

Well Name: LHS WILDCAT FED COM	Well Location: T25S / R35E / SEC 36 / SESE / 32.08026 / -103.314298	County or Parish/State: LEA / NM
Well Number: 705H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM117126	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254810700X1	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: 02:35
Date proposed operation will begin: 05/20/2021	

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_LHS_705_updated_dir_23_lbs_Eagle_new_production_cmt_20210515143527.pdf
- LHS_Wildcat_Fed_Com_705H_GEOPROG_prelim_20210511164815.pdf
- Franklin_Mountain___LHS_Wildcat_Fed_Com_705H___Plan_4_20210511164810.pdf
- Data_Sheet_5.500_inch_23.00___P110_USS_EAGLE_SFH___USS_20210212151937_20210225100727_20210511164754.pdf

Well Name: LHS WILDCAT FED COM	Well Location: T25S / R35E / SEC 36 / SESE / 32.08026 / -103.314298	County or Parish/State: LEA / NM
Well Number: 705H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM117126	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254810700X1	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 02:35 PM
Name: FRANKLIN MOUNTAIN ENERGY LLC	
Title: Director – Operations Planning and Regulatory	
Street Address: 2401 E 2nd Avenue, Suite 300	
City: Denver	State: 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	



LHS Wildcat Fed Com 705H

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)	3,032'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,165'	897'			Carbonates
Salado	1,656'	1,406'			Salt, Carbonate & Clastics
Base Salt	474'	2,588'			Shaley Carbonate & Shale
Capitan Reef	-1,197'	4,259'			Carbonates
Lamar	-2,023'	5,085'			Carbonate & Clastics
Bell Canyon	-2,064'	5,126'			Sandstone - oil/gas/water
Cherry Canyon	-2,869'	5,931'			Sandstone - oil/gas/water
Brushy Canyon	-4,242'	7,304'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,225'	8,287'			Shale/Carbonates - oil/gas
Avalon	-5,574'	8,636'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,676'	9,738'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,815'	9,877'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,200'	10,262'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,900'	10,962'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,571'	11,633'			Sandstone - oil/gas/water
Wolfcamp	-8,813'	11,875'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,874'	11,936'			Overpressure Shale - Oil/Gas
HZ Target	-9,000'	12,062'			Overpressure Shale - Oil/Gas
Wolfcamp B	-9,094'	12,156'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,126'	Oil
Bone Spring	9,738'	Oil
Wolfcamp	11,875'	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	11900	1.12	1.28	1.82	1.24
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	22253 12260	1.32	1.39	1.19	0.99 1.59

7 5/8" casing will be set at 11,900' MD/11,859' TVD at 40° Inc. Stress calculations on 5 1/2" casing performed assuming 22,253' depth. Actual max vertical depth is 12,260'.



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	11900	237	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	10900	50%
Prod	6.75	5.5	22253	847	Tail, 14.5 ppg, Gas Migration Control	1.34	6.24	10900						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' – 11,900'	Brine	8.8-10.2	28-34	N/c
11,900' – 22,253' 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 12,260' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,650 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.

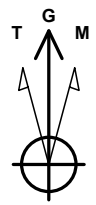
14. Additional variance requests**A. Casing.**

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: LHS Wildcat Fed Com
Well: LHS Wildcat Fed Com 705H
Wellbore: OH
Design: Plan #4



Azimuths to Grid North
True North: -0.54°
Magnetic North: 5.99°

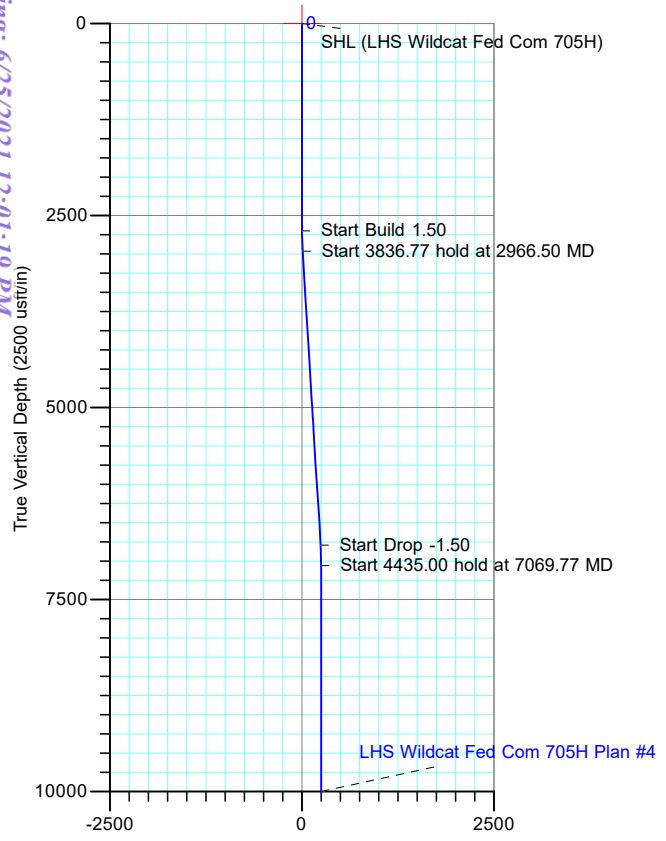
Magnetic Field
Strength: 47605.5nT
Dip Angle: 59.93°
Date: 2/25/2020
Model: IGRF2015

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

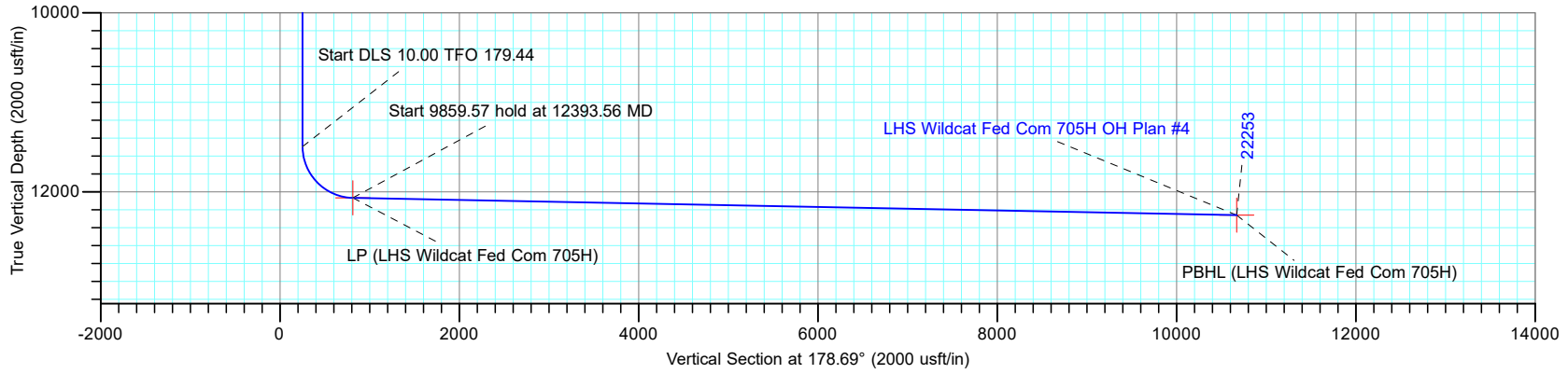
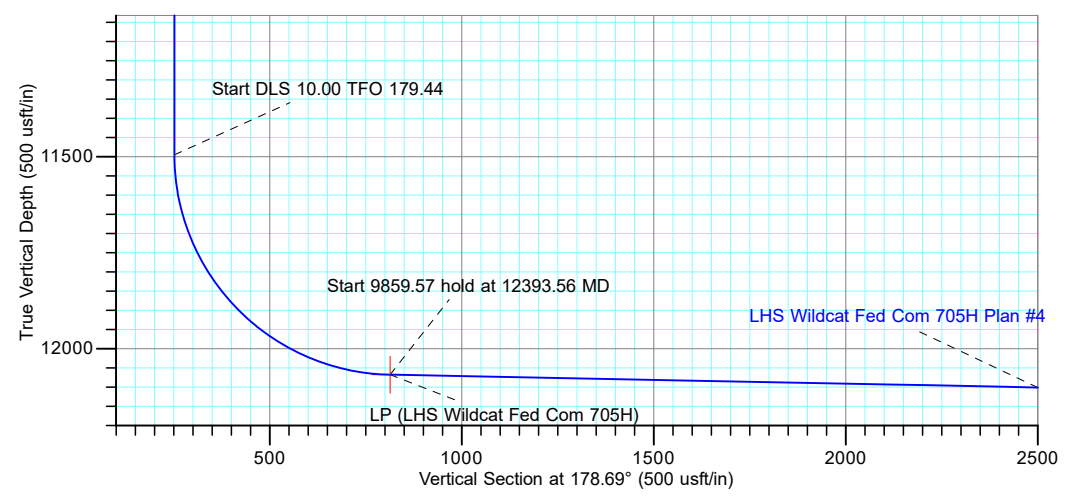


3031.9' GE + 21' KB @ 3052.90usft



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		
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50	
2966.50	4.00	150.38	2966.28	-8.08	4.59	1.50	150.38	8.18	Start 3836.77 hold at 2966.50 MD	
6803.27	4.00	150.38	6793.72	-240.59	136.80	0.00	0.00	243.65	Start Drop -1.50	
7069.77	0.00	0.00	7060.00	-248.67	141.39	1.50	180.00	251.83	Start 4435.00 hold at 7069.77 MD	
11504.77	0.00	0.00	11495.00	-248.67	141.39	0.00	0.00	251.83	Start DLS 10.00 TFO 179.44	
12393.56	88.88	179.44	12067.85	-810.40	146.89	10.00	179.44	813.54	Start 9859.57 hold at 12393.56 MD	
22253.13	88.88	179.44	12260.61	-10667.61	243.43	0.00	0.00	10670.39	TD at 22253.13	

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP (LHS Wildcat Fed Com 705H)	12067.85	-810.40	146.89	32.078028	-103.313848
PBHL (LHS Wildcat Fed Com 705H)	12260.61	-10667.61	243.43	32.050933	-103.313837
SHL (LHS Wildcat Fed Com 705H)	0.00	0.00	0.00	32.080260	-103.314297



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

Plan: Plan #4 (LHS Wildcat Fed Com 705H/OH)
LHS Wildcat Fed Com
Created By: Dustin Ault Date: 10:50, April 21 2021
Date: _____
Approved: _____ Date: _____

Franklin Mountain Energy

Project: Lea County, NM (NAD83)
Site: LHS Wildcat Fed Com
Well: LHS Wildcat Fed Com 705H
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



Azimuths to Grid North
True North: -0.54°
Magnetic North: 5.99°

Magnetic Field
Strength: 47605.5nT
Dip Angle: 59.93°
Date: 2/25/2020
Model: IGRF2015

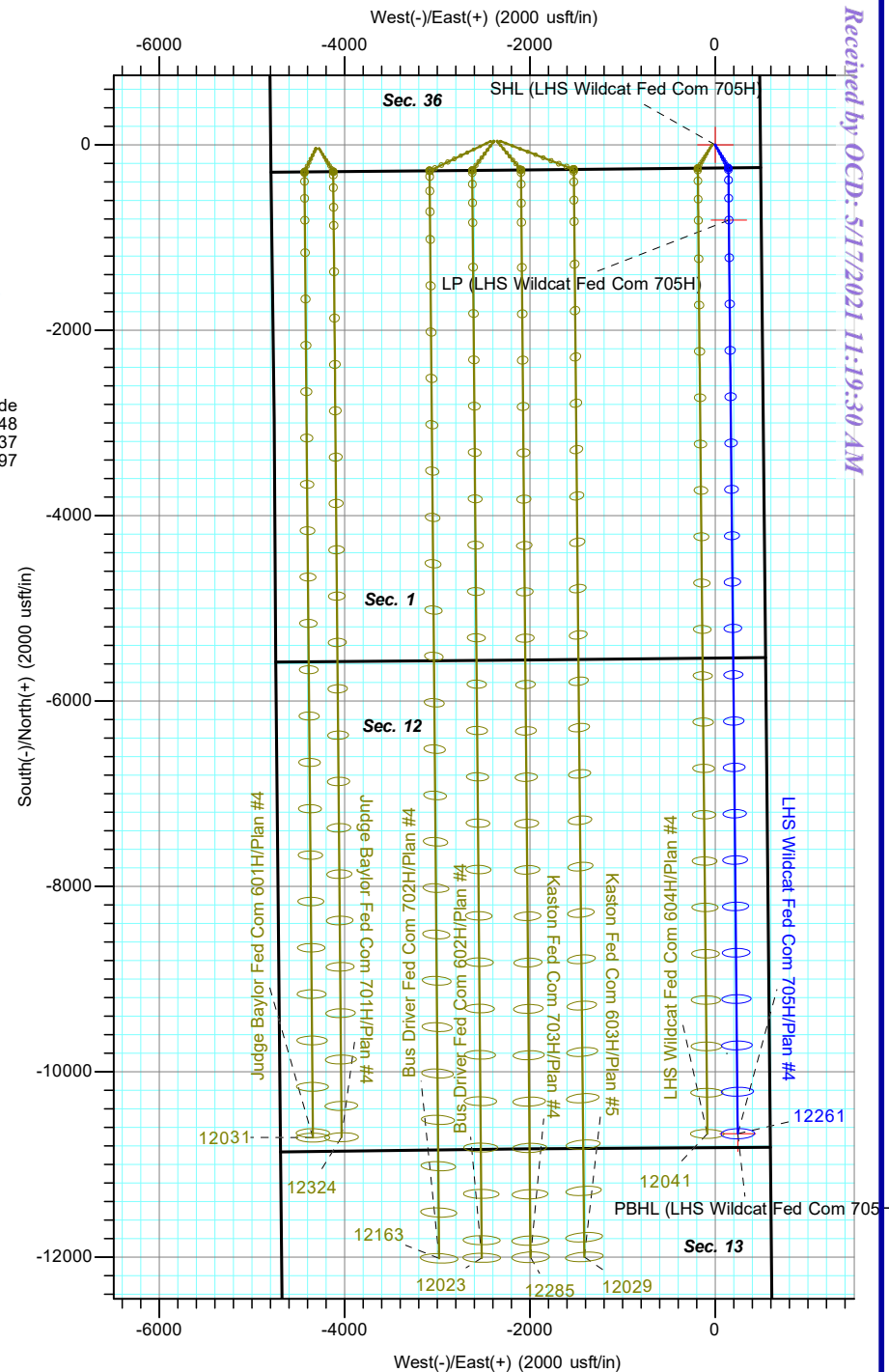
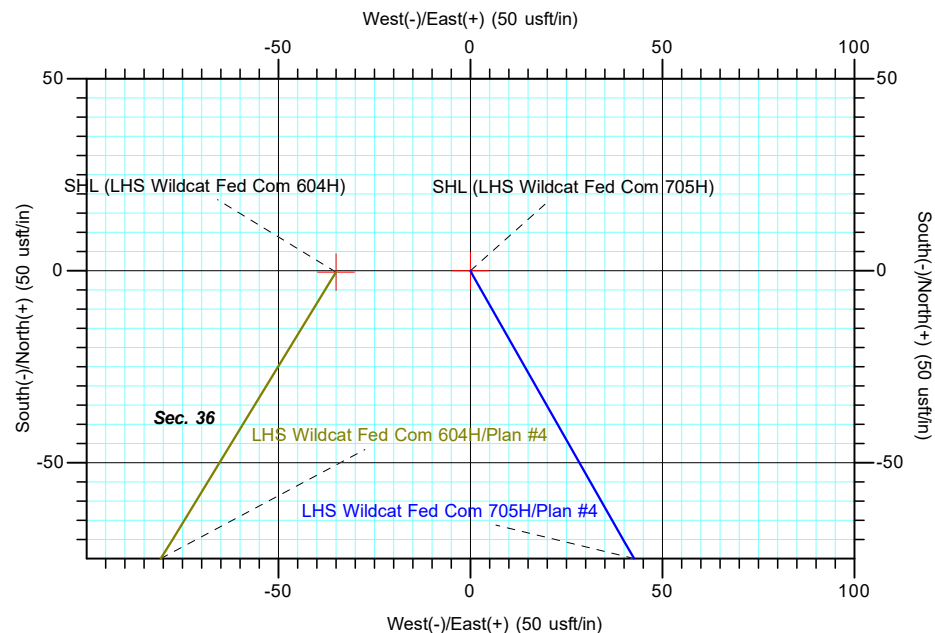


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP (LHS Wildcat Fed Com 705H)	12067.85	-810.40	146.89	393616.01	857105.17	32.078028	-103.313848
PBHL (LHS Wildcat Fed Com 705H)	12260.61	-10667.61	243.43	383758.80	857201.71	32.050933	-103.313837
SHL (LHS Wildcat Fed Com 705H)	0.00	0.00	0.00	394426.41	856958.28	32.080260	-103.314297

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	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
2966.50	4.00	150.38	2966.28	-8.08	4.59	1.50	150.38	8.18	Start 3836.77 hold at 2966.50 MD
6803.27	4.00	150.38	6793.72	-240.59	136.80	0.00	0.00	243.65	Start Drop -1.50
7069.77	0.00	0.00	7060.00	-248.67	141.39	1.50	180.00	251.83	Start 4435.00 hold at 7069.77 MD
11504.77	0.00	0.00	11495.00	-248.67	141.39	0.00	0.00	251.83	Start DLS 10.00 TFO 179.44
12393.56	88.88	179.44	12067.85	-810.40	146.89	10.00	179.44	813.54	Start 9859.57 hold at 12393.56 MD
22253.13	88.88	179.44	12260.61	-10667.61	243.43	0.00	0.00	10670.39	TD at 22253.13



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

Plan: Plan #4 (LHS Wildcat Fed Com 705H/OH)
LHS Wildcat Fed Com
Created By: Dustin Ault Date: 10:51, April 21 2021
Date: _____
Approved: _____ Date: _____



Franklin Mountain Energy

Lea County, NM (NAD83)

LHS Wildcat Fed Com

LHS Wildcat Fed Com 705H

OH

Plan: Plan #4

Standard Planning Report

21 April, 2021





Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	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		LHS Wildcat Fed Com			
Site Position: From:	Map	Northing:	394,426.10 usft	Latitude:	32.080260
		Easting:	856,923.28 usft	Longitude:	-103.314411
		Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "

Well	LHS Wildcat Fed Com 705H					
Well Position	+N/-S	0.31 usft	Northing:	394,426.41 usft	Latitude:	32.080260
	+E/-W	35.00 usft	Easting:	856,958.28 usft	Longitude:	-103.314298
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,031.90 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/25/2020	6.53	59.93	47,605.53336058

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	178.69

Plan Survey Tool Program	Date	4/21/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,252.59 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	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,966.50	4.00	150.38	2,966.28	-8.08	4.59	1.50	1.50	0.00	150.38	
6,803.27	4.00	150.38	6,793.72	-240.59	136.80	0.00	0.00	0.00	0.00	
7,069.77	0.00	0.00	7,060.00	-248.67	141.39	1.50	-1.50	0.00	180.00	
11,504.77	0.00	0.00	11,495.00	-248.67	141.39	0.00	0.00	0.00	0.00	
12,393.56	88.88	179.44	12,067.85	-810.40	146.89	10.00	10.00	20.19	179.44	
22,253.13	88.88	179.44	12,260.61	-10,667.61	243.43	0.00	0.00	0.00	0.00	PBHL (LHS Wildcat F



