

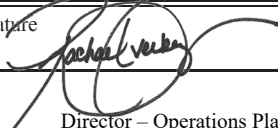
Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM101608
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☒ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator Franklin Mountain Energy, LLC [373910]		8. Lease Name and Well No. COUNTY FAIR FED COM 602H
3a. Address 44 Cook Street, Suite 1000, Denver CO 80206	3b. Phone No. (include area code) 720-414-7868	9. API Well No. 30-025-49395
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 215 FNL 1320 FWL Sec 2 T25S R35E At proposed prod. zone 150 FSL 1100 FWL Sec 11 T25S R35E		10. Field and Pool, or Exploratory 98185 WC-025 G-09 S253502B; LWR BONE SP
14. Distance in miles and direction from nearest town or post office* 9.6 miles		11. Sec., T. R. M. or Blk. and Survey or Area T25S / R35E / SEC 2 / LOT 4
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 215 feet	16. No of acres in lease 1600	17. Spacing Unit dedicated to this well 320.91
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 920 feet	19. Proposed Depth 11557 feet / 22062 feet	20. BLM/BIA Bond No. in file FED: NMB001761
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3246.2	22. Approximate date work will start* 10/1/2021	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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature 	Name (Printed/Typed) Rachael Overbey	Date 9/13/2021
Title Director – Operations Planning and Regulatory		
Approved by (Signature) CHRISTOPHER WALLS Digitally signed by CHRISTOPHER WALLS Date: 2021.09.17 12:28:12 -06'00'	Name (Printed/Typed) Chris Walls	Date 09/16/2021
Title Office CFO		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NGMP Rec 09/21/2021

KZ
09/21/2021

SL

(Continued on page 2)

*(Instructions on page 2)

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-49395	² Pool Code 98185	³ Pool Name WC-025 G-09 S253502B; LWR BONE SPRING
⁴ Property Code 328929	⁵ Property Name COUNTY FAIR FED COM	⁶ Well Number 602H
⁷ OGRID No. 373910	⁸ Operator Name FRANKLIN MOUNTAIN ENERGY LLC	⁹ Elevation 3246.2'

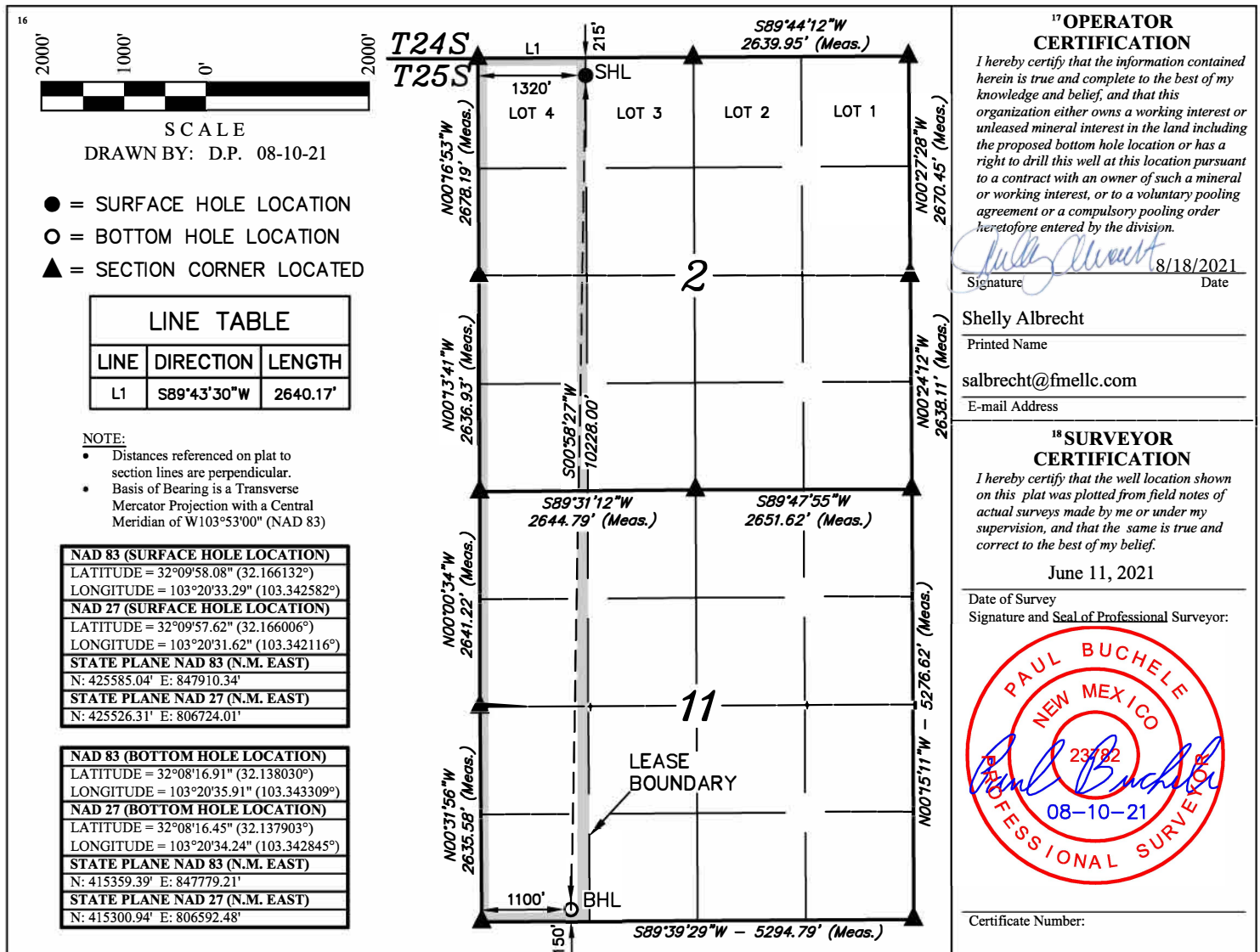
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 4	2	25S	35E		215	NORTH	1320	WEST	LEA

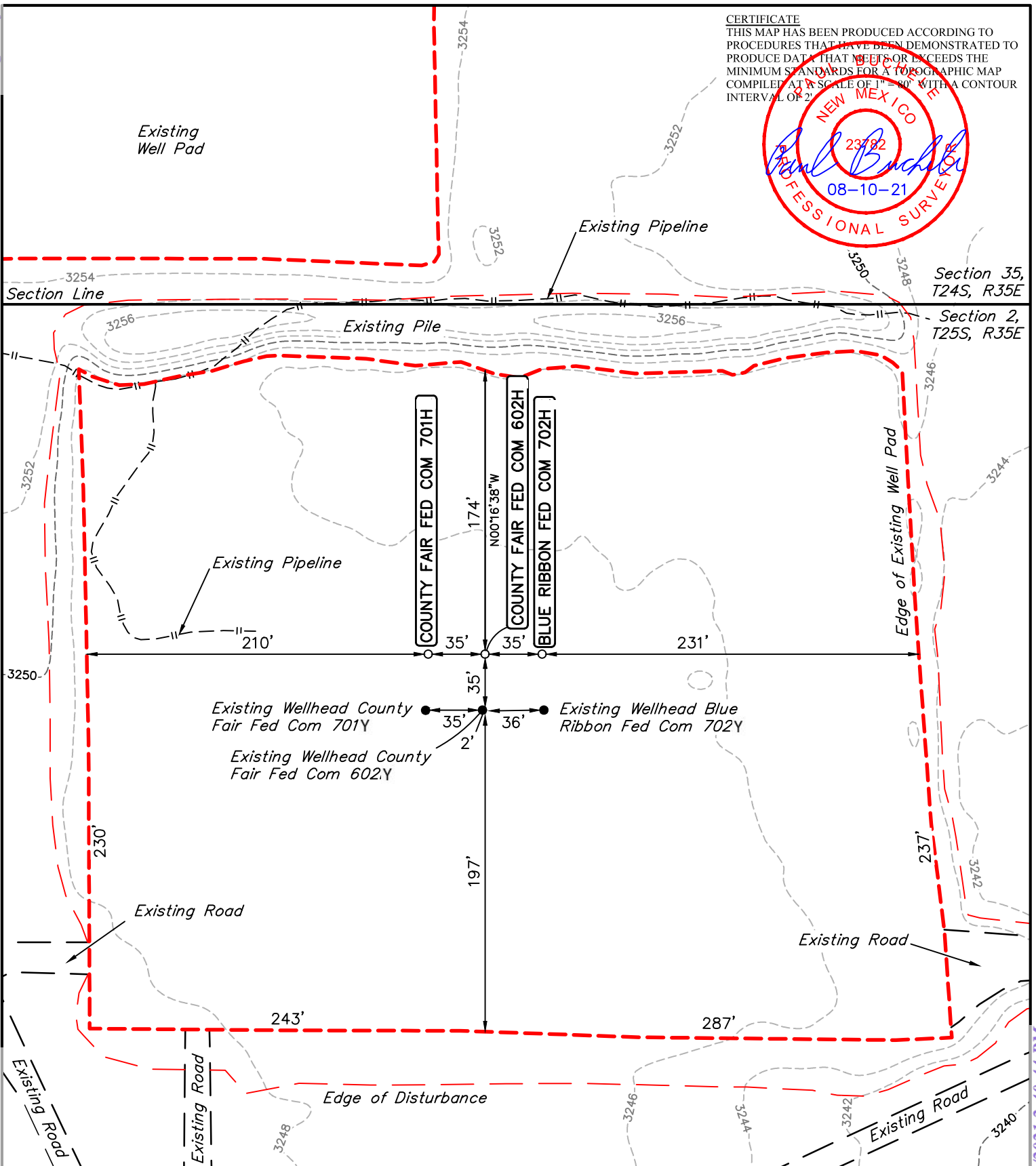
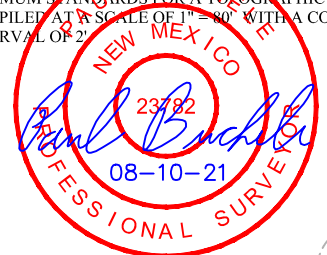
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	11	25S	35E		150	SOUTH	1100	WEST	LEA
¹² Dedicated Acres 320.91	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



CERTIFICATE
THIS MAP HAS BEEN PRODUCED ACCORDING TO
PROCEDURES THAT HAVE BEEN DEMONSTRATED TO
PRODUCE DATA THAT MEETS OR EXCEEDS THE
MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP
COMPILED AT A SCALE OF 1" = 80' WITH A CONTOUR
INTERVAL OF 2'



NOTES:

- Contours shown at 2' intervals.
- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- Total Well Pad Disturbance Contains ±6.147 Acres



FRANKLIN MOUNTAIN ENERGY LLC

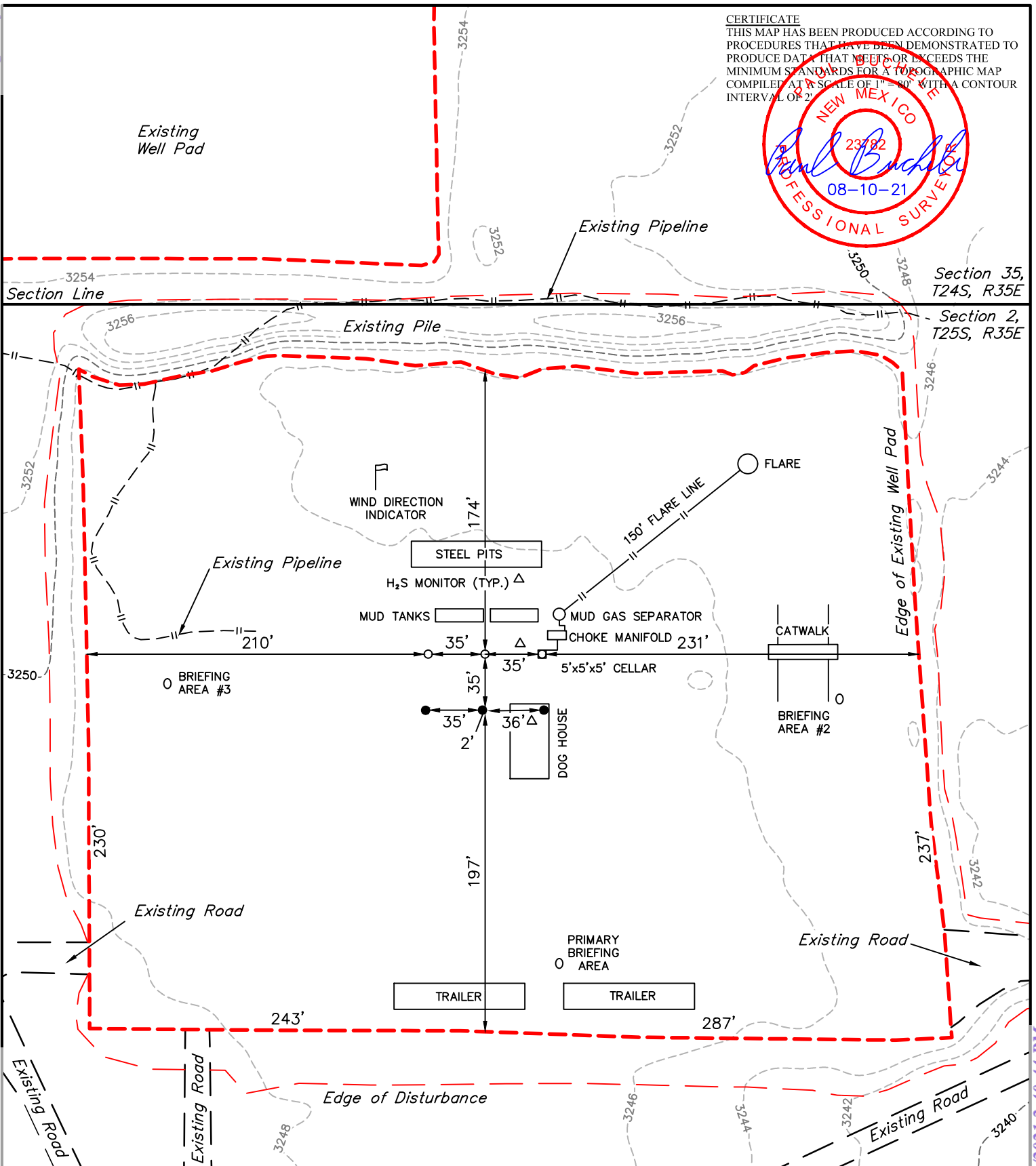
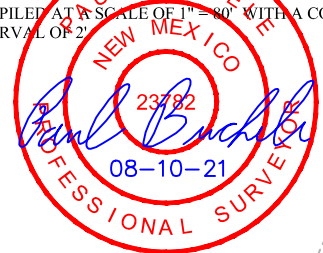
CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	B.B., R.C., M.D.	06-11-21	SCALE
DRAWN BY	D.P.	08-10-21	1" = 80'
AS-BUILT LOCATION LAYOUT			



UELS, LLC
Regional Office * 111 NE 3rd Street
Seminole, TX 79360 * (432) 955-6100
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CERTIFICATE
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PROCEDURES THAT HAVE BEEN DEMONSTRATED TO
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MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP
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INTERVAL OF 2'



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- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.



FRANKLIN MOUNTAIN ENERGY LLC

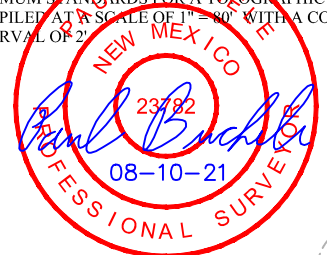
**CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO**

SURVEYED BY	B.B., R.C., M.D.	06-11-21	SCALE
DRAWN BY	D.P.	08-10-21	1" = 80'
TYPICAL RIG LAYOUT			



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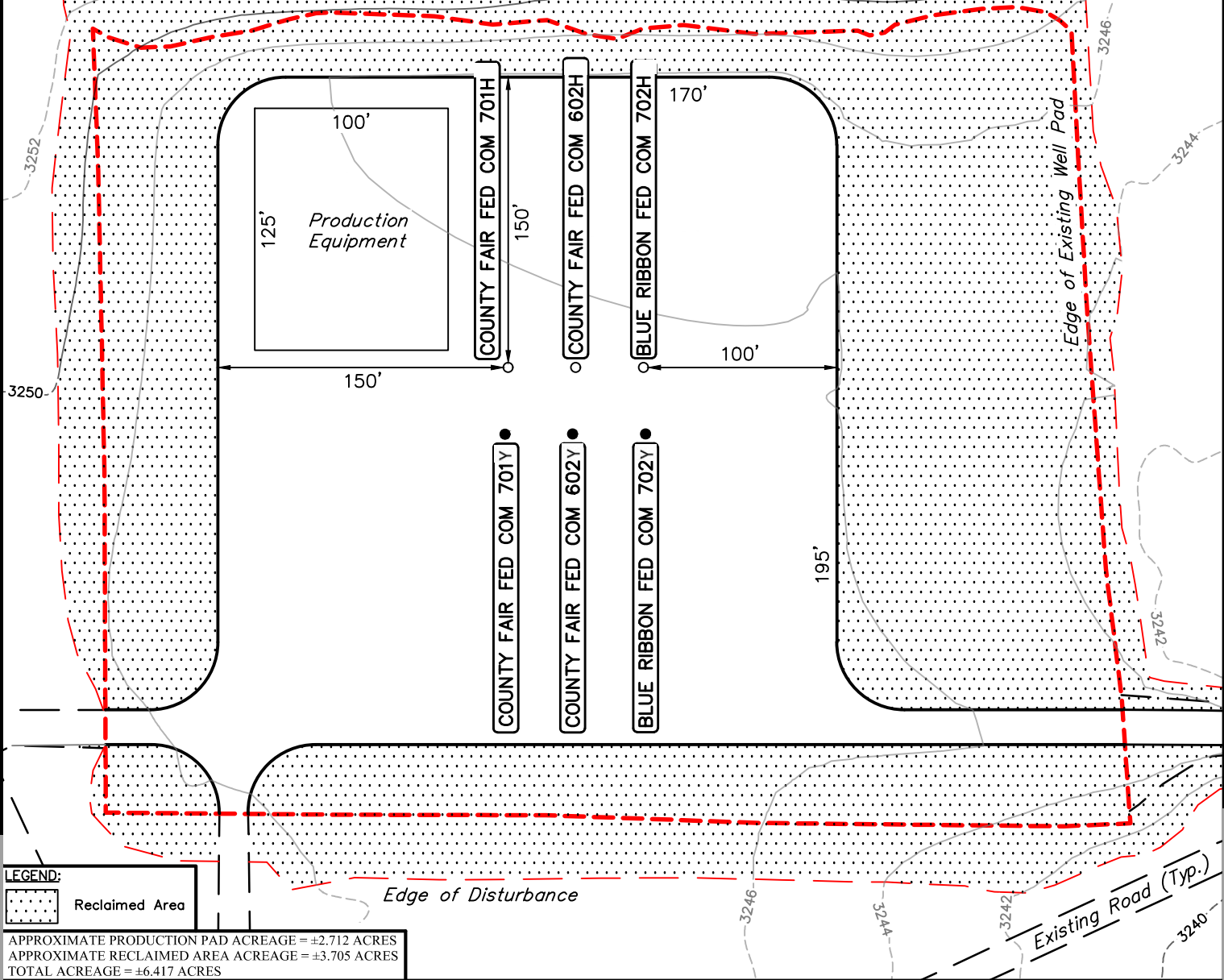


Existing Well Pad

Section Line

Section 35, T24S, R35E

Section 2, T25S, R35E



LEGEND:
Reclaimed Area

APPROXIMATE PRODUCTION PAD ACREAGE = ±2.712 ACRES
APPROXIMATE RECLAIMED AREA ACREAGE = ±3.705 ACRES
TOTAL ACREAGE = ±6.417 ACRES

NOTES:
• Contours shown at 2' intervals.



FRANKLIN MOUNTAIN ENERGY LLC

CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	B.B., R.C., M.D.	06-11-21	SCALE
DRAWN BY	D.P.	08-10-21	1" = 80'
RECLAMATION DIAGRAM			



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BEGINNING AT THE INTERSECTION OF HIGHWAY 18 & HIGHWAY 128 FROM JAL, NEW MEXICO PROCEED IN A NORTHWESTERLY DIRECTION ALONG HIGHWAY 128 APPROXIMATELY 9.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE EXISTING LOCATION.

TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE EXISTING WELL LOCATION IS APPROXIMATELY 10.5 MILES.

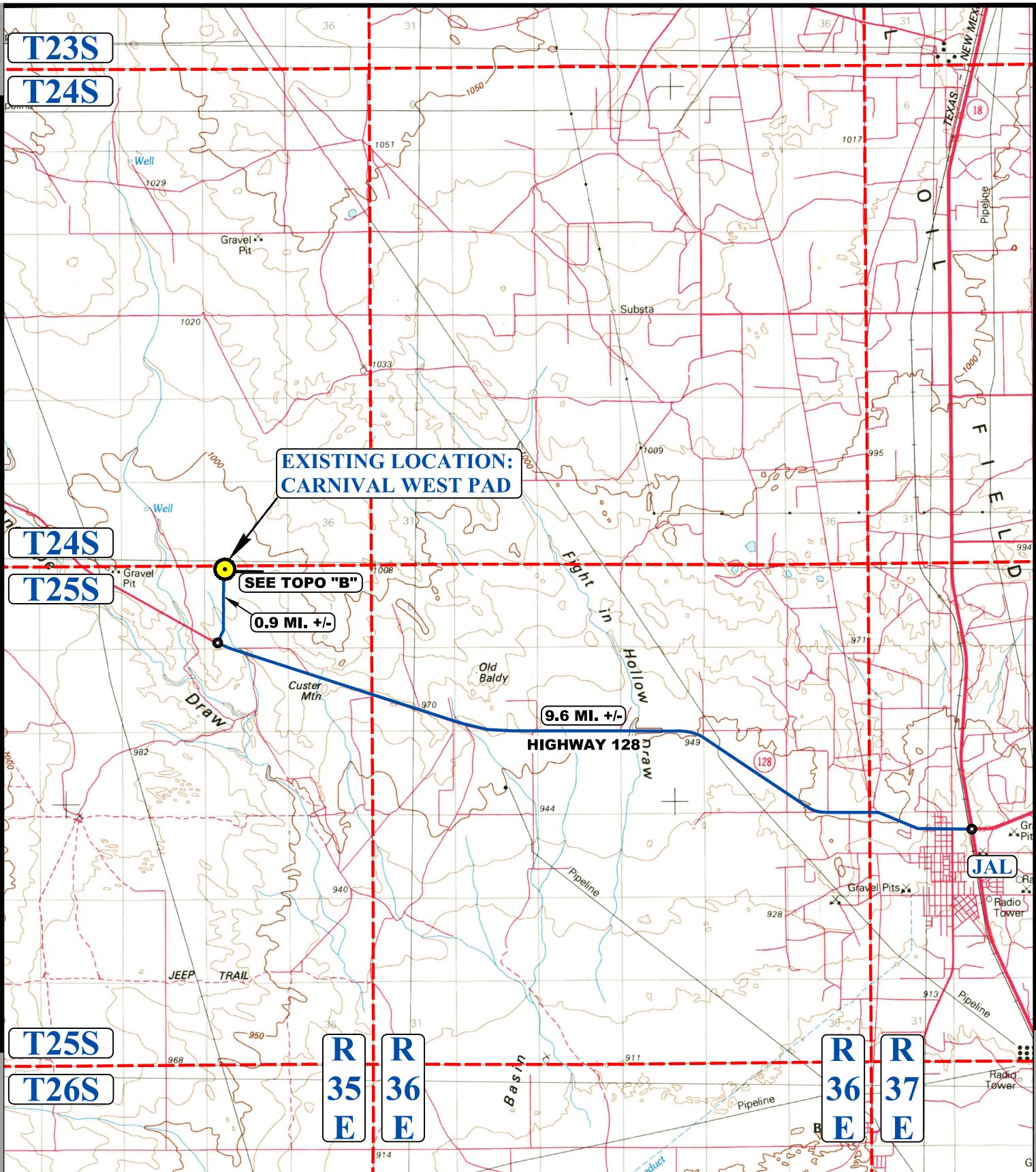
FRANKLIN MOUNTAIN ENERGY LLC

**CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO**



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SURVEYED BY	B.B., R.C., M.D.	06-11-21	
DRAWN BY	D.P.	08-10-21	
ROAD DESCRIPTION			



LEGEND:

EXISTING LOCATION



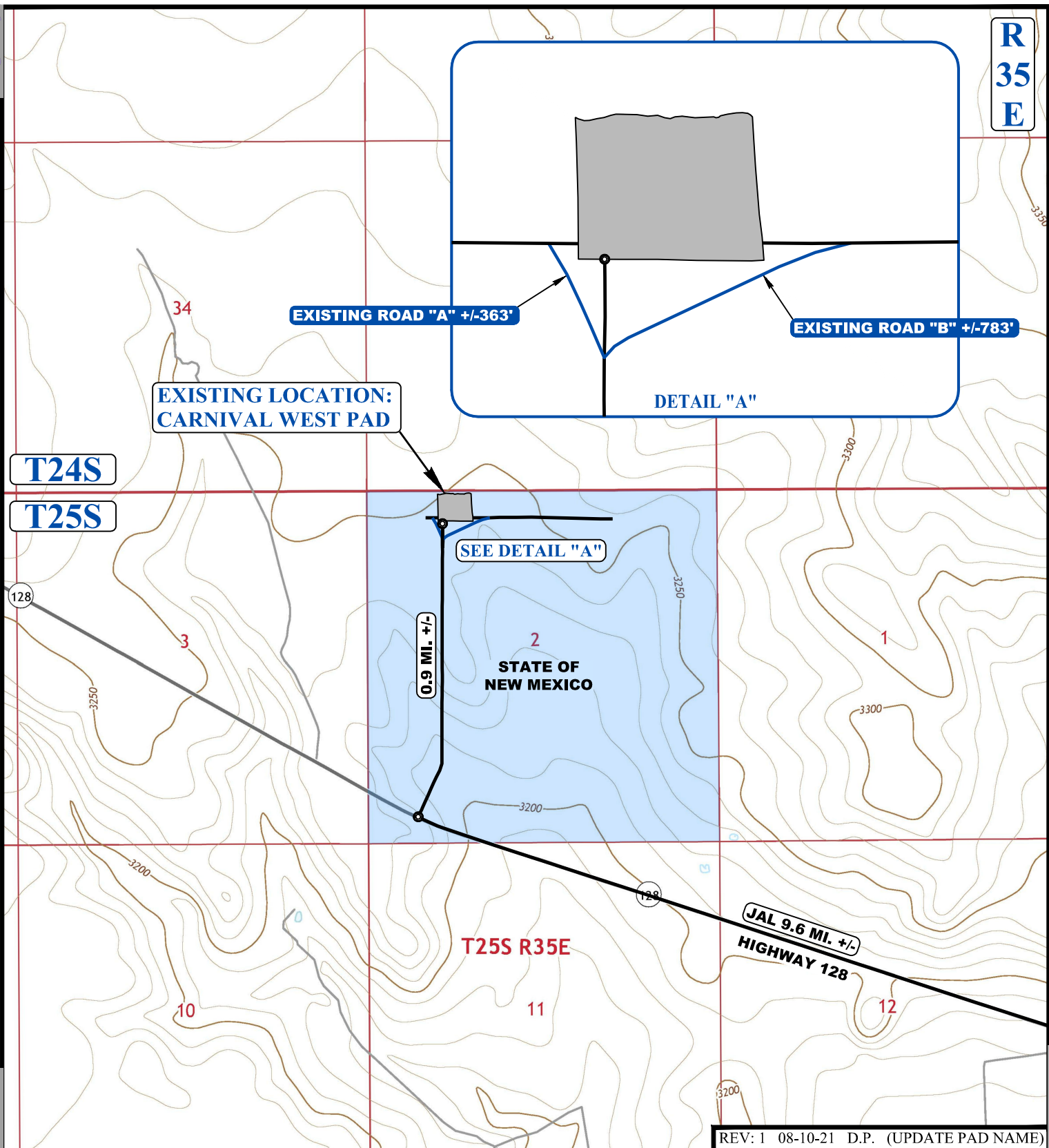
FRANKLIN MOUNTAIN ENERGY LLC

CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	B.B., R.C., M.D.	06-11-21	SCALE
DRAWN BY	D.P.	08-10-21	1 : 100,000
ACCESS ROAD MAP			TOPO A



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- EXISTING ROAD
- EXISTING ROAD RE-ROUTE



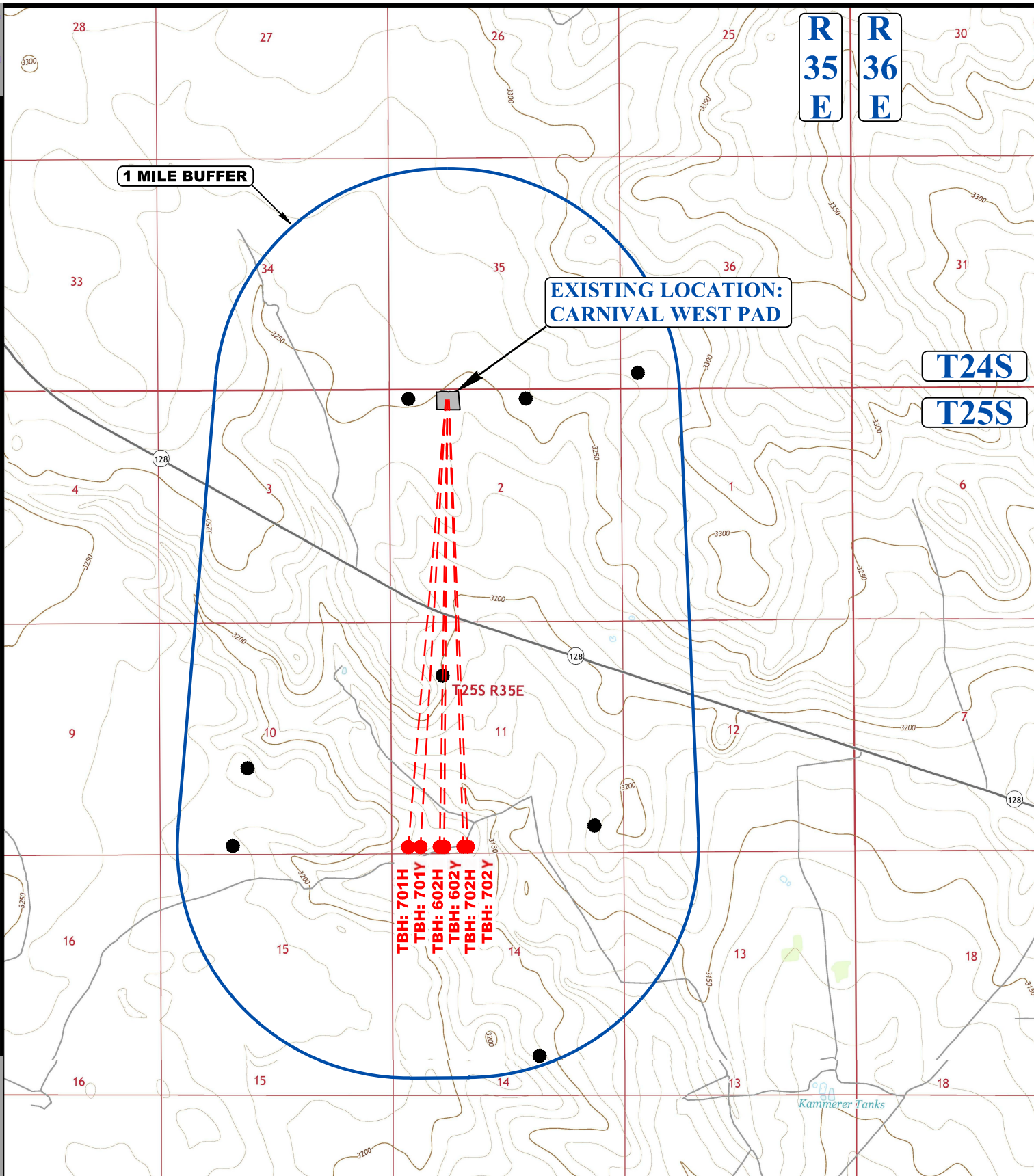
FRANKLIN MOUNTAIN ENERGY LLC

CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	B.B., R.C., M.D.	06-11-21	SCALE
DRAWN BY	R.T.	10-03-17	1 : 24,000
ACCESS ROAD MAP			TOPO B



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Vernal, UT 84078 * (435) 789-1017



LEGEND:

● EXISTING WELLS



FRANKLIN MOUNTAIN ENERGY LLC

CARNIVAL WEST PAD
LOTS 3 & 4, SECTION 2, T25S, R35E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	B.B., R.C., M.D.	06-11-21	SCALE
DRAWN BY	D.P.	08-10-21	1 : 36,000
WELL PROXIMITY MAP			TOPO C

UELS, LLC

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Vernal, UT 84078 * (435) 789-1017





County Fair Fed Com 602H

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'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,406'	870'			Carbonates
Salado	1,633'	1,643'			Salt, Carbonate & Clastics
Base Salt	-473'	3,749'			Shaley Carbonate & Shale
Lamar	-1,848'	5,124'			Carbonate & Clastics
Bell Canyon	-1,974'	5,250'			Sandstone - oil/gas/water
Cherry Canyon	-2,821'	6,097'			Sandstone - oil/gas/water
Brushy Canyon	-4,199'	7,475'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,593'	8,869'			Shale/Carbonates - oil/gas
Avalon	-5,665'	8,941'			Shale/Carbonates - oil/gas
Chert Zone	-5,863'	9,139'			Carbonate/Chert
First Bone Spring Sand	-6,776'	10,052'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,847'	10,123'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,323'	10,599'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,894'	11,170'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,514'	11,790'			Sandstone - oil/gas/water
Wolfcamp	-8,747'	12,023'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,785'	12,061'			Overpressure Shale - Oil/Gas
HZ Target	-8,847'	12,123'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,999'	12,275'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,250'	Oil
Bone Spring	10,052'	Oil
Wolfcamp	12,023'	Oil

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

4. Casing Program:

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

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5150	1.78	1.76	2.99	3.41
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	12258	1.08	1.25	1.78	1.22
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	22062 11899	1.32	1.41	1.20	1.00 1.62



Stress calculations on 5 ½" casing performed assuming 22,062' depth. Actual max vertical depth is 11,899'.

Cementing Program:

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft3/sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft3/sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1300	804	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.728	9.06	0	331	Tail, 14.8 ppg, Class C,	1.364	6.51	1000	100%
Int1	12.25	9.625	5150	1505	0.125pps Poly-E-Flake Lead, 12.8 ppg, Class C 5% Salt,	1.79	9.74	0	154	1% CaCl ₂ , 0.125pps Celo-Flake Tail, 14.8 ppg, Class C,	1.33	6.37	4850	100%
Int2	8.75	7.625	12258	382	0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.13	5.97	4150	94	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl ₂	1.33	6.29	11258	50%
Prod	6.75	5.5	22062	806	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	11258						20%

5. Minimum Specifications for Pressure Control:

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

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

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

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

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



6. Types and characteristics of the proposed mud system:

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

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,300'	Fresh - Gel	8.6-8.8	28-34	N/c
1,300' – 12,258'	Brine	8.8-10.2	28-34	N/c
12,258' – 22,062' Lateral	Oil Base	10.0-12.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 10-12 ppg. In order to maintain hole stability, mud weights up to 12.5 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 11,899' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,734 psig (based on 12.5 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

A. All personnel shall receive proper awareness H₂S training.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment

a. Well Control Equipment

i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.

ii. Choke manifold with a remotely operated hydraulic choke.

iii. Mud/gas separator

b. Protective equipment for essential personnel

i. Breathing Apparatus

1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.

