36.518	
8,800.00	8,782.05	8,701.90	8,665.11	31.78	0.00	-92.59	124.30	-738.17	1,128.68	1,097.71	30.97	36.445	
8,900.00	8,882.05	8,801.31	8,763.93	32.13	0.00	-92.46	126.29	-748.81	1,139.28	1,107.96	31.32	36.374	
9,000.00	8,982.05	8,900.71	8,862.74	32.47	0.00	-92.34	128.27	-759.44	1,149.89	1,118.22	31.67	36.305	
9,100.00	9,082.05	9,000.12	8,961.56	32.82	0.00	-92.22	130.26	-770.08	1,160.50	1,128.48	32.03	36.237	
9,200.00	9,182.05	9,099.53	9,060.37	33.17	0.00	-92.10	132.25	-780.71	1,171.12	1,138.74	32.38	36.170	
9,300.00	9,282.05	9,198.93	9,159.19	33.52	0.00	-91.99	134.24	-791.35	1,181.74	1,149.01	32.73	36.105	
9,400.00	9,382.05	9,298.34	9,258.00	33.87	0.00	-91.87	136.23	-801.98	1,192.37	1,159.29	33.08	36.041	
9,500.00	9,482.05	9,397.74	9,356.82	34.22	0.00	-91.76	138.22	-812.62	1,203.00	1,169.57	33.44	35.979	
9,600.00	9,582.05	9,497.15	9,455.64	34.57	0.00	-91.65	140.20	-823.25	1,213.64	1,179.85	33.79	35.918	
9,700.00	9,682.05	9,596.56	9,554.45	34.92	0.00	-91.54	142.19	-833.89	1,224.28	1,190.14	34.14	35.858	
9,800.00	9,782.05	9,695.96	9,653.27	35.26	0.00	-91.44	144.18	-844.52	1,234.93	1,200.43	34.50	35.799	
9,900.00	9,882.05	9,795.37	9,752.08	35.61	0.00	-91.33	146.17	-855.15	1,245.58	1,210.73	34.85	35.742	