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	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 (LHS Wildcat Fed Com 705H)									
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
Start Build 1.50									
2,800.00	1.50	150.38	2,799.99	-1.14	0.65	1.15	1.50	1.50	0.00
2,900.00	3.00	150.38	2,899.91	-4.55	2.59	4.61	1.50	1.50	0.00
2,966.50	4.00	150.38	2,966.28	-8.08	4.59	8.18	1.50	1.50	0.00
Start 3836.77 hold at 2966.50 MD									
3,000.00	4.00	150.38	2,999.70	-10.11	5.75	10.24	0.00	0.00	0.00
3,100.00	4.00	150.38	3,099.46	-16.17	9.19	16.37	0.00	0.00	0.00
3,200.00	4.00	150.38	3,199.22	-22.23	12.64	22.51	0.00	0.00	0.00
3,300.00	4.00	150.38	3,298.97	-28.29	16.08	28.65	0.00	0.00	0.00
3,400.00	4.00	150.38	3,398.73	-34.35	19.53	34.79	0.00	0.00	0.00
3,500.00	4.00	150.38	3,498.49	-40.41	22.98	40.92	0.00	0.00	0.00
3,600.00	4.00	150.38	3,598.24	-46.47	26.42	47.06	0.00	0.00	0.00
3,700.00	4.00	150.38	3,698.00	-52.53	29.87	53.20	0.00	0.00	0.00
3,800.00	4.00	150.38	3,797.76	-58.59	33.31	59.33	0.00	0.00	0.00
3,900.00	4.00	150.38	3,897.51	-64.65	36.76	65.47	0.00	0.00	0.00
4,000.00	4.00	150.38	3,997.27	-70.71	40.20	71.61	0.00	0.00	0.00
4,100.00	4.00	150.38	4,097.03	-76.77	43.65	77.75	0.00	0.00	0.00
4,200.00	4.00	150.38	4,196.78	-82.83	47.10	83.88	0.00	0.00	0.00
4,300.00	4.00	150.38	4,296.54	-88.89	50.54	90.02	0.00	0.00	0.00
4,400.00	4.00	150.38	4,396.30	-94.95	53.99	96.16	0.00	0.00	0.00
4,500.00	4.00	150.38	4,496.05	-101.01	57.43	102.29	0.00	0.00	0.00
4,600.00	4.00	150.38	4,595.81	-107.07	60.88	108.43	0.00	0.00	0.00
4,700.00	4.00	150.38	4,695.57	-113.13	64.32	114.57	0.00	0.00	0.00
4,800.00	4.00	150.38	4,795.32	-119.19	67.77	120.71	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	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)
4,900.00	4.00	150.38	4,895.08	-125.25	71.22	126.84	0.00	0.00	0.00
5,000.00	4.00	150.38	4,994.84	-131.31	74.66	132.98	0.00	0.00	0.00
5,100.00	4.00	150.38	5,094.59	-137.37	78.11	139.12	0.00	0.00	0.00
5,200.00	4.00	150.38	5,194.35	-143.43	81.55	145.25	0.00	0.00	0.00
5,300.00	4.00	150.38	5,294.11	-149.49	85.00	151.39	0.00	0.00	0.00
5,400.00	4.00	150.38	5,393.86	-155.55	88.44	157.53	0.00	0.00	0.00
5,500.00	4.00	150.38	5,493.62	-161.61	91.89	163.67	0.00	0.00	0.00
5,600.00	4.00	150.38	5,593.38	-167.67	95.34	169.80	0.00	0.00	0.00
5,700.00	4.00	150.38	5,693.13	-173.73	98.78	175.94	0.00	0.00	0.00
5,800.00	4.00	150.38	5,792.89	-179.79	102.23	182.08	0.00	0.00	0.00
5,900.00	4.00	150.38	5,892.65	-185.85	105.67	188.21	0.00	0.00	0.00
6,000.00	4.00	150.38	5,992.40	-191.91	109.12	194.35	0.00	0.00	0.00
6,100.00	4.00	150.38	6,092.16	-197.97	112.56	200.49	0.00	0.00	0.00
6,200.00	4.00	150.38	6,191.92	-204.03	116.01	206.63	0.00	0.00	0.00
6,300.00	4.00	150.38	6,291.67	-210.09	119.46	212.76	0.00	0.00	0.00
6,400.00	4.00	150.38	6,391.43	-216.15	122.90	218.90	0.00	0.00	0.00
6,500.00	4.00	150.38	6,491.19	-222.21	126.35	225.04	0.00	0.00	0.00
6,600.00	4.00	150.38	6,590.94	-228.27	129.79	231.17	0.00	0.00	0.00
6,700.00	4.00	150.38	6,690.70	-234.33	133.24	237.31	0.00	0.00	0.00
6,803.27	4.00	150.38	6,793.72	-240.59	136.80	243.65	0.00	0.00	0.00
Start Drop -1.50									
6,900.00	2.55	150.38	6,890.29	-245.39	139.53	248.51	1.50	-1.50	0.00
7,000.00	1.05	150.38	6,990.24	-248.12	141.08	251.27	1.50	-1.50	0.00
7,069.77	0.00	0.00	7,060.00	-248.67	141.39	251.83	1.50	-1.50	0.00
Start 4435.00 hold at 7069.77 MD									
7,100.00	0.00	0.00	7,090.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,200.00	0.00	0.00	7,190.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,300.00	0.00	0.00	7,290.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,400.00	0.00	0.00	7,390.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,500.00	0.00	0.00	7,490.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,600.00	0.00	0.00	7,590.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,700.00	0.00	0.00	7,690.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,800.00	0.00	0.00	7,790.23	-248.67	141.39	251.83	0.00	0.00	0.00
7,900.00	0.00	0.00	7,890.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,000.00	0.00	0.00	7,990.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,100.00	0.00	0.00	8,090.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,200.00	0.00	0.00	8,190.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,300.00	0.00	0.00	8,290.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,400.00	0.00	0.00	8,390.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,500.00	0.00	0.00	8,490.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,600.00	0.00	0.00	8,590.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,700.00	0.00	0.00	8,690.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,800.00	0.00	0.00	8,790.23	-248.67	141.39	251.83	0.00	0.00	0.00
8,900.00	0.00	0.00	8,890.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,000.00	0.00	0.00	8,990.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,100.00	0.00	0.00	9,090.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,200.00	0.00	0.00	9,190.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,300.00	0.00	0.00	9,290.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,400.00	0.00	0.00	9,390.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,500.00	0.00	0.00	9,490.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,600.00	0.00	0.00	9,590.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,700.00	0.00	0.00	9,690.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,800.00	0.00	0.00	9,790.23	-248.67	141.39	251.83	0.00	0.00	0.00
9,900.00	0.00	0.00	9,890.23	-248.67	141.39	251.83	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	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	9,990.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,100.00	0.00	0.00	10,090.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,200.00	0.00	0.00	10,190.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,300.00	0.00	0.00	10,290.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,400.00	0.00	0.00	10,390.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,500.00	0.00	0.00	10,490.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,600.00	0.00	0.00	10,590.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,700.00	0.00	0.00	10,690.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,800.00	0.00	0.00	10,790.23	-248.67	141.39	251.83	0.00	0.00	0.00
10,900.00	0.00	0.00	10,890.23	-248.67	141.39	251.83	0.00	0.00	0.00
11,000.00	0.00	0.00	10,990.23	-248.67	141.39	251.83	0.00	0.00	0.00
11,100.00	0.00	0.00	11,090.23	-248.67	141.39	251.83	0.00	0.00	0.00
11,200.00	0.00	0.00	11,190.23	-248.67	141.39	251.83	0.00	0.00	0.00
11,300.00	0.00	0.00	11,290.23	-248.67	141.39	251.83	0.00	0.00	0.00
11,400.00	0.00	0.00	11,390.23	-248.67	141.39	251.83	0.00	0.00	0.00
11,504.77	0.00	0.00	11,495.00	-248.67	141.39	251.83	0.00	0.00	0.00
Start DLS 10.00 TFO 179.44									
11,550.00	4.52	179.44	11,540.19	-250.45	141.41	253.62	10.00	10.00	0.00
11,600.00	9.52	179.44	11,589.80	-256.57	141.47	259.73	10.00	10.00	0.00
11,650.00	14.52	179.44	11,638.68	-266.98	141.57	270.14	10.00	10.00	0.00
11,700.00	19.52	179.44	11,686.48	-281.61	141.71	284.77	10.00	10.00	0.00
11,750.00	24.52	179.44	11,732.81	-300.35	141.90	303.51	10.00	10.00	0.00
11,800.00	29.52	179.44	11,777.34	-323.06	142.12	326.22	10.00	10.00	0.00
11,850.00	34.52	179.44	11,819.72	-349.57	142.38	352.72	10.00	10.00	0.00
11,900.00	39.52	179.44	11,859.63	-379.66	142.67	382.82	10.00	10.00	0.00
11,950.00	44.52	179.44	11,896.76	-413.12	143.00	416.28	10.00	10.00	0.00
12,000.00	49.52	179.44	11,930.83	-449.69	143.36	452.84	10.00	10.00	0.00
12,050.00	54.52	179.44	11,961.59	-489.09	143.74	492.24	10.00	10.00	0.00
12,100.00	59.52	179.44	11,988.80	-531.02	144.16	534.17	10.00	10.00	0.00
12,150.00	64.52	179.44	12,012.24	-575.16	144.59	578.31	10.00	10.00	0.00
12,200.00	69.52	179.44	12,031.76	-621.17	145.04	624.32	10.00	10.00	0.00
12,250.00	74.52	179.44	12,047.18	-668.72	145.50	671.86	10.00	10.00	0.00
12,300.00	79.52	179.44	12,058.41	-717.42	145.98	720.57	10.00	10.00	0.00
12,350.00	84.52	179.44	12,065.34	-766.92	146.47	770.06	10.00	10.00	0.00
12,393.57	88.88	179.44	12,067.85	-810.40	146.89	813.54	10.00	10.00	0.00
Start 9859.57 hold at 12393.56 MD - LP (LHS Wildcat Fed Com 705H)									
12,400.00	88.88	179.44	12,067.97	-816.83	146.95	819.97	0.00	0.00	0.00
12,500.00	88.88	179.44	12,069.93	-916.81	147.93	919.95	0.00	0.00	0.00
12,600.00	88.88	179.44	12,071.88	-1,016.79	148.91	1,019.92	0.00	0.00	0.00
12,700.00	88.88	179.44	12,073.84	-1,116.76	149.89	1,119.89	0.00	0.00	0.00
12,800.00	88.88	179.44	12,075.79	-1,216.74	150.87	1,219.86	0.00	0.00	0.00
12,900.00	88.88	179.44	12,077.75	-1,316.71	151.85	1,319.84	0.00	0.00	0.00
13,000.00	88.88	179.44	12,079.70	-1,416.69	152.83	1,419.81	0.00	0.00	0.00
13,100.00	88.88	179.44	12,081.66	-1,516.67	153.81	1,519.78	0.00	0.00	0.00
13,200.00	88.88	179.44	12,083.61	-1,616.64	154.79	1,619.75	0.00	0.00	0.00
13,300.00	88.88	179.44	12,085.57	-1,716.62	155.77	1,719.73	0.00	0.00	0.00
13,400.00	88.88	179.44	12,087.53	-1,816.59	156.75	1,819.70	0.00	0.00	0.00
13,500.00	88.88	179.44	12,089.48	-1,916.57	157.72	1,919.67	0.00	0.00	0.00
13,600.00	88.88	179.44	12,091.44	-2,016.55	158.70	2,019.64	0.00	0.00	0.00
13,700.00	88.88	179.44	12,093.39	-2,116.52	159.68	2,119.61	0.00	0.00	0.00
13,800.00	88.88	179.44	12,095.35	-2,216.50	160.66	2,219.59	0.00	0.00	0.00
13,900.00	88.88	179.44	12,097.30	-2,316.47	161.64	2,319.56	0.00	0.00	0.00
14,000.00	88.88	179.44	12,099.26	-2,416.45	162.62	2,419.53	0.00	0.00	0.00
14,100.00	88.88	179.44	12,101.21	-2,516.43	163.60	2,519.50	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	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)
14,200.00	88.88	179.44	12,103.17	-2,616.40	164.58	2,619.48	0.00	0.00	0.00
14,300.00	88.88	179.44	12,105.12	-2,716.38	165.56	2,719.45	0.00	0.00	0.00
14,400.00	88.88	179.44	12,107.08	-2,816.36	166.54	2,819.42	0.00	0.00	0.00
14,500.00	88.88	179.44	12,109.03	-2,916.33	167.52	2,919.39	0.00	0.00	0.00
14,600.00	88.88	179.44	12,110.99	-3,016.31	168.50	3,019.37	0.00	0.00	0.00
14,700.00	88.88	179.44	12,112.94	-3,116.28	169.47	3,119.34	0.00	0.00	0.00
14,800.00	88.88	179.44	12,114.90	-3,216.26	170.45	3,219.31	0.00	0.00	0.00
14,900.00	88.88	179.44	12,116.85	-3,316.24	171.43	3,319.28	0.00	0.00	0.00
15,000.00	88.88	179.44	12,118.81	-3,416.21	172.41	3,419.26	0.00	0.00	0.00
15,100.00	88.88	179.44	12,120.76	-3,516.19	173.39	3,519.23	0.00	0.00	0.00
15,200.00	88.88	179.44	12,122.72	-3,616.16	174.37	3,619.20	0.00	0.00	0.00
15,300.00	88.88	179.44	12,124.67	-3,716.14	175.35	3,719.17	0.00	0.00	0.00
15,400.00	88.88	179.44	12,126.63	-3,816.12	176.33	3,819.15	0.00	0.00	0.00
15,500.00	88.88	179.44	12,128.58	-3,916.09	177.31	3,919.12	0.00	0.00	0.00
15,600.00	88.88	179.44	12,130.54	-4,016.07	178.29	4,019.09	0.00	0.00	0.00
15,700.00	88.88	179.44	12,132.49	-4,116.04	179.27	4,119.06	0.00	0.00	0.00
15,800.00	88.88	179.44	12,134.45	-4,216.02	180.25	4,219.04	0.00	0.00	0.00
15,900.00	88.88	179.44	12,136.40	-4,316.00	181.22	4,319.01	0.00	0.00	0.00
16,000.00	88.88	179.44	12,138.36	-4,415.97	182.20	4,418.98	0.00	0.00	0.00
16,100.00	88.88	179.44	12,140.31	-4,515.95	183.18	4,518.95	0.00	0.00	0.00
16,200.00	88.88	179.44	12,142.27	-4,615.92	184.16	4,618.93	0.00	0.00	0.00
16,300.00	88.88	179.44	12,144.22	-4,715.90	185.14	4,718.90	0.00	0.00	0.00
16,400.00	88.88	179.44	12,146.18	-4,815.88	186.12	4,818.87	0.00	0.00	0.00
16,500.00	88.88	179.44	12,148.13	-4,915.85	187.10	4,918.84	0.00	0.00	0.00
16,600.00	88.88	179.44	12,150.09	-5,015.83	188.08	5,018.81	0.00	0.00	0.00
16,700.00	88.88	179.44	12,152.04	-5,115.81	189.06	5,118.79	0.00	0.00	0.00
16,800.00	88.88	179.44	12,154.00	-5,215.78	190.04	5,218.76	0.00	0.00	0.00
16,900.00	88.88	179.44	12,155.95	-5,315.76	191.02	5,318.73	0.00	0.00	0.00
17,000.00	88.88	179.44	12,157.91	-5,415.73	191.99	5,418.70	0.00	0.00	0.00
17,100.00	88.88	179.44	12,159.86	-5,515.71	192.97	5,518.68	0.00	0.00	0.00
17,200.00	88.88	179.44	12,161.82	-5,615.69	193.95	5,618.65	0.00	0.00	0.00
17,300.00	88.88	179.44	12,163.77	-5,715.66	194.93	5,718.62	0.00	0.00	0.00
17,400.00	88.88	179.44	12,165.73	-5,815.64	195.91	5,818.59	0.00	0.00	0.00
17,500.00	88.88	179.44	12,167.68	-5,915.61	196.89	5,918.57	0.00	0.00	0.00
17,600.00	88.88	179.44	12,169.64	-6,015.59	197.87	6,018.54	0.00	0.00	0.00
17,700.00	88.88	179.44	12,171.59	-6,115.57	198.85	6,118.51	0.00	0.00	0.00
17,800.00	88.88	179.44	12,173.55	-6,215.54	199.83	6,218.48	0.00	0.00	0.00
17,900.00	88.88	179.44	12,175.50	-6,315.52	200.81	6,318.46	0.00	0.00	0.00
18,000.00	88.88	179.44	12,177.46	-6,415.49	201.79	6,418.43	0.00	0.00	0.00
18,100.00	88.88	179.44	12,179.41	-6,515.47	202.77	6,518.40	0.00	0.00	0.00
18,200.00	88.88	179.44	12,181.37	-6,615.45	203.74	6,618.37	0.00	0.00	0.00
18,300.00	88.88	179.44	12,183.32	-6,715.42	204.72	6,718.35	0.00	0.00	0.00
18,400.00	88.88	179.44	12,185.28	-6,815.40	205.70	6,818.32	0.00	0.00	0.00
18,500.00	88.88	179.44	12,187.23	-6,915.38	206.68	6,918.29	0.00	0.00	0.00
18,600.00	88.88	179.44	12,189.19	-7,015.35	207.66	7,018.26	0.00	0.00	0.00
18,700.00	88.88	179.44	12,191.14	-7,115.33	208.64	7,118.24	0.00	0.00	0.00
18,800.00	88.88	179.44	12,193.10	-7,215.30	209.62	7,218.21	0.00	0.00	0.00
18,900.00	88.88	179.44	12,195.05	-7,315.28	210.60	7,318.18	0.00	0.00	0.00
19,000.00	88.88	179.44	12,197.01	-7,415.26	211.58	7,418.15	0.00	0.00	0.00
19,100.00	88.88	179.44	12,198.96	-7,515.23	212.56	7,518.12	0.00	0.00	0.00
19,200.00	88.88	179.44	12,200.92	-7,615.21	213.54	7,618.10	0.00	0.00	0.00
19,300.00	88.88	179.44	12,202.87	-7,715.18	214.51	7,718.07	0.00	0.00	0.00
19,400.00	88.88	179.44	12,204.83	-7,815.16	215.49	7,818.04	0.00	0.00	0.00
19,500.00	88.88	179.44	12,206.78	-7,915.14	216.47	7,918.01	0.00	0.00	0.00



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	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)
19,600.00	88.88	179.44	12,208.74	-8,015.11	217.45	8,017.99	0.00	0.00	0.00
19,700.00	88.88	179.44	12,210.69	-8,115.09	218.43	8,117.96	0.00	0.00	0.00
19,800.00	88.88	179.44	12,212.65	-8,215.06	219.41	8,217.93	0.00	0.00	0.00
19,900.00	88.88	179.44	12,214.60	-8,315.04	220.39	8,317.90	0.00	0.00	0.00
20,000.00	88.88	179.44	12,216.56	-8,415.02	221.37	8,417.88	0.00	0.00	0.00
20,100.00	88.88	179.44	12,218.51	-8,514.99	222.35	8,517.85	0.00	0.00	0.00
20,200.00	88.88	179.44	12,220.47	-8,614.97	223.33	8,617.82	0.00	0.00	0.00
20,300.00	88.88	179.44	12,222.43	-8,714.94	224.31	8,717.79	0.00	0.00	0.00
20,400.00	88.88	179.44	12,224.38	-8,814.92	225.29	8,817.77	0.00	0.00	0.00
20,500.00	88.88	179.44	12,226.34	-8,914.90	226.26	8,917.74	0.00	0.00	0.00
20,600.00	88.88	179.44	12,228.29	-9,014.87	227.24	9,017.71	0.00	0.00	0.00
20,700.00	88.88	179.44	12,230.25	-9,114.85	228.22	9,117.68	0.00	0.00	0.00
20,800.00	88.88	179.44	12,232.20	-9,214.83	229.20	9,217.66	0.00	0.00	0.00
20,900.00	88.88	179.44	12,234.16	-9,314.80	230.18	9,317.63	0.00	0.00	0.00
21,000.00	88.88	179.44	12,236.11	-9,414.78	231.16	9,417.60	0.00	0.00	0.00
21,100.00	88.88	179.44	12,238.07	-9,514.75	232.14	9,517.57	0.00	0.00	0.00
21,200.00	88.88	179.44	12,240.02	-9,614.73	233.12	9,617.55	0.00	0.00	0.00
21,300.00	88.88	179.44	12,241.98	-9,714.71	234.10	9,717.52	0.00	0.00	0.00
21,400.00	88.88	179.44	12,243.93	-9,814.68	235.08	9,817.49	0.00	0.00	0.00
21,500.00	88.88	179.44	12,245.89	-9,914.66	236.06	9,917.46	0.00	0.00	0.00
21,600.00	88.88	179.44	12,247.84	-10,014.63	237.03	10,017.44	0.00	0.00	0.00
21,700.00	88.88	179.44	12,249.80	-10,114.61	238.01	10,117.41	0.00	0.00	0.00
21,800.00	88.88	179.44	12,251.75	-10,214.59	238.99	10,217.38	0.00	0.00	0.00
21,900.00	88.88	179.44	12,253.71	-10,314.56	239.97	10,317.35	0.00	0.00	0.00
22,000.00	88.88	179.44	12,255.66	-10,414.54	240.95	10,417.32	0.00	0.00	0.00
22,100.00	88.88	179.44	12,257.62	-10,514.51	241.93	10,517.30	0.00	0.00	0.00
22,200.00	88.88	179.44	12,259.57	-10,614.49	242.91	10,617.27	0.00	0.00	0.00
22,253.13	88.88	179.44	12,260.61	-10,667.61	243.43	10,670.39	0.00	0.00	0.00
TD at 22253.13 - PBHL (LHS Wildcat Fed Com 705H)									

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 (LHS Wildcat Fed C - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	394,426.41	856,958.28	32.080260	-103.314298
LP (LHS Wildcat Fed Cc - plan hits target center - Point	0.00	0.00	12,067.85	-810.40	146.89	393,616.01	857,105.17	32.078029	-103.313848
PBHL (LHS Wildcat Fed - plan hits target center - Point	0.00	0.00	12,260.61	-10,667.61	243.43	383,758.80	857,201.71	32.050933	-103.313837



Total Directional Services

Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Company:	Franklin Mountain Energy	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site:	LHS Wildcat Fed Com	North Reference:	Grid
Well:	LHS Wildcat Fed Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #4		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,700.00	2,700.00	0.00	0.00	Start Build 1.50
2,966.50	2,966.28	-8.08	4.59	Start 3836.77 hold at 2966.50 MD
6,803.27	6,793.72	-240.59	136.80	Start Drop -1.50
7,069.77	7,060.00	-248.67	141.39	Start 4435.00 hold at 7069.77 MD
11,504.77	11,495.00	-248.67	141.39	Start DLS 10.00 TFO 179.44
12,393.56	12,067.85	-810.40	146.89	Start 9859.57 hold at 12393.56 MD
22,253.13	12,260.61	-10,667.61	243.43	TD at 22253.13



Franklin Mountain Energy

Lea County, NM (NAD83)
LHS Wildcat Fed Com
LHS Wildcat Fed Com 705H

OH
Plan #4

Anticollision Report

21 April, 2021





Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	4/21/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	22,252.59	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 602H - OH - Plan #4	2,700.00	2,734.60	2,389.22	2,375.76	177.537	CC, ES
Bus Driver Fed Com 602H - OH - Plan #4	22,253.13	22,078.94	2,786.78	2,531.15	10.902	SF
Bus Driver Fed Com 702H - OH - Plan #4	2,607.12	2,641.72	2,424.20	2,411.21	186.667	CC
Bus Driver Fed Com 702H - OH - Plan #4	2,700.00	2,700.00	2,424.46	2,411.10	181.371	ES
Bus Driver Fed Com 702H - OH - Plan #4	22,253.13	22,279.56	3,236.72	2,980.41	12.628	SF
Kaston Fed Com 603H - OH - Plan #5	11,281.23	11,378.90	1,669.44	1,613.07	29.616	CC
Kaston Fed Com 603H - OH - Plan #5	22,253.13	22,103.76	1,689.36	1,436.00	6.668	ES, SF
Kaston Fed Com 703H - OH - Plan #4	11,504.77	11,549.97	2,237.91	2,180.77	39.167	CC
Kaston Fed Com 703H - OH - Plan #4	22,253.13	22,366.41	2,248.41	1,991.80	8.762	ES, SF
Judge Baylor Fed Com						
Judge Baylor Fed Com 601H - OH - Plan #4	2,700.00	2,738.10	4,309.86	4,296.38	319.770	CC, ES
Judge Baylor Fed Com 601H - OH - Plan #4	22,253.13	22,148.35	4,591.63	4,336.02	17.964	SF
Judge Baylor Fed Com 701H - OH - Plan #4	6,705.06	6,887.66	4,263.24	4,229.42	126.067	CC
Judge Baylor Fed Com 701H - OH - Plan #4	22,253.13	22,436.60	4,276.39	4,020.39	16.704	ES, SF
LHS Wildcat Fed Com						
LHS Wildcat Fed Com 604H - OH - Plan #4	2,700.00	2,699.60	35.00	21.62	2.616	CC, ES
LHS Wildcat Fed Com 604H - OH - Plan #4	22,253.13	22,043.99	396.38	192.66	1.946	SF