2. Work/Escapes packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity



3. Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.
- ii. Auxiliary Rescue Equipment
 1. Stretcher
 2. Two OSHA full body harnesses
 3. 100 feet of 5/8 inches OSHA approved rope
 4. 1-20# class ABC fire extinguisher
- c. H2S Detection and Monitoring Equipment
 - i. A stationary detector with three sensors will be placed in the doghouse if equipped, set to visually alarm at 10 ppm and audible at 14 ppm. The detector will be calibrated a minimum of every 30 days or as needed. The sensors will be placed in the following places:
 1. Rig Floor
 2. Below Rig Floor / Near BOPs
 3. End of flow line or where well bore fluid is being discharged (near shakers)
 - ii. If H2S is encountered, measured values and formations will be provided to the BLM.
- d. Visual Warning Systems
 - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - iii. Two windsocks will be placed in strategic locations, visible from all angles.
- e. Mud Program
 - i. The Mud program will be designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.
- f. Metallurgy
 - i. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service at the anticipated operating pressures to prevent sour sulfide stress cracking.
- g. Communication
 - i. Communication will be via cell phones and walkie talkies on location.

Franklin Mountain Energy has conducted a review of offset operated wells to determine if an H2S contingency plan is required for the proposed well. Based on concentrations of offset wells, proximity to main roads, and distance to populated areas, the radius of exposure created by a potential release was determined to be minimal and low enough to not necessitate an H2S contingency plan. This will be reevaluated during wellbore construction if H2S is observed and after the well is on production.

11. Anticipated starting date and duration of operations:

The drilling operations on the well should be finished in approximately one month. However, in order to minimize disturbance in the area and to improve efficiency Franklin Mountain is planning to drill all the wells on the pad prior to commence completion operations. To even further reduce the time heavy machinery is used the “batch drilling” method may be used. A batch drilling sequence sundry will be submitted for BLM approval prior to spud. A drilling rig with walking/skidding capabilities will be used.

**12. Disposal/environmental concerns:**

- (A) Drilled cuttings will be hauled to and disposed of in a state-certified disposal site.
- (B) Non-hazardous waste mud/cement from the drilling process will also be hauled to and disposed of in a state-certified disposal site.
- (C) Garbage will be hauled to the Pecos City Landfill.
- (D) Sewage (grey water) will be hauled to the Carlsbad City Landfill

13. Wellhead:

A multi-bowl wellhead system will be utilized.

After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 21 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 5,000 psi.

After running the 2nd intermediate casing, and before drilling out, the wellhead, BOP, and related equipment will be tested to 10,000/250 psig.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Cactus Multi-Bowl WH system has been sent to the BLM office in Carlsbad.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing strings. After installation of the first intermediate string the pack-off and lower flanges will be pressure tested to 5000 psi. After installation of the second intermediate string, the pack-off and upper flange will be pressure tested to 10,000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

14. Additional variance requests**A. Casing.**

In order to minimize potential environmental and technical hazards, this well is planned with two intermediate strings of casing.

1. Variance is requested to wave the centralizer requirements for the 7 5/8" casing due to the tight clearance with 9 5/8" string.
2. Variance is requested to wave/reduce the centralizer requirements for the 5 1/2" casing due to the tight clearance with 6 3/4" hole and 5 1/2" casing due to tight clearances.

Released to Imaging: 9/21/2021 2:40:44 PM

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: County Fair/Blue Ribbon
Well: County Fair Fed Com 602H
Wellbore: OH
Design: Plan #1

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



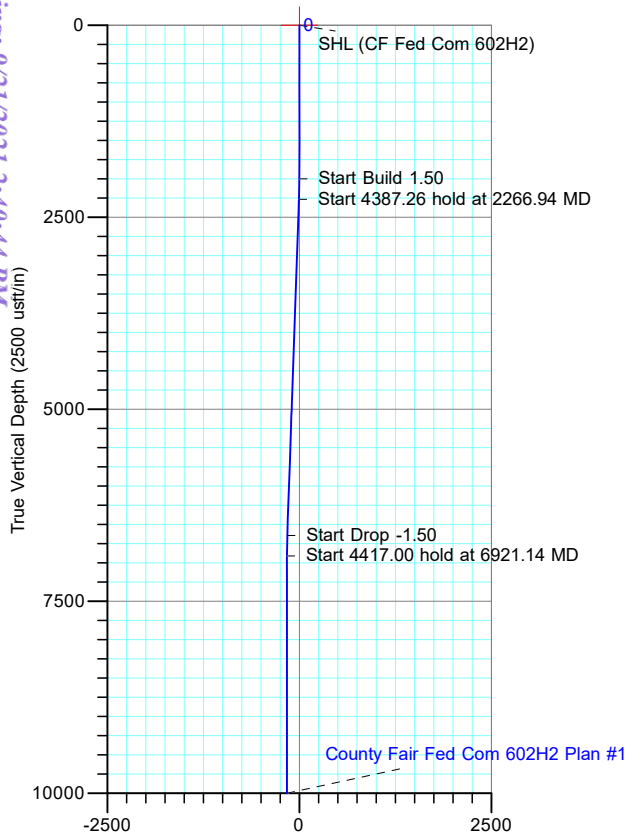
Azimuths to Grid North
True North: -0.53°
Magnetic North: 5.89°

Magnetic Field
Strength: 47464.9nT
Dip Angle: 59.88°
Date: 8/20/2021
Model: IGRF2020



Received by OCD: 9/17/2021 5:18:45 PM

3246.2' GE + 30' KB @ 3276.20usft

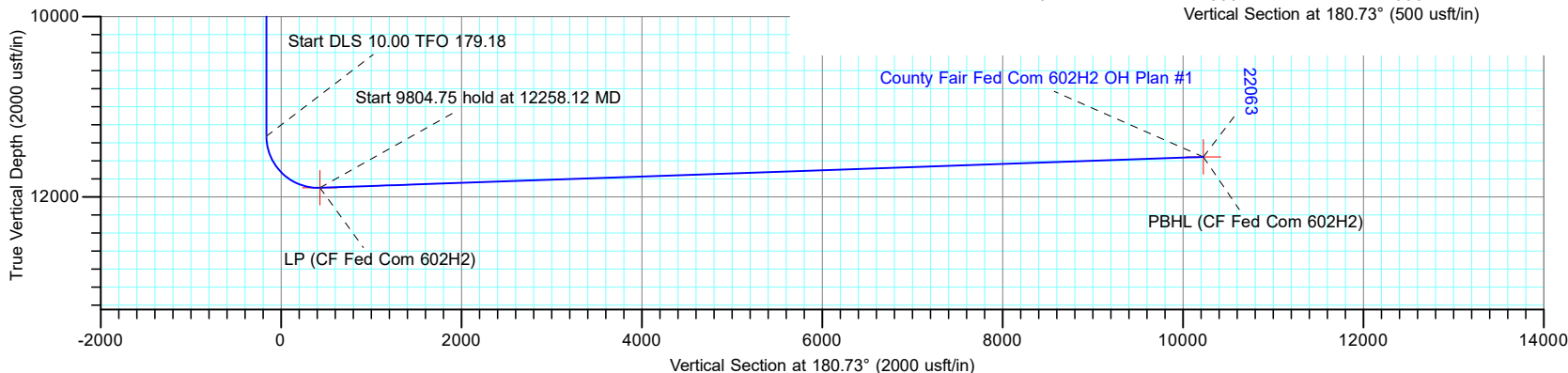
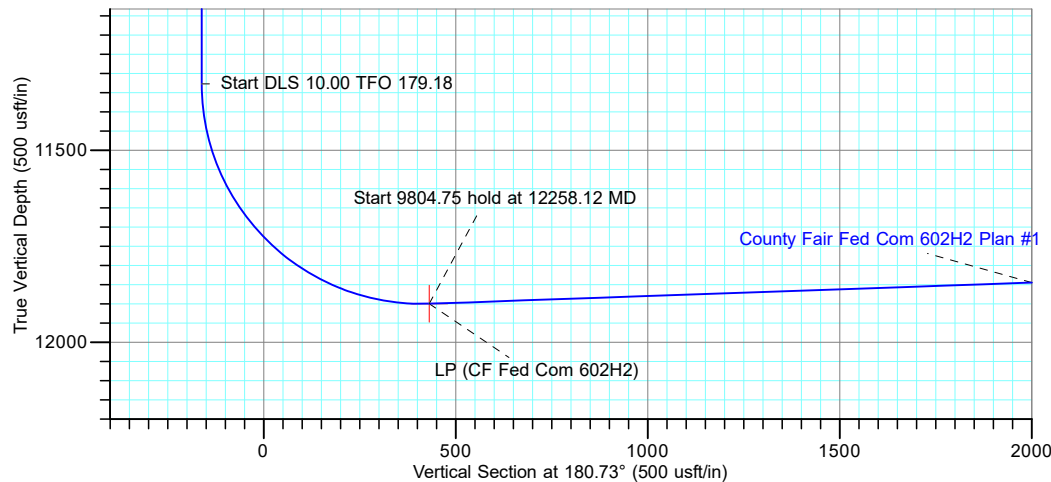


SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2266.94	4.00	300.51	2266.72	4.73	-8.03	1.50	300.51	-4.63	Start 4387.26 hold at 2266.94 MD
6654.20	4.00	300.51	6643.28	160.27	-271.97	0.00	0.00	-156.77	Start Drop -1.50
6921.14	0.00	0.00	6910.00	165.00	-280.00	1.50	180.00	-161.40	Start 4417.00 hold at 6921.14 MD
11338.14	0.00	0.00	11327.00	165.00	-280.00	0.00	0.00	-161.40	Start DLS 10.00 TFO 179.18
12258.12	92.00	179.18	11899.61	-427.87	-271.51	10.00	179.18	431.31	Start 9804.75 hold at 12258.12 MD
22062.86	92.00	179.18	11557.88	-10225.65	-131.13	0.00	0.00	10226.49	TD at 22062.86

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (CF Fed Com 602H2)	11899.61	-427.87	-271.51	32.164963	-103.343472
PBHL (CF Fed Com 602H2)	11557.88	-10225.65	-131.13	32.138030	-103.343309
SHL (CF Fed Com 602H2)	0.00	0.00	0.00	32.166132	-103.342582



TOTAL DIRECTIONAL SERVICES LLC

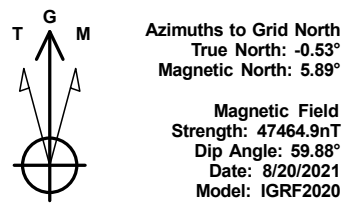
Plan: Plan #1 (County Fair Fed Com 602H2/OH)
County Fair/Blue Ribbon
Created By: Dustin Ault
Date: 14:24, August 20 2021
Approved: _____
Date: _____

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Released to Imaging: 9/21/2021 2:40:44 PM

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: County Fair/Blue Ribbon
Well: County Fair Fed Com 602H2
Wellbore: OH
Design: Plan #1



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

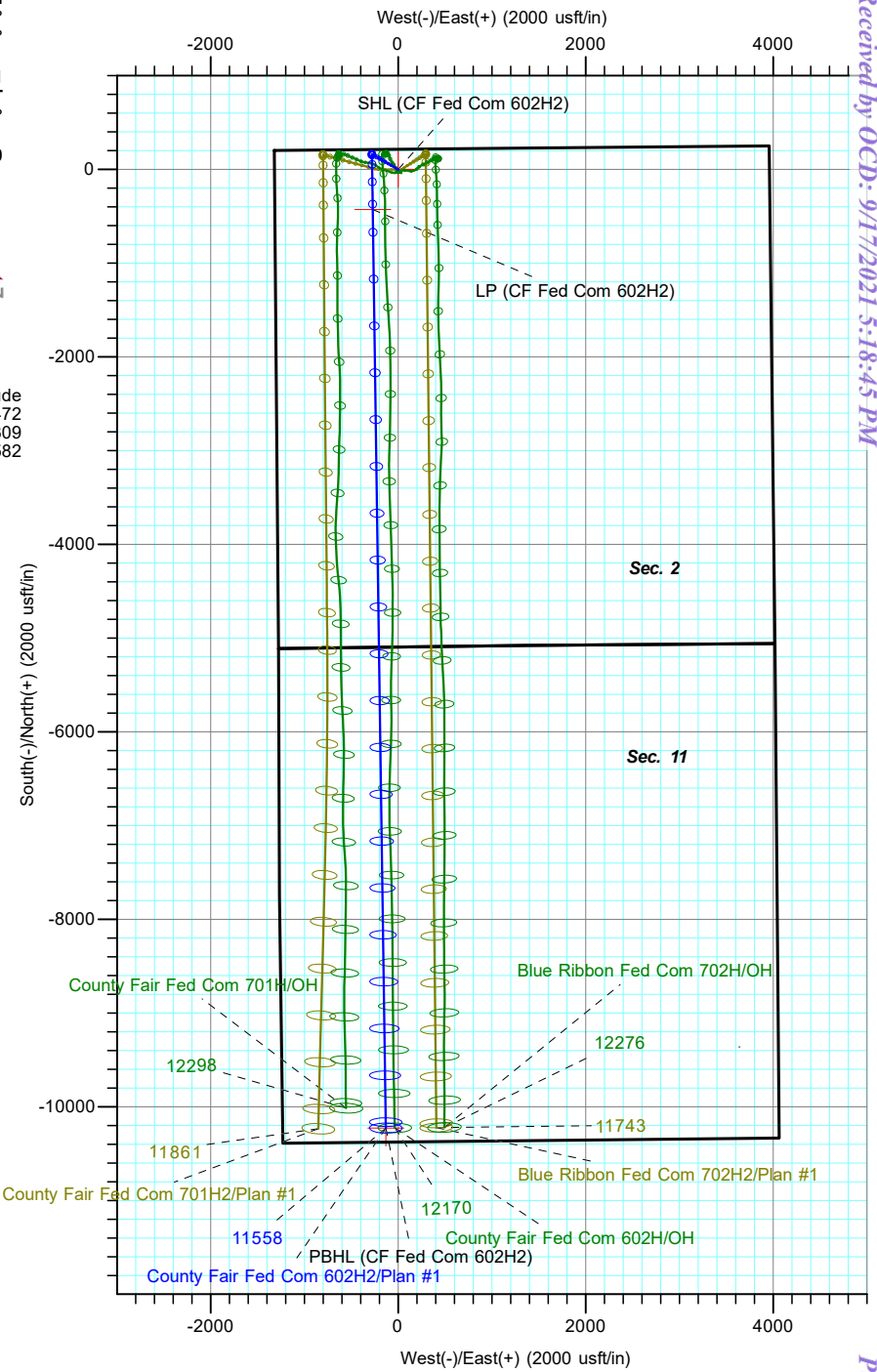
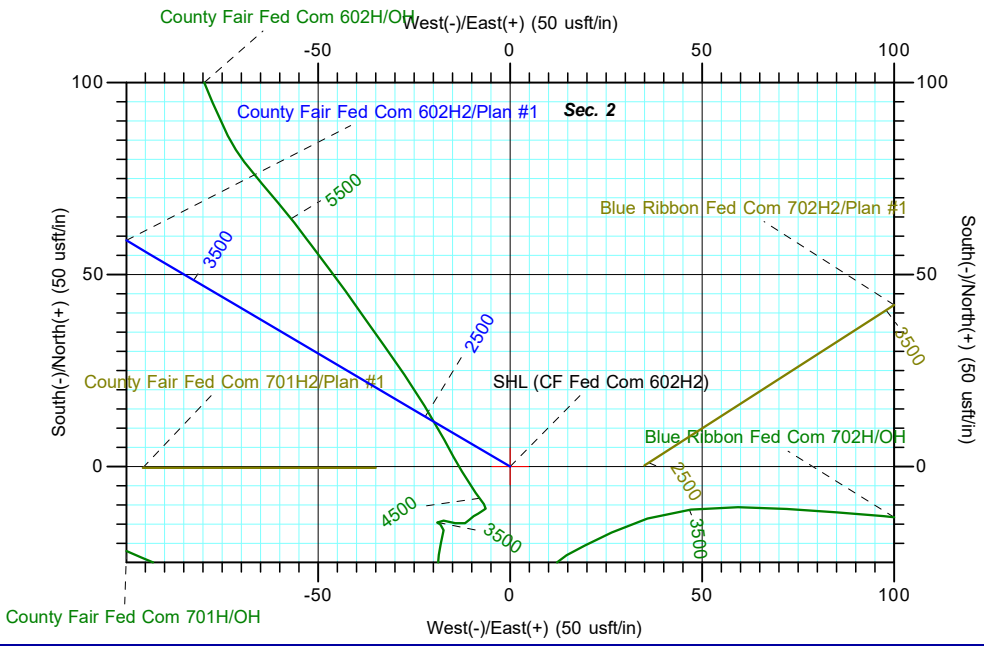


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (CF Fed Com 602H2)	11899.61	-427.87	-271.51	425157.17	847638.83	32.164963	-103.343472
PBHL (CF Fed Com 602H2)	11557.88	-10225.65	-131.13	415359.39	847779.21	32.138030	-103.343309
SHL (CF Fed Com 602H2)	0.00	0.00	0.00	425585.04	847910.34	32.166132	-103.342582

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2266.94	4.00	300.51	2266.72	4.73	-8.03	1.50	300.51	-4.63	Start 4387.26 hold at 2266.94 MD
6654.20	4.00	300.51	6643.28	160.27	-271.97	0.00	0.00	-156.77	Start Drop -1.50
6921.14	0.00	0.00	6910.00	165.00	-280.00	1.50	180.00	-161.40	Start 4417.00 hold at 6921.14 MD
11338.14	0.00	0.00	11327.00	165.00	-280.00	0.00	0.00	-161.40	Start DLS 10.00 TFO 179.18
12258.12	92.00	179.18	11899.61	-427.87	-271.51	10.00	179.18	431.31	Start 9804.75 hold at 12258.12 MD
22062.86	92.00	179.18	11557.88	-10225.65	-131.13	0.00	0.00	10226.49	TD at 22062.86



TOTAL DIRECTIONAL SERVICES LLC

Plan: Plan #1 (County Fair Fed Com 602H2/OH)
County Fair/Blue Ribbon
Created By: Dustin Ault
Date: 14:25, August 20 2021
Approved: _____
Date: _____

Received by OCD: 9/17/2021 5:18:45 PM

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Franklin Mountain Energy

Lea County, NM (NAD83)
County Fair/Blue Ribbon
County Fair Fed Com 602H2

OH

Plan: Plan #1

Standard Planning Report

20 August, 2021





Total Directional Services Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	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	County Fair Fed Com 602H2					
Well Position	+N/-S	35.31 usft	Northing:	425,585.04 usft	Latitude:	32.166132
	+E/-W	34.68 usft	Easting:	847,910.34 usft	Longitude:	-103.342582
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,246.20 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/20/2021	6.41	59.88	47,464.86823214

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	180.73

Plan Survey Tool Program	Date	8/20/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,062.40 Plan #1 (OH)	OWSG (Rev2) MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,266.94	4.00	300.51	2,266.72	4.73	-8.03	1.50	1.50	0.00	300.51	
6,654.20	4.00	300.51	6,643.28	160.27	-271.97	0.00	0.00	0.00	0.00	
6,921.14	0.00	0.00	6,910.00	165.00	-280.00	1.50	-1.50	0.00	180.00	
11,338.14	0.00	0.00	11,327.00	165.00	-280.00	0.00	0.00	0.00	0.00	
12,258.12	92.00	179.18	11,899.61	-427.87	-271.51	10.00	10.00	19.48	179.18	
22,062.86	92.00	179.18	11,557.88	-10,225.65	-131.13	0.00	0.00	0.00	0.00	PBHL (CF Fed Com 6



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	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 (CF Fed Com 602H2)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
2,100.00	1.50	300.51	2,099.99	0.66	-1.13	-0.65	1.50	1.50	0.00
2,200.00	3.00	300.51	2,199.91	2.66	-4.51	-2.60	1.50	1.50	0.00
2,266.94	4.00	300.51	2,266.72	4.73	-8.03	-4.63	1.50	1.50	0.00
Start 4387.26 hold at 2266.94 MD									
2,300.00	4.00	300.51	2,299.70	5.91	-10.02	-5.78	0.00	0.00	0.00
2,400.00	4.00	300.51	2,399.46	9.45	-16.04	-9.24	0.00	0.00	0.00
2,500.00	4.00	300.51	2,499.21	13.00	-22.05	-12.71	0.00	0.00	0.00
2,600.00	4.00	300.51	2,598.97	16.54	-28.07	-16.18	0.00	0.00	0.00
2,700.00	4.00	300.51	2,698.73	20.09	-34.09	-19.65	0.00	0.00	0.00
2,800.00	4.00	300.51	2,798.48	23.63	-40.10	-23.11	0.00	0.00	0.00
2,900.00	4.00	300.51	2,898.24	27.18	-46.12	-26.58	0.00	0.00	0.00
3,000.00	4.00	300.51	2,997.99	30.72	-52.13	-30.05	0.00	0.00	0.00
3,100.00	4.00	300.51	3,097.75	34.27	-58.15	-33.52	0.00	0.00	0.00
3,200.00	4.00	300.51	3,197.51	37.81	-64.16	-36.99	0.00	0.00	0.00
3,300.00	4.00	300.51	3,297.26	41.36	-70.18	-40.45	0.00	0.00	0.00
3,400.00	4.00	300.51	3,397.02	44.90	-76.20	-43.92	0.00	0.00	0.00
3,500.00	4.00	300.51	3,496.77	48.45	-82.21	-47.39	0.00	0.00	0.00
3,600.00	4.00	300.51	3,596.53	51.99	-88.23	-50.86	0.00	0.00	0.00
3,700.00	4.00	300.51	3,696.28	55.54	-94.24	-54.32	0.00	0.00	0.00
3,800.00	4.00	300.51	3,796.04	59.08	-100.26	-57.79	0.00	0.00	0.00
3,900.00	4.00	300.51	3,895.80	62.63	-106.28	-61.26	0.00	0.00	0.00
4,000.00	4.00	300.51	3,995.55	66.17	-112.29	-64.73	0.00	0.00	0.00
4,100.00	4.00	300.51	4,095.31	69.72	-118.31	-68.19	0.00	0.00	0.00
4,200.00	4.00	300.51	4,195.06	73.26	-124.32	-71.66	0.00	0.00	0.00
4,300.00	4.00	300.51	4,294.82	76.81	-130.34	-75.13	0.00	0.00	0.00
4,400.00	4.00	300.51	4,394.58	80.35	-136.36	-78.60	0.00	0.00	0.00
4,500.00	4.00	300.51	4,494.33	83.90	-142.37	-82.07	0.00	0.00	0.00
4,600.00	4.00	300.51	4,594.09	87.44	-148.39	-85.53	0.00	0.00	0.00
4,700.00	4.00	300.51	4,693.84	90.99	-154.40	-89.00	0.00	0.00	0.00
4,800.00	4.00	300.51	4,793.60	94.53	-160.42	-92.47	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	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	4.00	300.51	4,893.36	98.08	-166.44	-95.94	0.00	0.00	0.00
5,000.00	4.00	300.51	4,993.11	101.62	-172.45	-99.40	0.00	0.00	0.00
5,100.00	4.00	300.51	5,092.87	105.17	-178.47	-102.87	0.00	0.00	0.00
5,200.00	4.00	300.51	5,192.62	108.71	-184.48	-106.34	0.00	0.00	0.00
5,300.00	4.00	300.51	5,292.38	112.26	-190.50	-109.81	0.00	0.00	0.00
5,400.00	4.00	300.51	5,392.14	115.80	-196.52	-113.27	0.00	0.00	0.00
5,500.00	4.00	300.51	5,491.89	119.35	-202.53	-116.74	0.00	0.00	0.00
5,600.00	4.00	300.51	5,591.65	122.89	-208.55	-120.21	0.00	0.00	0.00
5,700.00	4.00	300.51	5,691.40	126.44	-214.56	-123.68	0.00	0.00	0.00
5,800.00	4.00	300.51	5,791.16	129.98	-220.58	-127.14	0.00	0.00	0.00
5,900.00	4.00	300.51	5,890.91	133.53	-226.59	-130.61	0.00	0.00	0.00
6,000.00	4.00	300.51	5,990.67	137.07	-232.61	-134.08	0.00	0.00	0.00
6,100.00	4.00	300.51	6,090.43	140.62	-238.63	-137.55	0.00	0.00	0.00
6,200.00	4.00	300.51	6,190.18	144.16	-244.64	-141.02	0.00	0.00	0.00
6,300.00	4.00	300.51	6,289.94	147.71	-250.66	-144.48	0.00	0.00	0.00
6,400.00	4.00	300.51	6,389.69	151.25	-256.67	-147.95	0.00	0.00	0.00
6,500.00	4.00	300.51	6,489.45	154.80	-262.69	-151.42	0.00	0.00	0.00
6,600.00	4.00	300.51	6,589.21	158.34	-268.71	-154.89	0.00	0.00	0.00
6,654.20	4.00	300.51	6,643.28	160.27	-271.97	-156.77	0.00	0.00	0.00
Start Drop -1.50									
6,700.00	3.32	300.51	6,688.98	161.75	-274.49	-158.22	1.50	-1.50	0.00
6,800.00	1.82	300.51	6,788.88	164.02	-278.35	-160.44	1.50	-1.50	0.00
6,900.00	0.32	300.51	6,888.86	164.97	-279.95	-161.37	1.50	-1.50	0.00
6,921.14	0.00	0.00	6,910.00	165.00	-280.00	-161.40	1.50	-1.50	0.00
Start 4417.00 hold at 6921.14 MD									
7,000.00	0.00	0.00	6,988.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,100.00	0.00	0.00	7,088.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,200.00	0.00	0.00	7,188.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,300.00	0.00	0.00	7,288.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,400.00	0.00	0.00	7,388.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,500.00	0.00	0.00	7,488.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,600.00	0.00	0.00	7,588.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,700.00	0.00	0.00	7,688.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,800.00	0.00	0.00	7,788.86	165.00	-280.00	-161.40	0.00	0.00	0.00
7,900.00	0.00	0.00	7,888.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,000.00	0.00	0.00	7,988.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,100.00	0.00	0.00	8,088.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,200.00	0.00	0.00	8,188.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,300.00	0.00	0.00	8,288.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,400.00	0.00	0.00	8,388.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,500.00	0.00	0.00	8,488.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,600.00	0.00	0.00	8,588.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,700.00	0.00	0.00	8,688.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,800.00	0.00	0.00	8,788.86	165.00	-280.00	-161.40	0.00	0.00	0.00
8,900.00	0.00	0.00	8,888.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,000.00	0.00	0.00	8,988.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,100.00	0.00	0.00	9,088.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,200.00	0.00	0.00	9,188.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,300.00	0.00	0.00	9,288.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,400.00	0.00	0.00	9,388.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,500.00	0.00	0.00	9,488.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,600.00	0.00	0.00	9,588.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,700.00	0.00	0.00	9,688.86	165.00	-280.00	-161.40	0.00	0.00	0.00
9,800.00	0.00	0.00	9,788.86	165.00	-280.00	-161.40	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	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	9,888.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,000.00	0.00	0.00	9,988.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,100.00	0.00	0.00	10,088.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,200.00	0.00	0.00	10,188.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,300.00	0.00	0.00	10,288.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,400.00	0.00	0.00	10,388.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,500.00	0.00	0.00	10,488.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,600.00	0.00	0.00	10,588.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,700.00	0.00	0.00	10,688.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,800.00	0.00	0.00	10,788.86	165.00	-280.00	-161.40	0.00	0.00	0.00
10,900.00	0.00	0.00	10,888.86	165.00	-280.00	-161.40	0.00	0.00	0.00
11,000.00	0.00	0.00	10,988.86	165.00	-280.00	-161.40	0.00	0.00	0.00
11,100.00	0.00	0.00	11,088.86	165.00	-280.00	-161.40	0.00	0.00	0.00
11,200.00	0.00	0.00	11,188.86	165.00	-280.00	-161.40	0.00	0.00	0.00
11,300.00	0.00	0.00	11,288.86	165.00	-280.00	-161.40	0.00	0.00	0.00
11,338.14	0.00	0.00	11,327.00	165.00	-280.00	-161.40	0.00	0.00	0.00
Start DLS 10.00 TFO 179.18									
11,350.00	1.19	179.18	11,338.86	164.88	-280.00	-161.27	10.00	10.00	0.00
11,400.00	6.19	179.18	11,388.74	161.66	-279.95	-158.06	10.00	10.00	0.00
11,450.00	11.19	179.18	11,438.15	154.12	-279.84	-150.52	10.00	10.00	0.00
11,500.00	16.19	179.18	11,486.71	142.29	-279.67	-138.69	10.00	10.00	0.00
11,550.00	21.19	179.18	11,534.06	126.28	-279.45	-122.69	10.00	10.00	0.00
11,600.00	26.19	179.18	11,579.84	106.20	-279.16	-102.61	10.00	10.00	0.00
11,650.00	31.19	179.18	11,623.69	82.21	-278.81	-78.63	10.00	10.00	0.00
11,700.00	36.19	179.18	11,665.28	54.49	-278.42	-50.92	10.00	10.00	0.00
11,750.00	41.19	179.18	11,704.29	23.25	-277.97	-19.69	10.00	10.00	0.00
11,800.00	46.19	179.18	11,740.44	-11.27	-277.47	14.82	10.00	10.00	0.00
11,850.00	51.19	179.18	11,773.44	-48.81	-276.94	52.35	10.00	10.00	0.00
11,900.00	56.19	179.18	11,803.04	-89.08	-276.36	92.61	10.00	10.00	0.00
11,950.00	61.19	179.18	11,829.02	-131.78	-275.75	135.30	10.00	10.00	0.00
12,000.00	66.19	179.18	11,851.18	-176.58	-275.11	180.09	10.00	10.00	0.00
12,050.00	71.19	179.18	11,869.34	-223.14	-274.44	226.64	10.00	10.00	0.00
12,100.00	76.19	179.18	11,883.38	-271.10	-273.75	274.59	10.00	10.00	0.00
12,150.00	81.19	179.18	11,893.19	-320.11	-273.05	323.59	10.00	10.00	0.00
12,200.00	86.19	179.18	11,898.69	-369.79	-272.34	373.25	10.00	10.00	0.00
12,250.00	91.19	179.18	11,899.84	-419.75	-271.62	423.20	10.00	10.00	0.00
12,258.12	92.00	179.18	11,899.61	-427.87	-271.51	431.32	10.00	10.00	0.00
Start 9804.75 hold at 12258.12 MD - LP (CF Fed Com 602H2)									
12,300.00	92.00	179.18	11,898.15	-469.72	-270.91	473.15	0.00	0.00	0.00
12,400.00	92.00	179.18	11,894.66	-569.65	-269.47	573.06	0.00	0.00	0.00
12,500.00	92.00	179.18	11,891.18	-669.58	-268.04	672.96	0.00	0.00	0.00
12,600.00	92.00	179.18	11,887.69	-769.51	-266.61	772.86	0.00	0.00	0.00
12,700.00	92.00	179.18	11,884.21	-869.44	-265.18	872.76	0.00	0.00	0.00
12,800.00	92.00	179.18	11,880.72	-969.36	-263.75	972.67	0.00	0.00	0.00
12,900.00	92.00	179.18	11,877.24	-1,069.29	-262.32	1,072.57	0.00	0.00	0.00
13,000.00	92.00	179.18	11,873.75	-1,169.22	-260.88	1,172.47	0.00	0.00	0.00
13,100.00	92.00	179.18	11,870.27	-1,269.15	-259.45	1,272.37	0.00	0.00	0.00
13,200.00	92.00	179.18	11,866.78	-1,369.08	-258.02	1,372.28	0.00	0.00	0.00
13,300.00	92.00	179.18	11,863.30	-1,469.01	-256.59	1,472.18	0.00	0.00	0.00
13,400.00	92.00	179.18	11,859.81	-1,568.94	-255.16	1,572.08	0.00	0.00	0.00
13,500.00	92.00	179.18	11,856.33	-1,668.87	-253.73	1,671.98	0.00	0.00	0.00
13,600.00	92.00	179.18	11,852.84	-1,768.80	-252.29	1,771.89	0.00	0.00	0.00
13,700.00	92.00	179.18	11,849.36	-1,868.73	-250.86	1,871.79	0.00	0.00	0.00
13,800.00	92.00	179.18	11,845.87	-1,968.65	-249.43	1,971.69	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,900.00	92.00	179.18	11,842.38	-2,068.58	-248.00	2,071.59	0.00	0.00	0.00	
14,000.00	92.00	179.18	11,838.90	-2,168.51	-246.57	2,171.50	0.00	0.00	0.00	
14,100.00	92.00	179.18	11,835.41	-2,268.44	-245.14	2,271.40	0.00	0.00	0.00	
14,200.00	92.00	179.18	11,831.93	-2,368.37	-243.70	2,371.30	0.00	0.00	0.00	
14,300.00	92.00	179.18	11,828.44	-2,468.30	-242.27	2,471.20	0.00	0.00	0.00	
14,400.00	92.00	179.18	11,824.96	-2,568.23	-240.84	2,571.11	0.00	0.00	0.00	
14,500.00	92.00	179.18	11,821.47	-2,668.16	-239.41	2,671.01	0.00	0.00	0.00	
14,600.00	92.00	179.18	11,817.99	-2,768.09	-237.98	2,770.91	0.00	0.00	0.00	
14,700.00	92.00	179.18	11,814.50	-2,868.02	-236.55	2,870.81	0.00	0.00	0.00	
14,800.00	92.00	179.18	11,811.02	-2,967.94	-235.11	2,970.72	0.00	0.00	0.00	
14,900.00	92.00	179.18	11,807.53	-3,067.87	-233.68	3,070.62	0.00	0.00	0.00	
15,000.00	92.00	179.18	11,804.05	-3,167.80	-232.25	3,170.52	0.00	0.00	0.00	
15,100.00	92.00	179.18	11,800.56	-3,267.73	-230.82	3,270.42	0.00	0.00	0.00	
15,200.00	92.00	179.18	11,797.08	-3,367.66	-229.39	3,370.32	0.00	0.00	0.00	
15,300.00	92.00	179.18	11,793.59	-3,467.59	-227.95	3,470.23	0.00	0.00	0.00	
15,400.00	92.00	179.18	11,790.10	-3,567.52	-226.52	3,570.13	0.00	0.00	0.00	
15,500.00	92.00	179.18	11,786.62	-3,667.45	-225.09	3,670.03	0.00	0.00	0.00	
15,600.00	92.00	179.18	11,783.13	-3,767.38	-223.66	3,769.93	0.00	0.00	0.00	
15,700.00	92.00	179.18	11,779.65	-3,867.31	-222.23	3,869.84	0.00	0.00	0.00	
15,800.00	92.00	179.18	11,776.16	-3,967.23	-220.80	3,969.74	0.00	0.00	0.00	
15,900.00	92.00	179.18	11,772.68	-4,067.16	-219.36	4,069.64	0.00	0.00	0.00	
16,000.00	92.00	179.18	11,769.19	-4,167.09	-217.93	4,169.54	0.00	0.00	0.00	
16,100.00	92.00	179.18	11,765.71	-4,267.02	-216.50	4,269.45	0.00	0.00	0.00	
16,200.00	92.00	179.18	11,762.22	-4,366.95	-215.07	4,369.35	0.00	0.00	0.00	
16,300.00	92.00	179.18	11,758.74	-4,466.88	-213.64	4,469.25	0.00	0.00	0.00	
16,400.00	92.00	179.18	11,755.25	-4,566.81	-212.21	4,569.15	0.00	0.00	0.00	
16,500.00	92.00	179.18	11,751.77	-4,666.74	-210.77	4,669.06	0.00	0.00	0.00	
16,600.00	92.00	179.18	11,748.28	-4,766.67	-209.34	4,768.96	0.00	0.00	0.00	
16,700.00	92.00	179.18	11,744.79	-4,866.60	-207.91	4,868.86	0.00	0.00	0.00	
16,800.00	92.00	179.18	11,741.31	-4,966.52	-206.48	4,968.76	0.00	0.00	0.00	
16,900.00	92.00	179.18	11,737.82	-5,066.45	-205.05	5,068.67	0.00	0.00	0.00	
17,000.00	92.00	179.18	11,734.34	-5,166.38	-203.62	5,168.57	0.00	0.00	0.00	
17,100.00	92.00	179.18	11,730.85	-5,266.31	-202.18	5,268.47	0.00	0.00	0.00	
17,200.00	92.00	179.18	11,727.37	-5,366.24	-200.75	5,368.37	0.00	0.00	0.00	
17,300.00	92.00	179.18	11,723.88	-5,466.17	-199.32	5,468.28	0.00	0.00	0.00	
17,400.00	92.00	179.18	11,720.40	-5,566.10	-197.89	5,568.18	0.00	0.00	0.00	
17,500.00	92.00	179.18	11,716.91	-5,666.03	-196.46	5,668.08	0.00	0.00	0.00	
17,600.00	92.00	179.18	11,713.43	-5,765.96	-195.03	5,767.98	0.00	0.00	0.00	
17,700.00	92.00	179.18	11,709.94	-5,865.89	-193.59	5,867.89	0.00	0.00	0.00	
17,800.00	92.00	179.18	11,706.46	-5,965.81	-192.16	5,967.79	0.00	0.00	0.00	
17,900.00	92.00	179.18	11,702.97	-6,065.74	-190.73	6,067.69	0.00	0.00	0.00	
18,000.00	92.00	179.18	11,699.49	-6,165.67	-189.30	6,167.59	0.00	0.00	0.00	
18,100.00	92.00	179.18	11,696.00	-6,265.60	-187.87	6,267.49	0.00	0.00	0.00	
18,200.00	92.00	179.18	11,692.51	-6,365.53	-186.44	6,367.40	0.00	0.00	0.00	
18,300.00	92.00	179.18	11,689.03	-6,465.46	-185.00	6,467.30	0.00	0.00	0.00	
18,400.00	92.00	179.18	11,685.54	-6,565.39	-183.57	6,567.20	0.00	0.00	0.00	
18,500.00	92.00	179.18	11,682.06	-6,665.32	-182.14	6,667.10	0.00	0.00	0.00	
18,600.00	92.00	179.18	11,678.57	-6,765.25	-180.71	6,767.01	0.00	0.00	0.00	
18,700.00	92.00	179.18	11,675.09	-6,865.18	-179.28	6,866.91	0.00	0.00	0.00	
18,800.00	92.00	179.18	11,671.60	-6,965.10	-177.84	6,966.81	0.00	0.00	0.00	
18,900.00	92.00	179.18	11,668.12	-7,065.03	-176.41	7,066.71	0.00	0.00	0.00	
19,000.00	92.00	179.18	11,664.63	-7,164.96	-174.98	7,166.62	0.00	0.00	0.00	
19,100.00	92.00	179.18	11,661.15	-7,264.89	-173.55	7,266.52	0.00	0.00	0.00	
19,200.00	92.00	179.18	11,657.66	-7,364.82	-172.12	7,366.42	0.00	0.00	0.00	



