

Well Name: BUS DRIVER FED COM	Well Location: T25S / R35E / SEC 36 / SESW / 32.080431 / -103.322008	County or Parish/State: LEA / NM
Well Number: 602H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM117126	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254810000X1	Well Status: Approved Application for Permit to Drill	Operator: FRANKLIN MOUNTAIN ENERGY LLC

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Drilling Operations
Date Sundry Submitted: 05/15/2021	Time Sundry Submitted: 02:42
Date proposed operation will begin: 05/18/2021	

Procedure Description: Franklin Mountain Energy, LLC (FME), Operator, respectfully requests approval to make the following changes to the proposed drilling plan for the above referenced well: - Change 1st Intermediate set depth to 5095'. - Change cement volumes based on updated Geoprog, casing and Directional plan. - Production Casing: FME would like approval to utilize 5.5 inch Eagle 606 23lb. P-110 in the drilling of this bore. Please see attached revised 14-point plan, Plan #4, geo prog and data sheet.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

FME_Federal_14_Point_Plan_Bus_Driver_602_updated_dir_23_lbs_Eagle_14_20210515144239.pdf

Franklin_Mountain__Bus_Driver_Fed_Com_602H__Plan_4_20210511163828.pdf

Bus_Driver_602H_GEOPROG_prelim_20210511163812.pdf

Data_Sheet_5.500_inch_23.00__P110_USS_EAGLE_SFH__USS_20210212151937_20210225100727_20210511163731.pdf

Received by OCD: 5/17/2021 11:02:24 AM

Well Name: BUS DRIVER FED COM

Well Location: T25S / R35E / SEC 36 / SESW / 32.080431 / -103.322008

County or Parish/State: LEA / NM

Well Number: 602H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM117126

Unit or CA Name:

Unit or CA Number:

US Well Number: 300254810000X1

Well Status: Approved Application for Permit to Drill

Operator: FRANKLIN MOUNTAIN ENERGY LLC

Operator Certification

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: RACHAEL OVERBEY

Signed on: MAY 15, 2021 02:42 PM

Name: FRANKLIN MOUNTAIN ENERGY LLC

Title: Director – Operations Planning and Regulatory

Street Address: 2401 E 2nd Avenue, Suite 300

City: DenverState: CO

Phone: (720) 414-7868

Email address: roverbey@fmellc.com

Field Representative

Representative Name:

Street Address:

City:State:Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: LONG VO

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345972

BLM POC Email Address: lvo@blm.gov

Disposition: Approved

Disposition Date: 05/17/2021

Signature: Long Vo



Bus Driver 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)	3,057'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,263'	824'			Carbonates
Salado	1,743'	1,344'			Salt, Carbonate & Clastics
Base Salt	498'	2,589'			Shaley Carbonate & Shale
Lamar	-1,995'	5,082'			Carbonate & Clastics
Bell Canyon	-2,032'	5,119'			Sandstone - oil/gas/water
Cherry Canyon	-2,879'	5,966'			Sandstone - oil/gas/water
Brushy Canyon	-4,271'	7,358'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,640'	8,727'			Shale/Carbonates - oil/gas
Avalon	-5,664'	8,751'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,766'	9,853'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,905'	9,992'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,290'	10,377'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,990'	11,077'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,661'	11,748'			Sandstone - oil/gas/water
HZ Target at SHL	-8,790'	11,877'			Overpressure shale/sand- Oil/Gas
Wolfcamp	-8,903'	11,990'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,964'	12,051'			Overpressure Shale - Oil/Gas
Wolfcamp B	-9,184'	12,271'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,119'	Oil
Bone Spring	9,853'	Oil
Wolfcamp	11,990'	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	5095	1.79	1.77	3.02	3.43
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	12219	1.09	1.25	1.79	1.22
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	23389 12057	1.32	1.33	1.14	0.95 1.61

Stress calculations on 5 1/2" casing performed assuming 23,389' depth. Stress calculations on 5 1/2" connections performed at 12,057' – maximum vertical depth of this well.



Cementing Program:

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft ³ /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft ³ /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1300	795	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	HalCem TM, 14.8 ppg, Class C, 1% CaCl ₂ , 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5095	1486	Lead, 12.8 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	1.79	9.72	0	154	HalCem TM, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.33	6.37	4795	100%
Int2	8.75	7.625	12219	248	Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	3.28	14.74	4095	94	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl ₂	1.33	6.26	11219	50%
Prod	6.75	5.5	23389	908	NeoCem, 13.5 ppg, Gas Migration Control	1.34	6.24	11219						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' – 12,219'	Brine	8.8-10.2	28-34	N/c
12,219' – 23,389' Lateral	Oil Base	10.0-11.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 10-11 ppg. In order to maintain hole stability, mud weights up to 12 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary well control and monitoring equipment:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

(C) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

(D) A wear bushing will be installed in the wellhead prior to drilling out of the surface casing.

8. Logging, testing and coring program:

GR–CCL–CNL Will be run in cased hole during completions phase of operations.

Open-hole logs are not planned for this well.

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

The estimated bottom-hole temperature at 12,057' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,523 psig (based on 12 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

A. All personnel shall receive proper awareness H₂S training.

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

C. Required Emergency Equipment

a. Well Control Equipment

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

ii. Choke manifold with a remotely operated hydraulic choke.

iii. Mud/gas separator

b. Protective equipment for essential personnel

i. Breathing Apparatus

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

2. Work/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 Cameron Multi-Bowl WH system has been sent to the BLM office in Carlsbad.

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

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

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

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

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

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

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

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Bus Driver/Kaston Fed Com
Well: Bus Driver Fed Com 602H
Wellbore: OH
Design: Plan #4



Azimuths to Grid North
True North: -0.54°
Magnetic North: 6.00°

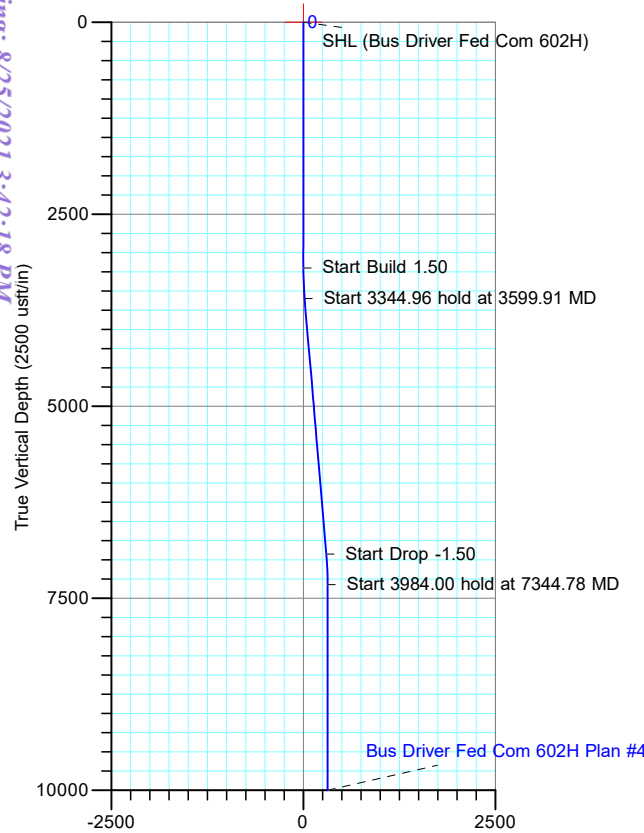
Magnetic Field
Strength: 47604.7nT
Dip Angle: 59.93°
Date: 2/25/2020
Model: IGRF2015

PROJECT DETAILS: Lea County, NM (NAD83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone



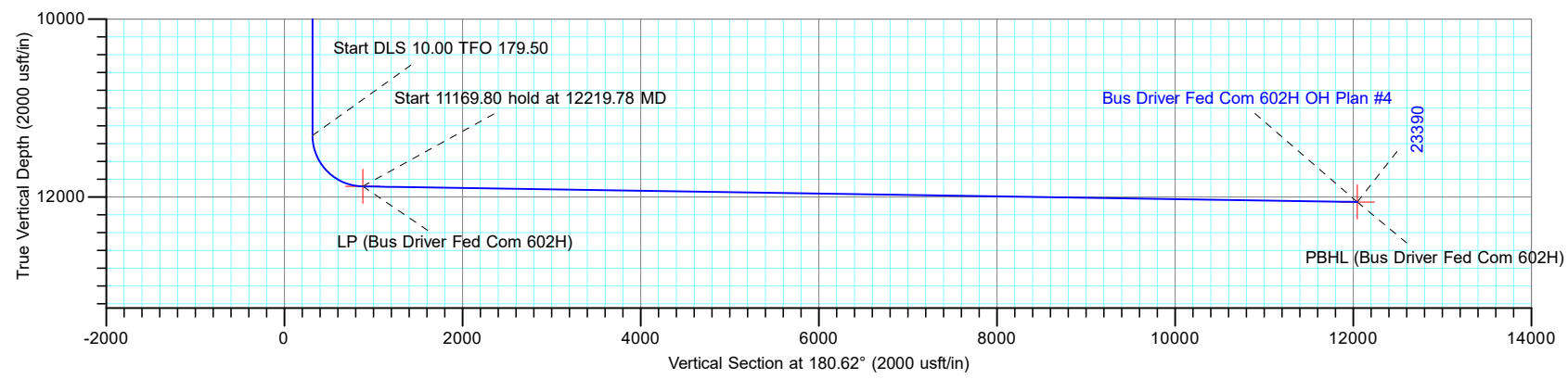
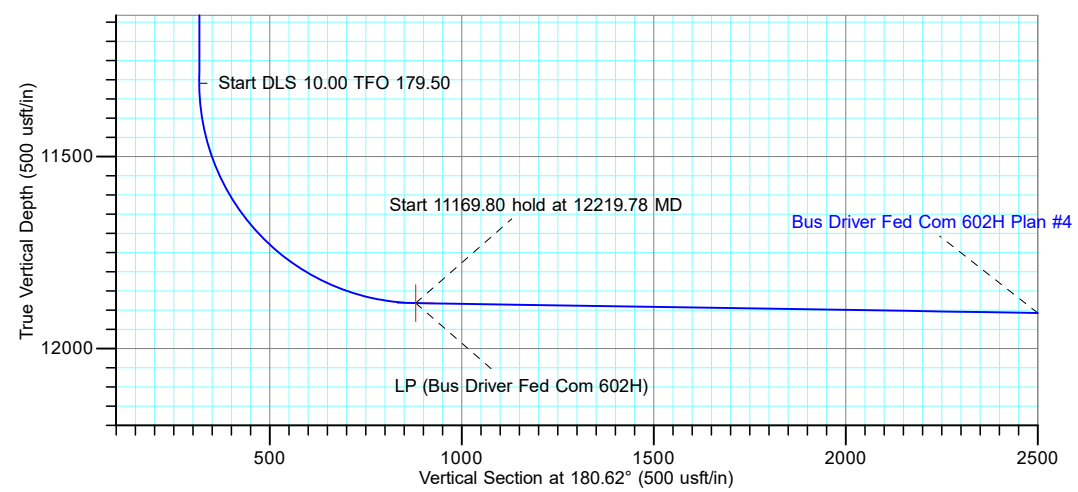
3057.5' GE + 30' KB @ 3087.50usft



SECTION DETAILS										Annotation
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00		Start Build 1.50
3599.91	6.00	216.63	3599.18	-16.79	-12.48	1.50	216.63	16.92		Start 3344.96 hold at 3599.91 MD
6944.87	6.00	216.63	6925.82	-297.32	-221.02	0.00	0.00	299.71		Start Drop -1.50
7344.78	0.00	0.00	7325.00	-314.11	-233.50	1.50	180.00	316.63		Start 3984.00 hold at 7344.78 MD
11328.78	0.00	0.00	11309.00	-314.11	-233.50	0.00	0.00	316.63		Start DLS 10.00 TFO 179.50
12219.78	89.10	179.50	11881.89	-878.05	-228.56	10.00	179.50	880.48		Start 11169.80 hold at 12219.78 MD
23389.58	89.10	179.50	12057.25	-12046.05	-130.83	0.00	0.00	12046.76		TD at 23389.58

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (Bus Driver Fed Com 602H)	11881.89	-878.05	-228.56	32.078023	-103.322773
PBHL (Bus Driver Fed Com 602H)	12057.25	-12046.05	-130.83	32.047325	-103.322795
SHL (Bus Driver Fed Com 602H)	0.00	0.00	0.00	32.080431	-103.322008



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

Plan: Plan #4 (Bus Driver Fed Com 602H/OH)
Bus Driver/Kaston Fed Com
Created By: Dustin Ault
Date: 11:17, April 20 2021
Approved: _____ Date: _____

Released to Imaging: 8/25/2021 3:42:18 PM

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: Bus Driver/Kaston Fed Com
Well: Bus Driver Fed Com 602H
Wellbore: OH
Design: Plan #4

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

T

G

M

Azimuths to Grid North
True North: -0.54°
Magnetic North: 6.00°

Magnetic Field
Strength: 47604.7nT
Dip Angle: 59.93°
Date: 2/25/2020
Model: IGRF2015

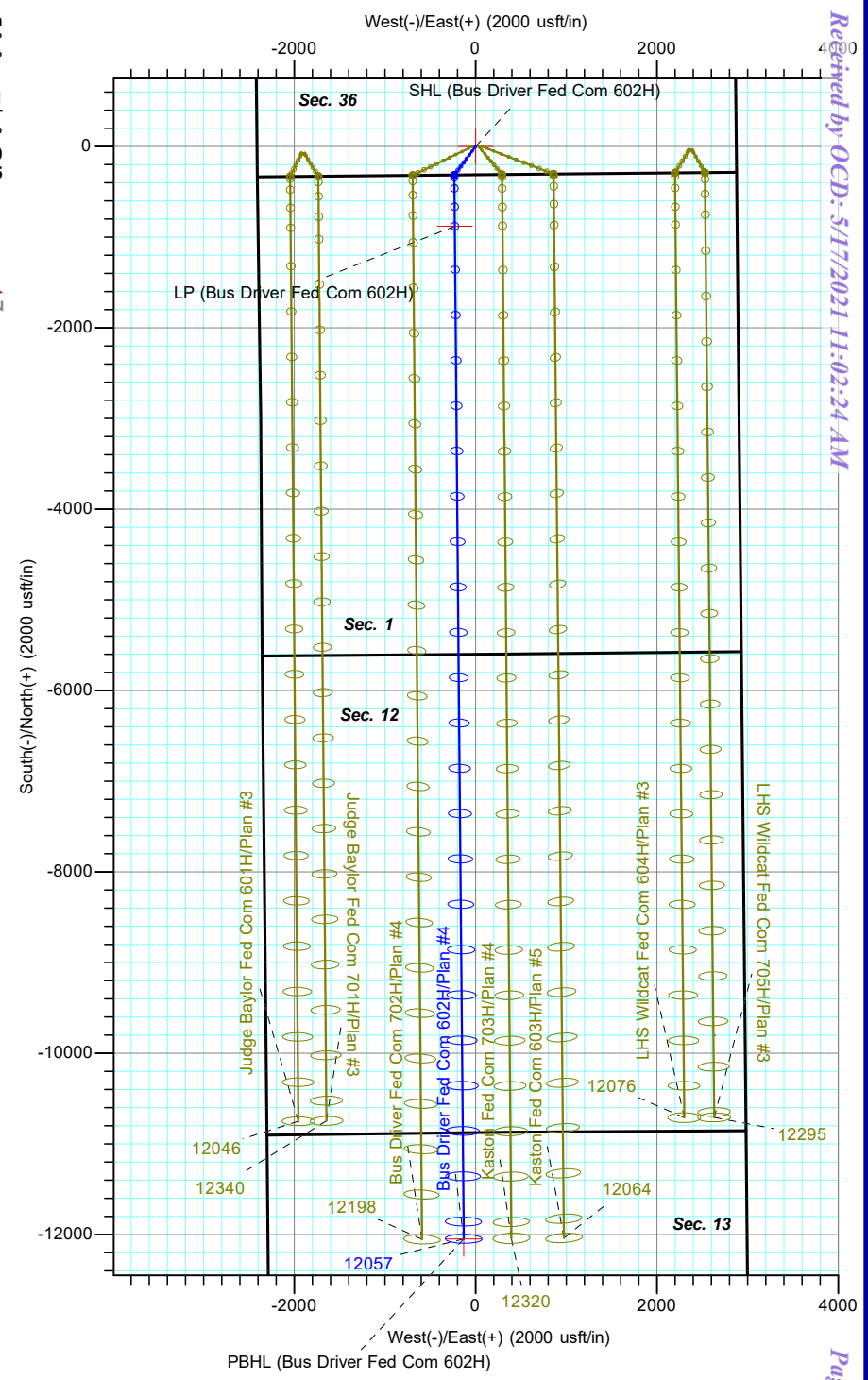
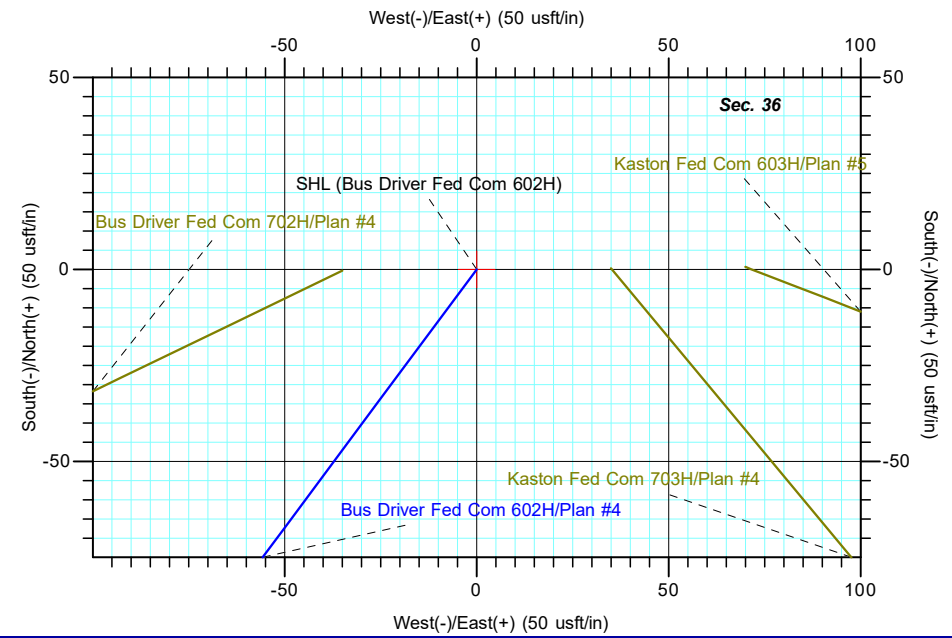
FRANKLIN MOUNTAIN
ENERGY

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (Bus Driver Fed Com 602H)	11881.89	-878.05	-228.56	393588.03	854340.83	32.078023	-103.322773
PBHL (Bus Driver Fed Com 602H)	12057.25	-12046.05	-130.83	382420.03	854438.56	32.047325	-103.322795
SHL (Bus Driver Fed Com 602H)	0.00	0.00	0.00	394466.08	854569.39	32.080431	-103.322008

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	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
3599.91	6.00	216.63	3599.18	-16.79	-12.48	1.50	216.63	16.92	Start 3344.96 hold at 3599.91 MD
6944.87	6.00	216.63	6925.82	-297.32	-221.02	0.00	0.00	299.71	Start Drop -1.50
7344.78	0.00	0.00	7325.00	-314.11	-233.50	1.50	180.00	316.63	Start 3984.00 hold at 7344.78 MD
11328.78	0.00	0.00	11309.00	-314.11	-233.50	0.00	0.00	316.63	Start DLS 10.00 TFO 179.50
12219.78	89.10	179.50	11881.89	-878.05	-228.56	10.00	179.50	880.48	Start 11169.80 hold at 12219.78 MD
23389.58	89.10	179.50	12057.25	-12046.05	-130.83	0.00	0.00	12046.76	TD at 23389.58



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

Plan: Plan #4 (Bus Driver Fed Com 602H/OH)
Bus Driver/Kaston Fed Com
Created By: Dustin Ault
Date: 11:18, April 20 2021
Approved: _____ Date: _____

Received by OCD: 5/17/2021 11:02:24 AM



Franklin Mountain Energy

Lea County, NM (NAD83)
Bus Driver/Kaston Fed Com
Bus Driver Fed Com 602H

OH

Plan: Plan #4

Standard Planning Report

20 April, 2021





Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

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	Bus Driver/Kaston Fed Com				
Site Position:		Northing:	394,466.08 usft	Latitude:	32.080431
From:	Map	Easting:	854,569.39 usft	Longitude:	-103.322008
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.54

Well	Bus Driver Fed Com 602H					
Well Position	+N/-S	0.00 usft	Northing:	394,466.08 usft	Latitude:	32.080431
	+E/-W	0.00 usft	Easting:	854,569.39 usft	Longitude:	-103.322008
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,057.50 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/25/2020	6.53	59.93	47,604.66772934

Design	Plan #4			
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	180.62

Plan Survey Tool Program	Date	4/20/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	23,389.42 Plan #4 (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	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,599.91	6.00	216.63	3,599.18	-16.79	-12.48	1.50	1.50	0.00	216.63	
6,944.87	6.00	216.63	6,925.82	-297.32	-221.02	0.00	0.00	0.00	0.00	
7,344.78	0.00	0.00	7,325.00	-314.11	-233.50	1.50	-1.50	0.00	180.00	
11,328.78	0.00	0.00	11,309.00	-314.11	-233.50	0.00	0.00	0.00	0.00	
12,219.78	89.10	179.50	11,881.89	-878.05	-228.56	10.00	10.00	20.15	179.50	
23,389.58	89.10	179.50	12,057.25	-12,046.05	-130.83	0.00	0.00	0.00	0.00	PBHL (Bus Driver Fec



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

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 (Bus Driver Fed Com 602H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
3,300.00	1.50	216.63	3,299.99	-1.05	-0.78	1.06	1.50	1.50	0.00
3,400.00	3.00	216.63	3,399.91	-4.20	-3.12	4.23	1.50	1.50	0.00
3,500.00	4.50	216.63	3,499.69	-9.45	-7.02	9.53	1.50	1.50	0.00
3,599.91	6.00	216.63	3,599.18	-16.79	-12.48	16.92	1.50	1.50	0.00
Start 3344.96 hold at 3599.91 MD									
3,700.00	6.00	216.63	3,698.72	-25.18	-18.72	25.38	0.00	0.00	0.00
3,800.00	6.00	216.63	3,798.17	-33.57	-24.95	33.84	0.00	0.00	0.00
3,900.00	6.00	216.63	3,897.63	-41.95	-31.19	42.29	0.00	0.00	0.00
4,000.00	6.00	216.63	3,997.08	-50.34	-37.42	50.74	0.00	0.00	0.00
4,100.00	6.00	216.63	4,096.53	-58.73	-43.66	59.20	0.00	0.00	0.00
4,200.00	6.00	216.63	4,195.98	-67.11	-49.89	67.65	0.00	0.00	0.00
4,300.00	6.00	216.63	4,295.44	-75.50	-56.13	76.11	0.00	0.00	0.00
4,400.00	6.00	216.63	4,394.89	-83.89	-62.36	84.56	0.00	0.00	0.00
4,500.00	6.00	216.63	4,494.34	-92.28	-68.59	93.01	0.00	0.00	0.00
4,600.00	6.00	216.63	4,593.79	-100.66	-74.83	101.47	0.00	0.00	0.00
4,700.00	6.00	216.63	4,693.25	-109.05	-81.06	109.92	0.00	0.00	0.00
4,800.00	6.00	216.63	4,792.70	-117.44	-87.30	118.38	0.00	0.00	0.00
4,900.00	6.00	216.63	4,892.15	-125.82	-93.53	126.83	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

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)	
5,000.00	6.00	216.63	4,991.60	-134.21	-99.77	135.29	0.00	0.00	0.00	
5,100.00	6.00	216.63	5,091.06	-142.60	-106.00	143.74	0.00	0.00	0.00	
5,200.00	6.00	216.63	5,190.51	-150.98	-112.24	152.19	0.00	0.00	0.00	
5,300.00	6.00	216.63	5,289.96	-159.37	-118.47	160.65	0.00	0.00	0.00	
5,400.00	6.00	216.63	5,389.41	-167.76	-124.71	169.10	0.00	0.00	0.00	
5,500.00	6.00	216.63	5,488.87	-176.14	-130.94	177.56	0.00	0.00	0.00	
5,600.00	6.00	216.63	5,588.32	-184.53	-137.18	186.01	0.00	0.00	0.00	
5,700.00	6.00	216.63	5,687.77	-192.92	-143.41	194.46	0.00	0.00	0.00	
5,800.00	6.00	216.63	5,787.22	-201.31	-149.64	202.92	0.00	0.00	0.00	
5,900.00	6.00	216.63	5,886.68	-209.69	-155.88	211.37	0.00	0.00	0.00	
6,000.00	6.00	216.63	5,986.13	-218.08	-162.11	219.83	0.00	0.00	0.00	
6,100.00	6.00	216.63	6,085.58	-226.47	-168.35	228.28	0.00	0.00	0.00	
6,200.00	6.00	216.63	6,185.03	-234.85	-174.58	236.74	0.00	0.00	0.00	
6,300.00	6.00	216.63	6,284.49	-243.24	-180.82	245.19	0.00	0.00	0.00	
6,400.00	6.00	216.63	6,383.94	-251.63	-187.05	253.64	0.00	0.00	0.00	
6,500.00	6.00	216.63	6,483.39	-260.01	-193.29	262.10	0.00	0.00	0.00	
6,600.00	6.00	216.63	6,582.84	-268.40	-199.52	270.55	0.00	0.00	0.00	
6,700.00	6.00	216.63	6,682.30	-276.79	-205.76	279.01	0.00	0.00	0.00	
6,800.00	6.00	216.63	6,781.75	-285.17	-211.99	287.46	0.00	0.00	0.00	
6,900.00	6.00	216.63	6,881.20	-293.56	-218.22	295.91	0.00	0.00	0.00	
6,944.87	6.00	216.63	6,925.82	-297.32	-221.02	299.71	0.00	0.00	0.00	
Start Drop -1.50										
7,000.00	5.17	216.63	6,980.69	-301.63	-224.22	304.05	1.50	-1.50	0.00	
7,100.00	3.67	216.63	7,080.39	-307.82	-228.82	310.28	1.50	-1.50	0.00	
7,200.00	2.17	216.63	7,180.26	-311.91	-231.86	314.41	1.50	-1.50	0.00	
7,300.00	0.67	216.63	7,280.23	-313.90	-233.34	316.42	1.50	-1.50	0.00	
7,344.78	0.00	0.00	7,325.00	-314.11	-233.50	316.63	1.50	-1.50	0.00	
Start 3984.00 hold at 7344.78 MD										
7,400.00	0.00	0.00	7,380.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,480.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,580.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,680.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,780.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,880.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,980.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,080.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,180.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,280.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,380.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,480.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,580.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,680.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,780.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,880.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,980.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,100.00	0.00	0.00	9,080.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,180.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,280.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,380.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,480.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,580.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,680.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,800.00	0.00	0.00	9,780.22	-314.11	-233.50	316.63	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,880.22	-314.11	-233.50	316.63	0.00	0.00	0.00	



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

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)
10,000.00	0.00	0.00	9,980.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,100.00	0.00	0.00	10,080.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,200.00	0.00	0.00	10,180.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,300.00	0.00	0.00	10,280.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,400.00	0.00	0.00	10,380.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,500.00	0.00	0.00	10,480.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,600.00	0.00	0.00	10,580.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,700.00	0.00	0.00	10,680.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,800.00	0.00	0.00	10,780.22	-314.11	-233.50	316.63	0.00	0.00	0.00
10,900.00	0.00	0.00	10,880.22	-314.11	-233.50	316.63	0.00	0.00	0.00
11,000.00	0.00	0.00	10,980.22	-314.11	-233.50	316.63	0.00	0.00	0.00
11,100.00	0.00	0.00	11,080.22	-314.11	-233.50	316.63	0.00	0.00	0.00
11,200.00	0.00	0.00	11,180.22	-314.11	-233.50	316.63	0.00	0.00	0.00
11,300.00	0.00	0.00	11,280.22	-314.11	-233.50	316.63	0.00	0.00	0.00
11,328.78	0.00	0.00	11,309.00	-314.11	-233.50	316.63	0.00	0.00	0.00
Start DLS 10.00 TFO 179.50									
11,350.00	2.12	179.50	11,330.22	-314.50	-233.50	317.02	10.00	10.00	0.00
11,400.00	7.12	179.50	11,380.04	-318.53	-233.46	321.05	10.00	10.00	0.00
11,450.00	12.12	179.50	11,429.32	-326.89	-233.39	329.40	10.00	10.00	0.00
11,500.00	17.12	179.50	11,477.69	-339.50	-233.28	342.02	10.00	10.00	0.00
11,550.00	22.12	179.50	11,524.77	-356.29	-233.13	358.80	10.00	10.00	0.00
11,600.00	27.12	179.50	11,570.21	-377.11	-232.95	379.62	10.00	10.00	0.00
11,650.00	32.12	179.50	11,613.66	-401.82	-232.73	404.32	10.00	10.00	0.00
11,700.00	37.12	179.50	11,654.79	-430.22	-232.48	432.72	10.00	10.00	0.00
11,750.00	42.12	179.50	11,693.29	-462.09	-232.20	464.59	10.00	10.00	0.00
11,800.00	47.12	179.50	11,728.87	-497.20	-231.90	499.69	10.00	10.00	0.00
11,850.00	52.12	179.50	11,761.25	-535.28	-231.56	537.76	10.00	10.00	0.00
11,900.00	57.12	179.50	11,790.19	-576.03	-231.21	578.51	10.00	10.00	0.00
11,950.00	62.12	179.50	11,815.47	-619.15	-230.83	621.62	10.00	10.00	0.00
12,000.00	67.12	179.50	11,836.89	-664.31	-230.44	666.77	10.00	10.00	0.00
12,050.00	72.12	179.50	11,854.29	-711.16	-230.03	713.62	10.00	10.00	0.00
12,100.00	77.12	179.50	11,867.55	-759.36	-229.60	761.81	10.00	10.00	0.00
12,150.00	82.12	179.50	11,876.55	-808.52	-229.17	810.96	10.00	10.00	0.00
12,200.00	87.12	179.50	11,881.24	-858.28	-228.74	860.72	10.00	10.00	0.00
12,219.78	89.10	179.50	11,881.89	-878.05	-228.56	880.48	10.00	10.00	0.00
Start 11169.80 hold at 12219.78 MD - LP (Bus Driver Fed Com 602H)									
12,300.00	89.10	179.50	11,883.15	-958.26	-227.86	960.68	0.00	0.00	0.00
12,400.00	89.10	179.50	11,884.72	-1,058.24	-226.99	1,060.64	0.00	0.00	0.00
12,500.00	89.10	179.50	11,886.29	-1,158.23	-226.11	1,160.61	0.00	0.00	0.00
12,600.00	89.10	179.50	11,887.86	-1,258.21	-225.24	1,260.58	0.00	0.00	0.00
12,700.00	89.10	179.50	11,889.43	-1,358.19	-224.36	1,360.55	0.00	0.00	0.00
12,800.00	89.10	179.50	11,891.00	-1,458.18	-223.49	1,460.52	0.00	0.00	0.00
12,900.00	89.10	179.50	11,892.57	-1,558.16	-222.61	1,560.49	0.00	0.00	0.00
13,000.00	89.10	179.50	11,894.14	-1,658.14	-221.74	1,660.46	0.00	0.00	0.00
13,100.00	89.10	179.50	11,895.71	-1,758.13	-220.86	1,760.42	0.00	0.00	0.00
13,200.00	89.10	179.50	11,897.28	-1,858.11	-219.99	1,860.39	0.00	0.00	0.00
13,300.00	89.10	179.50	11,898.85	-1,958.10	-219.11	1,960.36	0.00	0.00	0.00
13,400.00	89.10	179.50	11,900.42	-2,058.08	-218.24	2,060.33	0.00	0.00	0.00
13,500.00	89.10	179.50	11,901.99	-2,158.06	-217.36	2,160.30	0.00	0.00	0.00
13,600.00	89.10	179.50	11,903.56	-2,258.05	-216.49	2,260.27	0.00	0.00	0.00
13,700.00	89.10	179.50	11,905.13	-2,358.03	-215.61	2,360.23	0.00	0.00	0.00
13,800.00	89.10	179.50	11,906.70	-2,458.02	-214.74	2,460.20	0.00	0.00	0.00
13,900.00	89.10	179.50	11,908.27	-2,558.00	-213.86	2,560.17	0.00	0.00	0.00
14,000.00	89.10	179.50	11,909.84	-2,657.98	-212.99	2,660.14	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,100.00	89.10	179.50	11,911.41	-2,757.97	-212.11	2,760.11	0.00	0.00	0.00
14,200.00	89.10	179.50	11,912.98	-2,857.95	-211.24	2,860.08	0.00	0.00	0.00
14,300.00	89.10	179.50	11,914.55	-2,957.93	-210.36	2,960.04	0.00	0.00	0.00
14,400.00	89.10	179.50	11,916.12	-3,057.92	-209.49	3,060.01	0.00	0.00	0.00
14,500.00	89.10	179.50	11,917.69	-3,157.90	-208.61	3,159.98	0.00	0.00	0.00
14,600.00	89.10	179.50	11,919.26	-3,257.89	-207.74	3,259.95	0.00	0.00	0.00
14,700.00	89.10	179.50	11,920.83	-3,357.87	-206.86	3,359.92	0.00	0.00	0.00
14,800.00	89.10	179.50	11,922.40	-3,457.85	-205.99	3,459.89	0.00	0.00	0.00
14,900.00	89.10	179.50	11,923.97	-3,557.84	-205.11	3,559.86	0.00	0.00	0.00
15,000.00	89.10	179.50	11,925.54	-3,657.82	-204.24	3,659.82	0.00	0.00	0.00
15,100.00	89.10	179.50	11,927.11	-3,757.81	-203.36	3,759.79	0.00	0.00	0.00
15,200.00	89.10	179.50	11,928.68	-3,857.79	-202.49	3,859.76	0.00	0.00	0.00
15,300.00	89.10	179.50	11,930.25	-3,957.77	-201.61	3,959.73	0.00	0.00	0.00
15,400.00	89.10	179.50	11,931.82	-4,057.76	-200.74	4,059.70	0.00	0.00	0.00
15,500.00	89.10	179.50	11,933.39	-4,157.74	-199.86	4,159.67	0.00	0.00	0.00
15,600.00	89.10	179.50	11,934.96	-4,257.72	-198.99	4,259.63	0.00	0.00	0.00
15,700.00	89.10	179.50	11,936.53	-4,357.71	-198.11	4,359.60	0.00	0.00	0.00
15,800.00	89.10	179.50	11,938.10	-4,457.69	-197.24	4,459.57	0.00	0.00	0.00
15,900.00	89.10	179.50	11,939.67	-4,557.68	-196.36	4,559.54	0.00	0.00	0.00
16,000.00	89.10	179.50	11,941.24	-4,657.66	-195.49	4,659.51	0.00	0.00	0.00
16,100.00	89.10	179.50	11,942.81	-4,757.64	-194.61	4,759.48	0.00	0.00	0.00
16,200.00	89.10	179.50	11,944.38	-4,857.63	-193.74	4,859.45	0.00	0.00	0.00
16,300.00	89.10	179.50	11,945.95	-4,957.61	-192.86	4,959.41	0.00	0.00	0.00
16,400.00	89.10	179.50	11,947.52	-5,057.60	-191.99	5,059.38	0.00	0.00	0.00
16,500.00	89.10	179.50	11,949.09	-5,157.58	-191.11	5,159.35	0.00	0.00	0.00
16,600.00	89.10	179.50	11,950.66	-5,257.56	-190.24	5,259.32	0.00	0.00	0.00
16,700.00	89.10	179.50	11,952.23	-5,357.55	-189.36	5,359.29	0.00	0.00	0.00
16,800.00	89.10	179.50	11,953.80	-5,457.53	-188.49	5,459.26	0.00	0.00	0.00
16,900.00	89.10	179.50	11,955.37	-5,557.51	-187.61	5,559.22	0.00	0.00	0.00
17,000.00	89.10	179.50	11,956.94	-5,657.50	-186.74	5,659.19	0.00	0.00	0.00
17,100.00	89.10	179.50	11,958.51	-5,757.48	-185.86	5,759.16	0.00	0.00	0.00
17,200.00	89.10	179.50	11,960.08	-5,857.47	-184.99	5,859.13	0.00	0.00	0.00
17,300.00	89.10	179.50	11,961.65	-5,957.45	-184.11	5,959.10	0.00	0.00	0.00
17,400.00	89.10	179.50	11,963.22	-6,057.43	-183.24	6,059.07	0.00	0.00	0.00
17,500.00	89.10	179.50	11,964.79	-6,157.42	-182.36	6,159.04	0.00	0.00	0.00
17,600.00	89.10	179.50	11,966.36	-6,257.40	-181.49	6,259.00	0.00	0.00	0.00
17,700.00	89.10	179.50	11,967.93	-6,357.39	-180.61	6,358.97	0.00	0.00	0.00
17,800.00	89.10	179.50	11,969.50	-6,457.37	-179.74	6,458.94	0.00	0.00	0.00
17,900.00	89.10	179.50	11,971.07	-6,557.35	-178.86	6,558.91	0.00	0.00	0.00
18,000.00	89.10	179.50	11,972.64	-6,657.34	-177.99	6,658.88	0.00	0.00	0.00
18,100.00	89.10	179.50	11,974.21	-6,757.32	-177.11	6,758.85	0.00	0.00	0.00
18,200.00	89.10	179.50	11,975.78	-6,857.30	-176.24	6,858.81	0.00	0.00	0.00
18,300.00	89.10	179.50	11,977.35	-6,957.29	-175.36	6,958.78	0.00	0.00	0.00
18,400.00	89.10	179.50	11,978.92	-7,057.27	-174.49	7,058.75	0.00	0.00	0.00
18,500.00	89.10	179.50	11,980.49	-7,157.26	-173.61	7,158.72	0.00	0.00	0.00
18,600.00	89.10	179.50	11,982.06	-7,257.24	-172.74	7,258.69	0.00	0.00	0.00
18,700.00	89.10	179.50	11,983.63	-7,357.22	-171.86	7,358.66	0.00	0.00	0.00
18,800.00	89.10	179.50	11,985.20	-7,457.21	-170.99	7,458.63	0.00	0.00	0.00
18,900.00	89.10	179.50	11,986.77	-7,557.19	-170.11	7,558.59	0.00	0.00	0.00
19,000.00	89.10	179.50	11,988.34	-7,657.18	-169.24	7,658.56	0.00	0.00	0.00
19,100.00	89.10	179.50	11,989.90	-7,757.16	-168.36	7,758.53	0.00	0.00	0.00
19,200.00	89.10	179.50	11,991.47	-7,857.14	-167.49	7,858.50	0.00	0.00	0.00
19,300.00	89.10	179.50	11,993.04	-7,957.13	-166.61	7,958.47	0.00	0.00	0.00
19,400.00	89.10	179.50	11,994.61	-8,057.11	-165.74	8,058.44	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

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)	
19,500.00	89.10	179.50	11,996.18	-8,157.09	-164.86	8,158.40	0.00	0.00	0.00	
19,600.00	89.10	179.50	11,997.75	-8,257.08	-163.99	8,258.37	0.00	0.00	0.00	
19,700.00	89.10	179.50	11,999.32	-8,357.06	-163.11	8,358.34	0.00	0.00	0.00	
19,800.00	89.10	179.50	12,000.89	-8,457.05	-162.24	8,458.31	0.00	0.00	0.00	
19,900.00	89.10	179.50	12,002.46	-8,557.03	-161.36	8,558.28	0.00	0.00	0.00	
20,000.00	89.10	179.50	12,004.03	-8,657.01	-160.49	8,658.25	0.00	0.00	0.00	
20,100.00	89.10	179.50	12,005.60	-8,757.00	-159.61	8,758.22	0.00	0.00	0.00	
20,200.00	89.10	179.50	12,007.17	-8,856.98	-158.74	8,858.18	0.00	0.00	0.00	
20,300.00	89.10	179.50	12,008.74	-8,956.97	-157.86	8,958.15	0.00	0.00	0.00	
20,400.00	89.10	179.50	12,010.31	-9,056.95	-156.99	9,058.12	0.00	0.00	0.00	
20,500.00	89.10	179.50	12,011.88	-9,156.93	-156.11	9,158.09	0.00	0.00	0.00	
20,600.00	89.10	179.50	12,013.45	-9,256.92	-155.24	9,258.06	0.00	0.00	0.00	
20,700.00	89.10	179.50	12,015.02	-9,356.90	-154.36	9,358.03	0.00	0.00	0.00	
20,800.00	89.10	179.50	12,016.59	-9,456.88	-153.49	9,457.99	0.00	0.00	0.00	
20,900.00	89.10	179.50	12,018.16	-9,556.87	-152.61	9,557.96	0.00	0.00	0.00	
21,000.00	89.10	179.50	12,019.73	-9,656.85	-151.74	9,657.93	0.00	0.00	0.00	
21,100.00	89.10	179.50	12,021.30	-9,756.84	-150.86	9,757.90	0.00	0.00	0.00	
21,200.00	89.10	179.50	12,022.87	-9,856.82	-149.99	9,857.87	0.00	0.00	0.00	
21,300.00	89.10	179.50	12,024.44	-9,956.80	-149.11	9,957.84	0.00	0.00	0.00	
21,400.00	89.10	179.50	12,026.01	-10,056.79	-148.24	10,057.80	0.00	0.00	0.00	
21,500.00	89.10	179.50	12,027.58	-10,156.77	-147.36	10,157.77	0.00	0.00	0.00	
21,600.00	89.10	179.50	12,029.15	-10,256.76	-146.49	10,257.74	0.00	0.00	0.00	
21,700.00	89.10	179.50	12,030.72	-10,356.74	-145.61	10,357.71	0.00	0.00	0.00	
21,800.00	89.10	179.50	12,032.29	-10,456.72	-144.74	10,457.68	0.00	0.00	0.00	
21,900.00	89.10	179.50	12,033.86	-10,556.71	-143.86	10,557.65	0.00	0.00	0.00	
22,000.00	89.10	179.50	12,035.43	-10,656.69	-142.99	10,657.62	0.00	0.00	0.00	
22,100.00	89.10	179.50	12,037.00	-10,756.68	-142.11	10,757.58	0.00	0.00	0.00	
22,200.00	89.10	179.50	12,038.57	-10,856.66	-141.24	10,857.55	0.00	0.00	0.00	
22,300.00	89.10	179.50	12,040.14	-10,956.64	-140.36	10,957.52	0.00	0.00	0.00	
22,400.00	89.10	179.50	12,041.71	-11,056.63	-139.49	11,057.49	0.00	0.00	0.00	
22,500.00	89.10	179.50	12,043.28	-11,156.61	-138.61	11,157.46	0.00	0.00	0.00	
22,600.00	89.10	179.50	12,044.85	-11,256.59	-137.74	11,257.43	0.00	0.00	0.00	
22,700.00	89.10	179.50	12,046.42	-11,356.58	-136.86	11,357.39	0.00	0.00	0.00	
22,800.00	89.10	179.50	12,047.99	-11,456.56	-135.99	11,457.36	0.00	0.00	0.00	
22,900.00	89.10	179.50	12,049.56	-11,556.55	-135.11	11,557.33	0.00	0.00	0.00	
23,000.00	89.10	179.50	12,051.13	-11,656.53	-134.24	11,657.30	0.00	0.00	0.00	
23,100.00	89.10	179.50	12,052.70	-11,756.51	-133.36	11,757.27	0.00	0.00	0.00	
23,200.00	89.10	179.50	12,054.27	-11,856.50	-132.49	11,857.24	0.00	0.00	0.00	
23,300.00	89.10	179.50	12,055.84	-11,956.48	-131.61	11,957.21	0.00	0.00	0.00	
23,389.58	89.10	179.50	12,057.25	-12,046.05	-130.83	12,046.76	0.00	0.00	0.00	
TD at 23389.58 - PBHL (Bus Driver Fed Com 602H)										