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

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 701H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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
10,000.00	9,982.05	9,894.77	9,850.90	35.96	0.00	-91.23	148.16	-865.79	1,256.23	1,221.03	35.20	35.686	
10,100.00	10,082.05	9,994.18	9,949.71	36.31	0.00	-91.13	150.15	-876.42	1,266.89	1,231.33	35.56	35.631	
10,200.00	10,182.05	10,093.59	10,048.53	36.66	0.00	-91.03	152.13	-887.06	1,277.55	1,241.64	35.91	35.577	
10,300.00	10,282.05	10,192.99	10,147.34	37.01	0.00	-90.93	154.12	-897.69	1,288.21	1,251.95	36.26	35.524	
10,400.00	10,382.05	10,292.40	10,246.16	37.36	0.00	-90.84	156.11	-908.33	1,298.88	1,262.26	36.62	35.472	
10,500.00	10,482.05	10,391.80	10,344.97	37.72	0.00	-90.74	158.10	-918.96	1,309.55	1,272.58	36.97	35.421	
10,600.00	10,582.05	10,491.21	10,443.79	38.07	0.00	-90.65	160.09	-929.60	1,320.23	1,282.90	37.33	35.371	
10,700.00	10,682.05	10,590.62	10,542.61	38.42	0.00	-90.56	162.08	-940.23	1,330.91	1,293.23	37.68	35.322	
10,800.00	10,782.05	10,690.02	10,641.42	38.77	0.00	-90.47	164.06	-950.86	1,341.59	1,303.55	38.03	35.274	
10,900.00	10,882.05	10,789.43	10,740.24	39.12	0.00	-90.38	166.05	-961.50	1,352.27	1,313.89	38.39	35.227	
11,000.00	10,982.05	10,888.83	10,839.05	39.47	0.00	-90.29	168.04	-972.13	1,362.96	1,324.22	38.74	35.180	
11,100.00	11,082.05	10,988.24	10,937.87	39.82	0.00	-90.21	170.03	-982.77	1,373.65	1,334.56	39.10	35.135	
11,200.00	11,182.05	11,122.63	11,071.56	40.17	0.00	-90.10	172.54	-996.22	1,383.86	1,344.32	39.54	35.001	
11,300.00	11,282.05	11,313.12	11,261.77	40.53	0.00	-90.03	174.30	-1,005.59	1,388.78	1,348.75	40.04	34.688	
11,400.00	11,382.05	11,436.10	11,384.75	40.88	0.00	-90.03	174.37	-1,005.99	1,388.99	1,348.58	40.41	34.373	
11,500.00	11,482.05	11,536.10	11,484.75	41.23	0.00	-90.03	174.37	-1,005.99	1,388.99	1,348.23	40.76	34.074	
11,573.95	11,556.00	11,610.05	11,558.70	41.49	0.00	-90.03	174.37	-1,005.99	1,388.99	1,347.96	41.03	33.857	
11,600.00	11,582.04	11,636.09	11,584.74	41.58	0.00	90.50	174.37	-1,005.99	1,389.00	1,347.88	41.11	33.784	
11,650.00	11,631.83	11,687.05	11,635.66	41.73	0.00	90.61	172.70	-1,005.98	1,389.02	1,347.75	41.27	33.654	
11,700.00	11,681.04	11,738.43	11,686.64	41.89	0.00	90.73	166.50	-1,005.92	1,389.06	1,347.63	41.43	33.530	
11,750.00	11,729.29	11,790.06	11,737.11	42.03	0.00	90.84	155.69	-1,005.83	1,389.09	1,347.52	41.57	33.412	
11,800.00	11,776.23	11,841.94	11,786.64	42.17	0.00	90.94	140.30	-1,005.70	1,389.13	1,347.42	41.72	33.300	
11,850.00	11,821.49	11,894.05	11,834.78	42.29	0.00	91.03	120.39	-1,005.52	1,389.17	1,347.32	41.85	33.193	
11,900.00	11,864.74	11,946.39	11,881.11	42.41	0.00	91.12	96.09	-1,005.31	1,389.22	1,347.23	41.98	33.092	
11,950.00	11,905.63	11,998.93	11,925.19	42.51	0.00	91.20	67.54	-1,005.07	1,389.26	1,347.15	42.11	32.994	