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	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)	
19,300.00	92.00	179.18	11,654.18	-7,464.75	-170.69	7,466.32	0.00	0.00	0.00	
19,400.00	92.00	179.18	11,650.69	-7,564.68	-169.25	7,566.23	0.00	0.00	0.00	
19,500.00	92.00	179.18	11,647.21	-7,664.61	-167.82	7,666.13	0.00	0.00	0.00	
19,600.00	92.00	179.18	11,643.72	-7,764.54	-166.39	7,766.03	0.00	0.00	0.00	
19,700.00	92.00	179.18	11,640.23	-7,864.46	-164.96	7,865.93	0.00	0.00	0.00	
19,800.00	92.00	179.18	11,636.75	-7,964.39	-163.53	7,965.84	0.00	0.00	0.00	
19,900.00	92.00	179.18	11,633.26	-8,064.32	-162.10	8,065.74	0.00	0.00	0.00	
20,000.00	92.00	179.18	11,629.78	-8,164.25	-160.66	8,165.64	0.00	0.00	0.00	
20,100.00	92.00	179.18	11,626.29	-8,264.18	-159.23	8,265.54	0.00	0.00	0.00	
20,200.00	92.00	179.18	11,622.81	-8,364.11	-157.80	8,365.45	0.00	0.00	0.00	
20,300.00	92.00	179.18	11,619.32	-8,464.04	-156.37	8,465.35	0.00	0.00	0.00	
20,400.00	92.00	179.18	11,615.84	-8,563.97	-154.94	8,565.25	0.00	0.00	0.00	
20,500.00	92.00	179.18	11,612.35	-8,663.90	-153.51	8,665.15	0.00	0.00	0.00	
20,600.00	92.00	179.18	11,608.87	-8,763.83	-152.07	8,765.06	0.00	0.00	0.00	
20,700.00	92.00	179.18	11,605.38	-8,863.75	-150.64	8,864.96	0.00	0.00	0.00	
20,800.00	92.00	179.18	11,601.90	-8,963.68	-149.21	8,964.86	0.00	0.00	0.00	
20,900.00	92.00	179.18	11,598.41	-9,063.61	-147.78	9,064.76	0.00	0.00	0.00	
21,000.00	92.00	179.18	11,594.92	-9,163.54	-146.35	9,164.66	0.00	0.00	0.00	
21,100.00	92.00	179.18	11,591.44	-9,263.47	-144.92	9,264.57	0.00	0.00	0.00	
21,200.00	92.00	179.18	11,587.95	-9,363.40	-143.48	9,364.47	0.00	0.00	0.00	
21,300.00	92.00	179.18	11,584.47	-9,463.33	-142.05	9,464.37	0.00	0.00	0.00	
21,400.00	92.00	179.18	11,580.98	-9,563.26	-140.62	9,564.27	0.00	0.00	0.00	
21,500.00	92.00	179.18	11,577.50	-9,663.19	-139.19	9,664.18	0.00	0.00	0.00	
21,600.00	92.00	179.18	11,574.01	-9,763.12	-137.76	9,764.08	0.00	0.00	0.00	
21,700.00	92.00	179.18	11,570.53	-9,863.04	-136.33	9,863.98	0.00	0.00	0.00	
21,800.00	92.00	179.18	11,567.04	-9,962.97	-134.89	9,963.88	0.00	0.00	0.00	
21,900.00	92.00	179.18	11,563.56	-10,062.90	-133.46	10,063.79	0.00	0.00	0.00	
22,000.00	92.00	179.18	11,560.07	-10,162.83	-132.03	10,163.69	0.00	0.00	0.00	
22,062.86	92.00	179.18	11,557.88	-10,225.65	-131.13	10,226.49	0.00	0.00	0.00	
TD at 22062.86 - PBHL (CF Fed Com 602H2)										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (CF Fed Com 602H - hit/miss target - Shape - Point	0.00	0.00	0.00	0.00	0.00	425,585.04	847,910.34	32.166132	-103.342582
PBHL (CF Fed Com 602 - plan hits target center - Point	0.00	0.00	11,557.88	-10,225.65	-131.13	415,359.39	847,779.21	32.138030	-103.343309
LP (CF Fed Com 602H2 - plan hits target center - Point	0.00	0.00	11,899.61	-427.87	-271.51	425,157.17	847,638.83	32.164963	-103.343472



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Company:	Franklin Mountain Energy	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Project:	Lea County, NM (NAD83)	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site:	County Fair/Blue Ribbon	North Reference:	Grid
Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.00	2,000.00	0.00	0.00	Start Build 1.50
2,266.94	2,266.72	4.73	-8.03	Start 4387.26 hold at 2266.94 MD
6,654.20	6,643.28	160.27	-271.97	Start Drop -1.50
6,921.14	6,910.00	165.00	-280.00	Start 4417.00 hold at 6921.14 MD
11,338.14	11,327.00	165.00	-280.00	Start DLS 10.00 TFO 179.18
12,258.12	11,899.61	-427.87	-271.51	Start 9804.75 hold at 12258.12 MD
22,062.86	11,557.88	-10,225.65	-131.13	TD at 22062.86



Franklin Mountain Energy

Lea County, NM (NAD83)
County Fair/Blue Ribbon
County Fair Fed Com 602H2

OH
Plan #1

Anticollision Report

20 August, 2021





Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program		Date	8/20/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	22,062.40	Plan #1 (OH)	OWSG (Rev2) MWD	OWSG MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
County Fair/Blue Ribbon						
Blue Ribbon Fed Com 702H - OH - OH	1,470.64	1,470.78	29.86	23.08	4.402	CC
Blue Ribbon Fed Com 702H - OH - OH	1,500.00	1,500.06	29.91	23.03	4.351	ES
Blue Ribbon Fed Com 702H - OH - OH	2,100.00	2,100.00	34.02	25.00	3.770	SF
Blue Ribbon Fed Com 702H2 - OH - Plan #1	2,000.00	2,000.00	34.99	25.18	3.567	CC, ES
Blue Ribbon Fed Com 702H2 - OH - Plan #1	22,061.13	22,244.96	569.78	337.70	2.455	SF
County Fair Fed Com 602H - OH - OH	800.99	800.90	33.09	29.37	8.892	CC
County Fair Fed Com 602H - OH - OH	900.00	899.77	33.38	29.16	7.904	ES
County Fair Fed Com 602H - OH - OH	11,390.16	11,390.88	107.69	53.93	2.003	SF
County Fair Fed Com 701H - OH - OH	0.00	0.00	49.49			
County Fair Fed Com 701H - OH - OH	100.00	99.51	49.68	49.40	183.150	ES
County Fair Fed Com 701H - OH - OH	21,900.00	22,110.00	848.23	698.00	5.646	SF
County Fair Fed Com 701H2 - OH - Plan #1	1,400.00	1,400.00	34.99	28.22	5.170	CC, ES
County Fair Fed Com 701H2 - OH - Plan #1	22,062.86	22,395.49	781.14	554.73	3.450	SF

Offset Design		County Fair/Blue Ribbon - Blue Ribbon Fed Com 702H - OH - OH											Offset Site Error:	0.00 usft
Survey Program:		58-OWSG (Rev2) MWD, 1335-OWSG (Rev2) MWD, 22173-BLIND											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	134.48	-34.68	35.31	49.49					
100.00	100.00	99.84	99.84	0.13	0.20	134.38	-34.58	35.33	49.44	49.21	0.23	212.864		
200.00	200.00	200.57	200.56	0.48	0.55	134.83	-34.34	34.55	48.72	47.99	0.73	66.302		
300.00	300.00	300.46	300.45	0.84	0.91	135.54	-33.92	33.29	47.53	46.29	1.24	38.341		
400.00	400.00	400.58	400.55	1.20	1.27	136.47	-33.46	31.78	46.15	44.41	1.75	26.429		
500.00	500.00	500.91	500.86	1.56	1.63	137.57	-32.65	29.85	44.25	41.99	2.25	19.630		
600.00	600.00	600.79	600.70	1.92	1.99	138.92	-31.59	27.54	41.92	39.16	2.76	15.183		
700.00	700.00	700.87	700.75	2.28	2.35	140.78	-30.79	25.13	39.76	36.49	3.27	12.164		
800.00	800.00	800.45	800.30	2.63	2.71	143.05	-30.12	22.65	37.69	33.91	3.78	9.982		
900.00	900.00	900.78	900.60	2.99	3.07	145.47	-29.35	20.19	35.63	31.35	4.28	8.317		
1,000.00	1,000.00	1,000.63	1,000.41	3.35	3.43	149.16	-29.08	17.36	33.87	29.08	4.79	7.068		
1,100.00	1,100.00	1,100.44	1,100.19	3.71	3.79	152.29	-28.88	15.17	32.62	27.32	5.30	6.156		
1,200.00	1,200.00	1,200.36	1,200.09	4.07	4.15	156.03	-28.87	12.84	31.60	25.79	5.81	5.441		
1,300.00	1,300.00	1,300.34	1,300.04	4.43	4.43	159.35	-28.72	10.82	30.69	24.43	6.26	4.900		
1,400.00	1,400.00	1,400.27	1,399.95	4.79	4.51	163.52	-28.86	8.54	30.10	23.52	6.58	4.575		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 58-OWSG (Rev2) MWD, 1335-OWSG (Rev2) MWD, 22173-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
1,470.64	1,470.64	1,470.78	1,470.44	5.04	4.54	166.55	-29.04	6.94	29.86	23.08	6.78	4.402	CC	
1,500.00	1,500.00	1,500.06	1,499.71	5.14	4.56	167.54	-29.20	6.45	29.91	23.03	6.87	4.351	ES	
1,600.00	1,600.00	1,599.97	1,599.61	5.50	4.63	169.48	-29.93	5.56	30.45	23.25	7.19	4.234		
1,700.00	1,700.00	1,699.99	1,699.63	5.86	4.72	169.85	-30.55	5.47	31.03	23.50	7.53	4.122		
1,800.00	1,800.00	1,799.95	1,799.60	6.22	4.84	169.59	-31.08	5.71	31.60	23.72	7.88	4.010		
1,900.00	1,900.00	1,900.01	1,899.65	6.58	4.98	169.14	-31.59	6.06	32.17	23.92	8.25	3.899		
2,000.00	2,000.00	2,000.00	1,999.64	6.94	5.14	168.79	-32.03	6.35	32.65	24.02	8.63	3.782		
2,100.00	2,099.99	2,100.00	2,099.64	7.29	5.32	-133.69	-32.46	6.64	34.02	25.00	9.02	3.770	SF	
2,200.00	2,199.91	2,200.02	2,199.65	7.64	5.51	-138.48	-32.66	6.97	37.14	27.71	9.42	3.941		
2,266.94	2,266.72	2,266.88	2,266.51	7.88	5.65	-142.61	-32.64	7.19	40.36	30.66	9.69	4.163		
2,300.00	2,299.70	2,299.84	2,299.48	8.00	5.72	-144.68	-32.60	7.31	42.22	32.40	9.83	4.296		
2,400.00	2,399.46	2,399.55	2,399.19	8.35	5.94	-150.17	-32.46	7.89	48.26	38.02	10.24	4.712		
2,500.00	2,499.21	2,499.44	2,499.08	8.71	6.17	-154.57	-32.09	8.48	54.46	43.79	10.66	5.107		
2,600.00	2,598.97	2,599.34	2,598.97	9.06	6.41	-158.32	-31.34	9.15	60.65	49.56	11.09	5.469		
2,700.00	2,698.73	2,699.21	2,698.83	9.42	6.66	-161.61	-30.21	9.85	66.78	55.26	11.52	5.796		
2,800.00	2,798.48	2,799.15	2,798.75	9.78	6.92	-164.37	-28.95	10.49	72.97	61.01	11.96	6.101		
2,900.00	2,898.24	2,899.06	2,898.65	10.15	7.19	-166.72	-27.43	10.90	78.95	66.55	12.40	6.366		
3,000.00	2,997.99	2,998.47	2,998.05	10.51	7.46	-168.97	-25.73	11.64	85.17	72.32	12.85	6.628		
3,100.00	3,097.75	3,097.04	3,096.57	10.87	7.74	-171.57	-23.72	13.69	92.32	79.03	13.30	6.944		
3,200.00	3,197.51	3,195.02	3,194.44	11.24	8.02	-174.70	-21.33	17.88	101.18	87.44	13.74	7.363		
3,300.00	3,297.26	3,292.55	3,291.68	11.60	8.31	-178.40	-18.07	24.53	111.94	97.76	14.18	7.893		
3,400.00	3,397.02	3,388.74	3,387.37	11.96	8.60	177.83	-14.31	33.49	125.00	110.39	14.61	8.555		
3,500.00	3,496.77	3,484.07	3,482.03	12.33	8.89	174.77	-11.51	44.45	140.89	125.86	15.03	9.374		
3,600.00	3,596.53	3,580.13	3,577.29	12.70	9.19	172.75	-10.56	56.73	159.02	143.56	15.46	10.284		
3,700.00	3,696.28	3,676.77	3,673.06	13.06	9.50	171.45	-10.88	69.65	178.33	162.42	15.91	11.209		
3,800.00	3,796.04	3,774.96	3,770.35	13.43	9.82	170.51	-11.74	82.99	198.11	181.73	16.38	12.094		
3,900.00	3,895.80	3,873.93	3,868.44	13.80	10.15	169.82	-12.78	96.02	217.59	200.73	16.86	12.905		
4,000.00	3,995.55	3,971.56	3,965.26	14.17	10.48	169.34	-14.08	108.60	236.93	219.61	17.33	13.672		
4,100.00	4,095.31	4,062.97	4,055.73	14.53	10.80	168.99	-15.87	121.46	257.62	239.88	17.73	14.529		
4,200.00	4,195.06	4,156.85	4,148.33	14.90	11.14	168.53	-17.65	136.76	280.35	262.19	18.16	15.434		
4,300.00	4,294.82	4,260.82	4,250.85	15.27	11.51	167.64	-17.28	154.09	302.77	284.05	18.71	16.180		
4,400.00	4,394.58	4,369.36	4,358.14	15.64	11.91	166.33	-13.16	169.94	322.30	303.01	19.29	16.708		
4,500.00	4,494.33	4,477.35	4,465.12	16.01	12.30	164.90	-6.51	182.95	338.89	319.05	19.84	17.077		
4,600.00	4,594.09	4,584.00	4,571.11	16.38	12.67	163.72	0.21	192.85	352.94	332.56	20.38	17.318		
4,700.00	4,693.84	4,685.95	4,672.58	16.75	13.03	162.80	6.28	200.56	365.54	344.65	20.88	17.503		
4,800.00	4,793.60	4,789.66	4,775.86	17.12	13.39	161.98	12.28	207.75	377.66	356.26	21.40	17.650		
4,900.00	4,893.36	4,894.42	4,880.35	17.49	13.76	161.38	17.61	213.01	388.09	366.18	21.91	17.712		
5,000.00	4,993.11	4,992.68	4,978.39	17.86	14.10	160.85	22.63	217.36	398.00	375.60	22.40	17.770		
5,100.00	5,092.87	5,083.55	5,068.96	18.23	14.41	160.28	27.85	222.59	409.13	386.28	22.85	17.904		
5,200.00	5,192.62	5,175.40	5,160.33	18.60	14.75	159.62	33.51	230.01	422.48	399.17	23.30	18.128		
5,300.00	5,292.38	5,273.80	5,258.18	18.97	15.10	159.03	38.88	238.82	436.87	413.07	23.80	18.358		
5,400.00	5,392.14	5,372.62	5,356.53	19.34	15.46	158.58	43.47	247.34	451.10	426.81	24.29	18.570		
5,500.00	5,491.89	5,470.12	5,453.56	19.71	15.82	158.18	47.85	255.94	465.58	440.80	24.78	18.788		
5,600.00	5,591.65	5,568.40	5,551.32	20.08	16.19	157.79	52.35	264.85	480.30	455.03	25.27	19.004		
5,700.00	5,691.40	5,667.14	5,649.54	20.46	16.55	157.40	56.99	273.88	495.11	469.34	25.77	19.212		
5,800.00	5,791.16	5,766.01	5,747.89	20.83	16.92	157.05	61.49	282.91	509.95	483.68	26.27	19.413		
5,900.00	5,890.91	5,864.15	5,845.52	21.20	17.28	156.74	65.83	291.92	524.86	498.10	26.76	19.611		
6,000.00	5,990.67	5,964.31	5,945.17	21.57	17.66	156.44	70.22	301.02	539.71	512.44	27.27	19.791		
6,100.00	6,090.43	6,060.16	6,040.51	21.94	18.01	156.16	74.55	309.93	554.75	527.00	27.75	19.989		
6,200.00	6,190.18	6,156.59	6,136.36	22.31	18.38	155.85	79.21	319.38	570.28	542.04	28.24	20.194		
6,300.00	6,289.94	6,254.23	6,233.35	22.69	18.75	155.51	84.38	329.31	586.13	557.40	28.73	20.398		
6,400.00	6,389.69	6,353.88	6,332.33	23.06	19.13	155.14	90.06	339.46	601.98	572.74	29.24	20.586		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - Blue Ribbon Fed Com 702H - OH - OH		Offset Site Error:	0.00 usft
Survey Program: 58-OWSG (Rev2) MWD, 1335-OWSG (Rev2) MWD, 22173-BLIND													Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
6,500.00	6,489.45	6,452.46	6,430.22	23.43	19.51	154.76	96.01	349.44	617.78	588.03	29.74	20.769				
6,600.00	6,589.21	6,550.73	6,527.78	23.80	19.88	154.38	102.08	359.50	633.69	603.44	30.25	20.951				
6,654.20	6,643.28	6,604.95	6,581.61	24.00	20.09	154.19	105.45	365.02	642.29	611.76	30.52	21.042				
6,700.00	6,688.98	6,651.28	6,627.62	24.17	20.27	154.06	108.29	369.67	649.25	618.49	30.76	21.107				
6,800.00	6,788.88	6,761.09	6,736.78	24.54	20.69	153.74	114.27	379.99	662.25	630.92	31.32	21.142				
6,900.00	6,888.86	6,881.19	6,856.58	24.89	21.13	153.53	117.71	387.75	670.13	638.21	31.92	20.994				
6,921.14	6,910.00	6,906.25	6,881.61	24.97	21.22	94.01	118.14	388.91	671.14	639.10	32.04	20.947				
7,000.00	6,988.86	6,984.39	6,959.66	25.24	21.49	93.88	119.42	392.36	674.53	642.10	32.43	20.801				
7,100.00	7,088.86	7,085.16	7,060.32	25.59	21.85	93.72	121.02	396.75	678.77	645.85	32.92	20.616				
7,200.00	7,188.86	7,184.61	7,159.67	25.93	22.20	93.58	122.44	401.03	682.98	649.56	33.42	20.438				
7,300.00	7,288.86	7,304.00	7,279.00	26.28	22.62	93.48	123.38	404.60	685.93	651.96	33.97	20.191				
7,400.00	7,388.86	7,422.45	7,397.43	26.63	23.00	93.38	124.59	404.37	685.62	651.12	34.50	19.876				
7,500.00	7,488.86	7,520.45	7,495.42	26.98	23.31	93.30	125.62	403.03	684.20	649.23	34.97	19.565				
7,600.00	7,588.86	7,615.59	7,590.56	27.33	23.61	93.31	125.48	402.55	683.69	648.26	35.44	19.293				
7,700.00	7,688.86	7,715.28	7,690.25	27.68	23.92	93.34	125.16	402.31	683.48	647.56	35.91	19.031				
7,800.00	7,788.86	7,814.62	7,789.58	28.03	24.23	93.38	124.72	402.07	683.26	646.87	36.39	18.776				
7,900.00	7,888.86	7,914.63	7,889.60	28.38	24.55	93.43	124.17	401.93	683.15	646.28	36.87	18.528				
8,000.00	7,988.86	8,013.86	7,988.82	28.73	24.87	93.48	123.50	401.79	683.05	645.70	37.35	18.287				
8,013.28	8,002.14	8,026.97	8,001.94	28.77	24.91	93.49	123.41	401.78	683.05	645.63	37.41	18.256				
8,100.00	8,088.86	8,113.11	8,088.07	29.08	25.19	93.55	122.75	401.78	683.09	645.25	37.83	18.056				
8,200.00	8,188.86	8,212.01	8,186.96	29.43	25.51	93.63	121.76	401.88	683.25	644.94	38.31	17.833				
8,300.00	8,288.86	8,311.54	8,286.49	29.78	25.83	93.74	120.42	402.08	683.54	644.74	38.80	17.618				
8,400.00	8,388.86	8,410.00	8,384.93	30.13	26.16	93.88	118.73	402.37	683.94	644.66	39.28	17.412				
8,500.00	8,488.86	8,509.25	8,484.15	30.48	26.48	94.06	116.59	402.78	684.51	644.75	39.76	17.214				
8,600.00	8,588.86	8,605.50	8,580.39	30.83	26.80	94.20	114.85	403.57	685.46	645.21	40.24	17.033				
8,700.00	8,688.86	8,704.27	8,679.15	31.18	27.14	94.22	114.43	404.82	686.75	646.02	40.73	16.860				
8,800.00	8,788.86	8,803.21	8,778.07	31.53	27.48	94.17	114.93	406.32	688.23	647.00	41.23	16.694				
8,900.00	8,888.86	8,903.66	8,878.51	31.88	27.83	94.13	115.35	407.88	689.74	648.02	41.72	16.532				
9,000.00	8,988.86	9,004.14	8,978.98	32.23	28.18	94.14	115.08	409.27	691.14	648.92	42.22	16.370				
9,100.00	9,088.86	9,103.41	9,078.24	32.58	28.52	94.17	114.65	410.72	692.63	649.92	42.71	16.216				
9,200.00	9,188.86	9,204.77	9,179.59	32.94	28.87	94.23	113.86	412.11	694.05	650.84	43.21	16.062				
9,300.00	9,288.86	9,306.48	9,281.28	33.29	29.21	94.36	112.13	413.17	695.23	651.52	43.71	15.906				
9,400.00	9,388.86	9,407.86	9,382.64	33.64	29.55	94.51	110.28	414.01	696.19	651.99	44.20	15.750				
9,500.00	9,488.86	9,513.75	9,488.52	33.99	29.91	94.52	110.09	414.59	696.76	652.05	44.71	15.584				
9,600.00	9,588.86	9,614.99	9,589.75	34.34	30.25	94.41	111.41	414.48	696.55	651.35	45.20	15.409				
9,648.58	9,637.44	9,662.48	9,637.24	34.52	30.41	94.36	112.08	414.49	696.50	651.06	45.44	15.328				
9,700.00	9,688.86	9,712.38	9,687.13	34.70	30.58	94.29	112.86	414.60	696.56	650.87	45.69	15.245				
9,800.00	9,788.86	9,808.71	9,783.45	35.05	30.91	94.16	114.47	415.18	697.03	650.86	46.18	15.095				
9,900.00	9,888.86	9,901.80	9,876.51	35.40	31.24	94.02	116.09	416.42	698.24	651.59	46.65	14.967				
10,000.00	9,988.86	9,990.17	9,964.84	35.76	31.55	93.89	117.45	418.73	700.76	653.64	47.11	14.874				
10,100.00	10,088.86	10,081.89	10,056.48	36.11	31.87	93.85	117.76	422.50	704.82	657.24	47.58	14.814				
10,200.00	10,188.86	10,200.23	10,174.73	36.46	32.29	93.94	116.31	426.77	708.58	660.44	48.14	14.718				
10,300.00	10,288.86	10,307.69	10,282.18	36.81	32.66	94.01	115.39	428.15	709.92	661.25	48.66	14.589				
10,400.00	10,388.86	10,405.27	10,379.75	37.17	33.00	93.98	115.62	429.26	711.03	661.88	49.15	14.466				
10,500.00	10,488.86	10,509.26	10,483.73	37.52	33.36	93.98	115.53	430.46	712.20	662.54	49.66	14.341				
10,600.00	10,588.86	10,621.18	10,595.64	37.87	33.73	94.08	114.39	429.99	711.82	661.65	50.17	14.187				
10,700.00	10,688.86	10,726.88	10,701.33	38.23	34.08	94.11	114.05	428.56	710.50	659.84	50.67	14.023				
10,800.00	10,788.86	10,834.48	10,808.88	38.58	34.43	93.96	116.07	426.20	708.19	657.02	51.16	13.842				
10,900.00	10,888.86	10,946.94	10,921.17	38.94	34.80	93.58	121.08	422.41	704.54	652.88	51.65	13.639				
11,000.00	10,988.86	11,069.65	11,043.48	39.29	35.19	93.08	127.65	415.22	698.38	646.26	52.12	13.400				
11,100.00	11,088.86	11,175.51	11,148.88	39.64	35.52	92.89	130.35	405.75	689.26	636.67	52.59	13.107				
11,200.00	11,188.86	11,252.74	11,225.89	40.00	35.77	92.89	130.65	400.21	682.09	628.99	53.10	12.845				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
County Fair/Blue Ribbon - Blue Ribbon Fed Com 702H - OH - OH												Offset Well Error:	0.00 usft
Survey Program: 58-OWSG (Rev2) MWD, 1335-OWSG (Rev2) MWD, 22173-BLIND													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,300.00	11,288.86	11,332.00	11,305.09	40.35	36.02	93.04	129.05	397.52	678.67	625.08	53.59	12.665	
11,338.14	11,327.00	11,359.37	11,332.44	40.49	36.11	93.12	128.09	397.20	678.23	624.47	53.76	12.616	
11,350.00	11,338.86	11,370.50	11,343.56	40.53	36.15	-86.05	127.69	397.10	678.13	624.32	53.81	12.601	
11,400.00	11,388.74	11,417.40	11,390.43	40.69	36.30	-86.20	125.97	396.77	677.66	623.62	54.04	12.540	
11,450.00	11,438.15	11,463.59	11,436.57	40.84	36.45	-86.65	123.71	396.64	677.17	622.91	54.26	12.481	
11,500.00	11,486.71	11,509.54	11,482.35	40.99	36.60	-87.29	119.92	396.68	676.74	622.27	54.47	12.425	
11,550.00	11,534.06	11,560.86	11,533.18	41.13	36.77	-88.16	112.91	396.74	676.32	621.64	54.68	12.368	
11,600.00	11,579.84	11,620.37	11,590.98	41.26	36.95	-89.13	98.88	396.06	675.35	620.45	54.90	12.301	
11,650.00	11,623.69	11,662.00	11,630.41	41.38	37.07	-89.85	85.59	395.36	674.22	619.14	55.09	12.239	
11,700.00	11,665.28	11,704.79	11,669.97	41.48	37.19	-90.60	69.29	395.11	673.71	618.44	55.27	12.190	
11,705.93	11,670.04	11,710.00	11,674.72	41.50	37.20	-90.69	67.15	395.13	673.71	618.42	55.29	12.186	
11,750.00	11,704.29	11,733.13	11,695.66	41.58	37.26	-91.09	57.33	395.56	674.45	619.04	55.41	12.172	
11,800.00	11,740.44	11,762.05	11,721.48	41.67	37.34	-91.55	44.40	397.03	677.06	621.51	55.55	12.189	
11,850.00	11,773.44	11,818.76	11,770.18	41.74	37.48	-92.69	15.60	400.47	680.47	624.72	55.76	12.205	
11,900.00	11,803.04	11,879.04	11,818.59	41.81	37.62	-93.87	-20.16	403.44	683.46	627.52	55.95	12.216	
11,950.00	11,829.02	11,934.33	11,860.89	41.89	37.74	-95.03	-55.68	405.77	686.50	630.39	56.11	12.235	
12,000.00	11,851.18	11,977.85	11,892.67	42.01	37.84	-95.93	-85.35	407.62	690.06	633.80	56.25	12.267	
12,050.00	11,869.34	12,037.65	11,933.34	42.13	37.98	-97.30	-129.05	410.66	694.51	638.13	56.37	12.320	
12,100.00	11,883.38	12,112.33	11,979.36	42.26	38.18	-99.16	-187.76	413.04	698.48	642.05	56.43	12.377	
12,150.00	11,893.19	12,197.76	12,017.21	42.39	38.44	-100.68	-264.09	414.34	700.77	644.29	56.48	12.408	
12,200.00	11,898.69	12,246.87	12,033.53	42.53	38.60	-101.34	-310.40	415.06	703.04	646.47	56.57	12.427	
12,250.00	11,899.84	12,297.31	12,049.34	42.67	38.77	-102.18	-358.29	416.07	706.47	649.84	56.63	12.474	
12,258.12	11,899.61	12,305.97	12,051.86	42.70	38.81	-102.33	-366.56	416.25	707.11	650.47	56.64	12.484	
12,300.00	11,898.15	12,361.89	12,066.77	42.83	39.02	-103.66	-420.45	417.09	710.12	653.44	56.68	12.529	
12,400.00	11,894.66	12,470.19	12,087.51	43.19	39.47	-105.56	-526.67	418.83	716.16	659.25	56.90	12.585	
12,500.00	11,891.18	12,600.17	12,087.54	43.60	40.07	-105.86	-656.36	423.01	718.59	661.06	57.53	12.491	
12,600.00	11,887.69	12,699.28	12,081.70	44.07	40.60	-105.63	-755.23	426.55	720.00	661.77	58.23	12.366	
12,700.00	11,884.21	12,797.62	12,076.95	44.60	41.17	-105.48	-853.39	430.03	721.67	662.68	58.98	12.235	
12,800.00	11,880.72	12,891.23	12,074.55	45.18	41.76	-105.51	-946.91	433.23	723.83	664.07	59.76	12.112	
12,900.00	11,877.24	13,024.81	12,070.84	45.81	42.68	-105.58	-1,080.41	435.35	724.17	663.37	60.80	11.911	
13,000.00	11,873.75	13,138.63	12,067.47	46.49	43.52	-105.70	-1,194.15	433.33	721.22	659.42	61.80	11.670	
13,100.00	11,870.27	13,238.97	12,063.98	47.22	44.32	-105.80	-1,294.39	430.33	716.97	654.16	62.81	11.415	
13,200.00	11,866.78	13,335.37	12,060.50	47.99	45.12	-105.87	-1,390.70	428.12	713.34	649.48	63.87	11.169	
13,300.00	11,863.30	13,417.06	12,058.48	48.81	45.84	-105.98	-1,472.35	426.85	710.83	645.94	64.89	10.955	
13,325.00	11,862.43	13,435.76	12,058.53	49.03	46.00	-106.04	-1,491.05	426.83	710.72	645.58	65.13	10.912	
13,400.00	11,859.81	13,499.78	12,059.60	49.67	46.59	-106.31	-1,555.06	427.48	711.46	645.55	65.91	10.795	
13,500.00	11,856.33	13,592.47	12,060.44	50.57	47.47	-106.60	-1,647.72	429.63	713.56	646.53	67.04	10.644	
13,600.00	11,852.84	13,684.53	12,061.17	51.50	48.38	-106.86	-1,739.72	432.74	716.66	648.45	68.21	10.507	
13,700.00	11,849.36	13,778.61	12,061.26	52.47	49.34	-107.05	-1,833.70	437.24	720.90	651.45	69.46	10.379	
13,800.00	11,845.87	13,879.44	12,059.38	53.47	50.41	-107.07	-1,934.35	442.95	725.43	654.58	70.85	10.239	
13,900.00	11,842.38	13,983.68	12,059.06	54.51	51.55	-107.24	-2,038.46	447.92	729.55	657.28	72.27	10.094	
14,000.00	11,838.90	14,075.11	12,060.90	55.57	52.58	-107.56	-2,129.80	451.61	733.70	660.13	73.57	9.972	
14,100.00	11,835.41	14,174.75	12,062.97	56.67	53.72	-107.88	-2,229.28	456.77	738.97	663.99	74.98	9.855	
14,200.00	11,831.93	14,313.79	12,065.33	57.79	55.35	-108.38	-2,368.24	459.92	741.39	664.67	76.72	9.664	
14,300.00	11,828.44	14,418.70	12,065.06	58.93	56.60	-108.68	-2,473.14	459.47	740.64	662.41	78.23	9.468	
14,400.00	11,824.96	14,516.96	12,063.14	60.10	57.80	-108.82	-2,571.39	459.59	739.89	660.13	79.77	9.276	
14,474.80	11,822.35	14,586.92	12,062.70	60.99	58.66	-109.00	-2,641.34	459.50	739.49	658.61	80.88	9.143	
14,500.00	11,821.47	14,606.82	12,062.76	61.29	58.91	-109.06	-2,661.24	459.60	739.58	658.36	81.22	9.106	
14,600.00	11,817.99	14,690.37	12,063.76	62.50	59.96	-109.33	-2,744.77	461.30	741.64	659.03	82.61	8.977	
14,700.00	11,814.50	14,791.78	12,064.93	63.73	61.26	-109.63	-2,846.12	464.44	744.76	660.57	84.19	8.847	
14,800.00	11,811.02	14,928.05	12,065.01	64.98	63.01	-110.03	-2,982.32	464.32	744.33	658.28	86.05	8.650	
14,900.00	11,807.53	15,053.43	12,066.46	66.25	64.63	-110.71	-3,107.43	456.57	738.35	650.73	87.62	8.426	