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Company:	Franklin Mountain Energy	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Project:	Lea County, NM (NAD83)	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site:	Bus Driver/Kaston Fed Com	North Reference:	Grid
Well:	Bus Driver Fed Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (Bus Driver Fed Co - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	394,466.08	854,569.39	32.080431	-103.322008
LP (Bus Driver Fed Com - plan misses target center by 0.01usft at 12219.78usft MD (11881.89 TVD, -878.05 N, -228.56 E) - Point	0.00	0.00	11,881.89	-878.05	-228.56	393,588.03	854,340.83	32.078023	-103.322773
PBHL (Bus Driver Fed C - plan hits target center - Point	0.00	0.00	12,057.25	-12,046.05	-130.83	382,420.03	854,438.56	32.047325	-103.322795

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,200.00	3,200.00	0.00	0.00	Start Build 1.50
3,599.91	3,599.18	-16.79	-12.48	Start 3344.96 hold at 3599.91 MD
6,944.87	6,925.82	-297.32	-221.02	Start Drop -1.50
7,344.78	7,325.00	-314.11	-233.50	Start 3984.00 hold at 7344.78 MD
11,328.78	11,309.00	-314.11	-233.50	Start DLS 10.00 TFO 179.50
12,219.78	11,881.89	-878.05	-228.56	Start 11169.80 hold at 12219.78 MD
23,389.58	12,057.25	-12,046.05	-130.83	TD at 23389.58



Franklin Mountain Energy

Lea County, NM (NAD83)
Bus Driver/Kaston Fed Com
Bus Driver Fed Com 602H

OH
Plan #4

Anticollision Report

20 April, 2021





Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Reference	Plan #4		
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	4/20/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	23,389.42	Plan #4 (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						
Bus Driver/Kaston Fed Com						
Bus Driver Fed Com 702H - OH - Plan #4	2,612.12	2,612.12	34.99	22.08	2.710	CC
Bus Driver Fed Com 702H - OH - Plan #4	2,700.00	2,699.90	35.01	21.65	2.621	ES
Bus Driver Fed Com 702H - OH - Plan #4	23,389.58	23,590.84	480.95	212.50	1.792	SF
Kaston Fed Com 603H - OH - Plan #5	2,612.55	2,612.55	69.99	57.08	5.420	CC
Kaston Fed Com 603H - OH - Plan #5	2,700.00	2,699.82	70.01	56.65	5.241	ES
Kaston Fed Com 603H - OH - Plan #5	23,389.58	23,410.70	1,106.34	819.50	3.857	SF
Kaston Fed Com 703H - OH - Plan #4	3,002.41	3,002.41	34.99	20.10	2.350	CC
Kaston Fed Com 703H - OH - Plan #4	3,100.00	3,099.83	35.07	19.68	2.280	ES, SF
Judge Baylor Fed Com						
Judge Baylor Fed Com 601H - OH - Plan #3	7,060.56	6,979.56	1,757.48	1,722.51	50.251	CC
Judge Baylor Fed Com 601H - OH - Plan #3	22,100.00	22,130.50	1,811.28	1,554.63	7.057	ES
Judge Baylor Fed Com 601H - OH - Plan #3	22,200.00	22,130.50	1,815.30	1,557.86	7.051	SF
Judge Baylor Fed Com 701H - OH - Plan #3	11,359.60	11,357.55	1,500.45	1,444.08	26.617	CC
Judge Baylor Fed Com 701H - OH - Plan #3	22,100.00	22,424.01	1,531.68	1,279.51	6.074	ES, SF
LHS Wildcat Fed Com						
LHS Wildcat Fed Com 604H - OH - Plan #3	3,200.00	3,165.00	2,354.23	2,338.41	148.852	CC
LHS Wildcat Fed Com 604H - OH - Plan #3	22,100.00	22,051.09	2,445.25	2,188.71	9.532	ES
LHS Wildcat Fed Com 604H - OH - Plan #3	22,200.00	22,051.09	2,448.32	2,191.16	9.521	SF
LHS Wildcat Fed Com 705H - OH - Plan #3	3,200.00	3,165.40	2,389.22	2,373.40	151.055	CC, ES
LHS Wildcat Fed Com 705H - OH - Plan #3	22,200.00	22,259.70	2,789.41	2,532.72	10.867	SF

Offset Design												
Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #4												
Survey Program: 0-OWSG (Rev2) MWD												
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
0.00	0.00	0.00	0.00	0.00	0.00	-90.54	-0.33	-34.99	34.99	34.81	0.18	197.208
100.00	100.00	100.00	100.00	0.13	0.13	-90.54	-0.33	-34.99	34.99	34.31	0.68	51.128
200.00	200.00	200.00	200.00	0.48	0.48	-90.54	-0.33	-34.99	34.99	33.80	1.19	29.371
300.00	300.00	300.00	300.00	0.84	0.84	-90.54	-0.33	-34.99	34.99	33.29	1.70	20.604
400.00	400.00	400.00	400.00	1.20	1.20	-90.54	-0.33	-34.99	34.99	32.79	2.21	15.867
500.00	500.00	500.00	500.00	1.56	1.56	-90.54	-0.33	-34.99	34.99			

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
600.00	600.00	600.00	600.00	1.92	1.92	-90.54	-0.33	-34.99	34.99	32.28	2.71	12.901		
700.00	700.00	700.00	700.00	2.28	2.28	-90.54	-0.33	-34.99	34.99	31.77	3.22	10.870		
800.00	800.00	800.00	800.00	2.63	2.63	-90.54	-0.33	-34.99	34.99	31.27	3.73	9.391		
900.00	900.00	900.00	900.00	2.99	2.99	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-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	-90.54	-0.33	-34.99	34.99	25.18	9.81	3.567		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	-90.54	-0.33	-34.99	34.99	24.68	10.32	3.392		
2,200.00	2,200.00	2,200.00	2,200.00	7.65	7.65	-90.54	-0.33	-34.99	34.99	24.17	10.82	3.233		
2,300.00	2,300.00	2,300.00	2,300.00	8.01	8.01	-90.54	-0.33	-34.99	34.99	23.66	11.33	3.088		
2,400.00	2,400.00	2,400.00	2,400.00	8.37	8.37	-90.54	-0.33	-34.99	34.99	23.15	11.84	2.956		
2,500.00	2,500.00	2,500.00	2,500.00	8.73	8.73	-90.54	-0.33	-34.99	34.99	22.65	12.34	2.835		
2,600.00	2,600.00	2,600.00	2,600.00	9.09	9.09	-90.54	-0.33	-34.99	34.99	22.14	12.85	2.723		
2,612.12	2,612.12	2,612.12	2,612.12	9.13	9.13	-90.54	-0.33	-34.99	34.99	22.08	12.91	2.710 CC		
2,700.00	2,700.00	2,699.90	2,699.90	9.45	9.44	-90.55	-0.34	-35.01	35.01	21.65	13.36	2.621 ES		
2,800.00	2,800.00	2,799.05	2,799.05	9.80	9.77	-91.62	-1.03	-36.44	36.47	22.63	13.84	2.636		
2,900.00	2,900.00	2,898.05	2,897.94	10.16	10.11	-94.04	-2.84	-40.19	40.34	26.03	14.31	2.819		
3,000.00	3,000.00	2,996.76	2,996.43	10.52	10.44	-97.10	-5.75	-46.22	46.71	31.94	14.77	3.163		
3,100.00	3,100.00	3,095.07	3,094.30	10.88	10.78	-100.15	-9.76	-54.50	55.66	40.44	15.22	3.657		
3,200.00	3,200.00	3,192.83	3,191.36	11.24	11.12	-102.85	-14.82	-64.99	67.21	51.55	15.66	4.291		
3,300.00	3,299.99	3,290.28	3,287.79	11.58	11.46	38.74	-20.94	-77.65	80.33	64.24	16.09	4.993		
3,400.00	3,399.91	3,389.53	3,385.85	11.91	11.81	38.28	-27.62	-91.48	92.49	75.93	16.56	5.585		
3,500.00	3,499.69	3,489.01	3,484.13	12.24	12.18	38.84	-34.31	-105.35	102.61	85.57	17.03	6.024		
3,599.91	3,599.18	3,588.55	3,582.46	12.57	12.54	40.15	-41.02	-119.22	110.73	93.22	17.51	6.323		
3,700.00	3,698.72	3,688.33	3,681.04	12.90	12.91	41.77	-47.73	-133.13	117.94	99.95	18.00	6.554		
3,800.00	3,798.17	3,788.02	3,779.53	13.24	13.29	43.21	-54.45	-147.02	125.24	106.75	18.48	6.776		
3,900.00	3,897.63	3,887.71	3,878.02	13.58	13.67	44.48	-61.16	-160.92	132.60	113.63	18.97	6.988		
4,000.00	3,997.08	3,987.39	3,976.50	13.93	14.05	45.62	-67.87	-174.81	140.02	120.55	19.47	7.192		
4,100.00	4,096.53	4,087.08	4,074.99	14.27	14.44	46.65	-74.58	-188.71	147.49	127.53	19.97	7.388		
4,200.00	4,195.98	4,186.77	4,173.47	14.62	14.83	47.58	-81.29	-202.60	155.01	134.54	20.47	7.574		
4,300.00	4,295.44	4,286.46	4,271.96	14.98	15.22	48.42	-88.00	-216.49	162.56	141.59	20.97	7.753		
4,400.00	4,394.89	4,386.14	4,370.45	15.33	15.61	49.18	-94.71	-230.39	170.14	148.67	21.47	7.923		
4,500.00	4,494.34	4,485.83	4,468.93	15.69	16.01	49.88	-101.42	-244.28	177.75	155.77	21.98	8.087		
4,600.00	4,593.79	4,585.52	4,567.42	16.05	16.40	50.53	-108.14	-258.18	185.39	162.89	22.49	8.243		
4,700.00	4,693.25	4,685.21	4,665.90	16.41	16.80	51.12	-114.85	-272.07	193.04	170.04	23.00	8.392		
4,800.00	4,792.70	4,784.89	4,764.39	16.77	17.21	51.67	-121.56	-285.96	200.72	177.20	23.52	8.535		
4,900.00	4,892.15	4,884.58	4,862.88	17.13	17.61	52.17	-128.27	-299.86	208.41	184.37	24.03	8.671		
5,000.00	4,991.60	4,984.27	4,961.36	17.50	18.01	52.64	-134.98	-313.75	216.11	191.56	24.55	8.802		
5,100.00	5,091.06	5,083.96	5,059.85	17.86	18.42	53.08	-141.69	-327.65	223.83	198.76	25.07	8.928		
5,200.00	5,190.51	5,183.64	5,158.33	18.23	18.83	53.49	-148.40	-341.54	231.57	205.97	25.59	9.048		
5,300.00	5,289.96	5,283.33	5,256.82	18.60	19.24	53.87	-155.11	-355.44	239.31	213.19	26.12	9.163		
5,400.00	5,389.41	5,383.02	5,355.31	18.97	19.65	54.23	-161.83	-369.33	247.06	220.42	26.64	9.274		
5,500.00	5,488.87	5,482.71	5,453.79	19.34	20.06	54.57	-168.54	-383.22	254.82	227.66	27.17	9.380		
5,600.00	5,588.32	5,582.39	5,552.28	19.71	20.47	54.89	-175.25	-397.12	262.59	234.90	27.69	9.482		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
5,700.00	5,687.77	5,682.08	5,650.76	20.09	20.89	55.18	-181.96	-411.01	270.37	242.15	28.22	9.580		
5,800.00	5,787.22	5,781.77	5,749.25	20.46	21.30	55.47	-188.67	-424.91	278.16	249.40	28.75	9.674		
5,900.00	5,886.68	5,881.46	5,847.74	20.84	21.71	55.73	-195.38	-438.80	285.95	256.66	29.28	9.765		
6,000.00	5,986.13	5,981.14	5,946.22	21.21	22.13	55.99	-202.09	-452.70	293.74	263.93	29.81	9.852		
6,100.00	6,085.58	6,080.83	6,044.71	21.59	22.55	56.22	-208.81	-466.59	301.55	271.20	30.35	9.937		
6,200.00	6,185.03	6,180.52	6,143.19	21.97	22.97	56.45	-215.52	-480.48	309.35	278.47	30.88	10.018		
6,300.00	6,284.49	6,280.21	6,241.68	22.34	23.38	56.67	-222.23	-494.38	317.17	285.75	31.42	10.096		
6,400.00	6,383.94	6,379.89	6,340.17	22.72	23.80	56.87	-228.94	-508.27	324.98	293.03	31.95	10.171		
6,500.00	6,483.39	6,479.58	6,438.65	23.10	24.22	57.07	-235.65	-522.17	332.80	300.31	32.49	10.244		
6,600.00	6,582.84	6,579.27	6,537.14	23.48	24.64	57.26	-242.36	-536.06	340.63	307.60	33.02	10.315		
6,700.00	6,682.30	6,678.96	6,635.63	23.86	25.06	57.44	-249.07	-549.95	348.45	314.89	33.56	10.382		
6,800.00	6,781.75	6,778.64	6,734.11	24.24	25.48	57.61	-255.78	-563.85	356.28	322.18	34.10	10.448		
6,900.00	6,881.20	6,878.33	6,832.60	24.63	25.91	57.77	-262.50	-577.74	364.12	329.48	34.64	10.512		
6,944.87	6,925.82	6,923.06	6,876.79	24.80	26.10	57.84	-265.51	-583.98	367.63	332.75	34.88	10.539		
7,000.00	6,980.69	6,978.00	6,931.07	25.01	26.33	57.93	-269.21	-591.64	372.16	336.99	35.18	10.580		
7,100.00	7,080.39	7,077.56	7,029.42	25.38	26.75	57.85	-275.91	-605.51	381.46	345.76	35.70	10.685		
7,200.00	7,180.26	7,176.92	7,127.59	25.74	27.17	57.47	-282.60	-619.36	392.16	355.95	36.21	10.830		
7,300.00	7,280.23	7,276.02	7,225.50	26.09	27.59	56.82	-289.27	-633.17	404.31	367.60	36.70	11.015		
7,344.78	7,325.00	7,320.29	7,269.23	26.25	27.78	-86.92	-292.25	-639.34	410.24	373.32	36.92	11.112		
7,400.00	7,380.22	7,374.85	7,323.14	26.43	28.01	-87.48	-295.92	-646.95	417.77	380.58	37.18	11.236		
7,500.00	7,480.22	7,480.63	7,427.73	26.77	28.46	-88.48	-302.77	-661.13	430.99	393.27	37.72	11.427		
7,600.00	7,580.22	7,591.16	7,537.43	27.11	28.91	-89.29	-308.66	-673.31	441.93	403.66	38.27	11.548		
7,700.00	7,680.22	7,702.40	7,648.17	27.44	29.34	-89.88	-313.19	-682.69	450.33	411.53	38.81	11.605		
7,800.00	7,780.22	7,814.14	7,759.68	27.78	29.75	-90.28	-316.32	-689.18	456.15	416.82	39.32	11.600		
7,900.00	7,880.22	7,926.22	7,871.68	28.12	30.14	-90.49	-318.04	-692.73	459.33	419.52	39.81	11.537		
8,000.00	7,980.22	8,034.77	7,980.22	28.46	30.49	-90.53	-318.39	-693.46	459.98	419.69	40.29	11.418		
8,100.00	8,080.22	8,134.77	8,080.22	28.80	30.81	-90.53	-318.39	-693.46	459.98	419.22	40.76	11.284		
8,200.00	8,180.22	8,234.77	8,180.22	29.14	31.13	-90.53	-318.39	-693.46	459.98	418.74	41.24	11.153		
8,300.00	8,280.22	8,334.77	8,280.22	29.48	31.45	-90.53	-318.39	-693.46	459.98	418.26	41.72	11.025		
8,400.00	8,380.22	8,434.77	8,380.22	29.82	31.77	-90.53	-318.39	-693.46	459.98	417.78	42.20	10.899		
8,500.00	8,480.22	8,534.77	8,480.22	30.16	32.10	-90.53	-318.39	-693.46	459.98	417.30	42.68	10.777		
8,600.00	8,580.22	8,634.77	8,580.22	30.51	32.42	-90.53	-318.39	-693.46	459.98	416.82	43.16	10.656		
8,700.00	8,680.22	8,734.77	8,680.22	30.85	32.74	-90.53	-318.39	-693.46	459.98	416.33	43.65	10.539		
8,800.00	8,780.22	8,834.77	8,780.22	31.19	33.07	-90.53	-318.39	-693.46	459.98	415.85	44.13	10.424		
8,900.00	8,880.22	8,934.77	8,880.22	31.53	33.39	-90.53	-318.39	-693.46	459.98	415.37	44.61	10.311		
9,000.00	8,980.22	9,034.77	8,980.22	31.88	33.72	-90.53	-318.39	-693.46	459.98	414.88	45.10	10.200		
9,100.00	9,080.22	9,134.77	9,080.22	32.22	34.05	-90.53	-318.39	-693.46	459.98	414.40	45.58	10.092		
9,200.00	9,180.22	9,234.77	9,180.22	32.57	34.37	-90.53	-318.39	-693.46	459.98	413.92	46.06	9.986		
9,300.00	9,280.22	9,334.77	9,280.22	32.91	34.70	-90.53	-318.39	-693.46	459.98	413.43	46.55	9.882		
9,400.00	9,380.22	9,434.77	9,380.22	33.26	35.03	-90.53	-318.39	-693.46	459.98	412.95	47.03	9.780		
9,500.00	9,480.22	9,534.77	9,480.22	33.60	35.36	-90.53	-318.39	-693.46	459.98	412.46	47.52	9.680		
9,600.00	9,580.22	9,634.77	9,580.22	33.95	35.69	-90.53	-318.39	-693.46	459.98	411.97	48.01	9.582		
9,700.00	9,680.22	9,734.77	9,680.22	34.29	36.02	-90.53	-318.39	-693.46	459.98	411.49	48.49	9.485		
9,800.00	9,780.22	9,834.77	9,780.22	34.64	36.35	-90.53	-318.39	-693.46	459.98	411.00	48.98	9.391		
9,900.00	9,880.22	9,934.77	9,880.22	34.98	36.68	-90.53	-318.39	-693.46	459.98	410.51	49.47	9.298		
10,000.00	9,980.22	10,034.77	9,980.22	35.33	37.01	-90.53	-318.39	-693.46	459.98	410.02	49.96	9.208		
10,100.00	10,080.22	10,134.77	10,080.22	35.68	37.34	-90.53	-318.39	-693.46	459.98	409.54	50.44	9.119		
10,200.00	10,180.22	10,234.77	10,180.22	36.02	37.68	-90.53	-318.39	-693.46	459.98	409.05	50.93	9.031		
10,300.00	10,280.22	10,334.77	10,280.22	36.37	38.01	-90.53	-318.39	-693.46	459.98	408.56	51.42	8.945		
10,400.00	10,380.22	10,434.77	10,380.22	36.72	38.34	-90.53	-318.39	-693.46	459.98	408.07	51.91	8.861		
10,500.00	10,480.22	10,534.77	10,480.22	37.06	38.68	-90.53	-318.39	-693.46	459.98	407.58	52.40	8.778		
10,600.00	10,580.22	10,634.77	10,580.22	37.41	39.01	-90.53	-318.39	-693.46	459.98	407.09	52.89	8.697		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #4		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
10,700.00	10,680.22	10,734.77	10,680.22	37.76	39.35	-90.53	-318.39	-693.46	459.98	406.60	53.38	8.617				
10,800.00	10,780.22	10,834.77	10,780.22	38.11	39.68	-90.53	-318.39	-693.46	459.98	406.11	53.87	8.538				
10,900.00	10,880.22	10,934.77	10,880.22	38.46	40.02	-90.53	-318.39	-693.46	459.98	405.62	54.36	8.461				
11,000.00	10,980.22	11,034.77	10,980.22	38.80	40.36	-90.53	-318.39	-693.46	459.98	405.12	54.86	8.385				
11,100.00	11,080.22	11,134.77	11,080.22	39.15	40.69	-90.53	-318.39	-693.46	459.98	404.63	55.35	8.311				
11,200.00	11,180.22	11,234.77	11,180.22	39.50	41.03	-90.53	-318.39	-693.46	459.98	404.14	55.84	8.238				
11,300.00	11,280.22	11,334.77	11,280.22	39.85	41.37	-90.53	-318.39	-693.46	459.98	403.65	56.33	8.166				
11,328.78	11,309.00	11,363.54	11,309.00	39.95	41.46	-90.53	-318.39	-693.46	459.98	403.51	56.47	8.145				
11,345.87	11,326.09	11,380.63	11,326.09	40.01	41.52	90.00	-318.39	-693.46	459.98	403.42	56.56	8.133				
11,350.00	11,330.22	11,384.76	11,330.22	40.02	41.53	90.02	-318.39	-693.46	459.98	403.40	56.58	8.130				
11,400.00	11,380.04	11,434.58	11,380.04	40.20	41.70	90.51	-318.39	-693.46	460.00	403.16	56.83	8.094				
11,450.00	11,429.32	11,483.86	11,429.32	40.38	41.87	91.52	-318.39	-693.46	460.15	403.04	57.11	8.058				
11,500.00	11,477.69	11,532.23	11,477.69	40.57	42.03	92.99	-318.39	-693.46	460.67	403.27	57.39	8.026				
11,550.00	11,524.77	11,582.87	11,528.27	40.76	42.20	94.74	-320.60	-693.44	461.70	404.02	57.68	8.004				
11,600.00	11,570.21	11,634.99	11,579.90	40.95	42.38	96.47	-327.52	-693.38	463.20	405.23	57.97	7.990				
11,650.00	11,613.66	11,688.66	11,632.19	41.15	42.57	98.17	-339.53	-693.27	465.11	406.86	58.24	7.986				
11,700.00	11,654.79	11,743.99	11,684.68	41.36	42.77	99.82	-356.97	-693.12	467.38	408.89	58.49	7.990				
11,750.00	11,693.29	11,801.08	11,736.81	41.57	42.98	101.42	-380.17	-692.92	469.96	411.26	58.70	8.006				
11,800.00	11,728.87	11,859.98	11,787.90	41.78	43.19	102.94	-409.43	-692.66	472.75	413.89	58.86	8.032				
11,850.00	11,761.25	11,920.75	11,837.18	42.01	43.41	104.37	-444.94	-692.35	475.66	416.70	58.96	8.068				
11,900.00	11,790.19	11,983.38	11,883.73	42.23	43.64	105.69	-486.79	-691.99	478.57	419.58	58.99	8.113				
11,950.00	11,815.47	12,047.83	11,926.58	42.47	43.89	106.87	-534.89	-691.56	481.38	422.41	58.97	8.163				
12,000.00	11,836.89	12,113.99	11,964.66	42.72	44.15	107.90	-588.95	-691.09	483.95	425.04	58.91	8.215				
12,050.00	11,854.29	12,181.70	11,996.92	42.97	44.42	108.76	-648.43	-690.57	486.19	427.35	58.84	8.263				
12,100.00	11,867.55	12,250.71	12,022.35	43.22	44.72	109.43	-712.54	-690.01	487.98	429.18	58.80	8.299				
12,150.00	11,876.55	12,320.73	12,040.08	43.49	45.04	109.89	-780.22	-689.42	489.25	430.43	58.82	8.318				
12,200.00	11,881.24	12,391.38	12,049.48	43.75	45.38	110.13	-850.20	-688.80	489.93	430.99	58.94	8.313				
12,219.78	11,881.89	12,419.43	12,050.81	43.86	45.52	110.17	-878.21	-688.56	490.03	431.01	59.02	8.303				
12,300.00	11,883.15	12,501.29	12,051.91	44.30	45.94	110.15	-960.06	-687.84	489.96	430.40	59.56	8.226				
12,400.00	11,884.72	12,601.29	12,053.23	44.91	46.51	110.12	-1,060.05	-686.97	489.88	429.56	60.32	8.121				
12,500.00	11,886.29	12,701.29	12,054.55	45.56	47.13	110.09	-1,160.04	-686.09	489.79	428.64	61.15	8.010				
12,600.00	11,887.86	12,801.29	12,055.86	46.27	47.79	110.07	-1,260.03	-685.21	489.70	427.66	62.05	7.893				
12,700.00	11,889.43	12,901.29	12,057.18	47.02	48.51	110.04	-1,360.01	-684.34	489.61	426.61	63.01	7.771				
12,800.00	11,891.00	13,001.29	12,058.49	47.82	49.27	110.01	-1,460.00	-683.46	489.53	425.50	64.03	7.645				
12,900.00	11,892.57	13,101.29	12,059.81	48.66	50.07	109.98	-1,559.99	-682.59	489.44	424.33	65.11	7.517				
13,000.00	11,894.14	13,201.29	12,061.13	49.54	50.91	109.95	-1,659.97	-681.71	489.35	423.10	66.25	7.386				
13,100.00	11,895.71	13,301.29	12,062.44	50.46	51.79	109.93	-1,759.96	-680.84	489.27	421.82	67.44	7.255				
13,200.00	11,897.28	13,401.29	12,063.76	51.42	52.71	109.90	-1,859.95	-679.96	489.18	420.49	68.69	7.122				
13,300.00	11,898.85	13,501.29	12,065.08	52.41	53.67	109.87	-1,959.94	-679.09	489.09	419.12	69.98	6.989				
13,400.00	11,900.42	13,601.29	12,066.39	53.44	54.65	109.84	-2,059.92	-678.21	489.01	417.69	71.31	6.857				
13,500.00	11,901.99	13,701.29	12,067.71	54.49	55.67	109.81	-2,159.91	-677.34	488.92	416.23	72.69	6.726				
13,600.00	11,903.56	13,801.29	12,069.02	55.58	56.72	109.79	-2,259.90	-676.46	488.83	414.72	74.11	6.596				
13,700.00	11,905.13	13,901.28	12,070.34	56.69	57.80	109.76	-2,359.88	-675.58	488.75	413.18	75.56	6.468				
13,800.00	11,906.70	14,001.28	12,071.66	57.83	58.90	109.73	-2,459.87	-674.71	488.66	411.60	77.06	6.342				
13,900.00	11,908.27	14,101.28	12,072.97	58.99	60.03	109.70	-2,559.86	-673.83	488.57	409.99	78.58	6.217				
14,000.00	11,909.84	14,201.28	12,074.29	60.17	61.18	109.68	-2,659.85	-672.96	488.49	408.35	80.14	6.095				
14,100.00	11,911.41	14,301.28	12,075.61	61.38	62.36	109.65	-2,759.83	-672.08	488.40	406.67	81.73	5.976				
14,200.00	11,912.98	14,401.28	12,076.92	62.60	63.56	109.62	-2,859.82	-671.21	488.32	404.97	83.35	5.859				
14,300.00	11,914.55	14,501.28	12,078.24	63.85	64.77	109.59	-2,959.81	-670.33	488.23	403.24	84.99	5.745				
14,400.00	11,916.12	14,601.28	12,079.55	65.11	66.01	109.56	-3,059.79	-669.46	488.15	401.49	86.66	5.633				
14,500.00	11,917.69	14,701.28	12,080.87	66.39	67.26	109.53	-3,159.78	-668.58	488.06	399.71	88.35	5.524				
14,600.00	11,919.26	14,801.28	12,082.19	67.69	68.53	109.51	-3,259.77	-667.71	487.97	397.91	90.06	5.418				

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #4		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				
14,700.00	11,920.83	14,901.28	12,083.50	69.00	69.82	109.48	-3,359.76	-666.83	487.89	396.09	91.80	5.315				
14,800.00	11,922.40	15,001.28	12,084.82	70.33	71.12	109.45	-3,459.74	-665.95	487.80	394.25	93.55	5.214				
14,900.00	11,923.97	15,101.28	12,086.14	71.67	72.44	109.42	-3,559.73	-665.08	487.72	392.39	95.33	5.116				
15,000.00	11,925.54	15,201.28	12,087.45	73.02	73.76	109.39	-3,659.72	-664.20	487.64	390.52	97.12	5.021				
15,100.00	11,927.11	15,301.28	12,088.77	74.39	75.11	109.37	-3,759.70	-663.33	487.55	388.63	98.93	4.928				
15,200.00	11,928.68	15,401.28	12,090.08	75.77	76.46	109.34	-3,859.69	-662.45	487.47	386.72	100.75	4.838				
15,300.00	11,930.25	15,501.28	12,091.40	77.15	77.83	109.31	-3,959.68	-661.58	487.38	384.79	102.59	4.751				
15,400.00	11,931.82	15,601.28	12,092.72	78.55	79.20	109.28	-4,059.67	-660.70	487.30	382.86	104.44	4.666				
15,500.00	11,933.39	15,701.28	12,094.03	79.96	80.59	109.25	-4,159.65	-659.83	487.21	380.91	106.31	4.583				
15,600.00	11,934.96	15,801.28	12,095.35	81.37	81.99	109.23	-4,259.64	-658.95	487.13	378.94	108.18	4.503				
15,700.00	11,936.53	15,901.28	12,096.67	82.80	83.39	109.20	-4,359.63	-658.07	487.05	376.97	110.07	4.425				
15,800.00	11,938.10	16,001.28	12,097.98	84.23	84.81	109.17	-4,459.62	-657.20	486.96	374.99	111.98	4.349				
15,900.00	11,939.67	16,101.28	12,099.30	85.67	86.23	109.14	-4,559.60	-656.32	486.88	372.99	113.89	4.275				
16,000.00	11,941.24	16,201.28	12,100.61	87.12	87.66	109.11	-4,659.59	-655.45	486.79	370.98	115.81	4.203				
16,100.00	11,942.81	16,301.28	12,101.93	88.58	89.10	109.08	-4,759.58	-654.57	486.71	368.97	117.74	4.134				
16,200.00	11,944.38	16,401.28	12,103.25	90.04	90.55	109.06	-4,859.56	-653.70	486.63	366.94	119.68	4.066				
16,300.00	11,945.95	16,501.28	12,104.56	91.51	92.00	109.03	-4,959.55	-652.82	486.54	364.91	121.63	4.000				
16,400.00	11,947.52	16,601.28	12,105.88	92.99	93.46	109.00	-5,059.54	-651.95	486.46	362.87	123.59	3.936				
16,500.00	11,949.09	16,701.28	12,107.20	94.47	94.93	108.97	-5,159.53	-651.07	486.38	360.82	125.56	3.874				
16,600.00	11,950.66	16,801.28	12,108.51	95.95	96.40	108.94	-5,259.51	-650.20	486.29	358.76	127.53	3.813				
16,700.00	11,952.23	16,901.28	12,109.83	97.45	97.88	108.92	-5,359.50	-649.32	486.21	356.70	129.51	3.754				
16,800.00	11,953.80	17,001.28	12,111.14	98.94	99.36	108.89	-5,459.49	-648.44	486.13	354.63	131.50	3.697				
16,900.00	11,955.37	17,101.27	12,112.46	100.45	100.85	108.86	-5,559.47	-647.57	486.05	352.56	133.49	3.641				
17,000.00	11,956.94	17,201.27	12,113.78	101.95	102.35	108.83	-5,659.46	-646.69	485.96	350.47	135.49	3.587				
17,100.00	11,958.51	17,301.27	12,115.09	103.46	103.84	108.80	-5,759.45	-645.82	485.88	348.39	137.50	3.534				
17,200.00	11,960.08	17,401.27	12,116.41	104.98	105.35	108.77	-5,859.44	-644.94	485.80	346.29	139.51	3.482				
17,300.00	11,961.65	17,501.27	12,117.73	106.50	106.86	108.75	-5,959.42	-644.07	485.72	344.20	141.52	3.432				
17,400.00	11,963.22	17,601.27	12,119.04	108.02	108.37	108.72	-6,059.41	-643.19	485.64	342.09	143.54	3.383				
17,500.00	11,964.79	17,701.27	12,120.36	109.55	109.88	108.69	-6,159.40	-642.32	485.55	339.99	145.57	3.336				
17,600.00	11,966.36	17,801.27	12,121.67	111.08	111.40	108.66	-6,259.38	-641.44	485.47	337.88	147.60	3.289				
17,700.00	11,967.93	17,901.27	12,122.99	112.61	112.93	108.63	-6,359.37	-640.56	485.39	335.76	149.63	3.244				
17,800.00	11,969.50	18,001.27	12,124.31	114.15	114.45	108.60	-6,459.36	-639.69	485.31	333.64	151.67	3.200				
17,900.00	11,971.07	18,101.27	12,125.62	115.69	115.98	108.58	-6,559.35	-638.81	485.23	331.52	153.71	3.157				
18,000.00	11,972.64	18,201.27	12,126.94	117.24	117.52	108.55	-6,659.33	-637.94	485.15	329.39	155.76	3.115				
18,100.00	11,974.21	18,301.27	12,128.26	118.78	119.06	108.52	-6,759.32	-637.06	485.07	327.26	157.81	3.074				
18,200.00	11,975.78	18,401.27	12,129.57	120.33	120.60	108.49	-6,859.31	-636.19	484.99	325.13	159.86	3.034				
18,300.00	11,977.35	18,501.27	12,130.89	121.89	122.14	108.46	-6,959.29	-635.31	484.90	322.99	161.92	2.995				
18,400.00	11,978.92	18,601.27	12,132.20	123.44	123.68	108.43	-7,059.28	-634.44	484.82	320.85	163.97	2.957				
18,500.00	11,980.49	18,701.27	12,133.52	125.00	125.23	108.41	-7,159.27	-633.56	484.74	318.71	166.04	2.920				
18,600.00	11,982.06	18,801.27	12,134.84	126.56	126.78	108.38	-7,259.26	-632.69	484.66	316.56	168.10	2.883				
18,700.00	11,983.63	18,901.27	12,136.15	128.12	128.34	108.35	-7,359.24	-631.81	484.58	314.41	170.17	2.848				
18,800.00	11,985.20	19,001.27	12,137.47	129.68	129.89	108.32	-7,459.23	-630.93	484.50	312.26	172.24	2.813				
18,900.00	11,986.77	19,101.27	12,138.79	131.25	131.45	108.29	-7,559.22	-630.06	484.42	310.11	174.31	2.779				
19,000.00	11,988.34	19,201.27	12,140.10	132.82	133.01	108.26	-7,659.21	-629.18	484.34	307.96	176.38	2.746				
19,100.00	11,989.90	19,301.27	12,141.42	134.39	134.58	108.23	-7,759.19	-628.31	484.26	305.80	178.46	2.714				
19,200.00	11,991.47	19,401.27	12,142.74	135.96	136.14	108.21	-7,859.18	-627.43	484.18	303.64	180.54	2.682				
19,300.00	11,993.04	19,501.27	12,144.05	137.54	137.71	108.18	-7,959.17	-626.56	484.10	301.48	182.62	2.651				
19,400.00	11,994.61	19,601.27	12,145.37	139.11	139.28	108.15	-8,059.15	-625.68	484.02	299.32	184.70	2.621				
19,500.00	11,996.18	19,701.27	12,146.68	140.69	140.85	108.12	-8,159.14	-624.81	483.94	297.16	186.79	2.591				
19,600.00	11,997.75	19,801.27	12,148.00	142.27	142.42	108.09	-8,259.13	-623.93	483.86	294.99	188.87	2.562				
19,700.00	11,999.32	19,901.27	12,149.32	143.85	144.00	108.06	-8,359.12	-623.05	483.78	292.83	190.96	2.533				
19,800.00	12,000.89	20,001.27	12,150.63	145.43	145.57	108.03	-8,459.10	-622.18	483.71	290.66	193.05	2.506				