12,000.00	11,943.86	12,051.64	11,966.60	42.61	0.00	91.27	34.95	-1,004.78	1,389.29	1,347.07	42.23	32.901	
12,050.00	11,979.14	12,104.52	12,004.96	42.69	0.00	91.33	-1.41	-1,004.47	1,389.33	1,346.98	42.35	32.809	
12,100.00	12,011.20	12,157.53	12,039.89	42.77	0.00	91.37	-41.26	-1,004.13	1,389.36	1,346.90	42.46	32.719	
12,150.00	12,039.79	12,210.65	12,071.05	42.84	0.00	91.41	-84.26	-1,003.75	1,389.39	1,346.81	42.58	32.630	
12,200.00	12,064.70	12,263.85	12,098.12	42.91	0.00	91.44	-130.03	-1,003.36	1,389.40	1,346.71	42.70	32.540	
12,250.00	12,085.75	12,317.10	12,120.86	43.00	0.00	91.45	-178.15	-1,002.94	1,389.42	1,346.60	42.82	32.449	
12,300.00	12,102.76	12,370.37	12,139.04	43.11	0.00	91.45	-228.20	-1,002.51	1,389.42	1,346.48	42.94	32.357	
12,350.00	12,115.60	12,423.63	12,152.50	43.23	0.00	91.44	-279.72	-1,002.06	1,389.42	1,346.35	43.07	32.263	
12,400.00	12,124.19	12,476.85	12,161.10	43.35	0.00	91.42	-332.22	-1,001.61	1,389.41	1,346.22	43.19	32.167	
12,450.00	12,128.46	12,530.01	12,164.80	43.49	0.00	91.39	-385.22	-1,001.15	1,389.40	1,346.07	43.32	32.070	
12,466.01	12,128.90	12,546.45	12,165.02	43.53	0.00	91.38	-401.66	-1,001.01	1,389.39	1,346.03	43.36	32.040	
12,468.97	12,128.94	12,549.41	12,165.05	43.54	0.00	91.38	-404.62	-1,000.98	1,389.39	1,346.02	43.37	32.034	
12,500.00	12,129.21	12,580.44	12,165.38	43.63	0.00	91.38	-435.65	-1,000.71	1,389.40	1,345.94	43.46	31.973	
12,600.00	12,130.07	12,680.44	12,166.42	43.95	0.00	91.39	-535.64	-999.85	1,389.41	1,345.64	43.77	31.745	
12,700.00	12,130.94	12,780.44	12,167.46	44.33	0.00	91.39	-635.63	-998.99	1,389.42	1,345.28	44.14	31.479	
12,800.00	12,131.81	12,880.44	12,168.50	44.77	0.00	91.40	-735.62	-998.12	1,389.43	1,344.87	44.57	31.176	
12,900.00	12,132.68	12,980.44	12,169.55	45.26	0.00	91.41	-835.61	-997.26	1,389.45	1,344.39	45.05	30.840	
13,000.00	12,133.55	13,080.44	12,170.59	45.80	0.00	91.42	-935.60	-996.39	1,389.46	1,343.86	45.59	30.474	
13,100.00	12,134.42	13,180.44	12,171.63	46.40	0.00	91.42	-1,035.59	-995.53	1,389.47	1,343.28	46.19	30.083	
13,200.00	12,135.28	13,280.44	12,172.67	47.04	0.00	91.43	-1,135.58	-994.66	1,389.48	1,342.65	46.83	29.669	
13,300.00	12,136.15	13,380.43	12,173.72	47.73	0.00	91.44	-1,235.57	-993.80	1,389.50	1,341.97	47.53	29.237	
13,400.00	12,137.02	13,480.43	12,174.76	48.47	0.00	91.44	-1,335.56	-992.93	1,389.51	1,341.24	48.27	28.789	
13,500.00	12,137.89	13,580.43	12,175.80	49.25	0.00	91.45	-1,435.55	-992.07	1,389.52	1,340.47	49.05	28.329	
13,600.00	12,138.76	13,680.43	12,176.84	50.08	0.00	91.46	-1,535.54	-991.20	1,389.53	1,339.66	49.88	27.859	
13,700.00	12,139.63	13,780.43	12,177.89	50.94	0.00	91.47	-1,635.54	-990.34	1,389.55	1,338.80	50.74	27.383	
13,800.00	12,140.49	13,880.43	12,178.93	51.85	0.00	91.47	-1,735.53	-989.47	1,389.56	1,337.91	51.65	26.904	
13,900.00	12,141.36	13,980.43	12,179.97	52.78	0.00	91.48	-1,835.52	-988.61	1,389.57	1,336.98	52.59	26.422	