Offset Design	Bus Driver/Kaston Fed Com - Bus Driver Fed Com 602H - 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		Minimum Separation		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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	34.60	34.60	0.00	0.04	-89.05	39.67	-2,388.89	2,389.22				
100.00	100.00	134.60	134.60	0.14	0.25	-89.05	39.67	-2,388.89	2,389.22	2,388.93	0.29	8,328.396	
200.00	200.00	234.60	234.60	0.50	0.61	-89.05	39.67	-2,388.89	2,389.22	2,388.43	0.79	3,035.063	
300.00	300.00	334.60	334.60	0.86	0.97	-89.05	39.67	-2,388.89	2,389.22	2,387.93	1.29	1,848.227	
400.00	400.00	434.60	434.60	1.22	1.32	-89.05	39.67	-2,388.89	2,389.22	2,387.42	1.80	1,328.061	
500.00	500.00	534.60	534.60	1.58	1.68	-89.05	39.67	-2,388.89	2,389.22	2,386.91	2.31	1,036.255	
600.00	600.00	634.60	634.60	1.93	2.04	-89.05	39.67	-2,388.89	2,389.22	2,386.41	2.81	849.544	
700.00	700.00	734.60	734.60	2.29	2.40	-89.05	39.67	-2,388.89	2,389.22	2,385.90	3.32	719.828	
800.00	800.00	834.60	834.60	2.65	2.76	-89.05	39.67	-2,388.89	2,389.22	2,385.39	3.83	624.471	
900.00	900.00	934.60	934.60	3.01	3.12	-89.05	39.67	-2,388.89	2,389.22	2,384.89	4.33	551.419	

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		
1,000.00	1,000.00	1,034.60	1,034.60	3.37	3.48	-89.05	39.67	-2,388.89	2,389.22	2,384.38	4.84	493.667		
1,100.00	1,100.00	1,134.60	1,134.60	3.73	3.83	-89.05	39.67	-2,388.89	2,389.22	2,383.87	5.35	446.864		
1,200.00	1,200.00	1,234.60	1,234.60	4.08	4.19	-89.05	39.67	-2,388.89	2,389.22	2,383.37	5.85	408.166		
1,300.00	1,300.00	1,334.60	1,334.60	4.44	4.55	-89.05	39.67	-2,388.89	2,389.22	2,382.86	6.36	375.636		
1,400.00	1,400.00	1,434.60	1,434.60	4.80	4.91	-89.05	39.67	-2,388.89	2,389.22	2,382.35	6.87	347.908		
1,500.00	1,500.00	1,534.60	1,534.60	5.16	5.27	-89.05	39.67	-2,388.89	2,389.22	2,381.85	7.37	323.992		
1,600.00	1,600.00	1,634.60	1,634.60	5.52	5.63	-89.05	39.67	-2,388.89	2,389.22	2,381.34	7.88	303.153		
1,700.00	1,700.00	1,734.60	1,734.60	5.88	5.99	-89.05	39.67	-2,388.89	2,389.22	2,380.83	8.39	284.832		
1,800.00	1,800.00	1,834.60	1,834.60	6.24	6.34	-89.05	39.67	-2,388.89	2,389.22	2,380.32	8.90	268.599		
1,900.00	1,900.00	1,934.60	1,934.60	6.59	6.70	-89.05	39.67	-2,388.89	2,389.22	2,379.82	9.40	254.117		
2,000.00	2,000.00	2,034.60	2,034.60	6.95	7.06	-89.05	39.67	-2,388.89	2,389.22	2,379.31	9.91	241.116		
2,100.00	2,100.00	2,134.60	2,134.60	7.31	7.42	-89.05	39.67	-2,388.89	2,389.22	2,378.80	10.42	229.381		
2,200.00	2,200.00	2,234.60	2,234.60	7.67	7.78	-89.05	39.67	-2,388.89	2,389.22	2,378.30	10.92	218.735		
2,300.00	2,300.00	2,334.60	2,334.60	8.03	8.14	-89.05	39.67	-2,388.89	2,389.22	2,377.79	11.43	209.034		
2,400.00	2,400.00	2,434.60	2,434.60	8.39	8.49	-89.05	39.67	-2,388.89	2,389.22	2,377.28	11.94	200.156		
2,500.00	2,500.00	2,534.60	2,534.60	8.74	8.85	-89.05	39.67	-2,388.89	2,389.22	2,376.78	12.44	192.002		
2,600.00	2,600.00	2,634.60	2,634.60	9.10	9.21	-89.05	39.67	-2,388.89	2,389.22	2,376.27	12.95	184.486		
2,700.00	2,700.00	2,734.60	2,734.60	9.46	9.57	-89.05	39.67	-2,388.89	2,389.22	2,375.76	13.46	177.537	CC, ES	
2,800.00	2,799.99	2,834.59	2,834.59	9.80	9.93	120.59	39.67	-2,388.89	2,389.89	2,375.93	13.95	171.290		
2,900.00	2,899.91	2,934.51	2,934.51	10.13	10.29	120.65	39.67	-2,388.89	2,391.89	2,377.45	14.44	165.691		
2,966.50	2,966.28	3,000.88	3,000.88	10.35	10.52	120.70	39.67	-2,388.89	2,393.96	2,379.20	14.76	162.214		
3,000.00	2,999.70	3,034.30	3,034.30	10.46	10.64	120.75	39.67	-2,388.89	2,395.15	2,380.23	14.92	160.527		
3,100.00	3,099.46	3,134.06	3,134.06	10.79	11.00	120.89	39.67	-2,388.89	2,398.73	2,383.33	15.41	155.691		
3,200.00	3,199.22	3,224.83	3,224.83	11.12	11.32	121.02	39.61	-2,388.94	2,402.39	2,386.52	15.87	151.386		
3,300.00	3,298.97	3,300.00	3,299.99	11.46	11.58	121.11	38.62	-2,389.67	2,406.92	2,390.63	16.29	147.790		
3,400.00	3,398.73	3,371.37	3,371.32	11.80	11.81	121.16	36.59	-2,391.18	2,412.55	2,395.87	16.69	144.591		
3,500.00	3,498.49	3,444.60	3,444.44	12.14	12.05	121.18	33.39	-2,393.56	2,419.29	2,402.20	17.09	141.566		
3,600.00	3,598.24	3,517.73	3,517.37	12.49	12.30	121.18	29.07	-2,396.77	2,427.12	2,409.62	17.49	138.745		
3,700.00	3,698.00	3,599.91	3,599.18	12.83	12.57	121.15	22.88	-2,401.37	2,436.06	2,418.14	17.92	135.927		
3,800.00	3,797.76	3,686.85	3,686.64	13.18	12.86	121.10	15.59	-2,406.79	2,445.63	2,427.27	18.37	133.168		
3,900.00	3,897.51	3,786.35	3,784.60	13.53	13.20	121.03	7.25	-2,412.99	2,455.24	2,436.40	18.85	130.285		
4,000.00	3,997.27	3,885.86	3,883.56	13.88	13.53	120.97	-1.10	-2,419.20	2,464.85	2,445.52	19.33	127.526		
4,100.00	4,097.03	3,985.36	3,982.52	14.23	13.88	120.92	-9.44	-2,425.40	2,474.46	2,454.65	19.81	124.884		
4,200.00	4,196.78	4,084.87	4,081.48	14.58	14.22	120.86	-17.79	-2,431.60	2,484.08	2,463.78	20.30	122.354		
4,300.00	4,296.54	4,184.37	4,180.44	14.94	14.57	120.80	-26.13	-2,437.81	2,493.70	2,472.90	20.79	119.929		
4,400.00	4,396.30	4,283.87	4,279.40	15.29	14.92	120.74	-34.48	-2,444.01	2,503.32	2,482.03	21.29	117.604		
4,500.00	4,496.05	4,383.38	4,378.36	15.65	15.27	120.68	-42.82	-2,450.21	2,512.94	2,491.16	21.78	115.373		
4,600.00	4,595.81	4,482.88	4,477.32	16.00	15.63	120.62	-51.17	-2,456.42	2,522.57	2,500.29	22.28	113.232		
4,700.00	4,695.57	4,582.39	4,576.28	16.36	15.98	120.57	-59.52	-2,462.62	2,532.20	2,509.42	22.78	111.176		
4,800.00	4,795.32	4,681.89	4,675.24	16.72	16.34	120.51	-67.86	-2,468.82	2,541.83	2,518.55	23.28	109.200		
4,900.00	4,895.08	4,781.39	4,774.19	17.08	16.70	120.45	-76.21	-2,475.03	2,551.46	2,527.68	23.78	107.300		
5,000.00	4,994.84	4,880.90	4,873.15	17.44	17.06	120.40	-84.55	-2,481.23	2,561.09	2,536.81	24.28	105.473		
5,100.00	5,094.59	4,980.40	4,972.11	17.80	17.43	120.34	-92.90	-2,487.44	2,570.73	2,545.95	24.79	103.714		
5,200.00	5,194.35	5,079.91	5,071.07	18.16	17.79	120.29	-101.24	-2,493.64	2,580.37	2,555.08	25.29	102.020		
5,300.00	5,294.11	5,179.41	5,170.03	18.52	18.16	120.23	-109.59	-2,499.84	2,590.02	2,564.22	25.80	100.388		
5,400.00	5,393.86	5,278.91	5,268.99	18.89	18.52	120.18	-117.93	-2,506.05	2,599.66	2,573.35	26.31	98.815		
5,500.00	5,493.62	5,378.42	5,367.95	19.25	18.89	120.13	-126.28	-2,512.25	2,609.31	2,582.49	26.82	97.298		
5,600.00	5,593.38	5,477.92	5,466.91	19.61	19.26	120.07	-134.62	-2,518.45	2,618.96	2,591.63	27.33	95.833		
5,700.00	5,693.13	5,577.43	5,565.87	19.98	19.63	120.02	-142.97	-2,524.66	2,628.61	2,600.77	27.84	94.419		
5,800.00	5,792.89	5,676.93	5,664.83	20.34	20.00	119.97	-151.31	-2,530.86	2,638.26	2,609.91	28.35	93.054		
5,900.00	5,892.65	5,776.43	5,763.79	20.71	20.37	119.91	-159.66	-2,537.07	2,647.92	2,619.05	28.87	91.734		
6,000.00	5,992.40	5,875.94	5,862.74	21.07	20.75	119.86	-168.00	-2,543.27	2,657.58	2,628.20	29.38	90.458		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		
6,100.00	6,092.16	5,975.44	5,961.70	21.44	21.12	119.81	-176.35	-2,549.47	2,667.24	2,637.34	29.89	89.223		
6,200.00	6,191.92	6,074.94	6,060.66	21.81	21.49	119.76	-184.69	-2,555.68	2,676.90	2,646.49	30.41	88.029		
6,300.00	6,291.67	6,174.45	6,159.62	22.17	21.87	119.71	-193.04	-2,561.88	2,686.56	2,655.64	30.93	86.872		
6,400.00	6,391.43	6,273.95	6,258.58	22.54	22.25	119.66	-201.39	-2,568.08	2,696.23	2,664.79	31.44	85.751		
6,500.00	6,491.19	6,373.46	6,357.54	22.91	22.62	119.61	-209.73	-2,574.29	2,705.90	2,673.94	31.96	84.666		
6,600.00	6,590.94	6,472.96	6,456.50	23.28	23.00	119.56	-218.08	-2,580.49	2,715.57	2,683.09	32.48	83.613		
6,700.00	6,690.70	6,572.46	6,555.46	23.64	23.38	119.51	-226.42	-2,586.69	2,725.24	2,692.25	33.00	82.592		
6,803.27	6,793.72	6,675.22	6,657.65	24.02	23.77	119.46	-235.04	-2,593.10	2,735.23	2,701.70	33.53	81.569		
6,900.00	6,890.29	6,771.50	6,753.40	24.38	24.14	119.51	-243.11	-2,599.10	2,743.99	2,709.96	34.03	80.627		
7,000.00	6,990.24	6,871.03	6,852.39	24.73	24.52	119.49	-251.46	-2,605.31	2,751.79	2,717.25	34.55	79.654		
7,069.77	7,060.00	6,940.44	6,921.41	24.98	24.78	-90.18	-257.28	-2,609.64	2,756.49	2,721.59	34.90	78.983		
7,100.00	7,090.23	6,990.21	6,970.94	25.08	24.97	-90.26	-261.24	-2,612.58	2,758.29	2,723.18	35.11	78.554		
7,200.00	7,190.23	7,166.96	7,147.25	25.42	25.62	-90.47	-271.12	-2,619.92	2,762.49	2,726.66	35.84	77.088		
7,300.00	7,290.23	7,344.48	7,324.70	25.76	26.24	-90.53	-274.44	-2,622.39	2,763.90	2,727.38	36.52	75.675		
7,400.00	7,390.23	7,444.61	7,424.83	26.10	26.58	-90.53	-274.44	-2,622.39	2,763.90	2,726.90	37.00	74.691		
7,500.00	7,490.23	7,544.61	7,524.83	26.44	26.92	-90.53	-274.44	-2,622.39	2,763.90	2,726.41	37.49	73.732		
7,600.00	7,590.23	7,644.61	7,624.83	26.78	27.26	-90.53	-274.44	-2,622.39	2,763.90	2,725.93	37.97	72.797		
7,700.00	7,690.23	7,744.61	7,724.83	27.12	27.59	-90.53	-274.44	-2,622.39	2,763.90	2,725.45	38.45	71.883		
7,800.00	7,790.23	7,844.61	7,824.83	27.46	27.93	-90.53	-274.44	-2,622.39	2,763.90	2,724.97	38.93	70.991		
7,900.00	7,890.23	7,944.61	7,924.83	27.80	28.27	-90.53	-274.44	-2,622.39	2,763.90	2,724.48	39.42	70.120		
8,000.00	7,990.23	8,044.61	8,024.83	28.14	28.61	-90.53	-274.44	-2,622.39	2,763.90	2,724.00	39.90	69.269		
8,100.00	8,090.23	8,144.61	8,124.83	28.49	28.95	-90.53	-274.44	-2,622.39	2,763.90	2,723.51	40.39	68.437		
8,200.00	8,190.23	8,244.61	8,224.83	28.83	29.29	-90.53	-274.44	-2,622.39	2,763.90	2,723.03	40.87	67.625		
8,300.00	8,290.23	8,344.61	8,324.83	29.17	29.63	-90.53	-274.44	-2,622.39	2,763.90	2,722.54	41.36	66.830		
8,400.00	8,390.23	8,444.61	8,424.83	29.52	29.98	-90.53	-274.44	-2,622.39	2,763.90	2,722.06	41.84	66.053		
8,500.00	8,490.23	8,544.61	8,524.83	29.86	30.32	-90.53	-274.44	-2,622.39	2,763.90	2,721.57	42.33	65.294		
8,600.00	8,590.23	8,644.61	8,624.83	30.21	30.66	-90.53	-274.44	-2,622.39	2,763.90	2,721.08	42.82	64.551		
8,700.00	8,690.23	8,744.61	8,724.83	30.55	31.00	-90.53	-274.44	-2,622.39	2,763.90	2,720.59	43.31	63.823		
8,800.00	8,790.23	8,844.61	8,824.83	30.90	31.34	-90.53	-274.44	-2,622.39	2,763.90	2,720.11	43.79	63.112		
8,900.00	8,890.23	8,944.61	8,924.83	31.24	31.69	-90.53	-274.44	-2,622.39	2,763.90	2,719.62	44.28	62.415		
9,000.00	8,990.23	9,044.61	9,024.83	31.59	32.03	-90.53	-274.44	-2,622.39	2,763.90	2,719.13	44.77	61.734		
9,100.00	9,090.23	9,144.61	9,124.83	31.93	32.38	-90.53	-274.44	-2,622.39	2,763.90	2,718.64	45.26	61.066		
9,200.00	9,190.23	9,244.61	9,224.83	32.28	32.72	-90.53	-274.44	-2,622.39	2,763.90	2,718.15	45.75	60.412		
9,300.00	9,290.23	9,344.61	9,324.83	32.63	33.06	-90.53	-274.44	-2,622.39	2,763.90	2,717.66	46.24	59.772		
9,400.00	9,390.23	9,444.61	9,424.83	32.97	33.41	-90.53	-274.44	-2,622.39	2,763.90	2,717.17	46.73	59.144		
9,500.00	9,490.23	9,544.61	9,524.83	33.32	33.75	-90.53	-274.44	-2,622.39	2,763.90	2,716.68	47.22	58.530		
9,600.00	9,590.23	9,644.61	9,624.83	33.67	34.10	-90.53	-274.44	-2,622.39	2,763.90	2,716.19	47.71	57.927		
9,700.00	9,690.23	9,744.61	9,724.83	34.02	34.45	-90.53	-274.44	-2,622.39	2,763.90	2,715.70	48.21	57.336		
9,800.00	9,790.23	9,844.61	9,824.83	34.37	34.79	-90.53	-274.44	-2,622.39	2,763.90	2,715.20	48.70	56.757		
9,900.00	9,890.23	9,944.61	9,924.83	34.71	35.14	-90.53	-274.44	-2,622.39	2,763.90	2,714.71	49.19	56.189		
10,000.00	9,990.23	10,044.61	10,024.83	35.06	35.48	-90.53	-274.44	-2,622.39	2,763.90	2,714.22	49.68	55.632		
10,100.00	10,090.23	10,144.61	10,124.83	35.41	35.83	-90.53	-274.44	-2,622.39	2,763.90	2,713.73	50.17	55.086		
10,200.00	10,190.23	10,244.61	10,224.83	35.76	36.18	-90.53	-274.44	-2,622.39	2,763.90	2,713.23	50.67	54.550		
10,300.00	10,290.23	10,344.61	10,324.83	36.11	36.52	-90.53	-274.44	-2,622.39	2,763.90	2,712.74	51.16	54.024		
10,400.00	10,390.23	10,444.61	10,424.83	36.46	36.87	-90.53	-274.44	-2,622.39	2,763.90	2,712.25	51.65	53.508		
10,500.00	10,490.23	10,544.61	10,524.83	36.81	37.22	-90.53	-274.44	-2,622.39	2,763.90	2,711.75	52.15	53.001		
10,600.00	10,590.23	10,644.61	10,624.83	37.16	37.57	-90.53	-274.44	-2,622.39	2,763.90	2,711.26	52.64	52.503		
10,700.00	10,690.23	10,744.61	10,724.83	37.50	37.92	-90.53	-274.44	-2,622.39	2,763.90	2,710.76	53.14	52.015		
10,800.00	10,790.23	10,844.61	10,824.83	37.85	38.26	-90.53	-274.44	-2,622.39	2,763.90	2,710.27	53.63	51.535		
10,900.00	10,890.23	10,944.61	10,924.83	38.20	38.61	-90.53	-274.44	-2,622.39	2,763.90	2,709.77	54.13	51.064		