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Bus Driver Fed Com 702H - OH - Plan #4		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				
19,900.00	12,002.46	20,101.27	12,151.95	147.02	147.15	108.01	-8,559.09	-621.30	483.63	288.49	195.14	2.478				
20,000.00	12,004.03	20,201.26	12,153.27	148.60	148.73	107.98	-8,659.08	-620.43	483.55	286.32	197.23	2.452				
20,100.00	12,005.60	20,301.26	12,154.58	150.19	150.31	107.95	-8,759.06	-619.55	483.47	284.15	199.32	2.426				
20,200.00	12,007.17	20,401.26	12,155.90	151.78	151.89	107.92	-8,859.05	-618.68	483.39	281.97	201.42	2.400				
20,300.00	12,008.74	20,501.26	12,157.21	153.37	153.48	107.89	-8,959.04	-617.80	483.31	279.80	203.51	2.375				
20,400.00	12,010.31	20,601.26	12,158.53	154.96	155.06	107.86	-9,059.03	-616.93	483.23	277.63	205.61	2.350				
20,500.00	12,011.88	20,701.26	12,159.85	156.55	156.65	107.83	-9,159.01	-616.05	483.16	275.45	207.70	2.326				
20,600.00	12,013.45	20,801.26	12,161.16	158.15	158.24	107.81	-9,259.00	-615.18	483.08	273.28	209.80	2.303				
20,700.00	12,015.02	20,901.26	12,162.48	159.74	159.83	107.78	-9,358.99	-614.30	483.00	271.10	211.90	2.279				
20,800.00	12,016.59	21,001.26	12,163.80	161.34	161.42	107.75	-9,458.97	-613.42	482.92	268.92	214.00	2.257				
20,900.00	12,018.16	21,101.26	12,165.11	162.94	163.01	107.72	-9,558.96	-612.55	482.84	266.74	216.10	2.234				
21,000.00	12,019.73	21,201.26	12,166.43	164.53	164.60	107.69	-9,658.95	-611.67	482.77	264.57	218.20	2.212				
21,100.00	12,021.30	21,301.26	12,167.74	166.13	166.20	107.66	-9,758.94	-610.80	482.69	262.39	220.30	2.191				
21,200.00	12,022.87	21,401.26	12,169.06	167.73	167.79	107.63	-9,858.92	-609.92	482.61	260.21	222.40	2.170				
21,300.00	12,024.44	21,501.26	12,170.38	169.34	169.39	107.61	-9,958.91	-609.05	482.53	258.03	224.50	2.149				
21,400.00	12,026.01	21,601.26	12,171.69	170.94	170.99	107.58	-10,058.90	-608.17	482.46	255.85	226.61	2.129				
21,500.00	12,027.58	21,701.26	12,173.01	172.54	172.59	107.55	-10,158.88	-607.30	482.38	253.67	228.71	2.109				
21,600.00	12,029.15	21,801.26	12,174.33	174.15	174.19	107.52	-10,258.87	-606.42	482.30	251.49	230.81	2.090				
21,700.00	12,030.72	21,901.26	12,175.64	175.75	175.79	107.49	-10,358.86	-605.54	482.23	249.31	232.92	2.070				
21,800.00	12,032.29	22,001.26	12,176.96	177.36	177.39	107.46	-10,458.85	-604.67	482.15	247.13	235.02	2.052				
21,900.00	12,033.86	22,101.26	12,178.27	178.96	178.99	107.43	-10,558.83	-603.79	482.07	244.95	237.12	2.033				
22,000.00	12,035.43	22,201.26	12,179.59	180.57	180.60	107.40	-10,658.82	-602.92	482.00	242.77	239.23	2.015				
22,100.00	12,037.00	22,301.26	12,180.91	182.18	182.20	107.38	-10,758.81	-602.04	481.92	240.59	241.33	1.997				
22,200.00	12,038.57	22,401.26	12,182.22	183.79	183.81	107.35	-10,858.80	-601.17	481.84	238.41	243.44	1.979				
22,300.00	12,040.14	22,501.26	12,183.54	185.40	185.41	107.32	-10,958.78	-600.29	481.77	236.23	245.54	1.962				
22,400.00	12,041.71	22,601.26	12,184.86	187.01	187.02	107.29	-11,058.77	-599.42	481.69	234.05	247.64	1.945				
22,500.00	12,043.28	22,701.26	12,186.17	188.62	188.63	107.26	-11,158.76	-598.54	481.62	231.87	249.75	1.928				
22,600.00	12,044.85	22,801.26	12,187.49	190.23	190.23	107.23	-11,258.74	-597.67	481.54	229.69	251.85	1.912				
22,700.00	12,046.42	22,901.26	12,188.80	191.85	191.84	107.20	-11,358.73	-596.79	481.47	227.51	253.95	1.896				
22,800.00	12,047.99	23,001.26	12,190.12	193.46	193.45	107.17	-11,458.72	-595.91	481.39	225.33	256.06	1.880				
22,900.00	12,049.56	23,101.26	12,191.44	195.07	195.06	107.14	-11,558.71	-595.04	481.31	223.16	258.16	1.864				
23,000.00	12,051.13	23,201.26	12,192.75	196.69	196.68	107.12	-11,658.69	-594.16	481.24	220.98	260.26	1.849				
23,100.00	12,052.70	23,301.25	12,194.07	198.30	198.29	107.09	-11,758.68	-593.29	481.16	218.80	262.36	1.834				
23,200.00	12,054.27	23,401.25	12,195.39	199.92	199.90	107.06	-11,858.67	-592.41	481.09	216.62	264.46	1.819				
23,300.00	12,055.84	23,501.25	12,196.70	201.54	201.51	107.03	-11,958.65	-591.54	481.01	214.45	266.57	1.804				
23,389.58	12,057.25	23,590.84	12,197.88	202.99	202.96	107.00	-12,048.23	-590.75	480.95	212.50	268.45	1.792 SF				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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	89.46	0.66	69.99	69.99	69.99	0.18	394.473		
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.66	69.99	69.99	69.99	0.68	102.271		
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.66	69.99	69.99	69.99	1.19	58.751		
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.66	69.99	69.99	69.99	1.70	41.214		
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.66	69.99	69.99	69.99	2.21	31.739		
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.66	69.99	69.99	69.99	2.71	25.807		
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.66	69.99	69.99	69.99	3.22	21.743		
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.66	69.99	69.99	69.99	3.73	18.784		
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.66	69.99	69.99	69.99	4.23	16.535		
900.00	900.00	900.00	900.00	2.99	2.99	89.46	0.66	69.99	69.99	69.99	4.74	14.766		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	89.46	0.66	69.99	69.99	69.99	5.25	13.340		
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	89.46	0.66	69.99	69.99	69.99	5.75	12.164		
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	89.46	0.66	69.99	69.99	69.99	6.26	11.179		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	89.46	0.66	69.99	69.99	69.99	6.77	10.342		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	89.46	0.66	69.99	69.99	69.99	7.27	9.621		
1,500.00	1,500.00	1,500.00	1,500.00	5.14	5.14	89.46	0.66	69.99	69.99	69.99	7.78	8.995		
1,600.00	1,600.00	1,600.00	1,600.00	5.50	5.50	89.46	0.66	69.99	69.99	69.99	8.29	8.444		
1,700.00	1,700.00	1,700.00	1,700.00	5.86	5.86	89.46	0.66	69.99	69.99	69.99	8.80	7.958		
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	89.46	0.66	69.99	69.99	69.99	9.30	7.524		
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	89.46	0.66	69.99	69.99	69.99	9.81	7.135		
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	89.46	0.66	69.99	69.99	69.99	10.32	6.785		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	89.46	0.66	69.99	69.99	69.99	10.82	6.467		
2,200.00	2,200.00	2,200.00	2,200.00	7.65	7.65	89.46	0.66	69.99	69.99	69.99	11.33	6.177		
2,300.00	2,300.00	2,300.00	2,300.00	8.01	8.01	89.46	0.66	69.99	69.99	69.99	11.84	5.913		
2,400.00	2,400.00	2,400.00	2,400.00	8.37	8.37	89.46	0.66	69.99	69.99	69.99	12.34	5.670		
2,500.00	2,500.00	2,500.00	2,500.00	8.73	8.73	89.46	0.66	69.99	69.99	69.99	12.85	5.446		
2,600.00	2,600.00	2,600.00	2,600.00	9.09	9.09	89.46	0.66	69.99	69.99	69.99	12.91	5.420 CC		
2,612.55	2,612.55	2,612.55	2,612.55	9.13	9.13	89.46	0.66	69.99	69.99	69.99	13.36	5.241 ES		
2,700.00	2,700.00	2,699.82	2,699.82	9.45	9.44	89.46	0.65	70.00	70.01	56.65	13.84	5.165		
2,800.00	2,800.00	2,798.11	2,798.10	9.80	9.77	89.92	0.10	71.44	71.47	57.63	14.31	5.265		
2,900.00	2,900.00	2,896.26	2,896.16	10.16	10.10	91.04	-1.36	75.24	75.35	61.04	14.77	5.528		
3,000.00	3,000.00	2,994.14	2,993.82	10.52	10.44	92.62	-3.72	81.36	81.68	66.90	15.23	5.943		
3,100.00	3,100.00	3,091.62	3,090.87	10.88	10.77	94.43	-6.96	89.77	90.50	75.28	15.67	6.499		
3,200.00	3,200.00	3,188.57	3,187.15	11.24	11.11	96.29	-11.06	100.43	101.85	86.18	16.09	7.231		
3,300.00	3,299.99	3,284.82	3,282.41	11.58	11.45	-118.95	-16.00	113.27	116.36	100.27	16.50	8.156		
3,400.00	3,399.91	3,380.20	3,376.44	11.91	11.79	-118.51	-21.75	128.19	134.55	118.05	16.97	9.140		
3,500.00	3,499.69	3,478.06	3,472.71	12.24	12.15	-118.86	-28.05	144.56	155.08	138.12	17.44	10.142		
3,599.91	3,599.18	3,575.49	3,568.56	12.57	12.52	-119.79	-34.33	160.85	176.88	159.44	17.92	11.131		
3,700.00	3,698.72	3,672.92	3,664.42	12.90	12.89	-121.09	-40.60	177.14	199.44	181.52	18.40	12.071		
3,800.00	3,798.17	3,770.26	3,760.18	13.24	13.26	-122.11	-46.87	193.42	222.05	203.66	18.88	12.963		
3,900.00	3,897.63	3,867.60	3,855.95	13.58	13.64	-122.95	-53.14	209.70	244.72	225.84	19.36	13.811		
4,000.00	3,997.08	3,964.94	3,951.71	13.93	14.03	-123.65	-59.41	225.98	267.43	248.07	19.85	14.618		
4,100.00	4,096.53	4,062.28	4,047.48	14.27	14.41	-124.24	-65.67	242.26	290.17	270.32	20.34	15.385		
4,200.00	4,195.98	4,159.62	4,143.24	14.62	14.81	-124.74	-71.94	258.54	312.94	292.60	20.83	16.115		
4,300.00	4,295.44	4,256.96	4,239.00	14.98	15.20	-125.17	-78.21	274.81	335.73	314.89	21.33	16.810		
4,400.00	4,394.89	4,354.30	4,334.77	15.33	15.60	-125.55	-84.48	291.09	358.53	337.20	21.83	17.472		
4,500.00	4,494.34	4,451.64	4,430.53	15.69	16.00	-125.88	-90.75	307.37	381.34	359.52	22.32	18.104		
4,600.00	4,593.79	4,548.98	4,526.30	16.05	16.40	-126.18	-97.02	323.65	404.17	381.85	22.83	18.707		
4,700.00	4,693.25	4,646.32	4,622.06	16.41	16.81	-126.44	-103.28	339.93	427.01	404.18	23.33	19.283		
4,800.00	4,792.70	4,743.66	4,717.83	16.77	17.21	-126.68	-109.55	356.21	449.85	426.52	23.83	19.834		
4,900.00	4,892.15	4,841.00	4,813.59	17.13	17.62	-126.89	-115.82	372.48	472.70	448.87	24.34	20.360		
5,000.00	4,991.60	4,938.34	4,909.35	17.50	18.03	-127.09	-122.09	388.76	495.55	471.21				

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - Plan #5		Offset Site Error:		0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:		0.00 usft			
Reference		Offset		Semi Major Axis			Distance											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning					
5,100.00	5,091.06	5,035.68	5,005.12	17.86	18.45	-127.27	-128.36	405.04	518.41	493.57	24.85	20.865						
5,200.00	5,190.51	5,133.02	5,100.88	18.23	18.86	-127.43	-134.63	421.32	541.28	515.92	25.36	21.348						
5,300.00	5,289.96	5,230.36	5,196.65	18.60	19.28	-127.58	-140.89	437.60	564.15	538.28	25.87	21.811						
5,400.00	5,389.41	5,327.70	5,292.41	18.97	19.70	-127.72	-147.16	453.88	587.02	560.64	26.38	22.255						
5,500.00	5,488.87	5,425.04	5,388.18	19.34	20.12	-127.84	-153.43	470.15	609.89	583.00	26.89	22.681						
5,600.00	5,588.32	5,522.38	5,483.94	19.71	20.54	-127.96	-159.70	486.43	632.77	605.37	27.40	23.091						
5,700.00	5,687.77	5,619.72	5,579.70	20.09	20.96	-128.07	-165.97	502.71	655.65	627.73	27.92	23.485						
5,800.00	5,787.22	5,717.06	5,675.47	20.46	21.38	-128.17	-172.24	518.99	678.53	650.10	28.43	23.863						
5,900.00	5,886.68	5,814.40	5,771.23	20.84	21.81	-128.27	-178.50	535.27	701.42	672.46	28.95	24.227						
6,000.00	5,986.13	5,911.74	5,867.00	21.21	22.23	-128.36	-184.77	551.55	724.30	694.83	29.47	24.578						
6,100.00	6,085.58	6,009.08	5,962.76	21.59	22.66	-128.44	-191.04	567.82	747.19	717.20	29.99	24.916						
6,200.00	6,185.03	6,106.42	6,058.53	21.97	23.08	-128.52	-197.31	584.10	770.08	739.57	30.51	25.242						
6,300.00	6,284.49	6,203.76	6,154.29	22.34	23.51	-128.60	-203.58	600.38	792.97	761.94	31.03	25.556						
6,400.00	6,383.94	6,301.10	6,250.05	22.72	23.94	-128.67	-209.85	616.66	815.86	784.31	31.55	25.860						
6,500.00	6,483.39	6,398.44	6,345.82	23.10	24.37	-128.73	-216.11	632.94	838.75	806.68	32.07	26.153						
6,600.00	6,582.84	6,495.78	6,441.58	23.48	24.80	-128.80	-222.38	649.22	861.64	829.05	32.59	26.436						
6,700.00	6,682.30	6,593.12	6,537.35	23.86	25.23	-128.86	-228.65	665.50	884.54	851.42	33.12	26.709						
6,800.00	6,781.75	6,690.46	6,633.11	24.24	25.66	-128.91	-234.92	681.77	907.43	873.79	33.64	26.974						
6,900.00	6,881.20	6,787.80	6,728.88	24.63	26.10	-128.97	-241.19	698.05	930.33	896.16	34.17	27.230						
6,944.87	6,925.82	6,831.48	6,771.85	24.80	26.29	-128.99	-244.00	705.36	940.60	906.20	34.40	27.342						
7,000.00	6,980.69	6,885.20	6,824.70	25.01	26.53	-129.15	-247.46	714.34	952.98	918.29	34.69	27.471						
7,100.00	7,080.39	6,982.92	6,920.83	25.38	26.96	-129.32	-253.75	730.68	974.18	938.97	35.21	27.667						
7,200.00	7,180.26	7,080.92	7,017.25	25.74	27.40	-129.36	-260.06	747.07	993.77	958.04	35.73	27.817						
7,300.00	7,280.23	7,179.15	7,113.89	26.09	27.84	-129.27	-266.39	763.50	1,011.74	975.50	36.24	27.921						
7,344.78	7,325.00	7,223.19	7,157.21	26.25	28.04	87.44	-269.23	770.86	1,019.27	982.81	36.46	27.955						
7,400.00	7,380.22	7,277.52	7,210.66	26.43	28.28	87.66	-272.72	779.95	1,028.37	991.63	36.74	27.993						
7,500.00	7,480.22	7,375.90	7,307.45	26.77	28.72	88.05	-279.06	796.40	1,044.88	1,007.64	37.24	28.060						
7,600.00	7,580.22	7,494.23	7,424.00	27.11	29.24	88.49	-286.40	815.46	1,060.90	1,023.03	37.86	28.019						
7,700.00	7,680.22	7,627.79	7,556.20	27.44	29.80	88.88	-293.21	833.15	1,074.04	1,035.49	38.55	27.860						
7,800.00	7,780.22	7,762.53	7,690.16	27.78	30.33	89.17	-298.39	846.61	1,083.97	1,044.76	39.21	27.649						
7,900.00	7,880.22	7,898.13	7,825.41	28.12	30.84	89.36	-301.89	855.69	1,090.64	1,050.82	39.82	27.388						
8,000.00	7,980.22	8,034.25	7,961.43	28.46	31.30	89.45	-303.67	860.30	1,094.01	1,053.62	40.40	27.082						
8,100.00	8,080.22	8,153.05	8,080.22	28.80	31.68	89.47	-303.90	860.91	1,094.46	1,053.55	40.91	26.755						
8,200.00	8,180.22	8,253.05	8,180.22	29.14	31.99	89.47	-303.90	860.91	1,094.46	1,053.07	41.38	26.447						
8,300.00	8,280.22	8,353.05	8,280.22	29.48	32.31	89.47	-303.90	860.91	1,094.46	1,052.60	41.86	26.145						
8,400.00	8,380.22	8,453.05	8,380.22	29.82	32.62	89.47	-303.90	860.91	1,094.46	1,052.12	42.34	25.849						
8,500.00	8,480.22	8,553.05	8,480.22	30.16	32.94	89.47	-303.90	860.91	1,094.46	1,051.64	42.82	25.560						
8,600.00	8,580.22	8,653.05	8,580.22	30.51	33.25	89.47	-303.90	860.91	1,094.46	1,051.16	43.30	25.276						
8,700.00	8,680.22	8,753.05	8,680.22	30.85	33.57	89.47	-303.90	860.91	1,094.46	1,050.68	43.78	24.999						
8,800.00	8,780.22	8,853.05	8,780.22	31.19	33.89	89.47	-303.90	860.91	1,094.46	1,050.20	44.26	24.727						
8,900.00	8,880.22	8,953.05	8,880.22	31.53	34.21	89.47	-303.90	860.91	1,094.46	1,049.71	44.74	24.461						
9,000.00	8,980.22	9,053.05	8,980.22	31.88	34.53	89.47	-303.90	860.91	1,094.46	1,049.23	45.23	24.200						
9,100.00	9,080.22	9,153.05	9,080.22	32.22	34.85	89.47	-303.90	860.91	1,094.46	1,048.75	45.71	23.944						
9,200.00	9,180.22	9,253.05	9,180.22	32.57	35.17	89.47	-303.90	860.91	1,094.46	1,048.27	46.19	23.694						
9,300.00	9,280.22	9,353.05	9,280.22	32.91	35.49	89.47	-303.90	860.91	1,094.46	1,047.78	46.68	23.448						
9,400.00	9,380.22	9,453.05	9,380.22	33.26	35.81	89.47	-303.90	860.91	1,094.46	1,047.30	47.16	23.208						
9,500.00	9,480.22	9,553.05	9,480.22	33.60	36.14	89.47	-303.90	860.91	1,094.46	1,046.81	47.64	22.971						
9,600.00	9,580.22	9,653.05	9,580.22	33.95	36.46	89.47	-303.90	860.91	1,094.46	1,046.33	48.13	22.740						
9,700.00	9,680.22	9,753.05	9,680.22	34.29	36.79	89.47	-303.90	860.91	1,094.46	1,045.84	48.62	22.513						
9,800.00	9,780.22	9,853.05	9,780.22	34.64	37.11	89.47	-303.90	860.91	1,094.46	1,045.36	49.10	22.290						
9,900.00	9,880.22	9,953.05	9,880.22	34.98	37.44	89.47	-303.90	860.91	1,094.46	1,044.87	49.59	22.071						
10,000.00	9,980.22	10,053.05	9,980.22	35.33	37.76	89.47	-303.90	860.91	1,094.46	1,044.38	50.07	21.856						

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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	10,080.22	10,153.05	10,080.22	35.68	38.09	89.47	-303.90	860.91	1,094.46	1,043.90	50.56	21.646		
10,200.00	10,180.22	10,253.05	10,180.22	36.02	38.42	89.47	-303.90	860.91	1,094.46	1,043.41	51.05	21.439		
10,300.00	10,280.22	10,353.05	10,280.22	36.37	38.75	89.47	-303.90	860.91	1,094.46	1,042.92	51.54	21.236		
10,400.00	10,380.22	10,453.05	10,380.22	36.72	39.08	89.47	-303.90	860.91	1,094.46	1,042.43	52.03	21.037		
10,500.00	10,480.22	10,553.05	10,480.22	37.06	39.40	89.47	-303.90	860.91	1,094.46	1,041.94	52.52	20.841		
10,600.00	10,580.22	10,653.05	10,580.22	37.41	39.73	89.47	-303.90	860.91	1,094.46	1,041.45	53.00	20.648		
10,700.00	10,680.22	10,753.05	10,680.22	37.76	40.06	89.47	-303.90	860.91	1,094.46	1,040.96	53.49	20.459		
10,800.00	10,780.22	10,853.05	10,780.22	38.11	40.40	89.47	-303.90	860.91	1,094.46	1,040.47	53.98	20.274		
10,900.00	10,880.22	10,953.05	10,880.22	38.46	40.73	89.47	-303.90	860.91	1,094.46	1,039.98	54.47	20.091		
11,000.00	10,980.22	11,053.05	10,980.22	38.80	41.06	89.47	-303.90	860.91	1,094.46	1,039.49	54.96	19.912		
11,100.00	11,080.22	11,153.05	11,080.22	39.15	41.39	89.47	-303.90	860.91	1,094.46	1,039.00	55.46	19.736		
11,200.00	11,180.22	11,253.05	11,180.22	39.50	41.72	89.47	-303.90	860.91	1,094.46	1,038.51	55.95	19.563		
11,215.57	11,195.79	11,268.62	11,195.79	39.56	41.77	89.47	-303.90	860.91	1,094.46	1,038.44	56.02	19.536		
11,300.00	11,280.22	11,353.05	11,280.22	39.85	42.06	89.47	-303.91	860.91	1,094.46	1,038.02	56.44	19.392		
11,328.78	11,309.00	11,381.76	11,308.92	39.95	42.15	89.51	-304.79	860.92	1,094.46	1,037.88	56.58	19.344		
11,350.00	11,330.22	11,402.88	11,329.98	40.02	42.22	-89.92	-306.35	860.93	1,094.46	1,037.78	56.68	19.309		
11,400.00	11,380.04	11,452.47	11,379.10	40.20	42.39	-89.78	-313.07	861.00	1,094.47	1,037.55	56.93	19.226		
11,450.00	11,429.32	11,501.82	11,427.22	40.38	42.56	-89.64	-323.94	861.11	1,094.50	1,037.32	57.18	19.140		
11,500.00	11,477.69	11,550.95	11,474.02	40.57	42.73	-89.50	-338.84	861.25	1,094.54	1,037.09	57.45	19.053		
11,550.00	11,524.77	11,600.00	11,519.30	40.76	42.91	-89.36	-357.65	861.43	1,094.58	1,036.86	57.72	18.965		
11,600.00	11,570.21	11,648.57	11,562.39	40.95	43.08	-89.23	-380.03	861.65	1,094.63	1,036.64	57.99	18.875		
11,650.00	11,613.66	11,697.09	11,603.39	41.15	43.26	-89.11	-405.95	861.91	1,094.69	1,036.42	58.28	18.785		
11,700.00	11,654.79	11,745.42	11,641.91	41.36	43.44	-88.99	-435.13	862.19	1,094.76	1,036.20	58.57	18.693		
11,750.00	11,693.29	11,793.59	11,677.71	41.57	43.61	-88.88	-467.33	862.51	1,094.83	1,035.97	58.86	18.600		
11,800.00	11,728.87	11,841.61	11,710.59	41.78	43.79	-88.78	-502.31	862.85	1,094.91	1,035.74	59.17	18.505		
11,850.00	11,761.25	11,889.49	11,740.34	42.01	43.97	-88.68	-539.80	863.21	1,094.99	1,035.50	59.48	18.409		
11,900.00	11,790.19	11,937.25	11,766.79	42.23	44.16	-88.60	-579.55	863.60	1,095.06	1,035.26	59.80	18.311		
11,950.00	11,815.47	11,984.90	11,789.79	42.47	44.35	-88.53	-621.26	864.01	1,095.14	1,035.01	60.13	18.212		
12,000.00	11,836.89	12,032.46	11,809.22	42.72	44.55	-88.46	-664.65	864.43	1,095.22	1,034.74	60.47	18.111		
12,050.00	11,854.29	12,079.94	11,824.96	42.97	44.76	-88.41	-709.44	864.87	1,095.29	1,034.47	60.82	18.008		
12,100.00	11,867.55	12,127.37	11,836.92	43.22	44.97	-88.37	-755.31	865.32	1,095.36	1,034.18	61.17	17.905		
12,150.00	11,876.55	12,174.76	11,845.05	43.49	45.19	-88.35	-801.98	865.77	1,095.42	1,033.88	61.53	17.802		
12,200.00	11,881.24	12,222.12	11,849.29	43.75	45.42	-88.33	-849.14	866.23	1,095.47	1,033.58	61.90	17.698		
12,219.78	11,881.89	12,240.97	11,849.89	43.86	45.52	-88.33	-867.97	866.42	1,095.50	1,033.45	62.04	17.657		
12,300.00	11,883.15	12,321.19	11,851.43	44.30	45.93	-88.34	-948.17	867.20	1,095.57	1,032.90	62.67	17.483		
12,400.00	11,884.72	12,421.19	11,853.34	44.91	46.50	-88.36	-1,048.15	868.18	1,095.66	1,032.15	63.51	17.252		
12,500.00	11,886.29	12,521.18	11,855.26	45.56	47.12	-88.38	-1,148.13	869.15	1,095.75	1,031.32	64.43	17.007		
12,600.00	11,887.86	12,621.18	11,857.17	46.27	47.78	-88.40	-1,248.10	870.13	1,095.84	1,030.43	65.42	16.752		
12,700.00	11,889.43	12,721.18	11,859.09	47.02	48.50	-88.41	-1,348.08	871.10	1,095.93	1,029.46	66.47	16.487		
12,800.00	11,891.00	12,821.18	11,861.00	47.82	49.26	-88.43	-1,448.06	872.08	1,096.03	1,028.43	67.59	16.215		
12,900.00	11,892.57	12,921.18	11,862.92	48.66	50.06	-88.45	-1,548.03	873.06	1,096.12	1,027.34	68.77	15.938		
13,000.00	11,894.14	13,021.18	11,864.83	49.54	50.91	-88.47	-1,648.01	874.03	1,096.21	1,026.20	70.01	15.657		
13,100.00	11,895.71	13,121.18	11,866.75	50.46	51.79	-88.49	-1,747.98	875.01	1,096.30	1,024.99	71.31	15.374		
13,200.00	11,897.28	13,221.18	11,868.66	51.42	52.71	-88.51	-1,847.96	875.98	1,096.39	1,023.74	72.65	15.091		
13,300.00	11,898.85	13,321.18	11,870.58	52.41	53.67	-88.52	-1,947.94	876.96	1,096.48	1,022.44	74.05	14.807		
13,400.00	11,900.42	13,421.18	11,872.49	53.44	54.66	-88.54	-2,047.91	877.94	1,096.58	1,021.09	75.49	14.526		
13,500.00	11,901.99	13,521.18	11,874.41	54.49	55.68	-88.56	-2,147.89	878.91	1,096.67	1,019.69	76.98	14.247		
13,600.00	11,903.56	13,621.18	11,876.32	55.58	56.73	-88.58	-2,247.87	879.89	1,096.76	1,018.26	78.51	13.970		
13,700.00	11,905.13	13,721.18	11,878.23	56.69	57.81	-88.60	-2,347.84	880.86	1,096.85	1,016.78	80.07	13.698		
13,800.00	11,906.70	13,821.18	11,880.15	57.83	58.92	-88.61	-2,447.82	881.84	1,096.95	1,015.27	81.68	13.430		
13,900.00	11,908.27	13,921.18	11,882.06	58.99	60.05	-88.63	-2,547.79	882.82	1,097.04	1,013.73	83.31	13.167		
14,000.00	11,909.84	14,021.18	11,883.98	60.17	61.21	-88.65	-2,647.77	883.79	1,097.13	1,012.15	84.99	12.910		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
14,100.00	11,911.41	14,121.17	11,885.89	61.38	62.38	-88.67	-2,747.75	884.77	1,097.23	1,010.54	86.69	12.657		
14,200.00	11,912.98	14,221.17	11,887.81	62.60	63.58	-88.69	-2,847.72	885.74	1,097.32	1,008.90	88.42	12.411		
14,300.00	11,914.55	14,321.17	11,889.72	63.85	64.80	-88.70	-2,947.70	886.72	1,097.41	1,007.24	90.18	12.170		
14,400.00	11,916.12	14,421.17	11,891.64	65.11	66.04	-88.72	-3,047.68	887.70	1,097.51	1,005.55	91.96	11.935		
14,500.00	11,917.69	14,521.17	11,893.55	66.39	67.29	-88.74	-3,147.65	888.67	1,097.60	1,003.83	93.77	11.706		
14,600.00	11,919.26	14,621.17	11,895.47	67.69	68.57	-88.76	-3,247.63	889.65	1,097.69	1,002.09	95.60	11.482		
14,700.00	11,920.83	14,721.17	11,897.38	69.00	69.86	-88.78	-3,347.60	890.62	1,097.79	1,000.34	97.45	11.265		
14,800.00	11,922.40	14,821.17	11,899.30	70.33	71.16	-88.80	-3,447.58	891.60	1,097.88	998.56	99.32	11.054		
14,900.00	11,923.97	14,921.17	11,901.21	71.67	72.48	-88.81	-3,547.56	892.58	1,097.97	996.76	101.22	10.848		
15,000.00	11,925.54	15,021.17	11,903.13	73.02	73.81	-88.83	-3,647.53	893.55	1,098.07	994.94	103.13	10.648		
15,100.00	11,927.11	15,121.17	11,905.04	74.39	75.15	-88.85	-3,747.51	894.53	1,098.16	993.11	105.05	10.453		
15,200.00	11,928.68	15,221.17	11,906.95	75.77	76.51	-88.87	-3,847.49	895.50	1,098.26	991.26	107.00	10.264		
15,300.00	11,930.25	15,321.17	11,908.87	77.15	77.88	-88.89	-3,947.46	896.48	1,098.35	989.39	108.96	10.081		
15,400.00	11,931.82	15,421.17	11,910.78	78.55	79.25	-88.90	-4,047.44	897.46	1,098.44	987.51	110.93	9.902		
15,500.00	11,933.39	15,521.17	11,912.70	79.96	80.64	-88.92	-4,147.41	898.43	1,098.54	985.62	112.92	9.728		
15,600.00	11,934.96	15,621.16	11,914.61	81.37	82.04	-88.94	-4,247.39	899.41	1,098.63	983.71	114.92	9.560		
15,700.00	11,936.53	15,721.16	11,916.53	82.80	83.45	-88.96	-4,347.37	900.38	1,098.73	981.79	116.93	9.396		
15,800.00	11,938.10	15,821.16	11,918.44	84.23	84.87	-88.98	-4,447.34	901.36	1,098.82	979.86	118.96	9.237		
15,900.00	11,939.67	15,921.16	11,920.36	85.67	86.29	-88.99	-4,547.32	902.34	1,098.92	977.92	121.00	9.082		
16,000.00	11,941.24	16,021.16	11,922.27	87.12	87.72	-89.01	-4,647.30	903.31	1,099.01	975.97	123.04	8.932		
16,100.00	11,942.81	16,121.16	11,924.19	88.58	89.16	-89.03	-4,747.27	904.29	1,099.11	974.01	125.10	8.786		
16,200.00	11,944.38	16,221.16	11,926.10	90.04	90.61	-89.05	-4,847.25	905.27	1,099.20	972.04	127.17	8.644		
16,300.00	11,945.95	16,321.16	11,928.02	91.51	92.07	-89.07	-4,947.23	906.24	1,099.30	970.05	129.25	8.506		
16,400.00	11,947.52	16,421.16	11,929.93	92.99	93.53	-89.08	-5,047.20	907.22	1,099.40	968.06	131.33	8.371		
16,500.00	11,949.09	16,521.16	11,931.84	94.47	95.00	-89.10	-5,147.18	908.19	1,099.49	966.07	133.42	8.241		
16,600.00	11,950.66	16,621.16	11,933.76	95.95	96.47	-89.12	-5,247.15	909.17	1,099.59	964.06	135.53	8.114		
16,700.00	11,952.23	16,721.16	11,935.67	97.45	97.95	-89.14	-5,347.13	910.15	1,099.68	962.05	137.63	7.990		
16,800.00	11,953.80	16,821.16	11,937.59	98.94	99.43	-89.16	-5,447.11	911.12	1,099.78	960.03	139.75	7.870		
16,900.00	11,955.37	16,921.16	11,939.50	100.45	100.92	-89.17	-5,547.08	912.10	1,099.87	958.00	141.87	7.752		
17,000.00	11,956.94	17,021.16	11,941.42	101.95	102.42	-89.19	-5,647.06	913.07	1,099.97	955.97	144.00	7.638		
17,100.00	11,958.51	17,121.16	11,943.33	103.46	103.92	-89.21	-5,747.04	914.05	1,100.07	953.93	146.14	7.527		
17,200.00	11,960.08	17,221.15	11,945.25	104.98	105.42	-89.23	-5,847.01	915.03	1,100.16	951.88	148.28	7.419		
17,300.00	11,961.65	17,321.15	11,947.16	106.50	106.93	-89.25	-5,946.99	916.00	1,100.26	949.83	150.43	7.314		
17,400.00	11,963.22	17,421.15	11,949.08	108.02	108.44	-89.26	-6,046.96	916.98	1,100.36	947.77	152.58	7.211		
17,500.00	11,964.79	17,521.15	11,950.99	109.55	109.96	-89.28	-6,146.94	917.95	1,100.45	945.71	154.74	7.111		
17,600.00	11,966.36	17,621.15	11,952.91	111.08	111.48	-89.30	-6,246.92	918.93	1,100.55	943.64	156.91	7.014		
17,700.00	11,967.93	17,721.15	11,954.82	112.61	113.01	-89.32	-6,346.89	919.91	1,100.65	941.57	159.08	6.919		
17,800.00	11,969.50	17,821.15	11,956.74	114.15	114.54	-89.34	-6,446.87	920.88	1,100.74	939.49	161.25	6.826		
17,900.00	11,971.07	17,921.15	11,958.65	115.69	116.07	-89.35	-6,546.85	921.86	1,100.84	937.41	163.43	6.736		
18,000.00	11,972.64	18,021.15	11,960.56	117.24	117.60	-89.37	-6,646.82	922.83	1,100.94	935.33	165.61	6.648		
18,100.00	11,974.21	18,121.15	11,962.48	118.78	119.14	-89.39	-6,746.80	923.81	1,101.04	933.24	167.80	6.562		
18,200.00	11,975.78	18,221.15	11,964.39	120.33	120.68	-89.41	-6,846.77	924.79	1,101.13	931.15	169.99	6.478		
18,300.00	11,977.35	18,321.15	11,966.31	121.89	122.22	-89.43	-6,946.75	925.76	1,101.23	929.05	172.18	6.396		
18,400.00	11,978.92	18,421.15	11,968.22	123.44	123.77	-89.44	-7,046.73	926.74	1,101.33	926.95	174.38	6.316		
18,500.00	11,980.49	18,521.15	11,970.14	125.00	125.32	-89.46	-7,146.70	927.71	1,101.43	924.84	176.58	6.237		
18,600.00	11,982.06	18,621.15	11,972.05	126.56	126.87	-89.48	-7,246.68	928.69	1,101.52	922.74	178.79	6.161		
18,700.00	11,983.63	18,721.14	11,973.97	128.12	128.43	-89.50	-7,346.66	929.67	1,101.62	920.63	181.00	6.086		
18,800.00	11,985.20	18,821.14	11,975.88	129.68	129.98	-89.52	-7,446.63	930.64	1,101.72	918.51	183.21	6.014		
18,900.00	11,986.77	18,921.14	11,977.80	131.25	131.54	-89.53	-7,546.61	931.62	1,101.82	916.40	185.42	5.942		
19,000.00	11,988.34	19,021.14	11,979.71	132.82	133.10	-89.55	-7,646.58	932.59	1,101.92	914.28	187.64	5.873		
19,100.00	11,989.90	19,121.14	11,981.63	134.39	134.67	-89.57	-7,746.56	933.57	1,102.02	912.16	189.86	5.804		
19,200.00	11,991.47	19,221.14	11,983.54	135.96	136.23	-89.59	-7,846.54	934.55	1,102.11	910.03	192.08	5.738		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design		Bus Driver/Kaston Fed Com - Kaston Fed Com 603H - OH - Plan #5											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			
19,300.00	11,993.04	19,321.14	11,985.46	137.54	137.80	-89.61	-7,946.51	935.52	1,102.21	907.90	194.31	5.672			
19,400.00	11,994.61	19,421.14	11,987.37	139.11	139.37	-89.62	-8,046.49	936.50	1,102.31	905.77	196.54	5.609			
19,500.00	11,996.18	19,521.14	11,989.28	140.69	140.94	-89.64	-8,146.47	937.47	1,102.41	903.64	198.77	5.546			
19,600.00	11,997.75	19,621.14	11,991.20	142.27	142.52	-89.66	-8,246.44	938.45	1,102.51	901.51	201.00	5.485			
19,700.00	11,999.32	19,721.14	11,993.11	143.85	144.09	-89.68	-8,346.42	939.43	1,102.61	899.37	203.24	5.425			
19,800.00	12,000.89	19,821.14	11,995.03	145.43	145.67	-89.70	-8,446.39	940.40	1,102.71	897.23	205.48	5.367			
19,900.00	12,002.46	19,921.14	11,996.94	147.02	147.25	-89.71	-8,546.37	941.38	1,102.81	895.09	207.72	5.309			
20,000.00	12,004.03	20,021.14	11,998.86	148.60	148.83	-89.73	-8,646.35	942.35	1,102.91	892.95	209.96	5.253			
20,100.00	12,005.60	20,121.14	12,000.77	150.19	150.41	-89.75	-8,746.32	943.33	1,103.01	890.80	212.20	5.198			
20,200.00	12,007.17	20,221.14	12,002.69	151.78	151.99	-89.77	-8,846.30	944.31	1,103.11	888.66	214.45	5.144			
20,300.00	12,008.74	20,321.13	12,004.60	153.37	153.58	-89.79	-8,946.28	945.28	1,103.21	886.51	216.70	5.091			
20,400.00	12,010.31	20,421.13	12,006.52	154.96	155.17	-89.80	-9,046.25	946.26	1,103.31	884.36	218.95	5.039			
20,500.00	12,011.88	20,521.13	12,008.43	156.55	156.75	-89.82	-9,146.23	947.23	1,103.41	882.21	221.20	4.988			
20,600.00	12,013.45	20,621.13	12,010.35	158.15	158.34	-89.84	-9,246.20	948.21	1,103.51	880.05	223.45	4.938			
20,700.00	12,015.02	20,721.13	12,012.26	159.74	159.93	-89.86	-9,346.18	949.19	1,103.61	877.90	225.71	4.890			
20,800.00	12,016.59	20,821.13	12,014.17	161.34	161.52	-89.88	-9,446.16	950.16	1,103.71	875.74	227.96	4.842			
20,900.00	12,018.16	20,921.13	12,016.09	162.94	163.12	-89.89	-9,546.13	951.14	1,103.81	873.58	230.22	4.795			
21,000.00	12,019.73	21,021.13	12,018.00	164.53	164.71	-89.91	-9,646.11	952.11	1,103.91	871.42	232.48	4.748			
21,100.00	12,021.30	21,121.13	12,019.92	166.13	166.31	-89.93	-9,746.09	953.09	1,104.01	869.26	234.74	4.703			
21,200.00	12,022.87	21,221.13	12,021.83	167.73	167.90	-89.95	-9,846.06	954.07	1,104.11	867.10	237.01	4.659			
21,300.00	12,024.44	21,321.13	12,023.75	169.34	169.50	-89.96	-9,946.04	955.04	1,104.21	864.94	239.27	4.615			
21,400.00	12,026.01	21,421.13	12,025.66	170.94	171.10	-89.98	-10,046.01	956.02	1,104.31	862.77	241.54	4.572			
21,500.00	12,027.58	21,521.13	12,027.58	172.54	172.70	-90.00	-10,145.99	956.99	1,104.41	860.61	243.80	4.530			
21,600.00	12,029.15	21,621.13	12,029.49	174.15	174.30	-90.02	-10,245.97	957.97	1,104.51	858.44	246.07	4.489			
21,700.00	12,030.72	21,721.13	12,031.41	175.75	175.90	-90.04	-10,345.94	958.95	1,104.61	856.27	248.34	4.448			
21,800.00	12,032.29	21,821.12	12,033.32	177.36	177.50	-90.05	-10,445.92	959.92	1,104.72	854.10	250.61	4.408			
21,900.00	12,033.86	21,921.12	12,035.24	178.96	179.10	-90.07	-10,545.90	960.90	1,104.82	851.93	252.88	4.369			
22,000.00	12,035.43	22,021.12	12,037.15	180.57	180.71	-90.09	-10,645.87	961.88	1,104.92	849.76	255.15	4.330			
22,100.00	12,037.00	22,121.12	12,039.07	182.18	182.31	-90.11	-10,745.85	962.85	1,105.02	847.59	257.43	4.293			
22,200.00	12,038.57	22,221.12	12,040.98	183.79	183.92	-90.13	-10,845.82	963.83	1,105.12	845.42	259.70	4.255			
22,300.00	12,040.14	22,321.12	12,042.89	185.40	185.52	-90.14	-10,945.80	964.80	1,105.22	843.24	261.98	4.219			
22,400.00	12,041.71	22,421.12	12,044.81	187.01	187.13	-90.16	-11,045.78	965.78	1,105.33	841.07	264.26	4.183			
22,500.00	12,043.28	22,521.12	12,046.72	188.62	188.74	-90.18	-11,145.75	966.76	1,105.43	838.89	266.54	4.147			
22,600.00	12,044.85	22,621.12	12,048.64	190.23	190.35	-90.20	-11,245.73	967.73	1,105.53	836.72	268.81	4.113			
22,700.00	12,046.42	22,721.12	12,050.55	191.85	191.96	-90.21	-11,345.71	968.71	1,105.63	834.54	271.09	4.078			
22,800.00	12,047.99	22,821.12	12,052.47	193.46	193.57	-90.23	-11,445.68	969.68	1,105.73	832.36	273.38	4.045			
22,900.00	12,049.56	22,921.12	12,054.38	195.07	195.18	-90.25	-11,545.66	970.66	1,105.84	830.18	275.66	4.012			
23,000.00	12,051.13	23,021.12	12,056.30	196.69	196.79	-90.27	-11,645.63	971.64	1,105.94	828.00	277.94	3.979			
23,100.00	12,052.70	23,121.12	12,058.21	198.30	198.40	-90.29	-11,745.61	972.61	1,106.04	825.82	280.22	3.947			
23,200.00	12,054.27	23,221.12	12,060.13	199.92	200.02	-90.30	-11,845.59	973.59	1,106.15	823.64	282.51	3.915			
23,300.00	12,055.84	23,321.12	12,062.04	201.54	201.63	-90.32	-11,945.56	974.56	1,106.25	821.46	284.79	3.884			
23,389.58	12,057.25	23,410.70	12,063.76	202.99	203.08	-90.34	-12,035.13	975.44	1,106.34	819.50	286.84	3.857 SF			