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 58-OWSG (Rev2) MWD, 1335-OWSG (Rev2) MWD, 22173-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,000.00	11,804.05	15,129.00	12,068.21	67.53	65.62	-111.16	-3,182.89	452.91	734.55	645.56	88.99	8.254		
15,100.00	11,800.56	15,224.00	12,071.28	68.83	66.88	-111.74	-3,277.80	450.26	733.05	642.63	90.42	8.107		
15,200.00	11,797.08	15,334.26	12,073.19	70.14	68.37	-112.29	-3,388.00	447.17	731.09	639.11	91.98	7.948		
15,300.00	11,793.59	15,431.32	12,074.09	71.47	69.68	-112.74	-3,484.99	443.98	728.42	634.93	93.49	7.791		
15,400.00	11,790.10	15,525.36	12,074.92	72.81	70.97	-113.14	-3,579.01	441.78	726.63	631.64	95.00	7.649		
15,500.00	11,786.62	15,629.47	12,074.40	74.16	72.41	-113.48	-3,683.09	439.81	724.76	628.13	96.63	7.500		
15,600.00	11,783.13	15,723.19	12,072.63	75.53	73.72	-113.67	-3,776.79	438.48	722.81	624.55	98.26	7.356		
15,650.66	11,781.37	15,765.09	12,072.46	76.23	74.31	-113.79	-3,818.68	438.24	722.50	623.48	99.02	7.297		
15,700.00	11,779.65	15,810.34	12,072.82	76.91	74.94	-113.95	-3,863.93	438.24	722.71	622.94	99.77	7.244		
15,800.00	11,776.16	15,904.82	12,073.06	78.29	76.29	-114.23	-3,958.41	438.79	723.46	622.11	101.35	7.138		
15,900.00	11,772.68	15,989.83	12,074.59	79.69	77.50	-114.55	-4,043.39	440.17	725.83	623.05	102.78	7.062		
16,000.00	11,769.19	16,081.38	12,078.45	81.10	78.83	-115.01	-4,134.83	442.77	730.30	626.11	104.19	7.010		
16,100.00	11,765.71	16,196.27	12,078.93	82.51	80.50	-115.30	-4,249.66	445.49	732.65	626.59	106.05	6.908		
16,200.00	11,762.22	16,285.77	12,081.42	83.94	81.80	-115.65	-4,339.10	447.93	736.45	628.95	107.50	6.851		
16,300.00	11,758.74	16,397.02	12,083.59	85.37	83.43	-116.04	-4,450.29	450.45	739.56	630.33	109.23	6.770		
16,400.00	11,755.25	16,505.04	12,084.99	86.81	85.02	-116.41	-4,558.29	451.83	741.54	630.61	110.92	6.685		
16,500.00	11,751.77	16,609.50	12,086.09	88.26	86.56	-116.77	-4,662.74	452.19	742.59	630.04	112.55	6.598		
16,600.00	11,748.28	16,696.20	12,087.62	89.72	87.84	-117.12	-4,749.43	452.61	744.15	630.20	113.96	6.530		
16,700.00	11,744.79	16,783.55	12,090.03	91.18	89.15	-117.46	-4,836.73	454.54	747.70	632.36	115.34	6.483		
16,800.00	11,741.31	16,862.39	12,092.92	92.64	90.33	-117.78	-4,915.45	457.59	753.23	636.68	116.55	6.463		
16,900.00	11,737.82	16,944.60	12,098.31	94.12	92.33	-118.28	-5,047.36	464.22	760.51	641.94	118.57	6.414		
17,000.00	11,734.34	17,092.00	12,099.18	95.60	93.80	-118.53	-5,144.73	466.50	763.40	643.23	120.17	6.352		
17,100.00	11,730.85	17,172.62	12,100.62	97.08	95.02	-118.74	-5,225.28	469.44	767.88	646.36	121.51	6.319		
17,200.00	11,727.37	17,256.82	12,104.35	98.57	96.31	-119.07	-5,309.30	473.53	774.70	651.94	122.76	6.311		
17,300.00	11,723.88	17,388.70	12,107.37	100.07	98.32	-119.37	-5,440.89	480.74	781.24	656.28	124.97	6.252		
17,400.00	11,720.40	17,466.51	12,107.20	101.57	99.52	-119.40	-5,518.54	485.63	786.91	660.49	126.41	6.225		
17,500.00	11,716.91	17,591.53	12,108.78	103.08	101.44	-119.63	-5,643.41	491.49	792.15	663.63	128.52	6.164		
17,600.00	11,713.43	17,737.99	12,105.06	104.59	103.68	-119.72	-5,789.78	493.45	792.52	661.70	130.82	6.058		
17,651.97	11,711.62	17,769.96	12,103.87	105.37	104.17	-119.73	-5,821.73	493.33	791.74	660.14	131.60	6.016		
17,700.00	11,709.94	17,795.34	12,104.13	106.10	104.56	-119.82	-5,847.10	493.46	792.42	660.31	132.12	5.998		
17,800.00	11,706.46	17,879.66	12,110.96	107.62	105.86	-120.43	-5,931.12	494.62	797.91	664.83	133.08	5.996		
17,900.00	11,702.97	17,990.89	12,118.50	109.14	107.57	-121.25	-6,042.07	492.91	800.47	666.23	134.24	5.963		
18,000.00	11,699.49	18,072.59	12,124.97	110.66	108.83	-121.86	-6,123.52	493.02	805.32	670.24	135.08	5.962		
18,100.00	11,696.00	18,194.98	12,133.48	112.19	110.73	-122.63	-6,245.59	494.66	811.05	674.60	136.45	5.944		
18,200.00	11,692.51	18,323.32	12,136.89	113.73	112.71	-123.25	-6,373.85	492.32	811.43	673.54	137.90	5.884		
18,207.47	11,692.25	18,328.26	12,136.98	113.84	112.78	-123.27	-6,378.79	492.21	811.42	673.44	137.98	5.881		
18,300.00	11,689.03	18,400.00	12,139.81	115.26	113.89	-123.65	-6,450.46	491.67	813.32	674.39	138.93	5.854		
18,400.00	11,685.54	18,485.58	12,145.04	116.80	115.23	-124.16	-6,535.88	491.98	817.65	677.78	139.88	5.846		
18,500.00	11,682.06	18,588.00	12,150.96	118.34	116.82	-124.78	-6,638.13	491.75	821.54	680.59	140.95	5.829		
18,600.00	11,678.57	18,659.30	12,156.20	119.89	117.94	-125.24	-6,709.22	492.11	827.13	685.57	141.55	5.843		
18,700.00	11,675.09	18,799.33	12,165.63	121.43	120.13	-126.10	-6,848.88	492.76	832.30	689.31	142.99	5.821		
18,800.00	11,671.60	18,872.30	12,170.25	122.98	121.27	-126.54	-6,921.70	492.74	836.91	693.24	143.67	5.825		
18,900.00	11,668.12	18,990.06	12,175.50	124.54	123.11	-127.09	-7,039.33	493.48	840.87	695.85	145.02	5.798		
19,000.00	11,664.63	19,061.76	12,179.92	126.09	124.24	-127.47	-7,110.87	494.45	846.64	700.96	145.68	5.812		
19,100.00	11,661.15	19,149.09	12,187.65	127.65	125.62	-128.02	-7,197.84	496.30	854.76	708.41	146.35	5.841		
19,200.00	11,657.66	19,305.70	12,197.18	129.21	128.08	-128.94	-7,354.12	495.31	858.41	710.54	147.87	5.805		
19,300.00	11,654.18	19,401.69	12,201.35	130.77	129.58	-129.46	-7,450.01	493.60	860.88	712.13	148.75	5.787		
19,400.00	11,650.69	19,489.51	12,205.85	132.34	130.97	-129.94	-7,537.71	492.49	864.33	714.82	149.51	5.781		
19,500.00	11,647.21	19,620.12	12,211.88	133.90	133.02	-130.62	-7,668.14	491.00	867.84	717.22	150.62	5.762		
19,600.00	11,643.72	19,699.43	12,213.73	135.47	134.27	-130.92	-7,747.43	490.41	869.96	718.43	151.53	5.741		
19,700.00	11,640.23	19,828.38	12,214.30	137.04	136.31	-131.29	-7,876.36	489.56	870.82	717.81	153.01	5.691		
19,705.69	11,640.04	19,832.83	12,214.30	137.13	136.38	-131.31	-7,880.81	489.49	870.81	717.75	153.07	5.689		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - Blue Ribbon Fed Com 702H - OH - OH											Offset Site Error:		0.00 usft	
Survey Program:		58-OWSG (Rev2) MWD, 1335-OWSG (Rev2) MWD, 22173-BLIND											Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
19,800.00	11,636.75	19,909.04	12,215.77	138.62	137.58	-131.62	-7,956.99	488.15	871.91	718.01	153.90	5.665				
19,900.00	11,633.26	19,989.00	12,218.34	140.19	138.84	-131.98	-8,036.90	487.01	874.44	719.80	154.63	5.655				
20,000.00	11,629.78	20,082.00	12,222.40	141.77	140.32	-132.36	-8,129.80	487.58	879.11	723.59	155.52	5.653				
20,100.00	11,626.29	20,145.53	12,227.21	143.34	141.33	-132.68	-8,193.13	488.94	886.86	731.06	155.80	5.692				
20,200.00	11,622.81	20,286.04	12,238.64	144.92	143.57	-133.45	-8,333.11	490.97	895.18	738.08	157.10	5.698				
20,300.00	11,619.32	20,400.97	12,242.74	146.50	145.40	-133.89	-8,447.97	491.00	899.03	740.80	158.23	5.682				
20,400.00	11,615.84	20,493.21	12,245.18	148.09	146.87	-134.19	-8,540.18	491.50	902.65	743.44	159.21	5.670				
20,500.00	11,612.35	20,596.20	12,247.35	149.67	148.51	-134.43	-8,643.12	493.46	906.90	746.43	160.47	5.651				
20,600.00	11,608.87	20,721.11	12,244.96	151.26	150.51	-134.47	-8,767.98	496.30	908.45	746.04	162.40	5.594				
20,700.00	11,605.38	20,843.40	12,243.48	152.84	152.45	-134.70	-8,890.24	495.65	908.74	744.92	163.82	5.547				
20,788.80	11,602.29	20,918.84	12,243.07	154.25	153.65	-134.95	-8,965.64	493.36	907.82	743.19	164.64	5.514				
20,800.00	11,601.90	20,927.59	12,243.15	154.43	153.79	-134.98	-8,974.39	493.13	907.84	743.11	164.73	5.511				
20,900.00	11,598.41	21,016.45	12,244.36	156.02	155.20	-135.31	-9,063.22	491.43	908.90	743.33	165.57	5.490				
21,000.00	11,594.92	21,113.49	12,245.41	157.61	156.75	-135.60	-9,160.25	490.73	910.64	744.07	166.57	5.467				
21,100.00	11,591.44	21,193.90	12,247.55	159.20	158.03	-135.91	-9,240.63	489.86	913.35	746.10	167.25	5.461				
21,200.00	11,587.95	21,292.12	12,252.18	160.80	159.60	-136.33	-9,338.74	489.57	918.06	750.08	167.98	5.465				
21,300.00	11,584.47	21,383.63	12,255.81	162.39	161.07	-136.69	-9,430.17	489.36	922.37	753.68	168.68	5.468				
21,400.00	11,580.98	21,492.14	12,261.05	163.99	162.81	-137.14	-9,538.56	489.53	927.61	758.05	169.55	5.471				
21,500.00	11,577.50	21,574.02	12,264.27	165.58	164.12	-137.43	-9,620.37	489.95	932.51	762.33	170.18	5.480				
21,600.00	11,574.01	21,673.20	12,269.66	167.18	165.72	-137.78	-9,719.38	491.56	939.23	768.20	171.02	5.492				
21,700.00	11,570.53	21,788.60	12,272.75	168.78	167.58	-138.00	-9,834.69	494.75	944.70	772.22	172.48	5.477				
21,800.00	11,567.04	21,922.73	12,273.82	170.38	169.73	-138.30	-9,968.81	495.18	947.02	773.05	173.96	5.444				
21,900.00	11,563.56	22,013.97	12,274.34	171.98	171.19	-138.57	-10,060.03	493.75	948.11	773.30	174.80	5.424				
22,000.00	11,560.07	22,108.39	12,275.76	173.58	172.71	-138.81	-10,154.44	493.98	951.03	775.28	175.75	5.411				
22,062.86	11,557.88	22,173.00	12,276.01	174.48	179.73	-138.94	-10,219.05	494.32	952.48	773.49	179.00	5.321				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	89.48	0.32	34.99	34.99					
100.00	100.00	100.00	100.00	0.13	0.13	89.48	0.32	34.99	34.99	34.81	0.18	197.208		
200.00	200.00	200.00	200.00	0.48	0.48	89.48	0.32	34.99	34.99	34.31	0.68	51.128		
300.00	300.00	300.00	300.00	0.84	0.84	89.48	0.32	34.99	34.99	33.80	1.19	29.371		
400.00	400.00	400.00	400.00	1.20	1.20	89.48	0.32	34.99	34.99	33.29	1.70	20.604		
500.00	500.00	500.00	500.00	1.56	1.56	89.48	0.32	34.99	34.99	32.79	2.21	15.867		
600.00	600.00	600.00	600.00	1.92	1.92	89.48	0.32	34.99	34.99	32.28	2.71	12.901		
700.00	700.00	700.00	700.00	2.28	2.28	89.48	0.32	34.99	34.99	31.77	3.22	10.870		
800.00	800.00	800.00	800.00	2.63	2.63	89.48	0.32	34.99	34.99	31.27	3.73	9.391		
900.00	900.00	900.00	900.00	2.99	2.99	89.48	0.32	34.99	34.99	30.76	4.23	8.266		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	89.48	0.32	34.99	34.99	30.25	4.74	7.382		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	89.48	0.32	34.99	34.99	29.74	5.25	6.669		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	89.48	0.32	34.99	34.99	29.24	5.75	6.081		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	89.48	0.32	34.99	34.99	28.73	6.26	5.589		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	89.48	0.32	34.99	34.99	28.22	6.77	5.170		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.48	0.32	34.99	34.99	27.72	7.27	4.810		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	89.48	0.32	34.99	34.99	27.21	7.78	4.497		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	89.48	0.32	34.99	34.99	26.70	8.29	4.222		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	89.48	0.32	34.99	34.99	26.20	8.80	3.978		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	89.48	0.32	34.99	34.99	25.69	9.30	3.761		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	89.48	0.32	34.99	34.99	25.18	9.81	3.567 CC, ES		
2,100.00	2,099.99	2,099.99	2,099.99	7.29	7.29	150.03	0.32	34.99	36.12	25.81	10.31	3.502		
2,200.00	2,199.91	2,199.91	2,199.91	7.64	7.65	152.84	0.32	34.99	39.57	28.75	10.81	3.659		
2,266.94	2,266.72	2,266.72	2,266.72	7.88	7.89	155.29	0.32	34.99	43.25	32.10	11.15	3.879		
2,300.00	2,299.70	2,299.70	2,299.70	8.00	8.01	156.51	0.32	34.99	45.36	34.04	11.32	4.009		
2,400.00	2,399.46	2,399.46	2,399.46	8.35	8.37	159.59	0.32	34.99	51.84	40.02	11.82	4.387		
2,500.00	2,499.21	2,498.14	2,498.12	8.71	8.72	161.09	1.00	36.05	59.34	47.03	12.31	4.821		
2,600.00	2,598.97	2,596.52	2,596.43	9.06	9.06	160.73	3.05	39.24	68.70	55.90	12.79	5.370		
2,700.00	2,698.73	2,694.48	2,694.18	9.42	9.41	159.20	6.45	44.54	79.92	66.65	13.27	6.022		
2,800.00	2,798.48	2,793.59	2,792.99	9.78	9.76	157.45	10.65	51.08	92.26	78.50	13.77	6.702		
2,900.00	2,898.24	2,892.79	2,891.89	10.15	10.11	156.11	14.86	57.63	104.67	90.41	14.26	7.339		
3,000.00	2,997.99	2,991.99	2,990.78	10.51	10.47	155.05	19.07	64.18	117.12	102.36	14.76	7.935		
3,100.00	3,097.75	3,091.19	3,089.68	10.87	10.83	154.20	23.28	70.73	129.60	114.34	15.26	8.494		
3,200.00	3,197.51	3,190.40	3,188.57	11.24	11.18	153.50	27.49	77.28	142.11	126.35	15.76	9.018		
3,300.00	3,297.26	3,289.60	3,287.47	11.60	11.54	152.91	31.69	83.84	154.63	138.37	16.26	9.511		
3,400.00	3,397.02	3,388.80	3,386.36	11.96	11.90	152.41	35.90	90.39	167.17	150.41	16.76	9.975		
3,500.00	3,496.77	3,488.00	3,485.26	12.33	12.26	151.98	40.11	96.94	179.71	162.45	17.26	10.412		
3,600.00	3,596.53	3,587.20	3,584.15	12.70	12.62	151.60	44.32	103.49	192.27	174.51	17.76	10.824		
3,700.00	3,696.28	3,686.40	3,683.05	13.06	12.98	151.27	48.53	110.04	204.83	186.57	18.27	11.214		
3,800.00	3,796.04	3,785.60	3,781.95	13.43	13.35	150.98	52.73	116.59	217.40	198.63	18.77	11.583		
3,900.00	3,895.80	3,884.80	3,880.84	13.80	13.71	150.72	56.94	123.14	229.98	210.70	19.27	11.932		
4,000.00	3,995.55	3,984.01	3,979.74	14.17	14.07	150.49	61.15	129.70	242.56	222.78	19.78	12.264		
4,100.00	4,095.31	4,083.21	4,078.63	14.53	14.44	150.28	65.36	136.25	255.14	234.86	20.28	12.579		
4,200.00	4,195.06	4,182.41	4,177.53	14.90	14.80	150.09	69.57	142.80	267.72	246.94	20.79	12.878		
4,300.00	4,294.82	4,281.61	4,276.42	15.27	15.17	149.92	73.77	149.35	280.31	259.02	21.29	13.163		
4,400.00	4,394.58	4,380.81	4,375.32	15.64	15.54	149.76	77.98	155.90	292.90	271.10	21.80	13.435		
4,500.00	4,494.33	4,480.01	4,474.21	16.01	15.90	149.62	82.19	162.45	305.49	283.19	22.31	13.695		
4,600.00	4,594.09	4,579.21	4,573.11	16.38	16.27	149.48	86.40	169.00	318.09	295.27	22.81	13.943		
4,700.00	4,693.84	4,678.41	4,672.00	16.75	16.64	149.36	90.61	175.56	330.68	307.36	23.32	14.180		
4,800.00	4,793.60	4,777.61	4,770.90	17.12	17.00	149.25	94.81	182.11	343.28	319.45	23.83	14.406		
4,900.00	4,893.36	4,876.82	4,869.79	17.49	17.37	149.14	99.02	188.66	355.88	331.54	24.34	14.624		
5,000.00	4,993.11	4,976.02	4,968.69	17.86	17.74	149.04	103.23	195.21	368.48	343.63	24.84	14.832		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,092.87	5,075.22	5,067.58	18.23	18.11	148.95	107.44	201.76	381.08	355.73	25.35	15.032		
5,200.00	5,192.62	5,174.42	5,166.48	18.60	18.48	148.86	111.65	208.31	393.68	367.82	25.86	15.224		
5,300.00	5,292.38	5,273.62	5,265.37	18.97	18.85	148.78	115.86	214.87	406.28	379.91	26.37	15.408		
5,400.00	5,392.14	5,372.82	5,364.27	19.34	19.22	148.71	120.06	221.42	418.88	392.01	26.88	15.585		
5,500.00	5,491.89	5,472.02	5,463.16	19.71	19.58	148.63	124.27	227.97	431.49	404.10	27.39	15.756		
5,600.00	5,591.65	5,571.22	5,562.06	20.08	19.95	148.57	128.48	234.52	444.09	416.19	27.89	15.920		
5,700.00	5,691.40	5,670.43	5,660.95	20.46	20.32	148.50	132.69	241.07	456.69	428.29	28.40	16.079		
5,800.00	5,791.16	5,769.63	5,759.85	20.83	20.69	148.44	136.90	247.62	469.30	440.39	28.91	16.232		
5,900.00	5,890.91	5,868.83	5,858.74	21.20	21.06	148.38	141.10	254.17	481.90	452.48	29.42	16.379		
6,000.00	5,990.67	5,968.03	5,957.64	21.57	21.43	148.33	145.31	260.73	494.51	464.58	29.93	16.521		
6,100.00	6,090.43	6,067.23	6,056.53	21.94	21.80	148.28	149.52	267.28	507.12	476.68	30.44	16.659		
6,200.00	6,190.18	6,166.43	6,155.43	22.31	22.18	148.23	153.73	273.83	519.72	488.77	30.95	16.792		
6,300.00	6,289.94	6,265.63	6,254.32	22.69	22.55	148.18	157.94	280.38	532.33	500.87	31.46	16.920		
6,400.00	6,389.69	6,368.73	6,357.11	23.06	22.93	148.14	162.24	287.08	544.84	512.84	31.99	17.030		
6,500.00	6,489.45	6,468.08	6,470.28	23.43	23.35	148.24	165.63	292.35	555.48	522.91	32.57	17.054		
6,600.00	6,589.21	6,595.91	6,584.07	23.80	23.75	148.51	167.20	294.81	563.60	530.48	33.13	17.012		
6,654.20	6,643.28	6,655.12	6,643.28	24.00	23.96	148.71	167.32	294.99	567.00	533.58	33.42	16.967		
6,700.00	6,688.98	6,700.82	6,688.98	24.17	24.12	148.89	167.32	294.99	569.50	535.86	33.65	16.926		
6,800.00	6,788.88	6,800.71	6,788.88	24.54	24.47	149.15	167.32	294.99	573.34	539.19	34.15	16.789		
6,900.00	6,888.86	6,900.69	6,888.86	24.89	24.82	149.26	167.32	294.99	574.94	540.29	34.65	16.593		
6,921.14	6,910.00	6,921.84	6,910.00	24.97	24.89	89.77	167.32	294.99	574.99	540.24	34.76	16.544		
7,000.00	6,988.86	7,000.69	6,988.86	25.24	25.17	89.77	167.32	294.99	574.99	539.85	35.15	16.359		
7,100.00	7,088.86	7,100.69	7,088.86	25.59	25.51	89.77	167.32	294.99	574.99	539.35	35.65	16.131		
7,200.00	7,188.86	7,200.69	7,188.86	25.93	25.86	89.77	167.32	294.99	574.99	538.85	36.14	15.909		
7,300.00	7,288.86	7,300.69	7,288.86	26.28	26.21	89.77	167.32	294.99	574.99	538.35	36.64	15.693		
7,400.00	7,388.86	7,400.69	7,388.86	26.63	26.56	89.77	167.32	294.99	574.99	537.86	37.14	15.483		
7,500.00	7,488.86	7,500.69	7,488.86	26.98	26.91	89.77	167.32	294.99	574.99	537.36	37.64	15.278		
7,600.00	7,588.86	7,600.69	7,588.86	27.33	27.26	89.77	167.32	294.99	574.99	536.86	38.13	15.078		
7,700.00	7,688.86	7,700.69	7,688.86	27.68	27.61	89.77	167.32	294.99	574.99	536.36	38.63	14.883		
7,800.00	7,788.86	7,800.69	7,788.86	28.03	27.97	89.77	167.32	294.99	574.99	535.86	39.13	14.694		
7,900.00	7,888.86	7,900.69	7,888.86	28.38	28.32	89.77	167.32	294.99	574.99	535.36	39.63	14.509		
8,000.00	7,988.86	8,000.69	7,988.86	28.73	28.67	89.77	167.32	294.99	574.99	534.86	40.13	14.328		
8,100.00	8,088.86	8,100.69	8,088.86	29.08	29.02	89.77	167.32	294.99	574.99	534.36	40.63	14.152		
8,200.00	8,188.86	8,200.69	8,188.86	29.43	29.37	89.77	167.32	294.99	574.99	533.87	41.13	13.980		
8,300.00	8,288.86	8,300.69	8,288.86	29.78	29.72	89.77	167.32	294.99	574.99	533.37	41.63	13.812		
8,400.00	8,388.86	8,400.69	8,388.86	30.13	30.07	89.77	167.32	294.99	574.99	532.87	42.13	13.648		
8,500.00	8,488.86	8,500.69	8,488.86	30.48	30.43	89.77	167.32	294.99	574.99	532.37	42.63	13.488		
8,600.00	8,588.86	8,600.69	8,588.86	30.83	30.78	89.77	167.32	294.99	574.99	531.87	43.13	13.332		
8,700.00	8,688.86	8,700.69	8,688.86	31.18	31.13	89.77	167.32	294.99	574.99	531.36	43.63	13.179		
8,800.00	8,788.86	8,800.69	8,788.86	31.53	31.48	89.77	167.32	294.99	574.99	530.86	44.13	13.029		
8,900.00	8,888.86	8,900.69	8,888.86	31.88	31.84	89.77	167.32	294.99	574.99	530.36	44.63	12.883		
9,000.00	8,988.86	9,000.69	8,988.86	32.23	32.19	89.77	167.32	294.99	574.99	529.86	45.13	12.740		
9,100.00	9,088.86	9,100.69	9,088.86	32.58	32.54	89.77	167.32	294.99	574.99	529.36	45.63	12.600		
9,200.00	9,188.86	9,200.69	9,188.86	32.94	32.89	89.77	167.32	294.99	574.99	528.86	46.13	12.463		
9,300.00	9,288.86	9,300.69	9,288.86	33.29	33.25	89.77	167.32	294.99	574.99	528.36	46.64	12.330		
9,400.00	9,388.86	9,400.69	9,388.86	33.64	33.60	89.77	167.32	294.99	574.99	527.86	47.14	12.198		
9,500.00	9,488.86	9,500.69	9,488.86	33.99	33.95	89.77	167.32	294.99	574.99	527.36	47.64	12.070		
9,600.00	9,588.86	9,600.69	9,588.86	34.34	34.31	89.77	167.32	294.99	574.99	526.85	48.14	11.944		
9,700.00	9,688.86	9,700.69	9,688.86	34.70	34.66	89.77	167.32	294.99	574.99	526.35	48.64	11.821		
9,800.00	9,788.86	9,800.69	9,788.86	35.05	35.01	89.77	167.32	294.99	574.99	525.85	49.14	11.700		
9,900.00	9,888.86	9,900.69	9,888.86	35.40	35.37	89.77	167.32	294.99	574.99	525.35	49.65	11.582		
10,000.00	9,988.86	10,000.69	9,988.86	35.76	35.72	89.77	167.32	294.99	574.99	524.85	50.15	11.466		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	10,088.86	10,100.69	10,088.86	36.11	36.08	89.77	167.32	294.99	574.99	524.34	50.65	11.352		
10,200.00	10,188.86	10,200.69	10,188.86	36.46	36.43	89.77	167.32	294.99	574.99	523.84	51.15	11.241		
10,300.00	10,288.86	10,300.69	10,288.86	36.81	36.78	89.77	167.32	294.99	574.99	523.34	51.65	11.132		
10,400.00	10,388.86	10,400.69	10,388.86	37.17	37.14	89.77	167.32	294.99	574.99	522.84	52.16	11.024		
10,500.00	10,488.86	10,500.69	10,488.86	37.52	37.49	89.77	167.32	294.99	574.99	522.34	52.66	10.919		
10,600.00	10,588.86	10,600.69	10,588.86	37.87	37.85	89.77	167.32	294.99	574.99	521.83	53.16	10.816		
10,700.00	10,688.86	10,700.69	10,688.86	38.23	38.20	89.77	167.32	294.99	574.99	521.33	53.66	10.715		
10,800.00	10,788.86	10,800.69	10,788.86	38.58	38.56	89.77	167.32	294.99	574.99	520.83	54.17	10.615		
10,900.00	10,888.86	10,900.69	10,888.86	38.94	38.91	89.77	167.32	294.99	574.99	520.32	54.67	10.518		
11,000.00	10,988.86	11,000.69	10,988.86	39.29	39.26	89.77	167.32	294.99	574.99	519.82	55.17	10.422		
11,100.00	11,088.86	11,100.69	11,088.86	39.64	39.62	89.77	167.32	294.99	574.99	519.32	55.68	10.328		
11,200.00	11,188.86	11,200.69	11,188.86	40.00	39.97	89.77	167.32	294.99	574.99	518.82	56.18	10.235		
11,300.00	11,288.86	11,300.69	11,288.86	40.35	40.33	89.77	167.32	294.99	574.99	518.31	56.68	10.144		
11,338.14	11,327.00	11,338.84	11,327.00	40.49	40.46	89.77	167.32	294.99	574.99	518.12	56.87	10.110		
11,350.00	11,338.86	11,350.69	11,338.86	40.53	40.51	-89.42	167.32	294.99	574.99	518.06	56.93	10.100		
11,400.00	11,388.74	11,400.57	11,388.74	40.69	40.68	-89.74	167.32	294.99	574.97	517.80	57.17	10.057		
11,420.54	11,409.11	11,420.95	11,409.11	40.75	40.76	-90.00	167.32	294.99	574.96	517.70	57.27	10.040		
11,450.00	11,438.15	11,449.98	11,438.15	40.84	40.86	-90.49	167.32	294.99	574.99	517.58	57.40	10.016		
11,500.00	11,486.71	11,498.55	11,486.71	40.99	41.03	-91.61	167.32	294.99	575.21	517.58	57.63	9.981		
11,550.00	11,534.06	11,547.31	11,535.47	41.13	41.20	-93.05	166.84	295.00	575.87	518.02	57.85	9.955		
11,600.00	11,579.84	11,598.43	11,586.39	41.26	41.36	-94.57	162.47	295.04	576.99	518.93	58.06	9.938		
11,650.00	11,623.69	11,651.21	11,638.33	41.38	41.52	-96.08	153.22	295.14	578.52	520.27	58.25	9.931		
11,700.00	11,665.28	11,705.78	11,690.90	41.48	41.68	-97.57	138.68	295.30	580.43	522.00	58.42	9.935		
11,750.00	11,704.29	11,762.26	11,743.60	41.58	41.83	-99.03	118.43	295.52	582.66	524.10	58.56	9.949		
11,800.00	11,740.44	11,820.78	11,795.82	41.67	41.98	-100.43	92.09	295.81	585.15	526.48	58.67	9.974		
11,850.00	11,773.44	11,881.42	11,846.82	41.74	42.11	-101.78	59.32	296.16	587.81	529.09	58.72	10.010		
11,900.00	11,803.04	11,944.24	11,895.68	41.81	42.24	-103.04	19.89	296.59	590.53	531.81	58.73	10.056		
11,950.00	11,829.02	12,009.24	11,941.39	41.89	42.34	-104.20	-26.28	297.09	593.21	534.53	58.69	10.108		
12,000.00	11,851.18	12,076.36	11,982.78	42.01	42.45	-105.24	-79.06	297.67	595.73	537.12	58.62	10.163		
12,050.00	11,869.34	12,145.46	12,018.65	42.13	42.58	-106.14	-138.07	298.31	597.97	539.43	58.54	10.215		
12,100.00	11,883.38	12,216.30	12,047.78	42.26	42.75	-106.88	-202.59	299.01	599.81	541.33	58.48	10.256		
12,150.00	11,893.19	12,288.55	12,069.06	42.39	42.94	-107.42	-271.57	299.76	601.16	542.68	58.48	10.279		
12,200.00	11,898.69	12,361.79	12,081.60	42.53	43.13	-107.77	-343.68	300.54	601.93	543.37	58.56	10.278		
12,250.00	11,899.84	12,435.55	12,084.84	42.67	43.34	-107.90	-417.32	301.34	602.09	543.34	58.75	10.248		
12,258.12	11,899.61	12,447.54	12,084.47	42.70	43.37	-107.90	-429.30	301.47	602.06	543.27	58.79	10.241		
12,300.00	11,898.15	12,488.22	12,083.06	42.83	43.50	-107.91	-469.95	301.91	601.92	542.96	58.96	10.209		
12,400.00	11,894.66	12,588.22	12,079.57	43.19	43.86	-107.92	-569.89	302.99	601.59	542.17	59.42	10.124		
12,500.00	11,891.18	12,688.22	12,076.09	43.60	44.27	-107.93	-669.82	304.08	601.26	541.29	59.97	10.026		
12,600.00	11,887.69	12,788.22	12,072.60	44.07	44.73	-107.94	-769.75	305.16	600.93	540.34	60.59	9.918		
12,700.00	11,884.21	12,888.22	12,069.11	44.60	45.25	-107.95	-869.68	306.25	600.60	539.31	61.29	9.800		
12,800.00	11,880.72	12,988.22	12,065.63	45.18	45.82	-107.96	-969.62	307.33	600.27	538.21	62.06	9.673		
12,900.00	11,877.24	13,088.22	12,062.14	45.81	46.45	-107.97	-1,069.55	308.42	599.94	537.04	62.90	9.538		
13,000.00	11,873.75	13,188.22	12,058.65	46.49	47.12	-107.98	-1,169.48	309.50	599.61	535.80	63.80	9.398		
13,100.00	11,870.27	13,288.22	12,055.17	47.22	47.84	-107.99	-1,269.41	310.59	599.28	534.50	64.77	9.252		
13,200.00	11,866.78	13,388.22	12,051.68	47.99	48.61	-108.00	-1,369.35	311.67	598.95	533.14	65.81	9.102		
13,300.00	11,863.30	13,488.21	12,048.19	48.81	49.42	-108.01	-1,469.28	312.76	598.62	531.72	66.90	8.948		
13,400.00	11,859.81	13,588.21	12,044.71	49.67	50.27	-108.02	-1,569.21	313.84	598.29	530.24	68.04	8.793		
13,500.00	11,856.33	13,688.21	12,041.22	50.57	51.15	-108.03	-1,669.14	314.93	597.96	528.72	69.24	8.636		
13,600.00	11,852.84	13,788.21	12,037.73	51.50	52.08	-108.04	-1,769.08	316.01	597.63	527.14	70.49	8.478		
13,700.00	11,849.36	13,888.21	12,034.24	52.47	53.04	-108.05	-1,869.01	317.10	597.30	525.51	71.79	8.320		
13,800.00	11,845.87	13,988.21	12,030.76	53.47	54.03	-108.06	-1,968.94	318.18	596.97	523.84	73.13	8.163		
13,900.00	11,842.38	14,088.21	12,027.27	54.51	55.06	-108.07	-2,068.88	319.27	596.64	522.13	74.51	8.008		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - Blue Ribbon Fed Com 702H2 - OH - Plan #1		Offset Site Error:		0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:		0.00 usft			
Reference		Offset		Semi Major Axis			Distance											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning					
14,000.00	11,838.90	14,188.21	12,023.78	55.57	56.12	-108.08	-2,168.81	320.35	596.31	520.38	75.93	7.853						
14,100.00	11,835.41	14,288.21	12,020.30	56.67	57.20	-108.09	-2,268.74	321.44	595.98	518.59	77.39	7.701						
14,200.00	11,831.93	14,388.21	12,016.81	57.79	58.31	-108.10	-2,368.67	322.52	595.65	516.76	78.89	7.551						
14,300.00	11,828.44	14,488.21	12,013.32	58.93	59.44	-108.11	-2,468.61	323.61	595.32	514.90	80.42	7.403						
14,400.00	11,824.96	14,588.21	12,009.84	60.10	60.60	-108.12	-2,568.54	324.69	594.99	513.01	81.97	7.258						
14,500.00	11,821.47	14,688.21	12,006.35	61.29	61.78	-108.13	-2,668.47	325.78	594.66	511.09	83.56	7.116						
14,600.00	11,817.99	14,788.21	12,002.86	62.50	62.99	-108.14	-2,768.40	326.86	594.33	509.14	85.18	6.977						
14,700.00	11,814.50	14,888.21	11,999.38	63.73	64.21	-108.15	-2,868.34	327.95	594.00	507.17	86.82	6.841						
14,800.00	11,811.02	14,988.21	11,995.89	64.98	65.45	-108.16	-2,968.27	329.03	593.67	505.17	88.49	6.709						
14,900.00	11,807.53	15,088.21	11,992.40	66.25	66.71	-108.17	-3,068.20	330.12	593.34	503.15	90.18	6.579						
15,000.00	11,804.05	15,188.20	11,988.91	67.53	67.98	-108.18	-3,168.14	331.20	593.01	501.11	91.90	6.453						
15,100.00	11,800.56	15,288.20	11,985.43	68.83	69.27	-108.19	-3,268.07	332.29	592.68	499.05	93.63	6.330						
15,200.00	11,797.08	15,388.20	11,981.94	70.14	70.58	-108.20	-3,368.00	333.37	592.35	496.96	95.38	6.210						
15,300.00	11,793.59	15,488.20	11,978.45	71.47	71.90	-108.21	-3,467.93	334.46	592.02	494.86	97.15	6.094						
15,400.00	11,790.10	15,588.20	11,974.97	72.81	73.23	-108.22	-3,567.87	335.54	591.69	492.74	98.94	5.980						
15,500.00	11,786.62	15,688.20	11,971.48	74.16	74.58	-108.23	-3,667.80	336.63	591.36	490.61	100.75	5.870						
15,600.00	11,783.13	15,788.20	11,967.99	75.53	75.94	-108.25	-3,767.73	337.71	591.03	488.46	102.57	5.762						
15,700.00	11,779.65	15,888.20	11,964.51	76.91	77.31	-108.26	-3,867.66	338.80	590.70	486.30	104.40	5.658						
15,800.00	11,776.16	15,988.20	11,961.02	78.29	78.69	-108.27	-3,967.60	339.88	590.37	484.12	106.25	5.556						
15,900.00	11,772.68	16,088.20	11,957.53	79.69	80.08	-108.28	-4,067.53	340.97	590.04	481.93	108.11	5.458						
16,000.00	11,769.19	16,188.20	11,954.05	81.10	81.48	-108.29	-4,167.46	342.05	589.71	479.73	109.98	5.362						
16,100.00	11,765.71	16,288.20	11,950.56	82.51	82.89	-108.30	-4,267.40	343.14	589.38	477.51	111.87	5.269						
16,200.00	11,762.22	16,388.20	11,947.07	83.94	84.31	-108.31	-4,367.33	344.22	589.05	475.29	113.76	5.178						
16,300.00	11,758.74	16,488.20	11,943.58	85.37	85.74	-108.32	-4,467.26	345.31	588.72	473.05	115.67	5.090						
16,400.00	11,755.25	16,588.20	11,940.10	86.81	87.17	-108.33	-4,567.19	346.39	588.39	470.81	117.58	5.004						
16,500.00	11,751.77	16,688.20	11,936.61	88.26	88.61	-108.34	-4,667.13	347.48	588.06	468.56	119.50	4.921						
16,600.00	11,748.28	16,788.20	11,933.12	89.72	90.06	-108.35	-4,767.06	348.56	587.73	466.29	121.44	4.840						
16,700.00	11,744.79	16,888.19	11,929.64	91.18	91.52	-108.36	-4,866.99	349.65	587.40	464.02	123.38	4.761						
16,800.00	11,741.31	16,988.19	11,926.15	92.64	92.98	-108.37	-4,966.92	350.73	587.07	461.75	125.33	4.684						
16,900.00	11,737.82	17,088.19	11,922.66	94.12	94.45	-108.38	-5,066.86	351.82	586.74	459.46	127.28	4.610						
17,000.00	11,734.34	17,188.19	11,919.18	95.60	95.92	-108.39	-5,166.79	352.90	586.41	457.17	129.24	4.537						
17,100.00	11,730.85	17,288.19	11,915.69	97.08	97.40	-108.40	-5,266.72	353.99	586.08	454.87	131.21	4.467						
17,200.00	11,727.37	17,388.19	11,912.20	98.57	98.89	-108.41	-5,366.65	355.07	585.75	452.57	133.19	4.398						
17,300.00	11,723.88	17,488.19	11,908.72	100.07	100.38	-108.42	-5,466.59	356.16	585.42	450.26	135.17	4.331						
17,400.00	11,720.40	17,588.19	11,905.23	101.57	101.88	-108.43	-5,566.52	357.24	585.09	447.94	137.15	4.266						
17,500.00	11,716.91	17,688.19	11,901.74	103.08	103.38	-108.44	-5,666.45	358.33	584.76	445.62	139.14	4.203						
17,600.00	11,713.43	17,788.19	11,898.25	104.59	104.88	-108.46	-5,766.39	359.41	584.44	443.30	141.14	4.141						
17,700.00	11,709.94	17,888.19	11,894.77	106.10	106.39	-108.47	-5,866.32	360.50	584.11	440.97	143.14	4.081						
17,800.00	11,706.46	17,988.19	11,891.28	107.62	107.90	-108.48	-5,966.25	361.58	583.78	438.63	145.14	4.022						
17,900.00	11,702.97	18,088.19	11,887.79	109.14	109.42	-108.49	-6,066.18	362.67	583.45	436.30	147.15	3.965						
18,000.00	11,699.49	18,188.19	11,884.31	110.66	110.94	-108.50	-6,166.12	363.75	583.12	433.95	149.16	3.909						
18,100.00	11,696.00	18,288.19	11,880.82	112.19	112.47	-108.51	-6,266.05	364.84	582.79	431.61	151.18	3.855						
18,200.00	11,692.51	18,388.19	11,877.33	113.73	114.00	-108.52	-6,365.98	365.92	582.46	429.26	153.20	3.802						
18,300.00	11,689.03	18,488.18	11,873.85	115.26	115.53	-108.53	-6,465.91	367.01	582.13	426.91	155.22	3.750						
18,400.00	11,685.54	18,588.18	11,870.36	116.80	117.06	-108.54	-6,565.85	368.09	581.80	424.55	157.25	3.700						
18,500.00	11,682.06	18,688.18	11,866.87	118.34	118.60	-108.55	-6,665.78	369.18	581.47	422.20	159.27	3.651						
18,600.00	11,678.57	18,788.18	11,863.39	119.89	120.14	-108.56	-6,765.71	370.26	581.14	419.84	161.31	3.603						
18,700.00	11,675.09	18,888.18	11,859.90	121.43	121.69	-108.57	-6,865.65	371.35	580.81	417.47	163.34	3.556						
18,800.00	11,671.60	18,988.18	11,856.41	122.98	123.23	-108.58	-6,965.58	372.43	580.48	415.11	165.37	3.510						
18,900.00	11,668.12	19,088.18	11,852.93	124.54	124.78	-108.59	-7,065.51	373.52	580.15	412.74	167.41	3.465						
19,000.00	11,664.63	19,188.18	11,849.44	126.09	126.33	-108.60	-7,165.44	374.60	579.83	410.38	169.45	3.422						
19,100.00	11,661.15	19,288.18	11,845.95	127.65	127.89	-108.62	-7,265.38	375.69	579.50	408.00	171.49	3.379						