11,000.00	10,990.23	11,044.61	11,024.83	38.55	38.96	-90.53	-274.44	-2,622.39	2,763.90	2,709.28	54.62	50.601		
11,100.00	11,090.23	11,144.61	11,124.83	38.91	39.31	-90.53	-274.44	-2,622.39	2,763.90	2,708.78	55.12	50.147		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		
11,200.00	11,190.23	11,244.61	11,224.83	39.26	39.66	-90.53	-274.44	-2,622.39	2,763.90	2,708.29	55.61	49.700		
11,210.84	11,201.07	11,255.45	11,235.67	39.29	39.70	-90.53	-274.44	-2,622.39	2,763.90	2,708.23	55.67	49.652		
11,300.00	11,290.23	11,344.56	11,324.78	39.61	40.01	-90.54	-274.66	-2,622.39	2,763.90	2,707.79	56.11	49.261		
11,400.00	11,390.23	11,442.76	11,422.24	39.96	40.36	-90.77	-285.74	-2,622.29	2,763.93	2,707.33	56.60	48.830		
11,504.77	11,495.00	11,538.82	11,514.37	40.32	40.72	-91.32	-312.51	-2,622.06	2,764.23	2,707.11	57.12	48.393		
11,550.00	11,540.19	11,577.71	11,550.18	40.48	40.87	88.92	-327.67	-2,621.92	2,764.52	2,707.18	57.34	48.213		
11,600.00	11,589.80	11,619.78	11,587.65	40.66	41.03	88.58	-346.76	-2,621.76	2,764.94	2,707.36	57.58	48.016		
11,650.00	11,638.68	11,660.99	11,622.91	40.84	41.20	88.25	-368.08	-2,621.57	2,765.45	2,707.62	57.83	47.820		
11,700.00	11,686.48	11,700.00	11,654.79	41.03	41.36	87.94	-390.55	-2,621.37	2,766.03	2,707.95	58.07	47.629		
11,750.00	11,732.81	11,741.20	11,686.72	41.22	41.53	87.63	-416.57	-2,621.15	2,766.66	2,708.33	58.33	47.431		
11,800.00	11,777.34	11,780.37	11,715.27	41.41	41.70	87.33	-443.38	-2,620.91	2,767.34	2,708.75	58.58	47.238		
11,850.00	11,819.72	11,819.01	11,741.57	41.61	41.87	87.05	-471.68	-2,620.66	2,768.04	2,709.20	58.84	47.044		
11,900.00	11,859.63	11,857.19	11,765.63	41.81	42.04	86.79	-501.31	-2,620.40	2,768.74	2,709.64	59.10	46.850		
11,950.00	11,896.76	11,900.00	11,790.19	42.01	42.23	86.53	-536.36	-2,620.10	2,769.45	2,710.07	59.38	46.641		
12,000.00	11,930.83	11,932.38	11,806.99	42.22	42.39	86.33	-564.03	-2,619.86	2,770.11	2,710.49	59.63	46.457		
12,050.00	11,961.59	11,969.49	11,824.28	42.44	42.57	86.13	-596.86	-2,619.57	2,770.75	2,710.85	59.90	46.256		
12,100.00	11,988.80	12,000.00	11,836.89	42.66	42.72	85.98	-624.64	-2,619.33	2,771.35	2,711.20	60.15	46.071		
12,150.00	12,012.24	12,042.97	11,852.09	42.89	42.93	85.81	-664.81	-2,618.97	2,771.87	2,711.40	60.46	45.845		
12,200.00	12,031.76	12,079.42	11,862.60	43.12	43.12	85.68	-699.71	-2,618.67	2,772.32	2,711.57	60.75	45.633		
12,250.00	12,047.18	12,115.73	11,870.84	43.36	43.31	85.58	-735.07	-2,618.36	2,772.69	2,711.65	61.05	45.419		
12,300.00	12,058.41	12,150.00	11,876.55	43.60	43.49	85.51	-768.85	-2,618.06	2,772.98	2,711.64	61.34	45.206		
12,350.00	12,065.34	12,188.09	11,880.51	43.85	43.69	85.46	-806.72	-2,617.73	2,773.18	2,711.52	61.65	44.979		
12,393.56	12,067.85	12,219.78	11,881.89	44.07	43.86	85.44	-838.38	-2,617.45	2,773.27	2,711.35	61.92	44.785		
12,400.00	12,067.97	12,225.89	11,881.98	44.10	43.89	85.44	-844.49	-2,617.40	2,773.28	2,711.31	61.97	44.751		
12,500.00	12,069.93	12,325.89	11,883.55	44.63	44.46	85.43	-944.47	-2,616.53	2,773.42	2,710.67	62.74	44.203		
12,600.00	12,071.88	12,425.89	11,885.12	45.21	45.08	85.42	-1,044.46	-2,615.65	2,773.55	2,709.96	63.59	43.617		
12,700.00	12,073.84	12,525.89	11,886.69	45.84	45.75	85.42	-1,144.44	-2,614.78	2,773.68	2,709.18	64.51	42.998		
12,800.00	12,075.79	12,625.89	11,888.26	46.53	46.46	85.41	-1,244.42	-2,613.90	2,773.82	2,708.32	65.50	42.351		
12,900.00	12,077.75	12,725.89	11,889.83	47.26	47.23	85.40	-1,344.40	-2,613.03	2,773.95	2,707.40	66.55	41.681		
13,000.00	12,079.70	12,825.88	11,891.40	48.04	48.04	85.39	-1,444.39	-2,612.15	2,774.09	2,706.42	67.67	40.994		
13,100.00	12,081.66	12,925.88	11,892.97	48.86	48.89	85.38	-1,544.37	-2,611.28	2,774.22	2,705.37	68.85	40.293		
13,200.00	12,083.61	13,025.88	11,894.54	49.72	49.78	85.38	-1,644.35	-2,610.40	2,774.36	2,704.27	70.09	39.583		
13,300.00	12,085.57	13,125.88	11,896.11	50.62	50.71	85.37	-1,744.34	-2,609.53	2,774.49	2,703.11	71.38	38.868		
13,400.00	12,087.53	13,225.88	11,897.68	51.56	51.68	85.36	-1,844.32	-2,608.65	2,774.63	2,701.90	72.73	38.152		
13,500.00	12,089.48	13,325.88	11,899.25	52.54	52.68	85.35	-1,944.30	-2,607.78	2,774.76	2,700.64	74.12	37.436		
13,600.00	12,091.44	13,425.88	11,900.82	53.54	53.71	85.35	-2,044.29	-2,606.90	2,774.90	2,699.34	75.56	36.725		
13,700.00	12,093.39	13,525.88	11,902.39	54.58	54.77	85.34	-2,144.27	-2,606.03	2,775.03	2,697.99	77.04	36.020		
13,800.00	12,095.35	13,625.88	11,903.96	55.65	55.86	85.33	-2,244.25	-2,605.15	2,775.17	2,696.60	78.57	35.323		
13,900.00	12,097.30	13,725.88	11,905.53	56.75	56.98	85.32	-2,344.23	-2,604.28	2,775.30	2,695.18	80.13	34.635		
14,000.00	12,099.26	13,825.88	11,907.10	57.87	58.13	85.31	-2,444.22	-2,603.40	2,775.44	2,693.71	81.73	33.959		
14,100.00	12,101.21	13,925.88	11,908.67	59.02	59.29	85.31	-2,544.20	-2,602.53	2,775.58	2,692.21	83.36	33.295		
14,200.00	12,103.17	14,025.88	11,910.24	60.19	60.48	85.30	-2,644.18	-2,601.65	2,775.71	2,690.68	85.03	32.644		
14,300.00	12,105.12	14,125.87	11,911.81	61.38	61.70	85.29	-2,744.17	-2,600.78	2,775.85	2,689.12	86.73	32.007		
14,400.00	12,107.08	14,225.87	11,913.38	62.60	62.93	85.28	-2,844.15	-2,599.90	2,775.98	2,687.53	88.45	31.384		
14,500.00	12,109.03	14,325.87	11,914.95	63.83	64.18	85.28	-2,944.13	-2,599.03	2,776.12	2,685.91	90.20	30.776		
14,600.00	12,110.99	14,425.87	11,916.52	65.09	65.45	85.27	-3,044.12	-2,598.15	2,776.25	2,684.27	91.98	30.182		
14,700.00	12,112.94	14,525.87	11,918.09	66.36	66.73	85.26	-3,144.10	-2,597.28	2,776.39	2,682.60	93.79	29.604		
14,800.00	12,114.90	14,625.87	11,919.66	67.64	68.03	85.25	-3,244.08	-2,596.40	2,776.52	2,680.91	95.61	29.040		
14,900.00	12,116.85	14,725.87	11,921.23	68.94	69.35	85.24	-3,344.07	-2,595.53	2,776.66	2,679.20	97.46	28.491		
15,000.00	12,118.81	14,825.87	11,922.80	70.26	70.68	85.24	-3,444.05	-2,594.65	2,776.80	2,677.47	99.32	27.957		
15,100.00	12,120.76	14,925.87	11,924.37	71.59	72.02	85.23	-3,544.03	-2,593.78	2,776.93	2,675.72	101.21	27.437		
15,200.00	12,122.72	15,025.87	11,925.94	72.94	73.38	85.22	-3,644.01	-2,592.90	2,777.07	2,673.95	103.11	26.932		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 602H - 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				
15,300.00	12,124.67	15,125.87	11,927.51	74.29	74.74	85.21	-3,744.00	-2,592.03	2,777.20	2,672.17	105.04	26.441				
15,400.00	12,126.63	15,225.87	11,929.08	75.66	76.12	85.21	-3,843.98	-2,591.15	2,777.34	2,670.37	106.97	25.963				
15,500.00	12,128.58	15,325.86	11,930.65	77.04	77.51	85.20	-3,943.96	-2,590.28	2,777.48	2,668.55	108.93	25.499				
15,600.00	12,130.54	15,425.86	11,932.22	78.43	78.91	85.19	-4,043.95	-2,589.40	2,777.61	2,666.72	110.89	25.048				
15,700.00	12,132.49	15,525.86	11,933.79	79.83	80.32	85.18	-4,143.93	-2,588.53	2,777.75	2,664.88	112.87	24.610				
15,800.00	12,134.45	15,625.86	11,935.36	81.24	81.74	85.17	-4,243.91	-2,587.65	2,777.88	2,663.02	114.87	24.184				
15,900.00	12,136.40	15,725.86	11,936.93	82.66	83.17	85.17	-4,343.90	-2,586.78	2,778.02	2,661.15	116.87	23.770				
16,000.00	12,138.36	15,825.86	11,938.50	84.09	84.61	85.16	-4,443.88	-2,585.90	2,778.16	2,659.27	118.89	23.367				
16,100.00	12,140.31	15,925.86	11,940.07	85.52	86.05	85.15	-4,543.86	-2,585.03	2,778.29	2,657.37	120.92	22.976				
16,200.00	12,142.27	16,025.86	11,941.64	86.96	87.50	85.14	-4,643.84	-2,584.15	2,778.43	2,655.47	122.96	22.596				
16,300.00	12,144.22	16,125.86	11,943.21	88.42	88.96	85.14	-4,743.83	-2,583.28	2,778.57	2,653.56	125.01	22.227				
16,400.00	12,146.18	16,225.86	11,944.78	89.87	90.42	85.13	-4,843.81	-2,582.40	2,778.70	2,651.63	127.07	21.868				
16,500.00	12,148.13	16,325.86	11,946.35	91.34	91.89	85.12	-4,943.79	-2,581.53	2,778.84	2,649.70	129.14	21.519				
16,600.00	12,150.09	16,425.86	11,947.92	92.81	93.37	85.11	-5,043.78	-2,580.65	2,778.98	2,647.76	131.21	21.179				
16,700.00	12,152.04	16,525.86	11,949.49	94.28	94.85	85.11	-5,143.76	-2,579.78	2,779.11	2,645.81	133.30	20.849				
16,800.00	12,154.00	16,625.85	11,951.06	95.77	96.34	85.10	-5,243.74	-2,578.90	2,779.25	2,643.86	135.39	20.527				
16,900.00	12,155.95	16,725.85	11,952.63	97.25	97.83	85.09	-5,343.73	-2,578.03	2,779.39	2,641.89	137.49	20.215				
17,000.00	12,157.91	16,825.85	11,954.20	98.75	99.33	85.08	-5,443.71	-2,577.15	2,779.52	2,639.92	139.60	19.911				
17,100.00	12,159.86	16,925.85	11,955.77	100.24	100.84	85.07	-5,543.69	-2,576.28	2,779.66	2,637.94	141.72	19.614				
17,200.00	12,161.82	17,025.85	11,957.34	101.75	102.34	85.07	-5,643.68	-2,575.40	2,779.80	2,635.96	143.84	19.326				
17,300.00	12,163.77	17,125.85	11,958.91	103.25	103.86	85.06	-5,743.66	-2,574.53	2,779.93	2,633.97	145.96	19.045				
17,400.00	12,165.73	17,225.85	11,960.48	104.77	105.37	85.05	-5,843.64	-2,573.65	2,780.07	2,631.97	148.10	18.772				
17,500.00	12,167.68	17,325.85	11,962.05	106.28	106.89	85.04	-5,943.62	-2,572.78	2,780.21	2,629.97	150.24	18.505				
17,600.00	12,169.64	17,425.85	11,963.62	107.80	108.42	85.04	-6,043.61	-2,571.90	2,780.34	2,627.96	152.38	18.246				
17,700.00	12,171.59	17,525.85	11,965.19	109.32	109.95	85.03	-6,143.59	-2,571.03	2,780.48	2,625.95	154.53	17.993				
17,800.00	12,173.55	17,625.85	11,966.76	110.85	111.48	85.02	-6,243.57	-2,570.15	2,780.62	2,623.93	156.69	17.746				
17,900.00	12,175.50	17,725.85	11,968.33	112.38	113.01	85.01	-6,343.56	-2,569.28	2,780.76	2,621.91	158.85	17.506				
18,000.00	12,177.46	17,825.84	11,969.90	113.92	114.55	85.01	-6,443.54	-2,568.40	2,780.89	2,619.88	161.01	17.271				
18,100.00	12,179.41	17,925.84	11,971.47	115.45	116.09	85.00	-6,543.52	-2,567.53	2,781.03	2,617.85	163.18	17.043				
18,200.00	12,181.37	18,025.84	11,973.04	117.00	117.64	84.99	-6,643.51	-2,566.65	2,781.17	2,615.81	165.35	16.819				
18,300.00	12,183.32	18,125.84	11,974.61	118.54	119.18	84.98	-6,743.49	-2,565.78	2,781.31	2,613.77	167.53	16.602				
18,400.00	12,185.28	18,225.84	11,976.18	120.09	120.73	84.97	-6,843.47	-2,564.90	2,781.44	2,611.73	169.71	16.389				
18,500.00	12,187.23	18,325.84	11,977.75	121.64	122.29	84.97	-6,943.46	-2,564.03	2,781.58	2,609.68	171.90	16.182				
18,600.00	12,189.19	18,425.84	11,979.32	123.19	123.84	84.96	-7,043.44	-2,563.15	2,781.72	2,607.63	174.09	15.979				
18,700.00	12,191.14	18,525.84	11,980.89	124.74	125.40	84.95	-7,143.42	-2,562.28	2,781.86	2,605.58	176.28	15.781				
18,800.00	12,193.10	18,625.84	11,982.46	126.30	126.96	84.94	-7,243.40	-2,561.40	2,781.99	2,603.52	178.48	15.588				
18,900.00	12,195.05	18,725.84	11,984.03	127.86	128.52	84.94	-7,343.39	-2,560.53	2,782.13	2,601.46	180.67	15.399				
19,000.00	12,197.01	18,825.84	11,985.60	129.42	130.09	84.93	-7,443.37	-2,559.65	2,782.27	2,599.39	182.88	15.214				
19,100.00	12,198.96	18,925.84	11,987.17	130.99	131.65	84.92	-7,543.35	-2,558.78	2,782.41	2,597.33	185.08	15.033				
19,200.00	12,200.92	19,025.84	11,988.74	132.55	133.22	84.91	-7,643.34	-2,557.90	2,782.55	2,595.26	187.29	14.857				
19,300.00	12,202.87	19,125.83	11,990.31	134.12	134.79	84.90	-7,743.32	-2,557.03	2,782.68	2,593.18	189.50	14.684				
19,400.00	12,204.83	19,225.83	11,991.88	135.69	136.37	84.90	-7,843.30	-2,556.15	2,782.82	2,591.11	191.71	14.515				
19,500.00	12,206.78	19,325.83	11,993.45	137.26	137.94	84.89	-7,943.29	-2,555.28	2,782.96	2,589.03	193.93	14.350				
19,600.00	12,208.74	19,425.83	11,995.02	138.84	139.52	84.88	-8,043.27	-2,554.40	2,783.10	2,586.95	196.15	14.189				
19,700.00	12,210.69	19,525.83	11,996.59	140.41	141.10	84.87	-8,143.25	-2,553.53	2,783.24	2,584.87	198.37	14.030				
19,800.00	12,212.65	19,625.83	11,998.16	141.99	142.68	84.87	-8,243.23	-2,552.65	2,783.37	2,582.78	200.59	13.876				
19,900.00	12,214.60	19,725.83	11,999.73	143.57	144.26	84.86	-8,343.22	-2,551.78	2,783.51	2,580.69	202.82	13.724				
20,000.00	12,216.56	19,825.83	12,001.30	145.15	145.84	84.85	-8,443.20	-2,550.90	2,783.65	2,578.60	205.05	13.576				
20,100.00	12,218.51	19,925.83	12,002.87	146.73	147.43	84.84	-8,543.18	-2,550.03	2,783.79	2,576.51	207.28	13.430				
20,200.00	12,220.47	20,025.83	12,004.44	148.32	149.01	84.84	-8,643.17	-2,549.15	2,783.93	2,574.42	209.51	13.288				
20,300.00	12,222.43	20,125.83	12,006.01	149.90	150.60	84.83	-8,743.15	-2,548.28	2,784.07	2,572.32	211.74	13.148				
20,400.00	12,224.38	20,225.83	12,007.58	151.49	152.19	84.82	-8,843.13	-2,547.40	2,784.20	2,570.22	213.98	13.011				