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 701H - OH - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0- **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	12,142.23	14,080.43	12,181.01	53.76	0.00	91.49	-1,935.51	-987.74	1,389.59	1,336.02	53.57	25.941	
14,100.00	12,143.10	14,180.43	12,182.06	54.76	0.00	91.50	-2,035.50	-986.88	1,389.60	1,335.02	54.58	25.461	
14,200.00	12,143.97	14,280.43	12,183.10	55.80	0.00	91.50	-2,135.49	-986.02	1,389.61	1,333.99	55.62	24.986	
14,300.00	12,144.84	14,380.43	12,184.14	56.87	0.00	91.51	-2,235.48	-985.15	1,389.62	1,332.94	56.69	24.515	
14,400.00	12,145.71	14,480.43	12,185.18	57.96	0.00	91.52	-2,335.47	-984.29	1,389.64	1,331.85	57.78	24.050	
14,500.00	12,146.57	14,580.43	12,186.23	59.08	0.00	91.52	-2,435.46	-983.42	1,389.65	1,330.75	58.90	23.592	
14,600.00	12,147.44	14,680.43	12,187.27	60.22	0.00	91.53	-2,535.45	-982.56	1,389.66	1,329.61	60.05	23.141	
14,700.00	12,148.31	14,780.43	12,188.31	61.39	0.00	91.54	-2,635.44	-981.69	1,389.68	1,328.45	61.22	22.699	
14,800.00	12,149.18	14,880.43	12,189.35	62.58	0.00	91.55	-2,735.43	-980.83	1,389.69	1,327.28	62.41	22.266	
14,900.00	12,150.05	14,980.43	12,190.39	63.79	0.00	91.55	-2,835.42	-979.96	1,389.70	1,326.08	63.63	21.842	
15,000.00	12,150.92	15,080.43	12,191.44	65.02	0.00	91.56	-2,935.41	-979.10	1,389.71	1,324.86	64.86	21.427	
15,100.00	12,151.78	15,180.43	12,192.48	66.26	0.00	91.57	-3,035.40	-978.23	1,389.73	1,323.62	66.11	21.022	
15,200.00	12,152.65	15,280.43	12,193.52	67.53	0.00	91.57	-3,135.40	-977.37	1,389.74	1,322.37	67.38	20.627	
15,300.00	12,153.52	15,380.43	12,194.56	68.81	0.00	91.58	-3,235.39	-976.50	1,389.75	1,321.09	68.66	20.241	
15,400.00	12,154.39	15,480.43	12,195.61	70.10	0.00	91.59	-3,335.38	-975.64	1,389.77	1,319.81	69.96	19.866	
15,500.00	12,155.26	15,580.43	12,196.65	71.42	0.00	91.60	-3,435.37	-974.77	1,389.78	1,318.51	71.27	19.500	
15,600.00	12,156.13	15,680.43	12,197.69	72.74	0.00	91.60	-3,535.36	-973.91	1,389.79	1,317.19	72.60	19.143	
15,700.00	12,156.99	15,780.43	12,198.73	74.08	0.00	91.61	-3,635.35	-973.05	1,389.81	1,315.86	73.94	18.796	
15,800.00	12,157.86	15,880.43	12,199.78	75.43	0.00	91.62	-3,735.34	-972.18	1,389.82	1,314.52	75.29	18.458	
15,900.00	12,158.73	15,980.43	12,200.82	76.79	0.00	91.62	-3,835.33	-971.32	1,389.83	1,313.17	76.66	18.130	
16,000.00	12,159.60	16,080.43	12,201.86	78.17	0.00	91.63	-3,935.32	-970.45	1,389.85	1,311.81	78.04	17.810	
16,100.00	12,160.47	16,180.43	12,202.90	79.55	0.00	91.64	-4,035.31	-969.59	1,389.86	1,310.44	79.42	17.500	
16,200.00	12,161.34	16,280.43	12,203.95	80.95	0.00	91.65	-4,135.30	-968.72	1,389.87	1,309.05	80.82	17.197	
16,300.00	12,162.20	16,380.43	12,204.99	82.35	0.00	91.65	-4,235.29	-967.86	1,389.89	1,307.66	82.23	16.903	
16,400.00	12,163.07	16,480.43	12,206.03	83.76	0.00	91.66	-4,335.28	-966.99	1,389.90	1,306.26	83.64	16.617	