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - Blue Ribbon Fed Com 702H2 - OH - Plan #1		Offset Site Error:		0.00 usft
Survey Program: 0-OWSG (Rev2) MWD														Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
19,200.00	11,657.66	19,388.18	11,842.46	129.21	129.44	-108.63	-7,365.31	376.77	579.17	405.63	173.54	3.337				
19,300.00	11,654.18	19,488.18	11,838.98	130.77	131.00	-108.64	-7,465.24	377.86	578.84	403.26	175.58	3.297				
19,400.00	11,650.69	19,588.18	11,835.49	132.34	132.56	-108.65	-7,565.17	378.94	578.51	400.88	177.63	3.257				
19,500.00	11,647.21	19,688.18	11,832.00	133.90	134.13	-108.66	-7,665.11	380.03	578.18	398.51	179.67	3.218				
19,600.00	11,643.72	19,788.18	11,828.52	135.47	135.69	-108.67	-7,765.04	381.11	577.85	396.13	181.72	3.180				
19,700.00	11,640.23	19,888.18	11,825.03	137.04	137.26	-108.68	-7,864.97	382.20	577.52	393.75	183.77	3.143				
19,800.00	11,636.75	19,988.18	11,821.54	138.62	138.83	-108.69	-7,964.90	383.28	577.19	391.37	185.82	3.106				
19,900.00	11,633.26	20,088.18	11,818.06	140.19	140.40	-108.70	-8,064.84	384.37	576.86	388.99	187.87	3.071				
20,000.00	11,629.78	20,188.17	11,814.57	141.77	141.97	-108.71	-8,164.77	385.45	576.54	386.61	189.92	3.036				
20,100.00	11,626.29	20,288.17	11,811.08	143.34	143.55	-108.72	-8,264.70	386.54	576.21	384.23	191.98	3.001				
20,200.00	11,622.81	20,388.17	11,807.60	144.92	145.13	-108.73	-8,364.64	387.62	575.88	381.85	194.03	2.968				
20,300.00	11,619.32	20,488.17	11,804.11	146.50	146.70	-108.75	-8,464.57	388.71	575.55	379.47	196.08	2.935				
20,400.00	11,615.84	20,588.17	11,800.62	148.09	148.28	-108.76	-8,564.50	389.79	575.22	377.08	198.14	2.903				
20,500.00	11,612.35	20,688.17	11,797.13	149.67	149.86	-108.77	-8,664.43	390.88	574.89	374.70	200.19	2.872				
20,600.00	11,608.87	20,788.17	11,793.65	151.26	151.45	-108.78	-8,764.37	391.96	574.56	372.32	202.24	2.841				
20,700.00	11,605.38	20,888.17	11,790.16	152.84	153.03	-108.79	-8,864.30	393.05	574.23	369.93	204.30	2.811				
20,800.00	11,601.90	20,988.17	11,786.67	154.43	154.62	-108.80	-8,964.23	394.13	573.90	367.55	206.35	2.781				
20,900.00	11,598.41	21,088.17	11,783.19	156.02	156.20	-108.81	-9,064.16	395.22	573.58	365.17	208.41	2.752				
21,000.00	11,594.92	21,188.17	11,779.70	157.61	157.79	-108.82	-9,164.10	396.30	573.25	362.79	210.46	2.724				
21,100.00	11,591.44	21,288.17	11,776.21	159.20	159.38	-108.83	-9,264.03	397.39	572.92	360.40	212.52	2.696				
21,200.00	11,587.95	21,388.17	11,772.73	160.80	160.97	-108.84	-9,363.96	398.47	572.59	358.02	214.57	2.669				
21,300.00	11,584.47	21,488.17	11,769.24	162.39	162.56	-108.86	-9,463.90	399.56	572.26	355.64	216.62	2.642				
21,400.00	11,580.98	21,588.17	11,765.75	163.99	164.16	-108.87	-9,563.83	400.64	571.93	353.26	218.67	2.615				
21,500.00	11,577.50	21,688.17	11,762.27	165.58	165.75	-108.88	-9,663.76	401.73	571.60	350.88	220.73	2.590				
21,600.00	11,574.01	21,788.17	11,758.78	167.18	167.35	-108.89	-9,763.69	402.81	571.28	348.50	222.78	2.564				
21,700.00	11,570.53	21,888.16	11,755.29	168.78	168.94	-108.90	-9,863.63	403.90	570.95	346.12	224.83	2.539				
21,800.00	11,567.04	21,988.16	11,751.80	170.38	170.54	-108.91	-9,963.56	404.98	570.62	343.74	226.88	2.515				
21,900.00	11,563.56	22,088.16	11,748.32	171.98	172.14	-108.92	-10,063.49	406.07	570.29	341.36	228.93	2.491				
22,000.00	11,560.07	22,188.16	11,744.83	173.58	173.74	-108.93	-10,163.42	407.15	569.96	338.98	230.98	2.468				
22,061.13	11,557.94	22,244.96	11,742.85	174.45	174.65	-108.94	-10,220.18	407.77	569.78	337.70	232.08	2.455 SF				
22,062.86	11,557.88	22,244.96	11,742.85	174.48	174.65	-108.94	-10,220.18	407.77	569.79	337.71	232.08	2.455				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - OH		Offset Site Error:	0.00 usft
Survey Program:													107-OWSG (Rev2) MWD, 1422-OWSG (Rev2) MWD, 22063-BLIND		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	0.00	0.00	0.00	0.00	179.48	-34.99	0.32	34.99							
100.00	100.00	99.90	99.90	0.13	0.13	179.59	-34.84	0.25	34.84	34.66	0.18	193.596				
128.88	128.88	128.68	128.68	0.23	0.21	179.68	-34.79	0.19	34.79	34.47	0.31	110.861				
200.00	200.00	199.86	199.86	0.48	0.47	-179.27	-34.87	-0.44	34.87	34.20	0.67	51.860				
300.00	300.00	300.02	300.01	0.84	0.83	-176.85	-34.33	-1.89	34.38	33.20	1.18	29.139				
400.00	400.00	399.98	399.95	1.20	1.18	-174.48	-33.84	-3.27	34.00	32.32	1.69	20.159				
500.00	500.00	500.08	500.04	1.56	1.54	-171.52	-33.20	-4.95	33.57	31.37	2.19	15.297				
582.85	582.85	582.71	582.65	1.86	1.84	-168.74	-32.55	-6.48	33.18	30.57	2.61	12.694				
600.00	600.00	599.74	599.68	1.92	1.90	-168.13	-32.51	-6.83	33.22	30.52	2.70	12.298				
700.00	700.00	699.95	699.85	2.28	2.26	-164.19	-31.88	-9.03	33.13	29.92	3.21	10.323				
800.00	800.00	799.92	799.81	2.63	2.62	-160.84	-31.26	-10.86	33.09	29.38	3.72	8.904				
800.99	800.99	800.90	800.79	2.64	2.63	-160.80	-31.25	-10.88	33.09	29.37	3.72	8.892 CC				
900.00	900.00	899.77	899.64	2.99	2.98	-157.42	-30.82	-12.82	33.38	29.16	4.22	7.904 ES				
1,000.00	1,000.00	999.73	999.58	3.35	3.34	-154.26	-30.72	-14.81	34.11	29.38	4.73	7.210				
1,100.00	1,100.00	1,099.82	1,099.65	3.71	3.70	-151.63	-30.55	-16.50	34.72	29.49	5.24	6.630				
1,200.00	1,200.00	1,199.71	1,199.53	4.07	4.06	-149.86	-30.78	-17.87	35.59	29.85	5.74	6.198				
1,300.00	1,300.00	1,299.56	1,299.37	4.43	4.33	-148.06	-31.04	-19.35	36.58	30.40	6.19	5.914				
1,400.00	1,400.00	1,399.49	1,399.29	4.79	4.51	-147.13	-31.78	-20.54	37.84	31.27	6.57	5.757				
1,500.00	1,500.00	1,499.58	1,499.37	5.14	4.58	-146.79	-32.71	-21.42	39.10	32.22	6.88	5.679				
1,600.00	1,600.00	1,599.67	1,599.46	5.50	4.64	-146.44	-33.38	-22.14	40.06	32.86	7.20	5.567				
1,700.00	1,700.00	1,699.73	1,699.51	5.86	4.73	-146.19	-33.93	-22.72	40.83	33.30	7.53	5.425				
1,800.00	1,800.00	1,799.73	1,799.51	6.22	4.84	-146.25	-34.53	-23.07	41.52	33.65	7.88	5.272				
1,900.00	1,900.00	1,899.82	1,899.60	6.58	4.98	-146.46	-35.10	-23.27	42.11	33.87	8.24	5.108				
2,000.00	2,000.00	1,999.91	1,999.69	6.94	5.13	-146.73	-35.51	-23.30	42.47	33.85	8.62	4.925				
2,100.00	2,099.99	2,099.94	2,099.72	7.29	5.31	-89.13	-35.74	-23.33	42.64	33.62	9.01	4.731				
2,200.00	2,199.91	2,199.94	2,199.72	7.64	5.49	-94.70	-35.93	-23.17	42.87	33.46	9.41	4.556				
2,266.94	2,266.72	2,266.88	2,266.66	7.88	5.62	-100.40	-35.92	-22.91	43.29	33.61	9.68	4.474				
2,300.00	2,299.70	2,299.91	2,299.69	8.00	5.69	-103.56	-35.85	-22.73	43.64	33.83	9.81	4.449				
2,400.00	2,399.46	2,399.77	2,399.55	8.35	5.90	-112.87	-35.45	-22.04	45.30	35.08	10.22	4.432				
2,500.00	2,499.21	2,499.64	2,499.42	8.71	6.12	-121.37	-34.74	-21.31	47.74	37.10	10.64	4.488				
2,600.00	2,598.97	2,599.48	2,599.24	9.06	6.35	-128.94	-33.77	-20.58	50.87	39.81	11.06	4.598				
2,700.00	2,698.73	2,699.42	2,699.17	9.42	6.59	-135.69	-32.59	-19.76	54.59	43.10	11.49	4.750				
2,800.00	2,798.48	2,799.57	2,799.31	9.78	6.84	-141.68	-30.80	-18.99	58.39	46.46	11.93	4.895				
2,900.00	2,898.24	2,899.60	2,899.30	10.15	7.10	-146.81	-28.49	-18.59	62.11	49.74	12.37	5.022				
3,000.00	2,997.99	2,999.58	2,999.26	10.51	7.37	-150.95	-26.13	-18.70	65.97	53.16	12.81	5.149				
3,100.00	3,097.75	3,099.36	3,099.01	10.87	7.65	-154.87	-23.49	-18.63	69.99	56.73	13.26	5.278				
3,200.00	3,197.51	3,199.43	3,199.03	11.24	7.94	-158.81	-20.44	-18.14	74.26	60.55	13.71	5.415				
3,300.00	3,297.26	3,299.20	3,298.73	11.60	8.23	-162.68	-16.87	-17.41	78.61	64.43	14.17	5.547				
3,400.00	3,397.02	3,398.59	3,398.09	11.96	8.52	-164.59	-15.06	-18.09	83.51	68.88	14.63	5.708				
3,500.00	3,496.77	3,497.00	3,496.49	12.33	8.81	-165.58	-14.55	-18.98	89.26	74.17	15.09	5.916				
3,600.00	3,596.53	3,594.65	3,594.12	12.70	9.11	-167.49	-14.11	-17.27	97.00	81.46	15.54	6.243				
3,700.00	3,696.28	3,693.18	3,692.59	13.06	9.41	-169.22	-14.79	-14.02	106.75	90.75	15.99	6.674				
3,800.00	3,796.04	3,795.83	3,795.20	13.43	9.72	-170.79	-14.60	-11.49	115.37	98.89	16.48	6.999				
3,900.00	3,895.80	3,896.04	3,895.40	13.80	10.04	-172.06	-13.55	-10.28	122.54	105.59	16.96	7.226				
4,000.00	3,995.55	3,995.35	3,994.70	14.17	10.35	-173.09	-12.69	-9.15	129.84	112.41	17.43	7.449				
4,100.00	4,095.31	4,095.16	4,094.50	14.53	10.67	-173.92	-12.09	-8.07	137.28	119.37	17.91	7.666				
4,200.00	4,195.06	4,195.14	4,194.48	14.90	10.99	-174.56	-11.57	-7.29	144.55	126.16	18.39	7.862				
4,300.00	4,294.82	4,294.94	4,294.28	15.27	11.31	-175.07	-11.16	-6.68	151.76	132.89	18.87	8.044				
4,400.00	4,394.58	4,396.81	4,396.14	15.64	11.64	-175.54	-10.53	-6.38	158.61	139.25	19.35	8.195				
4,500.00	4,494.33	4,501.27	4,500.56	16.01	11.98	-176.09	-8.21	-7.97	163.06	143.22	19.84	8.217				
4,600.00	4,594.09	4,606.62	4,605.72	16.38	12.32	-177.07	-3.01	-11.46	164.53	144.21	20.32	8.098				
4,700.00	4,693.84	4,710.31	4,708.94	16.75	12.67	-178.76	5.54	-16.35	163.08	142.29	20.78	7.846				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
County Fair/Blue Ribbon - County Fair Fed Com 602H - OH - OH													Offset Well Error:	0.00 usft
Survey Program: 107-OWSG (Rev2) MWD, 1422-OWSG (Rev2) MWD, 22063-BLIND														
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.00	4,793.60	4,810.24	4,808.27	17.12	13.00	179.34	14.95	-21.73	160.59	139.32	21.27	7.550		
4,900.00	4,893.36	4,909.61	4,907.12	17.49	13.34	177.68	23.50	-27.24	158.53	136.77	21.76	7.285		
5,000.00	4,993.11	5,009.46	5,006.49	17.86	13.68	176.15	31.57	-32.86	156.77	134.52	22.25	7.046		
5,100.00	5,092.87	5,108.67	5,105.25	18.23	14.02	174.68	39.32	-38.34	155.34	132.59	22.74	6.830		
5,200.00	5,192.62	5,207.35	5,203.54	18.60	14.36	173.33	46.41	-43.36	154.66	131.42	23.24	6.655		
5,259.62	5,252.09	5,266.61	5,262.60	18.82	14.56	172.62	50.30	-46.23	154.59	131.05	23.53	6.568		
5,300.00	5,292.38	5,306.74	5,302.61	18.97	14.70	172.17	52.81	-48.14	154.62	130.89	23.73	6.515		
5,400.00	5,392.14	5,406.05	5,401.63	19.34	15.05	171.10	58.87	-52.65	155.02	130.79	24.23	6.398		
5,500.00	5,491.89	5,506.10	5,501.41	19.71	15.39	170.12	64.67	-57.12	155.66	130.93	24.72	6.296		
5,600.00	5,591.65	5,605.95	5,601.01	20.08	15.74	169.27	70.11	-61.64	156.39	131.18	25.22	6.201		
5,700.00	5,691.40	5,706.33	5,701.13	20.46	16.09	168.39	75.74	-66.27	157.03	131.32	25.72	6.107		
5,800.00	5,791.16	5,806.79	5,801.28	20.83	16.44	167.35	81.89	-71.03	157.43	131.22	26.21	6.006		
5,900.00	5,890.91	5,907.09	5,901.14	21.20	16.80	165.52	90.18	-75.43	157.60	130.88	26.72	5.899		
6,000.00	5,990.67	6,006.72	6,000.22	21.57	17.16	163.24	99.71	-79.55	157.86	130.63	27.23	5.798		
6,100.00	6,090.43	6,105.81	6,098.81	21.94	17.51	161.05	108.94	-83.37	158.69	130.95	27.74	5.721		
6,200.00	6,190.18	6,205.73	6,198.26	22.31	17.87	158.93	118.02	-86.93	160.08	131.83	28.25	5.666		
6,300.00	6,289.94	6,305.59	6,297.60	22.69	18.23	156.72	127.49	-90.66	161.46	132.69	28.77	5.612		
6,400.00	6,389.69	6,402.96	6,394.53	23.06	18.58	154.81	136.08	-93.78	163.68	134.40	29.28	5.590		
6,500.00	6,489.45	6,504.92	6,496.21	23.43	18.95	153.51	143.18	-96.47	166.77	136.97	29.80	5.597		
6,600.00	6,589.21	6,606.87	6,597.84	23.80	19.32	152.42	149.87	-100.98	168.18	137.87	30.31	5.549		
6,654.20	6,643.28	6,661.13	6,651.91	24.00	19.51	151.83	153.51	-103.68	168.66	138.07	30.59	5.514		
6,700.00	6,688.98	6,706.82	6,697.44	24.17	19.68	151.28	156.60	-105.93	168.86	138.03	30.82	5.478		
6,800.00	6,788.88	6,806.00	6,796.27	24.54	20.03	149.74	163.37	-110.73	167.79	136.45	31.34	5.354		
6,900.00	6,888.86	6,904.68	6,894.68	24.89	20.39	147.96	169.40	-114.94	165.18	133.33	31.85	5.186		
6,921.14	6,910.00	6,925.62	6,915.58	24.97	20.46	88.11	170.42	-115.72	164.47	132.52	31.96	5.146		
7,000.00	6,988.86	7,003.92	6,993.78	25.24	20.74	87.21	172.88	-118.40	161.87	129.52	32.35	5.003		
7,100.00	7,088.86	7,104.18	7,093.98	25.59	21.09	86.60	174.39	-121.79	158.57	125.73	32.85	4.828		
7,200.00	7,188.86	7,203.71	7,193.46	25.93	21.43	86.16	175.39	-125.05	155.37	122.03	33.34	4.661		
7,300.00	7,288.86	7,302.49	7,292.18	26.28	21.77	85.82	176.12	-128.02	152.42	118.60	33.82	4.506		
7,400.00	7,388.86	7,399.22	7,388.90	26.63	22.09	85.66	176.46	-129.08	151.36	117.06	34.30	4.413		
7,417.32	7,406.18	7,416.29	7,405.98	26.69	22.15	85.65	176.47	-129.09	151.34	116.97	34.38	4.402		
7,500.00	7,488.86	7,498.29	7,487.97	26.98	22.42	85.70	176.36	-128.81	151.61	116.84	34.77	4.360		
7,600.00	7,588.86	7,598.44	7,588.12	27.33	22.75	85.89	175.89	-128.36	152.03	116.78	35.25	4.313		
7,700.00	7,688.86	7,698.47	7,688.15	27.68	23.08	86.15	175.23	-128.02	152.33	116.60	35.73	4.263		
7,800.00	7,788.86	7,797.93	7,787.60	28.03	23.40	86.57	174.14	-127.48	152.79	116.59	36.20	4.221		
7,900.00	7,888.86	7,897.38	7,887.04	28.38	23.73	87.05	172.92	-126.51	153.71	117.03	36.67	4.191		
8,000.00	7,988.86	7,999.32	7,988.97	28.73	24.07	87.11	172.78	-125.77	154.42	117.25	37.18	4.154		
8,100.00	8,088.86	8,101.06	8,090.70	29.08	24.42	86.66	173.93	-126.79	153.49	115.80	37.68	4.073		
8,200.00	8,188.86	8,200.70	8,190.33	29.43	24.76	86.26	174.91	-128.16	152.17	113.99	38.18	3.986		
8,300.00	8,288.86	8,299.89	8,289.51	29.78	25.11	86.06	175.39	-129.02	151.34	112.67	38.66	3.914		
8,400.00	8,388.86	8,399.50	8,389.12	30.13	25.44	86.08	175.31	-129.44	150.92	111.77	39.15	3.855		
8,500.00	8,488.86	8,499.69	8,489.31	30.48	25.77	86.37	174.54	-129.74	150.56	110.93	39.63	3.799		
8,600.00	8,588.86	8,599.83	8,589.44	30.83	26.11	86.90	173.11	-130.16	150.06	109.94	40.11	3.741		
8,643.15	8,632.00	8,642.20	8,631.80	30.98	26.25	87.08	172.63	-130.25	149.94	109.63	40.32	3.719		
8,700.00	8,688.86	8,698.22	8,687.82	31.18	26.44	87.10	172.60	-130.06	150.13	109.55	40.59	3.699		
8,800.00	8,788.86	8,799.02	8,788.62	31.53	26.78	86.81	173.38	-129.79	150.45	109.36	41.09	3.661		
8,900.00	8,888.86	8,900.27	8,889.87	31.88	27.13	86.60	173.90	-130.22	150.05	108.46	41.59	3.608		
9,000.00	8,988.86	9,001.46	8,991.05	32.23	27.48	86.61	173.79	-131.43	148.84	106.76	42.09	3.536		
9,100.00	9,088.86	9,102.03	9,091.60	32.58	27.82	86.97	172.75	-133.32	146.92	104.34	42.58	3.450		
9,200.00	9,188.86	9,200.96	9,190.51	32.94	28.16	87.25	171.96	-135.02	145.16	102.09	43.06	3.371		
9,288.00	9,276.86	9,287.11	9,276.66	33.25	28.45	87.24	171.96	-135.59	144.57	101.09	43.48	3.325		
9,300.00	9,288.86	9,298.83	9,288.38	33.29	28.49	87.22	172.00	-135.58	144.59	101.05	43.54	3.321		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - OH		Offset Site Error:	0.00 usft
Survey Program:													107-OWSG (Rev2) MWD, 1422-OWSG (Rev2) MWD, 22063-BLIND		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
9,400.00	9,388.86	9,397.26	9,386.80	33.64	28.83	87.02	172.57	-134.75	145.46	101.44	44.02	3.305				
9,500.00	9,488.86	9,496.63	9,486.16	33.99	29.17	86.81	173.17	-133.29	146.96	102.46	44.50	3.302				
9,600.00	9,588.86	9,596.09	9,585.59	34.34	29.51	86.40	174.35	-131.48	148.85	103.85	44.99	3.308				
9,700.00	9,688.86	9,696.58	9,686.05	34.70	29.85	85.75	176.19	-129.56	150.87	105.38	45.50	3.316				
9,800.00	9,788.86	9,798.65	9,788.10	35.05	30.20	85.57	176.73	-128.44	152.01	106.00	46.01	3.304				
9,900.00	9,888.86	9,899.55	9,888.99	35.40	30.54	86.22	175.02	-128.37	151.96	105.46	46.50	3.268				
10,000.00	9,988.86	10,001.40	9,990.78	35.76	30.87	87.56	171.45	-128.93	151.22	104.24	46.99	3.218				
10,100.00	10,088.86	10,101.04	10,090.34	36.11	31.21	88.97	167.70	-130.14	149.90	102.43	47.46	3.158				
10,200.00	10,188.86	10,200.40	10,189.68	36.46	31.54	89.50	166.31	-131.01	149.00	101.05	47.95	3.107				
10,300.00	10,288.86	10,299.93	10,289.20	36.81	31.88	89.71	165.75	-131.52	148.48	100.04	48.44	3.065				
10,400.00	10,388.86	10,399.88	10,389.15	37.17	32.22	89.83	165.44	-131.92	148.09	99.16	48.93	3.027				
10,444.74	10,433.59	10,444.13	10,433.40	37.33	32.38	89.82	165.46	-131.99	148.01	98.87	49.14	3.012				
10,500.00	10,488.86	10,499.02	10,488.29	37.52	32.56	89.89	165.27	-131.89	148.11	98.70	49.41	2.997				
10,600.00	10,588.86	10,600.02	10,589.29	37.87	32.90	90.20	164.49	-131.83	148.17	98.26	49.91	2.969				
10,700.00	10,688.86	10,703.54	10,692.78	38.23	33.26	90.93	162.63	-133.41	146.67	96.26	50.41	2.910				
10,800.00	10,788.86	10,808.25	10,797.38	38.58	33.62	91.01	162.49	-138.05	142.24	91.36	50.88	2.796				
10,900.00	10,888.86	10,909.45	10,898.30	38.94	33.98	90.46	163.92	-145.36	134.99	83.62	51.36	2.628				
11,000.00	10,988.86	11,007.95	10,996.58	39.29	34.33	89.71	165.65	-151.81	128.43	76.55	51.88	2.476				
11,100.00	11,088.86	11,108.24	11,096.62	39.64	34.68	88.32	168.57	-158.01	122.31	69.93	52.38	2.335				
11,200.00	11,188.86	11,207.49	11,195.66	40.00	35.03	87.99	169.05	-164.53	115.75	62.87	52.88	2.189				
11,300.00	11,288.86	11,305.94	11,293.89	40.35	35.37	89.52	165.92	-169.80	110.33	56.94	53.38	2.067				
11,338.14	11,327.00	11,342.87	11,330.65	40.49	35.49	91.23	162.68	-171.41	108.68	55.11	53.57	2.029				
11,350.00	11,338.86	11,353.95	11,341.62	40.53	35.53	-87.26	161.19	-171.80	108.30	54.68	53.62	2.020				
11,390.16	11,378.94	11,390.88	11,377.82	40.65	35.65	-84.56	154.02	-172.62	107.69	53.93	53.76	2.003 SF				
11,400.00	11,388.74	11,399.74	11,386.41	40.69	35.67	-83.86	151.84	-172.69	107.74	53.96	53.78	2.003				
11,450.00	11,438.15	11,445.27	11,429.83	40.84	35.80	-80.12	138.20	-172.20	109.12	55.33	53.79	2.029				
11,500.00	11,486.71	11,493.10	11,474.15	40.99	35.93	-76.47	120.29	-171.00	111.57	57.79	53.78	2.075				
11,550.00	11,534.06	11,542.03	11,518.22	41.13	36.06	-73.37	99.05	-170.29	113.58	59.80	53.79	2.112				
11,600.00	11,579.84	11,588.96	11,559.23	41.26	36.18	-71.14	76.27	-169.60	115.39	61.74	53.65	2.151				
11,650.00	11,623.69	11,634.56	11,598.00	41.38	36.29	-70.00	52.31	-168.10	117.48	64.04	53.44	2.198				
11,700.00	11,665.28	11,681.00	11,636.53	41.48	36.40	-70.15	26.56	-165.27	119.99	66.59	53.40	2.247				
11,750.00	11,704.29	11,729.66	11,676.61	41.58	36.53	-72.10	-0.81	-161.65	121.92	68.17	53.75	2.268				
11,800.00	11,740.44	11,777.92	11,715.75	41.67	36.66	-75.43	-28.80	-157.99	123.23	69.00	54.23	2.272				
11,850.00	11,773.44	11,826.25	11,752.85	41.74	36.79	-79.01	-59.56	-154.61	124.48	69.74	54.74	2.274				
11,900.00	11,803.04	11,876.96	11,788.74	41.81	36.94	-82.60	-95.26	-151.83	125.47	70.17	55.31	2.269				
11,950.00	11,829.02	11,928.47	11,822.85	41.89	37.10	-86.77	-133.81	-150.39	125.52	69.71	55.81	2.249				
11,973.52	11,839.93	11,951.77	11,837.51	41.94	37.17	-88.87	-151.92	-150.05	125.43	69.45	55.97	2.241				
12,000.00	11,851.18	11,976.36	11,852.33	42.01	37.24	-91.16	-171.54	-149.54	125.68	69.58	56.10	2.240				
12,050.00	11,869.34	12,023.76	11,878.45	42.13	37.40	-95.47	-211.02	-147.84	127.52	71.30	56.23	2.268				
12,100.00	11,883.38	12,073.04	11,901.32	42.26	37.56	-99.32	-254.59	-145.28	130.79	74.63	56.16	2.329				
12,150.00	11,893.19	12,124.24	11,920.78	42.39	37.73	-102.88	-301.83	-142.26	134.95	79.04	55.91	2.414				
12,200.00	11,898.69	12,180.78	11,937.14	42.53	37.92	-106.49	-355.85	-139.54	139.01	83.57	55.44	2.507				
12,250.00	11,899.84	12,237.39	11,947.47	42.67	38.13	-109.65	-411.46	-138.15	142.03	87.08	54.95	2.585				
12,258.12	11,899.61	12,246.22	11,948.52	42.70	38.16	-110.10	-420.23	-138.01	142.44	87.57	54.88	2.596				
12,300.00	11,898.15	12,290.51	11,952.82	42.83	38.33	-112.29	-464.30	-137.52	144.33	89.78	54.55	2.646				
12,400.00	11,894.66	12,396.61	11,957.00	43.19	38.75	-115.39	-570.29	-137.61	145.94	91.69	54.25	2.690				
12,500.00	11,891.18	12,497.96	11,955.70	43.60	39.22	-116.55	-671.63	-138.27	145.03	90.57	54.46	2.663				
12,600.00	11,887.69	12,597.32	11,952.91	44.07	39.75	-117.00	-770.94	-138.06	144.25	89.34	54.91	2.627				
12,686.85	11,884.67	12,683.18	11,950.37	44.53	40.25	-117.32	-856.77	-137.71	143.67	88.31	55.36	2.595				
12,700.00	11,884.21	12,695.76	11,950.01	44.60	40.33	-117.35	-869.34	-137.54	143.69	88.26	55.43	2.592				
12,800.00	11,880.72	12,793.89	11,946.69	45.18	40.96	-117.10	-967.37	-134.53	145.19	88.96	56.22	2.582				
12,900.00	11,877.24	12,894.38	11,939.61	45.81	41.68	-115.24	-1,067.48	-129.66	146.68	89.02	57.67	2.544				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - OH		Offset Site Error:	0.00 usft
Survey Program:													107-OWSG (Rev2) MWD, 1422-OWSG (Rev2) MWD, 22063-BLIND		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
13,000.00	11,873.75	12,994.16	11,932.08	46.49	42.44	-113.25	-1,166.85	-124.77	148.18	88.98	59.20	2.503				
13,100.00	11,870.27	13,093.08	11,926.11	47.22	43.24	-111.89	-1,265.49	-120.20	150.15	89.57	60.57	2.479				
13,200.00	11,866.78	13,191.31	11,921.10	47.99	44.09	-110.81	-1,363.45	-115.04	153.12	91.21	61.91	2.473				
13,300.00	11,863.30	13,290.78	11,917.69	48.81	44.98	-110.31	-1,462.72	-109.60	156.92	93.76	63.16	2.484				
13,400.00	11,859.81	13,389.79	11,914.55	49.67	45.91	-109.88	-1,561.51	-103.92	161.07	96.63	64.44	2.499				
13,500.00	11,856.33	13,486.40	11,911.93	50.57	46.85	-109.49	-1,657.85	-97.19	166.55	100.86	65.69	2.535				