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		
20,500.00	12,226.34	20,325.83	12,009.15	153.08	153.78	84.81	-8,943.12	-2,546.53	2,784.34	2,568.12	216.22	12.877		
20,600.00	12,228.29	20,425.82	12,010.72	154.67	155.37	84.80	-9,043.10	-2,545.65	2,784.48	2,566.02	218.46	12.746		
20,700.00	12,230.25	20,525.82	12,012.29	156.26	156.96	84.80	-9,143.08	-2,544.78	2,784.62	2,563.92	220.70	12.617		
20,800.00	12,232.20	20,625.82	12,013.86	157.85	158.56	84.79	-9,243.07	-2,543.90	2,784.76	2,561.82	222.94	12.491		
20,900.00	12,234.16	20,725.82	12,015.43	159.45	160.15	84.78	-9,343.05	-2,543.03	2,784.90	2,559.71	225.19	12.367		
21,000.00	12,236.11	20,825.82	12,017.00	161.04	161.75	84.77	-9,443.03	-2,542.15	2,785.04	2,557.60	227.44	12.245		
21,100.00	12,238.07	20,925.82	12,018.57	162.64	163.35	84.77	-9,543.01	-2,541.28	2,785.18	2,555.49	229.68	12.126		
21,200.00	12,240.02	21,025.82	12,020.14	164.23	164.95	84.76	-9,643.00	-2,540.40	2,785.31	2,553.38	231.93	12.009		
21,300.00	12,241.98	21,125.82	12,021.71	165.83	166.55	84.75	-9,742.98	-2,539.53	2,785.45	2,551.27	234.18	11.894		
21,400.00	12,243.93	21,225.82	12,023.28	167.43	168.15	84.74	-9,842.96	-2,538.65	2,785.59	2,549.16	236.43	11.782		
21,500.00	12,245.89	21,325.82	12,024.85	169.03	169.75	84.74	-9,942.95	-2,537.78	2,785.73	2,547.04	238.69	11.671		
21,600.00	12,247.84	21,425.82	12,026.42	170.63	171.35	84.73	-10,042.93	-2,536.90	2,785.87	2,544.93	240.94	11.562		
21,700.00	12,249.80	21,525.82	12,027.99	172.23	172.96	84.72	-10,142.91	-2,536.03	2,786.01	2,542.81	243.20	11.456		
21,800.00	12,251.75	21,625.81	12,029.56	173.84	174.56	84.71	-10,242.90	-2,535.15	2,786.15	2,540.69	245.45	11.351		
21,900.00	12,253.71	21,725.81	12,031.13	175.44	176.16	84.70	-10,342.88	-2,534.28	2,786.29	2,538.58	247.71	11.248		
22,000.00	12,255.66	21,825.81	12,032.70	177.05	177.77	84.70	-10,442.86	-2,533.40	2,786.43	2,536.46	249.97	11.147		
22,100.00	12,257.62	21,925.81	12,034.27	178.65	179.38	84.69	-10,542.85	-2,532.53	2,786.57	2,534.33	252.23	11.048		
22,200.00	12,259.57	22,025.81	12,035.84	180.26	180.99	84.68	-10,642.83	-2,531.65	2,786.71	2,532.21	254.49	10.950		
22,253.13	12,260.61	22,078.94	12,036.67	181.02	181.84	84.68	-10,695.95	-2,531.19	2,786.78	2,531.15	255.63	10.902 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	34.60	34.60	0.00	0.04	-89.07	39.34	-2,423.88	2,424.20					
100.00	100.00	134.60	134.60	0.14	0.25	-89.07	39.34	-2,423.88	2,424.20	2,423.91	0.29	8,450.330		
200.00	200.00	234.60	234.60	0.50	0.61	-89.07	39.34	-2,423.88	2,424.20	2,423.41	0.79	3,079.499		
300.00	300.00	334.60	334.60	0.86	0.97	-89.07	39.34	-2,423.88	2,424.20	2,422.91	1.29	1,875.287		
400.00	400.00	434.60	434.60	1.22	1.32	-89.07	39.34	-2,423.88	2,424.20	2,422.40	1.80	1,347.504		
500.00	500.00	534.60	534.60	1.58	1.68	-89.07	39.34	-2,423.88	2,424.20	2,421.89	2.31	1,051.427		
600.00	600.00	634.60	634.60	1.93	2.04	-89.07	39.34	-2,423.88	2,424.20	2,421.39	2.81	861.982		
700.00	700.00	734.60	734.60	2.29	2.40	-89.07	39.34	-2,423.88	2,424.20	2,420.88	3.32	730.367		
800.00	800.00	834.60	834.60	2.65	2.76	-89.07	39.34	-2,423.88	2,424.20	2,420.37	3.83	633.613		
900.00	900.00	934.60	934.60	3.01	3.12	-89.07	39.34	-2,423.88	2,424.20	2,419.87	4.33	559.492		
1,000.00	1,000.00	1,034.60	1,034.60	3.37	3.48	-89.07	39.34	-2,423.88	2,424.20	2,419.36	4.84	500.894		
1,100.00	1,100.00	1,134.60	1,134.60	3.73	3.83	-89.07	39.34	-2,423.88	2,424.20	2,418.85	5.35	453.406		
1,200.00	1,200.00	1,234.60	1,234.60	4.08	4.19	-89.07	39.34	-2,423.88	2,424.20	2,418.35	5.85	414.142		
1,300.00	1,300.00	1,334.60	1,334.60	4.44	4.55	-89.07	39.34	-2,423.88	2,424.20	2,417.84	6.36	381.136		
1,400.00	1,400.00	1,434.60	1,434.60	4.80	4.91	-89.07	39.34	-2,423.88	2,424.20	2,417.33	6.87	353.002		
1,500.00	1,500.00	1,534.60	1,534.60	5.16	5.27	-89.07	39.34	-2,423.88	2,424.20	2,416.82	7.37	328.736		
1,600.00	1,600.00	1,634.60	1,634.60	5.52	5.63	-89.07	39.34	-2,423.88	2,424.20	2,416.32	7.88	307.591		
1,700.00	1,700.00	1,734.60	1,734.60	5.88	5.99	-89.07	39.34	-2,423.88	2,424.20	2,415.81	8.39	289.002		
1,800.00	1,800.00	1,834.60	1,834.60	6.24	6.34	-89.07	39.34	-2,423.88	2,424.20	2,415.30	8.90	272.532		
1,900.00	1,900.00	1,934.60	1,934.60	6.59	6.70	-89.07	39.34	-2,423.88	2,424.20	2,414.80	9.40	257.837		
2,000.00	2,000.00	2,034.60	2,034.60	6.95	7.06	-89.07	39.34	-2,423.88	2,424.20	2,414.29	9.91	244.646		
2,100.00	2,100.00	2,134.60	2,134.60	7.31	7.42	-89.07	39.34	-2,423.88	2,424.20	2,413.78	10.42	232.740		
2,200.00	2,200.00	2,234.60	2,234.60	7.67	7.78	-89.07	39.34	-2,423.88	2,424.20	2,413.28	10.92	221.938		
2,300.00	2,300.00	2,334.60	2,334.60	8.03	8.14	-89.07	39.34	-2,423.88	2,424.20	2,412.77	11.43	212.094		
2,400.00	2,400.00	2,434.60	2,434.60	8.39	8.49	-89.07	39.34	-2,423.88	2,424.20	2,412.26	11.94	203.087		
2,500.00	2,500.00	2,534.60	2,534.60	8.74	8.85	-89.07	39.34	-2,423.88	2,424.20	2,411.76	12.44	194.813		
2,600.00	2,600.00	2,634.60	2,634.60	9.10	9.21	-89.07	39.34	-2,423.88	2,424.20	2,411.25	12.95	187.187		
2,607.12	2,607.12	2,641.72	2,641.72	9.13	9.24	-89.07	39.34	-2,423.88	2,424.20	2,411.21	12.99	186.667	CC	
2,700.00	2,700.00	2,700.00	2,700.00	9.46	9.44	-89.07	39.33	-2,423.90	2,424.46	2,411.10	13.37	181.371	ES	
2,800.00	2,799.99	2,781.53	2,781.52	9.80	9.72	120.53	38.84	-2,424.91	2,426.47	2,412.67	13.80	175.844		
2,900.00	2,899.91	2,845.22	2,845.18	10.13	9.93	120.49	37.93	-2,426.79	2,431.39	2,417.22	14.17	171.529		
2,966.50	2,966.28	2,900.00	2,899.89	10.35	10.11	120.47	36.78	-2,429.18	2,436.28	2,421.82	14.46	168.530		
3,000.00	2,999.70	2,900.00	2,899.89	10.46	10.11	120.47	36.78	-2,429.18	2,439.08	2,424.55	14.53	167.902		
3,100.00	3,099.46	2,972.09	2,971.83	10.79	10.36	120.53	34.75	-2,433.39	2,448.49	2,433.57	14.92	164.073		
3,200.00	3,199.22	3,035.28	3,034.80	11.12	10.57	120.56	32.48	-2,438.09	2,459.40	2,444.10	15.30	160.790		
3,300.00	3,298.97	3,100.00	3,099.20	11.46	10.79	120.58	29.69	-2,443.87	2,471.77	2,456.10	15.67	157.720		
3,400.00	3,398.73	3,161.02	3,159.81	11.80	11.00	120.59	26.62	-2,450.22	2,485.60	2,469.56	16.04	154.994		
3,500.00	3,498.49	3,223.51	3,221.76	12.14	11.22	120.59	23.04	-2,457.63	2,500.87	2,484.46	16.40	152.451		
3,600.00	3,598.24	3,288.10	3,285.64	12.49	11.45	120.58	18.88	-2,466.24	2,517.57	2,500.79	16.78	150.059		
3,700.00	3,698.00	3,386.58	3,382.93	12.83	11.80	120.56	12.25	-2,479.96	2,534.90	2,517.64	17.26	146.899		
3,800.00	3,797.76	3,485.07	3,480.23	13.18	12.16	120.54	5.62	-2,493.69	2,552.22	2,534.49	17.74	143.884		
3,900.00	3,897.51	3,583.55	3,577.52	13.53	12.52	120.51	-1.01	-2,507.41	2,569.55	2,551.33	18.22	141.007		
4,000.00	3,997.27	3,682.03	3,674.82	13.88	12.89	120.49	-7.64	-2,521.14	2,586.88	2,568.17	18.71	138.260		
4,100.00	4,097.03	3,780.51	3,772.11	14.23	13.26	120.47	-14.27	-2,534.87	2,604.21	2,585.01	19.20	135.636		
4,200.00	4,196.78	3,878.99	3,869.41	14.58	13.64	120.45	-20.90	-2,548.59	2,621.54	2,601.85	19.69	133.127		
4,300.00	4,296.54	3,977.48	3,966.70	14.94	14.01	120.43	-27.53	-2,562.32	2,638.87	2,618.68	20.19	130.726		
4,400.00	4,396.30	4,075.96	4,064.00	15.29	14.39	120.40	-34.16	-2,576.05	2,656.20	2,635.51	20.68	128.429		
4,500.00	4,496.05	4,174.44	4,161.29	15.65	14.78	120.38	-40.79	-2,589.77	2,673.53	2,652.35	21.18	126.228		
4,600.00	4,595.81	4,272.92	4,258.59	16.00	15.16	120.36	-47.42	-2,603.50	2,690.86	2,669.18	21.68	124.119		
4,700.00	4,695.57	4,371.41	4,355.89	16.36	15.55	120.34	-54.05	-2,617.22	2,708.19	2,686.01	22.18	122.097		
4,800.00	4,795.32	4,469.89	4,453.18	16.72	15.94	120.32	-60.68	-2,630.95	2,725.52	2,702.83	22.68	120.156		
4,900.00	4,895.08	4,568.37	4,550.48	17.08	16.34	120.30	-67.31	-2,644.68	2,742.85	2,719.66	23.19	118.292		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		
5,000.00	4,994.84	4,666.85	4,647.77	17.44	16.73	120.28	-73.94	-2,658.40	2,760.18	2,736.49	23.69	116.501		
5,100.00	5,094.59	4,765.33	4,745.07	17.80	17.13	120.26	-80.57	-2,672.13	2,777.51	2,753.31	24.20	114.780		
5,200.00	5,194.35	4,863.82	4,842.36	18.16	17.53	120.24	-87.20	-2,685.85	2,794.85	2,770.14	24.71	113.124		
5,300.00	5,294.11	4,962.30	4,939.66	18.52	17.93	120.22	-93.83	-2,699.58	2,812.18	2,786.96	25.21	111.530		
5,400.00	5,393.86	5,060.78	5,036.95	18.89	18.33	120.20	-100.46	-2,713.31	2,829.51	2,803.79	25.72	109.994		
5,500.00	5,493.62	5,159.26	5,134.25	19.25	18.73	120.19	-107.09	-2,727.03	2,846.84	2,820.61	26.23	108.515		
5,600.00	5,593.38	5,257.75	5,231.54	19.61	19.13	120.17	-113.72	-2,740.76	2,864.18	2,837.43	26.75	107.088		
5,700.00	5,693.13	5,356.23	5,328.84	19.98	19.54	120.15	-120.35	-2,754.49	2,881.51	2,854.25	27.26	105.712		
5,800.00	5,792.89	5,454.71	5,426.13	20.34	19.94	120.13	-126.98	-2,768.21	2,898.84	2,871.07	27.77	104.383		
5,900.00	5,892.65	5,553.19	5,523.43	20.71	20.35	120.11	-133.61	-2,781.94	2,916.18	2,887.89	28.28	103.100		
6,000.00	5,992.40	5,651.67	5,620.72	21.07	20.76	120.10	-140.24	-2,795.66	2,933.51	2,904.71	28.80	101.860		
6,100.00	6,092.16	5,750.16	5,718.02	21.44	21.17	120.08	-146.87	-2,809.39	2,950.85	2,921.53	29.31	100.662		
6,200.00	6,191.92	5,848.64	5,815.31	21.81	21.58	120.06	-153.50	-2,823.12	2,968.18	2,938.35	29.83	99.503		
6,300.00	6,291.67	5,947.12	5,912.61	22.17	21.99	120.04	-160.13	-2,836.84	2,985.52	2,955.17	30.35	98.381		
6,400.00	6,391.43	6,045.60	6,009.91	22.54	22.40	120.03	-166.76	-2,850.57	3,002.85	2,971.99	30.86	97.295		
6,500.00	6,491.19	6,144.09	6,107.20	22.91	22.81	120.01	-173.39	-2,864.30	3,020.19	2,988.81	31.38	96.243		
6,600.00	6,590.94	6,242.57	6,204.50	23.28	23.23	120.00	-180.02	-2,878.02	3,037.53	3,005.63	31.90	95.223		
6,700.00	6,690.70	6,341.05	6,301.79	23.64	23.64	119.98	-186.65	-2,891.75	3,054.86	3,022.44	32.42	94.235		
6,803.27	6,793.72	6,442.75	6,402.27	24.02	24.07	119.96	-193.50	-2,905.92	3,072.76	3,039.81	32.95	93.246		
6,900.00	6,890.29	6,538.10	6,496.47	24.38	24.47	120.14	-199.92	-2,919.21	3,088.93	3,055.48	33.45	92.334		
7,000.00	6,990.24	6,636.81	6,593.99	24.73	24.89	120.27	-206.57	-2,932.97	3,104.37	3,070.40	33.97	91.393		
7,069.77	7,060.00	6,705.73	6,662.07	24.98	25.18	-89.30	-211.21	-2,942.58	3,114.37	3,080.05	34.32	90.744		
7,100.00	7,090.23	6,735.60	6,691.58	25.08	25.30	-89.34	-213.22	-2,946.74	3,118.57	3,084.10	34.47	90.467		
7,200.00	7,190.23	6,834.39	6,789.19	25.42	25.72	-89.47	-219.87	-2,960.51	3,132.47	3,097.50	34.97	89.566		
7,300.00	7,290.23	6,933.19	6,886.79	25.76	26.14	-89.59	-226.52	-2,974.28	3,146.39	3,110.91	35.48	88.690		
7,400.00	7,390.23	7,031.98	6,984.39	26.10	26.56	-89.72	-233.17	-2,988.05	3,160.32	3,124.34	35.98	87.837		
7,500.00	7,490.23	7,130.78	7,082.00	26.44	26.98	-89.84	-239.82	-3,001.82	3,174.26	3,137.78	36.48	87.008		
7,600.00	7,590.23	7,229.57	7,179.60	26.78	27.40	-89.96	-246.47	-3,015.59	3,188.22	3,151.23	36.99	86.200		
7,700.00	7,690.23	7,328.36	7,277.21	27.12	27.82	-90.08	-253.12	-3,029.36	3,202.19	3,164.70	37.49	85.414		
7,800.00	7,790.23	7,427.15	7,425.27	27.46	28.45	-90.26	-262.95	-3,049.71	3,216.05	3,177.87	38.18	84.240		
7,900.00	7,890.23	7,525.94	7,524.91	27.80	30.04	-90.52	-278.06	-3,080.99	3,223.56	3,183.93	39.62	81.354		
8,000.00	7,990.23	8,079.38	8,024.83	28.14	30.64	-90.53	-278.72	-3,082.35	3,223.88	3,183.59	40.29	80.021		
8,100.00	8,090.23	8,179.38	8,124.83	28.49	30.95	-90.53	-278.72	-3,082.35	3,223.88	3,183.11	40.77	79.080		
8,200.00	8,190.23	8,279.38	8,224.83	28.83	31.27	-90.53	-278.72	-3,082.35	3,223.88	3,182.63	41.25	78.160		
8,300.00	8,290.23	8,379.38	8,324.83	29.17	31.60	-90.53	-278.72	-3,082.35	3,223.88	3,182.15	41.73	77.260		
8,400.00	8,390.23	8,479.38	8,424.83	29.52	31.92	-90.53	-278.72	-3,082.35	3,223.88	3,181.67	42.21	76.380		
8,500.00	8,490.23	8,579.38	8,524.83	29.86	32.24	-90.53	-278.72	-3,082.35	3,223.88	3,181.19	42.69	75.518		
8,600.00	8,590.23	8,679.38	8,624.83	30.21	32.56	-90.53	-278.72	-3,082.35	3,223.88	3,180.71	43.17	74.674		
8,700.00	8,690.23	8,779.38	8,724.83	30.55	32.89	-90.53	-278.72	-3,082.35	3,223.88	3,180.22	43.66	73.849		
8,800.00	8,790.23	8,879.38	8,824.83	30.90	33.21	-90.53	-278.72	-3,082.35	3,223.88	3,179.74	44.14	73.040		
8,900.00	8,890.23	8,979.38	8,924.83	31.24	33.54	-90.53	-278.72	-3,082.35	3,223.88	3,179.26	44.62	72.248		
9,000.00	8,990.23	9,079.38	9,024.83	31.59	33.87	-90.53	-278.72	-3,082.35	3,223.88	3,178.77	45.11	71.472		
9,100.00	9,090.23	9,179.38	9,124.83	31.93	34.19	-90.53	-278.72	-3,082.35	3,223.88	3,178.29	45.59	70.712		
9,200.00	9,190.23	9,279.38	9,224.83	32.28	34.52	-90.53	-278.72	-3,082.35	3,223.88	3,177.80	46.08	69.967		
9,300.00	9,290.23	9,379.38	9,324.83	32.63	34.85	-90.53	-278.72	-3,082.35	3,223.88	3,177.32	46.56	69.237		
9,400.00	9,390.23	9,479.38	9,424.83	32.97	35.18	-90.53	-278.72	-3,082.35	3,223.88	3,176.83	47.05	68.521		
9,500.00	9,490.23	9,579.38	9,524.83	33.32	35.51	-90.53	-278.72	-3,082.35	3,223.88	3,176.34	47.54	67.820		
9,600.00	9,590.23	9,679.38	9,624.83	33.67	35.84	-90.53	-278.72	-3,082.35	3,223.88	3,175.86	48.02	67.132		
9,700.00	9,690.23	9,779.38	9,724.83	34.02	36.17	-90.53	-278.72	-3,082.35	3,223.88	3,175.37	48.51	66.457		
9,800.00	9,790.23	9,879.38	9,824.83	34.37	36.50	-90.53	-278.72	-3,082.35	3,223.88	3,174.88	49.00	65.795		
9,900.00	9,890.23	9,979.38	9,924.83	34.71	36.83	-90.53	-278.72	-3,082.35	3,223.88	3,174.39	49.49	65.146		
10,000.00	9,990.23	10,079.38	10,024.83	35.06	37.16	-90.53	-278.72	-3,082.35	3,223.88	3,173.90	49.98	64.509		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	10,090.23	10,179.38	10,124.83	35.41	37.49	-90.53	-278.72	-3,082.35	3,223.88	3,173.42	50.46	63.884		
10,200.00	10,190.23	10,279.38	10,224.83	35.76	37.83	-90.53	-278.72	-3,082.35	3,223.88	3,172.93	50.95	63.271		
10,300.00	10,290.23	10,379.38	10,324.83	36.11	38.16	-90.53	-278.72	-3,082.35	3,223.88	3,172.44	51.44	62.668		
10,400.00	10,390.23	10,479.38	10,424.83	36.46	38.49	-90.53	-278.72	-3,082.35	3,223.88	3,171.95	51.93	62.077		
10,500.00	10,490.23	10,579.38	10,524.83	36.81	38.83	-90.53	-278.72	-3,082.35	3,223.88	3,171.46	52.42	61.496		
10,600.00	10,590.23	10,679.38	10,624.83	37.16	39.16	-90.53	-278.72	-3,082.35	3,223.88	3,170.97	52.91	60.926		
10,700.00	10,690.23	10,779.38	10,724.83	37.50	39.50	-90.53	-278.72	-3,082.35	3,223.88	3,170.47	53.41	60.366		
10,800.00	10,790.23	10,879.38	10,824.83	37.85	39.83	-90.53	-278.72	-3,082.35	3,223.88	3,169.98	53.90	59.816		
10,900.00	10,890.23	10,979.38	10,924.83	38.20	40.17	-90.53	-278.72	-3,082.35	3,223.88	3,169.49	54.39	59.275		
11,000.00	10,990.23	11,079.38	11,024.83	38.55	40.51	-90.53	-278.72	-3,082.35	3,223.88	3,169.00	54.88	58.744		
11,100.00	11,090.23	11,179.38	11,124.83	38.91	40.84	-90.53	-278.72	-3,082.35	3,223.88	3,168.51	55.37	58.222		
11,200.00	11,190.23	11,279.38	11,224.83	39.26	41.18	-90.53	-278.72	-3,082.35	3,223.88	3,168.02	55.86	57.708		
11,300.00	11,290.23	11,379.38	11,324.83	39.61	41.52	-90.53	-278.72	-3,082.35	3,223.88	3,167.52	56.36	57.204		
11,400.00	11,390.23	11,479.38	11,424.83	39.96	41.85	-90.53	-278.72	-3,082.35	3,223.88	3,167.03	56.85	56.708		
11,408.67	11,398.91	11,488.05	11,433.51	39.99	41.88	-90.53	-278.72	-3,082.35	3,223.88	3,166.99	56.89	56.665		
11,504.77	11,495.00	11,583.84	11,529.23	40.32	42.21	-90.57	-281.01	-3,082.33	3,223.88	3,166.52	57.37	56.199		
11,550.00	11,540.19	11,628.42	11,573.43	40.48	42.36	89.91	-286.72	-3,082.28	3,223.89	3,166.30	57.59	55.981		
11,600.00	11,589.80	11,677.34	11,621.26	40.66	42.53	89.84	-296.92	-3,082.19	3,223.91	3,166.07	57.84	55.738		
11,650.00	11,638.68	11,725.92	11,667.73	40.84	42.70	89.76	-311.04	-3,082.07	3,223.94	3,165.84	58.10	55.492		