16,500.00	12,163.94	16,580.43	12,207.07	85.19	0.00	91.67	-4,435.27	-966.13	1,389.91	1,304.85	85.06	16.339	
16,600.00	12,164.81	16,680.43	12,208.12	86.62	0.00	91.67	-4,535.26	-965.26	1,389.93	1,303.43	86.50	16.069	
16,700.00	12,165.68	16,780.43	12,209.16	88.05	0.00	91.68	-4,635.26	-964.40	1,389.94	1,302.00	87.94	15.806	
16,800.00	12,166.55	16,880.43	12,210.20	89.50	0.00	91.69	-4,735.25	-963.53	1,389.95	1,300.57	89.38	15.551	
16,900.00	12,167.41	16,980.43	12,211.24	90.95	0.00	91.70	-4,835.24	-962.67	1,389.97	1,299.13	90.84	15.302	
17,000.00	12,168.28	17,080.43	12,212.29	92.41	0.00	91.70	-4,935.23	-961.80	1,389.98	1,297.68	92.30	15.060	
17,100.00	12,169.15	17,180.43	12,213.33	93.88	0.00	91.71	-5,035.22	-960.94	1,389.99	1,296.23	93.76	14.824	
17,200.00	12,170.02	17,280.43	12,214.37	95.35	0.00	91.72	-5,135.21	-960.08	1,390.01	1,294.77	95.24	14.595	
17,300.00	12,170.89	17,380.43	12,215.41	96.83	0.00	91.72	-5,235.20	-959.21	1,390.02	1,293.30	96.72	14.372	
17,400.00	12,171.76	17,480.43	12,216.46	98.31	0.00	91.73	-5,335.19	-958.35	1,390.03	1,291.83	98.20	14.155	
17,500.00	12,172.62	17,580.43	12,217.50	99.80	0.00	91.74	-5,435.18	-957.48	1,390.05	1,290.36	99.69	13.944	
17,600.00	12,173.49	17,680.43	12,218.54	101.29	0.00	91.75	-5,535.17	-956.62	1,390.06	1,288.87	101.19	13.738	
17,700.00	12,174.36	17,780.43	12,219.58	102.79	0.00	91.75	-5,635.16	-955.75	1,390.07	1,287.39	102.68	13.537	
17,800.00	12,175.23	17,880.43	12,220.63	104.29	0.00	91.76	-5,735.15	-954.89	1,390.09	1,285.90	104.19	13.342	
17,900.00	12,176.10	17,980.43	12,221.67	105.80	0.00	91.77	-5,835.14	-954.02	1,390.10	1,284.40	105.70	13.152	
18,000.00	12,176.97	18,080.43	12,222.71	107.31	0.00	91.77	-5,935.13	-953.16	1,390.11	1,282.90	107.21	12.966	
18,100.00	12,177.84	18,180.43	12,223.75	108.83	0.00	91.78	-6,035.13	-952.29	1,390.13	1,281.40	108.73	12.785	
18,200.00	12,178.70	18,280.43	12,224.80	110.35	0.00	91.79	-6,135.12	-951.43	1,390.14	1,279.89	110.25	12.609	
18,300.00	12,179.57	18,380.43	12,225.84	111.87	0.00	91.80	-6,235.11	-950.56	1,390.16	1,278.38	111.77	12.437	
18,400.00	12,180.44	18,480.43	12,226.88	113.40	0.00	91.80	-6,335.10	-949.70	1,390.17	1,276.87	113.30	12.270	
18,500.00	12,181.31	18,580.43	12,227.92	114.93	0.00	91.81	-6,435.09	-948.83	1,390.18	1,275.35	114.83	12.106	
18,600.00	12,182.18	18,680.43	12,228.97	116.46	0.00	91.82	-6,535.08	-947.97	1,390.20	1,273.83	116.37	11.947	
18,700.00	12,183.05	18,780.43	12,230.01	118.00	0.00	91.82	-6,635.07	-947.11	1,390.21	1,272.31	117.90	11.791	
18,800.00	12,183.91	18,880.43	12,231.05	119.54	0.00	91.83	-6,735.06	-946.24	1,390.22	1,270.78	119.45	11.639	
18,900.00	12,184.78	18,980.43	12,232.09	121.09	0.00	91.84	-6,835.05	-945.38	1,390.24	1,269.25	120.99	11.491	
19,000.00	12,185.65	19,080.43	12,233.14	122.63	0.00	91.85	-6,935.04	-944.51	1,390.25	1,267.72	122.54	11.346	
19,100.00	12,186.52	19,180.43	12,234.18	124.18	0.00	91.85	-7,035.03	-943.65	1,390.27	1,266.18	124.09	11.204	