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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	89.46	0.33	34.99	34.99					
100.00	100.00	100.00	100.00	0.13	0.13	89.46	0.33	34.99	34.99	34.81	0.18	197.208		
200.00	200.00	200.00	200.00	0.48	0.48	89.46	0.33	34.99	34.99	34.31	0.68	51.128		
300.00	300.00	300.00	300.00	0.84	0.84	89.46	0.33	34.99	34.99	33.80	1.19	29.371		
400.00	400.00	400.00	400.00	1.20	1.20	89.46	0.33	34.99	34.99	33.29	1.70	20.604		
500.00	500.00	500.00	500.00	1.56	1.56	89.46	0.33	34.99	34.99	32.79	2.21	15.867		
600.00	600.00	600.00	600.00	1.92	1.92	89.46	0.33	34.99	34.99	32.28	2.71	12.901		
700.00	700.00	700.00	700.00	2.28	2.28	89.46	0.33	34.99	34.99	31.77	3.22	10.870		
800.00	800.00	800.00	800.00	2.63	2.63	89.46	0.33	34.99	34.99	31.27	3.73	9.391		
900.00	900.00	900.00	900.00	2.99	2.99	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	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	89.46	0.33	34.99	34.99	25.18	9.81	3.567		
2,100.00	2,100.00	2,100.00	2,100.00	7.29	7.29	89.46	0.33	34.99	34.99	24.68	10.32	3.392		
2,200.00	2,200.00	2,200.00	2,200.00	7.65	7.65	89.46	0.33	34.99	34.99	24.17	10.82	3.233		
2,300.00	2,300.00	2,300.00	2,300.00	8.01	8.01	89.46	0.33	34.99	34.99	23.66	11.33	3.088		
2,400.00	2,400.00	2,400.00	2,400.00	8.37	8.37	89.46	0.33	34.99	34.99	23.15	11.84	2.956		
2,500.00	2,500.00	2,500.00	2,500.00	8.73	8.73	89.46	0.33	34.99	34.99	22.65	12.34	2.835		
2,600.00	2,600.00	2,600.00	2,600.00	9.09	9.09	89.46	0.33	34.99	34.99	22.14	12.85	2.723		
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	89.46	0.33	34.99	34.99	21.63	13.36	2.619		
2,800.00	2,800.00	2,800.00	2,800.00	9.80	9.80	89.46	0.33	34.99	34.99	21.13	13.87	2.524		
2,900.00	2,900.00	2,900.00	2,900.00	10.16	10.16	89.46	0.33	34.99	34.99	20.62	14.37	2.435		
3,000.00	3,000.00	3,000.00	3,000.00	10.52	10.52	89.46	0.33	34.99	34.99	20.11	14.88	2.352		
3,002.41	3,002.41	3,002.41	3,002.41	10.53	10.53	89.46	0.33	34.99	34.99	20.10	14.89	2.350 CC		
3,100.00	3,100.00	3,099.83	3,099.83	10.88	10.87	89.61	0.24	35.06	35.07	19.68	15.38	2.280 ES, SF		
3,200.00	3,200.00	3,199.20	3,199.18	11.24	11.20	92.12	-1.35	36.39	36.42	20.56	15.86	2.296		
3,300.00	3,299.99	3,298.41	3,298.27	11.58	11.53	-121.06	-4.92	39.36	40.36	24.04	16.32	2.473		
3,400.00	3,399.91	3,397.31	3,396.91	11.91	11.85	-118.87	-10.44	43.95	47.58	30.82	16.76	2.839		
3,500.00	3,499.69	3,496.04	3,495.17	12.24	12.18	-117.88	-17.85	50.11	57.93	40.72	17.20	3.367		
3,599.91	3,599.18	3,595.21	3,593.79	12.57	12.52	-118.65	-25.82	56.74	70.02	52.34	17.67	3.961		
3,700.00	3,698.72	3,694.47	3,692.51	12.90	12.86	-120.10	-33.80	63.38	82.78	64.63	18.15	4.561		
3,800.00	3,798.17	3,793.63	3,791.13	13.24	13.20	-121.17	-41.77	70.01	95.58	76.95	18.63	5.131		
3,900.00	3,897.63	3,892.80	3,889.75	13.58	13.55	-121.98	-49.74	76.64	108.40	89.29	19.11	5.673		
4,000.00	3,997.08	3,991.96	3,988.37	13.93	13.89	-122.62	-57.71	83.27	121.23	101.64	19.59	6.189		
4,100.00	4,096.53	4,091.12	4,086.99	14.27	14.24	-123.14	-65.69	89.90	134.08	114.01	20.08	6.679		
4,200.00	4,195.98	4,190.29	4,185.61	14.62	14.59	-123.57	-73.66	96.54	146.94	126.38	20.56	7.146		
4,300.00	4,295.44	4,289.45	4,284.23	14.98	14.95	-123.93	-81.63	103.17	159.80	138.75	21.05	7.590		
4,400.00	4,394.89	4,388.62	4,382.85	15.33	15.30	-124.23	-89.60	109.80	172.67	151.12	21.55	8.013		
4,500.00	4,494.34	4,487.78	4,481.47	15.69	15.66	-124.50	-97.57	116.43	185.55	163.50	22.04	8.417		
4,600.00	4,593.79	4,586.95	4,580.09	16.05	16.02	-124.72	-105.54	123.06	198.42	175.88	22.54	8.803		
4,700.00	4,693.25	4,686.11	4,678.72	16.41	16.38	-124.93	-113.51	129.69	211.30	188.26	23.04	9.171		
4,800.00	4,792.70	4,785.28	4,777.34	16.77	16.75	-125.10	-121.48	136.32	224.18	200.64	23.54	9.523		
4,900.00	4,892.15	4,884.44	4,875.96	17.13	17.11	-125.26	-129.46	142.95	237.07	213.02	24.05	9.859		
5,000.00	4,991.60	4,983.61	4,974.58	17.50	17.47	-125.40	-137.43	149.58	249.95	225.40	24.55	10.181		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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	5,091.06	5,082.77	5,073.20	17.86	17.84	-125.53	-145.40	156.21	262.84	237.78	25.06	10.490		
5,200.00	5,190.51	5,181.94	5,171.82	18.23	18.21	-125.65	-153.37	162.84	275.73	250.16	25.57	10.785		
5,300.00	5,289.96	5,281.10	5,270.44	18.60	18.58	-125.75	-161.34	169.47	288.61	262.54	26.07	11.069		
5,400.00	5,389.41	5,380.26	5,369.06	18.97	18.95	-125.85	-169.31	176.11	301.50	274.92	26.59	11.341		
5,500.00	5,488.87	5,479.43	5,467.68	19.34	19.32	-125.94	-177.28	182.74	314.39	287.30	27.10	11.602		
5,600.00	5,588.32	5,578.59	5,566.30	19.71	19.69	-126.02	-185.25	189.37	327.28	299.67	27.61	11.854		
5,700.00	5,687.77	5,677.76	5,664.93	20.09	20.06	-126.10	-193.23	196.00	340.18	312.05	28.13	12.095		
5,800.00	5,787.22	5,776.92	5,763.55	20.46	20.43	-126.17	-201.20	202.63	353.07	324.43	28.64	12.328		
5,900.00	5,886.68	5,876.09	5,862.17	20.84	20.81	-126.23	-209.17	209.26	365.96	336.80	29.16	12.551		
6,000.00	5,986.13	5,975.25	5,960.79	21.21	21.18	-126.29	-217.14	215.89	378.85	349.18	29.67	12.767		
6,100.00	6,085.58	6,074.42	6,059.41	21.59	21.56	-126.35	-225.11	222.52	391.75	361.55	30.19	12.975		
6,200.00	6,185.03	6,173.58	6,158.03	21.97	21.93	-126.40	-233.08	229.15	404.64	373.93	30.71	13.175		
6,300.00	6,284.49	6,272.75	6,256.65	22.34	22.31	-126.45	-241.05	235.78	417.54	386.30	31.23	13.369		
6,400.00	6,383.94	6,371.91	6,355.27	22.72	22.69	-126.50	-249.03	242.41	430.43	398.68	31.75	13.556		
6,500.00	6,483.39	6,471.07	6,453.89	23.10	23.07	-126.54	-257.00	249.05	443.32	411.05	32.27	13.736		
6,600.00	6,582.84	6,570.24	6,552.51	23.48	23.44	-126.59	-264.97	255.68	456.22	423.42	32.80	13.911		
6,700.00	6,682.30	6,669.40	6,651.14	23.86	23.82	-126.63	-272.94	262.31	469.11	435.80	33.32	14.079		
6,800.00	6,781.75	6,768.57	6,749.76	24.24	24.20	-126.66	-280.91	268.94	482.01	448.17	33.84	14.243		
6,900.00	6,881.20	6,867.73	6,848.38	24.63	24.58	-126.70	-288.88	275.57	494.91	460.54	34.37	14.401		
6,944.87	6,925.82	6,912.23	6,892.63	24.80	24.75	-126.71	-292.46	278.54	500.69	466.09	34.60	14.470		
7,000.00	6,980.69	6,971.22	6,951.33	25.01	24.98	-126.80	-296.94	282.27	507.37	472.45	34.92	14.531		
7,100.00	7,080.39	7,080.01	7,059.80	25.38	25.38	-126.94	-303.39	287.64	516.89	481.40	35.48	14.567		
7,200.00	7,180.26	7,189.24	7,168.89	25.74	25.78	-127.05	-307.47	291.03	523.04	487.01	36.03	14.517		
7,300.00	7,280.23	7,298.71	7,278.34	26.09	26.16	-127.14	-309.15	292.43	525.80	489.24	36.56	14.383		
7,344.78	7,325.00	7,345.37	7,325.00	26.25	26.32	89.47	-309.20	292.47	525.99	489.22	36.78	14.302		
7,400.00	7,380.22	7,400.60	7,380.22	26.43	26.51	89.47	-309.20	292.47	525.99	488.95	37.04	14.200		
7,500.00	7,480.22	7,500.60	7,480.22	26.77	26.84	89.47	-309.20	292.47	525.99	488.47	37.52	14.018		
7,600.00	7,580.22	7,600.60	7,580.22	27.11	27.18	89.47	-309.20	292.47	525.99	487.99	38.00	13.841		
7,700.00	7,680.22	7,700.60	7,680.22	27.44	27.52	89.47	-309.20	292.47	525.99	487.51	38.48	13.668		
7,800.00	7,780.22	7,800.60	7,780.22	27.78	27.85	89.47	-309.20	292.47	525.99	487.03	38.96	13.499		
7,900.00	7,880.22	7,900.60	7,880.22	28.12	28.19	89.47	-309.20	292.47	525.99	486.55	39.45	13.334		
8,000.00	7,980.22	8,000.60	7,980.22	28.46	28.53	89.47	-309.20	292.47	525.99	486.06	39.93	13.173		
8,100.00	8,080.22	8,100.60	8,080.22	28.80	28.87	89.47	-309.20	292.47	525.99	485.58	40.41	13.016		
8,200.00	8,180.22	8,200.60	8,180.22	29.14	29.21	89.47	-309.20	292.47	525.99	485.10	40.90	12.862		
8,300.00	8,280.22	8,300.60	8,280.22	29.48	29.55	89.47	-309.20	292.47	525.99	484.61	41.38	12.711		
8,400.00	8,380.22	8,400.60	8,380.22	29.82	29.89	89.47	-309.20	292.47	525.99	484.13	41.87	12.564		
8,500.00	8,480.22	8,500.60	8,480.22	30.16	30.23	89.47	-309.20	292.47	525.99	483.64	42.35	12.420		
8,600.00	8,580.22	8,600.60	8,580.22	30.51	30.57	89.47	-309.20	292.47	525.99	483.16	42.84	12.279		
8,700.00	8,680.22	8,700.60	8,680.22	30.85	30.91	89.47	-309.20	292.47	525.99	482.67	43.32	12.141		
8,800.00	8,780.22	8,800.60	8,780.22	31.19	31.26	89.47	-309.20	292.47	525.99	482.18	43.81	12.006		
8,900.00	8,880.22	8,900.60	8,880.22	31.53	31.60	89.47	-309.20	292.47	525.99	481.70	44.30	11.874		
9,000.00	8,980.22	9,000.60	8,980.22	31.88	31.94	89.47	-309.20	292.47	525.99	481.21	44.79	11.745		
9,100.00	9,080.22	9,100.60	9,080.22	32.22	32.29	89.47	-309.20	292.47	525.99	480.72	45.27	11.618		
9,200.00	9,180.22	9,200.60	9,180.22	32.57	32.63	89.47	-309.20	292.47	525.99	480.23	45.76	11.494		
9,300.00	9,280.22	9,300.60	9,280.22	32.91	32.97	89.47	-309.20	292.47	525.99	479.74	46.25	11.372		
9,400.00	9,380.22	9,400.60	9,380.22	33.26	33.32	89.47	-309.20	292.47	525.99	479.25	46.74	11.253		
9,500.00	9,480.22	9,500.60	9,480.22	33.60	33.66	89.47	-309.20	292.47	525.99	478.76	47.23	11.137		
9,600.00	9,580.22	9,600.60	9,580.22	33.95	34.01	89.47	-309.20	292.47	525.99	478.27	47.72	11.022		
9,700.00	9,680.22	9,700.60	9,680.22	34.29	34.35	89.47	-309.20	292.47	525.99	477.78	48.21	10.910		
9,800.00	9,780.22	9,800.60	9,780.22	34.64	34.70	89.47	-309.20	292.47	525.99	477.29	48.70	10.800		
9,900.00	9,880.22	9,900.60	9,880.22	34.98	35.04	89.47	-309.20	292.47	525.99	476.80	49.19	10.692		
10,000.00	9,980.22	10,000.60	9,980.22	35.33	35.39	89.47	-309.20	292.47	525.99	476.31	49.68	10.587		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - Plan #4		Offset Site Error: 0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
10,100.00	10,080.22	10,100.60	10,080.22	35.68	35.73	89.47	-309.20	292.47	525.99	475.82	50.18	10.483				
10,200.00	10,180.22	10,200.60	10,180.22	36.02	36.08	89.47	-309.20	292.47	525.99	475.32	50.67	10.381				
10,300.00	10,280.22	10,300.60	10,280.22	36.37	36.43	89.47	-309.20	292.47	525.99	474.83	51.16	10.281				
10,400.00	10,380.22	10,400.60	10,380.22	36.72	36.77	89.47	-309.20	292.47	525.99	474.34	51.65	10.183				
10,500.00	10,480.22	10,500.60	10,480.22	37.06	37.12	89.47	-309.20	292.47	525.99	473.85	52.15	10.087				
10,600.00	10,580.22	10,600.60	10,580.22	37.41	37.47	89.47	-309.20	292.47	525.99	473.35	52.64	9.992				
10,700.00	10,680.22	10,700.60	10,680.22	37.76	37.82	89.47	-309.20	292.47	525.99	472.86	53.13	9.899				
10,800.00	10,780.22	10,800.60	10,780.22	38.11	38.16	89.47	-309.20	292.47	525.99	472.37	53.63	9.808				
10,900.00	10,880.22	10,900.60	10,880.22	38.46	38.51	89.47	-309.20	292.47	525.99	471.87	54.12	9.719				
11,000.00	10,980.22	11,000.60	10,980.22	38.80	38.86	89.47	-309.20	292.47	525.99	471.38	54.62	9.631				
11,100.00	11,080.22	11,100.60	11,080.22	39.15	39.21	89.47	-309.20	292.47	525.99	470.88	55.11	9.544				
11,200.00	11,180.22	11,200.60	11,180.22	39.50	39.56	89.47	-309.20	292.47	525.99	470.39	55.60	9.460				
11,300.00	11,280.22	11,300.60	11,280.22	39.85	39.90	89.47	-309.20	292.47	525.99	469.89	56.10	9.376				
11,328.78	11,309.00	11,329.37	11,309.00	39.95	40.00	89.47	-309.20	292.47	525.99	469.75	56.24	9.352				
11,350.00	11,330.22	11,350.59	11,330.22	40.02	40.08	-90.08	-309.20	292.47	525.99	469.65	56.35	9.335				
11,400.00	11,380.04	11,400.42	11,380.04	40.20	40.25	-90.51	-309.20	292.47	526.01	469.42	56.59	9.294				
11,450.00	11,429.32	11,449.70	11,429.32	40.38	40.42	-91.39	-309.20	292.47	526.16	469.31	56.85	9.256				
11,500.00	11,477.69	11,498.06	11,477.69	40.57	40.59	-92.67	-309.20	292.47	526.62	469.52	57.10	9.223				
11,550.00	11,524.77	11,545.14	11,524.77	40.76	40.76	-94.28	-309.20	292.47	527.71	470.35	57.35	9.201				
11,600.00	11,570.21	11,590.58	11,570.21	40.95	40.92	-96.11	-309.20	292.47	529.79	472.19	57.60	9.197				
11,650.00	11,613.66	11,636.51	11,616.13	41.15	41.08	-98.19	-309.43	292.47	533.27	475.42	57.85	9.218				
11,700.00	11,654.79	11,688.81	11,668.27	41.36	41.26	-100.52	-313.28	292.51	538.02	479.91	58.11	9.258				
11,750.00	11,693.29	11,744.27	11,722.93	41.57	41.46	-102.85	-322.54	292.59	543.84	485.48	58.35	9.320				
11,800.00	11,728.87	11,803.41	11,779.94	41.78	41.68	-105.16	-338.19	292.72	550.57	492.02	58.55	9.403				
11,850.00	11,761.25	11,866.81	11,838.91	42.01	41.92	-107.44	-361.38	292.93	558.00	499.33	58.67	9.512				
11,900.00	11,790.19	11,935.06	11,899.10	42.23	42.19	-109.68	-393.46	293.21	565.87	507.20	58.66	9.646				
11,950.00	11,815.47	12,008.76	11,959.32	42.47	42.49	-111.83	-435.87	293.58	573.84	515.32	58.52	9.806				
12,000.00	11,836.89	12,088.37	12,017.66	42.72	42.83	-113.85	-489.93	294.06	581.53	523.30	58.23	9.986				
12,050.00	11,854.29	12,174.11	12,071.47	42.97	43.21	-115.66	-556.58	294.64	588.51	530.67	57.84	10.175				
12,100.00	11,867.55	12,265.74	12,117.30	43.22	43.63	-117.17	-635.81	295.34	594.31	536.89	57.43	10.349				
12,150.00	11,876.55	12,362.41	12,151.32	43.49	44.11	-118.27	-726.17	296.13	598.52	541.39	57.13	10.476				
12,200.00	11,881.24	12,462.56	12,170.04	43.75	44.62	-118.86	-824.42	297.00	600.79	543.68	57.11	10.519				
12,219.78	11,881.89	12,502.68	12,172.68	43.86	44.83	-118.94	-864.45	297.35	601.11	543.90	57.21	10.507				
12,300.00	11,883.15	12,588.06	12,173.90	44.30	45.29	-118.93	-949.81	298.10	601.03	543.29	57.75	10.408				
12,400.00	11,884.72	12,688.06	12,175.21	44.91	45.88	-118.91	-1,049.80	298.98	600.91	542.44	58.47	10.277				
12,500.00	11,886.29	12,788.06	12,176.53	45.56	46.51	-118.89	-1,149.79	299.86	600.79	541.53	59.26	10.138				
12,600.00	11,887.86	12,888.06	12,177.84	46.27	47.20	-118.87	-1,249.78	300.73	600.67	540.56	60.11	9.993				
12,700.00	11,889.43	12,988.06	12,179.15	47.02	47.93	-118.85	-1,349.76	301.61	600.55	539.53	61.02	9.841				
12,800.00	11,891.00	13,088.06	12,180.47	47.82	48.71	-118.83	-1,449.75	302.49	600.43	538.44	61.99	9.686				
12,900.00	11,892.57	13,188.06	12,181.78	48.66	49.53	-118.80	-1,549.74	303.37	600.31	537.30	63.02	9.526				
13,000.00	11,894.14	13,288.06	12,183.10	49.54	50.40	-118.78	-1,649.72	304.25	600.19	536.10	64.09	9.365				
13,100.00	11,895.71	13,388.06	12,184.41	50.46	51.30	-118.76	-1,749.71	305.13	600.07	534.86	65.21	9.201				
13,200.00	11,897.28	13,488.06	12,185.73	51.42	52.23	-118.74	-1,849.70	306.01	599.95	533.57	66.39	9.037				
13,300.00	11,898.85	13,588.06	12,187.04	52.41	53.21	-118.72	-1,949.69	306.88	599.83	532.23	67.60	8.873				
13,400.00	11,900.42	13,688.06	12,188.36	53.44	54.21	-118.70	-2,049.67	307.76	599.71	530.86	68.86	8.710				
13,500.00	11,901.99	13,788.06	12,189.67	54.49	55.25	-118.67	-2,149.66	308.64	599.59	529.44	70.15	8.547				
13,600.00	11,903.56	13,888.06	12,190.98	55.58	56.31	-118.65	-2,249.65	309.52	599.47	527.99	71.49	8.386				
13,700.00	11,905.13	13,988.06	12,192.30	56.69	57.41	-118.63	-2,349.63	310.40	599.36	526.50	72.86	8.227				
13,800.00	11,906.70	14,088.06	12,193.61	57.83	58.52	-118.61	-2,449.62	311.28	599.24	524.98	74.26	8.070				
13,900.00	11,908.27	14,188.06	12,194.93	58.99	59.67	-118.59	-2,549.61	312.16	599.12	523.42	75.69	7.915				
14,000.00	11,909.84	14,288.06	12,196.24	60.17	60.84	-118.57	-2,649.60	313.03	599.00	521.84	77.15	7.764				
14,100.00	11,911.41	14,388.06	12,197.56	61.38	62.03	-118.55	-2,749.58	313.91	598.88	520.23	78.64	7.615				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design		Bus Driver/Kaston Fed Com - Kaston Fed Com 703H - OH - Plan #4											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			
14,200.00	11,912.98	14,488.06	12,198.87	62.60	63.24	-118.52	-2,849.57	314.79	598.76	518.60	80.16	7.469			
14,300.00	11,914.55	14,588.06	12,200.19	63.85	64.47	-118.50	-2,949.56	315.67	598.64	516.94	81.70	7.327			
14,400.00	11,916.12	14,688.06	12,201.50	65.11	65.72	-118.48	-3,049.55	316.55	598.52	515.25	83.27	7.188			
14,500.00	11,917.69	14,788.06	12,202.81	66.39	66.98	-118.46	-3,149.53	317.43	598.40	513.55	84.85	7.052			
14,600.00	11,919.26	14,888.05	12,204.13	67.69	68.26	-118.44	-3,249.52	318.31	598.28	511.82	86.46	6.920			
14,700.00	11,920.83	14,988.05	12,205.44	69.00	69.56	-118.42	-3,349.51	319.18	598.17	510.08	88.09	6.791			
14,800.00	11,922.40	15,088.05	12,206.76	70.33	70.87	-118.39	-3,449.49	320.06	598.05	508.31	89.73	6.665			
14,900.00	11,923.97	15,188.05	12,208.07	71.67	72.20	-118.37	-3,549.48	320.94	597.93	506.53	91.39	6.542			
15,000.00	11,925.54	15,288.05	12,209.39	73.02	73.54	-118.35	-3,649.47	321.82	597.81	504.74	93.07	6.423			
15,100.00	11,927.11	15,388.05	12,210.70	74.39	74.89	-118.33	-3,749.46	322.70	597.69	502.92	94.77	6.307			
15,200.00	11,928.68	15,488.05	12,212.01	75.77	76.26	-118.31	-3,849.44	323.58	597.57	501.10	96.48	6.194			
15,300.00	11,930.25	15,588.05	12,213.33	77.15	77.63	-118.28	-3,949.43	324.46	597.46	499.26	98.20	6.084			
15,400.00	11,931.82	15,688.05	12,214.64	78.55	79.02	-118.26	-4,049.42	325.33	597.34	497.40	99.93	5.977			
15,500.00	11,933.39	15,788.05	12,215.96	79.96	80.42	-118.24	-4,149.40	326.21	597.22	495.54	101.68	5.874			
15,600.00	11,934.96	15,888.05	12,217.27	81.37	81.82	-118.22	-4,249.39	327.09	597.10	493.66	103.44	5.772			
15,700.00	11,936.53	15,988.05	12,218.59	82.80	83.24	-118.20	-4,349.38	327.97	596.98	491.78	105.21	5.674			
15,800.00	11,938.10	16,088.05	12,219.90	84.23	84.66	-118.18	-4,449.37	328.85	596.87	489.88	106.99	5.579			
15,900.00	11,939.67	16,188.05	12,221.22	85.67	86.09	-118.15	-4,549.35	329.73	596.75	487.97	108.78	5.486			
16,000.00	11,941.24	16,288.05	12,222.53	87.12	87.53	-118.13	-4,649.34	330.60	596.63	486.05	110.58	5.396			
16,100.00	11,942.81	16,388.05	12,223.84	88.58	88.98	-118.11	-4,749.33	331.48	596.51	484.13	112.39	5.308			
16,200.00	11,944.38	16,488.05	12,225.16	90.04	90.43	-118.09	-4,849.31	332.36	596.40	482.20	114.20	5.222			
16,300.00	11,945.95	16,588.05	12,226.47	91.51	91.89	-118.07	-4,949.30	333.24	596.28	480.25	116.03	5.139			
16,400.00	11,947.52	16,688.05	12,227.79	92.99	93.36	-118.05	-5,049.29	334.12	596.16	478.31	117.86	5.058			
16,500.00	11,949.09	16,788.05	12,229.10	94.47	94.83	-118.02	-5,149.28	335.00	596.05	476.35	119.70	4.980			
16,600.00	11,950.66	16,888.05	12,230.42	95.95	96.31	-118.00	-5,249.26	335.88	595.93	474.39	121.54	4.903			
16,700.00	11,952.23	16,988.05	12,231.73	97.45	97.80	-117.98	-5,349.25	336.75	595.81	472.42	123.39	4.829			
16,800.00	11,953.80	17,088.05	12,233.05	98.94	99.28	-117.96	-5,449.24	337.63	595.70	470.45	125.25	4.756			
16,900.00	11,955.37	17,188.05	12,234.36	100.45	100.78	-117.94	-5,549.22	338.51	595.58	468.47	127.11	4.685			
17,000.00	11,956.94	17,288.05	12,235.67	101.95	102.28	-117.91	-5,649.21	339.39	595.46	466.48	128.98	4.617			
17,100.00	11,958.51	17,388.05	12,236.99	103.46	103.78	-117.89	-5,749.20	340.27	595.35	464.49	130.85	4.550			
17,200.00	11,960.08	17,488.05	12,238.30	104.98	105.29	-117.87	-5,849.19	341.15	595.23	462.50	132.73	4.484			
17,300.00	11,961.65	17,588.05	12,239.62	106.50	106.81	-117.85	-5,949.17	342.03	595.11	460.50	134.61	4.421			
17,400.00	11,963.22	17,688.05	12,240.93	108.02	108.32	-117.83	-6,049.16	342.90	595.00	458.50	136.50	4.359			
17,500.00	11,964.79	17,788.05	12,242.25	109.55	109.84	-117.80	-6,149.15	343.78	594.88	456.49	138.39	4.299			
17,600.00	11,966.36	17,888.05	12,243.56	111.08	111.37	-117.78	-6,249.13	344.66	594.76	454.48	140.29	4.240			
17,700.00	11,967.93	17,988.04	12,244.87	112.61	112.90	-117.76	-6,349.12	345.54	594.65	452.46	142.19	4.182			
17,800.00	11,969.50	18,088.04	12,246.19	114.15	114.43	-117.74	-6,449.11	346.42	594.53	450.45	144.09	4.126			
17,900.00	11,971.07	18,188.04	12,247.50	115.69	115.96	-117.72	-6,549.10	347.30	594.42	448.42	145.99	4.072			
18,000.00	11,972.64	18,288.04	12,248.82	117.24	117.50	-117.69	-6,649.08	348.18	594.30	446.40	147.90	4.018			
18,100.00	11,974.21	18,388.04	12,250.13	118.78	119.04	-117.67	-6,749.07	349.05	594.19	444.37	149.81	3.966			
18,200.00	11,975.78	18,488.04	12,251.45	120.33	120.59	-117.65	-6,849.06	349.93	594.07	442.34	151.73	3.915			
18,300.00	11,977.35	18,588.04	12,252.76	121.89	122.13	-117.63	-6,949.04	350.81	593.95	440.31	153.64	3.866			
18,400.00	11,978.92	18,688.04	12,254.08	123.44	123.68	-117.61	-7,049.03	351.69	593.84	438.28	155.56	3.817			
18,500.00	11,980.49	18,788.04	12,255.39	125.00	125.24	-117.58	-7,149.02	352.57	593.72	436.24	157.48	3.770			
18,600.00	11,982.06	18,888.04	12,256.70	126.56	126.79	-117.56	-7,249.01	353.45	593.61	434.20	159.41	3.724			
18,700.00	11,983.63	18,988.04	12,258.02	128.12	128.35	-117.54	-7,348.99	354.33	593.49	432.16	161.33	3.679			
18,800.00	11,985.20	19,088.04	12,259.33	129.68	129.91	-117.52	-7,448.98	355.20	593.38	430.12	163.26	3.635			
18,900.00	11,986.77	19,188.04	12,260.65	131.25	131.47	-117.50	-7,548.97	356.08	593.26	428.07	165.19	3.591			
19,000.00	11,988.34	19,288.04	12,261.96	132.82	133.03	-117.47	-7,648.96	356.96	593.15	426.03	167.12	3.549			
19,100.00	11,989.90	19,388.04	12,263.28	134.39	134.60	-117.45	-7,748.94	357.84	593.03	423.98	169.05	3.508			
19,200.00	11,991.47	19,488.04	12,264.59	135.96	136.17	-117.43	-7,848.93	358.72	592.92	421.93	170.99	3.468			
19,300.00	11,993.04	19,588.04	12,265.91	137.54	137.74	-117.41	-7,948.92	359.60	592.80	419.88	172.92	3.428			

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
19,400.00	11,994.61	19,688.04	12,267.22	139.11	139.31	-117.39	-8,048.90	360.48	592.69	417.83	174.86	3.389		
19,500.00	11,996.18	19,788.04	12,268.53	140.69	140.89	-117.36	-8,148.89	361.35	592.58	415.78	176.80	3.352		
19,600.00	11,997.75	19,888.04	12,269.85	142.27	142.46	-117.34	-8,248.88	362.23	592.46	413.72	178.74	3.315		
19,700.00	11,999.32	19,988.04	12,271.16	143.85	144.04	-117.32	-8,348.87	363.11	592.35	411.67	180.68	3.278		
19,800.00	12,000.89	20,088.04	12,272.48	145.43	145.62	-117.30	-8,448.85	363.99	592.23	409.61	182.62	3.243		
19,900.00	12,002.46	20,188.04	12,273.79	147.02	147.20	-117.28	-8,548.84	364.87	592.12	407.56	184.56	3.208		
20,000.00	12,004.03	20,288.04	12,275.11	148.60	148.78	-117.25	-8,648.83	365.75	592.01	405.50	186.51	3.174		
20,100.00	12,005.60	20,388.04	12,276.42	150.19	150.37	-117.23	-8,748.81	366.63	591.89	403.44	188.45	3.141		
20,200.00	12,007.17	20,488.04	12,277.73	151.78	151.95	-117.21	-8,848.80	367.50	591.78	401.38	190.39	3.108		
20,300.00	12,008.74	20,588.04	12,279.05	153.37	153.54	-117.19	-8,948.79	368.38	591.66	399.32	192.34	3.076		
20,400.00	12,010.31	20,688.04	12,280.36	154.96	155.13	-117.16	-9,048.78	369.26	591.55	397.27	194.28	3.045		
20,500.00	12,011.88	20,788.04	12,281.68	156.55	156.71	-117.14	-9,148.76	370.14	591.44	395.21	196.23	3.014		
20,600.00	12,013.45	20,888.04	12,282.99	158.15	158.31	-117.12	-9,248.75	371.02	591.32	393.15	198.18	2.984		
20,700.00	12,015.02	20,988.04	12,284.31	159.74	159.90	-117.10	-9,348.74	371.90	591.21	391.09	200.12	2.954		
20,800.00	12,016.59	21,088.03	12,285.62	161.34	161.49	-117.08	-9,448.72	372.78	591.10	389.03	202.07	2.925		
20,900.00	12,018.16	21,188.03	12,286.94	162.94	163.08	-117.05	-9,548.71	373.65	590.98	386.97	204.02	2.897		
21,000.00	12,019.73	21,288.03	12,288.25	164.53	164.68	-117.03	-9,648.70	374.53	590.87	384.91	205.96	2.869		
21,100.00	12,021.30	21,388.03	12,289.56	166.13	166.28	-117.01	-9,748.69	375.41	590.76	382.85	207.91	2.841		
21,200.00	12,022.87	21,488.03	12,290.88	167.73	167.87	-116.99	-9,848.67	376.29	590.64	380.79	209.86	2.814		
21,300.00	12,024.44	21,588.03	12,292.19	169.34	169.47	-116.96	-9,948.66	377.17	590.53	378.73	211.81	2.788		
21,400.00	12,026.01	21,688.03	12,293.51	170.94	171.07	-116.94	-10,048.65	378.05	590.42	376.67	213.75	2.762		
21,500.00	12,027.58	21,788.03	12,294.82	172.54	172.67	-116.92	-10,148.63	378.92	590.31	374.61	215.70	2.737		
21,600.00	12,029.15	21,888.03	12,296.14	174.15	174.28	-116.90	-10,248.62	379.80	590.19	372.55	217.65	2.712		
21,700.00	12,030.72	21,988.03	12,297.45	175.75	175.88	-116.88	-10,348.61	380.68	590.08	370.49	219.60	2.687		
21,800.00	12,032.29	22,088.03	12,298.77	177.36	177.48	-116.85	-10,448.60	381.56	589.97	368.43	221.54	2.663		
21,900.00	12,033.86	22,188.03	12,300.08	178.96	179.09	-116.83	-10,548.58	382.44	589.86	366.37	223.49	2.639		
22,000.00	12,035.43	22,288.03	12,301.39	180.57	180.69	-116.81	-10,648.57	383.32	589.74	364.31	225.44	2.616		
22,100.00	12,037.00	22,388.03	12,302.71	182.18	182.30	-116.79	-10,748.56	384.20	589.63	362.25	227.38	2.593		
22,200.00	12,038.57	22,488.03	12,304.02	183.79	183.91	-116.76	-10,848.54	385.07	589.52	360.19	229.33	2.571		
22,300.00	12,040.14	22,588.03	12,305.34	185.40	185.51	-116.74	-10,948.53	385.95	589.41	358.14	231.27	2.549		
22,400.00	12,041.71	22,688.03	12,306.65	187.01	187.12	-116.72	-11,048.52	386.83	589.30	356.08	233.22	2.527		
22,500.00	12,043.28	22,788.03	12,307.97	188.62	188.73	-116.70	-11,148.51	387.71	589.19	354.03	235.16	2.505		
22,600.00	12,044.85	22,888.03	12,309.28	190.23	190.34	-116.67	-11,248.49	388.59	589.07	351.97	237.10	2.484		
22,700.00	12,046.42	22,988.03	12,310.59	191.85	191.95	-116.65	-11,348.48	389.47	588.96	349.92	239.05	2.464		
22,800.00	12,047.99	23,088.03	12,311.91	193.46	193.56	-116.63	-11,448.47	390.35	588.85	347.86	240.99	2.443		
22,900.00	12,049.56	23,188.03	12,313.22	195.07	195.18	-116.61	-11,548.46	391.22	588.74	345.81	242.93	2.423		
23,000.00	12,051.13	23,288.03	12,314.54	196.69	196.79	-116.59	-11,648.44	392.10	588.63	343.76	244.87	2.404		
23,100.00	12,052.70	23,388.03	12,315.85	198.30	198.40	-116.56	-11,748.43	392.98	588.52	341.71	246.81	2.384		
23,200.00	12,054.27	23,488.03	12,317.17	199.92	200.02	-116.54	-11,848.42	393.86	588.41	339.66	248.75	2.365		
23,300.00	12,055.84	23,588.03	12,318.48	201.54	201.63	-116.52	-11,948.40	394.74	588.29	337.61	250.69	2.347		
23,389.58	12,057.25	23,677.61	12,319.66	202.99	203.08	-116.50	-12,037.98	395.53	588.20	335.77	252.43	2.330		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Judge Baylor Fed Com - Judge Baylor Fed Com 601H - OH - Plan #3		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	3.50	3.50	0.00	0.00	-92.38	-79.85	-1,920.78	1,922.44							
100.00	100.00	103.50	103.50	0.13	0.15	-92.38	-79.85	-1,920.78	1,922.44	1,922.24	0.20	9,672.647				
200.00	200.00	203.50	203.50	0.48	0.51	-92.38	-79.85	-1,920.78	1,922.44	1,921.73	0.70	2,727.019				
300.00	300.00	303.50	303.50	0.84	0.87	-92.38	-79.85	-1,920.78	1,922.44	1,921.23	1.21	1,586.442				
400.00	400.00	403.50	403.50	1.20	1.23	-92.38	-79.85	-1,920.78	1,922.44	1,920.72	1.72	1,118.544				
500.00	500.00	503.50	503.50	1.56	1.59	-92.38	-79.85	-1,920.78	1,922.44	1,920.21	2.23	863.774				
600.00	600.00	603.50	603.50	1.92	1.95	-92.38	-79.85	-1,920.78	1,922.44	1,919.71	2.73	703.529				
700.00	700.00	703.50	703.50	2.28	2.30	-92.38	-79.85	-1,920.78	1,922.44	1,919.20	3.24	593.435				
800.00	800.00	803.50	803.50	2.63	2.66	-92.38	-79.85	-1,920.78	1,922.44	1,918.69	3.75	513.136				
900.00	900.00	903.50	903.50	2.99	3.02	-92.38	-79.85	-1,920.78	1,922.44	1,918.19	4.25	451.977				
1,000.00	1,000.00	1,003.50	1,003.50	3.35	3.38	-92.38	-79.85	-1,920.78	1,922.44	1,917.68	4.76	403.844				
1,100.00	1,100.00	1,103.50	1,103.50	3.71	3.74	-92.38	-79.85	-1,920.78	1,922.44	1,917.17	5.27	364.976				
1,200.00	1,200.00	1,203.50	1,203.50	4.07	4.10	-92.38	-79.85	-1,920.78	1,922.44	1,916.66	5.77	332.933				
1,300.00	1,300.00	1,303.50	1,303.50	4.43	4.46	-92.38	-79.85	-1,920.78	1,922.44	1,916.16	6.28	306.062				
1,400.00	1,400.00	1,403.50	1,403.50	4.79	4.81	-92.38	-79.85	-1,920.78	1,922.44	1,915.65	6.79	283.205				
1,500.00	1,500.00	1,503.50	1,503.50	5.14	5.17	-92.38	-79.85	-1,920.78	1,922.44	1,915.14	7.30	263.524				
1,600.00	1,600.00	1,603.50	1,603.50	5.50	5.53	-92.38	-79.85	-1,920.78	1,922.44	1,914.64	7.80	246.401				
1,700.00	1,700.00	1,703.50	1,703.50	5.86	5.89	-92.38	-79.85	-1,920.78	1,922.44	1,914.13	8.31	231.368				
1,800.00	1,800.00	1,803.50	1,803.50	6.22	6.25	-92.38	-79.85	-1,920.78	1,922.44	1,913.62	8.82	218.063				
1,900.00	1,900.00	1,903.50	1,903.50	6.58	6.61	-92.38	-79.85	-1,920.78	1,922.44	1,913.12	9.32	206.205				
2,000.00	2,000.00	2,003.50	2,003.50	6.94	6.97	-92.38	-79.85	-1,920.78	1,922.44	1,912.61	9.83	195.571				
2,100.00	2,100.00	2,103.50	2,103.50	7.29	7.32	-92.38	-79.85	-1,920.78	1,922.44	1,912.10	10.34	185.979				
2,200.00	2,200.00	2,203.50	2,203.50	7.65	7.68	-92.38	-79.85	-1,920.78	1,922.44	1,911.60	10.84	177.285				
2,300.00	2,300.00	2,303.50	2,303.50	8.01	8.04	-92.38	-79.85	-1,920.78	1,922.44	1,911.09	11.35	169.367				
2,400.00	2,400.00	2,403.50	2,403.50	8.37	8.40	-92.38	-79.85	-1,920.78	1,922.44	1,910.58	11.86	162.126				
2,500.00	2,500.00	2,503.50	2,503.50	8.73	8.76	-92.38	-79.85	-1,920.78	1,922.44	1,910.07	12.36	155.479				
2,600.00	2,600.00	2,603.50	2,603.50	9.09	9.12	-92.38	-79.85	-1,920.78	1,922.44	1,909.57	12.87	149.355				
2,700.00	2,700.00	2,703.50	2,703.50	9.45	9.47	-92.38	-79.85	-1,920.78	1,922.44	1,909.06	13.38	143.695				
2,800.00	2,800.00	2,803.50	2,803.50	9.80	9.83	-92.38	-79.85	-1,920.78	1,922.44	1,908.55	13.89	138.449				
2,900.00	2,900.00	2,903.50	2,903.50	10.16	10.19	-92.38	-79.85	-1,920.78	1,922.44	1,908.05	14.39	133.573				
3,000.00	3,000.00	3,003.50	3,003.50	10.52	10.55	-92.38	-79.85	-1,920.78	1,922.44	1,907.54	14.90	129.028				
3,100.00	3,100.00	3,103.50	3,103.50	10.88	10.91	-92.38	-79.85	-1,920.78	1,922.44	1,907.03	15.41	124.782				
3,200.00	3,200.00	3,203.50	3,203.50	11.24	11.27	-92.38	-79.85	-1,920.78	1,922.44	1,906.53	15.91	120.807				
3,300.00	3,299.99	3,303.49	3,303.49	11.58	11.63	51.03	-79.85	-1,920.78	1,921.62	1,905.21	16.41	117.112				
3,400.00	3,399.91	3,403.41	3,403.41	11.91	11.98	51.15	-79.85	-1,920.78	1,919.15	1,902.26	16.89	113.610				
3,500.00	3,499.69	3,503.19	3,503.19	12.24	12.34	51.35	-79.85	-1,920.78	1,915.05	1,897.67	17.38	110.206				
3,599.91	3,599.18	3,602.68	3,602.68	12.57	12.70	51.63	-79.85	-1,920.78	1,909.34	1,891.48	17.86	106.894				
3,700.00	3,698.72	3,702.22	3,702.22	12.90	13.05	51.88	-79.85	-1,920.78	1,902.85	1,884.50	18.35	103.700				
3,800.00	3,798.17	3,801.67	3,801.67	13.24	13.41	52.13	-79.85	-1,920.78	1,896.39	1,877.55	18.84	100.666				
3,900.00	3,897.63	3,901.13	3,901.13	13.58	13.77	52.38	-79.85	-1,920.78	1,889.97	1,870.64	19.33	97.778				
4,000.00	3,997.08	4,000.58	4,000.58	13.93	14.12	52.63	-79.85	-1,920.78	1,883.59	1,863.77	19.82	95.025				
4,100.00	4,096.53	4,100.03	4,100.03	14.27	14.48	52.88	-79.85	-1,920.78	1,877.24	1,856.93	20.32	92.400				
4,200.00	4,195.98	4,199.48	4,199.48	14.62	14.84	53.14	-79.85	-1,920.78	1,870.93	1,850.12	20.81	89.895				
4,300.00	4,295.44	4,298.94	4,298.94	14.98	15.19	53.39	-79.85	-1,920.78	1,864.66	1,843.35	21.31	87.501				
4,400.00	4,394.89	4,398.39	4,398.39	15.33	15.55	53.65	-79.85	-1,920.78	1,858.42	1,836.62	21.81	85.213				
4,500.00	4,494.34	4,497.84	4,497.84	15.69	15.91	53.91	-79.85	-1,920.78	1,852.23	1,829.92	22.31	83.024				
4,600.00	4,593.79	4,597.29	4,597.29	16.05	16.26	54.17	-79.85	-1,920.78	1,846.07	1,823.26	22.81	80.928				
4,700.00	4,693.25	4,696.75	4,696.75	16.41	16.62	54.43	-79.85	-1,920.78	1,839.95	1,816.63	23.31	78.920				
4,800.00	4,792.70	4,796.20	4,796.20	16.77	16.98	54.70	-79.85	-1,920.78	1,833.87	1,810.05	23.82	76.995				
4,900.00	4,892.15	4,895.65	4,895.65	17.13	17.33	54.96	-79.85	-1,920.78	1,827.83	1,803.50	24.32	75.148				
5,000.00	4,991.60	4,995.10	4,995.10	17.50	17.69	55.23	-79.85	-1,920.78	1,821.82	1,796.99	24.83	73.374				
5,100.00	5,091.06	5,094.56	5,094.56	17.86	18.05	55.50	-79.85	-1,920.78	1,815.86	1,790.53	25.34	71.670				