11,700.00	11,686.48	11,774.16	11,712.52	41.03	42.88	89.69	-328.91	-3,081.91	3,223.98	3,165.62	58.36	55.243		
11,750.00	11,732.81	11,822.09	11,755.38	41.22	43.05	89.61	-350.33	-3,081.72	3,224.03	3,165.40	58.63	54.992		
11,800.00	11,777.34	11,869.72	11,796.05	41.41	43.23	89.54	-375.10	-3,081.51	3,224.08	3,165.18	58.90	54.739		
11,850.00	11,819.72	11,917.08	11,834.31	41.61	43.40	89.48	-402.98	-3,081.26	3,224.14	3,164.97	59.18	54.483		
11,900.00	11,859.63	11,964.19	11,869.96	41.81	43.57	89.42	-433.76	-3,080.99	3,224.21	3,164.75	59.46	54.225		
11,950.00	11,896.76	12,011.07	11,902.80	42.01	43.75	89.36	-467.19	-3,080.70	3,224.28	3,164.53	59.75	53.964		
12,000.00	11,930.83	12,057.74	11,932.68	42.22	43.93	89.31	-503.03	-3,080.39	3,224.35	3,164.31	60.04	53.699		
12,050.00	11,961.59	12,104.23	11,959.44	42.44	44.11	89.26	-541.03	-3,080.05	3,224.43	3,164.08	60.35	53.431		
12,100.00	11,988.80	12,150.00	11,982.69	42.66	44.29	89.22	-580.44	-3,079.71	3,224.50	3,163.84	60.66	53.161		
12,150.00	12,012.24	12,196.75	12,003.12	42.89	44.49	89.18	-622.47	-3,079.34	3,224.57	3,163.60	60.97	52.884		
12,200.00	12,031.76	12,242.83	12,019.84	43.12	44.69	89.15	-665.40	-3,078.96	3,224.64	3,163.34	61.30	52.606		
12,250.00	12,047.18	12,288.82	12,033.03	43.36	44.89	89.12	-709.44	-3,078.58	3,224.71	3,163.08	61.63	52.325		
12,300.00	12,058.41	12,334.74	12,042.63	43.60	45.11	89.10	-754.34	-3,078.19	3,224.77	3,162.81	61.96	52.042		
12,350.00	12,065.34	12,380.63	12,048.61	43.85	45.33	89.09	-799.82	-3,077.79	3,224.83	3,162.53	62.30	51.760		
12,393.56	12,067.85	12,420.59	12,050.83	44.07	45.53	89.08	-839.71	-3,077.44	3,224.88	3,162.27	62.60	51.515		
12,400.00	12,067.97	12,426.63	12,050.93	44.10	45.56	89.08	-845.75	-3,077.39	3,224.88	3,162.24	62.65	51.478		
12,500.00	12,069.93	12,526.63	12,052.25	44.63	46.08	89.07	-945.73	-3,076.51	3,225.00	3,161.59	63.40	50.865		
12,600.00	12,071.88	12,626.63	12,053.56	45.21	46.66	89.06	-1,045.72	-3,075.63	3,225.11	3,160.88	64.23	50.209		
12,700.00	12,073.84	12,726.63	12,054.88	45.84	47.29	89.05	-1,145.70	-3,074.76	3,225.23	3,160.09	65.14	49.514		
12,800.00	12,075.79	12,826.62	12,056.19	46.53	47.97	89.04	-1,245.69	-3,073.88	3,225.34	3,159.23	66.11	48.786		
12,900.00	12,077.75	12,926.62	12,057.51	47.26	48.70	89.03	-1,345.67	-3,073.01	3,225.45	3,158.30	67.15	48.031		
13,000.00	12,079.70	13,026.62	12,058.83	48.04	49.47	89.02	-1,445.66	-3,072.13	3,225.57	3,157.31	68.26	47.255		
13,100.00	12,081.66	13,126.62	12,060.14	48.86	50.28	89.00	-1,545.64	-3,071.26	3,225.68	3,156.26	69.43	46.463		
13,200.00	12,083.61	13,226.62	12,061.46	49.72	51.13	88.99	-1,645.63	-3,070.38	3,225.80	3,155.15	70.65	45.659		
13,300.00	12,085.57	13,326.61	12,062.78	50.62	52.03	88.98	-1,745.61	-3,069.51	3,225.91	3,153.98	71.93	44.848		
13,400.00	12,087.53	13,426.61	12,064.09	51.56	52.95	88.97	-1,845.60	-3,068.63	3,226.03	3,152.77	73.26	44.034		
13,500.00	12,089.48	13,526.61	12,065.41	52.54	53.92	88.96	-1,945.59	-3,067.75	3,226.14	3,151.50	74.64	43.221		
13,600.00	12,091.44	13,626.61	12,066.72	53.54	54.91	88.95	-2,045.57	-3,066.88	3,226.26	3,150.19	76.07	42.411		
13,700.00	12,093.39	13,726.61	12,068.04	54.58	55.94	88.94	-2,145.56	-3,066.00	3,226.37	3,148.83	77.54	41.608		
13,800.00	12,095.35	13,826.60	12,069.36	55.65	56.99	88.93	-2,245.54	-3,065.13	3,226.49	3,147.43	79.06	40.812		
13,900.00	12,097.30	13,926.60	12,070.67	56.75	58.08	88.91	-2,345.53	-3,064.25	3,226.61	3,146.00	80.61	40.027		
14,000.00	12,099.26	14,026.60	12,071.99	57.87	59.19	88.90	-2,445.51	-3,063.38	3,226.72	3,144.52	82.20	39.254		
14,100.00	12,101.21	14,126.60	12,073.31	59.02	60.32	88.89	-2,545.50	-3,062.50	3,226.84	3,143.01	83.83	38.495		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	12,103.17	14,226.59	12,074.62	60.19	61.48	88.88	-2,645.48	-3,061.63	3,226.95	3,141.47	85.48	37.749		
14,300.00	12,105.12	14,326.59	12,075.94	61.38	62.66	88.87	-2,745.47	-3,060.75	3,227.07	3,139.90	87.17	37.019		
14,400.00	12,107.08	14,426.59	12,077.25	62.60	63.86	88.86	-2,845.45	-3,059.88	3,227.19	3,138.30	88.89	36.305		
14,500.00	12,109.03	14,526.59	12,078.57	63.83	65.09	88.85	-2,945.44	-3,059.00	3,227.30	3,136.67	90.64	35.607		
14,600.00	12,110.99	14,626.59	12,079.89	65.09	66.33	88.83	-3,045.42	-3,058.12	3,227.42	3,135.01	92.41	34.925		
14,700.00	12,112.94	14,726.58	12,081.20	66.36	67.58	88.82	-3,145.41	-3,057.25	3,227.54	3,133.33	94.21	34.260		
14,800.00	12,114.90	14,826.58	12,082.52	67.64	68.86	88.81	-3,245.40	-3,056.37	3,227.65	3,131.63	96.03	33.612		
14,900.00	12,116.85	14,926.58	12,083.84	68.94	70.15	88.80	-3,345.38	-3,055.50	3,227.77	3,129.90	97.87	32.980		
15,000.00	12,118.81	15,026.58	12,085.15	70.26	71.45	88.79	-3,445.37	-3,054.62	3,227.89	3,128.16	99.73	32.366		
15,100.00	12,120.76	15,126.58	12,086.47	71.59	72.77	88.78	-3,545.35	-3,053.75	3,228.01	3,126.39	101.61	31.767		
15,200.00	12,122.72	15,226.57	12,087.78	72.94	74.10	88.77	-3,645.34	-3,052.87	3,228.12	3,124.61	103.52	31.185		
15,300.00	12,124.67	15,326.57	12,089.10	74.29	75.45	88.76	-3,745.32	-3,052.00	3,228.24	3,122.81	105.43	30.619		
15,400.00	12,126.63	15,426.57	12,090.42	75.66	76.81	88.74	-3,845.31	-3,051.12	3,228.36	3,120.99	107.37	30.068		
15,500.00	12,128.58	15,526.57	12,091.73	77.04	78.17	88.73	-3,945.29	-3,050.25	3,228.48	3,119.16	109.32	29.533		
15,600.00	12,130.54	15,626.57	12,093.05	78.43	79.55	88.72	-4,045.28	-3,049.37	3,228.59	3,117.31	111.28	29.012		
15,700.00	12,132.49	15,726.56	12,094.37	79.83	80.94	88.71	-4,145.26	-3,048.49	3,228.71	3,115.45	113.26	28.506		
15,800.00	12,134.45	15,826.56	12,095.68	81.24	82.34	88.70	-4,245.25	-3,047.62	3,228.83	3,113.57	115.26	28.014		
15,900.00	12,136.40	15,926.56	12,097.00	82.66	83.75	88.69	-4,345.24	-3,046.74	3,228.95	3,111.69	117.26	27.536		
16,000.00	12,138.36	16,026.56	12,098.31	84.09	85.17	88.68	-4,445.22	-3,045.87	3,229.07	3,109.79	119.28	27.071		
16,100.00	12,140.31	16,126.55	12,099.63	85.52	86.59	88.67	-4,545.21	-3,044.99	3,229.19	3,107.88	121.31	26.619		
16,200.00	12,142.27	16,226.55	12,100.95	86.96	88.03	88.65	-4,645.19	-3,044.12	3,229.30	3,105.95	123.35	26.180		
16,300.00	12,144.22	16,326.55	12,102.26	88.42	89.47	88.64	-4,745.18	-3,043.24	3,229.42	3,104.02	125.40	25.753		
16,400.00	12,146.18	16,426.55	12,103.58	89.87	90.92	88.63	-4,845.16	-3,042.37	3,229.54	3,102.08	127.46	25.338		
16,500.00	12,148.13	16,526.55	12,104.90	91.34	92.37	88.62	-4,945.15	-3,041.49	3,229.66	3,100.13	129.53	24.934		
16,600.00	12,150.09	16,626.54	12,106.21	92.81	93.83	88.61	-5,045.13	-3,040.61	3,229.78	3,098.17	131.61	24.541		
16,700.00	12,152.04	16,726.54	12,107.53	94.28	95.30	88.60	-5,145.12	-3,039.74	3,229.90	3,096.21	133.69	24.159		
16,800.00	12,154.00	16,826.54	12,108.84	95.77	96.77	88.59	-5,245.10	-3,038.86	3,230.02	3,094.23	135.79	23.787		
16,900.00	12,155.95	16,926.54	12,110.16	97.25	98.25	88.57	-5,345.09	-3,037.99	3,230.14	3,092.25	137.89	23.425		
17,000.00	12,157.91	17,026.54	12,111.48	98.75	99.74	88.56	-5,445.07	-3,037.11	3,230.26	3,090.26	140.00	23.073		
17,100.00	12,159.86	17,126.53	12,112.79	100.24	101.23	88.55	-5,545.06	-3,036.24	3,230.38	3,088.26	142.12	22.730		
17,200.00	12,161.82	17,226.53	12,114.11	101.75	102.72	88.54	-5,645.05	-3,035.36	3,230.50	3,086.25	144.24	22.396		
17,300.00	12,163.77	17,326.53	12,115.43	103.25	104.22	88.53	-5,745.03	-3,034.49	3,230.62	3,084.24	146.37	22.071		
17,400.00	12,165.73	17,426.53	12,116.74	104.77	105.73	88.52	-5,845.02	-3,033.61	3,230.74	3,082.23	148.51	21.754		
17,500.00	12,167.68	17,526.53	12,118.06	106.28	107.24	88.51	-5,945.00	-3,032.74	3,230.86	3,080.21	150.65	21.446		
17,600.00	12,169.64	17,626.52	12,119.37	107.80	108.75	88.50	-6,044.99	-3,031.86	3,230.98	3,078.18	152.80	21.145		
17,700.00	12,171.59	17,726.52	12,120.69	109.32	110.27	88.48	-6,144.97	-3,030.98	3,231.10	3,076.15	154.95	20.852		
17,800.00	12,173.55	17,826.52	12,122.01	110.85	111.79	88.47	-6,244.96	-3,030.11	3,231.22	3,074.11	157.11	20.566		
17,900.00	12,175.50	17,926.52	12,123.32	112.38	113.31	88.46	-6,344.94	-3,029.23	3,231.34	3,072.06	159.28	20.288		
18,000.00	12,177.46	18,026.52	12,124.64	113.92	114.84	88.45	-6,444.93	-3,028.36	3,231.46	3,070.02	161.44	20.016		
18,100.00	12,179.41	18,126.51	12,125.96	115.45	116.37	88.44	-6,544.91	-3,027.48	3,231.58	3,067.97	163.62	19.751		
18,200.00	12,181.37	18,226.51	12,127.27	117.00	117.91	88.43	-6,644.90	-3,026.61	3,231.70	3,065.91	165.79	19.492		
18,300.00	12,183.32	18,326.51	12,128.59	118.54	119.44	88.42	-6,744.89	-3,025.73	3,231.82	3,063.85	167.98	19.240		
18,400.00	12,185.28	18,426.51	12,129.90	120.09	120.98	88.41	-6,844.87	-3,024.86	3,231.95	3,061.78	170.16	18.993		
18,500.00	12,187.23	18,526.50	12,131.22	121.64	122.53	88.39	-6,944.86	-3,023.98	3,232.07	3,059.72	172.35	18.753		
18,600.00	12,189.19	18,626.50	12,132.54	123.19	124.07	88.38	-7,044.84	-3,023.11	3,232.19	3,057.64	174.54	18.518		
18,700.00	12,191.14	18,726.50	12,133.85	124.74	125.62	88.37	-7,144.83	-3,022.23	3,232.31	3,055.57	176.74	18.288		
18,800.00	12,193.10	18,826.50	12,135.17	126.30	127.18	88.36	-7,244.81	-3,021.35	3,232.43	3,053.49	178.94	18.064		
18,900.00	12,195.05	18,926.50	12,136.49	127.86	128.73	88.35	-7,344.80	-3,020.48	3,232.55	3,051.41	181.15	17.845		
19,000.00	12,197.01	19,026.49	12,137.80	129.42	130.29	88.34	-7,444.78	-3,019.60	3,232.68	3,049.32	183.35	17.631		
19,100.00	12,198.96	19,126.49	12,139.12	130.99	131.85	88.33	-7,544.77	-3,018.73	3,232.80	3,047.24	185.56	17.422		
19,200.00	12,200.92	19,226.49	12,140.43	132.55	133.41	88.32	-7,644.75	-3,017.85	3,232.92	3,045.15	187.78	17.217		
19,300.00	12,202.87	19,326.49	12,141.75	134.12	134.97	88.30	-7,744.74	-3,016.98	3,233.04	3,043.05	189.99	17.017		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
19,400.00	12,204.83	19,426.49	12,143.07	135.69	136.54	88.29	-7,844.72	-3,016.10	3,233.17	3,040.96	192.21	16.821				
19,500.00	12,206.78	19,526.48	12,144.38	137.26	138.10	88.28	-7,944.71	-3,015.23	3,233.29	3,038.86	194.43	16.629				
19,600.00	12,208.74	19,626.48	12,145.70	138.84	139.67	88.27	-8,044.70	-3,014.35	3,233.41	3,036.76	196.66	16.442				
19,700.00	12,210.69	19,726.48	12,147.02	140.41	141.24	88.26	-8,144.68	-3,013.48	3,233.54	3,034.65	198.88	16.258				
19,800.00	12,212.65	19,826.48	12,148.33	141.99	142.82	88.25	-8,244.67	-3,012.60	3,233.66	3,032.55	201.11	16.079				
19,900.00	12,214.60	19,926.48	12,149.65	143.57	144.39	88.24	-8,344.65	-3,011.72	3,233.78	3,030.44	203.35	15.903				
20,000.00	12,216.56	20,026.47	12,150.96	145.15	145.97	88.23	-8,444.64	-3,010.85	3,233.91	3,028.33	205.58	15.731				
20,100.00	12,218.51	20,126.47	12,152.28	146.73	147.55	88.21	-8,544.62	-3,009.97	3,234.03	3,026.21	207.82	15.562				
20,200.00	12,220.47	20,226.47	12,153.60	148.32	149.13	88.20	-8,644.61	-3,009.10	3,234.15	3,024.10	210.05	15.397				
20,300.00	12,222.43	20,326.47	12,154.91	149.90	150.71	88.19	-8,744.59	-3,008.22	3,234.28	3,021.98	212.29	15.235				
20,400.00	12,224.38	20,426.46	12,156.23	151.49	152.29	88.18	-8,844.58	-3,007.35	3,234.40	3,019.86	214.54	15.076				
20,500.00	12,226.34	20,526.46	12,157.55	153.08	153.88	88.17	-8,944.56	-3,006.47	3,234.52	3,017.75	216.78	14.921				
20,600.00	12,228.29	20,626.46	12,158.86	154.67	155.46	88.16	-9,044.55	-3,005.60	3,234.65	3,015.62	219.03	14.768				
20,700.00	12,230.25	20,726.46	12,160.18	156.26	157.05	88.15	-9,144.54	-3,004.72	3,234.77	3,013.50	221.27	14.619				
20,800.00	12,232.20	20,826.46	12,161.49	157.85	158.64	88.14	-9,244.52	-3,003.84	3,234.90	3,011.38	223.52	14.472				
20,900.00	12,234.16	20,926.45	12,162.81	159.45	160.23	88.12	-9,344.51	-3,002.97	3,235.02	3,009.25	225.77	14.329				
21,000.00	12,236.11	21,026.45	12,164.13	161.04	161.82	88.11	-9,444.49	-3,002.09	3,235.15	3,007.12	228.03	14.188				
21,100.00	12,238.07	21,126.45	12,165.44	162.64	163.41	88.10	-9,544.48	-3,001.22	3,235.27	3,004.99	230.28	14.049				
21,200.00	12,240.02	21,226.45	12,166.76	164.23	165.01	88.09	-9,644.46	-3,000.34	3,235.40	3,002.86	232.54	13.914				
21,300.00	12,241.98	21,326.45	12,168.08	165.83	166.60	88.08	-9,744.45	-2,999.47	3,235.52	3,000.73	234.79	13.780				
21,400.00	12,243.93	21,426.44	12,169.39	167.43	168.20	88.07	-9,844.43	-2,998.59	3,235.65	2,998.59	237.05	13.649				
21,500.00	12,245.89	21,526.44	12,170.71	169.03	169.79	88.06	-9,944.42	-2,997.72	3,235.77	2,996.46	239.31	13.521				
21,600.00	12,247.84	21,626.44	12,172.02	170.63	171.39	88.05	-10,044.40	-2,996.84	3,235.90	2,994.32	241.57	13.395				
21,700.00	12,249.80	21,726.44	12,173.34	172.23	172.99	88.03	-10,144.39	-2,995.97	3,236.02	2,992.18	243.84	13.271				
21,800.00	12,251.75	21,826.44	12,174.66	173.84	174.59	88.02	-10,244.37	-2,995.09	3,236.15	2,990.05	246.10	13.150				
21,900.00	12,253.71	21,926.43	12,175.97	175.44	176.19	88.01	-10,344.36	-2,994.21	3,236.27	2,987.91	248.37	13.030				
22,000.00	12,255.66	22,026.43	12,177.29	177.05	177.79	88.00	-10,444.35	-2,993.34	3,236.40	2,985.77	250.64	12.913				
22,100.00	12,257.62	22,126.43	12,178.61	178.65	179.40	87.99	-10,544.33	-2,992.46	3,236.53	2,983.62	252.90	12.797				
22,200.00	12,259.57	22,226.43	12,179.92	180.26	181.00	87.98	-10,644.32	-2,991.59	3,236.65	2,981.48	255.17	12.684				
22,253.13	12,260.61	22,279.56	12,180.62	181.02	181.85	87.97	-10,697.44	-2,991.12	3,236.72	2,980.41	256.31	12.628 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	34.60	34.60	0.00	0.04	-89.00	40.33	-2,318.90	2,319.25					
100.00	100.00	134.60	134.60	0.14	0.25	-89.00	40.33	-2,318.90	2,319.25	2,318.96	0.29	8,084.498		
200.00	200.00	234.60	234.60	0.50	0.61	-89.00	40.33	-2,318.90	2,319.25	2,318.46	0.79	2,946.181		
300.00	300.00	334.60	334.60	0.86	0.97	-89.00	40.33	-2,318.90	2,319.25	2,317.96	1.29	1,794.102		
400.00	400.00	434.60	434.60	1.22	1.32	-89.00	40.33	-2,318.90	2,319.25	2,317.45	1.80	1,289.168		
500.00	500.00	534.60	534.60	1.58	1.68	-89.00	40.33	-2,318.90	2,319.25	2,316.95	2.31	1,005.908		
600.00	600.00	634.60	634.60	1.93	2.04	-89.00	40.33	-2,318.90	2,319.25	2,316.44	2.81	824.665		
700.00	700.00	734.60	734.60	2.29	2.40	-89.00	40.33	-2,318.90	2,319.25	2,315.93	3.32	698.748		
800.00	800.00	834.60	834.60	2.65	2.76	-89.00	40.33	-2,318.90	2,319.25	2,315.42	3.83	606.183		
900.00	900.00	934.60	934.60	3.01	3.12	-89.00	40.33	-2,318.90	2,319.25	2,314.92	4.33	535.270		
1,000.00	1,000.00	1,034.60	1,034.60	3.37	3.48	-89.00	40.33	-2,318.90	2,319.25	2,314.41	4.84	479.209		
1,100.00	1,100.00	1,134.60	1,134.60	3.73	3.83	-89.00	40.33	-2,318.90	2,319.25	2,313.90	5.35	433.777		
1,200.00	1,200.00	1,234.60	1,234.60	4.08	4.19	-89.00	40.33	-2,318.90	2,319.25	2,313.40	5.85	396.213		
1,300.00	1,300.00	1,334.60	1,334.60	4.44	4.55	-89.00	40.33	-2,318.90	2,319.25	2,312.89	6.36	364.635		
1,400.00	1,400.00	1,434.60	1,434.60	4.80	4.91	-89.00	40.33	-2,318.90	2,319.25	2,312.38	6.87	337.720		
1,500.00	1,500.00	1,534.60	1,534.60	5.16	5.27	-89.00	40.33	-2,318.90	2,319.25	2,311.88	7.37	314.504		
1,600.00	1,600.00	1,634.60	1,634.60	5.52	5.63	-89.00	40.33	-2,318.90	2,319.25	2,311.37	7.88	294.275		
1,700.00	1,700.00	1,734.60	1,734.60	5.88	5.99	-89.00	40.33	-2,318.90	2,319.25	2,310.86	8.39	276.490		
1,800.00	1,800.00	1,834.60	1,834.60	6.24	6.34	-89.00	40.33	-2,318.90	2,319.25	2,310.36	8.90	260.733		
1,900.00	1,900.00	1,934.60	1,934.60	6.59	6.70	-89.00	40.33	-2,318.90	2,319.25	2,309.85	9.40	246.675		
2,000.00	2,000.00	2,034.60	2,034.60	6.95	7.06	-89.00	40.33	-2,318.90	2,319.25	2,309.34	9.91	234.055		
2,100.00	2,100.00	2,134.60	2,134.60	7.31	7.42	-89.00	40.33	-2,318.90	2,319.25	2,308.83	10.42	222.664		
2,200.00	2,200.00	2,234.60	2,234.60	7.67	7.78	-89.00	40.33	-2,318.90	2,319.25	2,308.33	10.92	212.330		