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

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.15 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design County Fair/Blue Ribbon - County Fair Fed Com 701H - OH - Plan #1

Offset Site Error: 0.00 usft

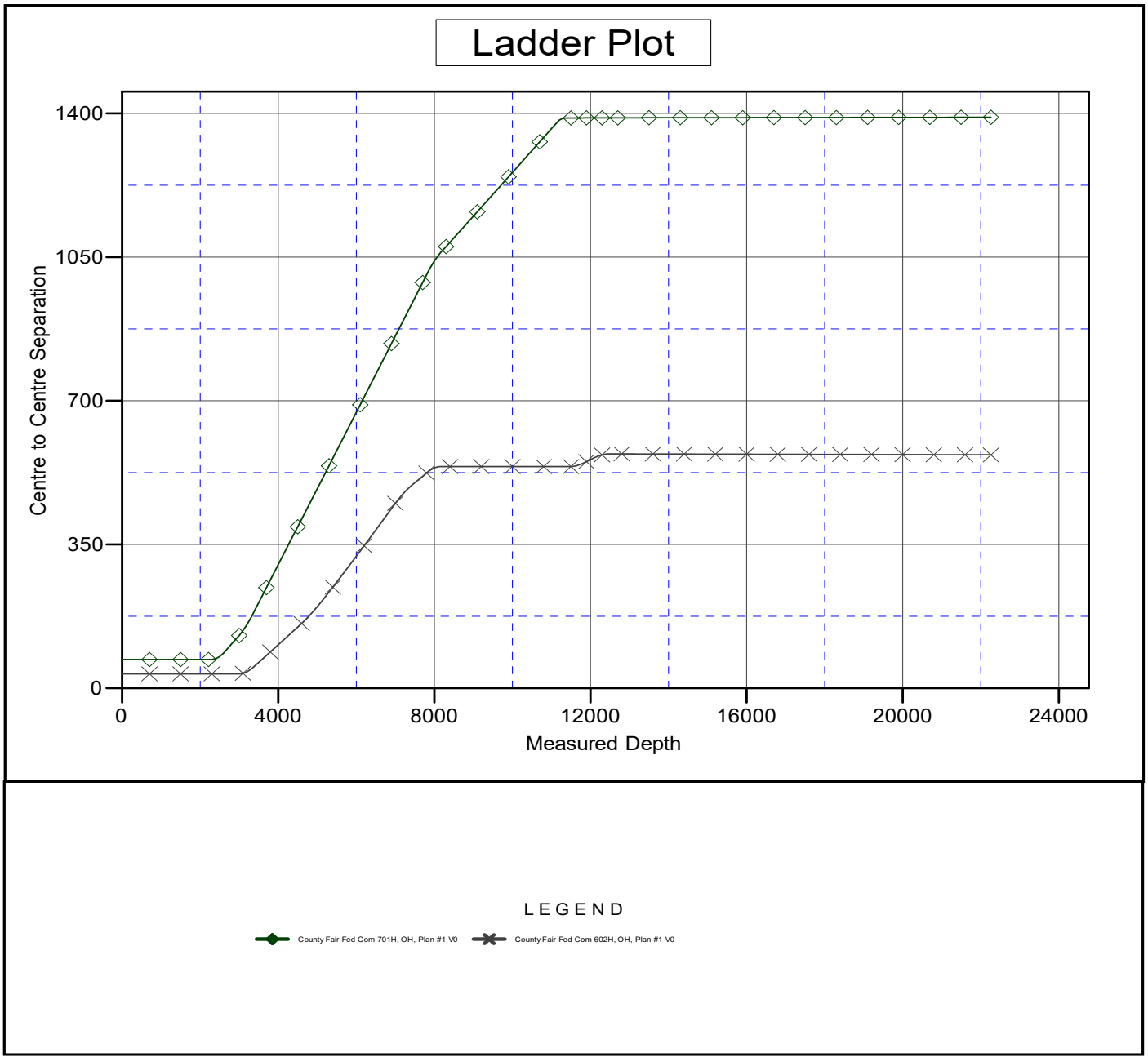
Survey Program: 0- **Offset Well Error:** 0.00 usft