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,200.00	5,190.51	5,194.01	5,194.01	18.23	18.40	55.77	-79.85	-1,920.78	1,809.94	1,784.10	25.84	70.032			
5,300.00	5,289.96	5,293.46	5,293.46	18.60	18.76	56.05	-79.85	-1,920.78	1,804.06	1,777.71	26.35	68.456			
5,400.00	5,389.41	5,392.91	5,392.91	18.97	19.12	56.32	-79.85	-1,920.78	1,798.22	1,771.36	26.86	66.940			
5,500.00	5,488.87	5,492.37	5,492.37	19.34	19.47	56.60	-79.85	-1,920.78	1,792.43	1,765.05	27.37	65.479			
5,600.00	5,588.32	5,577.66	5,577.65	19.71	19.76	56.81	-80.56	-1,921.13	1,787.04	1,759.20	27.84	64.188			
5,700.00	5,687.77	5,662.06	5,662.01	20.09	20.04	56.97	-82.93	-1,922.30	1,782.53	1,754.23	28.30	62.996			
5,800.00	5,787.22	5,746.70	5,746.52	20.46	20.32	57.08	-86.99	-1,924.31	1,778.89	1,750.14	28.75	61.878			
5,900.00	5,886.68	5,831.47	5,831.06	20.84	20.59	57.13	-92.74	-1,927.15	1,776.11	1,746.91	29.20	60.825			
6,000.00	5,986.13	5,919.21	5,918.38	21.21	20.88	57.12	-100.41	-1,930.94	1,774.16	1,744.50	29.66	59.817			
6,100.00	6,085.58	6,019.20	6,017.81	21.59	21.21	57.09	-109.78	-1,935.56	1,772.50	1,742.35	30.15	58.784			
6,200.00	6,185.03	6,119.18	6,117.25	21.97	21.54	57.06	-119.16	-1,940.19	1,770.83	1,740.19	30.65	57.781			
6,300.00	6,284.49	6,219.16	6,216.68	22.34	21.87	57.04	-128.53	-1,944.82	1,769.17	1,738.02	31.14	56.805			
6,400.00	6,383.94	6,319.14	6,316.11	22.72	22.20	57.01	-137.90	-1,949.45	1,767.50	1,735.86	31.64	55.857			
6,500.00	6,483.39	6,419.12	6,415.55	23.10	22.54	56.98	-147.27	-1,954.08	1,765.84	1,733.70	32.14	54.935			
6,600.00	6,582.84	6,519.11	6,514.98	23.48	22.88	56.95	-156.64	-1,958.71	1,764.18	1,731.53	32.65	54.039			
6,700.00	6,682.30	6,619.09	6,614.42	23.86	23.22	56.92	-166.02	-1,963.34	1,762.52	1,729.37	33.15	53.168			
6,800.00	6,781.75	6,719.07	6,713.85	24.24	23.56	56.89	-175.39	-1,967.97	1,760.85	1,727.20	33.66	52.320			
6,900.00	6,881.20	6,819.05	6,813.29	24.63	23.91	56.86	-184.76	-1,972.60	1,759.19	1,725.03	34.16	51.495			
6,944.87	6,925.82	6,863.92	6,857.90	24.80	24.06	56.85	-188.96	-1,974.67	1,758.45	1,724.06	34.39	51.132			
7,000.00	6,980.69	6,919.03	6,912.72	25.01	24.25	56.81	-194.13	-1,977.22	1,757.75	1,723.08	34.67	50.700			
7,060.56	7,041.04	6,979.56	6,972.92	25.23	24.46	56.76	-199.80	-1,980.03	1,757.48	1,722.51	34.97	50.251 CC			
7,100.00	7,080.39	7,018.98	7,012.12	25.38	24.60	56.71	-203.50	-1,981.85	1,757.60	1,722.42	35.17	49.970			
7,200.00	7,180.26	7,118.82	7,111.41	25.74	24.95	56.55	-212.86	-1,986.47	1,758.89	1,723.22	35.67	49.309			
7,300.00	7,280.23	7,218.50	7,210.54	26.09	25.30	56.34	-222.20	-1,991.09	1,761.66	1,725.49	36.16	48.715			
7,344.78	7,325.00	7,263.05	7,254.85	26.25	25.45	-87.15	-226.38	-1,993.15	1,763.38	1,727.00	36.38	48.471			
7,400.00	7,380.22	7,317.98	7,309.48	26.43	25.65	-87.32	-231.53	-1,995.69	1,765.69	1,729.04	36.65	48.182			
7,500.00	7,480.22	7,417.43	7,408.38	26.77	26.00	-87.63	-240.85	-2,000.30	1,769.92	1,732.79	37.13	47.669			
7,600.00	7,580.22	7,516.88	7,507.29	27.11	26.35	-87.93	-250.17	-2,004.90	1,774.20	1,736.59	37.61	47.170			
7,700.00	7,680.22	7,616.33	7,606.20	27.44	26.70	-88.24	-259.49	-2,009.51	1,778.54	1,740.44	38.10	46.683			
7,800.00	7,780.22	7,715.78	7,705.10	27.78	27.06	-88.54	-268.81	-2,014.11	1,782.92	1,744.34	38.58	46.208			
7,900.00	7,880.22	7,815.24	7,804.01	28.12	27.41	-88.85	-278.14	-2,018.72	1,787.36	1,748.28	39.07	45.746			
8,000.00	7,980.22	7,914.69	7,902.92	28.46	27.77	-89.15	-287.46	-2,023.32	1,791.84	1,752.28	39.56	45.294			
8,100.00	8,080.22	8,014.14	8,001.82	28.80	28.13	-89.45	-296.78	-2,027.92	1,796.38	1,756.33	40.05	44.854			
8,200.00	8,180.22	8,113.59	8,100.73	29.14	28.49	-89.74	-306.10	-2,032.53	1,800.96	1,760.42	40.54	44.425			
8,300.00	8,280.22	8,222.15	8,208.72	29.48	28.88	-90.06	-316.06	-2,037.45	1,805.51	1,764.45	41.06	43.977			
8,400.00	8,380.22	8,348.61	8,334.80	29.82	29.33	-90.34	-324.76	-2,041.75	1,808.94	1,767.32	41.62	43.465			
8,500.00	8,480.22	8,475.58	8,461.64	30.16	29.78	-90.49	-329.74	-2,044.20	1,810.90	1,768.73	42.17	42.940			
8,600.00	8,580.22	8,597.67	8,583.72	30.51	30.20	-90.53	-330.99	-2,044.82	1,811.40	1,768.69	42.71	42.411			
8,700.00	8,680.22	8,697.67	8,683.72	30.85	30.55	-90.53	-330.99	-2,044.82	1,811.40	1,768.20	43.20	41.929			
8,800.00	8,780.22	8,797.67	8,783.72	31.19	30.90	-90.53	-330.99	-2,044.82	1,811.40	1,767.71	43.69	41.458			
8,900.00	8,880.22	8,897.67	8,883.72	31.53	31.25	-90.53	-330.99	-2,044.82	1,811.40	1,767.21	44.18	40.997			
9,000.00	8,980.22	8,997.67	8,983.72	31.88	31.60	-90.53	-330.99	-2,044.82	1,811.40	1,766.72	44.68	40.545			
9,100.00	9,080.22	9,097.67	9,083.72	32.22	31.95	-90.53	-330.99	-2,044.82	1,811.40	1,766.23	45.17	40.103			
9,200.00	9,180.22	9,197.67	9,183.72	32.57	32.30	-90.53	-330.99	-2,044.82	1,811.40	1,765.74	45.66	39.670			
9,300.00	9,280.22	9,297.67	9,283.72	32.91	32.65	-90.53	-330.99	-2,044.82	1,811.40	1,765.24	46.15	39.247			
9,400.00	9,380.22	9,397.67	9,383.72	33.26	33.00	-90.53	-330.99	-2,044.82	1,811.40	1,764.75	46.65	38.832			
9,500.00	9,480.22	9,497.67	9,483.72	33.60	33.35	-90.53	-330.99	-2,044.82	1,811.40	1,764.26	47.14	38.425			
9,600.00	9,580.22	9,597.67	9,583.72	33.95	33.70	-90.53	-330.99	-2,044.82	1,811.40	1,763.76	47.64	38.027			
9,700.00	9,680.22	9,697.67	9,683.72	34.29	34.06	-90.53	-330.99	-2,044.82	1,811.40	1,763.27	48.13	37.636			
9,800.00	9,780.22	9,797.67	9,783.72	34.64	34.41	-90.53	-330.99	-2,044.82	1,811.40	1,762.77	48.62	37.253			
9,900.00	9,880.22	9,897.67	9,883.72	34.98	34.76	-90.53	-330.99	-2,044.82	1,811.40	1,762.28	49.12	36.878			
10,000.00	9,980.22	9,997.67	9,983.72	35.33	35.11	-90.53	-330.99	-2,044.82	1,811.40	1,761.79	49.61	36.510			

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Judge Baylor Fed Com - Judge Baylor Fed Com 601H - OH - Plan #3		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
10,100.00	10,080.22	10,097.67	10,083.72	35.68	35.46	-90.53	-330.99	-2,044.82	1,811.40	1,761.29	50.11	36.150				
10,200.00	10,180.22	10,197.67	10,183.72	36.02	35.82	-90.53	-330.99	-2,044.82	1,811.40	1,760.79	50.60	35.796				
10,300.00	10,280.22	10,297.67	10,283.72	36.37	36.17	-90.53	-330.99	-2,044.82	1,811.40	1,760.30	51.10	35.448				
10,400.00	10,380.22	10,397.67	10,383.72	36.72	36.52	-90.53	-330.99	-2,044.82	1,811.40	1,759.80	51.60	35.108				
10,500.00	10,480.22	10,497.67	10,483.72	37.06	36.87	-90.53	-330.99	-2,044.82	1,811.40	1,759.31	52.09	34.773				
10,600.00	10,580.22	10,597.67	10,583.72	37.41	37.22	-90.53	-330.99	-2,044.82	1,811.40	1,758.81	52.59	34.445				
10,700.00	10,680.22	10,697.67	10,683.72	37.76	37.58	-90.53	-330.99	-2,044.82	1,811.40	1,758.31	53.08	34.123				
10,800.00	10,780.22	10,797.67	10,783.72	38.11	37.93	-90.53	-330.99	-2,044.82	1,811.40	1,757.82	53.58	33.807				
10,900.00	10,880.22	10,897.67	10,883.72	38.46	38.28	-90.53	-330.99	-2,044.82	1,811.40	1,757.32	54.08	33.496				
11,000.00	10,980.22	10,997.67	10,983.72	38.80	38.64	-90.53	-330.99	-2,044.82	1,811.40	1,756.82	54.57	33.191				
11,100.00	11,080.22	11,097.67	11,083.72	39.15	38.99	-90.53	-330.99	-2,044.82	1,811.40	1,756.33	55.07	32.892				
11,200.00	11,180.22	11,197.67	11,183.72	39.50	39.34	-90.53	-330.99	-2,044.82	1,811.40	1,755.83	55.57	32.597				
11,300.00	11,280.22	11,297.67	11,283.72	39.85	39.70	-90.53	-330.99	-2,044.82	1,811.40	1,755.33	56.07	32.308				
11,328.78	11,309.00	11,326.45	11,312.50	39.95	39.80	-90.53	-330.99	-2,044.82	1,811.40	1,755.19	56.21	32.226				
11,350.00	11,330.22	11,347.67	11,333.72	40.02	39.87	89.98	-330.99	-2,044.82	1,811.40	1,755.08	56.32	32.165				
11,362.52	11,342.73	11,360.18	11,346.23	40.07	39.92	90.00	-330.99	-2,044.82	1,811.40	1,755.02	56.38	32.129				
11,400.00	11,380.04	11,397.57	11,383.62	40.20	40.05	90.10	-331.15	-2,044.82	1,811.40	1,754.84	56.57	32.023				
11,450.00	11,429.32	11,447.83	11,433.74	40.38	40.22	90.26	-334.55	-2,044.79	1,811.42	1,754.60	56.82	31.881				
11,500.00	11,477.69	11,498.53	11,483.82	40.57	40.40	90.42	-342.41	-2,044.72	1,811.45	1,754.37	57.08	31.735				
11,550.00	11,524.77	11,549.70	11,533.45	40.76	40.59	90.57	-354.80	-2,044.61	1,811.49	1,754.14	57.35	31.587				
11,600.00	11,570.21	11,601.32	11,582.19	40.95	40.78	90.72	-371.73	-2,044.46	1,811.54	1,753.92	57.63	31.436				
11,650.00	11,613.66	11,653.40	11,629.63	41.15	40.97	90.87	-393.19	-2,044.27	1,811.61	1,753.70	57.91	31.283				
11,700.00	11,654.79	11,705.93	11,675.30	41.36	41.17	91.00	-419.10	-2,044.05	1,811.68	1,753.48	58.20	31.128				
11,750.00	11,693.29	11,758.91	11,718.76	41.57	41.38	91.14	-449.36	-2,043.78	1,811.75	1,753.25	58.50	30.970				
11,800.00	11,728.87	11,812.30	11,759.55	41.78	41.59	91.26	-483.79	-2,043.48	1,811.83	1,753.03	58.81	30.810				
11,850.00	11,761.25	11,866.10	11,797.23	42.01	41.81	91.37	-522.16	-2,043.14	1,811.92	1,752.79	59.12	30.646				
11,900.00	11,790.19	11,920.27	11,831.36	42.23	42.04	91.48	-564.19	-2,042.77	1,812.00	1,752.55	59.45	30.479				
11,950.00	11,815.47	11,974.78	11,861.55	42.47	42.28	91.57	-609.55	-2,042.37	1,812.07	1,752.28	59.79	30.310				
12,000.00	11,836.89	12,029.58	11,887.42	42.72	42.53	91.64	-657.84	-2,041.95	1,812.14	1,752.01	60.13	30.137				
12,050.00	11,854.29	12,084.65	11,908.64	42.97	42.78	91.71	-708.63	-2,041.50	1,812.20	1,751.71	60.49	29.961				
12,100.00	11,867.55	12,139.92	11,924.95	43.22	43.05	91.76	-761.41	-2,041.04	1,812.24	1,751.39	60.85	29.783				
12,150.00	11,876.55	12,195.35	11,936.12	43.49	43.32	91.79	-815.68	-2,040.57	1,812.27	1,751.06	61.22	29.603				
12,200.00	11,881.24	12,250.88	11,942.00	43.75	43.59	91.81	-870.88	-2,040.08	1,812.29	1,750.70	61.59	29.423				
12,219.78	11,881.89	12,272.86	11,942.85	43.86	43.70	91.82	-892.84	-2,039.89	1,812.29	1,750.55	61.74	29.352				
12,300.00	11,883.15	12,353.57	11,943.74	44.30	44.12	91.81	-973.54	-2,039.18	1,812.28	1,749.93	62.36	29.064				
12,400.00	11,884.72	12,453.57	11,944.83	44.91	44.69	91.79	-1,073.53	-2,038.30	1,812.26	1,749.08	63.18	28.683				
12,500.00	11,886.29	12,553.57	11,945.91	45.56	45.31	91.77	-1,173.52	-2,037.42	1,812.24	1,748.16	64.08	28.280				
12,600.00	11,887.86	12,653.57	11,946.99	46.27	45.98	91.76	-1,273.51	-2,036.55	1,812.23	1,747.17	65.06	27.856				
12,700.00	11,889.43	12,753.57	11,948.07	47.02	46.69	91.74	-1,373.50	-2,035.67	1,812.21	1,746.11	66.10	27.417				
12,800.00	11,891.00	12,853.57	11,949.15	47.82	47.46	91.73	-1,473.49	-2,034.79	1,812.19	1,744.99	67.20	26.966				
12,900.00	11,892.57	12,953.57	11,950.23	48.66	48.27	91.71	-1,573.48	-2,033.91	1,812.17	1,743.80	68.37	26.505				
13,000.00	11,894.14	13,053.56	11,951.31	49.54	49.12	91.70	-1,673.46	-2,033.04	1,812.16	1,742.56	69.60	26.037				
13,100.00	11,895.71	13,153.56	11,952.39	50.46	50.01	91.68	-1,773.45	-2,032.16	1,812.14	1,741.26	70.88	25.566				
13,200.00	11,897.28	13,253.56	11,953.48	51.42	50.94	91.67	-1,873.44	-2,031.28	1,812.12	1,739.91	72.22	25.093				
13,300.00	11,898.85	13,353.56	11,954.56	52.41	51.91	91.65	-1,973.43	-2,030.40	1,812.11	1,738.50	73.60	24.620				
13,400.00	11,900.42	13,453.56	11,955.64	53.44	52.91	91.64	-2,073.42	-2,029.52	1,812.09	1,737.05	75.04	24.150				
13,500.00	11,901.99	13,553.56	11,956.72	54.49	53.94	91.62	-2,173.41	-2,028.65	1,812.07	1,735.56	76.51	23.683				
13,600.00	11,903.56	13,653.56	11,957.80	55.58	55.00	91.60	-2,273.40	-2,027.77	1,812.06	1,734.02	78.03	23.222				
13,700.00	11,905.13	13,753.56	11,958.88	56.69	56.10	91.59	-2,373.39	-2,026.89	1,812.04	1,732.45	79.59	22.767				
13,800.00	11,906.70	13,853.55	11,959.96	57.83	57.21	91.57	-2,473.38	-2,026.01	1,812.02	1,730.84	81.19	22.319				
13,900.00	11,908.27	13,953.55	11,961.04	58.99	58.36	91.56	-2,573.37	-2,025.14	1,812.01	1,729.19	82.82	21.879				
14,000.00	11,909.84	14,053.55	11,962.13	60.17	59.52	91.54	-2,673.36	-2,024.26	1,811.99	1,727.51	84.48	21.448				

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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			
14,100.00	11,911.41	14,153.55	11,963.21	61.38	60.71	91.53	-2,773.35	-2,023.38	1,811.98	1,725.80	86.18	21.025			
14,200.00	11,912.98	14,253.55	11,964.29	62.60	61.92	91.51	-2,873.33	-2,022.50	1,811.96	1,724.05	87.91	20.613			
14,300.00	11,914.55	14,353.55	11,965.37	63.85	63.15	91.50	-2,973.32	-2,021.62	1,811.94	1,722.29	89.66	20.209			
14,400.00	11,916.12	14,453.55	11,966.45	65.11	64.40	91.48	-3,073.31	-2,020.75	1,811.93	1,720.49	91.44	19.816			
14,500.00	11,917.69	14,553.55	11,967.53	66.39	65.67	91.47	-3,173.30	-2,019.87	1,811.91	1,718.67	93.24	19.432			
14,600.00	11,919.26	14,653.55	11,968.61	67.69	66.96	91.45	-3,273.29	-2,018.99	1,811.90	1,716.83	95.07	19.059			
14,700.00	11,920.83	14,753.54	11,969.69	69.00	68.26	91.43	-3,373.28	-2,018.11	1,811.88	1,714.97	96.92	18.695			
14,800.00	11,922.40	14,853.54	11,970.78	70.33	69.57	91.42	-3,473.27	-2,017.24	1,811.87	1,713.08	98.79	18.341			
14,900.00	11,923.97	14,953.54	11,971.86	71.67	70.90	91.40	-3,573.26	-2,016.36	1,811.85	1,711.18	100.68	17.997			
15,000.00	11,925.54	15,053.54	11,972.94	73.02	72.24	91.39	-3,673.25	-2,015.48	1,811.84	1,709.25	102.59	17.662			
15,100.00	11,927.11	15,153.54	11,974.02	74.39	73.60	91.37	-3,773.24	-2,014.60	1,811.82	1,707.31	104.51	17.336			
15,200.00	11,928.68	15,253.54	11,975.10	75.77	74.97	91.36	-3,873.23	-2,013.72	1,811.81	1,705.36	106.45	17.020			
15,300.00	11,930.25	15,353.54	11,976.18	77.15	76.34	91.34	-3,973.21	-2,012.85	1,811.80	1,703.39	108.41	16.713			
15,400.00	11,931.82	15,453.54	11,977.26	78.55	77.73	91.33	-4,073.20	-2,011.97	1,811.78	1,701.40	110.38	16.414			
15,500.00	11,933.39	15,553.53	11,978.34	79.96	79.13	91.31	-4,173.19	-2,011.09	1,811.77	1,699.40	112.37	16.124			
15,600.00	11,934.96	15,653.53	11,979.43	81.37	80.54	91.30	-4,273.18	-2,010.21	1,811.75	1,697.39	114.37	15.842			
15,700.00	11,936.53	15,753.53	11,980.51	82.80	81.96	91.28	-4,373.17	-2,009.34	1,811.74	1,695.36	116.38	15.568			
15,800.00	11,938.10	15,853.53	11,981.59	84.23	83.39	91.26	-4,473.16	-2,008.46	1,811.73	1,693.32	118.40	15.301			
15,900.00	11,939.67	15,953.53	11,982.67	85.67	84.82	91.25	-4,573.15	-2,007.58	1,811.71	1,691.28	120.44	15.043			
16,000.00	11,941.24	16,053.53	11,983.75	87.12	86.26	91.23	-4,673.14	-2,006.70	1,811.70	1,689.22	122.48	14.791			
16,100.00	11,942.81	16,153.53	11,984.83	88.58	87.71	91.22	-4,773.13	-2,005.82	1,811.69	1,687.15	124.54	14.547			
16,200.00	11,944.38	16,253.53	11,985.91	90.04	89.17	91.20	-4,873.12	-2,004.95	1,811.67	1,685.07	126.61	14.310			
16,300.00	11,945.95	16,353.52	11,987.00	91.51	90.63	91.19	-4,973.11	-2,004.07	1,811.66	1,682.98	128.68	14.079			
16,400.00	11,947.52	16,453.52	11,988.08	92.99	92.10	91.17	-5,073.09	-2,003.19	1,811.65	1,680.88	130.77	13.854			
16,500.00	11,949.09	16,553.52	11,989.16	94.47	93.58	91.16	-5,173.08	-2,002.31	1,811.64	1,678.78	132.86	13.636			
16,600.00	11,950.66	16,653.52	11,990.24	95.95	95.06	91.14	-5,273.07	-2,001.44	1,811.62	1,676.66	134.96	13.424			
16,700.00	11,952.23	16,753.52	11,991.32	97.45	96.55	91.13	-5,373.06	-2,000.56	1,811.61	1,674.54	137.07	13.217			
16,800.00	11,953.80	16,853.52	11,992.40	98.94	98.04	91.11	-5,473.05	-1,999.68	1,811.60	1,672.42	139.18	13.016			
16,900.00	11,955.37	16,953.52	11,993.48	100.45	99.54	91.09	-5,573.04	-1,998.80	1,811.59	1,670.28	141.31	12.820			
17,000.00	11,956.94	17,053.52	11,994.56	101.95	101.04	91.08	-5,673.03	-1,997.92	1,811.57	1,668.14	143.44	12.630			
17,100.00	11,958.51	17,153.52	11,995.65	103.46	102.55	91.06	-5,773.02	-1,997.05	1,811.56	1,665.99	145.57	12.445			
17,200.00	11,960.08	17,253.51	11,996.73	104.98	104.06	91.05	-5,873.01	-1,996.17	1,811.55	1,663.84	147.71	12.264			
17,300.00	11,961.65	17,353.51	11,997.81	106.50	105.58	91.03	-5,973.00	-1,995.29	1,811.54	1,661.68	149.86	12.088			
17,400.00	11,963.22	17,453.51	11,998.89	108.02	107.10	91.02	-6,072.99	-1,994.41	1,811.53	1,659.51	152.01	11.917			
17,500.00	11,964.79	17,553.51	11,999.97	109.55	108.62	91.00	-6,172.97	-1,993.54	1,811.52	1,657.34	154.17	11.750			
17,600.00	11,966.36	17,653.51	12,001.05	111.08	110.15	90.99	-6,272.96	-1,992.66	1,811.51	1,655.17	156.34	11.587			
17,700.00	11,967.93	17,753.51	12,002.13	112.61	111.68	90.97	-6,372.95	-1,991.78	1,811.49	1,652.99	158.51	11.429			
17,800.00	11,969.50	17,853.51	12,003.21	114.15	113.21	90.96	-6,472.94	-1,990.90	1,811.48	1,650.80	160.68	11.274			
17,900.00	11,971.07	17,953.51	12,004.30	115.69	114.75	90.94	-6,572.93	-1,990.02	1,811.47	1,648.62	162.86	11.123			
18,000.00	11,972.64	18,053.50	12,005.38	117.24	116.29	90.92	-6,672.92	-1,989.15	1,811.46	1,646.42	165.04	10.976			
18,100.00	11,974.21	18,153.50	12,006.46	118.78	117.84	90.91	-6,772.91	-1,988.27	1,811.45	1,644.23	167.23	10.832			
18,200.00	11,975.78	18,253.50	12,007.54	120.33	119.38	90.89	-6,872.90	-1,987.39	1,811.44	1,642.02	169.42	10.692			
18,300.00	11,977.35	18,353.50	12,008.62	121.89	120.93	90.88	-6,972.89	-1,986.51	1,811.43	1,639.82	171.61	10.555			
18,400.00	11,978.92	18,453.50	12,009.70	123.44	122.49	90.86	-7,072.88	-1,985.64	1,811.42	1,637.61	173.81	10.422			
18,500.00	11,980.49	18,553.50	12,010.78	125.00	124.04	90.85	-7,172.87	-1,984.76	1,811.41	1,635.40	176.01	10.291			
18,600.00	11,982.06	18,653.50	12,011.86	126.56	125.60	90.83	-7,272.86	-1,983.88	1,811.40	1,633.18	178.22	10.164			
18,700.00	11,983.63	18,753.50	12,012.95	128.12	127.16	90.82	-7,372.84	-1,983.00	1,811.39	1,630.97	180.43	10.040			
18,800.00	11,985.20	18,853.49	12,014.03	129.68	128.72	90.80	-7,472.83	-1,982.12	1,811.38	1,628.74	182.64	9.918			
18,900.00	11,986.77	18,953.49	12,015.11	131.25	130.28	90.79	-7,572.82	-1,981.25	1,811.37	1,626.52	184.85	9.799			
19,000.00	11,988.34	19,053.49	12,016.19	132.82	131.85	90.77	-7,672.81	-1,980.37	1,811.36	1,624.29	187.07	9.683			
19,100.00	11,989.90	19,153.49	12,017.27	134.39	133.42	90.75	-7,772.80	-1,979.49	1,811.35	1,622.06	189.29	9.569			
19,200.00	11,991.47	19,253.49	12,018.35	135.96	134.99	90.74	-7,872.79	-1,978.61	1,811.34	1,619.83	191.51	9.458			