2,300.00	2,300.00	2,334.60	2,334.60	8.03	8.14	-89.00	40.33	-2,318.90	2,319.25	2,307.82	11.43	202.912		
2,400.00	2,400.00	2,434.60	2,434.60	8.39	8.49	-89.00	40.33	-2,318.90	2,319.25	2,307.31	11.94	194.295		
2,500.00	2,500.00	2,534.60	2,534.60	8.74	8.85	-89.00	40.33	-2,318.90	2,319.25	2,306.81	12.44	186.379		
2,600.00	2,600.00	2,634.60	2,634.60	9.10	9.21	-89.00	40.33	-2,318.90	2,319.25	2,306.30	12.95	179.084		
2,700.00	2,700.00	2,734.60	2,734.60	9.46	9.57	-89.00	39.80	-2,317.52	2,318.66	2,305.06	13.59	170.600		
2,800.00	2,799.99	3,027.16	3,026.72	9.80	10.55	120.62	34.95	-2,304.94	2,313.86	2,299.50	14.36	161.183		
2,900.00	2,899.91	3,257.56	3,255.47	10.13	11.35	120.70	25.15	-2,279.48	2,304.72	2,289.65	15.08	152.876		
2,966.50	2,966.28	3,391.23	3,387.29	10.35	11.83	120.79	17.21	-2,258.85	2,296.33	2,280.83	15.51	148.095		
3,000.00	2,999.70	3,424.43	3,419.95	10.46	11.96	120.79	15.07	-2,253.30	2,291.87	2,276.21	15.66	146.315		
3,100.00	3,099.46	3,523.54	3,517.46	10.79	12.32	120.78	8.69	-2,236.73	2,278.55	2,262.41	16.14	141.181		
3,200.00	3,199.22	3,622.65	3,614.96	11.12	12.70	120.78	2.31	-2,220.15	2,265.22	2,248.61	16.62	136.310		
3,300.00	3,298.97	3,721.76	3,712.46	11.46	13.08	120.77	-4.08	-2,203.58	2,251.90	2,234.80	17.10	131.685		
3,400.00	3,398.73	3,820.87	3,809.97	11.80	13.46	120.77	-10.46	-2,187.01	2,238.58	2,220.99	17.59	127.291		
3,500.00	3,498.49	3,919.98	3,907.47	12.14	13.85	120.76	-16.84	-2,170.43	2,225.25	2,207.18	18.07	123.113		
3,600.00	3,598.24	4,019.08	4,004.98	12.49	14.24	120.76	-23.22	-2,153.86	2,211.93	2,193.37	18.57	119.137		
3,700.00	3,698.00	4,118.19	4,102.48	12.83	14.64	120.75	-29.61	-2,137.28	2,198.61	2,179.55	19.06	115.351		
3,800.00	3,797.76	4,217.30	4,199.98	13.18	15.04	120.75	-35.99	-2,120.71	2,185.29	2,165.73	19.56	111.743		
3,900.00	3,897.51	4,316.41	4,297.49	13.53	15.44	120.74	-42.37	-2,104.13	2,171.96	2,151.91	20.05	108.302		
4,000.00	3,997.27	4,415.52	4,394.99	13.88	15.85	120.74	-48.75	-2,087.56	2,158.64	2,138.08	20.55	105.018		
4,100.00	4,097.03	4,514.63	4,492.50	14.23	16.26	120.73	-55.13	-2,070.99	2,145.32	2,124.26	21.06	101.881		
4,200.00	4,196.78	4,613.73	4,590.00	14.58	16.67	120.73	-61.52	-2,054.41	2,131.99	2,110.43	21.56	98.882		
4,300.00	4,296.54	4,712.84	4,687.50	14.94	17.08	120.72	-67.90	-2,037.84	2,118.67	2,096.60	22.07	96.013		
4,400.00	4,396.30	4,811.95	4,785.01	15.29	17.50	120.72	-74.28	-2,021.26	2,105.35	2,082.77	22.57	93.266		
4,500.00	4,496.05	4,911.06	4,882.51	15.65	17.92	120.71	-80.66	-2,004.69	2,092.03	2,068.94	23.08	90.635		
4,600.00	4,495.81	5,010.17	4,980.02	16.00	18.34	120.71	-87.05	-1,988.12	2,078.70	2,055.11	23.59	88.111		
4,700.00	4,495.57	5,109.28	5,077.52	16.36	18.76	120.70	-93.43	-1,971.54	2,065.38	2,041.28	24.10	85.691		
4,800.00	4,495.32	5,208.38	5,175.02	16.72	19.18	120.70	-99.81	-1,954.97	2,052.06	2,027.44	24.61	83.367		
4,900.00	4,495.08	5,307.49	5,272.53	17.08	19.61	120.69	-106.19	-1,938.39	2,038.73	2,013.61	25.13	81.134		
5,000.00	4,994.84	5,406.60	5,370.03	17.44	20.04	120.69	-112.57	-1,921.82	2,025.41	1,999.77	25.64	78.987		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	5,094.59	5,505.71	5,467.54	17.80	20.46	120.68	-118.96	-1,905.25	2,012.09	1,985.93	26.16	76.922		
5,200.00	5,194.35	5,604.82	5,565.04	18.16	20.89	120.67	-125.34	-1,888.67	1,998.77	1,972.09	26.67	74.934		
5,300.00	5,294.11	5,703.93	5,662.54	18.52	21.32	120.67	-131.72	-1,872.10	1,985.44	1,958.25	27.19	73.019		
5,400.00	5,393.86	5,803.03	5,760.05	18.89	21.76	120.66	-138.10	-1,855.52	1,972.12	1,944.41	27.71	71.173		
5,500.00	5,493.62	5,902.14	5,857.55	19.25	22.19	120.66	-144.48	-1,838.95	1,958.80	1,930.57	28.23	69.394		
5,600.00	5,593.38	6,001.25	5,955.06	19.61	22.62	120.65	-150.87	-1,822.37	1,945.48	1,916.73	28.75	67.677		
5,700.00	5,693.13	6,100.36	6,052.56	19.98	23.06	120.64	-157.25	-1,805.80	1,932.15	1,902.89	29.27	66.019		
5,800.00	5,792.89	6,199.47	6,150.06	20.34	23.49	120.64	-163.63	-1,789.23	1,918.83	1,889.04	29.79	64.418		
5,900.00	5,892.65	6,298.58	6,247.57	20.71	23.93	120.63	-170.01	-1,772.65	1,905.51	1,875.20	30.31	62.870		
6,000.00	5,992.40	6,397.69	6,345.07	21.07	24.37	120.62	-176.40	-1,756.08	1,892.19	1,861.36	30.83	61.374		
6,100.00	6,092.16	6,496.79	6,442.58	21.44	24.81	120.62	-182.78	-1,739.50	1,878.86	1,847.51	31.35	59.926		
6,200.00	6,191.92	6,595.90	6,540.08	21.81	25.24	120.61	-189.16	-1,722.93	1,865.54	1,833.67	31.88	58.525		
6,300.00	6,291.67	6,695.01	6,637.59	22.17	25.68	120.60	-195.54	-1,706.36	1,852.22	1,819.82	32.40	57.168		
6,400.00	6,391.43	6,794.12	6,735.09	22.54	26.12	120.60	-201.92	-1,689.78	1,838.90	1,805.97	32.92	55.853		
6,500.00	6,491.19	6,893.23	6,832.59	22.91	26.56	120.59	-208.31	-1,673.21	1,825.57	1,792.13	33.45	54.579		
6,600.00	6,590.94	6,992.34	6,930.10	23.28	27.01	120.58	-214.69	-1,656.63	1,812.25	1,778.28	33.97	53.343		
6,700.00	6,690.70	7,091.44	7,027.60	23.64	27.45	120.58	-221.07	-1,640.06	1,798.93	1,764.43	34.50	52.145		
6,803.27	6,793.72	7,193.79	7,128.29	24.02	27.90	120.57	-227.66	-1,622.94	1,785.17	1,750.13	35.04	50.944		
6,900.00	6,890.29	7,289.56	7,222.52	24.38	28.33	120.35	-233.83	-1,606.93	1,771.67	1,736.12	35.55	49.836		
7,000.00	6,990.24	7,388.33	7,319.68	24.73	28.77	120.03	-240.19	-1,590.41	1,756.43	1,720.36	36.07	48.692		
7,069.77	7,060.00	7,444.94	7,375.39	24.98	29.03	-89.84	-243.80	-1,581.04	1,745.17	1,708.76	36.42	47.921		
7,100.00	7,090.23	7,465.82	7,395.97	25.08	29.12	-89.88	-245.07	-1,577.74	1,740.39	1,703.83	36.56	47.602		
7,200.00	7,190.23	7,535.15	7,464.44	25.42	29.42	-90.01	-248.99	-1,567.55	1,725.65	1,688.62	37.03	46.601		
7,300.00	7,290.23	7,600.00	7,528.64	25.76	29.69	-90.12	-252.26	-1,559.07	1,712.63	1,675.15	37.48	45.691		
7,400.00	7,390.23	7,674.93	7,603.01	26.10	29.99	-90.23	-255.55	-1,550.53	1,701.29	1,663.35	37.94	44.839		
7,500.00	7,490.23	7,745.27	7,672.98	26.44	30.27	-90.32	-258.15	-1,543.76	1,691.68	1,653.29	38.38	44.072		
7,600.00	7,590.23	7,815.86	7,743.31	26.78	30.54	-90.40	-260.30	-1,538.17	1,683.78	1,644.96	38.82	43.378		
7,700.00	7,690.23	7,900.00	7,827.27	27.12	30.84	-90.46	-262.26	-1,533.10	1,677.68	1,638.41	39.27	42.717		
7,800.00	7,790.23	7,957.59	7,884.81	27.46	31.04	-90.50	-263.21	-1,530.63	1,673.16	1,633.51	39.65	42.200		
7,900.00	7,890.23	8,028.63	7,955.82	27.80	31.28	-90.52	-263.96	-1,528.69	1,670.44	1,630.39	40.05	41.712		
8,000.00	7,990.23	8,104.82	8,032.00	28.14	31.53	-90.53	-264.23	-1,527.98	1,669.46	1,629.01	40.45	41.271		
8,035.91	8,026.14	8,133.56	8,060.74	28.27	31.62	-90.53	-264.23	-1,527.98	1,669.44	1,628.84	40.60	41.122		
8,100.00	8,090.23	8,197.66	8,124.83	28.49	31.82	-90.53	-264.23	-1,527.98	1,669.44	1,628.54	40.90	40.814		
8,200.00	8,190.23	8,297.66	8,224.83	28.83	32.13	-90.53	-264.23	-1,527.98	1,669.44	1,628.06	41.38	40.342		
8,300.00	8,290.23	8,397.66	8,324.83	29.17	32.45	-90.53	-264.23	-1,527.98	1,669.44	1,627.58	41.86	39.880		
8,400.00	8,390.23	8,497.66	8,424.83	29.52	32.76	-90.53	-264.23	-1,527.98	1,669.44	1,627.10	42.34	39.429		
8,500.00	8,490.23	8,597.66	8,524.83	29.86	33.08	-90.53	-264.23	-1,527.98	1,669.44	1,626.62	42.82	38.986		
8,600.00	8,590.23	8,697.66	8,624.83	30.21	33.40	-90.53	-264.23	-1,527.98	1,669.44	1,626.14	43.30	38.553		
8,700.00	8,690.23	8,797.66	8,724.83	30.55	33.71	-90.53	-264.23	-1,527.98	1,669.44	1,625.66	43.78	38.129		
8,800.00	8,790.23	8,897.66	8,824.83	30.90	34.03	-90.53	-264.23	-1,527.98	1,669.44	1,625.18	44.27	37.714		
8,900.00	8,890.23	8,997.66	8,924.83	31.24	34.35	-90.53	-264.23	-1,527.98	1,669.44	1,624.69	44.75	37.307		
9,000.00	8,990.23	9,097.66	9,024.83	31.59	34.67	-90.53	-264.23	-1,527.98	1,669.44	1,624.21	45.23	36.909		
9,100.00	9,090.23	9,197.66	9,124.83	31.93	34.99	-90.53	-264.23	-1,527.98	1,669.44	1,623.73	45.72	36.518		
9,200.00	9,190.23	9,297.66	9,224.83	32.28	35.31	-90.53	-264.23	-1,527.98	1,669.44	1,623.24	46.20	36.135		
9,300.00	9,290.23	9,397.66	9,324.83	32.63	35.64	-90.53	-264.23	-1,527.98	1,669.44	1,622.76	46.68	35.760		
9,400.00	9,390.23	9,497.66	9,424.83	32.97	35.96	-90.53	-264.23	-1,527.98	1,669.44	1,622.27	47.17	35.392		
9,500.00	9,490.23	9,597.66	9,524.83	33.32	36.28	-90.53	-264.23	-1,527.98	1,669.44	1,621.79	47.66	35.032		
9,600.00	9,590.23	9,697.66	9,624.83	33.67	36.61	-90.53	-264.23	-1,527.98	1,669.44	1,621.30	48.14	34.678		
9,700.00	9,690.23	9,797.66	9,724.83	34.02	36.93	-90.53	-264.23	-1,527.98	1,669.44	1,620.81	48.63	34.331		
9,800.00	9,790.23	9,897.66	9,824.83	34.37	37.26	-90.53	-264.23	-1,527.98	1,669.44	1,620.33	49.11	33.991		
9,900.00	9,890.23	9,997.66	9,924.83	34.71	37.58	-90.53	-264.23	-1,527.98	1,669.44	1,619.84	49.60	33.657		
10,000.00	9,990.23	10,097.66	10,024.83	35.06	37.91	-90.53	-264.23	-1,527.98	1,669.44	1,619.35	50.09	33.329		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	10,090.23	10,197.66	10,124.83	35.41	38.24	-90.53	-264.23	-1,527.98	1,669.44	1,618.86	50.58	33.007		
10,200.00	10,190.23	10,297.66	10,224.83	35.76	38.57	-90.53	-264.23	-1,527.98	1,669.44	1,618.38	51.07	32.692		
10,300.00	10,290.23	10,397.66	10,324.83	36.11	38.89	-90.53	-264.23	-1,527.98	1,669.44	1,617.89	51.55	32.382		
10,400.00	10,390.23	10,497.66	10,424.83	36.46	39.22	-90.53	-264.23	-1,527.98	1,669.44	1,617.40	52.04	32.077		
10,500.00	10,490.23	10,597.66	10,524.83	36.81	39.55	-90.53	-264.23	-1,527.98	1,669.44	1,616.91	52.53	31.779		
10,600.00	10,590.23	10,697.66	10,624.83	37.16	39.88	-90.53	-264.23	-1,527.98	1,669.44	1,616.42	53.02	31.485		
10,700.00	10,690.23	10,797.66	10,724.83	37.50	40.21	-90.53	-264.23	-1,527.98	1,669.44	1,615.93	53.51	31.197		
10,800.00	10,790.23	10,897.66	10,824.83	37.85	40.54	-90.53	-264.23	-1,527.98	1,669.44	1,615.44	54.00	30.913		
10,900.00	10,890.23	10,997.66	10,924.83	38.20	40.87	-90.53	-264.23	-1,527.98	1,669.44	1,614.95	54.49	30.635		
11,000.00	10,990.23	11,097.66	11,024.83	38.55	41.21	-90.53	-264.23	-1,527.98	1,669.44	1,614.46	54.99	30.361		
11,100.00	11,090.23	11,197.66	11,124.83	38.91	41.54	-90.53	-264.23	-1,527.98	1,669.44	1,613.97	55.48	30.092		
11,200.00	11,190.23	11,297.66	11,224.83	39.26	41.87	-90.53	-264.23	-1,527.98	1,669.44	1,613.47	55.97	29.828		
11,281.23	11,271.46	11,378.90	11,306.06	39.54	42.14	-90.56	-264.97	-1,527.97	1,669.44	1,613.07	56.37	29.616 CC		
11,300.00	11,290.23	11,397.61	11,324.73	39.61	42.20	-90.60	-266.22	-1,527.96	1,669.44	1,612.98	56.46	29.568		
11,400.00	11,390.23	11,494.68	11,420.32	39.96	42.54	-91.16	-282.44	-1,527.80	1,669.54	1,612.58	56.96	29.309		
11,504.77	11,495.00	11,588.01	11,508.38	40.32	42.87	-92.21	-313.03	-1,527.50	1,670.27	1,612.79	57.48	29.058		
11,550.00	11,540.19	11,625.48	11,542.15	40.48	43.00	87.78	-329.27	-1,527.35	1,670.93	1,613.24	57.70	28.961		
11,600.00	11,589.80	11,665.99	11,577.36	40.66	43.15	87.15	-349.27	-1,527.15	1,671.85	1,613.92	57.93	28.861		
11,650.00	11,638.68	11,705.63	11,610.38	40.84	43.29	86.54	-371.20	-1,526.94	1,672.94	1,614.78	58.16	28.766		
11,700.00	11,686.48	11,744.53	11,641.22	41.03	43.43	85.96	-394.88	-1,526.70	1,674.16	1,615.78	58.38	28.677		
11,750.00	11,732.81	11,782.76	11,689.90	41.22	43.57	85.39	-420.15	-1,526.46	1,675.49	1,616.89	58.60	28.591		
11,800.00	11,777.34	11,820.41	11,696.43	41.41	43.71	84.85	-446.85	-1,526.20	1,676.88	1,618.07	58.82	28.510		
11,850.00	11,819.72	11,857.54	11,720.83	41.61	43.85	84.34	-474.83	-1,525.92	1,678.32	1,619.29	59.03	28.431		
11,900.00	11,859.63	11,900.00	11,746.44	41.81	44.01	83.81	-508.69	-1,525.59	1,679.76	1,620.49	59.27	28.339		
11,950.00	11,896.76	11,930.53	11,763.27	42.01	44.13	83.42	-534.16	-1,525.34	1,681.15	1,621.71	59.45	28.279		
12,000.00	11,930.83	11,966.50	11,781.32	42.22	44.28	83.02	-565.25	-1,525.04	1,682.50	1,622.84	59.66	28.203		
12,050.00	11,961.59	12,000.00	11,796.35	42.44	44.41	82.67	-595.19	-1,524.75	1,683.76	1,623.91	59.85	28.132		
12,100.00	11,988.80	12,037.59	11,811.10	42.66	44.57	82.33	-629.76	-1,524.41	1,684.91	1,624.83	60.08	28.044		
12,150.00	12,012.24	12,072.81	11,822.83	42.89	44.73	82.06	-662.95	-1,524.09	1,685.93	1,625.63	60.30	27.959		
12,200.00	12,031.76	12,107.85	11,832.46	43.12	44.88	81.83	-696.64	-1,523.76	1,686.80	1,626.27	60.52	27.869		
12,250.00	12,047.18	12,150.00	11,841.28	43.36	45.08	81.62	-737.85	-1,523.39	1,687.52	1,626.72	60.80	27.755		
12,300.00	12,058.41	12,177.57	11,845.41	43.60	45.21	81.51	-765.11	-1,523.09	1,688.01	1,627.01	61.00	27.672		
12,350.00	12,065.34	12,212.32	11,848.73	43.85	45.37	81.43	-799.68	-1,522.75	1,688.33	1,627.08	61.25	27.564		
12,393.56	12,067.85	12,244.20	11,849.96	44.07	45.53	81.40	-831.53	-1,522.44	1,688.45	1,626.97	61.49	27.461		
12,400.00	12,067.97	12,250.63	11,850.08	44.10	45.56	81.40	-837.97	-1,522.38	1,688.45	1,626.92	61.53	27.441		
12,500.00	12,069.93	12,350.63	11,851.99	44.63	46.09	81.40	-937.94	-1,521.40	1,688.46	1,626.19	62.28	27.112		
12,600.00	12,071.88	12,450.63	11,853.91	45.21	46.68	81.40	-1,037.92	-1,520.43	1,688.47	1,625.37	63.10	26.760		
12,700.00	12,073.84	12,550.63	11,855.82	45.84	47.31	81.39	-1,137.90	-1,519.45	1,688.48	1,624.49	63.99	26.387		
12,800.00	12,075.79	12,650.63	11,857.74	46.53	47.99	81.39	-1,237.87	-1,518.47	1,688.49	1,623.54	64.95	25.996		
12,900.00	12,077.75	12,750.63	11,859.65	47.26	48.72	81.39	-1,337.85	-1,517.50	1,688.50	1,622.52	65.98	25.591		
13,000.00	12,079.70	12,850.63	11,861.57	48.04	49.49	81.39	-1,437.83	-1,516.52	1,688.51	1,621.43	67.07	25.173		
13,100.00	12,081.66	12,950.63	11,863.48	48.86	50.31	81.39	-1,537.80	-1,515.55	1,688.52	1,620.29	68.23	24.748		
13,200.00	12,083.61	13,050.63	11,865.40	49.72	51.17	81.39	-1,637.78	-1,514.57	1,688.53	1,619.08	69.44	24.316		
13,300.00	12,085.57	13,150.63	11,867.31	50.62	52.06	81.39	-1,737.76	-1,513.59	1,688.54	1,617.83	70.71	23.880		
13,400.00	12,087.53	13,250.63	11,869.23	51.56	52.99	81.38	-1,837.74	-1,512.62	1,688.54	1,616.51	72.03	23.442		
13,500.00	12,089.48	13,350.63	11,871.14	52.54	53.96	81.38	-1,937.71	-1,511.64	1,688.55	1,615.15	73.40	23.005		
13,600.00	12,091.44	13,450.63	11,873.05	53.54	54.96	81.38	-2,037.69	-1,510.67	1,688.56	1,613.75	74.81	22.570		
13,700.00	12,093.39	13,550.63	11,874.97	54.58	55.99	81.38	-2,137.67	-1,509.69	1,688.57	1,612.30	76.27	22.138		
13,800.00	12,095.35	13,650.63	11,876.88	55.65	57.05	81.38	-2,237.64	-1,508.71	1,688.58	1,610.80	77.78	21.711		
13,900.00	12,097.30	13,750.63	11,878.80	56.75	58.14	81.38	-2,337.62	-1,507.74	1,688.59	1,609.27	79.32	21.289		
14,000.00	12,099.26	13,850.63	11,880.71	57.87	59.25	81.38	-2,437.60	-1,506.76	1,688.60	1,607.71	80.89	20.874		
14,100.00	12,101.21	13,950.63	11,882.63	59.02	60.39	81.38	-2,537.57	-1,505.79	1,688.61	1,606.10	82.51	20.466		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	12,103.17	14,050.63	11,884.54	60.19	61.55	81.37	-2,637.55	-1,504.81	1,688.62	1,604.47	84.15	20.067		
14,300.00	12,105.12	14,150.63	11,886.46	61.38	62.74	81.37	-2,737.53	-1,503.83	1,688.63	1,602.80	85.83	19.675		
14,400.00	12,107.08	14,250.63	11,888.37	62.60	63.94	81.37	-2,837.50	-1,502.86	1,688.64	1,601.10	87.53	19.292		
14,500.00	12,109.03	14,350.63	11,890.29	63.83	65.17	81.37	-2,937.48	-1,501.88	1,688.64	1,599.38	89.26	18.917		
14,600.00	12,110.99	14,450.63	11,892.20	65.09	66.41	81.37	-3,037.46	-1,500.91	1,688.65	1,597.63	91.02	18.552		
14,700.00	12,112.94	14,550.63	11,894.12	66.36	67.67	81.37	-3,137.43	-1,499.93	1,688.66	1,595.86	92.81	18.196		
14,800.00	12,114.90	14,650.63	11,896.03	67.64	68.95	81.37	-3,237.41	-1,498.95	1,688.67	1,594.06	94.61	17.849		
14,900.00	12,116.85	14,750.63	11,897.95	68.94	70.24	81.36	-3,337.39	-1,497.98	1,688.68	1,592.24	96.44	17.511		