13,600.00	11,852.84	13,590.87	11,909.83	51.50	47.91	-109.41	-1,762.08	-90.63	171.61	104.46	67.15	2.555				
13,700.00	11,849.36	13,693.04	11,907.66	52.47	48.98	-109.58	-1,864.16	-86.75	174.29	105.81	68.48	2.545				
13,800.00	11,845.87	13,792.93	11,906.45	53.47	50.06	-110.00	-1,963.96	-82.81	177.42	107.72	69.70	2.546				
13,900.00	11,842.38	13,897.31	11,906.41	54.51	51.22	-111.14	-2,068.33	-81.83	178.15	107.36	70.79	2.517				
14,000.00	11,838.90	13,995.02	11,907.69	55.57	52.33	-112.71	-2,166.03	-81.87	178.58	107.10	71.47	2.498				
14,100.00	11,835.41	14,100.13	11,908.97	56.67	53.55	-114.27	-2,271.12	-81.20	179.79	107.42	72.36	2.484				
14,200.00	11,831.93	14,203.08	11,904.49	57.79	54.78	-114.39	-2,373.95	-82.61	176.85	103.07	73.77	2.397				
14,300.00	11,828.44	14,301.76	11,900.28	58.93	55.98	-114.51	-2,472.54	-83.77	174.15	99.07	75.08	2.320				
14,389.89	11,825.31	14,387.69	11,898.40	59.98	57.04	-115.08	-2,558.44	-84.29	172.99	97.05	75.94	2.278				
14,400.00	11,824.96	14,397.27	11,898.48	60.10	57.16	-115.23	-2,568.02	-84.33	173.00	97.02	75.98	2.277				
14,500.00	11,821.47	14,491.40	11,902.57	61.29	58.34	-117.63	-2,662.04	-84.55	175.01	99.13	75.88	2.306				
14,600.00	11,817.99	14,596.78	11,909.22	62.50	59.69	-120.91	-2,767.20	-85.26	177.99	102.39	75.60	2.354				
14,700.00	11,814.50	14,700.20	11,911.87	63.73	61.02	-123.28	-2,870.55	-87.67	178.02	102.44	75.57	2.356				
14,750.65	11,812.74	14,749.73	11,913.21	64.36	61.66	-124.50	-2,920.04	-89.23	177.83	102.46	75.37	2.359				
14,800.00	11,811.02	14,798.70	11,915.15	64.98	62.30	-125.90	-2,968.94	-90.91	177.99	102.96	75.04	2.372				
14,898.03	11,807.60	14,897.64	11,917.92	66.22	63.61	-128.50	-3,067.77	-94.63	177.65	103.19	74.46	2.386				
14,900.00	11,807.53	14,899.46	11,917.96	66.25	63.63	-128.54	-3,069.59	-94.69	177.65	103.21	74.45	2.386				
15,000.00	11,804.05	14,992.17	11,921.40	67.53	64.87	-130.75	-3,162.21	-96.10	179.96	106.19	73.78	2.439				
15,100.00	11,800.56	15,089.75	11,927.39	68.83	66.20	-133.14	-3,259.61	-95.66	185.67	112.45	73.22	2.536				
15,200.00	11,797.08	15,192.54	11,930.31	70.14	67.61	-134.71	-3,362.35	-94.84	189.57	116.10	73.47	2.580				
15,300.00	11,793.59	15,285.94	11,933.75	71.47	68.90	-135.80	-3,455.63	-92.06	195.74	122.11	73.63	2.658				
15,400.00	11,790.10	15,384.14	11,938.87	72.81	70.28	-136.88	-3,553.61	-87.70	204.10	130.00	74.10	2.754				
15,500.00	11,786.62	15,484.86	11,943.48	74.16	71.70	-137.79	-3,654.13	-83.23	212.06	137.24	74.82	2.834				
15,600.00	11,783.13	15,589.46	11,947.69	75.53	73.18	-138.63	-3,758.55	-78.99	219.44	143.71	75.73	2.897				
15,700.00	11,779.65	15,691.32	11,949.78	76.91	74.63	-139.43	-3,860.36	-76.73	224.12	147.67	76.45	2.931				
15,800.00	11,776.16	15,791.40	11,951.88	78.29	76.07	-140.16	-3,960.39	-74.31	229.03	151.88	77.15	2.969				
15,900.00	11,772.68	15,888.93	11,953.77	79.69	77.48	-140.71	-4,057.85	-71.47	234.15	156.29	77.85	3.007				
16,000.00	11,769.19	15,993.14	11,955.61	81.10	78.99	-141.23	-4,162.00	-68.30	239.25	160.35	78.90	3.032				
16,100.00	11,765.71	16,091.00	11,957.28	82.51	80.42	-141.83	-4,259.82	-66.09	243.83	164.27	79.56	3.065				
16,200.00	11,762.22	16,180.60	11,960.37	83.94	81.74	-142.27	-4,349.29	-62.33	250.96	170.95	80.01	3.137				
16,300.00	11,758.74	16,295.10	11,962.73	85.37	83.43	-142.68	-4,463.65	-58.11	256.70	175.06	81.64	3.144				
16,400.00	11,755.25	16,394.46	11,964.26	86.81	84.89	-143.51	-4,563.00	-57.66	260.13	178.05	82.08	3.169				
16,500.00	11,751.77	16,494.41	11,966.46	88.26	86.37	-144.71	-4,662.92	-58.88	263.18	181.01	82.18	3.203				
16,600.00	11,748.28	16,588.87	11,969.49	89.72	87.78	-145.73	-4,757.33	-58.88	267.86	185.63	82.23	3.257				
16,700.00	11,744.79	16,688.68	11,973.72	91.18	89.28	-146.80	-4,857.05	-58.34	273.79	191.29	82.49	3.319				
16,800.00	11,741.31	16,806.00	11,976.60	92.64	91.03	-148.15	-4,974.30	-59.91	277.49	194.39	83.09	3.340				
16,900.00	11,737.82	16,911.63	11,973.21	94.12	92.61	-149.26	-5,079.77	-64.48	274.66	191.37	83.29	3.298				
17,000.00	11,734.34	17,007.07	11,971.04	95.60	94.04	-150.34	-5,175.10	-68.45	272.89	189.67	83.21	3.279				
17,053.39	11,732.48	17,058.14	11,970.37	96.39	94.81	-150.90	-5,226.14	-70.13	272.66	189.45	83.21	3.277				
17,100.00	11,730.85	17,102.84	11,970.07	97.08	95.48	-151.38	-5,270.82	-71.43	272.83	189.61	83.21	3.279				
17,200.00	11,727.37	17,195.41	11,970.70	98.57	96.88	-152.38	-5,363.37	-73.43	274.82	191.67	83.16	3.305				
17,300.00	11,723.88	17,291.47	11,973.23	100.07	98.34	-153.36	-5,459.39	-74.39	279.16	195.88	83.27	3.352				
17,400.00	11,720.40	17,393.36	11,975.93	101.57	99.90	-154.26	-5,561.24	-74.79	283.86	200.13	83.72	3.390				
17,500.00	11,716.91	17,490.32	11,978.10	103.08	101.38	-154.94	-5,658.17	-74.49	288.55	204.39	84.16	3.429				
17,600.00	11,713.43	17,587.04	11,980.80	104.59	102.87	-155.38	-5,754.84	-72.80	294.38	209.58	84.80	3.471				
17,700.00	11,709.94	17,688.15	11,984.39	106.10	104.43	-156.06	-5,855.88	-72.02	300.52	215.09	85.43	3.518				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - OH		Offset Site Error:	0.00 usft
Survey Program:													107-OWSG (Rev2) MWD, 1422-OWSG (Rev2) MWD, 22063-BLIND		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
17,800.00	11,706.46	17,789.17	11,988.23	107.62	105.98	-157.07	-5,956.82	-73.15	306.19	220.43	85.76	3.570				
17,900.00	11,702.97	17,888.21	11,992.09	109.14	107.51	-158.00	-6,055.78	-74.13	312.09	226.01	86.08	3.626				
18,000.00	11,699.49	17,990.46	11,996.08	110.66	109.09	-159.21	-6,157.91	-76.84	317.48	231.19	86.30	3.679				
18,100.00	11,696.00	18,088.78	12,000.17	112.19	110.61	-160.54	-6,256.08	-80.58	322.86	236.58	86.28	3.742				
18,200.00	11,692.51	18,190.03	12,004.78	113.73	112.17	-161.84	-6,357.16	-84.18	328.88	242.45	86.43	3.805				
18,300.00	11,689.03	18,291.68	12,008.06	115.26	113.74	-163.15	-6,458.66	-88.50	333.56	246.95	86.62	3.851				
18,400.00	11,685.54	18,387.45	12,011.68	116.80	115.23	-164.23	-6,554.30	-91.74	339.19	252.41	86.78	3.909				
18,500.00	11,682.06	18,484.92	12,015.76	118.34	116.75	-165.00	-6,651.68	-93.02	345.86	258.60	87.26	3.964				
18,600.00	11,678.57	18,582.66	12,020.15	119.89	118.28	-165.64	-6,749.32	-93.62	353.06	265.22	87.84	4.019				
18,700.00	11,675.09	18,673.60	12,025.29	121.43	119.70	-166.21	-6,840.11	-93.89	361.52	273.31	88.21	4.098				
18,800.00	11,671.60	18,770.69	12,032.78	122.98	121.23	-166.64	-6,936.90	-92.70	372.35	283.41	88.93	4.187				
18,900.00	11,668.12	18,872.17	12,039.70	124.54	122.83	-166.84	-7,038.11	-90.10	382.62	292.63	89.98	4.252				
19,000.00	11,664.63	18,972.48	12,045.73	126.09	124.42	-166.69	-7,138.13	-85.41	392.60	301.41	91.19	4.305				
19,100.00	11,661.15	19,087.83	12,050.48	127.65	126.25	-166.42	-7,253.23	-79.75	400.83	307.81	93.03	4.309				
19,200.00	11,657.66	19,198.12	12,051.07	129.21	127.99	-166.06	-7,363.39	-74.46	405.55	310.88	94.67	4.284				
19,300.00	11,654.18	19,304.09	12,049.54	130.77	129.67	-165.94	-7,469.31	-71.53	407.83	311.84	95.99	4.249				
19,400.00	11,650.69	19,402.59	12,048.44	132.34	131.23	-166.08	-7,567.79	-70.57	410.01	313.10	96.92	4.231				
19,500.00	11,647.21	19,501.64	12,047.21	133.90	132.79	-166.08	-7,666.82	-68.64	412.32	314.37	97.96	4.209				
19,600.00	11,643.72	19,594.21	12,046.83	135.47	134.26	-166.13	-7,759.37	-66.94	415.42	316.64	98.78	4.205				
19,700.00	11,640.23	19,686.50	12,048.77	137.04	135.73	-166.25	-7,851.62	-65.29	420.91	321.37	99.54	4.229				
19,800.00	11,636.75	19,778.86	12,051.93	138.62	137.20	-166.50	-7,943.93	-64.27	427.56	327.37	100.19	4.267				
19,900.00	11,633.26	19,873.84	12,057.58	140.19	138.71	-166.88	-8,038.73	-63.79	436.50	335.66	100.85	4.328				
20,000.00	11,629.78	19,983.23	12,062.84	141.77	140.45	-167.22	-8,147.99	-62.80	444.48	342.43	102.05	4.356				
20,100.00	11,626.29	20,078.03	12,066.04	143.34	141.96	-167.40	-8,242.72	-61.37	451.21	348.36	102.84	4.387				
20,200.00	11,622.81	20,178.48	12,070.88	144.92	143.57	-167.52	-8,343.03	-59.13	459.49	355.61	103.88	4.423				
20,300.00	11,619.32	20,267.56	12,075.25	146.50	144.99	-167.67	-8,431.98	-57.45	467.84	363.35	104.48	4.478				
20,400.00	11,615.84	20,355.43	12,082.73	148.09	146.39	-168.12	-8,519.52	-57.71	479.17	374.36	104.82	4.572				
20,500.00	11,612.35	20,455.70	12,092.51	149.67	147.99	-168.61	-8,619.32	-57.75	491.84	386.21	105.63	4.656				
20,600.00	11,608.87	20,554.94	12,101.60	151.26	149.58	-169.12	-8,718.14	-58.30	503.85	397.46	106.39	4.736				
20,700.00	11,605.38	20,659.12	12,109.73	152.84	151.72	-169.51	-8,852.03	-57.51	513.21	404.84	108.37	4.736				
20,800.00	11,601.90	20,801.74	12,110.07	154.43	153.52	-169.65	-8,964.63	-56.37	516.78	407.11	109.67	4.712				
20,900.00	11,598.41	20,897.86	12,110.16	156.02	155.06	-169.82	-9,060.75	-55.99	520.12	409.59	110.54	4.705				
21,000.00	11,594.92	20,980.91	12,111.19	157.61	156.39	-169.95	-9,143.80	-55.30	524.80	413.73	111.07	4.725				
21,100.00	11,591.44	21,053.10	12,115.84	159.20	157.55	-169.95	-9,215.79	-52.93	534.73	423.50	111.23	4.807				
21,200.00	11,587.95	21,180.22	12,123.43	160.80	159.60	-170.04	-9,342.62	-49.86	544.19	431.00	113.19	4.808				
21,300.00	11,584.47	21,275.18	12,126.30	162.39	161.12	-170.20	-9,437.53	-49.02	550.56	436.54	114.02	4.829				
21,400.00	11,580.98	21,367.14	12,132.09	163.99	162.60	-170.40	-9,529.31	-48.10	560.05	445.31	114.74	4.881				
21,500.00	11,577.50	21,462.88	12,137.25	165.58	164.14	-170.56	-9,624.90	-46.87	568.80	453.20	115.60	4.920				
21,600.00	11,574.01	21,558.42	12,144.49	167.18	165.69	-170.61	-9,720.12	-44.33	579.87	463.35	116.52	4.977				
21,700.00	11,570.53	21,670.87	12,151.10	168.78	167.50	-170.70	-9,832.35	-41.84	589.20	471.23	117.97	4.995				
21,800.00	11,567.04	21,784.52	12,155.66	170.38	169.33	-170.89	-9,945.90	-40.87	596.52	477.20	119.32	4.999				
21,900.00	11,563.56	21,881.00	12,157.95	171.98	170.88	-171.11	-10,042.36	-40.86	602.11	481.94	120.17	5.010				
22,000.00	11,560.07	21,960.24	12,161.24	173.58	172.16	-171.19	-10,121.50	-39.71	609.82	489.22	120.60	5.057				
22,062.86	11,557.88	22,008.00	12,164.93	174.48	172.93	-171.15	-10,169.08	-37.77	616.98	495.87	121.12	5.094				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - OH		Offset Site Error:	0.00 usft
Survey Program:													35-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 22110-BLIND		Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	0.00	0.00	0.00	0.00	-135.52	-35.31	-34.68	49.49							
100.00	100.00	99.51	99.51	0.13	0.24	-135.52	-35.44	-34.80	49.68	49.40	0.27	183.150 ES				
200.00	200.00	199.09	199.08	0.48	0.59	-135.00	-35.91	-35.91	50.79	50.03	0.77	66.315				
300.00	300.00	298.97	298.94	0.84	0.95	-133.87	-36.21	-37.67	52.26	50.99	1.27	41.164				
400.00	400.00	398.76	398.69	1.20	1.31	-131.61	-36.03	-40.57	54.27	52.50	1.77	30.585				
500.00	500.00	498.50	498.38	1.56	1.67	-129.28	-35.79	-43.75	56.54	54.26	2.28	24.796				
600.00	600.00	598.55	598.37	1.92	2.03	-126.61	-35.16	-47.32	58.97	56.19	2.79	21.159				
700.00	700.00	698.23	697.97	2.28	2.39	-123.96	-34.38	-51.04	61.57	58.27	3.29	18.693				
800.00	800.00	797.75	797.38	2.63	2.75	-120.98	-33.45	-55.71	65.03	61.23	3.80	17.114				
900.00	900.00	897.65	897.15	2.99	3.12	-118.29	-32.61	-60.59	68.86	64.55	4.31	15.988				
1,000.00	1,000.00	997.17	996.56	3.35	3.48	-116.16	-32.14	-65.44	72.98	68.17	4.81	15.162				
1,100.00	1,100.00	1,097.23	1,096.47	3.71	3.85	-114.18	-31.73	-70.68	77.55	72.23	5.32	14.574				
1,200.00	1,200.00	1,198.14	1,197.30	4.07	4.21	-112.66	-31.25	-74.85	81.15	75.32	5.83	13.915				
1,300.00	1,300.00	1,298.42	1,297.52	4.43	4.51	-111.38	-30.60	-78.16	83.97	77.68	6.29	13.347				
1,400.00	1,400.00	1,398.24	1,397.28	4.79	4.70	-109.97	-29.63	-81.53	86.78	80.10	6.68	12.998				
1,500.00	1,500.00	1,496.11	1,495.02	5.14	4.78	-107.95	-27.88	-86.05	90.58	83.59	6.98	12.968				
1,600.00	1,600.00	1,592.90	1,591.42	5.50	4.86	-104.62	-24.52	-93.99	97.50	90.22	7.28	13.394				
1,700.00	1,700.00	1,691.10	1,688.94	5.86	4.97	-100.84	-20.03	-104.62	107.08	99.48	7.60	14.093				
1,800.00	1,800.00	1,790.73	1,787.86	6.22	5.11	-97.70	-15.64	-115.66	117.32	109.38	7.94	14.770				
1,900.00	1,900.00	1,890.03	1,886.50	6.58	5.28	-95.28	-11.68	-126.37	127.60	119.30	8.30	15.367				
2,000.00	2,000.00	1,989.62	1,985.44	6.94	5.47	-93.26	-7.81	-137.06	138.03	129.35	8.68	15.901				
2,100.00	2,099.99	2,089.17	2,084.35	7.29	5.68	-32.22	-3.91	-147.63	147.39	138.32	9.07	16.257				
2,200.00	2,199.91	2,189.41	2,183.97	7.64	5.91	-31.38	-0.01	-158.08	154.39	144.93	9.46	16.313				
2,266.94	2,266.72	2,256.48	2,250.64	7.88	6.08	-31.15	2.57	-164.91	157.69	147.96	9.74	16.195				
2,300.00	2,299.70	2,289.60	2,283.56	8.00	6.16	-31.11	3.86	-168.25	159.04	149.17	9.87	16.109				
2,400.00	2,399.46	2,389.74	2,383.12	8.35	6.43	-30.91	7.90	-178.27	163.04	152.75	10.29	15.841				
2,500.00	2,499.21	2,490.29	2,483.10	8.71	6.70	-30.67	12.14	-188.11	166.82	156.10	10.72	15.558				
2,600.00	2,598.97	2,591.22	2,583.50	9.06	6.99	-30.39	16.53	-197.43	170.05	158.89	11.16	15.235				
2,700.00	2,698.73	2,691.84	2,683.62	9.42	7.28	-30.00	21.29	-206.25	172.81	161.21	11.61	14.890				
2,800.00	2,798.48	2,792.64	2,783.93	9.78	7.58	-29.44	26.58	-214.70	175.21	163.15	12.06	14.533				
2,900.00	2,898.24	2,894.23	2,885.05	10.15	7.89	-28.78	32.26	-222.50	176.93	164.42	12.51	14.139				
3,000.00	2,997.99	2,995.57	2,985.99	10.51	8.20	-28.05	38.13	-229.30	177.72	164.74	12.97	13.697				
3,100.00	3,097.75	3,093.07	3,083.10	10.87	8.51	-27.33	43.84	-235.91	178.60	165.18	13.42	13.305				
3,200.00	3,197.51	3,188.52	3,178.01	11.24	8.82	-26.73	49.28	-244.49	181.72	167.85	13.86	13.108				
3,300.00	3,297.26	3,287.50	3,276.27	11.60	9.16	-26.30	54.50	-255.22	186.67	172.34	14.33	13.031				
3,400.00	3,397.02	3,386.78	3,374.83	11.96	9.51	-25.96	59.53	-266.02	191.65	176.86	14.79	12.956				
3,500.00	3,496.77	3,487.14	3,474.49	12.33	9.86	-26.04	63.19	-277.23	196.81	181.54	15.27	12.888				
3,600.00	3,596.53	3,592.94	3,579.75	12.70	10.23	-26.47	65.74	-287.53	200.46	184.68	15.78	12.702				
3,700.00	3,696.28	3,694.74	3,681.25	13.06	10.57	-26.99	67.63	-295.17	201.84	185.57	16.27	12.406				
3,800.00	3,796.04	3,786.18	3,772.26	13.43	10.89	-27.49	69.27	-303.74	205.10	188.39	16.70	12.278				
3,900.00	3,895.80	3,881.46	3,866.77	13.80	11.24	-27.98	71.16	-315.69	211.56	194.41	17.16	12.332				
4,000.00	3,995.55	3,983.47	3,967.89	14.17	11.62	-28.52	73.01	-328.97	218.52	200.86	17.66	12.372				
4,100.00	4,095.31	4,084.62	4,068.28	14.53	12.00	-29.09	74.56	-341.28	224.63	206.47	18.16	12.369				
4,200.00	4,195.06	4,185.23	4,168.17	14.90	12.37	-29.57	76.35	-353.20	230.45	211.79	18.66	12.351				
4,300.00	4,294.82	4,287.83	4,270.13	15.27	12.75	-29.99	78.32	-364.39	235.33	216.17	19.17	12.277				
4,400.00	4,394.58	4,389.50	4,371.27	15.64	13.12	-30.39	80.27	-374.58	239.34	219.67	19.67	12.167				
4,500.00	4,494.33	4,491.21	4,472.52	16.01	13.49	-30.65	82.80	-384.02	242.62	222.44	20.17	12.026				
4,600.00	4,594.09	4,592.09	4,572.95	16.38	13.86	-30.67	86.29	-392.75	245.26	224.58	20.67	11.863				
4,700.00	4,693.84	4,690.44	4,670.84	16.75	14.22	-30.53	90.37	-401.33	247.98	226.82	21.16	11.719				
4,800.00	4,793.60	4,788.37	4,768.25	17.12	14.58	-30.51	93.93	-410.80	251.64	229.99	21.65	11.624				
4,900.00	4,893.36	4,887.76	4,867.06	17.49	14.95	-30.48	97.57	-420.90	255.80	233.66	22.14	11.552				
5,000.00	4,993.11	4,987.54	4,966.23	17.86	15.33	-30.35	101.66	-431.10	260.02	237.38	22.64	11.485				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 35-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 22110-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,092.87	5,087.20	5,065.27	18.23	15.71	-30.17	106.05	-441.36	264.31	241.18	23.14	11.423		
5,200.00	5,192.62	5,188.30	5,165.73	18.60	16.09	-29.96	110.62	-451.64	268.49	244.84	23.64	11.355		
5,300.00	5,292.38	5,290.02	5,266.90	18.97	16.48	-29.80	115.02	-461.38	272.07	247.92	24.15	11.264		
5,400.00	5,392.14	5,389.95	5,366.31	19.34	16.85	-29.69	119.12	-470.61	275.31	250.65	24.66	11.166		
5,500.00	5,491.89	5,489.98	5,465.84	19.71	17.23	-29.64	122.95	-479.85	278.55	253.39	25.16	11.072		
5,600.00	5,591.65	5,590.31	5,565.69	20.08	17.61	-29.65	126.50	-489.05	281.71	256.05	25.66	10.978		
5,700.00	5,691.40	5,690.15	5,665.06	20.46	17.98	-29.72	129.76	-498.03	284.69	258.52	26.17	10.880		
5,800.00	5,791.16	5,789.69	5,760.05	20.83	18.35	-29.60	133.76	-507.53	288.63	261.99	26.64	10.833		
5,900.00	5,890.91	5,889.68	5,857.29	21.20	18.73	-29.27	139.01	-518.37	293.74	266.60	27.14	10.825		
6,000.00	5,990.67	5,989.67	5,958.46	21.57	19.13	-28.96	144.35	-529.55	298.75	271.10	27.65	10.804		
6,100.00	6,090.43	6,088.29	6,060.52	21.94	19.53	-28.82	148.82	-539.94	302.88	274.71	28.17	10.751		
6,200.00	6,190.18	6,189.48	6,161.20	22.31	19.91	-28.82	152.50	-549.45	306.28	277.60	28.69	10.677		
6,300.00	6,289.94	6,289.56	6,260.78	22.69	20.29	-28.86	155.92	-558.76	309.57	280.38	29.19	10.605		
6,400.00	6,389.69	6,390.06	6,360.80	23.06	20.68	-28.93	159.19	-568.00	312.74	283.04	29.70	10.530		
6,500.00	6,489.45	6,491.29	6,461.58	23.43	21.06	-29.00	162.46	-577.03	315.65	285.44	30.21	10.447		
6,600.00	6,589.21	6,591.84	6,561.71	23.80	21.44	-29.09	165.59	-585.62	318.17	287.45	30.72	10.356		
6,654.20	6,643.28	6,643.87	6,613.52	24.00	21.63	-29.13	167.26	-590.14	319.61	288.63	30.99	10.314		
6,700.00	6,688.98	6,686.07	6,655.49	24.17	21.80	-29.13	168.76	-594.24	321.56	290.35	31.20	10.305		
6,800.00	6,788.88	6,781.31	6,750.07	24.54	22.17	-28.93	172.52	-604.81	328.85	297.18	31.68	10.381		
6,900.00	6,888.86	6,884.48	6,852.49	24.89	22.58	-28.54	176.44	-616.53	338.71	306.51	32.20	10.520		
6,921.14	6,910.00	6,907.39	6,875.27	24.97	22.67	-87.94	177.21	-618.90	340.87	308.56	32.31	10.549		
7,000.00	6,988.86	7,000.92	6,968.48	25.24	23.01	-87.80	178.28	-626.32	347.16	314.41	32.75	10.599		
7,100.00	7,088.86	7,104.64	7,072.05	25.59	23.37	-87.97	177.45	-631.84	352.45	319.20	33.25	10.600		
7,200.00	7,188.86	7,208.60	7,175.90	25.93	23.72	-88.14	176.55	-636.48	356.89	323.15	33.74	10.577		
7,300.00	7,288.86	7,318.22	7,285.50	26.28	24.07	-88.23	176.11	-638.56	358.75	324.52	34.22	10.483		
7,400.00	7,388.86	7,419.11	7,386.38	26.63	24.39	-88.27	175.87	-639.19	359.36	324.65	34.71	10.354		
7,500.00	7,488.86	7,518.97	7,486.24	26.98	24.71	-88.32	175.56	-639.93	360.09	324.90	35.19	10.232		
7,600.00	7,588.86	7,619.88	7,587.15	27.33	25.02	-88.39	175.13	-640.49	360.63	324.96	35.68	10.108		
7,700.00	7,688.86	7,720.42	7,687.69	27.68	25.33	-88.50	174.48	-640.83	360.96	324.80	36.16	9.983		
7,800.00	7,788.86	7,821.86	7,789.13	28.03	25.64	-88.63	173.64	-640.97	361.07	324.44	36.63	9.856		
7,900.00	7,888.86	7,924.26	7,891.52	28.38	25.94	-88.78	172.69	-640.53	360.62	323.52	37.10	9.720		
8,000.00	7,988.86	8,026.22	7,993.47	28.73	26.23	-88.97	171.46	-639.46	359.55	321.98	37.57	9.571		
8,100.00	8,088.86	8,126.86	8,094.09	29.08	26.52	-89.19	170.04	-638.03	358.11	320.07	38.04	9.415		
8,200.00	8,188.86	8,226.86	8,194.06	29.43	26.81	-89.45	168.45	-636.53	356.59	318.08	38.51	9.259		
8,300.00	8,288.86	8,326.59	8,293.76	29.78	27.10	-89.72	166.73	-635.07	355.11	316.12	38.99	9.108		
8,400.00	8,388.86	8,425.95	8,393.10	30.13	27.39	-90.03	164.79	-633.74	353.76	314.30	39.47	8.963		
8,500.00	8,488.86	8,525.03	8,492.16	30.48	27.68	-90.30	163.13	-632.57	352.60	312.65	39.95	8.826		
8,600.00	8,588.86	8,623.28	8,590.40	30.83	27.98	-90.36	162.77	-631.89	351.91	311.47	40.43	8.704		
8,700.00	8,688.86	8,722.95	8,690.07	31.18	28.29	-90.29	163.19	-631.45	351.46	310.55	40.91	8.591		
8,800.00	8,788.86	8,822.48	8,789.60	31.53	28.60	-90.23	163.60	-631.11	351.11	309.72	41.39	8.482		
8,898.30	8,887.15	8,919.83	8,886.95	31.88	28.90	-90.21	163.72	-630.96	350.96	309.09	41.87	8.382		
8,900.00	8,888.86	8,921.52	8,888.63	31.88	28.91	-90.21	163.72	-630.96	350.96	309.08	41.88	8.381		
9,000.00	8,988.86	9,020.75	8,987.87	32.23	29.22	-90.27	163.36	-631.11	351.12	308.75	42.36	8.288		
9,100.00	9,088.86	9,119.95	9,087.05	32.58	29.54	-90.51	161.87	-631.39	351.41	308.55	42.85	8.200		
9,200.00	9,188.86	9,218.52	9,185.60	32.94	29.85	-90.86	159.74	-632.02	352.07	308.73	43.35	8.122		
9,300.00	9,288.86	9,316.12	9,283.18	33.29	30.17	-91.14	158.00	-633.11	353.22	309.38	43.84	8.057		
9,400.00	9,388.86	9,423.63	9,390.66	33.64	30.52	-91.39	156.40	-634.18	354.29	309.97	44.32	7.994		
9,500.00	9,488.86	9,527.61	9,494.63	33.99	30.84	-91.38	156.52	-632.72	352.87	308.08	44.78	7.880		
9,600.00	9,588.86	9,625.34	9,592.36	34.34	31.14	-91.40	156.43	-631.30	351.43	306.16	45.27	7.763		
9,700.00	9,688.86	9,723.92	9,690.93	34.70	31.44	-91.49	155.88	-630.47	350.60	304.84	45.76	7.662		
9,800.00	9,788.86	9,823.10	9,790.10	35.05	31.75	-91.68	154.75	-629.92	350.07	303.82	46.24	7.570		
9,900.00	9,888.86	9,924.69	9,891.69	35.40	32.07	-91.75	154.33	-629.23	349.41	302.68	46.72	7.478		