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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	
19,300.00	11,993.04	19,353.49	12,019.43	137.54	136.56	90.72	-7,972.78	-1,977.74	1,811.33	1,617.59	193.74	9.349		
19,400.00	11,994.61	19,453.49	12,020.51	139.11	138.14	90.71	-8,072.77	-1,976.86	1,811.33	1,615.36	195.97	9.243		
19,500.00	11,996.18	19,553.49	12,021.60	140.69	139.71	90.69	-8,172.76	-1,975.98	1,811.32	1,613.12	198.20	9.139		
19,600.00	11,997.75	19,653.49	12,022.68	142.27	141.29	90.68	-8,272.75	-1,975.10	1,811.31	1,610.87	200.44	9.037		
19,700.00	11,999.32	19,753.48	12,023.76	143.85	142.87	90.66	-8,372.74	-1,974.22	1,811.30	1,608.63	202.67	8.937		
19,800.00	12,000.89	19,853.48	12,024.84	145.43	144.45	90.65	-8,472.72	-1,973.35	1,811.29	1,606.38	204.91	8.839		
19,900.00	12,002.46	19,953.48	12,025.92	147.02	146.03	90.63	-8,572.71	-1,972.47	1,811.28	1,604.13	207.15	8.744		
20,000.00	12,004.03	20,053.48	12,027.00	148.60	147.62	90.62	-8,672.70	-1,971.59	1,811.28	1,601.88	209.39	8.650		
20,100.00	12,005.60	20,153.48	12,028.08	150.19	149.20	90.60	-8,772.69	-1,970.71	1,811.27	1,599.63	211.64	8.558		
20,200.00	12,007.17	20,253.48	12,029.16	151.78	150.79	90.58	-8,872.68	-1,969.84	1,811.26	1,597.38	213.88	8.468		
20,300.00	12,008.74	20,353.48	12,030.25	153.37	152.38	90.57	-8,972.67	-1,968.96	1,811.25	1,595.12	216.13	8.380		
20,400.00	12,010.31	20,453.48	12,031.33	154.96	153.97	90.55	-9,072.66	-1,968.08	1,811.24	1,592.86	218.38	8.294		
20,500.00	12,011.88	20,553.47	12,032.41	156.55	155.56	90.54	-9,172.65	-1,967.20	1,811.24	1,590.60	220.64	8.209		
20,600.00	12,013.45	20,653.47	12,033.49	158.15	157.15	90.52	-9,272.64	-1,966.32	1,811.23	1,588.34	222.89	8.126		
20,700.00	12,015.02	20,753.47	12,034.57	159.74	158.75	90.51	-9,372.63	-1,965.45	1,811.22	1,586.08	225.15	8.045		
20,800.00	12,016.59	20,853.47	12,035.65	161.34	160.34	90.49	-9,472.62	-1,964.57	1,811.22	1,583.81	227.40	7.965		
20,900.00	12,018.16	20,953.47	12,036.73	162.94	161.94	90.48	-9,572.60	-1,963.69	1,811.21	1,581.55	229.66	7.886		
21,000.00	12,019.73	21,053.47	12,037.81	164.53	163.53	90.46	-9,672.59	-1,962.81	1,811.20	1,579.28	231.92	7.809		
21,100.00	12,021.30	21,153.47	12,038.90	166.13	165.13	90.45	-9,772.58	-1,961.94	1,811.20	1,577.01	234.19	7.734		
21,200.00	12,022.87	21,253.47	12,039.98	167.73	166.73	90.43	-9,872.57	-1,961.06	1,811.19	1,574.74	236.45	7.660		
21,300.00	12,024.44	21,353.47	12,041.06	169.34	168.33	90.41	-9,972.56	-1,960.18	1,811.18	1,572.47	238.71	7.587		
21,400.00	12,026.01	21,453.46	12,042.14	170.94	169.93	90.40	-10,072.55	-1,959.30	1,811.18	1,570.20	240.98	7.516		
21,500.00	12,027.58	21,553.46	12,043.22	172.54	171.54	90.38	-10,172.54	-1,958.43	1,811.17	1,567.92	243.25	7.446		
21,600.00	12,029.15	21,653.46	12,044.30	174.15	173.14	90.37	-10,272.53	-1,957.55	1,811.16	1,565.65	245.52	7.377		
21,700.00	12,030.72	21,753.46	12,045.38	175.75	174.74	90.35	-10,372.52	-1,956.67	1,811.16	1,563.37	247.79	7.309		
21,800.00	12,032.29	21,853.46	12,046.46	177.36	176.35	90.34	-10,472.51	-1,955.79	1,811.15	1,561.09	250.06	7.243		
21,900.00	12,033.86	21,953.46	12,047.55	178.96	177.95	90.32	-10,572.50	-1,954.91	1,811.15	1,558.82	252.33	7.178		
22,000.00	12,035.43	22,053.46	12,048.63	180.57	179.56	90.31	-10,672.48	-1,954.04	1,811.14	1,556.54	254.61	7.114		
22,077.14	12,036.65	22,130.50	12,049.46	181.81	180.80	90.29	-10,749.52	-1,953.36	1,811.14	1,554.78	256.36	7.065		
22,100.00	12,037.00	22,130.50	12,049.46	182.18	180.80	90.29	-10,749.52	-1,953.36	1,811.28	1,554.63	256.66	7.057 ES		
22,200.00	12,038.57	22,130.50	12,049.46	183.79	180.80	90.29	-10,749.52	-1,953.36	1,815.30	1,557.86	257.44	7.051 SF		
22,300.00	12,040.14	22,130.50	12,049.46	185.40	180.80	90.29	-10,749.52	-1,953.36	1,824.80	1,567.40	257.40	7.089		
22,400.00	12,041.71	22,130.50	12,049.46	187.01	180.80	90.29	-10,749.52	-1,953.36	1,839.69	1,583.14	256.55	7.171		
22,500.00	12,043.28	22,130.50	12,049.46	188.62	180.80	90.29	-10,749.52	-1,953.36	1,859.85	1,604.89	254.96	7.295		
22,600.00	12,044.85	22,130.50	12,049.46	190.23	180.80	90.29	-10,749.52	-1,953.36	1,885.10	1,632.42	252.69	7.460		
22,700.00	12,046.42	22,130.50	12,049.46	191.85	180.80	90.29	-10,749.52	-1,953.36	1,915.25	1,665.43	249.82	7.667		
22,800.00	12,047.99	22,130.50	12,049.46	193.46	180.80	90.29	-10,749.52	-1,953.36	1,950.06	1,703.61	246.45	7.913		
22,900.00	12,049.56	22,130.50	12,049.46	195.07	180.80	90.29	-10,749.52	-1,953.36	1,989.30	1,746.63	242.67	8.198		
23,000.00	12,051.13	22,130.50	12,049.46	196.69	180.80	90.29	-10,749.52	-1,953.36	2,032.71	1,794.14	238.57	8.520		
23,100.00	12,052.70	22,130.50	12,049.46	198.30	180.80	90.29	-10,749.52	-1,953.36	2,080.02	1,845.78	234.24	8.880		
23,200.00	12,054.27	22,130.50	12,049.46	199.92	180.80	90.29	-10,749.52	-1,953.36	2,130.97	1,901.22	229.75	9.275		
23,300.00	12,055.84	22,130.50	12,049.46	201.54	180.80	90.29	-10,749.52	-1,953.36	2,185.32	1,960.15	225.16	9.706		
23,389.58	12,057.25	22,130.50	12,049.46	202.99	180.80	90.29	-10,749.52	-1,953.36	2,236.68	2,015.65	221.03	10.119		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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	3.20	3.20	0.00	0.00	-92.41	-79.53	-1,885.79	1,887.47					
100.00	100.00	103.20	103.20	0.13	0.15	-92.41	-79.53	-1,885.79	1,887.47	1,887.27	0.20	9,536.648		
200.00	200.00	203.20	203.20	0.48	0.51	-92.41	-79.53	-1,885.79	1,887.47	1,886.76	0.70	2,680.381		
300.00	300.00	303.20	303.20	0.84	0.87	-92.41	-79.53	-1,885.79	1,887.47	1,886.26	1.21	1,558.575		
400.00	400.00	403.20	403.20	1.20	1.23	-92.41	-79.53	-1,885.79	1,887.47	1,885.75	1.72	1,098.687		
500.00	500.00	503.20	503.20	1.56	1.59	-92.41	-79.53	-1,885.79	1,887.47	1,885.24	2.22	848.353		
600.00	600.00	603.20	603.20	1.92	1.95	-92.41	-79.53	-1,885.79	1,887.47	1,884.73	2.73	690.924		
700.00	700.00	703.20	703.20	2.28	2.30	-92.41	-79.53	-1,885.79	1,887.47	1,884.23	3.24	582.777		
800.00	800.00	803.20	803.20	2.63	2.66	-92.41	-79.53	-1,885.79	1,887.47	1,883.72	3.75	503.903		
900.00	900.00	903.20	903.20	2.99	3.02	-92.41	-79.53	-1,885.79	1,887.47	1,883.21	4.25	443.834		
1,000.00	1,000.00	1,003.20	1,003.20	3.35	3.38	-92.41	-79.53	-1,885.79	1,887.47	1,882.71	4.76	396.561		
1,100.00	1,100.00	1,103.20	1,103.20	3.71	3.74	-92.41	-79.53	-1,885.79	1,887.47	1,882.20	5.27	358.388		
1,200.00	1,200.00	1,203.20	1,203.20	4.07	4.10	-92.41	-79.53	-1,885.79	1,887.47	1,881.69	5.77	326.919		
1,300.00	1,300.00	1,303.20	1,303.20	4.43	4.45	-92.41	-79.53	-1,885.79	1,887.47	1,881.19	6.28	300.531		
1,400.00	1,400.00	1,403.20	1,403.20	4.79	4.81	-92.41	-79.53	-1,885.79	1,887.47	1,880.68	6.79	278.084		
1,500.00	1,500.00	1,503.20	1,503.20	5.14	5.17	-92.41	-79.53	-1,885.79	1,887.47	1,880.17	7.29	258.757		
1,600.00	1,600.00	1,603.20	1,603.20	5.50	5.53	-92.41	-79.53	-1,885.79	1,887.47	1,879.67	7.80	241.942		
1,700.00	1,700.00	1,703.20	1,703.20	5.86	5.89	-92.41	-79.53	-1,885.79	1,887.47	1,879.16	8.31	227.179		
1,800.00	1,800.00	1,803.20	1,803.20	6.22	6.25	-92.41	-79.53	-1,885.79	1,887.47	1,878.65	8.82	214.115		
1,900.00	1,900.00	1,903.20	1,903.20	6.58	6.61	-92.41	-79.53	-1,885.79	1,887.47	1,878.14	9.32	202.471		
2,000.00	2,000.00	2,003.20	2,003.20	6.94	6.96	-92.41	-79.53	-1,885.79	1,887.47	1,877.64	9.83	192.028		
2,100.00	2,100.00	2,103.20	2,103.20	7.29	7.32	-92.41	-79.53	-1,885.79	1,887.47	1,877.13	10.34	182.610		
2,200.00	2,200.00	2,203.20	2,203.20	7.65	7.68	-92.41	-79.53	-1,885.79	1,887.47	1,876.62	10.84	174.072		
2,300.00	2,300.00	2,303.20	2,303.20	8.01	8.04	-92.41	-79.53	-1,885.79	1,887.47	1,876.12	11.35	166.297		
2,400.00	2,400.00	2,403.20	2,403.20	8.37	8.40	-92.41	-79.53	-1,885.79	1,887.47	1,875.61	11.86	159.187		
2,500.00	2,500.00	2,503.20	2,503.20	8.73	8.76	-92.41	-79.53	-1,885.79	1,887.47	1,875.10	12.36	152.660		
2,600.00	2,600.00	2,603.20	2,603.20	9.09	9.11	-92.41	-79.53	-1,885.79	1,887.47	1,874.60	12.87	146.647		
2,700.00	2,700.00	2,703.20	2,703.20	9.45	9.47	-92.41	-79.53	-1,885.79	1,887.47	1,874.09	13.38	141.089		
2,800.00	2,800.00	2,803.20	2,803.20	9.80	9.83	-92.41	-79.53	-1,885.79	1,887.47	1,873.58	13.88	135.938		
2,900.00	2,900.00	2,903.20	2,903.20	10.16	10.19	-92.41	-79.53	-1,885.79	1,887.47	1,873.07	14.39	131.150		
3,000.00	3,000.00	3,003.20	3,003.20	10.52	10.55	-92.41	-79.53	-1,885.79	1,887.47	1,872.57	14.90	126.687		
3,100.00	3,100.00	3,103.20	3,103.20	10.88	10.91	-92.41	-79.53	-1,885.79	1,887.47	1,872.06	15.41	122.518		
3,200.00	3,200.00	3,203.20	3,203.20	11.24	11.27	-92.41	-79.53	-1,885.79	1,887.47	1,871.55	15.91	118.615		
3,300.00	3,299.99	3,303.19	3,303.19	11.58	11.62	51.00	-79.53	-1,885.79	1,886.64	1,870.23	16.41	114.986		
3,400.00	3,399.91	3,403.11	3,403.11	11.91	11.98	51.12	-79.53	-1,885.79	1,884.17	1,867.28	16.89	111.545		
3,500.00	3,499.69	3,502.89	3,502.89	12.24	12.34	51.32	-79.53	-1,885.79	1,880.07	1,862.70	17.38	108.198		
3,599.91	3,599.18	3,602.38	3,602.38	12.57	12.70	51.61	-79.53	-1,885.79	1,874.36	1,856.50	17.86	104.940		
3,700.00	3,698.72	3,701.92	3,701.92	12.90	13.05	51.86	-79.53	-1,885.79	1,867.86	1,849.51	18.35	101.798		
3,800.00	3,798.17	3,801.37	3,801.37	13.24	13.41	52.11	-79.53	-1,885.79	1,861.40	1,842.57	18.84	98.813		
3,900.00	3,897.63	3,900.83	3,900.83	13.58	13.77	52.37	-79.53	-1,885.79	1,854.98	1,835.65	19.33	95.972		
4,000.00	3,997.08	4,000.28	4,000.28	13.93	14.12	52.62	-79.53	-1,885.79	1,848.60	1,828.78	19.82	93.264		
4,100.00	4,096.53	4,099.73	4,099.73	14.27	14.48	52.88	-79.53	-1,885.79	1,842.25	1,821.94	20.32	90.681		
4,200.00	4,195.98	4,199.18	4,199.18	14.62	14.84	53.14	-79.53	-1,885.79	1,835.94	1,815.13	20.81	88.217		
4,300.00	4,295.44	4,298.64	4,298.64	14.98	15.19	53.40	-79.53	-1,885.79	1,829.67	1,808.36	21.31	85.862		
4,400.00	4,394.89	4,398.09	4,398.09	15.33	15.55	53.66	-79.53	-1,885.79	1,823.44	1,801.63	21.81	83.612		
4,500.00	4,494.34	4,497.54	4,497.54	15.69	15.91	53.93	-79.53	-1,885.79	1,817.24	1,794.93	22.31	81.459		
4,600.00	4,593.79	4,596.99	4,596.99	16.05	16.26	54.19	-79.53	-1,885.79	1,811.08	1,788.27	22.81	79.397		
4,700.00	4,693.25	4,729.06	4,729.03	16.41	16.71	54.49	-81.39	-1,884.65	1,804.10	1,780.72	23.37	77.193		
4,800.00	4,792.70	4,862.18	4,861.98	16.77	17.14	54.67	-87.20	-1,881.10	1,795.27	1,771.36	23.92	75.066		
4,900.00	4,892.15	4,995.04	4,994.33	17.13	17.58	54.72	-96.94	-1,875.15	1,784.60	1,760.14	24.45	72.976		
5,000.00	4,991.60	5,095.68	5,094.42	17.50	17.91	54.71	-105.93	-1,869.66	1,772.92	1,747.98	24.94	71.089		
5,100.00	5,091.06	5,194.99	5,193.19	17.86	18.24	54.70	-114.79	-1,864.24	1,761.24	1,735.82	25.42	69.273		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
5,200.00	5,190.51	5,294.31	5,291.96	18.23	18.58	54.69	-123.66	-1,858.82	1,749.56	1,723.65	25.91	67.518		
5,300.00	5,289.96	5,393.62	5,390.73	18.60	18.91	54.68	-132.52	-1,853.41	1,737.88	1,711.48	26.40	65.822		
5,400.00	5,389.41	5,492.94	5,489.50	18.97	19.25	54.67	-141.39	-1,847.99	1,726.21	1,699.31	26.90	64.183		
5,500.00	5,488.87	5,592.26	5,588.27	19.34	19.59	54.66	-150.25	-1,842.57	1,714.53	1,687.14	27.39	62.598		
5,600.00	5,588.32	5,691.57	5,687.05	19.71	19.93	54.65	-159.12	-1,837.15	1,702.85	1,674.96	27.89	61.065		
5,700.00	5,687.77	5,790.89	5,785.82	20.09	20.28	54.64	-167.98	-1,831.74	1,691.17	1,662.79	28.38	59.582		
5,800.00	5,787.22	5,890.20	5,884.59	20.46	20.62	54.63	-176.85	-1,826.32	1,679.49	1,650.61	28.88	58.146		
5,900.00	5,886.68	5,989.52	5,983.36	20.84	20.97	54.62	-185.71	-1,820.90	1,667.82	1,638.43	29.39	56.756		
6,000.00	5,986.13	6,088.83	6,082.13	21.21	21.32	54.61	-194.58	-1,815.48	1,656.14	1,626.25	29.89	55.410		
6,100.00	6,085.58	6,188.15	6,180.90	21.59	21.67	54.60	-203.44	-1,810.07	1,644.46	1,614.07	30.39	54.106		
6,200.00	6,185.03	6,287.46	6,279.67	21.97	22.02	54.59	-212.31	-1,804.65	1,632.78	1,601.88	30.90	52.841		
6,300.00	6,284.49	6,386.78	6,378.44	22.34	22.38	54.58	-221.17	-1,799.23	1,621.11	1,589.70	31.41	51.616		
6,400.00	6,383.94	6,486.09	6,477.21	22.72	22.73	54.57	-230.04	-1,793.81	1,609.43	1,577.51	31.92	50.427		
6,500.00	6,483.39	6,585.41	6,575.98	23.10	23.09	54.56	-238.90	-1,788.39	1,597.75	1,565.32	32.43	49.274		
6,600.00	6,582.84	6,684.72	6,674.75	23.48	23.44	54.54	-247.77	-1,782.98	1,586.07	1,553.14	32.94	48.154		
6,700.00	6,682.30	6,784.04	6,773.52	23.86	23.80	54.53	-256.63	-1,777.56	1,574.40	1,540.95	33.45	47.068		
6,800.00	6,781.75	6,883.35	6,872.29	24.24	24.16	54.52	-265.50	-1,772.14	1,562.72	1,528.75	33.96	46.012		
6,900.00	6,881.20	6,982.67	6,971.06	24.63	24.52	54.51	-274.36	-1,766.72	1,551.04	1,516.56	34.48	44.987		
6,944.87	6,925.82	7,027.23	7,015.38	24.80	24.69	54.50	-278.34	-1,764.29	1,545.80	1,511.09	34.71	44.536		
7,000.00	6,980.69	7,082.01	7,069.85	25.01	24.89	54.41	-283.23	-1,761.30	1,539.59	1,504.60	34.99	43.998		
7,100.00	7,080.39	7,181.46	7,168.76	25.38	25.25	54.19	-292.11	-1,755.88	1,529.51	1,494.01	35.50	43.080		
7,200.00	7,180.26	7,280.98	7,267.74	25.74	25.61	53.90	-300.99	-1,750.45	1,520.96	1,484.95	36.01	42.236		
7,300.00	7,280.23	7,380.50	7,366.70	26.09	25.98	53.56	-309.87	-1,745.02	1,513.98	1,477.46	36.51	41.464		
7,344.78	7,325.00	7,418.03	7,404.05	26.25	26.12	-89.96	-313.10	-1,743.05	1,511.46	1,474.73	36.73	41.155		
7,400.00	7,380.22	7,463.61	7,449.45	26.43	26.28	-90.09	-316.59	-1,740.92	1,508.86	1,471.88	36.98	40.799		
7,500.00	7,480.22	7,546.38	7,531.99	26.77	26.58	-90.29	-321.76	-1,737.76	1,505.06	1,467.62	37.45	40.193		
7,600.00	7,580.22	7,629.37	7,614.87	27.11	26.88	-90.43	-325.40	-1,735.53	1,502.40	1,464.50	37.90	39.637		
7,700.00	7,680.22	7,712.51	7,697.97	27.44	27.17	-90.51	-327.51	-1,734.24	1,500.87	1,462.52	38.36	39.129		
7,800.00	7,780.22	7,797.97	7,783.42	27.78	27.46	-90.53	-328.09	-1,733.89	1,500.46	1,461.64	38.81	38.660		
7,900.00	7,880.22	7,897.97	7,883.42	28.12	27.81	-90.53	-328.09	-1,733.89	1,500.46	1,461.16	39.30	38.181		
8,000.00	7,980.22	7,997.97	7,983.42	28.46	28.16	-90.53	-328.09	-1,733.89	1,500.46	1,460.67	39.79	37.712		
8,100.00	8,080.22	8,097.97	8,083.42	28.80	28.51	-90.53	-328.09	-1,733.89	1,500.46	1,460.18	40.28	37.255		
8,200.00	8,180.22	8,197.97	8,183.42	29.14	28.86	-90.53	-328.09	-1,733.89	1,500.46	1,459.69	40.76	36.808		
8,300.00	8,280.22	8,297.97	8,283.42	29.48	29.20	-90.53	-328.09	-1,733.89	1,500.46	1,459.20	41.25	36.372		
8,400.00	8,380.22	8,397.97	8,383.42	29.82	29.55	-90.53	-328.09	-1,733.89	1,500.46	1,458.71	41.74	35.945		
8,500.00	8,480.22	8,497.97	8,483.42	30.16	29.90	-90.53	-328.09	-1,733.89	1,500.46	1,458.22	42.23	35.528		
8,600.00	8,580.22	8,597.97	8,583.42	30.51	30.25	-90.53	-328.09	-1,733.89	1,500.46	1,457.73	42.72	35.120		
8,700.00	8,680.22	8,697.97	8,683.42	30.85	30.60	-90.53	-328.09	-1,733.89	1,500.46	1,457.24	43.21	34.721		
8,800.00	8,780.22	8,797.97	8,783.42	31.19	30.95	-90.53	-328.09	-1,733.89	1,500.46	1,456.75	43.71	34.331		
8,900.00	8,880.22	8,897.97	8,883.42	31.53	31.30	-90.53	-328.09	-1,733.89	1,500.46	1,456.26	44.20	33.949		
9,000.00	8,980.22	8,997.97	8,983.42	31.88	31.65	-90.53	-328.09	-1,733.89	1,500.46	1,455.77	44.69	33.576		
9,100.00	9,080.22	9,097.97	9,083.42	32.22	32.00	-90.53	-328.09	-1,733.89	1,500.46	1,455.27	45.18	33.210		
9,200.00	9,180.22	9,197.97	9,183.42	32.57	32.35	-90.53	-328.09	-1,733.89	1,500.46	1,454.78	45.67	32.852		
9,300.00	9,280.22	9,297.97	9,283.42	32.91	32.70	-90.53	-328.09	-1,733.89	1,500.46	1,454.29	46.17	32.501		
9,400.00	9,380.22	9,397.97	9,383.42	33.26	33.05	-90.53	-328.09	-1,733.89	1,500.46	1,453.80	46.66	32.158		
9,500.00	9,480.22	9,497.97	9,483.42	33.60	33.40	-90.53	-328.09	-1,733.89	1,500.46	1,453.30	47.15	31.821		
9,600.00	9,580.22	9,597.97	9,583.42	33.95	33.75	-90.53	-328.09	-1,733.89	1,500.46	1,452.81	47.65	31.491		
9,700.00	9,680.22	9,697.97	9,683.42	34.29	34.10	-90.53	-328.09	-1,733.89	1,500.46	1,452.31	48.14	31.168		
9,800.00	9,780.22	9,797.97	9,783.42	34.64	34.45	-90.53	-328.09	-1,733.89	1,500.46	1,451.82	48.63	30.851		
9,900.00	9,880.22	9,897.97	9,883.42	34.98	34.81	-90.53	-328.09	-1,733.89	1,500.46	1,451.33	49.13	30.541		
10,000.00	9,980.22	9,997.97	9,983.42	35.33	35.16	-90.53	-328.09	-1,733.89	1,500.46	1,450.83	49.62	30.236		
10,100.00	10,080.22	10,097.97	10,083.42	35.68	35.51	-90.53	-328.09	-1,733.89	1,500.46	1,450.34	50.12	29.938		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
10,200.00	10,180.22	10,197.97	10,183.42	36.02	35.86	-90.53	-328.09	-1,733.89	1,500.46	1,449.84	50.61	29.645		
10,300.00	10,280.22	10,297.97	10,283.42	36.37	36.21	-90.53	-328.09	-1,733.89	1,500.46	1,449.35	51.11	29.357		
10,400.00	10,380.22	10,397.97	10,383.42	36.72	36.56	-90.53	-328.09	-1,733.89	1,500.46	1,448.85	51.61	29.075		
10,500.00	10,480.22	10,497.97	10,483.42	37.06	36.92	-90.53	-328.09	-1,733.89	1,500.46	1,448.35	52.10	28.799		
10,600.00	10,580.22	10,597.97	10,583.42	37.41	37.27	-90.53	-328.09	-1,733.89	1,500.46	1,447.86	52.60	28.527		
10,700.00	10,680.22	10,697.97	10,683.42	37.76	37.62	-90.53	-328.09	-1,733.89	1,500.46	1,447.36	53.09	28.260		
10,800.00	10,780.22	10,797.97	10,783.42	38.11	37.97	-90.53	-328.09	-1,733.89	1,500.46	1,446.86	53.59	27.998		
10,900.00	10,880.22	10,897.97	10,883.42	38.46	38.33	-90.53	-328.09	-1,733.89	1,500.46	1,446.37	54.09	27.741		
11,000.00	10,980.22	10,997.97	10,983.42	38.80	38.68	-90.53	-328.09	-1,733.89	1,500.46	1,445.87	54.58	27.489		
11,100.00	11,080.22	11,097.97	11,083.42	39.15	39.03	-90.53	-328.09	-1,733.89	1,500.46	1,445.37	55.08	27.241		
11,200.00	11,180.22	11,197.97	11,183.42	39.50	39.39	-90.53	-328.09	-1,733.89	1,500.46	1,444.88	55.58	26.997		
11,300.00	11,280.22	11,297.97	11,283.42	39.85	39.74	-90.53	-328.09	-1,733.89	1,500.46	1,444.38	56.08	26.757		
11,328.78	11,309.00	11,326.75	11,312.20	39.95	39.84	-90.53	-328.09	-1,733.89	1,500.46	1,444.24	56.22	26.689		
11,350.00	11,330.22	11,347.96	11,333.42	40.02	39.91	89.98	-328.09	-1,733.89	1,500.45	1,444.13	56.32	26.639		
11,359.60	11,339.81	11,357.55	11,343.01	40.06	39.95	90.00	-328.09	-1,733.89	1,500.45	1,444.08	56.37	26.617 CC		
11,400.00	11,380.04	11,397.79	11,383.24	40.20	40.09	90.14	-328.09	-1,733.89	1,500.46	1,443.88	56.57	26.522		
11,450.00	11,429.32	11,447.07	11,432.52	40.38	40.26	90.45	-328.09	-1,733.89	1,500.50	1,443.67	56.83	26.404		
11,500.00	11,477.69	11,495.43	11,480.89	40.57	40.44	90.90	-328.09	-1,733.89	1,500.66	1,443.57	57.08	26.289		
11,550.00	11,524.77	11,542.51	11,527.97	40.76	40.60	91.46	-328.09	-1,733.89	1,501.02	1,443.68	57.34	26.177		
11,600.00	11,570.21	11,587.95	11,573.41	40.95	40.76	92.11	-328.09	-1,733.89	1,501.74	1,444.14	57.60	26.073		
11,650.00	11,613.66	11,631.40	11,618.86	41.15	40.92	92.81	-328.09	-1,733.89	1,502.97	1,445.11	57.86	25.978		
11,700.00	11,654.79	11,672.54	11,657.99	41.36	41.06	93.51	-328.09	-1,733.89	1,504.88	1,446.76	58.11	25.896		
11,750.00	11,693.29	11,722.17	11,707.58	41.57	41.23	94.40	-329.75	-1,733.88	1,507.53	1,449.14	58.39	25.818		
11,800.00	11,728.87	11,777.35	11,762.31	41.78	41.43	95.35	-336.59	-1,733.82	1,510.78	1,452.10	58.68	25.745		
11,850.00	11,761.25	11,837.50	11,820.92	42.01	41.64	96.33	-350.00	-1,733.70	1,514.57	1,455.59	58.98	25.679		
11,900.00	11,790.19	11,903.80	11,883.50	42.23	41.88	97.35	-371.80	-1,733.51	1,518.80	1,459.52	59.28	25.620		
11,950.00	11,815.47	11,977.65	11,949.70	42.47	42.16	98.43	-404.40	-1,733.23	1,523.31	1,463.74	59.57	25.570		
12,000.00	11,836.89	12,060.63	12,018.39	42.72	42.48	99.55	-450.84	-1,732.82	1,527.92	1,468.07	59.85	25.529		
12,050.00	11,854.29	12,154.29	12,086.93	42.97	42.85	100.67	-514.51	-1,732.27	1,532.34	1,472.23	60.11	25.492		
12,100.00	11,867.55	12,259.63	12,150.47	43.22	43.29	101.73	-598.34	-1,731.54	1,536.23	1,475.85	60.38	25.444		
12,150.00	11,876.55	12,376.32	12,201.64	43.49	43.82	102.59	-702.98	-1,730.63	1,539.20	1,478.51	60.69	25.361		
12,200.00	11,881.24	12,501.77	12,231.82	43.75	44.40	103.10	-824.49	-1,729.58	1,540.89	1,479.78	61.11	25.213		
12,219.78	11,881.89	12,552.79	12,236.38	43.86	44.65	103.18	-875.28	-1,729.14	1,541.15	1,479.83	61.32	25.132		
12,300.00	11,883.15	12,645.01	12,237.71	44.30	45.12	103.18	-967.49	-1,728.34	1,541.09	1,479.15	61.94	24.880		
12,400.00	11,884.72	12,745.01	12,238.79	44.91	45.67	103.16	-1,067.48	-1,727.47	1,540.99	1,478.25	62.73	24.563		
12,500.00	11,886.29	12,845.01	12,239.87	45.56	46.27	103.14	-1,167.47	-1,726.60	1,540.88	1,477.28	63.60	24.227		
12,600.00	11,887.86	12,945.01	12,240.95	46.27	46.92	103.13	-1,267.45	-1,725.73	1,540.78	1,476.24	64.54	23.875		
12,700.00	11,889.43	13,045.01	12,242.04	47.02	47.62	103.11	-1,367.44	-1,724.86	1,540.67	1,475.14	65.54	23.508		
12,800.00	11,891.00	13,145.01	12,243.12	47.82	48.37	103.09	-1,467.43	-1,724.00	1,540.57	1,473.97	66.60	23.130		
12,900.00	11,892.57	13,245.01	12,244.20	48.66	49.16	103.07	-1,567.42	-1,723.13	1,540.47	1,472.73	67.73	22.744		
13,000.00	11,894.14	13,345.00	12,245.28	49.54	49.99	103.06	-1,667.41	-1,722.26	1,540.36	1,471.45	68.92	22.351		
13,100.00	11,895.71	13,445.00	12,246.36	50.46	50.86	103.04	-1,767.40	-1,721.39	1,540.26	1,470.10	70.16	21.955		
13,200.00	11,897.28	13,545.00	12,247.44	51.42	51.78	103.02	-1,867.39	-1,720.52	1,540.16	1,468.71	71.45	21.556		
13,300.00	11,898.85	13,645.00	12,248.52	52.41	52.72	103.00	-1,967.38	-1,719.66	1,540.05	1,467.26	72.79	21.158		
13,400.00	11,900.42	13,745.00	12,249.61	53.44	53.70	102.98	-2,067.37	-1,718.79	1,539.95	1,465.77	74.18	20.761		
13,500.00	11,901.99	13,845.00	12,250.69	54.49	54.72	102.97	-2,167.36	-1,717.92	1,539.85	1,464.24	75.61	20.366		
13,600.00	11,903.56	13,945.00	12,251.77	55.58	55.76	102.95	-2,267.35	-1,717.05	1,539.74	1,462.66	77.08	19.975		
13,700.00	11,905.13	14,045.00	12,252.85	56.69	56.83	102.93	-2,367.34	-1,716.18	1,539.64	1,461.05	78.59	19.590		
13,800.00	11,906.70	14,145.00	12,253.93	57.83	57.94	102.91	-2,467.33	-1,715.31	1,539.54	1,459.39	80.15	19.209		
13,900.00	11,908.27	14,244.99	12,255.01	58.99	59.06	102.90	-2,567.31	-1,714.45	1,539.43	1,457.71	81.73	18.836		
14,000.00	11,909.84	14,344.99	12,256.09	60.17	60.21	102.88	-2,667.30	-1,713.58	1,539.33	1,455.99	83.35	18.469		
14,100.00	11,911.41	14,444.99	12,257.18	61.38	61.38	102.86	-2,767.29	-1,712.71	1,539.23	1,454.24	85.00	18.110		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													Judge Baylor Fed Com - Judge Baylor Fed Com 701H - OH - Plan #3		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			
14,200.00	11,912.98	14,544.99	12,258.26	62.60	62.58	102.84	-2,867.28	-1,711.84	1,539.13	1,452.45	86.67	17.758				
14,300.00	11,914.55	14,644.99	12,259.34	63.85	63.79	102.82	-2,967.27	-1,710.97	1,539.03	1,450.65	88.38	17.414				
14,400.00	11,916.12	14,744.99	12,260.42	65.11	65.03	102.81	-3,067.26	-1,710.10	1,538.92	1,448.81	90.11	17.078				
14,500.00	11,917.69	14,844.99	12,261.50	66.39	66.28	102.79	-3,167.25	-1,709.24	1,538.82	1,446.95	91.87	16.750				
14,600.00	11,919.26	14,944.99	12,262.58	67.69	67.55	102.77	-3,267.24	-1,708.37	1,538.72	1,445.07	93.65	16.431				
14,700.00	11,920.83	15,044.98	12,263.66	69.00	68.84	102.75	-3,367.23	-1,707.50	1,538.62	1,443.17	95.45	16.119				
14,800.00	11,922.40	15,144.98	12,264.75	70.33	70.14	102.74	-3,467.22	-1,706.63	1,538.52	1,441.24	97.27	15.816				
14,900.00	11,923.97	15,244.98	12,265.83	71.67	71.46	102.72	-3,567.21	-1,705.76	1,538.42	1,439.30	99.12	15.521				
15,000.00	11,925.54	15,344.98	12,266.91	73.02	72.79	102.70	-3,667.20	-1,704.89	1,538.32	1,437.34	100.98	15.234				
15,100.00	11,927.11	15,444.98	12,267.99	74.39	74.13	102.68	-3,767.18	-1,704.03	1,538.22	1,435.36	102.85	14.955				
15,200.00	11,928.68	15,544.98	12,269.07	75.77	75.48	102.66	-3,867.17	-1,703.16	1,538.12	1,433.37	104.75	14.684				
15,300.00	11,930.25	15,644.98	12,270.15	77.15	76.85	102.65	-3,967.16	-1,702.29	1,538.02	1,431.35	106.66	14.420				
15,400.00	11,931.82	15,744.98	12,271.23	78.55	78.23	102.63	-4,067.15	-1,701.42	1,537.91	1,429.33	108.59	14.163				
15,500.00	11,933.39	15,844.97	12,272.31	79.96	79.62	102.61	-4,167.14	-1,700.55	1,537.81	1,427.29	110.53	13.914				
15,600.00	11,934.96	15,944.97	12,273.40	81.37	81.01	102.59	-4,267.13	-1,699.69	1,537.71	1,425.23	112.48	13.671				
15,700.00	11,936.53	16,044.97	12,274.48	82.80	82.42	102.58	-4,367.12	-1,698.82	1,537.61	1,423.17	114.45	13.435				
15,800.00	11,938.10	16,144.97	12,275.56	84.23	83.84	102.56	-4,467.11	-1,697.95	1,537.52	1,421.09	116.43	13.206				
15,900.00	11,939.67	16,244.97	12,276.64	85.67	85.26	102.54	-4,567.10	-1,697.08	1,537.42	1,419.00	118.42	12.983				
16,000.00	11,941.24	16,344.97	12,277.72	87.12	86.70	102.52	-4,667.09	-1,696.21	1,537.32	1,416.90	120.42	12.767				
16,100.00	11,942.81	16,444.97	12,278.80	88.58	88.14	102.50	-4,767.08	-1,695.34	1,537.22	1,414.79	122.43	12.556				
16,200.00	11,944.38	16,544.97	12,279.88	90.04	89.58	102.49	-4,867.07	-1,694.48	1,537.12	1,412.67	124.45	12.351				
16,300.00	11,945.95	16,644.97	12,280.97	91.51	91.04	102.47	-4,967.05	-1,693.61	1,537.02	1,410.54	126.48	12.152				
16,400.00	11,947.52	16,744.96	12,282.05	92.99	92.50	102.45	-5,067.04	-1,692.74	1,536.92	1,408.40	128.52	11.958				
16,500.00	11,949.09	16,844.96	12,283.13	94.47	93.97	102.43	-5,167.03	-1,691.87	1,536.82	1,406.25	130.57	11.770				
16,600.00	11,950.66	16,944.96	12,284.21	95.95	95.44	102.41	-5,267.02	-1,691.00	1,536.72	1,404.09	132.63	11.587				
16,700.00	11,952.23	17,044.96	12,285.29	97.45	96.92	102.40	-5,367.01	-1,690.13	1,536.62	1,401.93	134.69	11.408				
16,800.00	11,953.80	17,144.96	12,286.37	98.94	98.41	102.38	-5,467.00	-1,689.27	1,536.53	1,399.76	136.76	11.235				
16,900.00	11,955.37	17,244.96	12,287.45	100.45	99.90	102.36	-5,566.99	-1,688.40	1,536.43	1,397.58	138.84	11.066				
17,000.00	11,956.94	17,344.96	12,288.54	101.95	101.39	102.34	-5,666.98	-1,687.53	1,536.33	1,395.40	140.93	10.901				
17,100.00	11,958.51	17,444.96	12,289.62	103.46	102.89	102.33	-5,766.97	-1,686.66	1,536.23	1,393.21	143.02	10.741				
17,200.00	11,960.08	17,544.95	12,290.70	104.98	104.40	102.31	-5,866.96	-1,685.79	1,536.14	1,391.01	145.12	10.585				
17,300.00	11,961.65	17,644.95	12,291.78	106.50	105.91	102.29	-5,966.95	-1,684.92	1,536.04	1,388.81	147.23	10.433				
17,400.00	11,963.22	17,744.95	12,292.86	108.02	107.42	102.27	-6,066.94	-1,684.06	1,535.94	1,386.60	149.34	10.285				
17,500.00	11,964.79	17,844.95	12,293.94	109.55	108.94	102.25	-6,166.93	-1,683.19	1,535.84	1,384.39	151.45	10.141				
17,600.00	11,966.36	17,944.95	12,295.02	111.08	110.46	102.24	-6,266.91	-1,682.32	1,535.75	1,382.17	153.58	10.000				
17,700.00	11,967.93	18,044.95	12,296.11	112.61	111.99	102.22	-6,366.90	-1,681.45	1,535.65	1,379.95	155.70	9.863				
17,800.00	11,969.50	18,144.95	12,297.19	114.15	113.51	102.20	-6,466.89	-1,680.58	1,535.55	1,377.72	157.84	9.729				
17,900.00	11,971.07	18,244.95	12,298.27	115.69	115.05	102.18	-6,566.88	-1,679.72	1,535.46	1,375.48	159.97	9.598				
18,000.00	11,972.64	18,344.94	12,299.35	117.24	116.58	102.16	-6,666.87	-1,678.85	1,535.36	1,373.25	162.11	9.471				
18,100.00	11,974.21	18,444.94	12,300.43	118.78	118.12	102.15	-6,766.86	-1,677.98	1,535.26	1,371.00	164.26	9.347				
18,200.00	11,975.78	18,544.94	12,301.51	120.33	119.66	102.13	-6,866.85	-1,677.11	1,535.17	1,368.76	166.41	9.225				
18,300.00	11,977.35	18,644.94	12,302.59	121.89	121.21	102.11	-6,966.84	-1,676.24	1,535.07	1,366.51	168.56	9.107				
18,400.00	11,978.92	18,744.94	12,303.67	123.44	122.75	102.09	-7,066.83	-1,675.37	1,534.98	1,364.25	170.72	8.991				
18,500.00	11,980.49	18,844.94	12,304.76	125.00	124.30	102.08	-7,166.82	-1,674.51	1,534.88	1,362.00	172.88	8.878				
18,600.00	11,982.06	18,944.94	12,305.84	126.56	125.86	102.06	-7,266.81	-1,673.64	1,534.78	1,359.74	175.05	8.768				
18,700.00	11,983.63	19,044.94	12,306.92	128.12	127.41	102.04	-7,366.80	-1,672.77	1,534.69	1,357.47	177.22	8.660				
18,800.00	11,985.20	19,144.94	12,308.00	129.68	128.97	102.02	-7,466.78	-1,671.90	1,534.59	1,355.21	179.39	8.555				
18,900.00	11,986.77	19,244.93	12,309.08	131.25	130.53	102.00	-7,566.77	-1,671.03	1,534.50	1,352.94	181.56	8.452				
19,000.00	11,988.34	19,344.93	12,310.16	132.82	132.09	101.99	-7,666.76	-1,670.16	1,534.40	1,350.66	183.74	8.351				
19,100.00	11,989.90	19,444.93	12,311.24	134.39	133.65	101.97	-7,766.75	-1,669.30	1,534.31	1,348.39	185.92	8.252				
19,200.00	11,991.47	19,544.93	12,312.33	135.96	135.22	101.95	-7,866.74	-1,668.43	1,534.21	1,346.11	188.11	8.156				
19,300.00	11,993.04	19,644.93	12,313.41	137.54	136.79	101.93	-7,966.73	-1,667.56	1,534.12	1,343.83	190.29	8.062				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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			
19,400.00	11,994.61	19,744.93	12,314.49	139.11	138.36	101.91	-8,066.72	-1,666.69	1,534.03	1,341.54	192.48	7.970			
19,500.00	11,996.18	19,844.93	12,315.57	140.69	139.93	101.90	-8,166.71	-1,665.82	1,533.93	1,339.25	194.68	7.879			
19,600.00	11,997.75	19,944.93	12,316.65	142.27	141.51	101.88	-8,266.70	-1,664.96	1,533.84	1,336.96	196.87	7.791			
19,700.00	11,999.32	20,044.92	12,317.73	143.85	143.08	101.86	-8,366.69	-1,664.09	1,533.74	1,334.67	199.07	7.704			
19,800.00	12,000.89	20,144.92	12,318.81	145.43	144.66	101.84	-8,466.68	-1,663.22	1,533.65	1,332.38	201.27	7.620			
19,900.00	12,002.46	20,244.92	12,319.90	147.02	146.24	101.82	-8,566.67	-1,662.35	1,533.56	1,330.08	203.48	7.537			
20,000.00	12,004.03	20,344.92	12,320.98	148.60	147.82	101.81	-8,666.65	-1,661.48	1,533.46	1,327.78	205.68	7.456			
20,100.00	12,005.60	20,444.92	12,322.06	150.19	149.40	101.79	-8,766.64	-1,660.61	1,533.37	1,325.48	207.89	7.376			
20,200.00	12,007.17	20,544.92	12,323.14	151.78	150.99	101.77	-8,866.63	-1,659.75	1,533.28	1,323.18	210.10	7.298			
20,300.00	12,008.74	20,644.92	12,324.22	153.37	152.57	101.75	-8,966.62	-1,658.88	1,533.18	1,320.88	212.31	7.222			
20,400.00	12,010.31	20,744.92	12,325.30	154.96	154.16	101.73	-9,066.61	-1,658.01	1,533.09	1,318.57	214.52	7.147			
20,500.00	12,011.88	20,844.92	12,326.38	156.55	155.75	101.72	-9,166.60	-1,657.14	1,533.00	1,316.26	216.74	7.073			
20,600.00	12,013.45	20,944.91	12,327.47	158.15	157.33	101.70	-9,266.59	-1,656.27	1,532.91	1,313.95	218.95	7.001			
20,700.00	12,015.02	21,044.91	12,328.55	159.74	158.93	101.68	-9,366.58	-1,655.40	1,532.81	1,311.64	221.17	6.930			
20,800.00	12,016.59	21,144.91	12,329.63	161.34	160.52	101.66	-9,466.57	-1,654.54	1,532.72	1,309.33	223.40	6.861			
20,900.00	12,018.16	21,244.91	12,330.71	162.94	162.11	101.65	-9,566.56	-1,653.67	1,532.63	1,307.01	225.62	6.793			
21,000.00	12,019.73	21,344.91	12,331.79	164.53	163.71	101.63	-9,666.55	-1,652.80	1,532.54	1,304.69	227.84	6.726			
21,100.00	12,021.30	21,444.91	12,332.87	166.13	165.30	101.61	-9,766.54	-1,651.93	1,532.45	1,302.38	230.07	6.661			
21,200.00	12,022.87	21,544.91	12,333.95	167.73	166.90	101.59	-9,866.53	-1,651.06	1,532.35	1,300.06	232.30	6.597			
21,300.00	12,024.44	21,644.91	12,335.04	169.34	168.49	101.57	-9,966.51	-1,650.19	1,532.26	1,297.74	234.53	6.533			
21,400.00	12,026.01	21,744.90	12,336.12	170.94	170.09	101.56	-10,066.50	-1,649.33	1,532.17	1,295.41	236.76	6.472			
21,500.00	12,027.58	21,844.90	12,337.20	172.54	171.69	101.54	-10,166.49	-1,648.46	1,532.08	1,293.09	238.99	6.411			
21,600.00	12,029.15	21,944.90	12,338.28	174.15	173.29	101.52	-10,266.48	-1,647.59	1,531.99	1,290.77	241.22	6.351			
21,700.00	12,030.72	22,044.90	12,339.36	175.75	174.90	101.50	-10,366.47	-1,646.72	1,531.90	1,288.44	243.46	6.292			
21,800.00	12,032.29	22,144.90	12,340.44	177.36	176.50	101.48	-10,466.46	-1,645.85	1,531.81	1,286.11	245.70	6.235			
21,900.00	12,033.86	22,244.90	12,341.52	178.96	178.10	101.47	-10,566.45	-1,644.99	1,531.72	1,283.78	247.93	6.178			
22,000.00	12,035.43	22,344.90	12,342.60	180.57	179.71	101.45	-10,666.44	-1,644.12	1,531.63	1,281.45	250.17	6.122			
22,080.50	12,036.70	22,424.01	12,343.46	181.87	180.98	101.43	-10,745.54	-1,643.43	1,531.55	1,279.59	251.96	6.079			
22,100.00	12,037.00	22,424.01	12,343.46	182.18	180.98	101.43	-10,745.54	-1,643.43	1,531.68	1,279.51	252.17	6.074 ES, SF			
22,200.00	12,038.57	22,424.01	12,343.46	183.79	180.98	101.43	-10,745.54	-1,643.43	1,536.21	1,283.69	252.52	6.083			
22,300.00	12,040.14	22,424.01	12,343.46	185.40	180.98	101.43	-10,745.54	-1,643.43	1,547.20	1,295.47	251.73	6.146			
22,400.00	12,041.71	22,424.01	12,343.46	187.01	180.98	101.43	-10,745.54	-1,643.43	1,564.53	1,314.66	249.86	6.262			
22,500.00	12,043.28	22,424.01	12,343.46	188.62	180.98	101.43	-10,745.54	-1,643.43	1,587.97	1,340.94	247.02	6.428			
22,600.00	12,044.85	22,424.01	12,343.46	190.23	180.98	101.43	-10,745.54	-1,643.43	1,617.27	1,373.91	243.35	6.646			
22,700.00	12,046.42	22,424.01	12,343.46	191.85	180.98	101.43	-10,745.54	-1,643.43	1,652.10	1,413.09	239.01	6.912			
22,800.00	12,047.99	22,424.01	12,343.46	193.46	180.98	101.43	-10,745.54	-1,643.43	1,692.14	1,457.99	234.15	7.227			
22,900.00	12,049.56	22,424.01	12,343.46	195.07	180.98	101.43	-10,745.54	-1,643.43	1,737.02	1,508.10	228.92	7.588			
23,000.00	12,051.13	22,424.01	12,343.46	196.69	180.98	101.43	-10,745.54	-1,643.43	1,786.38	1,562.92	223.46	7.994			
23,100.00	12,052.70	22,424.01	12,343.46	198.30	180.98	101.43	-10,745.54	-1,643.43	1,839.85	1,621.97	217.88	8.444			
23,200.00	12,054.27	22,424.01	12,343.46	199.92	180.98	101.43	-10,745.54	-1,643.43	1,897.09	1,684.81	212.29	8.937			
23,300.00	12,055.84	22,424.01	12,343.46	201.54	180.98	101.43	-10,745.54	-1,643.43	1,957.77	1,751.03	206.74	9.470			
23,389.58	12,057.25	22,424.01	12,343.46	202.99	180.98	101.43	-10,745.54	-1,643.43	2,014.79	1,812.92	201.87	9.981			

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 604H - OH - Plan #3		Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
0.00	0.00	0.00	0.00	0.00	0.00	90.97	-39.98	2,353.89	2,354.49							
100.00	100.00	65.00	65.00	0.13	0.09	90.97	-39.98	2,353.89	2,354.23	2,354.07	0.16	N/A				
200.00	200.00	165.00	165.00	0.48	0.37	90.97	-39.98	2,353.89	2,354.23	2,353.62	0.61	3,846.892				
300.00	300.00	265.00	265.00	0.84	0.73	90.97	-39.98	2,353.89	2,354.23	2,353.11	1.12	2,108.176				
400.00	400.00	365.00	365.00	1.20	1.09	90.97	-39.98	2,353.89	2,354.23	2,352.61	1.62	1,450.692				
500.00	500.00	465.00	465.00	1.56	1.45	90.97	-39.98	2,353.89	2,354.23	2,352.10	2.13	1,105.610				
600.00	600.00	565.00	565.00	1.92	1.81	90.97	-39.98	2,353.89	2,354.23	2,351.59	2.64	893.095				
700.00	700.00	665.00	665.00	2.28	2.17	90.97	-39.98	2,353.89	2,354.23	2,351.09	3.14	749.085				
800.00	800.00	765.00	765.00	2.63	2.53	90.97	-39.98	2,353.89	2,354.23	2,350.58	3.65	645.060				
900.00	900.00	865.00	865.00	2.99	2.88	90.97	-39.98	2,353.89	2,354.23	2,350.07	4.16	566.399				
1,000.00	1,000.00	965.00	965.00	3.35	3.24	90.97	-39.98	2,353.89	2,354.23	2,349.57	4.66	504.835				
1,100.00	1,100.00	1,065.00	1,065.00	3.71	3.60	90.97	-39.98	2,353.89	2,354.23	2,349.06	5.17	455.341				
1,200.00	1,200.00	1,165.00	1,165.00	4.07	3.96	90.97	-39.98	2,353.89	2,354.23	2,348.55	5.68	414.684				
1,300.00	1,300.00	1,265.00	1,265.00	4.43	4.32	90.97	-39.98	2,353.89	2,354.23	2,348.05	6.18	380.693				
1,400.00	1,400.00	1,365.00	1,365.00	4.79	4.68	90.97	-39.98	2,353.89	2,354.23	2,347.54	6.69	351.851				
1,500.00	1,500.00	1,465.00	1,465.00	5.14	5.03	90.97	-39.98	2,353.89	2,354.23	2,347.03	7.20	327.071				
1,600.00	1,600.00	1,565.00	1,565.00	5.50	5.39	90.97	-39.98	2,353.89	2,354.23	2,346.52	7.70	305.552				
1,700.00	1,700.00	1,665.00	1,665.00	5.86	5.75	90.97	-39.98	2,353.89	2,354.23	2,346.02	8.21	286.690				
1,800.00	1,800.00	1,765.00	1,765.00	6.22	6.11	90.97	-39.98	2,353.89	2,354.23	2,345.51	8.72	270.020				
1,900.00	1,900.00	1,865.00	1,865.00	6.58	6.47	90.97	-39.98	2,353.89	2,354.23	2,345.00	9.23	255.183				
2,000.00	2,000.00	1,965.00	1,965.00	6.94	6.83	90.97	-39.98	2,353.89	2,354.23	2,344.50	9.73	241.892				
2,100.00	2,100.00	2,065.00	2,065.00	7.29	7.19	90.97	-39.98	2,353.89	2,354.23	2,343.99	10.24	229.916				
2,200.00	2,200.00	2,165.00	2,165.00	7.65	7.54	90.97	-39.98	2,353.89	2,354.23	2,343.48	10.75	219.070				
2,300.00	2,300.00	2,265.00	2,265.00	8.01	7.90	90.97	-39.98	2,353.89	2,354.23	2,342.98	11.25	209.202				
2,400.00	2,400.00	2,365.00	2,365.00	8.37	8.26	90.97	-39.98	2,353.89	2,354.23	2,342.47	11.76	200.184				
2,500.00	2,500.00	2,465.00	2,465.00	8.73	8.62	90.97	-39.98	2,353.89	2,354.23	2,341.96	12.27	191.911				
2,600.00	2,600.00	2,565.00	2,565.00	9.09	8.98	90.97	-39.98	2,353.89	2,354.23	2,341.46	12.77	184.295				
2,700.00	2,700.00	2,665.00	2,665.00	9.45	9.34	90.97	-39.98	2,353.89	2,354.23	2,340.95	13.28	177.260				
2,800.00	2,800.00	2,765.00	2,765.00	9.80	9.69	90.97	-39.98	2,353.89	2,354.23	2,340.44	13.79	170.743				
2,900.00	2,900.00	2,865.00	2,865.00	10.16	10.05	90.97	-39.98	2,353.89	2,354.23	2,339.93	14.30	164.688				
3,000.00	3,000.00	2,965.00	2,965.00	10.52	10.41	90.97	-39.98	2,353.89	2,354.23	2,339.43	14.80	159.048				
3,100.00	3,100.00	3,065.00	3,065.00	10.88	10.77	90.97	-39.98	2,353.89	2,354.23	2,338.92	15.31	153.781				
3,200.00	3,200.00	3,165.00	3,165.00	11.24	11.13	90.97	-39.98	2,353.89	2,354.23	2,338.41	15.82	148.852 CC				
3,300.00	3,299.99	3,264.99	3,264.99	11.58	11.49	-125.67	-39.98	2,353.89	2,354.99	2,338.68	16.31	144.381				
3,400.00	3,399.91	3,364.91	3,364.91	11.91	11.85	-125.72	-39.98	2,353.89	2,357.28	2,340.49	16.79	140.359				
3,500.00	3,499.69	3,464.69	3,464.69	12.24	12.20	-125.80	-39.98	2,353.89	2,361.11	2,343.83	17.28	136.644				
3,599.91	3,599.18	3,564.18	3,564.18	12.57	12.56	-125.91	-39.98	2,353.89	2,366.48	2,348.72	17.76	133.215				
3,700.00	3,698.72	3,663.72	3,663.72	12.90	12.92	-126.12	-39.98	2,353.89	2,372.65	2,354.40	18.25	129.996				
3,800.00	3,798.17	3,763.17	3,763.17	13.24	13.27	-126.32	-39.98	2,353.89	2,378.85	2,360.11	18.74	126.935				
3,900.00	3,897.63	3,862.63	3,862.63	13.58	13.63	-126.52	-39.98	2,353.89	2,385.08	2,365.85	19.23	124.019				
4,000.00	3,997.08	3,962.08	3,962.08	13.93	13.99	-126.72	-39.98	2,353.89	2,391.33	2,371.61	19.72	121.239				
4,100.00	4,096.53	4,061.53	4,061.53	14.27	14.34	-126.92	-39.98	2,353.89	2,397.62	2,377.40	20.22	118.586				
4,200.00	4,195.98	4,160.98	4,160.98	14.62	14.70	-127.12	-39.98	2,353.89	2,403.93	2,383.22	20.71	116.053				
4,300.00	4,295.44	4,260.44	4,260.44	14.98	15.06	-127.32	-39.98	2,353.89	2,410.28	2,389.07	21.21	113.632				
4,400.00	4,394.89	4,359.89	4,359.89	15.33	15.41	-127.52	-39.98	2,353.89	2,416.65	2,394.94	21.71	111.317				
4,500.00	4,494.34	4,459.34	4,459.34	15.69	15.77	-127.71	-39.98	2,353.89	2,423.05	2,400.84	22.21	109.101				
4,600.00	4,593.79	4,558.79	4,558.79	16.05	16.13	-127.90	-39.98	2,353.89	2,429.48	2,406.77	22.71	106.979				
4,700.00	4,693.25	4,658.25	4,658.25	16.41	16.48	-128.10	-39.98	2,353.89	2,435.93	2,412.72	23.21	104.945				
4,800.00	4,792.70	4,757.70	4,757.70	16.77	16.84	-128.29	-39.98	2,353.89	2,442.42	2,418.70	23.71	102.994				
4,900.00	4,892.15	4,857.15	4,857.15	17.13	17.19	-128.48	-39.98	2,353.89	2,448.93	2,424.71	24.22	101.121				
5,000.00	4,991.60	4,956.60	4,956.60	17.50	17.55	-128.67	-39.98	2,353.89	2,455.47	2,430.74	24.72	99.323				
5,100.00	5,091.06	5,056.06	5,056.06	17.86	17.91	-128.86	-39.98	2,353.89	2,462.03	2,436.80	25.23	97.595				