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
19,200.00	12,187.39	19,280.43	12,235.22	125.73	0.00	91.86	-7,135.02	-942.78	1,390.28	1,264.64	125.64	11.066	
19,300.00	12,188.26	19,380.43	12,236.26	127.29	0.00	91.87	-7,235.01	-941.92	1,390.29	1,263.10	127.19	10.931	
19,400.00	12,189.12	19,480.43	12,237.31	128.84	0.00	91.87	-7,335.00	-941.05	1,390.31	1,261.56	128.75	10.799	
19,500.00	12,189.99	19,580.43	12,238.35	130.40	0.00	91.88	-7,434.99	-940.19	1,390.32	1,260.01	130.31	10.669	
19,600.00	12,190.86	19,680.43	12,239.39	131.96	0.00	91.89	-7,534.99	-939.32	1,390.34	1,258.47	131.87	10.543	
19,700.00	12,191.73	19,780.43	12,240.43	133.53	0.00	91.90	-7,634.98	-938.46	1,390.35	1,256.92	133.43	10.420	
19,800.00	12,192.60	19,880.43	12,241.48	135.09	0.00	91.90	-7,734.97	-937.59	1,390.36	1,255.36	135.00	10.299	
19,900.00	12,193.47	19,980.43	12,242.52	136.66	0.00	91.91	-7,834.96	-936.73	1,390.38	1,253.81	136.57	10.181	
20,000.00	12,194.33	20,080.42	12,243.56	138.23	0.00	91.92	-7,934.95	-935.86	1,390.39	1,252.25	138.14	10.065	
20,100.00	12,195.20	20,180.42	12,244.60	139.80	0.00	91.92	-8,034.94	-935.00	1,390.41	1,250.70	139.71	9.952	
20,200.00	12,196.07	20,280.42	12,245.65	141.38	0.00	91.93	-8,134.93	-934.14	1,390.42	1,249.14	141.28	9.841	
20,300.00	12,196.94	20,380.42	12,246.69	142.95	0.00	91.94	-8,234.92	-933.27	1,390.43	1,247.58	142.86	9.733	
20,400.00	12,197.81	20,480.42	12,247.73	144.53	0.00	91.95	-8,334.91	-932.41	1,390.45	1,246.01	144.44	9.627	
20,500.00	12,198.68	20,580.42	12,248.77	146.11	0.00	91.95	-8,434.90	-931.54	1,390.46	1,244.45	146.01	9.523	
20,600.00	12,199.54	20,680.42	12,249.82	147.69	0.00	91.96	-8,534.89	-930.68	1,390.48	1,242.88	147.59	9.421	
20,700.00	12,200.41	20,780.42	12,250.86	149.27	0.00	91.97	-8,634.88	-929.81	1,390.49	1,241.32	149.18	9.321	
20,800.00	12,201.28	20,880.42	12,251.90	150.85	0.00	91.98	-8,734.87	-928.95	1,390.51	1,239.75	150.76	9.223	
20,900.00	12,202.15	20,980.42	12,252.94	152.44	0.00	91.98	-8,834.86	-928.08	1,390.52	1,238.18	152.34	9.128	
21,000.00	12,203.02	21,080.42	12,253.99	154.02	0.00	91.99	-8,934.85	-927.22	1,390.53	1,236.60	153.93	9.034	
21,100.00	12,203.89	21,180.42	12,255.03	155.61	0.00	92.00	-9,034.85	-926.35	1,390.55	1,235.03	155.52	8.941	
21,200.00	12,204.75	21,280.42	12,256.07	157.20	0.00	92.00	-9,134.84	-925.49	1,390.56	1,233.46	157.11	8.851	
21,300.00	12,205.62	21,380.42	12,257.11	158.79	0.00	92.01	-9,234.83	-924.62	1,390.58	1,231.88	158.70	8.762	
21,400.00	12,206.49	21,480.42	12,258.16	160.38	0.00	92.02	-9,334.82	-923.76	1,390.59	1,230.30	160.29	8.676	
21,500.00	12,207.36	21,580.42	12,259.20	161.98	0.00	92.03	-9,434.81	-922.89	1,390.61	1,228.73	161.88	8.590	
21,600.00	12,208.23	21,680.42	12,260.24	163.57	0.00	92.03	-9,534.80	-922.03	1,390.62	1,227.15	163.47	8.507	
21,700.00	12,209.10	21,780.42	12,261.28	165.17	0.00	92.04	-9,634.79	-921.17	1,390.63	1,225.57	165.07	8.425	
21,800.00	12,209.97	21,880.42	12,262.32	166.76	0.00	92.05	-9,734.78	-920.30	1,390.65	1,223.98	166.66	8.344	
21,900.00	12,210.83	21,980.42	12,263.37	168.36	0.00	92.05	-9,834.77	-919.44	1,390.66	1,222.40	168.26	8.265	
22,000.00	12,211.70	22,080.42	12,264.41	169.96	0.00	92.06	-9,934.76	-918.57	1,390.68	1,220.82	169.86	8.187	
22,100.00	12,212.57	22,180.42	12,265.45	171.56	0.00	92.07	-10,034.75	-917.71	1,390.69	1,219.23	171.46	8.111	
22,200.00	12,213.44	22,280.42	12,266.49	173.16	0.00	92.08	-10,134.74	-916.84	1,390.71	1,217.65	173.06	8.036	
22,261.24	12,213.97	22,341.66	12,267.13	174.03	0.00	92.08	-10,195.97	-916.31	1,390.72	1,216.79	173.93	7.996	SF

Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors 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 3246.4' GE + 21' KB @ 3267.40usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Blue Ribbon Fed Com 702H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.53°