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Total Directional Services

Anticollision Report



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

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 35-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 22110-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.00	9,988.86	10,023.54	9,990.53	35.76	32.39	-91.94	153.22	-628.49	348.69	301.48	47.21	7.385		
10,094.10	10,082.96	10,115.79	10,082.76	36.09	32.68	-92.21	151.59	-628.17	348.43	300.75	47.68	7.308		
10,100.00	10,088.86	10,121.53	10,088.50	36.11	32.70	-92.22	151.52	-628.17	348.43	300.72	47.71	7.303		
10,200.00	10,188.86	10,219.45	10,186.41	36.46	33.02	-92.28	151.13	-628.57	348.85	300.65	48.21	7.237		
10,300.00	10,288.86	10,320.27	10,287.24	36.81	33.36	-92.26	151.25	-629.11	349.39	300.69	48.70	7.174		
10,400.00	10,388.86	10,422.01	10,388.97	37.17	33.70	-92.38	150.46	-629.31	349.61	300.42	49.19	7.108		
10,491.75	10,480.61	10,513.46	10,480.41	37.49	33.99	-92.63	148.94	-628.92	349.29	299.65	49.64	7.036		
10,500.00	10,488.86	10,521.13	10,488.08	37.52	34.02	-92.65	148.85	-628.92	349.30	299.62	49.68	7.031		
10,600.00	10,588.86	10,615.85	10,582.79	37.87	34.34	-92.69	148.54	-629.93	350.37	300.19	50.18	6.982		
10,700.00	10,688.86	10,715.02	10,681.94	38.23	34.68	-92.71	148.36	-631.84	352.30	301.62	50.68	6.951		
10,800.00	10,788.86	10,813.17	10,780.07	38.58	35.01	-92.86	147.33	-633.68	354.22	303.05	51.18	6.921		
10,900.00	10,888.86	10,910.18	10,877.03	38.94	35.35	-92.72	148.04	-636.64	357.24	305.56	51.67	6.914		
11,000.00	10,988.86	11,017.10	10,983.90	39.29	35.72	-92.69	148.11	-639.56	359.99	307.82	52.17	6.900		
11,100.00	11,088.86	11,120.90	11,087.70	39.64	36.07	-92.78	147.53	-639.98	360.41	307.75	52.66	6.844		
11,200.00	11,188.86	11,219.38	11,186.16	40.00	36.40	-93.08	145.62	-640.31	360.84	307.68	53.16	6.788		
11,300.00	11,288.86	11,316.34	11,283.07	40.35	36.72	-93.54	142.63	-641.19	361.93	308.27	53.66	6.745		
11,338.14	11,327.00	11,352.96	11,319.66	40.49	36.84	-93.75	141.31	-641.75	362.59	308.75	53.85	6.734		
11,350.00	11,338.86	11,364.27	11,330.96	40.53	36.88	87.00	140.85	-641.95	362.83	308.92	53.90	6.731		
11,400.00	11,388.74	11,411.98	11,378.61	40.69	37.04	87.04	138.67	-642.97	363.88	309.74	54.13	6.722		
11,450.00	11,438.15	11,460.27	11,426.81	40.84	37.20	87.70	136.19	-644.24	365.01	310.66	54.35	6.716		
11,500.00	11,486.71	11,508.23	11,474.71	40.99	37.36	89.03	134.04	-645.66	366.27	311.72	54.55	6.714		
11,550.00	11,534.06	11,555.10	11,521.51	41.13	37.52	90.91	132.09	-647.20	368.01	313.26	54.75	6.722		
11,600.00	11,579.84	11,600.87	11,567.20	41.26	37.68	93.17	129.79	-648.83	370.64	315.70	54.94	6.747		
11,650.00	11,623.69	11,643.84	11,610.04	41.38	37.83	95.52	126.92	-650.57	374.68	319.56	55.12	6.798		
11,700.00	11,665.28	11,691.11	11,656.94	41.48	37.99	98.19	121.67	-652.91	380.55	325.25	55.30	6.881		
11,750.00	11,704.29	11,740.51	11,705.65	41.58	38.15	101.02	113.69	-654.98	387.71	332.23	55.47	6.989		
11,800.00	11,740.44	11,788.35	11,752.24	41.67	38.30	103.62	103.06	-657.07	396.62	340.99	55.62	7.131		
11,850.00	11,773.44	11,851.04	11,811.63	41.74	38.49	106.96	83.35	-659.89	406.93	351.32	55.61	7.318		
11,900.00	11,803.04	11,944.84	11,894.12	41.81	38.72	111.43	39.07	-660.93	415.51	360.54	54.96	7.560		
11,950.00	11,829.02	12,005.00	11,942.60	41.89	38.84	113.66	3.49	-660.13	423.07	368.41	54.66	7.740		
12,000.00	11,851.18	12,063.22	11,986.44	42.01	38.94	115.60	-34.80	-659.92	431.89	377.57	54.32	7.950		
12,050.00	11,869.34	12,147.09	12,042.07	42.13	39.08	118.23	-97.44	-659.99	440.86	387.47	53.39	8.257		
12,100.00	11,883.38	12,266.52	12,101.26	42.26	39.24	121.22	-200.63	-654.12	444.08	392.26	51.82	8.570		
12,150.00	11,893.19	12,346.49	12,129.25	42.39	39.37	122.71	-275.35	-649.22	446.46	395.26	51.19	8.721		
12,200.00	11,898.69	12,447.42	12,147.32	42.53	39.60	123.89	-374.11	-642.02	445.65	394.94	50.71	8.788		
12,235.41	11,899.95	12,482.61	12,148.01	42.63	39.70	123.91	-409.28	-641.06	444.95	394.13	50.82	8.755		
12,250.00	11,899.84	12,495.12	12,148.01	42.67	39.74	123.91	-421.78	-640.96	445.09	394.22	50.86	8.751		
12,258.12	11,899.61	12,502.07	12,147.99	42.70	39.76	123.90	-428.73	-640.94	445.28	394.40	50.88	8.751		
12,300.00	11,898.15	12,537.92	12,147.73	42.83	39.88	123.95	-464.58	-641.32	446.79	395.79	51.00	8.761		
12,400.00	11,894.66	12,622.57	12,147.58	43.19	40.21	123.94	-549.17	-644.30	452.74	401.36	51.38	8.811		
12,500.00	11,891.18	12,712.84	12,151.14	43.60	40.62	124.27	-639.28	-648.22	461.67	409.93	51.74	8.923		
12,600.00	11,887.69	12,834.79	12,156.24	44.07	41.25	124.83	-761.04	-652.15	470.04	417.96	52.07	9.026		
12,700.00	11,884.21	12,952.18	12,155.31	44.60	41.93	125.03	-878.41	-651.98	472.54	419.93	52.61	8.982		
12,800.00	11,880.72	13,057.12	12,154.26	45.18	42.59	125.28	-983.34	-650.69	474.19	421.01	53.18	8.917		
12,900.00	11,877.24	13,180.13	12,145.80	45.81	43.45	124.94	-1,105.99	-647.77	471.33	417.26	54.07	8.717		
13,000.00	11,873.75	13,276.87	12,134.83	46.49	44.18	124.19	-1,202.09	-646.18	466.69	411.54	55.14	8.463		
13,100.00	11,870.27	13,371.93	12,123.52	47.22	44.96	123.26	-1,296.48	-646.45	463.41	407.05	56.36	8.223		
13,200.00	11,866.78	13,477.61	12,111.18	47.99	45.86	122.25	-1,401.43	-646.52	460.23	402.54	57.69	7.978		
13,300.00	11,863.30	13,569.68	12,101.15	48.81	46.68	121.47	-1,492.94	-646.06	457.09	398.10	58.99	7.749		
13,400.00	11,859.81	13,663.11	12,094.63	49.67	47.54	121.09	-1,586.14	-645.11	455.63	395.45	60.18	7.571		
13,500.00	11,856.33	13,766.51	12,089.23	50.57	48.53	120.92	-1,689.38	-643.21	454.37	393.02	61.35	7.407		
13,544.20	11,854.79	13,803.92	12,087.81	50.98	48.90	120.93	-1,726.75	-642.41	454.04	392.19	61.84	7.342		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 35-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 22110-BLIND													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,600.00	11,852.84	13,851.16	12,087.38	51.50	49.37	121.07	-1,773.98	-641.53	454.57	392.15	62.41	7.283		
13,700.00	11,849.36	13,967.18	12,085.97	52.47	50.55	121.47	-1,889.93	-638.13	454.43	391.01	63.41	7.166		
13,800.00	11,845.87	14,070.90	12,083.28	53.47	51.64	121.78	-1,993.52	-633.46	452.28	387.81	64.48	7.015		
13,900.00	11,842.38	14,171.45	12,083.32	54.51	52.72	122.51	-2,093.84	-626.83	449.77	384.41	65.36	6.882		
14,000.00	11,838.90	14,263.17	12,083.22	55.57	53.74	123.15	-2,185.38	-621.19	447.68	381.37	66.31	6.752		
14,016.92	11,838.31	14,277.14	12,083.38	55.76	53.89	123.25	-2,199.34	-620.51	447.62	381.15	66.47	6.734		
14,100.00	11,835.41	14,349.46	12,084.90	56.67	54.72	123.78	-2,271.60	-618.09	448.83	381.57	67.26	6.673		
14,200.00	11,831.93	14,447.94	12,083.37	57.79	55.86	123.82	-2,370.04	-618.94	451.81	383.24	68.57	6.589		
14,300.00	11,828.44	14,554.75	12,080.02	58.93	57.13	123.70	-2,476.80	-619.63	453.72	383.73	70.00	6.482		
14,400.00	11,824.96	14,650.24	12,076.74	60.10	58.29	123.60	-2,572.24	-619.74	455.05	383.62	71.43	6.370		
14,500.00	11,821.47	14,740.37	12,074.74	61.29	59.39	123.52	-2,662.33	-621.33	458.42	385.54	72.88	6.290		
14,600.00	11,817.99	14,838.77	12,074.93	62.50	60.62	123.66	-2,760.70	-623.35	463.35	389.12	74.23	6.242		
14,700.00	11,814.50	14,932.31	12,075.27	63.73	61.80	123.81	-2,854.22	-625.16	468.31	392.74	75.57	6.197		
14,800.00	11,811.02	15,029.77	12,075.84	64.98	63.04	123.85	-2,951.60	-629.09	475.11	398.08	77.03	6.168		
14,900.00	11,807.53	15,130.18	12,077.79	66.25	64.35	124.13	-3,051.96	-631.65	481.44	403.09	78.35	6.144		
15,000.00	11,804.05	15,228.37	12,081.65	67.53	65.64	124.64	-3,150.05	-633.15	488.07	408.55	79.51	6.138		
15,100.00	11,800.56	15,336.00	12,085.30	68.83	67.07	125.15	-3,257.60	-634.59	494.29	413.57	80.73	6.123		
15,200.00	11,797.08	15,417.64	12,086.06	70.14	68.16	125.21	-3,339.18	-637.70	501.15	419.04	82.12	6.103		
15,300.00	11,793.59	15,511.69	12,087.31	71.47	69.43	125.10	-3,432.97	-644.42	510.91	427.20	83.71	6.103		
15,400.00	11,790.10	15,596.22	12,089.71	72.81	70.58	125.09	-3,517.20	-650.90	522.03	436.89	85.14	6.131		
15,500.00	11,786.62	15,688.61	12,098.53	74.16	71.86	125.71	-3,608.99	-656.71	535.84	449.66	86.17	6.218		
15,600.00	11,783.13	15,792.15	12,109.40	75.53	73.30	126.51	-3,711.79	-662.38	549.68	462.48	87.20	6.304		
15,700.00	11,779.65	15,909.01	12,121.35	76.91	74.94	127.50	-3,827.96	-666.07	561.65	473.47	88.18	6.369		
15,800.00	11,776.16	16,048.20	12,133.24	78.29	76.91	128.87	-3,966.59	-663.51	568.89	480.03	88.86	6.402		
15,900.00	11,772.68	16,159.84	12,134.82	79.69	78.50	129.45	-4,078.13	-659.60	570.28	480.33	89.95	6.340		
16,000.00	11,769.19	16,240.08	12,139.91	81.10	79.65	130.29	-4,158.05	-654.73	573.11	482.45	90.67	6.321		
16,100.00	11,765.71	16,353.70	12,149.94	82.51	81.28	131.77	-4,270.88	-646.53	576.82	485.93	90.90	6.346		
16,200.00	11,762.22	16,499.94	12,151.39	83.94	83.39	133.13	-4,416.25	-631.35	572.13	481.04	91.09	6.281		
16,300.00	11,758.74	16,589.06	12,150.13	85.37	84.69	133.74	-4,504.99	-623.28	567.99	475.98	92.01	6.173		
16,400.00	11,755.25	16,681.25	12,147.65	86.81	86.03	134.07	-4,596.99	-617.95	565.39	472.23	93.16	6.069		
16,490.22	11,752.11	16,760.02	12,145.46	88.12	87.19	134.24	-4,675.66	-614.99	564.36	470.04	94.32	5.983		
16,500.00	11,751.77	16,767.11	12,145.35	88.26	87.30	134.26	-4,682.75	-614.78	564.40	469.96	94.44	5.976		
16,600.00	11,748.28	16,840.04	12,146.36	89.72	88.37	134.54	-4,755.66	-613.41	567.47	471.95	95.52	5.941		
16,700.00	11,744.79	16,941.35	12,150.26	91.18	89.88	135.07	-4,856.88	-611.96	572.64	476.16	96.48	5.935		
16,800.00	11,741.31	17,031.20	12,154.26	92.64	91.21	135.53	-4,946.63	-611.23	578.72	481.32	97.40	5.942		
16,900.00	11,737.82	17,126.19	12,159.58	94.12	92.63	136.04	-5,041.48	-611.06	586.10	487.80	98.30	5.962		
17,000.00	11,734.34	17,226.37	12,166.13	95.60	94.14	136.67	-5,141.44	-610.25	593.79	494.68	99.11	5.991		
17,100.00	11,730.85	17,321.70	12,172.55	97.08	95.57	137.26	-5,236.55	-609.62	601.80	501.91	99.89	6.024		
17,200.00	11,727.37	17,410.91	12,180.25	98.57	96.92	137.92	-5,325.41	-608.78	611.10	510.61	100.48	6.081		
17,300.00	11,723.88	17,490.00	12,190.04	100.07	98.12	138.75	-5,403.87	-606.95	622.52	521.87	100.65	6.185		
17,400.00	11,720.40	17,554.21	12,201.35	101.57	99.09	139.58	-5,467.05	-605.71	638.47	538.09	100.37	6.361		
17,500.00	11,716.91	17,666.76	12,226.15	103.08	100.79	141.22	-5,576.81	-604.19	658.58	558.38	100.21	6.572		
17,600.00	11,713.43	17,844.56	12,247.71	104.59	103.50	143.13	-5,752.80	-595.39	667.93	567.40	100.53	6.644		
17,700.00	11,709.94	17,987.35	12,248.00	106.10	105.68	143.74	-5,895.36	-588.37	668.16	566.75	101.42	6.588		
17,800.00	11,706.46	18,087.18	12,246.49	107.62	107.21	144.14	-5,995.01	-582.66	667.23	564.95	102.28	6.524		
17,900.00	11,702.97	18,190.82	12,243.21	109.14	108.81	144.25	-6,098.55	-579.84	666.75	563.24	103.51	6.442		
18,000.00	11,699.49	18,294.49	12,237.61	110.66	110.40	144.21	-6,202.04	-577.47	664.68	559.76	104.91	6.335		
18,076.38	11,696.82	18,358.89	12,233.42	111.83	111.40	144.01	-6,266.30	-577.95	663.81	557.63	106.17	6.252		
18,100.00	11,696.00	18,376.69	12,232.50	112.19	111.67	143.96	-6,284.08	-578.24	663.91	557.37	106.54	6.232		
18,200.00	11,692.51	18,463.32	12,229.97	113.73	113.00	143.77	-6,370.65	-580.04	666.35	558.26	108.09	6.165		
18,300.00	11,689.03	18,575.65	12,226.30	115.26	114.74	143.53	-6,482.90	-582.11	668.49	558.59	109.89	6.083		
18,400.00	11,685.54	18,672.82	12,221.83	116.80	116.24	143.29	-6,579.95	-583.42	669.26	557.66	111.60	5.997		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 - OH		Offset Site Error:	0.00 usft
Survey Program: 35-OWSG (Rev2) MWD, 1424-OWSG (Rev2) MWD, 22110-BLIND													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
18,500.00	11,682.06	18,754.18	12,219.54	118.34	117.50	143.12	-6,661.25	-585.13	671.95	558.84	113.10	5.941				
18,600.00	11,678.57	18,841.74	12,220.64	119.89	118.86	143.15	-6,748.79	-586.62	677.56	563.19	114.37	5.924				
18,700.00	11,675.09	18,959.97	12,222.18	121.43	120.70	143.25	-6,867.01	-587.68	682.88	567.03	115.84	5.895				
18,800.00	11,671.60	19,044.83	12,222.00	122.98	122.02	143.29	-6,951.85	-587.82	686.60	569.55	117.05	5.866				
18,900.00	11,668.12	19,137.77	12,227.79	124.54	123.48	143.83	-7,044.56	-585.12	693.48	575.88	117.60	5.897				
19,000.00	11,664.63	19,237.57	12,234.07	126.09	125.05	144.49	-7,144.07	-580.85	699.75	581.70	118.04	5.928				
19,100.00	11,661.15	19,352.73	12,242.52	127.65	126.86	145.45	-7,258.68	-573.59	705.90	587.70	118.20	5.972				
19,200.00	11,657.66	19,444.65	12,248.70	129.21	128.31	146.26	-7,350.11	-566.55	710.89	592.61	118.28	6.010				
19,300.00	11,654.18	19,560.07	12,255.49	130.77	130.13	147.15	-7,465.00	-558.76	715.84	597.36	118.48	6.042				
19,400.00	11,650.69	19,675.29	12,254.98	132.34	131.94	147.33	-7,580.18	-556.75	718.19	598.50	119.69	6.000				
19,500.00	11,647.21	19,786.31	12,251.22	133.90	133.69	147.20	-7,691.14	-557.12	719.26	597.97	121.29	5.930				
19,566.37	11,644.89	19,852.82	12,248.03	134.95	134.73	147.11	-7,757.56	-556.93	718.94	596.63	122.31	5.878				
19,600.00	11,643.72	19,879.03	12,247.06	135.47	135.15	147.09	-7,783.76	-556.89	719.11	596.35	122.76	5.858				
19,700.00	11,640.23	19,969.44	12,245.21	137.04	136.57	147.03	-7,874.14	-557.29	721.29	597.15	124.13	5.811				
19,800.00	11,636.75	20,054.55	12,243.24	138.62	137.91	146.90	-7,959.22	-558.70	724.06	598.50	125.56	5.767				
19,900.00	11,633.26	20,131.78	12,244.56	140.19	139.13	146.87	-8,036.41	-560.67	730.46	603.77	126.69	5.766				
20,000.00	11,629.78	20,239.22	12,247.39	141.77	140.83	146.90	-8,143.78	-562.93	737.51	609.36	128.15	5.755				
20,100.00	11,626.29	20,337.42	12,249.32	143.34	142.38	146.94	-8,241.96	-564.40	743.69	614.23	129.45	5.745				
20,200.00	11,622.81	20,434.58	12,252.64	144.92	143.92	147.04	-8,339.05	-565.74	750.99	620.35	130.64	5.749				
20,300.00	11,619.32	20,529.56	12,255.77	146.50	145.42	147.18	-8,433.98	-566.35	757.83	626.11	131.72	5.753				
20,400.00	11,615.84	20,630.04	12,260.00	148.09	147.02	147.28	-8,534.34	-568.32	766.14	633.16	132.98	5.761				
20,500.00	11,612.35	20,719.85	12,262.93	149.67	148.44	147.34	-8,624.08	-570.01	773.68	639.58	134.10	5.769				
20,600.00	11,608.87	20,827.24	12,267.37	151.26	150.15	147.29	-8,731.29	-574.44	783.17	647.43	135.74	5.770				
20,700.00	11,605.38	20,947.20	12,270.48	152.84	152.05	147.42	-8,851.20	-575.36	789.41	652.20	137.21	5.753				
20,800.00	11,601.90	21,054.26	12,272.71	154.43	153.76	147.63	-8,958.23	-574.08	794.23	655.93	138.30	5.743				
20,900.00	11,598.41	21,157.31	12,273.37	156.02	155.40	147.72	-9,061.28	-573.92	798.40	658.85	139.55	5.721				
21,000.00	11,594.92	21,260.48	12,274.45	157.61	157.05	147.89	-9,164.43	-572.57	802.31	661.65	140.65	5.704				
21,100.00	11,591.44	21,362.92	12,275.38	159.20	158.69	148.12	-9,266.84	-570.16	805.54	663.91	141.63	5.688				
21,200.00	11,587.95	21,458.41	12,278.59	160.80	160.22	148.60	-9,362.11	-564.78	809.17	667.11	142.05	5.696				
21,300.00	11,584.47	21,552.45	12,282.20	162.39	161.73	149.08	-9,455.94	-559.63	813.34	670.88	142.46	5.709				
21,400.00	11,580.98	21,651.12	12,284.15	163.99	163.31	149.25	-9,554.58	-558.64	818.26	674.76	143.50	5.702				
21,500.00	11,577.50	21,740.73	12,285.41	165.58	164.75	149.32	-9,644.18	-558.82	823.33	678.75	144.59	5.694				
21,600.00	11,574.01	21,826.54	12,288.43	167.18	166.12	149.43	-9,729.93	-559.33	830.37	684.84	145.53	5.706				
21,700.00	11,570.53	21,950.65	12,293.58	168.78	168.11	149.68	-9,853.93	-558.85	837.68	690.89	146.79	5.706				
21,800.00	11,567.04	22,048.11	12,296.09	170.38	169.68	149.97	-9,951.31	-556.06	842.21	694.64	147.57	5.707				
21,900.00	11,563.56	22,110.00	12,298.25	171.98	177.21	150.18	-10,013.13	-554.12	848.23	698.00	150.23	5.646 SF				
22,000.00	11,560.07	22,110.00	12,298.25	173.58	177.21	150.18	-10,013.13	-554.12	863.58	714.67	148.91	5.799				
22,062.86	11,557.88	22,110.00	12,298.25	174.48	177.21	150.18	-10,013.13	-554.12	878.93	730.90	148.03	5.937				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	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 701H2 - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
				(usft)	(usft)	(°)								
0.00	0.00	0.00	0.00	0.00	0.00	-90.52	-0.32	-34.99	34.99					
100.00	100.00	100.00	100.00	0.13	0.13	-90.52	-0.32	-34.99	34.99	34.81	0.18	197.208		
200.00	200.00	200.00	200.00	0.48	0.48	-90.52	-0.32	-34.99	34.99	34.31	0.68	51.128		
300.00	300.00	300.00	300.00	0.84	0.84	-90.52	-0.32	-34.99	34.99	33.80	1.19	29.371		
400.00	400.00	400.00	400.00	1.20	1.20	-90.52	-0.32	-34.99	34.99	33.29	1.70	20.604		
500.00	500.00	500.00	500.00	1.56	1.56	-90.52	-0.32	-34.99	34.99	32.79	2.21	15.867		
600.00	600.00	600.00	600.00	1.92	1.92	-90.52	-0.32	-34.99	34.99	32.28	2.71	12.901		
700.00	700.00	700.00	700.00	2.28	2.28	-90.52	-0.32	-34.99	34.99	31.77	3.22	10.870		
800.00	800.00	800.00	800.00	2.63	2.63	-90.52	-0.32	-34.99	34.99	31.27	3.73	9.391		
900.00	900.00	900.00	900.00	2.99	2.99	-90.52	-0.32	-34.99	34.99	30.76	4.23	8.266		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.52	-0.32	-34.99	34.99	30.25	4.74	7.382		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-90.52	-0.32	-34.99	34.99	29.74	5.25	6.669		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-90.52	-0.32	-34.99	34.99	29.24	5.75	6.081		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.52	-0.32	-34.99	34.99	28.73	6.26	5.589		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.52	-0.32	-34.99	34.99	28.22	6.77	5.170	CC, ES	
1,500.00	1,500.00	1,499.07	1,499.06	5.14	5.13	-90.51	-0.32	-36.27	36.29	29.02	7.26	4.996		
1,600.00	1,600.00	1,598.01	1,597.92	5.50	5.47	-90.46	-0.32	-40.12	40.18	32.43	7.75	5.184		
1,700.00	1,700.00	1,696.68	1,696.38	5.86	5.82	-90.39	-0.32	-46.51	46.65	38.42	8.23	5.667		
1,800.00	1,800.00	1,794.96	1,794.25	6.22	6.16	-90.33	-0.32	-55.39	55.69	46.98	8.71	6.396		
1,900.00	1,900.00	1,892.71	1,891.35	6.58	6.51	-90.27	-0.32	-66.72	67.28	58.11	9.18	7.332		
2,000.00	2,000.00	1,990.87	1,988.56	6.94	6.87	-90.23	-0.32	-80.27	81.08	71.43	9.66	8.396		
2,100.00	2,099.99	2,090.01	2,086.72	7.29	7.25	-31.01	-0.32	-94.26	94.08	83.93	10.15	9.267		
2,200.00	2,199.91	2,189.41	2,185.12	7.64	7.62	-31.96	-0.32	-108.28	104.86	94.22	10.65	9.851		
2,266.94	2,266.72	2,256.05	2,251.10	7.88	7.88	-32.90	-0.32	-117.68	110.87	99.90	10.98	10.100		
2,300.00	2,299.70	2,288.99	2,283.70	8.00	8.01	-33.43	-0.32	-122.33	113.61	102.47	11.14	10.197		
2,400.00	2,399.46	2,388.59	2,382.31	8.35	8.39	-34.89	-0.32	-136.38	121.95	110.31	11.64	10.476		
2,500.00	2,499.21	2,488.20	2,480.92	8.71	8.78	-36.16	-0.32	-150.43	130.36	118.22	12.14	10.735		
2,600.00	2,598.97	2,587.81	2,579.53	9.06	9.18	-37.28	-0.32	-164.49	138.82	126.18	12.65	10.977		
2,700.00	2,698.73	2,687.41	2,678.14	9.42	9.57	-38.27	-0.32	-178.54	147.33	134.18	13.15	11.203		
2,800.00	2,798.48	2,787.02	2,776.75	9.78	9.97	-39.15	-0.32	-192.59	155.88	142.22	13.66	11.413		
2,900.00	2,898.24	2,886.63	2,875.36	10.15	10.37	-39.94	-0.32	-206.64	164.46	150.29	14.17	11.609		
3,000.00	2,997.99	2,986.88	2,974.62	10.51	10.77	-40.56	-0.04	-220.75	172.98	158.30	14.68	11.782		
3,100.00	3,097.75	3,087.95	3,074.69	10.87	11.18	-40.45	2.49	-234.66	180.83	165.62	15.21	11.892		
3,200.00	3,197.51	3,187.66	3,173.41	11.24	11.58	-39.99	6.20	-248.22	188.30	172.59	15.72	11.981		
3,300.00	3,297.26	3,287.37	3,272.12	11.60	11.99	-39.57	9.91	-261.78	195.79	179.56	16.23	12.065		
3,400.00	3,397.02	3,387.08	3,370.83	11.96	12.39	-39.18	13.62	-275.35	203.28	186.54	16.74	12.144		
3,500.00	3,496.77	3,486.79	3,469.55	12.33	12.80	-38.81	17.33	-288.91	210.79	193.54	17.25	12.218		
3,600.00	3,596.53	3,586.50	3,568.26	12.70	13.21	-38.47	21.04	-302.47	218.30	200.54	17.77	12.288		
3,700.00	3,696.28	3,686.21	3,666.97	13.06	13.62	-38.16	24.75	-316.03	225.82	207.54	18.28	12.354		
3,800.00	3,796.04	3,785.92	3,765.69	13.43	14.02	-37.86	28.46	-329.59	233.35	214.55	18.79	12.417		
3,900.00	3,895.80	3,885.63	3,864.40	13.80	14.43	-37.58	32.17	-343.15	240.88	221.57	19.31	12.476		
4,000.00	3,995.55	3,985.34	3,963.11	14.17	14.85	-37.32	35.88	-356.71	248.42	228.60	19.82	12.532		
4,100.00	4,095.31	4,085.05	4,061.83	14.53	15.26	-37.08	39.59	-370.27	255.96	235.62	20.34	12.586		
4,200.00	4,195.06	4,184.76	4,160.54	14.90	15.67	-36.85	43.30	-383.83	263.51	242.65	20.85	12.636		
4,300.00	4,294.82	4,284.47	4,259.25	15.27	16.08	-36.63	47.01	-397.40	271.06	249.69	21.37	12.685		
4,400.00	4,394.58	4,384.18	4,357.97	15.64	16.49	-36.42	50.72	-410.96	278.61	256.73	21.88	12.731		
4,500.00	4,494.33	4,483.89	4,456.68	16.01	16.91	-36.23	54.43	-424.52	286.17	263.77	22.40	12.775		
4,600.00	4,594.09	4,583.59	4,555.39	16.38	17.32	-36.04	58.13	-438.08	293.73	270.81	22.92	12.817		
4,700.00	4,693.84	4,683.30	4,654.11	16.75	17.74	-35.86	61.84	-451.64	301.29	277.86	23.43	12.857		
4,800.00	4,793.60	4,783.01	4,752.82	17.12	18.15	-35.70	65.55	-465.20	308.86	284.91	23.95	12.896		
4,900.00	4,893.36	4,882.72	4,851.53	17.49	18.56	-35.54	69.26	-478.76	316.43	291.96	24.47	12.932		
5,000.00	4,993.11	4,982.43	4,950.24	17.86	18.98	-35.39	72.97	-492.32	324.00	299.02	24.98	12.968		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,092.87	5,082.14	5,048.96	18.23	19.40	-35.24	76.68	-505.88	331.57	306.07	25.50	13.002		
5,200.00	5,192.62	5,181.85	5,147.67	18.60	19.81	-35.10	80.39	-519.45	339.15	313.13	26.02	13.034		
5,300.00	5,292.38	5,281.56	5,246.38	18.97	20.23	-34.97	84.10	-533.01	346.73	320.19	26.54	13.066		
5,400.00	5,392.14	5,381.27	5,345.10	19.34	20.64	-34.84	87.81	-546.57	354.31	327.25	27.06	13.096		
5,500.00	5,491.89	5,480.98	5,443.81	19.71	21.06	-34.72	91.52	-560.13	361.89	334.31	27.57	13.125		
5,600.00	5,591.65	5,580.69	5,542.52	20.08	21.48	-34.60	95.23	-573.69	369.47	341.38	28.09	13.153		
5,700.00	5,691.40	5,680.40	5,641.24	20.46	21.89	-34.49	98.94	-587.25	377.05	348.44	28.61	13.179		
5,800.00	5,791.16	5,780.11	5,739.95	20.83	22.31	-34.38	102.65	-600.81	384.64	355.51	29.13	13.205		
5,900.00	5,890.91	5,879.82	5,838.66	21.20	22.73	-34.28	106.36	-614.37	392.23	362.58	29.65	13.230		
6,000.00	5,990.67	5,979.53	5,937.38	21.57	23.15	-34.18	110.07	-627.93	399.81	369.65	30.16	13.255		
6,100.00	6,090.43	6,079.24	6,036.09	21.94	23.56	-34.08	113.78	-641.50	407.40	376.72	30.68	13.278		
6,200.00	6,190.18	6,178.94	6,134.80	22.31	23.98	-33.99	117.49	-655.06	414.99	383.79	31.20	13.301		
6,300.00	6,289.94	6,278.65	6,233.52	22.69	24.40	-33.90	121.20	-668.62	422.58	390.86	31.72	13.322		
6,400.00	6,389.69	6,378.36	6,332.23	23.06	24.82	-33.82	124.91	-682.18	430.17	397.94	32.24	13.343		
6,500.00	6,489.45	6,478.07	6,430.94	23.43	25.24	-33.74	128.62	-695.74	437.77	405.01	32.76	13.364		
6,600.00	6,589.21	6,577.78	6,529.66	23.80	25.66	-33.66	132.33	-709.30	445.36	412.09	33.28	13.384		
6,654.20	6,643.28	6,631.83	6,583.16	24.00	25.88	-33.61	134.34	-716.65	449.48	415.92	33.56	13.394		
6,700.00	6,688.98	6,677.47	6,628.35	24.17	26.07	-33.59	136.03	-722.86	453.18	419.39	33.79	13.410		
6,800.00	6,788.88	6,776.98	6,726.86	24.54	26.49	-33.42	139.74	-736.39	462.86	428.56	34.31	13.491		
6,900.00	6,888.86	6,876.21	6,825.11	24.89	26.91	-33.11	143.43	-749.89	474.73	439.92	34.82	13.636		
6,921.14	6,910.00	6,897.15	6,845.84	24.97	27.00	-92.52	144.21	-752.74	477.52	442.60	34.92	13.674		
7,000.00	6,988.86	6,975.22	6,923.13	25.24	27.32	-92.12	147.11	-763.36	488.13	452.82	35.32	13.822		
7,100.00	7,088.86	7,086.51	7,033.47	25.59	27.78	-91.62	150.92	-777.29	500.57	464.68	35.89	13.949		
7,200.00	7,188.86	7,200.45	7,146.82	25.93	28.23	-91.24	153.95	-788.37	510.22	473.78	36.45	14.000		
7,300.00	7,288.86	7,314.98	7,261.06	26.28	28.65	-90.99	156.10	-796.21	517.03	480.05	36.98	13.982		
7,400.00	7,388.86	7,429.89	7,375.87	26.63	29.05	-90.84	157.34	-800.75	520.97	483.48	37.48	13.898		
7,500.00	7,488.86	7,542.89	7,488.86	26.98	29.43	-90.80	157.68	-801.99	522.04	484.08	37.96	13.751		
7,600.00	7,588.86	7,642.89	7,588.86	27.33	29.74	-90.80	157.68	-801.99	522.04	483.59	38.45	13.577		
7,700.00	7,688.86	7,742.89	7,688.86	27.68	30.06	-90.80	157.68	-801.99	522.04	483.10	38.94	13.406		
7,800.00	7,788.86	7,842.89	7,788.86	28.03	30.38	-90.80	157.68	-801.99	522.04	482.61	39.43	13.240		
7,900.00	7,888.86	7,942.89	7,888.86	28.38	30.70	-90.80	157.68	-801.99	522.04	482.12	39.92	13.078		
8,000.00	7,988.86	8,042.89	7,988.86	28.73	31.02	-90.80	157.68	-801.99	522.04	481.63	40.41	12.919		
8,100.00	8,088.86	8,142.89	8,088.86	29.08	31.34	-90.80	157.68	-801.99	522.04	481.14	40.90	12.764		
8,200.00	8,188.86	8,242.89	8,188.86	29.43	31.66	-90.80	157.68	-801.99	522.04	480.65	41.39	12.613		
8,300.00	8,288.86	8,342.89	8,288.86	29.78	31.98	-90.80	157.68	-801.99	522.04	480.16	41.88	12.465		
8,400.00	8,388.86	8,442.89	8,388.86	30.13	32.31	-90.80	157.68	-801.99	522.04	479.67	42.37	12.321		
8,500.00	8,488.86	8,542.89	8,488.86	30.48	32.63	-90.80	157.68	-801.99	522.04	479.18	42.86	12.179		
8,600.00	8,588.86	8,642.89	8,588.86	30.83	32.96	-90.80	157.68	-801.99	522.04	478.69	43.36	12.041		
8,700.00	8,688.86	8,742.89	8,688.86	31.18	33.28	-90.80	157.68	-801.99	522.04	478.19	43.85	11.906		
8,800.00	8,788.86	8,842.89	8,788.86	31.53	33.61	-90.80	157.68	-801.99	522.04	477.70	44.34	11.773		
8,900.00	8,888.86	8,942.89	8,888.86	31.88	33.93	-90.80	157.68	-801.99	522.04	477.21	44.83	11.644		
9,000.00	8,988.86	9,042.89	8,988.86	32.23	34.26	-90.80	157.68	-801.99	522.04	476.71	45.33	11.517		
9,100.00	9,088.86	9,142.89	9,088.86	32.58	34.59	-90.80	157.68	-801.99	522.04	476.22	45.82	11.393		
9,200.00	9,188.86	9,242.89	9,188.86	32.94	34.92	-90.80	157.68	-801.99	522.04	475.73	46.31	11.272		
9,300.00	9,288.86	9,342.89	9,288.86	33.29	35.25	-90.80	157.68	-801.99	522.04	475.23	46.81	11.153		
9,400.00	9,388.86	9,442.89	9,388.86	33.64	35.58	-90.80	157.68	-801.99	522.04	474.74	47.30	11.036		
9,500.00	9,488.86	9,542.89	9,488.86	33.99	35.91	-90.80	157.68	-801.99	522.04	474.24	47.80	10.922		
9,600.00	9,588.86	9,642.89	9,588.86	34.34	36.24	-90.80	157.68	-801.99	522.04	473.75	48.29	10.810		
9,700.00	9,688.86	9,742.89	9,688.86	34.70	36.57	-90.80	157.68	-801.99	522.04	473.25	48.79	10.700		
9,800.00	9,788.86	9,842.89	9,788.86	35.05	36.90	-90.80	157.68	-801.99	522.04	472.76	49.28	10.593		
9,900.00	9,888.86	9,942.89	9,888.86	35.40	37.23	-90.80	157.68	-801.99	522.04	472.26	49.78	10.487		
10,000.00	9,988.86	10,042.89	9,988.86	35.76	37.57	-90.80	157.68	-801.99	522.04	471.77	50.28	10.384		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	10,088.86	10,142.89	10,088.86	36.11	37.90	-90.80	157.68	-801.99	522.04	471.27	50.77	10.282		
10,200.00	10,188.86	10,242.89	10,188.86	36.46	38.23	-90.80	157.68	-801.99	522.04	470.77	51.27	10.183		
10,300.00	10,288.86	10,342.89	10,288.86	36.81	38.57	-90.80	157.68	-801.99	522.04	470.28	51.76	10.085		
10,400.00	10,388.86	10,442.89	10,388.86	37.17	38.90	-90.80	157.68	-801.99	522.04	469.78	52.26	9.989		
10,500.00	10,488.86	10,542.89	10,488.86	37.52	39.24	-90.80	157.68	-801.99	522.04	469.28	52.76	9.895		
10,600.00	10,588.86	10,642.89	10,588.86	37.87	39.57	-90.80	157.68	-801.99	522.04	468.79	53.26	9.802		
10,700.00	10,688.86	10,742.89	10,688.86	38.23	39.91	-90.80	157.68	-801.99	522.04	468.29	53.75	9.712		
10,800.00	10,788.86	10,842.89	10,788.86	38.58	40.25	-90.80	157.68	-801.99	522.04	467.79	54.25	9.623		
10,900.00	10,888.86	10,942.89	10,888.86	38.94	40.58	-90.80	157.68	-801.99	522.04	467.29	54.75	9.535		
11,000.00	10,988.86	11,042.89	10,988.86	39.29	40.92	-90.80	157.68	-801.99	522.04	466.79	55.25	9.449		
11,100.00	11,088.86	11,142.89	11,088.86	39.64	41.26	-90.80	157.68	-801.99	522.04	466.30	55.74	9.365		
11,200.00	11,188.86	11,242.89	11,188.86	40.00	41.60	-90.80	157.68	-801.99	522.04	465.80	56.24	9.282		
11,300.00	11,288.86	11,342.89	11,288.86	40.35	41.93	-90.80	157.68	-801.99	522.04	465.30	56.74	9.200		
11,338.14	11,327.00	11,381.03	11,327.00	40.49	42.06	-90.80	157.68	-801.99	522.04	465.11	56.93	9.170		
11,350.00	11,338.86	11,392.89	11,338.86	40.53	42.10	90.03	157.68	-801.99	522.04	465.05	56.99	9.160		
11,400.00	11,388.74	11,442.77	11,388.74	40.69	42.27	90.38	157.68	-801.99	522.05	464.83	57.22	9.123		
11,450.00	11,438.15	11,492.18	11,438.15	40.84	42.44	91.19	157.68	-801.99	522.16	464.71	57.44	9.090		
11,500.00	11,486.71	11,540.74	11,486.71	40.99	42.60	92.41	157.68	-801.99	522.54	464.89	57.66	9.063		
11,550.00	11,534.06	11,588.09	11,534.06	41.13	42.76	93.97	157.68	-801.99	523.49	465.63	57.86	9.047		
11,600.00	11,579.84	11,633.87	11,579.84	41.26	42.92	95.79	157.68	-801.99	525.36	467.30	58.06	9.049		
11,650.00	11,623.69	11,677.72	11,623.69	41.38	43.07	97.74	157.68	-801.99	528.59	470.34	58.26	9.074		
11,700.00	11,665.28	11,727.17	11,673.10	41.48	43.23	100.07	156.13	-801.98	533.39	474.96	58.43	9.129		
11,750.00	11,704.29	11,780.90	11,726.42	41.58	43.39	102.46	149.68	-801.92	539.44	480.88	58.56	9.212		
11,800.00	11,740.44	11,838.25	11,782.40	41.67	43.55	104.84	137.32	-801.81	546.60	487.97	58.63	9.323		
11,850.00	11,773.44	11,899.87	11,840.84	41.74	43.72	107.20	117.87	-801.64	554.65	496.06	58.59	9.467		
11,900.00	11,803.04	11,966.46	11,901.25	41.81	43.89	109.54	89.94	-801.40	563.35	504.94	58.40	9.646		
11,950.00	11,829.02	12,038.76	11,962.68	41.89	44.04	111.82	51.92	-801.07	572.34	514.31	58.03	9.863		
12,000.00	11,851.18	12,117.46	12,023.53	42.01	44.19	114.00	2.11	-800.63	581.21	523.77	57.45	10.117		
12,050.00	11,869.34	12,203.04	12,081.27	42.13	44.32	116.01	-60.96	-800.08	589.50	532.82	56.69	10.399		
12,100.00	11,883.38	12,295.59	12,132.39	42.26	44.44	117.74	-137.98	-799.41	596.69	540.86	55.84	10.686		
12,150.00	11,893.19	12,394.47	12,172.56	42.39	44.56	119.06	-228.19	-798.62	602.26	547.20	55.06	10.938		
12,200.00	11,898.69	12,498.19	12,197.39	42.53	44.72	119.86	-328.75	-797.75	605.77	551.20	54.58	11.100		
12,250.00	11,899.84	12,604.38	12,203.63	42.67	44.93	120.05	-434.60	-796.82	606.92	552.36	54.56	11.125		
12,252.56	11,899.78	12,607.29	12,203.53	42.68	44.94	120.04	-437.50	-796.80	606.91	552.35	54.57	11.123		
12,258.12	11,899.61	12,612.84	12,203.34	42.70	44.95	120.04	-443.06	-796.75	606.93	552.34	54.58	11.119		
12,300.00	11,898.15	12,654.73	12,201.87	42.83	45.06	120.03	-484.91	-796.38	607.13	552.40	54.73	11.094		
12,400.00	11,894.66	12,754.72	12,198.38	43.19	45.37	120.00	-584.85	-795.51	607.61	552.49	55.12	11.024		
12,500.00	11,891.18	12,854.72	12,194.89	43.60	45.75	119.97	-684.78	-794.64	608.09	552.51	55.58	10.940		
12,600.00	11,887.69	12,954.72	12,191.41	44.07	46.20	119.95	-784.71	-793.77	608.58	552.46	56.12	10.844		
12,700.00	11,884.21	13,054.72	12,187.92	44.60	46.70	119.92	-884.65	-792.89	609.06	552.33	56.73	10.736		
12,800.00	11,880.72	13,154.72	12,184.43	45.18	47.26	119.89	-984.58	-792.02	609.54	552.14	57.41	10.618		
12,900.00	11,877.24	13,254.72	12,180.94	45.81	47.87	119.87	-1,084.51	-791.15	610.02	551.87	58.15	10.491		
13,000.00	11,873.75	13,354.71	12,177.45	46.49	48.53	119.84	-1,184.45	-790.28	610.51	551.55	58.96	10.355		
13,100.00	11,870.27	13,454.71	12,173.96	47.22	49.23	119.81	-1,284.38	-789.41	610.99	551.17	59.82	10.213		
13,200.00	11,866.78	13,554.71	12,170.47	47.99	49.98	119.79	-1,384.32	-788.53	611.47	550.72	60.75	10.065		
13,300.00	11,863.30	13,654.71	12,166.98	48.81	50.78	119.76	-1,484.25	-787.66	611.96	550.22	61.73	9.913		
13,400.00	11,859.81	13,754.71	12,163.49	49.67	51.61	119.73	-1,584.18	-786.79	612.44	549.67	62.77	9.757		
13,500.00	11,856.33	13,854.71	12,160.00	50.57	52.49	119.71	-1,684.12	-785.92	612.92	549.07	63.86	9.598		
13,600.00	11,852.84	13,954.71	12,156.51	51.50	53.40	119.68	-1,784.05	-785.04	613.41	548.42	64.99	9.438		
13,700.00	11,849.36	14,054.70	12,153.02	52.47	54.34	119.66	-1,883.98	-784.17	613.89	547.72	66.17	9.277		
13,800.00	11,845.87	14,154.70	12,149.53	53.47	55.32	119.63	-1,983.92	-783.30	614.38	546.98	67.40	9.116		
13,900.00	11,842.38	14,254.70	12,146.04	54.51	56.33	119.60	-2,083.85	-782.43	614.86	546.20	68.66	8.955		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.00	11,838.90	14,354.70	12,142.55	55.57	57.37	119.58	-2,183.79	-781.56	615.34	545.38	69.96	8.795		
14,100.00	11,835.41	14,454.70	12,139.06	56.67	58.43	119.55	-2,283.72	-780.68	615.83	544.53	71.30	8.637		
14,200.00	11,831.93	14,554.70	12,135.57	57.79	59.53	119.53	-2,383.65	-779.81	616.31	543.64	72.68	8.480		
14,300.00	11,828.44	14,654.69	12,132.08	58.93	60.64	119.50	-2,483.59	-778.94	616.80	542.71	74.08	8.326		
14,400.00	11,824.96	14,754.69	12,128.59	60.10	61.79	119.47	-2,583.52	-778.07	617.28	541.76	75.52	8.174		
14,500.00	11,821.47	14,854.69	12,125.10	61.29	62.95	119.45	-2,683.45	-777.20	617.77	540.78	76.99	8.024		
14,600.00	11,817.99	14,954.69	12,121.61	62.50	64.14	119.42	-2,783.39	-776.32	618.25	539.77	78.48	7.878		
14,700.00	11,814.50	15,054.69	12,118.12	63.73	65.34	119.40	-2,883.32	-775.45	618.74	538.74	80.00	7.734		
14,800.00	11,811.02	15,154.69	12,114.63	64.98	66.57	119.37	-2,983.26	-774.58	619.22	537.68	81.54	7.594		
14,900.00	11,807.53	15,254.68	12,111.14	66.25	67.81	119.34	-3,083.19	-773.71	619.71	536.60	83.11	7.457		
15,000.00	11,804.05	15,354.68	12,107.65	67.53	69.07	119.32	-3,183.12	-772.84	620.19	535.50	84.69	7.323		
15,100.00	11,800.56	15,454.68	12,104.16	68.83	70.35	119.29	-3,283.06	-771.96	620.68	534.38	86.30	7.192		
15,200.00	11,797.08	15,554.68	12,100.67	70.14	71.64	119.27	-3,382.99	-771.09	621.17	533.24	87.93	7.064		
15,300.00	11,793.59	15,654.68	12,097.18	71.47	72.94	119.24	-3,482.92	-770.22	621.65	532.08	89.57	6.940		
15,400.00	11,790.10	15,754.68	12,093.69	72.81	74.26	119.22	-3,582.86	-769.35	622.14	530.90	91.24	6.819		
15,500.00	11,786.62	15,854.68	12,090.20	74.16	75.59	119.19	-3,682.79	-768.47	622.62	529.71	92.91	6.701		
15,600.00	11,783.13	15,954.67	12,086.71	75.53	76.94	119.16	-3,782.72	-767.60	623.11	528.51	94.61	6.586		
15,700.00	11,779.65	16,054.67	12,083.22	76.91	78.30	119.14	-3,882.66	-766.73	623.60	527.28	96.31	6.475		
15,800.00	11,776.16	16,154.67	12,079.73	78.29	79.66	119.11	-3,982.59	-765.86	624.08	526.05	98.03	6.366		
15,900.00	11,772.68	16,254.67	12,076.24	79.69	81.04	119.09	-4,082.53	-764.99	624.57	524.80	99.77	6.260		
16,000.00	11,769.19	16,354.67	12,072.75	81.10	82.43	119.06	-4,182.46	-764.11	625.06	523.54	101.51	6.157		
16,100.00	11,765.71	16,454.67	12,069.26	82.51	83.83	119.04	-4,282.39	-763.24	625.54	522.27	103.27	6.057		
16,200.00	11,762.22	16,554.66	12,065.77	83.94	85.23	119.01	-4,382.33	-762.37	626.03	520.99	105.04	5.960		
16,300.00	11,758.74	16,654.66	12,062.28	85.37	86.65	118.99	-4,482.26	-761.50	626.52	519.70	106.82	5.865		
16,400.00	11,755.25	16,754.66	12,058.79	86.81	88.07	118.96	-4,582.19	-760.63	627.01	518.40	108.61	5.773		
16,500.00	11,751.77	16,854.66	12,055.30	88.26	89.50	118.94	-4,682.13	-759.75	627.49	517.09	110.41	5.684		
16,600.00	11,748.28	16,954.66	12,051.81	89.72	90.94	118.91	-4,782.06	-758.88	627.98	515.77	112.21	5.596		
16,700.00	11,744.79	17,054.66	12,048.32	91.18	92.38	118.89	-4,882.00	-758.01	628.47	514.44	114.03	5.512		
16,800.00	11,741.31	17,154.66	12,044.83	92.64	93.83	118.86	-4,981.93	-757.14	628.96	513.11	115.85	5.429		
16,900.00	11,737.82	17,254.65	12,041.34	94.12	95.29	118.84	-5,081.86	-756.27	629.44	511.76	117.68	5.349		
17,000.00	11,734.34	17,353.93	12,037.87	95.60	96.75	118.81	-5,181.08	-755.45	629.98	510.46	119.52	5.271		
17,100.00	11,730.85	17,452.97	12,034.42	97.08	98.20	118.78	-5,280.06	-754.80	630.65	509.28	121.38	5.196		
17,200.00	11,727.37	17,552.01	12,030.96	98.57	99.66	118.73	-5,379.03	-754.32	631.48	508.24	123.24	5.124		
17,300.00	11,723.88	17,651.05	12,027.51	100.07	101.13	118.69	-5,478.01	-754.02	632.47	507.34	125.13	5.055		
17,400.00	11,720.40	17,750.08	12,024.05	101.57	102.60	118.63	-5,576.98	-753.88	633.60	506.57	127.03	4.988		
17,500.00	11,716.91	17,849.11	12,020.59	103.08	104.08	118.57	-5,675.95	-753.92	634.89	505.95	128.94	4.924		
17,600.00	11,713.43	17,948.13	12,017.14	104.59	105.56	118.50	-5,774.91	-754.12	636.33	505.46	130.87	4.862		
17,700.00	11,709.94	18,047.15	12,013.68	106.10	107.04	118.42	-5,873.86	-754.50	637.92	505.11	132.81	4.803		
17,800.00	11,706.46	18,146.15	12,010.22	107.62	108.53	118.33	-5,972.81	-755.05	639.66	504.90	134.76	4.747		
17,900.00	11,702.97	18,245.16	12,006.77	109.14	110.02	118.24	-6,071.75	-755.77	641.56	504.83	136.74	4.692		
18,000.00	11,699.49	18,344.15	12,003.31	110.66	111.52	118.15	-6,170.68	-756.66	643.61	504.89	138.72	4.640		
18,100.00	11,696.00	18,443.14	11,999.86	112.19	113.02	118.04	-6,269.60	-757.73	645.82	505.10	140.72	4.589		
18,200.00	11,692.51	18,542.12	11,996.40	113.73	114.52	117.93	-6,368.51	-758.96	648.18	505.45	142.74	4.541		
18,300.00	11,689.03	18,641.08	11,992.95	115.26	116.03	117.81	-6,467.41	-760.36	650.70	505.93	144.77	4.495		
18,400.00	11,685.54	18,740.04	11,989.50	116.80	117.54	117.69	-6,566.29	-761.94	653.37	506.56	146.81	4.450		
18,500.00	11,682.06	18,838.99	11,986.04	118.34	119.05	117.56	-6,665.16	-763.68	656.20	507.33	148.87	4.408		
18,600.00	11,678.57	18,937.92	11,982.59	119.89	120.56	117.43	-6,764.02	-765.60	659.19	508.25	150.94	4.367		
18,700.00	11,675.09	19,036.85	11,979.14	121.43	122.08	117.29	-6,862.86	-767.69	662.33	509.30	153.03	4.328		
18,800.00	11,671.60	19,135.76	11,975.69	122.98	123.60	117.14	-6,961.69	-769.94	665.63	510.50	155.13	4.291		
18,900.00	11,668.12	19,235.04	11,972.22	124.54	125.12	116.99	-7,060.88	-772.37	669.07	511.83	157.24	4.255		
19,000.00	11,664.63	19,334.97	11,968.74	126.09	126.66	116.84	-7,160.72	-774.84	672.56	513.18	159.37	4.220		
19,100.00	11,661.15	19,434.89	11,965.25	127.65	128.21	116.69	-7,260.55	-777.32	676.04	514.54	161.50	4.186		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.00	11,657.66	19,534.82	11,961.76	129.21	129.75	116.54	-7,360.38	-779.79	679.53	515.89	163.64	4.153		
19,300.00	11,654.18	19,634.74	11,958.28	130.77	131.30	116.39	-7,460.21	-782.27	683.03	517.24	165.79	4.120		
19,400.00	11,650.69	19,734.66	11,954.79	132.34	132.85	116.25	-7,560.04	-784.74	686.53	518.59	167.93	4.088		
19,500.00	11,647.21	19,834.59	11,951.30	133.90	134.40	116.10	-7,659.88	-787.21	690.03	519.95	170.09	4.057		
19,600.00	11,643.72	19,934.51	11,947.81	135.47	135.95	115.96	-7,759.71	-789.69	693.54	521.30	172.24	4.027		
19,700.00	11,640.23	20,034.43	11,944.33	137.04	137.51	115.82	-7,859.54	-792.16	697.05	522.65	174.40	3.997		
19,800.00	11,636.75	20,134.36	11,940.84	138.62	139.06	115.68	-7,959.37	-794.64	700.57	524.00	176.57	3.968		
19,900.00	11,633.26	20,234.28	11,937.35	140.19	140.62	115.54	-8,059.20	-797.11	704.09	525.35	178.74	3.939		
20,000.00	11,629.78	20,334.20	11,933.87	141.77	142.18	115.41	-8,159.04	-799.59	707.62	526.70	180.91	3.911		
20,100.00	11,626.29	20,434.13	11,930.38	143.34	143.75	115.27	-8,258.87	-802.06	711.14	528.06	183.09	3.884		
20,200.00	11,622.81	20,534.05	11,926.89	144.92	145.31	115.14	-8,358.70	-804.54	714.68	529.41	185.27	3.857		
20,300.00	11,619.32	20,633.98	11,923.41	146.50	146.88	115.00	-8,458.53	-807.01	718.21	530.76	187.45	3.831		
20,400.00	11,615.84	20,733.90	11,919.92	148.09	148.45	114.87	-8,558.37	-809.48	721.75	532.11	189.64	3.806		
20,500.00	11,612.35	20,833.82	11,916.43	149.67	150.02	114.74	-8,658.20	-811.96	725.30	533.46	191.83	3.781		
20,600.00	11,608.87	20,933.75	11,912.95	151.26	151.59	114.61	-8,758.03	-814.43	728.85	534.82	194.03	3.756		
20,700.00	11,605.38	21,033.67	11,909.46	152.84	153.16	114.49	-8,857.86	-816.91	732.40	536.17	196.23	3.732		
20,800.00	11,601.90	21,133.59	11,905.97	154.43	154.73	114.36	-8,957.69	-819.38	735.95	537.52	198.43	3.709		
20,900.00	11,598.41	21,233.52	11,902.48	156.02	156.31	114.23	-9,057.53	-821.86	739.51	538.88	200.63	3.686		
21,000.00	11,594.92	21,333.44	11,899.00	157.61	157.89	114.11	-9,157.36	-824.33	743.08	540.23	202.84	3.663		
21,100.00	11,591.44	21,433.36	11,895.51	159.20	159.46	113.99	-9,257.19	-826.81	746.64	541.59	205.05	3.641		
21,200.00	11,587.95	21,533.29	11,892.02	160.80	161.04	113.86	-9,357.02	-829.28	750.21	542.94	207.27	3.620		
21,300.00	11,584.47	21,633.21	11,888.54	162.39	162.62	113.74	-9,456.85	-831.75	753.78	544.30	209.48	3.598		
21,400.00	11,580.98	21,733.14	11,885.05	163.99	164.21	113.62	-9,556.69	-834.23	757.36	545.65	211.70	3.577		
21,500.00	11,577.50	21,833.06	11,881.56	165.58	165.79	113.51	-9,656.52	-836.70	760.94	547.01	213.93	3.557		
21,600.00	11,574.01	21,932.98	11,878.08	167.18	167.37	113.39	-9,756.35	-839.18	764.52	548.37	216.15	3.537		
21,700.00	11,570.53	22,032.91	11,874.59	168.78	168.96	113.27	-9,856.18	-841.65	768.11	549.73	218.38	3.517		
21,800.00	11,567.04	22,132.83	11,871.10	170.38	170.55	113.16	-9,956.02	-844.13	771.69	551.09	220.61	3.498		
21,900.00	11,563.56	22,232.75	11,867.62	171.98	172.13	113.04	-10,055.85	-846.60	775.29	552.45	222.84	3.479		
22,000.00	11,560.07	22,332.68	11,864.13	173.58	173.72	112.93	-10,155.68	-849.07	778.88	553.81	225.07	3.461		
22,062.86	11,557.88	22,395.49	11,861.94	174.48	174.72	112.86	-10,218.44	-850.63	781.14	554.73	226.42	3.450 SF		