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
5,200.00	5,190.51	5,155.51	5,155.51	18.23	18.26	-129.05	-39.98	2,353.89	2,468.62	2,442.89	25.73	95.933		
5,300.00	5,289.96	5,254.96	5,254.96	18.60	18.62	-129.24	-39.98	2,353.89	2,475.24	2,449.00	26.24	94.334		
5,400.00	5,389.41	5,354.41	5,354.41	18.97	18.98	-129.42	-39.98	2,353.89	2,481.89	2,455.14	26.75	92.794		
5,500.00	5,488.87	5,453.87	5,453.87	19.34	19.33	-129.61	-39.98	2,353.89	2,488.56	2,461.30	27.25	91.310		
5,600.00	5,588.32	5,554.92	5,554.91	19.71	19.79	-129.83	-40.79	2,353.40	2,494.92	2,467.08	27.83	89.636		
5,700.00	5,687.77	5,744.09	5,743.92	20.09	20.31	-130.00	-46.63	2,349.83	2,499.19	2,470.73	28.45	87.839		
5,800.00	5,787.22	5,903.80	5,903.04	20.46	20.83	-130.04	-58.18	2,342.77	2,501.08	2,472.02	29.06	86.069		
5,900.00	5,886.68	6,027.28	6,025.67	20.84	21.24	-129.99	-70.58	2,335.20	2,501.02	2,471.43	29.59	84.514		
6,000.00	5,986.13	6,127.26	6,124.91	21.21	21.57	-129.94	-80.98	2,328.85	2,500.78	2,470.69	30.09	83.123		
6,100.00	6,085.58	6,227.24	6,224.14	21.59	21.90	-129.90	-91.37	2,322.50	2,500.54	2,469.96	30.58	81.771		
6,200.00	6,185.03	6,327.22	6,323.37	21.97	22.24	-129.85	-101.77	2,316.15	2,500.30	2,469.22	31.08	80.457		
6,300.00	6,284.49	6,427.20	6,422.61	22.34	22.58	-129.80	-112.17	2,309.80	2,500.06	2,468.49	31.57	79.179		
6,400.00	6,383.94	6,527.18	6,521.84	22.72	22.92	-129.76	-122.57	2,303.44	2,499.83	2,467.75	32.08	77.936		
6,500.00	6,483.39	6,627.16	6,621.08	23.10	23.27	-129.71	-132.96	2,297.09	2,499.59	2,467.01	32.58	76.728		
6,600.00	6,582.84	6,727.14	6,720.31	23.48	23.61	-129.67	-143.36	2,290.74	2,499.36	2,466.28	33.08	75.552		
6,700.00	6,682.30	6,827.12	6,819.55	23.86	23.96	-129.62	-153.76	2,284.39	2,499.13	2,465.54	33.59	74.408		
6,800.00	6,781.75	6,927.10	6,918.78	24.24	24.31	-129.57	-164.15	2,278.04	2,498.90	2,464.81	34.09	73.294		
6,900.00	6,881.20	7,027.08	7,018.02	24.63	24.66	-129.53	-174.55	2,271.69	2,498.67	2,464.07	34.60	72.210		
6,944.87	6,925.82	7,071.94	7,062.54	24.80	24.82	-129.51	-179.21	2,268.84	2,498.57	2,463.74	34.83	71.733		
7,000.00	6,980.69	7,127.05	7,117.24	25.01	25.02	-129.47	-184.95	2,265.34	2,498.19	2,463.08	35.11	71.149		
7,100.00	7,080.39	7,226.94	7,216.39	25.38	25.37	-129.35	-195.33	2,259.00	2,496.22	2,460.60	35.62	70.081		
7,200.00	7,180.26	7,326.68	7,315.39	25.74	25.73	-129.17	-205.71	2,252.66	2,492.61	2,456.48	36.12	69.004		
7,300.00	7,280.23	7,426.21	7,414.17	26.09	26.09	-128.92	-216.06	2,246.34	2,487.36	2,450.73	36.62	67.920		
7,344.78	7,325.00	7,470.68	7,458.31	26.25	26.25	87.84	-220.68	2,243.51	2,484.48	2,447.64	36.84	67.434		
7,400.00	7,380.22	7,525.49	7,512.71	26.43	26.44	87.97	-226.38	2,240.03	2,480.75	2,443.63	37.11	66.840		
7,500.00	7,480.22	7,624.75	7,611.23	26.77	26.80	88.20	-236.70	2,233.73	2,474.02	2,436.41	37.61	65.787		
7,600.00	7,580.22	7,724.00	7,709.74	27.11	27.16	88.44	-247.02	2,227.42	2,467.33	2,429.23	38.10	64.759		
7,700.00	7,680.22	7,823.26	7,808.26	27.44	27.52	88.68	-257.34	2,221.12	2,460.68	2,422.09	38.59	63.757		
7,800.00	7,780.22	7,917.24	7,901.55	27.78	27.87	88.90	-267.12	2,215.15	2,454.08	2,415.00	39.08	62.797		
7,900.00	7,880.22	8,000.00	7,983.79	28.12	28.17	89.08	-274.96	2,210.36	2,448.09	2,408.55	39.54	61.914		
8,000.00	7,980.22	8,069.16	8,052.66	28.46	28.42	89.21	-280.35	2,207.06	2,443.16	2,403.19	39.97	61.129		
8,100.00	8,080.22	8,143.54	8,126.84	28.80	28.68	89.31	-284.96	2,204.25	2,439.29	2,398.89	40.40	60.377		
8,200.00	8,180.22	8,218.11	8,201.31	29.14	28.95	89.39	-288.34	2,202.18	2,436.47	2,395.64	40.83	59.673		
8,300.00	8,280.22	8,300.00	8,283.15	29.48	29.23	89.45	-290.62	2,200.79	2,434.70	2,393.42	41.27	58.989		
8,400.00	8,380.22	8,367.57	8,350.72	29.82	29.47	89.46	-291.38	2,200.33	2,433.94	2,392.26	41.68	58.400		
8,442.61	8,422.84	8,404.69	8,387.84	29.97	29.60	89.47	-291.41	2,200.31	2,433.92	2,392.05	41.87	58.129		
8,500.00	8,480.22	8,462.08	8,445.22	30.16	29.80	89.47	-291.41	2,200.31	2,433.92	2,391.76	42.15	57.741		
8,600.00	8,580.22	8,562.08	8,545.22	30.51	30.15	89.47	-291.41	2,200.31	2,433.92	2,391.27	42.64	57.076		
8,700.00	8,680.22	8,662.08	8,645.22	30.85	30.50	89.47	-291.41	2,200.31	2,433.92	2,390.78	43.13	56.426		
8,800.00	8,780.22	8,762.08	8,745.22	31.19	30.85	89.47	-291.41	2,200.31	2,433.92	2,390.29	43.63	55.790		
8,900.00	8,880.22	8,862.08	8,845.22	31.53	31.20	89.47	-291.41	2,200.31	2,433.92	2,389.80	44.12	55.168		
9,000.00	8,980.22	8,962.08	8,945.22	31.88	31.55	89.47	-291.41	2,200.31	2,433.92	2,389.31	44.61	54.559		
9,100.00	9,080.22	9,062.08	9,045.22	32.22	31.90	89.47	-291.41	2,200.31	2,433.92	2,388.81	45.10	53.963		
9,200.00	9,180.22	9,162.08	9,145.22	32.57	32.25	89.47	-291.41	2,200.31	2,433.92	2,388.32	45.60	53.379		
9,300.00	9,280.22	9,262.08	9,245.22	32.91	32.60	89.47	-291.41	2,200.31	2,433.92	2,387.83	46.09	52.808		
9,400.00	9,380.22	9,362.08	9,345.22	33.26	32.95	89.47	-291.41	2,200.31	2,433.92	2,387.33	46.58	52.248		
9,500.00	9,480.22	9,462.08	9,445.22	33.60	33.30	89.47	-291.41	2,200.31	2,433.92	2,386.84	47.08	51.700		
9,600.00	9,580.22	9,562.08	9,545.22	33.95	33.65	89.47	-291.41	2,200.31	2,433.92	2,386.34	47.57	51.163		
9,700.00	9,680.22	9,662.08	9,645.22	34.29	34.00	89.47	-291.41	2,200.31	2,433.92	2,385.85	48.07	50.637		
9,800.00	9,780.22	9,762.08	9,745.22	34.64	34.36	89.47	-291.41	2,200.31	2,433.92	2,385.36	48.56	50.121		
9,900.00	9,880.22	9,862.08	9,845.22	34.98	34.71	89.47	-291.41	2,200.31	2,433.92	2,384.86	49.06	49.615		
10,000.00	9,980.22	9,962.08	9,945.22	35.33	35.06	89.47	-291.41	2,200.31	2,433.92	2,384.36	49.55	49.119		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design													LHS Wildcat Fed Com - LHS Wildcat Fed Com 604H - OH - Plan #3		Offset Site Error: 0.00 usft	
Survey Program: 0-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning			
10,100.00	10,080.22	10,062.08	10,045.22	35.68	35.41	89.47	-291.41	2,200.31	2,433.92	2,383.87	50.05	48.633				
10,200.00	10,180.22	10,162.08	10,145.22	36.02	35.76	89.47	-291.41	2,200.31	2,433.92	2,383.37	50.54	48.156				
10,300.00	10,280.22	10,262.08	10,245.22	36.37	36.12	89.47	-291.41	2,200.31	2,433.92	2,382.88	51.04	47.688				
10,400.00	10,380.22	10,362.08	10,345.22	36.72	36.47	89.47	-291.41	2,200.31	2,433.92	2,382.38	51.53	47.229				
10,500.00	10,480.22	10,462.08	10,445.22	37.06	36.82	89.47	-291.41	2,200.31	2,433.92	2,381.89	52.03	46.779				
10,600.00	10,580.22	10,562.08	10,545.22	37.41	37.17	89.47	-291.41	2,200.31	2,433.92	2,381.39	52.53	46.337				
10,700.00	10,680.22	10,662.08	10,645.22	37.76	37.53	89.47	-291.41	2,200.31	2,433.92	2,380.89	53.02	45.903				
10,800.00	10,780.22	10,762.08	10,745.22	38.11	37.88	89.47	-291.41	2,200.31	2,433.92	2,380.40	53.52	45.476				
10,900.00	10,880.22	10,862.08	10,845.22	38.46	38.23	89.47	-291.41	2,200.31	2,433.92	2,379.90	54.02	45.058				
11,000.00	10,980.22	10,962.08	10,945.22	38.80	38.59	89.47	-291.41	2,200.31	2,433.92	2,379.40	54.51	44.647				
11,100.00	11,080.22	11,062.08	11,045.22	39.15	38.94	89.47	-291.41	2,200.31	2,433.92	2,378.90	55.01	44.243				
11,200.00	11,180.22	11,162.08	11,145.22	39.50	39.29	89.47	-291.41	2,200.31	2,433.92	2,378.41	55.51	43.847				
11,300.00	11,280.22	11,262.08	11,245.22	39.85	39.65	89.47	-291.41	2,200.31	2,433.92	2,377.91	56.01	43.457				
11,328.78	11,309.00	11,290.86	11,274.00	39.95	39.75	89.47	-291.41	2,200.31	2,433.92	2,377.77	56.15	43.346				
11,350.00	11,330.22	11,312.06	11,295.21	40.02	39.82	-90.04	-291.47	2,200.31	2,433.92	2,377.66	56.26	43.265				
11,400.00	11,380.04	11,362.03	11,345.07	40.20	40.00	-90.07	-294.36	2,200.34	2,433.92	2,377.42	56.50	43.075				
11,450.00	11,429.32	11,412.10	11,394.60	40.38	40.17	-90.09	-301.60	2,200.41	2,433.93	2,377.17	56.76	42.883				
11,500.00	11,477.69	11,462.26	11,443.39	40.57	40.35	-90.12	-313.17	2,200.52	2,433.94	2,376.92	57.02	42.687				
11,550.00	11,524.77	11,512.52	11,491.09	40.76	40.54	-90.14	-328.99	2,200.68	2,433.96	2,376.68	57.29	42.487				
11,600.00	11,570.21	11,562.89	11,537.30	40.95	40.72	-90.17	-348.97	2,200.87	2,433.99	2,376.42	57.56	42.285				
11,650.00	11,613.66	11,613.34	11,581.65	41.15	40.91	-90.19	-372.98	2,201.11	2,434.01	2,376.17	57.84	42.079				
11,700.00	11,654.79	11,663.89	11,623.80	41.36	41.10	-90.21	-400.85	2,201.38	2,434.05	2,375.91	58.13	41.871				
11,750.00	11,693.29	11,714.53	11,663.40	41.57	41.30	-90.23	-432.38	2,201.69	2,434.08	2,375.65	58.43	41.660				
11,800.00	11,728.87	11,765.25	11,700.12	41.78	41.51	-90.24	-467.35	2,202.03	2,434.12	2,375.39	58.73	41.445				
11,850.00	11,761.25	11,816.05	11,733.65	42.01	41.72	-90.26	-505.49	2,202.41	2,434.17	2,375.12	59.04	41.226				
11,900.00	11,790.19	11,866.92	11,763.71	42.23	41.93	-90.27	-546.50	2,202.81	2,434.21	2,374.84	59.37	41.003				
11,950.00	11,815.47	11,917.85	11,790.05	42.47	42.16	-90.28	-590.08	2,203.24	2,434.26	2,374.56	59.70	40.777				
12,000.00	11,836.89	11,968.85	11,812.43	42.72	42.39	-90.29	-635.88	2,203.68	2,434.31	2,374.27	60.04	40.547				
12,050.00	11,854.29	12,019.89	11,830.68	42.97	42.63	-90.30	-683.53	2,204.15	2,434.36	2,373.98	60.39	40.314				
12,100.00	11,867.55	12,070.98	11,844.62	43.22	42.87	-90.31	-732.66	2,204.63	2,434.41	2,373.67	60.74	40.079				
12,150.00	11,876.55	12,122.10	11,854.13	43.49	43.12	-90.31	-782.86	2,205.12	2,434.47	2,373.36	61.10	39.842				
12,200.00	11,881.24	12,173.24	11,859.14	43.75	43.37	-90.31	-833.74	2,205.62	2,434.52	2,373.05	61.47	39.606				
12,219.78	11,881.89	12,193.48	11,859.86	43.86	43.47	-90.31	-853.97	2,205.82	2,434.54	2,372.93	61.61	39.513				
12,300.00	11,883.15	12,273.70	11,861.33	44.30	43.89	-90.31	-934.17	2,206.61	2,434.62	2,372.40	62.23	39.125				
12,400.00	11,884.72	12,373.70	11,863.17	44.91	44.46	-90.32	-1,034.14	2,207.59	2,434.73	2,371.67	63.06	38.612				
12,500.00	11,886.29	12,473.70	11,865.00	45.56	45.09	-90.32	-1,134.12	2,208.57	2,434.84	2,370.88	63.96	38.068				
12,600.00	11,887.86	12,573.70	11,866.83	46.27	45.76	-90.33	-1,234.10	2,209.55	2,434.94	2,370.01	64.94	37.497				
12,700.00	11,889.43	12,673.70	11,868.67	47.02	46.48	-90.34	-1,334.08	2,210.52	2,435.05	2,369.07	65.98	36.905				
12,800.00	11,891.00	12,773.70	11,870.50	47.82	47.25	-90.34	-1,434.06	2,211.50	2,435.15	2,368.06	67.09	36.297				
12,900.00	11,892.57	12,873.70	11,872.33	48.66	48.06	-90.35	-1,534.03	2,212.48	2,435.26	2,367.00	68.26	35.675				
13,000.00	11,894.14	12,973.70	11,874.17	49.54	48.92	-90.35	-1,634.01	2,213.46	2,435.37	2,365.87	69.49	35.045				
13,100.00	11,895.71	13,073.69	11,876.00	50.46	49.82	-90.36	-1,733.99	2,214.44	2,435.47	2,364.69	70.78	34.410				
13,200.00	11,897.28	13,173.69	11,877.83	51.42	50.75	-90.37	-1,833.97	2,215.42	2,435.58	2,363.46	72.12	33.772				
13,300.00	11,898.85	13,273.69	11,879.66	52.41	51.72	-90.37	-1,933.95	2,216.40	2,435.69	2,362.18	73.51	33.135				
13,400.00	11,900.42	13,373.69	11,881.50	53.44	52.72	-90.38	-2,033.92	2,217.38	2,435.79	2,360.85	74.94	32.502				
13,500.00	11,901.99	13,473.69	11,883.33	54.49	53.76	-90.39	-2,133.90	2,218.36	2,435.90	2,359.47	76.42	31.874				
13,600.00	11,903.56	13,573.69	11,885.16	55.58	54.83	-90.39	-2,233.88	2,219.34	2,436.00	2,358.06	77.95	31.252				
13,700.00	11,905.13	13,673.69	11,887.00	56.69	55.92	-90.40	-2,333.86	2,220.32	2,436.11	2,356.60	79.51	30.640				
13,800.00	11,906.70	13,773.69	11,888.83	57.83	57.04	-90.40	-2,433.84	2,221.30	2,436.22	2,355.11	81.11	30.037				
13,900.00	11,908.27	13,873.69	11,890.66	58.99	58.19	-90.41	-2,533.81	2,222.28	2,436.32	2,353.58	82.74	29.445				
14,000.00	11,909.84	13,973.69	11,892.50	60.17	59.36	-90.42	-2,633.79	2,223.26	2,436.43	2,352.02	84.41	28.864				
14,100.00	11,911.41	14,073.69	11,894.33	61.38	60.55	-90.42	-2,733.77	2,224.24	2,436.54	2,350.43	86.11	28.296				

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
14,200.00	11,912.98	14,173.69	11,896.16	62.60	61.77	-90.43	-2,833.75	2,225.22	2,436.64	2,348.81	87.84	27.741		
14,300.00	11,914.55	14,273.69	11,897.99	63.85	63.00	-90.43	-2,933.73	2,226.20	2,436.75	2,347.16	89.59	27.198		
14,400.00	11,916.12	14,373.69	11,899.83	65.11	64.25	-90.44	-3,033.70	2,227.18	2,436.86	2,345.48	91.37	26.669		
14,500.00	11,917.69	14,473.69	11,901.66	66.39	65.52	-90.45	-3,133.68	2,228.16	2,436.96	2,343.78	93.18	26.153		
14,600.00	11,919.26	14,573.69	11,903.49	67.69	66.81	-90.45	-3,233.66	2,229.13	2,437.07	2,342.06	95.01	25.651		
14,700.00	11,920.83	14,673.69	11,905.33	69.00	68.12	-90.46	-3,333.64	2,230.11	2,437.18	2,340.31	96.86	25.161		
14,800.00	11,922.40	14,773.69	11,907.16	70.33	69.43	-90.47	-3,433.62	2,231.09	2,437.28	2,338.55	98.73	24.685		
14,900.00	11,923.97	14,873.69	11,908.99	71.67	70.77	-90.47	-3,533.59	2,232.07	2,437.39	2,336.76	100.62	24.223		
15,000.00	11,925.54	14,973.69	11,910.83	73.02	72.11	-90.48	-3,633.57	2,233.05	2,437.50	2,334.96	102.53	23.772		
15,100.00	11,927.11	15,073.69	11,912.66	74.39	73.47	-90.48	-3,733.55	2,234.03	2,437.60	2,333.14	104.46	23.335		
15,200.00	11,928.68	15,173.69	11,914.49	75.77	74.84	-90.49	-3,833.53	2,235.01	2,437.71	2,331.30	106.41	22.910		
15,300.00	11,930.25	15,273.69	11,916.32	77.15	76.22	-90.50	-3,933.51	2,235.99	2,437.82	2,329.45	108.36	22.497		
15,400.00	11,931.82	15,373.69	11,918.16	78.55	77.61	-90.50	-4,033.48	2,236.97	2,437.92	2,327.58	110.34	22.095		
15,500.00	11,933.39	15,473.69	11,919.99	79.96	79.01	-90.51	-4,133.46	2,237.95	2,438.03	2,325.70	112.33	21.705		
15,600.00	11,934.96	15,573.69	11,921.82	81.37	80.42	-90.51	-4,233.44	2,238.93	2,438.14	2,323.81	114.33	21.326		
15,700.00	11,936.53	15,673.69	11,923.66	82.80	81.85	-90.52	-4,333.42	2,239.91	2,438.24	2,321.90	116.34	20.958		
15,800.00	11,938.10	15,773.69	11,925.49	84.23	83.27	-90.53	-4,433.40	2,240.89	2,438.35	2,319.98	118.37	20.600		
15,900.00	11,939.67	15,873.69	11,927.32	85.67	84.71	-90.53	-4,533.37	2,241.87	2,438.46	2,318.06	120.40	20.253		
16,000.00	11,941.24	15,973.69	11,929.16	87.12	86.16	-90.54	-4,633.35	2,242.85	2,438.56	2,316.11	122.45	19.915		
16,100.00	11,942.81	16,073.69	11,930.99	88.58	87.61	-90.55	-4,733.33	2,243.83	2,438.67	2,314.16	124.51	19.587		
16,200.00	11,944.38	16,173.69	11,932.82	90.04	89.07	-90.55	-4,833.31	2,244.81	2,438.78	2,312.20	126.57	19.268		
16,300.00	11,945.95	16,273.69	11,934.66	91.51	90.53	-90.56	-4,933.29	2,245.79	2,438.89	2,310.23	128.65	18.957		
16,400.00	11,947.52	16,373.69	11,936.49	92.99	92.00	-90.56	-5,033.26	2,246.76	2,438.99	2,308.26	130.74	18.656		
16,500.00	11,949.09	16,473.69	11,938.32	94.47	93.48	-90.57	-5,133.24	2,247.74	2,439.10	2,306.27	132.83	18.363		
16,600.00	11,950.66	16,573.69	11,940.15	95.95	94.97	-90.58	-5,233.22	2,248.72	2,439.21	2,304.28	134.93	18.077		
16,700.00	11,952.23	16,673.69	11,941.99	97.45	96.46	-90.58	-5,333.20	2,249.70	2,439.31	2,302.27	137.04	17.800		
16,800.00	11,953.80	16,773.69	11,943.82	98.94	97.95	-90.59	-5,433.18	2,250.68	2,439.42	2,300.26	139.16	17.530		
16,900.00	11,955.37	16,873.69	11,945.65	100.45	99.45	-90.59	-5,533.15	2,251.66	2,439.53	2,298.25	141.28	17.267		
17,000.00	11,956.94	16,973.69	11,947.49	101.95	100.95	-90.60	-5,633.13	2,252.64	2,439.64	2,296.22	143.41	17.012		
17,100.00	11,958.51	17,073.69	11,949.32	103.46	102.46	-90.61	-5,733.11	2,253.62	2,439.74	2,294.20	145.55	16.763		
17,200.00	11,960.08	17,173.69	11,951.15	104.98	103.98	-90.61	-5,833.09	2,254.60	2,439.85	2,292.16	147.69	16.520		
17,300.00	11,961.65	17,273.69	11,952.99	106.50	105.49	-90.62	-5,933.07	2,255.58	2,439.96	2,290.12	149.84	16.284		
17,400.00	11,963.22	17,373.69	11,954.82	108.02	107.02	-90.63	-6,033.04	2,256.56	2,440.06	2,288.07	151.99	16.054		
17,500.00	11,964.79	17,473.69	11,956.65	109.55	108.54	-90.63	-6,133.02	2,257.54	2,440.17	2,286.02	154.15	15.830		
17,600.00	11,966.36	17,573.69	11,958.48	111.08	110.07	-90.64	-6,233.00	2,258.52	2,440.28	2,283.96	156.32	15.611		
17,700.00	11,967.93	17,673.69	11,960.32	112.61	111.60	-90.64	-6,332.98	2,259.50	2,440.39	2,281.90	158.48	15.398		
17,800.00	11,969.50	17,773.69	11,962.15	114.15	113.14	-90.65	-6,432.96	2,260.48	2,440.49	2,279.84	160.66	15.191		
17,900.00	11,971.07	17,873.69	11,963.98	115.69	114.68	-90.66	-6,532.93	2,261.46	2,440.60	2,277.76	162.84	14.988		
18,000.00	11,972.64	17,973.69	11,965.82	117.24	116.22	-90.66	-6,632.91	2,262.44	2,440.71	2,275.69	165.02	14.790		
18,100.00	11,974.21	18,073.69	11,967.65	118.78	117.77	-90.67	-6,732.89	2,263.42	2,440.82	2,273.61	167.21	14.598		
18,200.00	11,975.78	18,173.69	11,969.48	120.33	119.31	-90.67	-6,832.87	2,264.40	2,440.92	2,271.53	169.40	14.409		
18,300.00	11,977.35	18,273.69	11,971.32	121.89	120.87	-90.68	-6,932.85	2,265.37	2,441.03	2,269.44	171.59	14.226		
18,400.00	11,978.92	18,373.69	11,973.15	123.44	122.42	-90.69	-7,032.82	2,266.35	2,441.14	2,267.35	173.79	14.046		
18,500.00	11,980.49	18,473.69	11,974.98	125.00	123.98	-90.69	-7,132.80	2,267.33	2,441.25	2,265.25	175.99	13.871		
18,600.00	11,982.06	18,573.69	11,976.81	126.56	125.53	-90.70	-7,232.78	2,268.31	2,441.36	2,263.16	178.20	13.700		
18,700.00	11,983.63	18,673.69	11,978.65	128.12	127.09	-90.71	-7,332.76	2,269.29	2,441.46	2,261.06	180.41	13.533		
18,800.00	11,985.20	18,773.69	11,980.48	129.68	128.66	-90.71	-7,432.74	2,270.27	2,441.57	2,258.95	182.62	13.370		
18,900.00	11,986.77	18,873.69	11,982.31	131.25	130.22	-90.72	-7,532.71	2,271.25	2,441.68	2,256.84	184.83	13.210		
19,000.00	11,988.34	18,973.69	11,984.15	132.82	131.79	-90.72	-7,632.69	2,272.23	2,441.79	2,254.73	187.05	13.054		
19,100.00	11,989.90	19,073.69	11,985.98	134.39	133.36	-90.73	-7,732.67	2,273.21	2,441.89	2,252.62	189.27	12.901		
19,200.00	11,991.47	19,173.69	11,987.81	135.96	134.93	-90.74	-7,832.65	2,274.19	2,442.00	2,250.51	191.50	12.752		
19,300.00	11,993.04	19,273.69	11,989.65	137.54	136.51	-90.74	-7,932.63	2,275.17	2,442.11	2,248.39	193.72	12.606		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
19,400.00	11,994.61	19,373.67	11,991.48	139.11	138.08	-90.75	-8,032.60	2,276.15	2,442.22	2,246.27	195.95	12.463		
19,500.00	11,996.18	19,473.67	11,993.31	140.69	139.66	-90.75	-8,132.58	2,277.13	2,442.33	2,244.14	198.18	12.324		
19,600.00	11,997.75	19,573.67	11,995.14	142.27	141.24	-90.76	-8,232.56	2,278.11	2,442.43	2,242.02	200.42	12.187		
19,700.00	11,999.32	19,673.67	11,996.98	143.85	142.82	-90.77	-8,332.54	2,279.09	2,442.54	2,239.89	202.65	12.053		
19,800.00	12,000.89	19,773.67	11,998.81	145.43	144.40	-90.77	-8,432.52	2,280.07	2,442.65	2,237.76	204.89	11.922		
19,900.00	12,002.46	19,873.67	12,000.64	147.02	145.98	-90.78	-8,532.49	2,281.05	2,442.76	2,235.63	207.13	11.793		
20,000.00	12,004.03	19,973.67	12,002.48	148.60	147.57	-90.79	-8,632.47	2,282.03	2,442.87	2,233.49	209.37	11.667		
20,100.00	12,005.60	20,073.67	12,004.31	150.19	149.16	-90.79	-8,732.45	2,283.00	2,442.97	2,231.36	211.62	11.544		
20,200.00	12,007.17	20,173.67	12,006.14	151.78	150.74	-90.80	-8,832.43	2,283.98	2,443.08	2,229.22	213.86	11.423		
20,300.00	12,008.74	20,273.67	12,007.98	153.37	152.33	-90.80	-8,932.41	2,284.96	2,443.19	2,227.08	216.11	11.305		
20,400.00	12,010.31	20,373.67	12,009.81	154.96	153.93	-90.81	-9,032.38	2,285.94	2,443.30	2,224.94	218.36	11.189		
20,500.00	12,011.88	20,473.67	12,011.64	156.55	155.52	-90.82	-9,132.36	2,286.92	2,443.41	2,222.79	220.62	11.075		
20,600.00	12,013.45	20,573.66	12,013.47	158.15	157.11	-90.82	-9,232.34	2,287.90	2,443.52	2,220.65	222.87	10.964		
20,700.00	12,015.02	20,673.66	12,015.31	159.74	158.71	-90.83	-9,332.32	2,288.88	2,443.62	2,218.50	225.12	10.855		
20,800.00	12,016.59	20,773.66	12,017.14	161.34	160.30	-90.83	-9,432.30	2,289.86	2,443.73	2,216.35	227.38	10.747		
20,900.00	12,018.16	20,873.66	12,018.97	162.94	161.90	-90.84	-9,532.27	2,290.84	2,443.84	2,214.20	229.64	10.642		
21,000.00	12,019.73	20,973.66	12,020.81	164.53	163.50	-90.85	-9,632.25	2,291.82	2,443.95	2,212.05	231.90	10.539		
21,100.00	12,021.30	21,073.66	12,022.64	166.13	165.10	-90.85	-9,732.23	2,292.80	2,444.06	2,209.90	234.16	10.437		
21,200.00	12,022.87	21,173.66	12,024.47	167.73	166.70	-90.86	-9,832.21	2,293.78	2,444.17	2,207.74	236.43	10.338		
21,300.00	12,024.44	21,273.66	12,026.31	169.34	168.30	-90.87	-9,932.19	2,294.76	2,444.27	2,205.58	238.69	10.240		
21,400.00	12,026.01	21,373.66	12,028.14	170.94	169.90	-90.87	-10,032.16	2,295.74	2,444.38	2,203.43	240.96	10.145		
21,500.00	12,027.58	21,473.66	12,029.97	172.54	171.50	-90.88	-10,132.14	2,296.72	2,444.49	2,201.27	243.22	10.050		
21,600.00	12,029.15	21,573.66	12,031.80	174.15	173.11	-90.88	-10,232.12	2,297.70	2,444.60	2,199.11	245.49	9.958		
21,700.00	12,030.72	21,673.66	12,033.64	175.75	174.71	-90.89	-10,332.10	2,298.68	2,444.71	2,196.95	247.76	9.867		
21,800.00	12,032.29	21,773.66	12,035.47	177.36	176.32	-90.90	-10,432.08	2,299.66	2,444.82	2,194.78	250.03	9.778		
21,900.00	12,033.86	21,873.66	12,037.30	178.96	177.92	-90.90	-10,532.05	2,300.64	2,444.93	2,192.62	252.30	9.690		
22,000.00	12,035.43	21,973.66	12,039.14	180.57	179.53	-90.91	-10,632.03	2,301.61	2,445.03	2,190.46	254.58	9.604		
22,000.36	12,035.44	21,974.02	12,039.14	180.58	179.54	-90.91	-10,632.39	2,301.62	2,445.03	2,190.45	254.59	9.604		
22,100.00	12,037.00	22,051.09	12,040.56	182.18	180.78	-90.91	-10,709.45	2,302.37	2,445.25	2,188.71	256.54	9.532 ES		
22,200.00	12,038.57	22,051.09	12,040.56	183.79	180.78	-90.91	-10,709.45	2,302.37	2,448.32	2,191.16	257.16	9.521 SF		
22,300.00	12,040.14	22,051.09	12,040.56	185.40	180.78	-90.91	-10,709.45	2,302.37	2,455.47	2,198.11	257.36	9.541		
22,400.00	12,041.71	22,051.09	12,040.56	187.01	180.78	-90.91	-10,709.45	2,302.37	2,466.65	2,209.53	257.12	9.593		
22,500.00	12,043.28	22,051.09	12,040.56	188.62	180.78	-90.91	-10,709.45	2,302.37	2,481.82	2,225.34	256.48	9.677		
22,600.00	12,044.85	22,051.09	12,040.56	190.23	180.78	-90.91	-10,709.45	2,302.37	2,500.89	2,245.46	255.44	9.791		
22,700.00	12,046.42	22,051.09	12,040.56	191.85	180.78	-90.91	-10,709.45	2,302.37	2,523.79	2,269.76	254.03	9.935		
22,800.00	12,047.99	22,051.09	12,040.56	193.46	180.78	-90.91	-10,709.45	2,302.37	2,550.40	2,298.12	252.29	10.109		
22,900.00	12,049.56	22,051.09	12,040.56	195.07	180.78	-90.91	-10,709.45	2,302.37	2,580.62	2,330.38	250.24	10.313		
23,000.00	12,051.13	22,051.09	12,040.56	196.69	180.78	-90.91	-10,709.45	2,302.37	2,614.31	2,366.40	247.92	10.545		
23,100.00	12,052.70	22,051.09	12,040.56	198.30	180.78	-90.91	-10,709.45	2,302.37	2,651.35	2,405.99	245.37	10.806		
23,200.00	12,054.27	22,051.09	12,040.56	199.92	180.78	-90.91	-10,709.45	2,302.37	2,691.60	2,448.99	242.61	11.094		
23,300.00	12,055.84	22,051.09	12,040.56	201.54	180.78	-90.91	-10,709.45	2,302.37	2,734.92	2,495.22	239.70	11.410		
23,389.58	12,057.25	22,051.09	12,040.56	202.99	180.78	-90.91	-10,709.45	2,302.37	2,776.20	2,539.24	236.97	11.715		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Offset Design		LHS Wildcat Fed Com - LHS Wildcat Fed Com 705H - OH - Plan #3											Offset Site Error:		0.00 usft
Survey Program:		0-OWSG (Rev2) MWD											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	0.00	0.00	0.00	90.95	-39.67	2,388.89	2,389.47						
100.00	100.00	65.40	65.40	0.13	0.09	90.95	-39.67	2,388.89	2,389.22	2,389.06	0.16	N/A			
200.00	200.00	165.40	165.40	0.48	0.38	90.95	-39.67	2,388.89	2,389.22	2,388.61	0.61	3,898.469			
300.00	300.00	265.40	265.40	0.84	0.73	90.95	-39.67	2,388.89	2,389.22	2,388.10	1.12	2,137.706			
400.00	400.00	365.40	365.40	1.20	1.09	90.95	-39.67	2,388.89	2,389.22	2,387.60	1.62	1,471.378			
500.00	500.00	465.40	465.40	1.56	1.45	90.95	-39.67	2,388.89	2,389.22	2,387.09	2.13	1,121.528			
600.00	600.00	565.40	565.40	1.92	1.81	90.95	-39.67	2,388.89	2,389.22	2,386.58	2.64	906.031			
700.00	700.00	665.40	665.40	2.28	2.17	90.95	-39.67	2,388.89	2,389.22	2,386.08	3.14	759.979			
800.00	800.00	765.40	765.40	2.63	2.53	90.95	-39.67	2,388.89	2,389.22	2,385.57	3.65	654.469			
900.00	900.00	865.40	865.40	2.99	2.89	90.95	-39.67	2,388.89	2,389.22	2,385.06	4.16	574.680			
1,000.00	1,000.00	965.40	965.40	3.35	3.24	90.95	-39.67	2,388.89	2,389.22	2,384.56	4.66	512.229			
1,100.00	1,100.00	1,065.40	1,065.40	3.71	3.60	90.95	-39.67	2,388.89	2,389.22	2,384.05	5.17	462.019			
1,200.00	1,200.00	1,165.40	1,165.40	4.07	3.96	90.95	-39.67	2,388.89	2,389.22	2,383.54	5.68	420.774			
1,300.00	1,300.00	1,265.40	1,265.40	4.43	4.32	90.95	-39.67	2,388.89	2,389.22	2,383.03	6.19	386.288			
1,400.00	1,400.00	1,365.40	1,365.40	4.79	4.68	90.95	-39.67	2,388.89	2,389.22	2,382.53	6.69	357.027			
1,500.00	1,500.00	1,465.40	1,465.40	5.14	5.04	90.95	-39.67	2,388.89	2,389.22	2,382.02	7.20	331.886			
1,600.00	1,600.00	1,565.40	1,565.40	5.50	5.39	90.95	-39.67	2,388.89	2,389.22	2,381.51	7.71	310.053			
1,700.00	1,700.00	1,665.40	1,665.40	5.86	5.75	90.95	-39.67	2,388.89	2,389.22	2,381.01	8.21	290.915			
1,800.00	1,800.00	1,765.40	1,765.40	6.22	6.11	90.95	-39.67	2,388.89	2,389.22	2,380.50	8.72	274.002			
1,900.00	1,900.00	1,865.40	1,865.40	6.58	6.47	90.95	-39.67	2,388.89	2,389.22	2,379.99	9.23	258.948			
2,000.00	2,000.00	1,965.40	1,965.40	6.94	6.83	90.95	-39.67	2,388.89	2,389.22	2,379.49	9.73	245.461			
2,100.00	2,100.00	2,065.40	2,065.40	7.29	7.19	90.95	-39.67	2,388.89	2,389.22	2,378.98	10.24	233.310			
2,200.00	2,200.00	2,165.40	2,165.40	7.65	7.55	90.95	-39.67	2,388.89	2,389.22	2,378.47	10.75	222.305			
2,300.00	2,300.00	2,265.40	2,265.40	8.01	7.90	90.95	-39.67	2,388.89	2,389.22	2,377.96	11.25	212.292			
2,400.00	2,400.00	2,365.40	2,365.40	8.37	8.26	90.95	-39.67	2,388.89	2,389.22	2,377.46	11.76	203.141			
2,500.00	2,500.00	2,465.40	2,465.40	8.73	8.62	90.95	-39.67	2,388.89	2,389.22	2,376.95	12.27	194.747			
2,600.00	2,600.00	2,565.40	2,565.40	9.09	8.98	90.95	-39.67	2,388.89	2,389.22	2,376.44	12.78	187.019			
2,700.00	2,700.00	2,665.40	2,665.40	9.45	9.34	90.95	-39.67	2,388.89	2,389.22	2,375.94	13.28	179.881			
2,800.00	2,800.00	2,765.40	2,765.40	9.80	9.70	90.95	-39.67	2,388.89	2,389.22	2,375.43	13.79	173.268			
2,900.00	2,900.00	2,865.40	2,865.40	10.16	10.05	90.95	-39.67	2,388.89	2,389.22	2,374.92	14.30	167.124			
3,000.00	3,000.00	2,965.40	2,965.40	10.52	10.41	90.95	-39.67	2,388.89	2,389.22	2,374.42	14.80	161.401			
3,100.00	3,100.00	3,065.40	3,065.40	10.88	10.77	90.95	-39.67	2,388.89	2,389.22	2,373.91	15.31	156.056			
3,200.00	3,200.00	3,165.40	3,165.40	11.24	11.13	90.95	-39.67	2,388.89	2,389.22	2,373.40	15.82	151.055	CC, ES		
3,300.00	3,299.99	3,265.39	3,265.39	11.58	11.49	-125.69	-39.67	2,388.89	2,389.98	2,373.67	16.31	146.518			
3,400.00	3,399.91	3,365.31	3,365.31	11.91	11.85	-125.74	-39.67	2,388.89	2,392.28	2,375.48	16.80	142.433			
3,500.00	3,499.69	3,465.09	3,465.09	12.24	12.20	-125.82	-39.67	2,388.89	2,396.11	2,378.83	17.28	138.661			
3,599.91	3,599.18	3,564.58	3,564.58	12.57	12.56	-125.93	-39.67	2,388.89	2,401.48	2,383.71	17.77	135.177			
3,700.00	3,698.72	3,664.12	3,664.12	12.90	12.92	-126.13	-39.67	2,388.89	2,407.65	2,389.40	18.25	131.906			
3,800.00	3,798.17	3,763.57	3,763.57	13.24	13.27	-126.33	-39.67	2,388.89	2,413.85	2,395.11	18.74	128.796			
3,900.00	3,897.63	3,863.03	3,863.03	13.58	13.63	-126.53	-39.67	2,388.89	2,420.08	2,400.85	19.23	125.832			
4,000.00	3,997.08	3,962.48	3,962.48	13.93	13.99	-126.73	-39.67	2,388.89	2,426.34	2,406.61	19.73	123.007			
4,100.00	4,096.53	4,061.93	4,061.93	14.27	14.34	-126.92	-39.67	2,388.89	2,432.62	2,412.40	20.22	120.311			
4,200.00	4,195.98	4,161.38	4,161.38	14.62	14.70	-127.12	-39.67	2,388.89	2,438.94	2,418.22	20.72	117.737			
4,300.00	4,295.44	4,260.84	4,260.84	14.98	15.06	-127.31	-39.67	2,388.89	2,445.28	2,424.07	21.21	115.277			
4,400.00	4,394.89	4,360.29	4,360.29	15.33	15.41	-127.51	-39.67	2,388.89	2,451.65	2,429.94	21.71	112.924			
4,500.00	4,494.34	4,459.74	4,459.74	15.69	15.77	-127.70	-39.67	2,388.89	2,458.05	2,435.84	22.21	110.672			
4,600.00	4,593.79	4,545.36	4,545.36	16.05	16.07	-127.86	-39.90	2,389.02	2,464.64	2,441.97	22.67	108.723			
4,700.00	4,693.25	4,621.64	4,621.62	16.41	16.33	-127.97	-41.35	2,389.85	2,472.12	2,449.02	23.10	107.034			
4,800.00	4,792.70	4,700.00	4,699.91	16.77	16.58	-128.05	-44.22	2,391.48	2,480.54	2,457.02	23.52	105.456			
4,900.00	4,892.15	4,774.22	4,773.99	17.13	16.82	-128.10	-48.22	2,393.75	2,489.90	2,465.96	23.94	104.019			
5,000.00	4,991.60	4,850.41	4,849.92	17.50	17.07	-128.12	-53.63	2,396.83	2,500.19	2,475.83	24.36	102.651			
5,100.00	5,091.06	4,926.45	4,925.57	17.86	17.32	-128.11	-60.34	2,400.64	2,511.41	2,486.63	24.77	101.370			