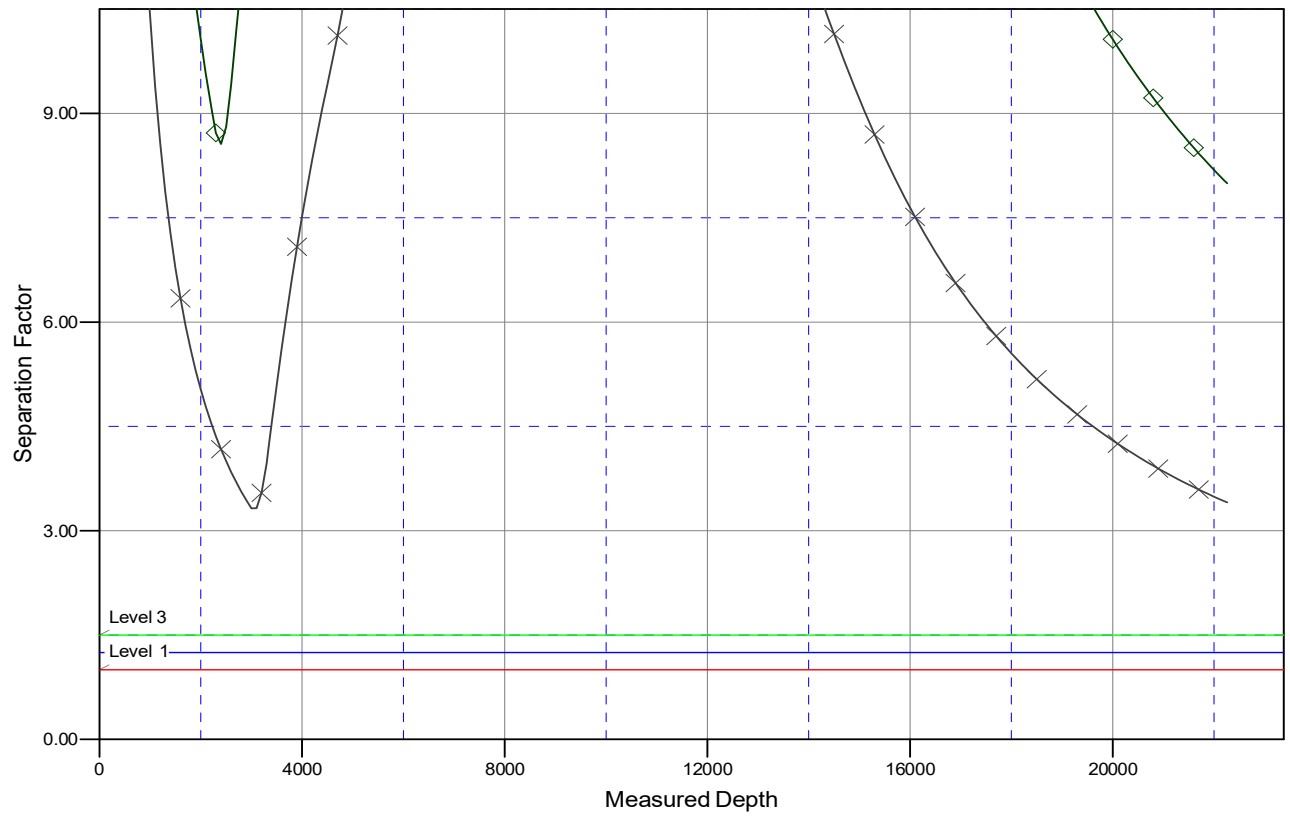


Company:	Franklin Mountain Energy	**Local Co-ordinate Reference:**	Well Blue Ribbon Fed Com 702H
Project:	Lea County, NM (NAD83)	**TVD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Reference Site:	County Fair/Blue Ribbon	**MD Reference:**	3246.4' GE + 21' KB @ 3267.40usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Blue Ribbon Fed Com 702H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors 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 3246.4' GE + 21' KB @ 3267.40usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Blue Ribbon Fed Com 702H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.53°

Separation Factor Plot



LEGEND

County Fair Fed Com 701H, OH, Plan #1 V0

County Fair Fed Com 602H, OH, Plan #1 V0

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Devon Energy Production Company LP**
LEASE NO.:	**NMNM101608**
LOCATION:	Section 2, T.25 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	Blue Ribbon Fed Com 702H
SURFACE HOLE FOOTAGE:	250'/N & 1355'/W
BOTTOM HOLE FOOTAGE	150'/S & 1740'/W

WELL NAME & NO.:	Blue Ribbon Fed Com 703H
SURFACE HOLE FOOTAGE:	675'/N & 2623'/W
BOTTOM HOLE FOOTAGE	150'/S & 2610'/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
Other	☑ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1150 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 shall be set at approximately **5400 feet** is:

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

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

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

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 **2000 (2M)** psi.

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

Option 2:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

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

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing 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

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.