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors 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 3246.2' GE + 30' KB @ 3276.20usft

Offset Depths are relative to Offset Datum

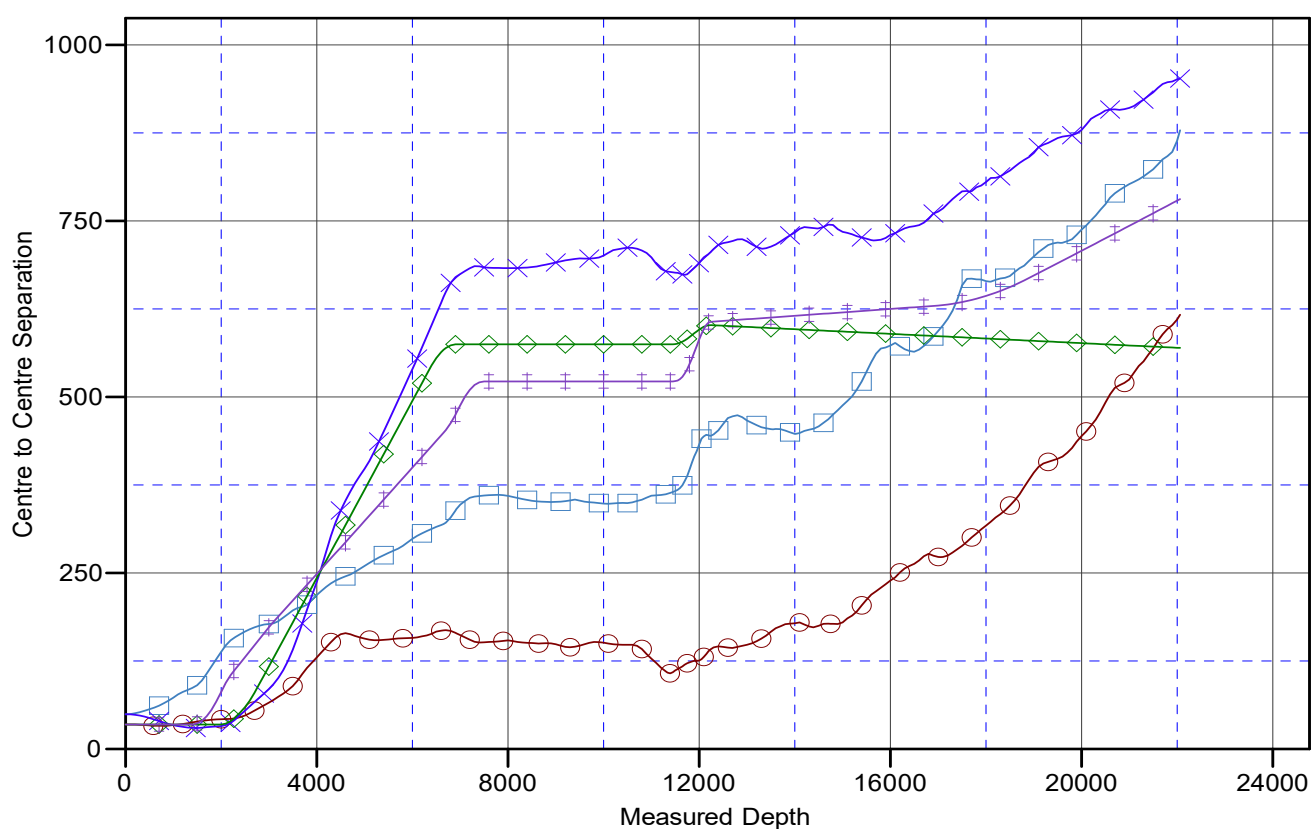
Central Meridian is -104.333334

Coordinates are relative to: County Fair Fed Com 602H2

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

Grid Convergence at Surface is: 0.53°

Ladder Plot



LEGEND



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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well County Fair Fed Com 602H2
Project:	Lea County, NM (NAD83)	TVD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Reference Site:	County Fair/Blue Ribbon	MD Reference:	3246.2' GE + 30' KB @ 3276.20usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	County Fair Fed Com 602H2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors 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 3246.2' GE + 30' KB @ 3276.20usft

Offset Depths are relative to Offset Datum

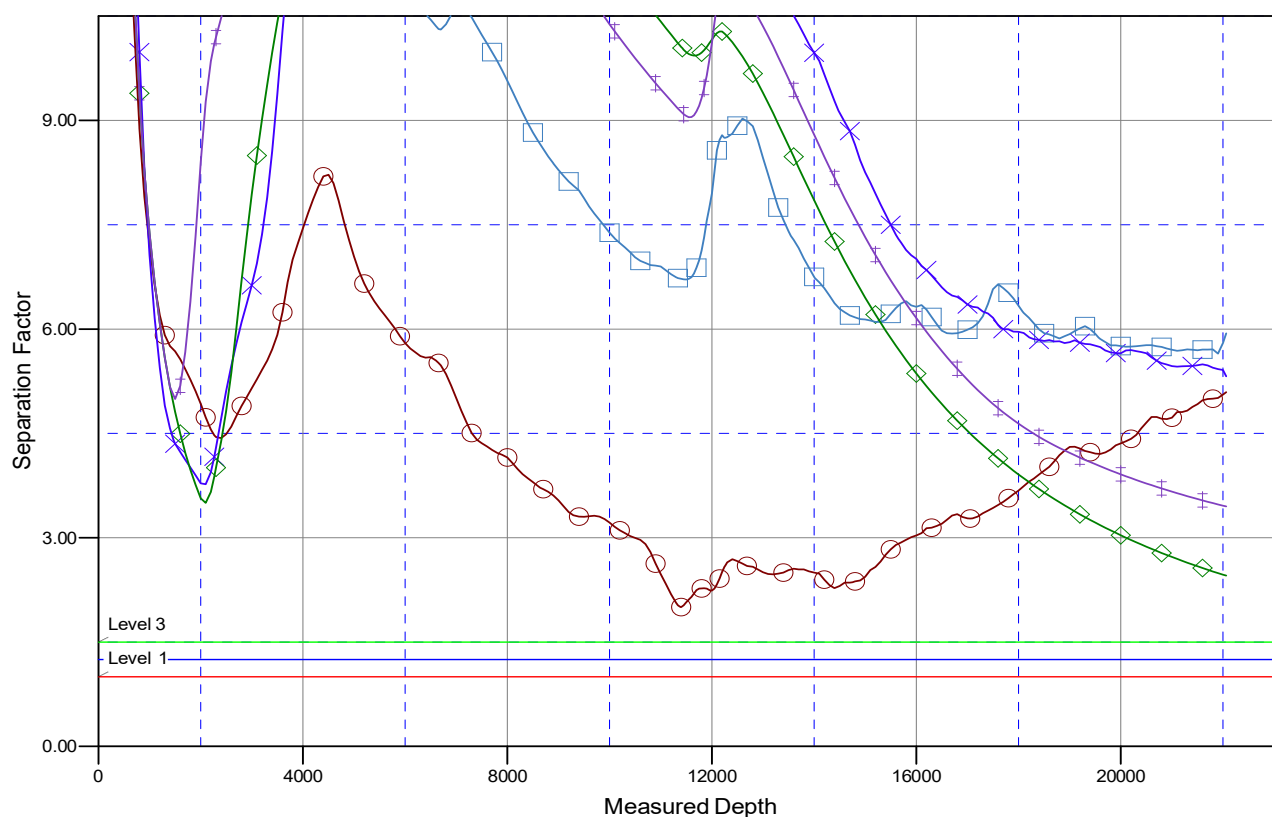
Central Meridian is -104.333334

Coordinates are relative to: County Fair Fed Com 602H2

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, OH V0	Blue Ribbon Fed Com 702H, OH, OH V0	County Fair Fed Com 701H2, OH, Plan #1 V0
County Fair Fed Com 602H, OH, OH V0	Blue Ribbon Fed Com 702H2, OH, Plan #1 V0	

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

FRANKLIN MOUNTAIN ENERGY



Geologic Prognosis

Well Name	County Fair Fed Com 602H
Operator	Franklin Mountain Energy, LLC
Project Area	Carnival Wells
Well Type	10,000' Third Bone Spring Lateral
API	
Permit Number	
Rig	

State	NM	County	Lea						
SHL	Township	25S/35E	Section	2	1,320'	FWL	215'	FNL	
BHL	Township	25S/35E	Section	11	1,100'	FWL	150'	FSL	
Surface Latitude	NAD 83		32.166132						
Surface Longitude	NAD 83		103.342582						
Bottom Hole Latitude	NAD 83		32.13803						
Bottom Hole Longitude	NAD 83		103.343309						
Ground Level	3,246'		Rig KB	30'	KB	3,276'			

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,246'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,412'	864'			Carbonates
Salado	1,617'	1,659'			Salt, Carbonate & Clastics
Base Salt	-480'	3,756'			Shaley Carbonate & Shale
Lamar	-1,838'	5,114'			Carbonate & Clastics
Bell Canyon	-1,962'	5,238'			Sandstone - oil/gas/water
Cherry Canyon	-2,813'	6,089'			Sandstone - oil/gas/water
Brushy Canyon	-4,185'	7,461'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,594'	8,870'			Shale/Carbonates - oil/gas
Avalon	-5,651'	8,927'			Shale/Carbonates - oil/gas
Chert Zone	-5,839'	9,115'			Carbonate/Chert
First Bone Spring Sand	-6,785'	10,061'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,850'	10,126'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,332'	10,608'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,899'	11,175'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,552'	11,828'			Sandstone - oil/gas/water
HZ Target at SHL	-8,718'	11,994'			Overpressure shale/sand- Oil/Gas
Wolfcamp	-8,773'	12,049'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,810'	12,086'			Overpressure Shale - Oil/Gas
Wolfcamp B	-9,009'	12,285'			Overpressure Shale - Oil/Gas

Target interval dips are variable along the lateral, but expected to have an average apparent dip of 2 degrees up at landing

Target window tolerance is set at +/- 15'

Target Line: 11915' KBTVD @ 0' VS w/ 92° inc.

Offset Log: Reno Com-1 (300252686700)

Updated 8/19/21

FME Geologist		Ben Kessel		bkessel@fmellc.com	
		Office	720.414.7868	Cell	303.868.9946
FME Engineer					
Electric Logs					
			From	To	
Open-Hole					
	n/a				
MWD/LWD					
	MWD GR		Int. 1 Csg. Point	TD	
Mud Log:					
t drill out of surface casing					
Sampling:	30' samples in vertical, 10' through curve, 30' samples in lateral				
Samples:	1 set dry samples at footage frequency noted above				
Mud Gas:	Continuous				
Daily Contact:	Email distribution of mud log/daily report at 7:30am and 4:30 pm CST				
Daily Mud Log Email Distribution List					
Final Mud Log Distribution					
	Ben Kessel (bkessel@fmellc.com)			email	
Cuttings/Samples Shipment Information					

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Franklin Mountain Energy, LLC **OGRID:** 373910 **Date:** 09 / 20 / 2021

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footage	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
	30-025-49395					
County Fair Fed Com 602H		Lot 4-2-25S-35E	215 FNL 1320	FWL 800+/-	1100+/-	500 +/-
County Fair Fed Com 701H		Lot 4-2-25S-35E	215 FNL 1285	FWL 800+/-	1100+/-	500 +/-

Blue Ribbon Fed Com 702H

Lot 4-2-25S-35E

215 FNL 1285

FWL 800+/-

1100+/-

500 +/-

IV. Central Delivery Point Name: Carnival CTB: facility ID (f#) fAPP2123468509 [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date Batch Drilling	Completion Commencement Date	Initial Flow Back Date	First Production Date
County Fair Fed Com 602H	30-025-49395	11/1/2021	1/20/2022	2/1/2022	2/21/2022	3/1/2022
County Fair Fed Com 701H		11/1/2021	1/20/2022	2/1/2022	2/21/2022	3/1/2022

Blue Ribbon Fed Com 702H

11/1/2021

1/20/2022

2/1/2022

2/21/2022

3/1/2022

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

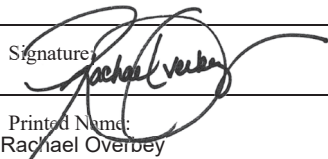
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

Signature: 
Printed Name: Rachael Overbey
Title: Director - Ops Planning & Regulatory
E-mail Address: roverbey@fmellc.com
Date: 9/20/2021
Phone: 720-414-6878
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



Natural Gas Management Plan

Items VI-VIII

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

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

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

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



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

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

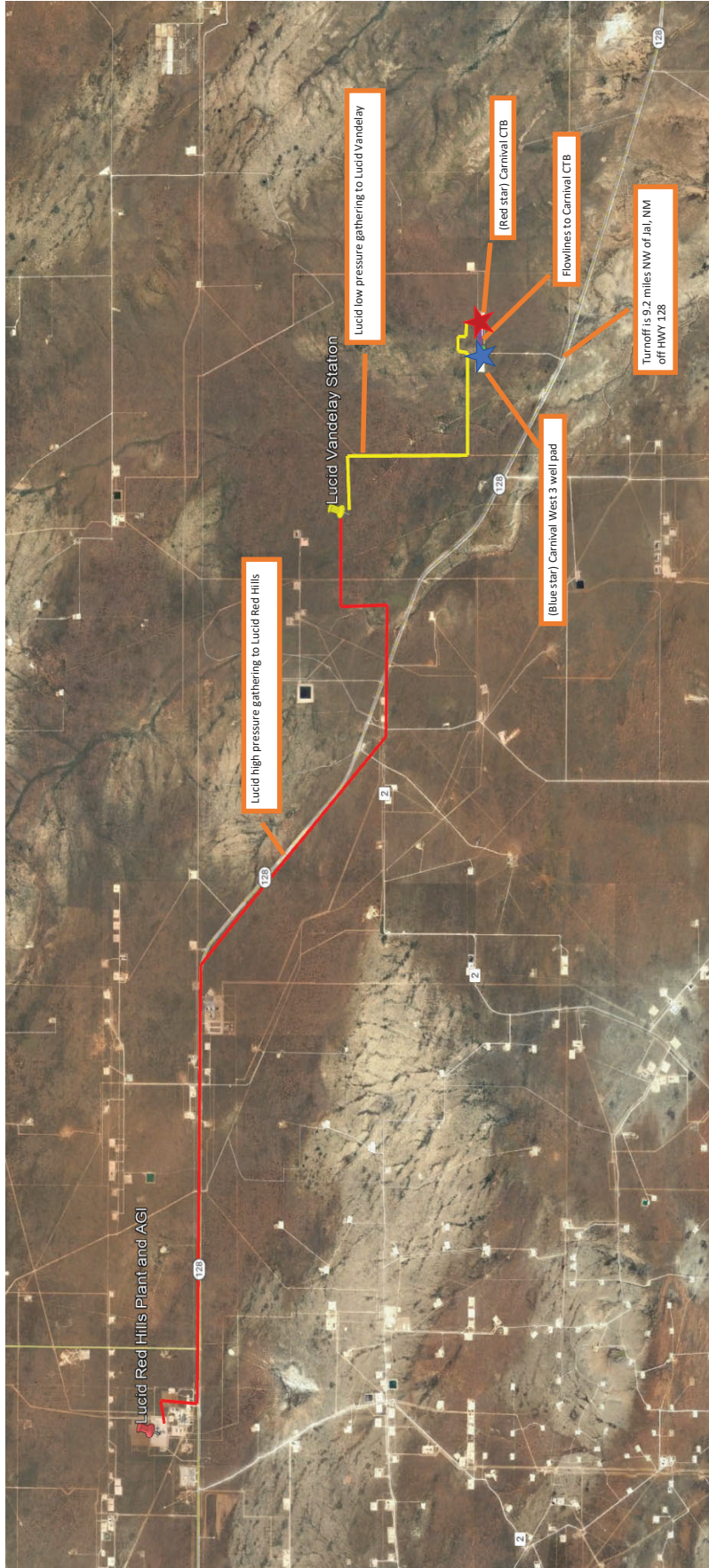
- Venting will be minimized during active and planned maintenance.
- Systems and equipment requiring maintenance will be isolated and blown down to sales and then flare before any remaining gas is vented in an effort to minimize waste and venting.
- Downhole maintenance will use best management practices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

XI. Map attached

Carnival West NGMP Map

Sep 2021

- Capacities reflected are FME's understanding of Lucid's system capacity



District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 49917

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 49917
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	9/21/2021
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	9/21/2021
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	9/21/2021
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	9/21/2021