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
5,200.00	5,190.51	5,013.31	5,011.81	18.23	17.61	-128.06	-69.36	2,405.77	2,523.45	2,498.23	25.22	100.040		
5,300.00	5,289.96	5,112.54	5,110.29	18.60	17.94	-128.00	-79.87	2,411.75	2,535.62	2,509.91	25.71	98.618		
5,400.00	5,389.41	5,211.76	5,208.77	18.97	18.28	-127.94	-90.39	2,417.73	2,547.80	2,521.60	26.20	97.239		
5,500.00	5,488.87	5,310.99	5,307.26	19.34	18.61	-127.89	-100.90	2,423.70	2,559.98	2,533.28	26.69	95.901		
5,600.00	5,588.32	5,410.21	5,405.74	19.71	18.95	-127.83	-111.41	2,429.68	2,572.16	2,544.97	27.19	94.603		
5,700.00	5,687.77	5,509.43	5,504.23	20.09	19.30	-127.78	-121.92	2,435.66	2,584.34	2,556.65	27.69	93.345		
5,800.00	5,787.22	5,608.66	5,602.71	20.46	19.64	-127.72	-132.43	2,441.63	2,596.52	2,568.34	28.19	92.123		
5,900.00	5,886.68	5,707.88	5,701.20	20.84	19.99	-127.67	-142.95	2,447.61	2,608.71	2,580.03	28.69	90.938		
6,000.00	5,986.13	5,807.11	5,799.68	21.21	20.34	-127.61	-153.46	2,453.59	2,620.90	2,591.71	29.19	89.788		
6,100.00	6,085.58	5,906.33	5,898.17	21.59	20.69	-127.56	-163.97	2,459.56	2,633.09	2,603.40	29.70	88.671		
6,200.00	6,185.03	6,005.55	5,996.65	21.97	21.05	-127.51	-174.48	2,465.54	2,645.29	2,615.09	30.20	87.586		
6,300.00	6,284.49	6,104.78	6,095.14	22.34	21.40	-127.45	-184.99	2,471.52	2,657.48	2,626.77	30.71	86.533		
6,400.00	6,383.94	6,204.00	6,193.62	22.72	21.76	-127.40	-195.51	2,477.50	2,669.68	2,638.46	31.22	85.510		
6,500.00	6,483.39	6,303.23	6,292.10	23.10	22.12	-127.35	-206.02	2,483.47	2,681.88	2,650.15	31.73	84.515		
6,600.00	6,582.84	6,402.45	6,390.59	23.48	22.48	-127.30	-216.53	2,489.45	2,694.09	2,661.84	32.25	83.549		
6,700.00	6,682.30	6,501.68	6,489.07	23.86	22.84	-127.25	-227.04	2,495.43	2,706.29	2,673.53	32.76	82.610		
6,800.00	6,781.75	6,600.90	6,587.56	24.24	23.20	-127.20	-237.55	2,501.40	2,718.50	2,685.22	33.28	81.696		
6,900.00	6,881.20	6,700.12	6,686.04	24.63	23.57	-127.15	-248.06	2,507.38	2,730.71	2,696.92	33.79	80.807		
6,944.87	6,925.82	6,744.65	6,730.23	24.80	23.73	-127.13	-252.78	2,510.06	2,736.19	2,702.16	34.03	80.416		
7,000.00	6,980.69	6,799.37	6,784.55	25.01	23.94	-127.17	-258.58	2,513.36	2,742.68	2,708.37	34.31	79.937		
7,100.00	7,080.39	6,926.64	6,910.96	25.38	24.41	-127.19	-271.34	2,520.61	2,752.98	2,718.07	34.91	78.854		
7,200.00	7,180.26	7,080.05	7,063.86	25.74	24.96	-127.17	-282.15	2,526.76	2,760.00	2,724.42	35.58	77.574		
7,300.00	7,280.23	7,234.09	7,217.76	26.09	25.50	-127.16	-287.63	2,529.87	2,763.48	2,727.26	36.22	76.290		
7,344.78	7,325.00	7,303.15	7,286.82	26.25	25.74	89.47	-288.33	2,530.27	2,763.90	2,727.39	36.50	75.716		
7,400.00	7,380.22	7,361.96	7,345.62	26.43	25.94	89.47	-288.34	2,530.28	2,763.90	2,727.12	36.78	75.146		
7,500.00	7,480.22	7,461.96	7,445.62	26.77	26.29	89.47	-288.34	2,530.28	2,763.90	2,726.63	37.27	74.166		
7,600.00	7,580.22	7,561.96	7,545.62	27.11	26.64	89.47	-288.34	2,530.28	2,763.90	2,726.15	37.75	73.210		
7,700.00	7,680.22	7,661.96	7,645.62	27.44	26.99	89.47	-288.34	2,530.28	2,763.90	2,725.66	38.24	72.277		
7,800.00	7,780.22	7,761.96	7,745.62	27.78	27.33	89.47	-288.34	2,530.28	2,763.90	2,725.17	38.73	71.367		
7,900.00	7,880.22	7,861.96	7,845.62	28.12	27.68	89.47	-288.34	2,530.28	2,763.90	2,724.68	39.22	70.479		
8,000.00	7,980.22	7,961.96	7,945.62	28.46	28.03	89.47	-288.34	2,530.28	2,763.90	2,724.20	39.70	69.612		
8,100.00	8,080.22	8,061.96	8,045.62	28.80	28.38	89.47	-288.34	2,530.28	2,763.90	2,723.71	40.19	68.765		
8,200.00	8,180.22	8,161.96	8,145.62	29.14	28.73	89.47	-288.34	2,530.28	2,763.90	2,723.22	40.68	67.937		
8,300.00	8,280.22	8,261.96	8,245.62	29.48	29.08	89.47	-288.34	2,530.28	2,763.90	2,722.73	41.17	67.129		
8,400.00	8,380.22	8,361.96	8,345.62	29.82	29.43	89.47	-288.34	2,530.28	2,763.90	2,722.24	41.66	66.339		
8,500.00	8,480.22	8,461.96	8,445.62	30.16	29.78	89.47	-288.34	2,530.28	2,763.90	2,721.75	42.15	65.567		
8,600.00	8,580.22	8,561.96	8,545.62	30.51	30.13	89.47	-288.34	2,530.28	2,763.90	2,721.26	42.65	64.812		
8,700.00	8,680.22	8,661.96	8,645.62	30.85	30.48	89.47	-288.34	2,530.28	2,763.90	2,720.76	43.14	64.073		
8,800.00	8,780.22	8,761.96	8,745.62	31.19	30.83	89.47	-288.34	2,530.28	2,763.90	2,720.27	43.63	63.351		
8,900.00	8,880.22	8,861.96	8,845.62	31.53	31.18	89.47	-288.34	2,530.28	2,763.90	2,719.78	44.12	62.644		
9,000.00	8,980.22	8,961.96	8,945.62	31.88	31.53	89.47	-288.34	2,530.28	2,763.90	2,719.29	44.61	61.953		
9,100.00	9,080.22	9,061.96	9,045.62	32.22	31.88	89.47	-288.34	2,530.28	2,763.90	2,718.79	45.11	61.276		
9,200.00	9,180.22	9,161.96	9,145.62	32.57	32.23	89.47	-288.34	2,530.28	2,763.90	2,718.30	45.60	60.613		
9,300.00	9,280.22	9,261.96	9,245.62	32.91	32.59	89.47	-288.34	2,530.28	2,763.90	2,717.81	46.09	59.964		
9,400.00	9,380.22	9,361.96	9,345.62	33.26	32.94	89.47	-288.34	2,530.28	2,763.90	2,717.31	46.59	59.329		
9,500.00	9,480.22	9,461.96	9,445.62	33.60	33.29	89.47	-288.34	2,530.28	2,763.90	2,716.82	47.08	58.706		
9,600.00	9,580.22	9,561.96	9,545.62	33.95	33.64	89.47	-288.34	2,530.28	2,763.90	2,716.33	47.57	58.096		
9,700.00	9,680.22	9,661.96	9,645.62	34.29	33.99	89.47	-288.34	2,530.28	2,763.90	2,715.83	48.07	57.499		
9,800.00	9,780.22	9,761.96	9,745.62	34.64	34.34	89.47	-288.34	2,530.28	2,763.90	2,715.34	48.56	56.913		
9,900.00	9,880.22	9,861.96	9,845.62	34.98	34.70	89.47	-288.34	2,530.28	2,763.90	2,714.84	49.06	56.338		
10,000.00	9,980.22	9,961.96	9,945.62	35.33	35.05	89.47	-288.34	2,530.28	2,763.90	2,714.35	49.55	55.775		
10,100.00	10,080.22	10,061.96	10,045.62	35.68	35.40	89.47	-288.34	2,530.28	2,763.90	2,713.85	50.05	55.223		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
10,200.00	10,180.22	10,161.96	10,145.62	36.02	35.75	89.47	-288.34	2,530.28	2,763.90	2,713.35	50.55	54.682		
10,300.00	10,280.22	10,261.96	10,245.62	36.37	36.11	89.47	-288.34	2,530.28	2,763.90	2,712.86	51.04	54.150		
10,400.00	10,380.22	10,361.96	10,345.62	36.72	36.46	89.47	-288.34	2,530.28	2,763.90	2,712.36	51.54	53.629		
10,500.00	10,480.22	10,461.96	10,445.62	37.06	36.81	89.47	-288.34	2,530.28	2,763.90	2,711.87	52.03	53.117		
10,600.00	10,580.22	10,561.96	10,545.62	37.41	37.16	89.47	-288.34	2,530.28	2,763.90	2,711.37	52.53	52.615		
10,700.00	10,680.22	10,661.96	10,645.62	37.76	37.52	89.47	-288.34	2,530.28	2,763.90	2,710.87	53.03	52.122		
10,800.00	10,780.22	10,761.96	10,745.62	38.11	37.87	89.47	-288.34	2,530.28	2,763.90	2,710.38	53.52	51.638		
10,900.00	10,880.22	10,861.96	10,845.62	38.46	38.22	89.47	-288.34	2,530.28	2,763.90	2,709.88	54.02	51.163		
11,000.00	10,980.22	10,961.96	10,945.62	38.80	38.58	89.47	-288.34	2,530.28	2,763.90	2,709.38	54.52	50.696		
11,100.00	11,080.22	11,061.96	11,045.62	39.15	38.93	89.47	-288.34	2,530.28	2,763.90	2,708.88	55.02	50.238		
11,200.00	11,180.22	11,161.96	11,145.62	39.50	39.28	89.47	-288.34	2,530.28	2,763.90	2,708.39	55.51	49.788		
11,300.00	11,280.22	11,261.96	11,245.62	39.85	39.64	89.47	-288.34	2,530.28	2,763.90	2,707.89	56.01	49.345		
11,328.78	11,309.00	11,290.73	11,274.40	39.95	39.74	89.47	-288.34	2,530.28	2,763.90	2,707.75	56.16	49.219		
11,350.00	11,330.22	11,311.95	11,295.62	40.02	39.82	-90.04	-288.34	2,530.28	2,763.90	2,707.64	56.26	49.127		
11,400.00	11,380.04	11,361.77	11,345.44	40.20	39.99	-90.12	-288.34	2,530.28	2,763.91	2,707.40	56.51	48.911		
11,450.00	11,429.32	11,411.06	11,394.72	40.38	40.17	-90.29	-288.34	2,530.28	2,763.94	2,707.18	56.76	48.694		
11,500.00	11,477.69	11,459.42	11,443.09	40.57	40.34	-90.53	-288.34	2,530.28	2,764.03	2,707.02	57.02	48.479		
11,550.00	11,524.77	11,506.50	11,490.17	40.76	40.50	-90.84	-288.34	2,530.28	2,764.25	2,706.98	57.27	48.268		
11,600.00	11,570.21	11,556.75	11,540.37	40.95	40.68	-91.20	-290.14	2,530.30	2,764.62	2,707.09	57.53	48.053		
11,650.00	11,613.66	11,609.35	11,592.54	41.15	40.86	-91.57	-296.70	2,530.36	2,765.13	2,707.32	57.81	47.834		
11,700.00	11,654.79	11,664.17	11,646.03	41.36	41.06	-91.93	-308.60	2,530.48	2,765.76	2,707.67	58.09	47.610		
11,750.00	11,693.29	11,721.41	11,700.40	41.57	41.27	-92.29	-326.42	2,530.65	2,766.50	2,708.11	58.39	47.380		
11,800.00	11,728.87	11,781.29	11,755.08	41.78	41.49	-92.65	-350.77	2,530.89	2,767.34	2,708.63	58.70	47.143		
11,850.00	11,761.25	11,844.02	11,809.30	42.01	41.73	-92.99	-382.24	2,531.20	2,768.23	2,709.21	59.03	46.899		
11,900.00	11,790.19	11,909.73	11,862.06	42.23	41.98	-93.32	-421.35	2,531.58	2,769.16	2,709.80	59.37	46.646		
11,950.00	11,815.47	11,978.53	11,912.12	42.47	42.26	-93.63	-468.49	2,532.04	2,770.09	2,710.37	59.72	46.384		
12,000.00	11,836.89	12,050.38	11,957.97	42.72	42.56	-93.91	-523.74	2,532.59	2,770.97	2,710.88	60.09	46.110		
12,050.00	11,854.29	12,125.12	11,997.94	42.97	42.88	-94.15	-586.82	2,533.20	2,771.76	2,711.27	60.49	45.822		
12,100.00	11,867.55	12,202.42	12,030.29	43.22	43.23	-94.34	-656.96	2,533.89	2,772.42	2,711.52	60.91	45.520		
12,150.00	11,876.55	12,281.76	12,053.37	43.49	43.60	-94.48	-732.81	2,534.63	2,772.91	2,711.57	61.34	45.203		
12,200.00	11,881.24	12,362.47	12,065.88	43.75	43.99	-94.55	-812.47	2,535.41	2,773.21	2,711.41	61.80	44.874		
12,219.78	11,881.89	12,394.60	12,067.71	43.86	44.15	-94.56	-844.54	2,535.73	2,773.27	2,711.29	61.98	44.742		
12,300.00	11,883.15	12,476.95	12,069.35	44.30	44.57	-94.57	-926.87	2,536.53	2,773.38	2,710.78	62.60	44.306		
12,400.00	11,884.72	12,576.95	12,071.31	44.91	45.13	-94.58	-1,026.84	2,537.51	2,773.51	2,710.10	63.41	43.736		
12,500.00	11,886.29	12,676.94	12,073.26	45.56	45.74	-94.58	-1,126.82	2,538.49	2,773.65	2,709.34	64.31	43.131		
12,600.00	11,887.86	12,776.94	12,075.22	46.27	46.40	-94.59	-1,226.79	2,539.47	2,773.78	2,708.51	65.27	42.496		
12,700.00	11,889.43	12,876.94	12,077.17	47.02	47.11	-94.60	-1,326.77	2,540.45	2,773.92	2,707.61	66.30	41.836		
12,800.00	11,891.00	12,976.94	12,079.13	47.82	47.87	-94.61	-1,426.74	2,541.43	2,774.05	2,706.65	67.40	41.158		
12,900.00	11,892.57	13,076.94	12,081.08	48.66	48.67	-94.61	-1,526.72	2,542.41	2,774.19	2,705.63	68.56	40.464		
13,000.00	11,894.14	13,176.94	12,083.04	49.54	49.51	-94.62	-1,626.69	2,543.39	2,774.32	2,704.54	69.78	39.760		
13,100.00	11,895.71	13,276.94	12,084.99	50.46	50.40	-94.63	-1,726.67	2,544.37	2,774.46	2,703.41	71.05	39.050		
13,200.00	11,897.28	13,376.94	12,086.95	51.42	51.32	-94.64	-1,826.64	2,545.35	2,774.59	2,702.22	72.38	38.336		
13,300.00	11,898.85	13,476.94	12,088.90	52.41	52.28	-94.65	-1,926.62	2,546.32	2,774.73	2,700.98	73.75	37.623		
13,400.00	11,900.42	13,576.94	12,090.86	53.44	53.27	-94.65	-2,026.59	2,547.30	2,774.86	2,699.69	75.17	36.913		
13,500.00	11,901.99	13,676.94	12,092.81	54.49	54.29	-94.66	-2,126.57	2,548.28	2,775.00	2,698.36	76.64	36.208		
13,600.00	11,903.56	13,776.94	12,094.77	55.58	55.35	-94.67	-2,226.55	2,549.26	2,775.13	2,696.98	78.15	35.511		
13,700.00	11,905.13	13,876.94	12,096.72	56.69	56.43	-94.68	-2,326.52	2,550.24	2,775.27	2,695.57	79.70	34.823		
13,800.00	11,906.70	13,976.93	12,098.68	57.83	57.54	-94.68	-2,426.50	2,551.22	2,775.40	2,694.12	81.28	34.145		
13,900.00	11,908.27	14,076.93	12,100.63	58.99	58.67	-94.69	-2,526.47	2,552.20	2,775.54	2,692.63	82.90	33.479		
14,000.00	11,909.84	14,176.93	12,102.59	60.17	59.83	-94.70	-2,626.45	2,553.18	2,775.67	2,691.12	84.56	32.826		
14,100.00	11,911.41	14,276.93	12,104.54	61.38	61.02	-94.71	-2,726.42	2,554.16	2,775.81	2,689.57	86.24	32.186		
14,200.00	11,912.98	14,376.93	12,106.50	62.60	62.22	-94.72	-2,826.40	2,555.14	2,775.94	2,687.99	87.96	31.560		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
14,300.00	11,914.55	14,476.93	12,108.45	63.85	63.44	-94.72	-2,926.37	2,556.12	2,776.08	2,686.38	89.70	30.948		
14,400.00	11,916.12	14,576.93	12,110.41	65.11	64.69	-94.73	-3,026.35	2,557.10	2,776.22	2,684.75	91.47	30.351		
14,500.00	11,917.69	14,676.93	12,112.36	66.39	65.95	-94.74	-3,126.32	2,558.07	2,776.35	2,683.09	93.26	29.769		
14,600.00	11,919.26	14,776.93	12,114.32	67.69	67.23	-94.75	-3,226.30	2,559.05	2,776.49	2,681.41	95.08	29.202		
14,700.00	11,920.83	14,876.93	12,116.27	69.00	68.52	-94.75	-3,326.27	2,560.03	2,776.62	2,679.71	96.92	28.650		
14,800.00	11,922.40	14,976.93	12,118.23	70.33	69.83	-94.76	-3,426.25	2,561.01	2,776.76	2,677.98	98.77	28.112		
14,900.00	11,923.97	15,076.93	12,120.18	71.67	71.15	-94.77	-3,526.22	2,561.99	2,776.89	2,676.24	100.65	27.589		
15,000.00	11,925.54	15,176.93	12,122.14	73.02	72.49	-94.78	-3,626.20	2,562.97	2,777.03	2,674.48	102.55	27.080		
15,100.00	11,927.11	15,276.92	12,124.09	74.39	73.84	-94.79	-3,726.17	2,563.95	2,777.17	2,672.70	104.46	26.585		
15,200.00	11,928.68	15,376.92	12,126.05	75.77	75.20	-94.79	-3,826.15	2,564.93	2,777.30	2,670.91	106.40	26.104		
15,300.00	11,930.25	15,476.92	12,128.00	77.15	76.57	-94.80	-3,926.13	2,565.91	2,777.44	2,669.10	108.34	25.636		
15,400.00	11,931.82	15,576.92	12,129.96	78.55	77.96	-94.81	-4,026.10	2,566.89	2,777.57	2,667.27	110.30	25.181		
15,500.00	11,933.39	15,676.92	12,131.91	79.96	79.35	-94.82	-4,126.08	2,567.87	2,777.71	2,665.43	112.28	24.740		
15,600.00	11,934.96	15,776.92	12,133.87	81.37	80.76	-94.82	-4,226.05	2,568.84	2,777.85	2,663.58	114.27	24.310		
15,700.00	11,936.53	15,876.92	12,135.82	82.80	82.17	-94.83	-4,326.03	2,569.82	2,777.98	2,661.72	116.27	23.893		
15,800.00	11,938.10	15,976.92	12,137.78	84.23	83.59	-94.84	-4,426.00	2,570.80	2,778.12	2,659.84	118.28	23.488		
15,900.00	11,939.67	16,076.92	12,139.73	85.67	85.02	-94.85	-4,525.98	2,571.78	2,778.26	2,657.95	120.30	23.093		
16,000.00	11,941.24	16,176.92	12,141.69	87.12	86.46	-94.85	-4,625.95	2,572.76	2,778.39	2,656.05	122.34	22.710		
16,100.00	11,942.81	16,276.92	12,143.64	88.58	87.91	-94.86	-4,725.93	2,573.74	2,778.53	2,654.14	124.39	22.338		
16,200.00	11,944.38	16,376.92	12,145.60	90.04	89.36	-94.87	-4,825.90	2,574.72	2,778.66	2,652.22	126.44	21.976		
16,300.00	11,945.95	16,476.91	12,147.55	91.51	90.82	-94.88	-4,925.88	2,575.70	2,778.80	2,650.30	128.50	21.624		
16,400.00	11,947.52	16,576.91	12,149.51	92.99	92.29	-94.89	-5,025.85	2,576.68	2,778.94	2,648.36	130.58	21.282		
16,500.00	11,949.09	16,676.91	12,151.46	94.47	93.76	-94.89	-5,125.83	2,577.66	2,779.07	2,646.41	132.66	20.949		
16,600.00	11,950.66	16,776.91	12,153.42	95.95	95.24	-94.90	-5,225.80	2,578.64	2,779.21	2,644.46	134.75	20.625		
16,700.00	11,952.23	16,876.91	12,155.37	97.45	96.72	-94.91	-5,325.78	2,579.62	2,779.35	2,642.50	136.85	20.310		
16,800.00	11,953.80	16,976.91	12,157.33	98.94	98.21	-94.92	-5,425.75	2,580.59	2,779.48	2,640.53	138.95	20.003		
16,900.00	11,955.37	17,076.91	12,159.28	100.45	99.71	-94.92	-5,525.73	2,581.57	2,779.62	2,638.56	141.06	19.705		
17,000.00	11,956.94	17,176.91	12,161.24	101.95	101.21	-94.93	-5,625.71	2,582.55	2,779.76	2,636.58	143.18	19.414		
17,100.00	11,958.51	17,276.91	12,163.19	103.46	102.71	-94.94	-5,725.68	2,583.53	2,779.90	2,634.59	145.31	19.131		
17,200.00	11,960.08	17,376.91	12,165.15	104.98	104.22	-94.95	-5,825.66	2,584.51	2,780.03	2,632.59	147.44	18.856		
17,300.00	11,961.65	17,476.91	12,167.10	106.50	105.73	-94.96	-5,925.63	2,585.49	2,780.17	2,630.59	149.57	18.587		
17,400.00	11,963.22	17,576.91	12,169.06	108.02	107.25	-94.96	-6,025.61	2,586.47	2,780.31	2,628.59	151.72	18.326		
17,500.00	11,964.79	17,676.91	12,171.01	109.55	108.77	-94.97	-6,125.58	2,587.45	2,780.44	2,626.58	153.86	18.071		
17,600.00	11,966.36	17,776.90	12,172.97	111.08	110.30	-94.98	-6,225.56	2,588.43	2,780.58	2,624.56	156.02	17.822		
17,700.00	11,967.93	17,876.90	12,174.92	112.61	111.83	-94.99	-6,325.53	2,589.41	2,780.72	2,622.54	158.18	17.580		
17,800.00	11,969.50	17,976.90	12,176.88	114.15	113.36	-94.99	-6,425.51	2,590.39	2,780.86	2,620.52	160.34	17.344		
17,900.00	11,971.07	18,076.90	12,178.83	115.69	114.89	-95.00	-6,525.48	2,591.36	2,780.99	2,618.49	162.50	17.113		
18,000.00	11,972.64	18,176.90	12,180.79	117.24	116.43	-95.01	-6,625.46	2,592.34	2,781.13	2,616.45	164.68	16.888		
18,100.00	11,974.21	18,276.90	12,182.74	118.78	117.97	-95.02	-6,725.43	2,593.32	2,781.27	2,614.42	166.85	16.669		
18,200.00	11,975.78	18,376.90	12,184.70	120.33	119.52	-95.02	-6,825.41	2,594.30	2,781.41	2,612.37	169.03	16.455		
18,300.00	11,977.35	18,476.90	12,186.65	121.89	121.07	-95.03	-6,925.38	2,595.28	2,781.54	2,610.33	171.21	16.246		
18,400.00	11,978.92	18,576.90	12,188.61	123.44	122.62	-95.04	-7,025.36	2,596.26	2,781.68	2,608.28	173.40	16.042		
18,500.00	11,980.49	18,676.90	12,190.56	125.00	124.17	-95.05	-7,125.33	2,597.24	2,781.82	2,606.23	175.59	15.842		
18,600.00	11,982.06	18,776.90	12,192.52	126.56	125.72	-95.06	-7,225.31	2,598.22	2,781.96	2,604.17	177.79	15.648		
18,700.00	11,983.63	18,876.90	12,194.47	128.12	127.28	-95.06	-7,325.29	2,599.20	2,782.09	2,602.11	179.98	15.457		
18,800.00	11,985.20	18,976.89	12,196.43	129.68	128.84	-95.07	-7,425.26	2,600.18	2,782.23	2,600.05	182.18	15.271		
18,900.00	11,986.77	19,076.89	12,198.38	131.25	130.41	-95.08	-7,525.24	2,601.16	2,782.37	2,597.98	184.39	15.090		
19,000.00	11,988.34	19,176.89	12,200.34	132.82	131.97	-95.09	-7,625.21	2,602.14	2,782.51	2,595.91	186.60	14.912		
19,100.00	11,989.90	19,276.89	12,202.29	134.39	133.54	-95.09	-7,725.19	2,603.11	2,782.65	2,593.84	188.80	14.738		
19,200.00	11,991.47	19,376.89	12,204.25	135.96	135.11	-95.10	-7,825.16	2,604.09	2,782.78	2,591.77	191.02	14.568		
19,300.00	11,993.04	19,476.89	12,206.20	137.54	136.68	-95.11	-7,925.14	2,605.07	2,782.92	2,589.69	193.23	14.402		
19,400.00	11,994.61	19,576.89	12,208.16	139.11	138.25	-95.12	-8,025.11	2,606.05	2,783.06	2,587.61	195.45	14.239		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	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		
19,500.00	11,996.18	19,676.89	12,210.11	140.69	139.82	-95.13	-8,125.09	2,607.03	2,783.20	2,585.53	197.67	14.080		
19,600.00	11,997.75	19,776.89	12,212.07	142.27	141.40	-95.13	-8,225.06	2,608.01	2,783.34	2,583.44	199.89	13.924		
19,700.00	11,999.32	19,876.89	12,214.02	143.85	142.98	-95.14	-8,325.04	2,608.99	2,783.47	2,581.36	202.12	13.772		
19,800.00	12,000.89	19,976.89	12,215.98	145.43	144.56	-95.15	-8,425.01	2,609.97	2,783.61	2,579.27	204.34	13.622		
19,900.00	12,002.46	20,076.89	12,217.93	147.02	146.14	-95.16	-8,524.99	2,610.95	2,783.75	2,577.18	206.57	13.476		
20,000.00	12,004.03	20,176.89	12,219.89	148.60	147.72	-95.16	-8,624.96	2,611.93	2,783.89	2,575.09	208.80	13.333		
20,100.00	12,005.60	20,276.88	12,221.84	150.19	149.31	-95.17	-8,724.94	2,612.91	2,784.03	2,572.99	211.04	13.192		
20,200.00	12,007.17	20,376.88	12,223.80	151.78	150.89	-95.18	-8,824.91	2,613.88	2,784.17	2,570.89	213.27	13.055		
20,300.00	12,008.74	20,476.88	12,225.75	153.37	152.48	-95.19	-8,924.89	2,614.86	2,784.30	2,568.80	215.51	12.920		
20,400.00	12,010.31	20,576.88	12,227.71	154.96	154.07	-95.19	-9,024.87	2,615.84	2,784.44	2,566.70	217.75	12.787		
20,500.00	12,011.88	20,676.88	12,229.67	156.55	155.66	-95.20	-9,124.84	2,616.82	2,784.58	2,564.59	219.99	12.658		
20,600.00	12,013.45	20,776.88	12,231.62	158.15	157.25	-95.21	-9,224.82	2,617.80	2,784.72	2,562.49	222.23	12.531		
20,700.00	12,015.02	20,876.88	12,233.58	159.74	158.84	-95.22	-9,324.79	2,618.78	2,784.86	2,560.38	224.47	12.406		
20,800.00	12,016.59	20,976.88	12,235.53	161.34	160.44	-95.23	-9,424.77	2,619.76	2,785.00	2,558.28	226.72	12.284		
20,900.00	12,018.16	21,076.88	12,237.49	162.94	162.03	-95.23	-9,524.74	2,620.74	2,785.14	2,556.17	228.97	12.164		
21,000.00	12,019.73	21,176.88	12,239.44	164.53	163.63	-95.24	-9,624.72	2,621.72	2,785.28	2,554.06	231.22	12.046		
21,100.00	12,021.30	21,276.88	12,241.40	166.13	165.23	-95.25	-9,724.69	2,622.70	2,785.42	2,551.95	233.47	11.931		
21,200.00	12,022.87	21,376.88	12,243.35	167.73	166.82	-95.26	-9,824.67	2,623.68	2,785.55	2,549.84	235.72	11.817		
21,300.00	12,024.44	21,476.88	12,245.31	169.34	168.42	-95.26	-9,924.64	2,624.66	2,785.69	2,547.72	237.97	11.706		
21,400.00	12,026.01	21,576.87	12,247.26	170.94	170.02	-95.27	-10,024.62	2,625.63	2,785.83	2,545.61	240.22	11.597		
21,500.00	12,027.58	21,676.87	12,249.22	172.54	171.63	-95.28	-10,124.59	2,626.61	2,785.97	2,543.49	242.48	11.490		
21,600.00	12,029.15	21,776.87	12,251.17	174.15	173.23	-95.29	-10,224.57	2,627.59	2,786.11	2,541.38	244.73	11.384		
21,700.00	12,030.72	21,876.87	12,253.13	175.75	174.83	-95.29	-10,324.54	2,628.57	2,786.25	2,539.26	246.99	11.281		
21,800.00	12,032.29	21,976.87	12,255.08	177.36	176.44	-95.30	-10,424.52	2,629.55	2,786.39	2,537.14	249.25	11.179		
21,900.00	12,033.86	22,076.87	12,257.04	178.96	178.04	-95.31	-10,524.49	2,630.53	2,786.53	2,535.02	251.51	11.079		
22,000.00	12,035.43	22,176.87	12,258.99	180.57	179.65	-95.32	-10,624.47	2,631.51	2,786.67	2,532.90	253.77	10.981		
22,100.00	12,037.00	22,259.70	12,260.61	182.18	180.98	-95.32	-10,707.28	2,632.32	2,786.86	2,531.04	255.83	10.894		
22,200.00	12,038.57	22,259.70	12,260.61	183.79	180.98	-95.32	-10,707.28	2,632.32	2,789.41	2,532.72	256.68	10.867 SF		
22,300.00	12,040.14	22,259.70	12,260.61	185.40	180.98	-95.32	-10,707.28	2,632.32	2,795.54	2,538.32	257.22	10.868		
22,400.00	12,041.71	22,259.70	12,260.61	187.01	180.98	-95.32	-10,707.28	2,632.32	2,805.21	2,547.81	257.41	10.898		
22,500.00	12,043.28	22,259.70	12,260.61	188.62	180.98	-95.32	-10,707.28	2,632.32	2,818.41	2,561.13	257.28	10.955		
22,600.00	12,044.85	22,259.70	12,260.61	190.23	180.98	-95.32	-10,707.28	2,632.32	2,835.07	2,578.24	256.84	11.038		
22,700.00	12,046.42	22,259.70	12,260.61	191.85	180.98	-95.32	-10,707.28	2,632.32	2,855.15	2,599.05	256.10	11.149		
22,800.00	12,047.99	22,259.70	12,260.61	193.46	180.98	-95.32	-10,707.28	2,632.32	2,878.55	2,623.48	255.07	11.285		
22,900.00	12,049.56	22,259.70	12,260.61	195.07	180.98	-95.32	-10,707.28	2,632.32	2,905.22	2,651.44	253.78	11.448		
23,000.00	12,051.13	22,259.70	12,260.61	196.69	180.98	-95.32	-10,707.28	2,632.32	2,935.05	2,682.80	252.24	11.636		
23,100.00	12,052.70	22,259.70	12,260.61	198.30	180.98	-95.32	-10,707.28	2,632.32	2,967.95	2,717.46	250.49	11.849		
23,200.00	12,054.27	22,259.70	12,260.61	199.92	180.98	-95.32	-10,707.28	2,632.32	3,003.82	2,755.28	248.53	12.086		
23,300.00	12,055.84	22,259.70	12,260.61	201.54	180.98	-95.32	-10,707.28	2,632.32	3,042.55	2,796.15	246.41	12.348		
23,389.58	12,057.25	22,259.70	12,260.61	202.99	180.98	-95.32	-10,707.28	2,632.32	3,079.60	2,835.23	244.37	12.602		

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 Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3057.5' GE + 30' KB @ 3087.50usft

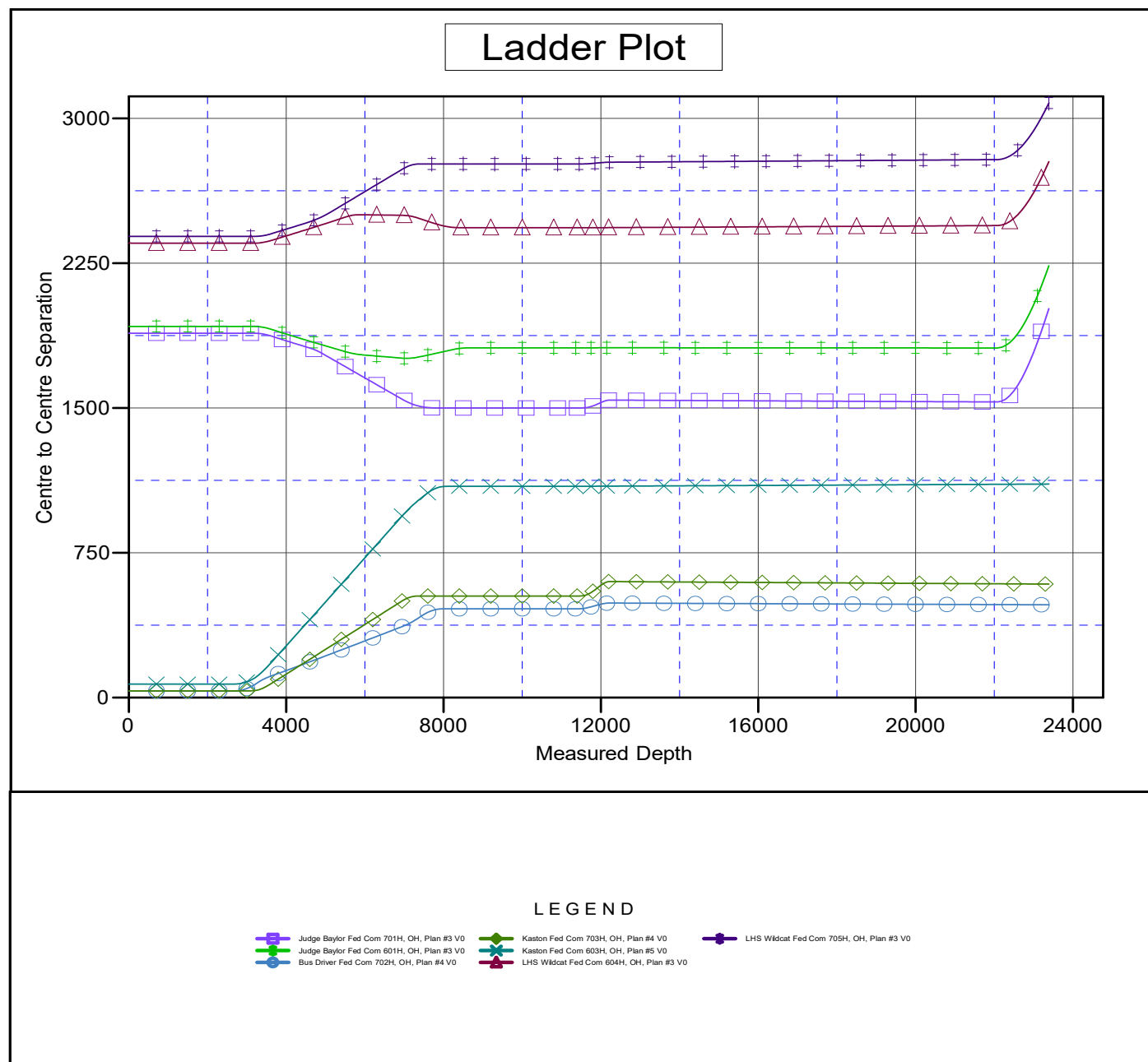
Coordinates are relative to: Bus Driver Fed Com 602H

Offset Depths are relative to Offset Datum

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

Central Meridian is -104.333334

Grid Convergence at Surface is: 0.54°



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



Total Directional Services

Anticollision Report

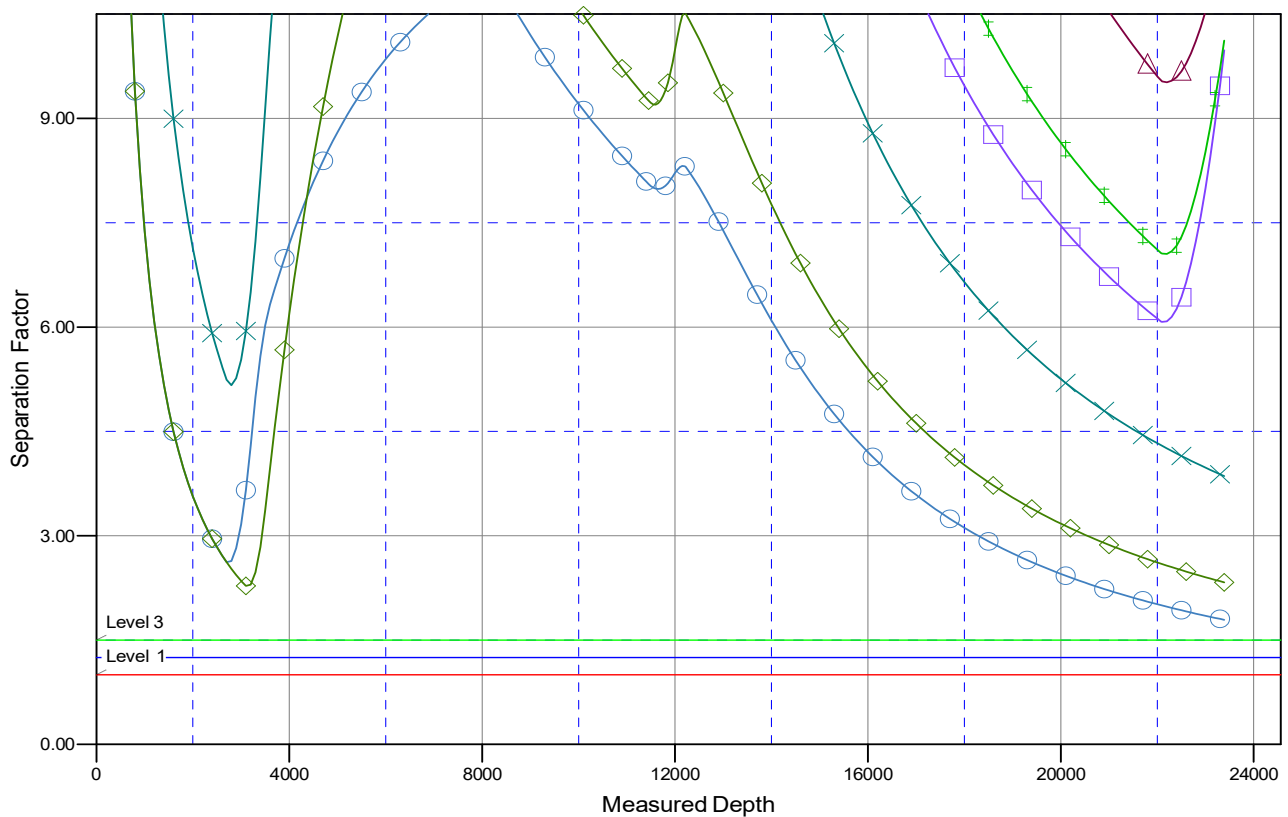


Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well Bus Driver Fed Com 602H
Project:	Lea County, NM (NAD83)	TVD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Reference Site:	Bus Driver/Kaston Fed Com	MD Reference:	3057.5' GE + 30' KB @ 3087.50usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Bus Driver Fed Com 602H	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 #4	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3057.5' GE + 30' KB @ 3087.50usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Bus Driver Fed Com 602H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.54°

Separation Factor Plot



LEGEND

Judge Baylor Fed Com 701H, OH, Plan #3 V0	Kaston Fed Com 703H, OH, Plan #4 V0	LHS Wildcat Fed Com 705H, OH, Plan #3 V0
Judge Baylor Fed Com 601H, OH, Plan #3 V0	Kaston Fed Com 603H, OH, Plan #5 V0	
Bus Driver Fed Com 702H, OH, Plan #4 V0	LHS Wildcat Fed Com 604H, OH, Plan #3 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	Bus Driver Fed Com 602H
Operator	Franklin Mountain Energy, LLC
Project Area	PF Unit
Well Type	11,000' Third Bone Spring Lateral
API	
Permit Number	
Rig	

State	NM	County	Lea						
SHL	Township	25S/35E	Section	36	2,410'	FEL	312'	FSL	
BHL	Township	26S/35E	Section	13	2,160'	FWL	1,170'	FNL	
Surface Latitude	NAD 83	32.080431							
Surface Longitude	NAD 83	103.322008							
Bottom Hole Latitude	NAD 83	32.047325							
Bottom Hole Longitude	NAD 83	103.322795							
Ground Level	3,057'	Rig KB	30'	KB	3,087'				

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,057'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,263'	824'			Carbonates
Salado	1,743'	1,344'			Salt, Carbonate & Clastics
Base Salt	498'	2,589'			Shaley Carbonate & Shale
Lamar	-1,995'	5,082'			Carbonate & Clastics
Bell Canyon	-2,032'	5,119'			Sandstone - oil/gas/water
Cherry Canyon	-2,879'	5,966'			Sandstone - oil/gas/water
Brushy Canyon	-4,271'	7,358'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,640'	8,727'			Shale/Carbonates - oil/gas
Avalon	-5,664'	8,751'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,766'	9,853'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,905'	9,992'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,290'	10,377'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,990'	11,077'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,661'	11,748'			Sandstone - oil/gas/water
HZ Target at SHL	-8,790'	11,877'			Overpressure shale/sand- Oil/Gas
Wolfcamp	-8,903'	11,990'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,964'	12,051'			Overpressure Shale - Oil/Gas
Wolfcamp B	-9,184'	12,271'			Overpressure Shale - Oil/Gas

Target interval is expected to have an average apparent dip of ~0.9 degrees down along the lateral based on the Wolfcamp A structure

Target window tolerance is set at +/- 10'

Target Line: 11868' KBTVD @ 0' VS w/ 89.1° inc.

Offset Log: Talco Unit 001 (30025267470000)

Updated 4/19/21

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:		10' samples in vertical and 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					



U. S. Steel Tubular Products

7/14/2020 11:41:19 AM

5.500" 23.00lbs/ft (0.415" Wall) P110 USS-EAGLE SFH®



MECHANICAL PROPERTIES	Pipe	USS-EAGLE SFH™	
Minimum Yield Strength	110,000	--	psi
Maximum Yield Strength	140,000	--	psi
Minimum Tensile Strength	125,000	--	psi
DIMENSIONS	Pipe	USS-EAGLE SFH™	
Outside Diameter	5.500	5.830	in.
Wall Thickness	0.415	--	in.
Inside Diameter	4.670	4.585	in.
Standard Drift	4.545	4.545	in.
Alternate Drift	--	4.545	in.
Nominal Linear Weight, T&C	23.00	--	lbs/ft
Plain End Weight	22.56	--	lbs/ft
SECTION AREA	Pipe	USS-EAGLE SFH™	
Critical Area	6.630	5.507	sq. in.
Joint Efficiency	--	83.1	%
PERFORMANCE	Pipe	USS-EAGLE SFH™	
Minimum Collapse Pressure	14,540	14,540	psi
External Pressure Leak Resistance	--	9,130	psi
Minimum Internal Yield Pressure	14,520	14,520	psi
Minimum Pipe Body Yield Strength	729,000	--	lbs
Joint Strength	--	606,000	lbs
Compression Rating	--	606,000	lbs
Reference Length	--	17,900	ft
Maximum Uniaxial Bend Rating	--	76.2	deg/100 ft
MAKE-UP DATA	Pipe	USS-EAGLE SFH™	
Make-Up Loss	--	6.65	in.
Minimum Make-Up Torque	--	16,600	ft-lbs
Maximum Make-Up Torque	--	19,800	ft-lbs
Maximum Operating Torque	--	28,000	ft-lbs

Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

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 28421

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 28421
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	8/25/2021