15,000.00	12,118.81	14,850.63	11,899.86	70.26	71.55	81.36	-3,437.37	-1,497.00	1,688.69	1,590.41	98.29	17.182		
15,100.00	12,120.76	14,950.63	11,901.77	71.59	72.87	81.36	-3,537.34	-1,496.03	1,688.70	1,588.55	100.15	16.861		
15,200.00	12,122.72	15,050.63	11,903.69	72.94	74.20	81.36	-3,637.32	-1,495.05	1,688.71	1,586.67	102.04	16.550		
15,300.00	12,124.67	15,150.63	11,905.60	74.29	75.55	81.36	-3,737.30	-1,494.07	1,688.72	1,584.78	103.94	16.247		
15,400.00	12,126.63	15,250.63	11,907.52	75.66	76.91	81.36	-3,837.27	-1,493.10	1,688.73	1,582.87	105.86	15.953		
15,500.00	12,128.58	15,350.63	11,909.43	77.04	78.28	81.36	-3,937.25	-1,492.12	1,688.74	1,580.94	107.79	15.666		
15,600.00	12,130.54	15,450.63	11,911.35	78.43	79.66	81.36	-4,037.23	-1,491.15	1,688.75	1,579.00	109.74	15.388		
15,700.00	12,132.49	15,550.63	11,913.26	79.83	81.05	81.35	-4,137.20	-1,490.17	1,688.75	1,577.05	111.70	15.118		
15,800.00	12,134.45	15,650.63	11,915.18	81.24	82.46	81.35	-4,237.18	-1,489.19	1,688.76	1,575.08	113.68	14.855		
15,900.00	12,136.40	15,750.63	11,917.09	82.66	83.87	81.35	-4,337.16	-1,488.22	1,688.77	1,573.10	115.67	14.600		
16,000.00	12,138.36	15,850.63	11,919.01	84.09	85.28	81.35	-4,437.13	-1,487.24	1,688.78	1,571.11	117.67	14.352		
16,100.00	12,140.31	15,950.63	11,920.92	85.52	86.71	81.35	-4,537.11	-1,486.27	1,688.79	1,569.11	119.68	14.111		
16,200.00	12,142.27	16,050.63	11,922.84	86.96	88.15	81.35	-4,637.09	-1,485.29	1,688.80	1,567.10	121.70	13.877		
16,300.00	12,144.22	16,150.63	11,924.75	88.42	89.59	81.35	-4,737.07	-1,484.31	1,688.81	1,565.08	123.73	13.649		
16,400.00	12,146.18	16,250.63	11,926.67	89.87	91.04	81.34	-4,837.04	-1,483.34	1,688.82	1,563.04	125.78	13.427		
16,500.00	12,148.13	16,350.63	11,928.58	91.34	92.50	81.34	-4,937.02	-1,482.36	1,688.83	1,561.00	127.83	13.212		
16,600.00	12,150.09	16,450.63	11,930.49	92.81	93.96	81.34	-5,037.00	-1,481.39	1,688.84	1,558.95	129.89	13.002		
16,700.00	12,152.04	16,550.63	11,932.41	94.28	95.43	81.34	-5,136.97	-1,480.41	1,688.85	1,556.89	131.96	12.799		
16,800.00	12,154.00	16,650.63	11,934.32	95.77	96.91	81.34	-5,236.95	-1,479.43	1,688.86	1,554.82	134.03	12.600		
16,900.00	12,155.95	16,750.63	11,936.24	97.25	98.39	81.34	-5,336.93	-1,478.46	1,688.86	1,552.75	136.12	12.408		
17,000.00	12,157.91	16,850.63	11,938.15	98.75	99.87	81.34	-5,436.90	-1,477.48	1,688.87	1,550.67	138.21	12.220		
17,100.00	12,159.86	16,950.63	11,940.07	100.24	101.36	81.34	-5,536.88	-1,476.50	1,688.88	1,548.58	140.31	12.037		
17,200.00	12,161.82	17,050.63	11,941.98	101.75	102.86	81.33	-5,636.86	-1,475.53	1,688.89	1,546.48	142.41	11.859		
17,300.00	12,163.77	17,150.63	11,943.90	103.25	104.36	81.33	-5,736.83	-1,474.55	1,688.90	1,544.38	144.52	11.686		
17,400.00	12,165.73	17,250.63	11,945.81	104.77	105.87	81.33	-5,836.81	-1,473.58	1,688.91	1,542.27	146.64	11.518		
17,500.00	12,167.68	17,350.63	11,947.73	106.28	107.38	81.33	-5,936.79	-1,472.60	1,688.92	1,540.16	148.76	11.353		
17,600.00	12,169.64	17,450.63	11,949.64	107.80	108.89	81.33	-6,036.76	-1,471.62	1,688.93	1,538.04	150.89	11.193		
17,700.00	12,171.59	17,550.63	11,951.56	109.32	110.41	81.33	-6,136.74	-1,470.65	1,688.94	1,535.92	153.02	11.037		
17,800.00	12,173.55	17,650.63	11,953.47	110.85	111.93	81.33	-6,236.72	-1,469.67	1,688.95	1,533.79	155.16	10.885		
17,900.00	12,175.50	17,750.63	11,955.39	112.38	113.46	81.32	-6,336.70	-1,468.70	1,688.96	1,531.65	157.30	10.737		
18,000.00	12,177.46	17,850.63	11,957.30	113.92	114.99	81.32	-6,436.67	-1,467.72	1,688.97	1,529.51	159.45	10.592		
18,100.00	12,179.41	17,950.63	11,959.21	115.45	116.52	81.32	-6,536.65	-1,466.74	1,688.97	1,527.37	161.60	10.451		
18,200.00	12,181.37	18,050.63	11,961.13	117.00	118.05	81.32	-6,636.63	-1,465.77	1,688.98	1,525.22	163.76	10.314		
18,300.00	12,183.32	18,150.63	11,963.04	118.54	119.59	81.32	-6,736.60	-1,464.79	1,688.99	1,523.07	165.92	10.179		
18,400.00	12,185.28	18,250.63	11,964.96	120.09	121.14	81.32	-6,836.58	-1,463.82	1,689.00	1,520.92	168.09	10.048		
18,500.00	12,187.23	18,350.63	11,966.87	121.64	122.68	81.32	-6,936.56	-1,462.84	1,689.01	1,518.76	170.25	9.921		
18,600.00	12,189.19	18,450.63	11,968.79	123.19	124.23	81.31	-7,036.53	-1,461.86	1,689.02	1,516.59	172.43	9.796		
18,700.00	12,191.14	18,550.63	11,970.70	124.74	125.78	81.31	-7,136.51	-1,460.89	1,689.03	1,514.43	174.60	9.674		
18,800.00	12,193.10	18,650.63	11,972.62	126.30	127.33	81.31	-7,236.49	-1,459.91	1,689.04	1,512.26	176.78	9.554		
18,900.00	12,195.05	18,750.63	11,974.53	127.86	128.89	81.31	-7,336.46	-1,458.94	1,689.05	1,510.08	178.96	9.438		
19,000.00	12,197.01	18,850.63	11,976.45	129.42	130.44	81.31	-7,436.44	-1,457.96	1,689.06	1,507.91	181.15	9.324		
19,100.00	12,198.96	18,950.63	11,978.36	130.99	132.00	81.31	-7,536.42	-1,456.98	1,689.07	1,505.73	183.34	9.213		
19,200.00	12,200.92	19,050.63	11,980.28	132.55	133.57	81.31	-7,636.40	-1,456.01	1,689.08	1,503.55	185.53	9.104		
19,300.00	12,202.87	19,150.63	11,982.19	134.12	135.13	81.31	-7,736.37	-1,455.03	1,689.08	1,501.36	187.72	8.998		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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					
19,400.00	12,204.83	19,250.63	11,984.11	135.69	136.70	81.30	-7,836.35	-1,454.06	1,689.09	1,499.17	189.92	8.894					
19,500.00	12,206.78	19,350.63	11,986.02	137.26	138.27	81.30	-7,936.33	-1,453.08	1,689.10	1,496.98	192.12	8.792					
19,600.00	12,208.74	19,450.63	11,987.93	138.84	139.84	81.30	-8,036.30	-1,452.10	1,689.11	1,494.79	194.32	8.692					
19,700.00	12,210.69	19,550.63	11,989.85	140.41	141.41	81.30	-8,136.28	-1,451.13	1,689.12	1,492.59	196.53	8.595					
19,800.00	12,212.65	19,650.63	11,991.76	141.99	142.98	81.30	-8,236.26	-1,450.15	1,689.13	1,490.40	198.73	8.499					
19,900.00	12,214.60	19,750.63	11,993.68	143.57	144.56	81.30	-8,336.23	-1,449.18	1,689.14	1,488.20	200.94	8.406					
20,000.00	12,216.56	19,850.63	11,995.59	145.15	146.14	81.30	-8,436.21	-1,448.20	1,689.15	1,485.99	203.15	8.315					
20,100.00	12,218.51	19,950.63	11,997.51	146.73	147.71	81.29	-8,536.19	-1,447.22	1,689.16	1,483.79	205.37	8.225					
20,200.00	12,220.47	20,050.63	11,999.42	148.32	149.30	81.29	-8,636.16	-1,446.25	1,689.17	1,481.58	207.58	8.137					
20,300.00	12,222.43	20,150.63	12,001.34	149.90	150.88	81.29	-8,736.14	-1,445.27	1,689.18	1,479.38	209.80	8.051					
20,400.00	12,224.38	20,250.63	12,003.25	151.49	152.46	81.29	-8,836.12	-1,444.30	1,689.19	1,477.16	212.02	7.967					
20,500.00	12,226.34	20,350.63	12,005.17	153.08	154.05	81.29	-8,936.09	-1,443.32	1,689.19	1,474.95	214.24	7.885					
20,600.00	12,228.29	20,450.63	12,007.08	154.67	155.63	81.29	-9,036.07	-1,442.34	1,689.20	1,472.74	216.46	7.804					
20,700.00	12,230.25	20,550.63	12,009.00	156.26	157.22	81.29	-9,136.05	-1,441.37	1,689.21	1,470.52	218.69	7.724					
20,800.00	12,232.20	20,650.63	12,010.91	157.85	158.81	81.29	-9,236.03	-1,440.39	1,689.22	1,468.31	220.92	7.646					
20,900.00	12,234.16	20,750.63	12,012.83	159.45	160.40	81.28	-9,336.00	-1,439.42	1,689.23	1,466.09	223.14	7.570					
21,000.00	12,236.11	20,850.63	12,014.74	161.04	161.99	81.28	-9,435.98	-1,438.44	1,689.24	1,463.87	225.37	7.495					
21,100.00	12,238.07	20,950.63	12,016.65	162.64	163.59	81.28	-9,535.96	-1,437.46	1,689.25	1,461.65	227.60	7.422					
21,200.00	12,240.02	21,050.63	12,018.57	164.23	165.18	81.28	-9,635.93	-1,436.49	1,689.26	1,459.42	229.84	7.350					
21,300.00	12,241.98	21,150.63	12,020.48	165.83	166.78	81.28	-9,735.91	-1,435.51	1,689.27	1,457.20	232.07	7.279					
21,400.00	12,243.93	21,250.63	12,022.40	167.43	168.37	81.28	-9,835.89	-1,434.54	1,689.28	1,454.97	234.31	7.210					
21,500.00	12,245.89	21,350.63	12,024.31	169.03	169.97	81.28	-9,935.86	-1,433.56	1,689.29	1,452.74	236.54	7.142					
21,600.00	12,247.84	21,450.63	12,026.23	170.63	171.57	81.27	-10,035.84	-1,432.58	1,689.30	1,450.51	238.78	7.075					
21,700.00	12,249.80	21,550.63	12,028.14	172.23	173.17	81.27	-10,135.82	-1,431.61	1,689.30	1,448.28	241.02	7.009					
21,800.00	12,251.75	21,650.63	12,030.06	173.84	174.77	81.27	-10,235.79	-1,430.63	1,689.31	1,446.05	243.26	6.944					
21,900.00	12,253.71	21,750.63	12,031.97	175.44	176.37	81.27	-10,335.77	-1,429.66	1,689.32	1,443.82	245.50	6.881					
22,000.00	12,255.66	21,850.63	12,033.89	177.05	177.97	81.27	-10,435.75	-1,428.68	1,689.33	1,441.59	247.75	6.819					
22,100.00	12,257.62	21,950.63	12,035.80	178.65	179.58	81.27	-10,535.73	-1,427.70	1,689.34	1,439.35	249.99	6.758					
22,200.00	12,259.57	22,050.63	12,037.72	180.26	181.18	81.27	-10,635.70	-1,426.73	1,689.35	1,437.12	252.23	6.698					
22,253.13	12,260.61	22,103.76	12,038.73	181.02	182.03	81.27	-10,688.82	-1,426.21	1,689.36	1,436.00	253.36	6.668 ES, 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	34.60	34.60	0.00	0.04	-89.03	40.00	-2,353.90	2,354.24					
100.00	100.00	134.60	134.60	0.14	0.25	-89.03	40.00	-2,353.90	2,354.24	2,353.95	0.29	8,206.464		
200.00	200.00	234.60	234.60	0.50	0.61	-89.03	40.00	-2,353.90	2,354.24	2,353.45	0.79	2,990.628		
300.00	300.00	334.60	334.60	0.86	0.97	-89.03	40.00	-2,353.90	2,354.24	2,352.95	1.29	1,821.168		
400.00	400.00	434.60	434.60	1.22	1.32	-89.03	40.00	-2,353.90	2,354.24	2,352.44	1.80	1,308.617		
500.00	500.00	534.60	534.60	1.58	1.68	-89.03	40.00	-2,353.90	2,354.24	2,351.93	2.31	1,021.084		
600.00	600.00	634.60	634.60	1.93	2.04	-89.03	40.00	-2,353.90	2,354.24	2,351.43	2.81	837.106		
700.00	700.00	734.60	734.60	2.29	2.40	-89.03	40.00	-2,353.90	2,354.24	2,350.92	3.32	709.289		
800.00	800.00	834.60	834.60	2.65	2.76	-89.03	40.00	-2,353.90	2,354.24	2,350.41	3.83	615.328		
900.00	900.00	934.60	934.60	3.01	3.12	-89.03	40.00	-2,353.90	2,354.24	2,349.91	4.33	543.346		
1,000.00	1,000.00	1,034.60	1,034.60	3.37	3.48	-89.03	40.00	-2,353.90	2,354.24	2,349.40	4.84	486.439		
1,100.00	1,100.00	1,134.60	1,134.60	3.73	3.83	-89.03	40.00	-2,353.90	2,354.24	2,348.89	5.35	440.321		
1,200.00	1,200.00	1,234.60	1,234.60	4.08	4.19	-89.03	40.00	-2,353.90	2,354.24	2,348.39	5.85	402.190		
1,300.00	1,300.00	1,334.60	1,334.60	4.44	4.55	-89.03	40.00	-2,353.90	2,354.24	2,347.88	6.36	370.136		
1,400.00	1,400.00	1,434.60	1,434.60	4.80	4.91	-89.03	40.00	-2,353.90	2,354.24	2,347.37	6.87	342.814		
1,500.00	1,500.00	1,534.60	1,534.60	5.16	5.27	-89.03	40.00	-2,353.90	2,354.24	2,346.87	7.37	319.249		
1,600.00	1,600.00	1,634.60	1,634.60	5.52	5.63	-89.03	40.00	-2,353.90	2,354.24	2,346.36	7.88	298.714		
1,700.00	1,700.00	1,734.60	1,734.60	5.88	5.99	-89.03	40.00	-2,353.90	2,354.24	2,345.85	8.39	280.662		
1,800.00	1,800.00	1,834.60	1,834.60	6.24	6.34	-89.03	40.00	-2,353.90	2,354.24	2,345.34	8.90	264.667		
1,900.00	1,900.00	1,934.60	1,934.60	6.59	6.70	-89.03	40.00	-2,353.90	2,354.24	2,344.84	9.40	250.396		
2,000.00	2,000.00	2,034.60	2,034.60	6.95	7.06	-89.03	40.00	-2,353.90	2,354.24	2,344.33	9.91	237.586		
2,100.00	2,100.00	2,134.60	2,134.60	7.31	7.42	-89.03	40.00	-2,353.90	2,354.24	2,343.82	10.42	226.023		
2,200.00	2,200.00	2,234.60	2,234.60	7.67	7.78	-89.03	40.00	-2,353.90	2,354.24	2,343.32	10.92	215.533		
2,300.00	2,300.00	2,334.60	2,334.60	8.03	8.14	-89.03	40.00	-2,353.90	2,354.24	2,342.81	11.43	205.974		
2,400.00	2,400.00	2,434.60	2,434.60	8.39	8.49	-89.03	40.00	-2,353.90	2,354.24	2,342.30	11.94	197.226		
2,500.00	2,500.00	2,534.60	2,534.60	8.74	8.85	-89.03	40.00	-2,353.90	2,354.24	2,341.80	12.44	189.191		
2,600.00	2,600.00	2,634.60	2,634.60	9.10	9.21	-89.03	40.00	-2,353.90	2,354.24	2,341.29	12.95	181.785		
2,700.00	2,700.00	2,734.60	2,734.60	9.46	9.57	-89.03	40.00	-2,353.90	2,354.24	2,340.78	13.46	174.938		
2,800.00	2,799.99	2,834.59	2,834.59	9.80	9.93	120.61	40.00	-2,353.90	2,354.91	2,340.95	13.95	168.783		
2,900.00	2,899.91	2,934.51	2,934.51	10.13	10.29	120.67	40.00	-2,353.90	2,356.91	2,342.47	14.44	163.268		
2,966.50	2,966.28	3,000.88	3,000.88	10.35	10.52	120.73	40.00	-2,353.90	2,358.98	2,344.23	14.76	159.844		
3,000.00	2,999.70	3,034.30	3,034.30	10.46	10.64	120.78	40.00	-2,353.90	2,360.18	2,345.26	14.92	158.183		
3,100.00	3,099.46	3,177.99	3,177.97	10.79	11.13	120.96	38.83	-2,352.92	2,363.17	2,347.67	15.50	152.498		
3,200.00	3,199.22	3,346.58	3,346.33	11.12	11.69	121.05	32.31	-2,347.50	2,363.45	2,347.33	16.11	146.672		
3,300.00	3,298.97	3,496.82	3,495.95	11.46	12.19	121.01	21.76	-2,338.72	2,360.93	2,344.24	16.69	141.460		
3,400.00	3,398.73	3,596.75	3,595.32	11.80	12.53	120.97	13.72	-2,332.04	2,357.64	2,340.47	17.17	137.351		
3,500.00	3,498.49	3,696.68	3,694.70	12.14	12.87	120.92	5.69	-2,325.36	2,354.34	2,336.70	17.64	133.437		
3,600.00	3,598.24	3,796.61	3,794.08	12.49	13.21	120.87	-2.34	-2,318.68	2,351.05	2,332.93	18.13	129.707		
3,700.00	3,698.00	3,896.53	3,893.46	12.83	13.56	120.83	-10.37	-2,312.00	2,347.76	2,329.15	18.61	126.150		
3,800.00	3,797.76	3,996.46	3,992.84	13.18	13.91	120.78	-18.41	-2,305.32	2,344.47	2,325.37	19.10	122.756		
3,900.00	3,897.51	4,096.39	4,092.22	13.53	14.26	120.73	-26.44	-2,298.63	2,341.19	2,321.60	19.59	119.515		
4,000.00	3,997.27	4,196.31	4,191.60	13.88	14.62	120.69	-34.47	-2,291.95	2,337.90	2,317.82	20.08	116.419		
4,100.00	4,097.03	4,296.24	4,290.98	14.23	14.97	120.64	-42.50	-2,285.27	2,334.62	2,314.04	20.58	113.459		
4,200.00	4,196.78	4,396.17	4,390.36	14.58	15.33	120.59	-50.54	-2,278.59	2,331.34	2,310.26	21.07	110.627		
4,300.00	4,296.54	4,496.10	4,489.74	14.94	15.69	120.54	-58.57	-2,271.91	2,328.05	2,306.48	21.57	107.916		
4,400.00	4,396.30	4,596.02	4,589.12	15.29	16.05	120.50	-66.60	-2,265.22	2,324.78	2,302.70	22.07	105.320		
4,500.00	4,496.05	4,695.95	4,688.50	15.65	16.42	120.45	-74.63	-2,258.54	2,321.50	2,298.92	22.58	102.831		
4,600.00	4,495.81	4,795.88	4,787.88	16.00	16.78	120.40	-82.67	-2,251.86	2,318.22	2,295.14	23.08	100.443		
4,700.00	4,495.57	4,895.81	4,887.26	16.36	17.15	120.35	-90.70	-2,245.18	2,314.95	2,291.36	23.59	98.152		
4,800.00	4,495.32	4,995.73	4,986.64	16.72	17.52	120.30	-98.73	-2,238.50	2,311.68	2,287.58	24.09	95.951		
4,900.00	4,495.08	5,095.66	5,086.02	17.08	17.89	120.26	-106.76	-2,231.82	2,308.41	2,283.80	24.60	93.836		
5,000.00	4,994.84	5,195.59	5,185.40	17.44	18.26	120.21	-114.80	-2,225.13	2,305.14	2,280.03	25.11	91.802		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	5,094.59	5,295.52	5,284.78	17.80	18.63	120.16	-122.83	-2,218.45	2,301.87	2,276.25	25.62	89.845		
5,200.00	5,194.35	5,395.44	5,384.16	18.16	19.00	120.11	-130.86	-2,211.77	2,298.60	2,272.47	26.13	87.961		
5,300.00	5,294.11	5,495.37	5,483.54	18.52	19.38	120.06	-138.90	-2,205.09	2,295.34	2,268.69	26.64	86.146		
5,400.00	5,393.86	5,595.30	5,582.92	18.89	19.75	120.01	-146.93	-2,198.41	2,292.08	2,264.92	27.16	84.396		
5,500.00	5,493.62	5,695.23	5,682.30	19.25	20.13	119.96	-154.96	-2,191.72	2,288.82	2,261.14	27.67	82.709		
5,600.00	5,593.38	5,795.15	5,781.68	19.61	20.50	119.91	-162.99	-2,185.04	2,285.56	2,257.37	28.19	81.081		
5,700.00	5,693.13	5,895.08	5,881.06	19.98	20.88	119.86	-171.03	-2,178.36	2,282.30	2,253.59	28.70	79.509		
5,800.00	5,792.89	5,995.01	5,980.44	20.34	21.26	119.81	-179.06	-2,171.68	2,279.04	2,249.82	29.22	77.990		
5,900.00	5,892.65	6,094.94	6,079.82	20.71	21.64	119.76	-187.09	-2,165.00	2,275.79	2,246.05	29.74	76.523		
6,000.00	5,992.40	6,194.86	6,179.20	21.07	22.02	119.71	-195.12	-2,158.31	2,272.54	2,242.28	30.26	75.104		
6,100.00	6,092.16	6,294.79	6,278.58	21.44	22.40	119.66	-203.16	-2,151.63	2,269.29	2,238.51	30.78	73.731		
6,200.00	6,191.92	6,394.72	6,377.96	21.81	22.78	119.61	-211.19	-2,144.95	2,266.04	2,234.74	31.30	72.402		
6,300.00	6,291.67	6,494.65	6,477.34	22.17	23.16	119.56	-219.22	-2,138.27	2,262.79	2,230.97	31.82	71.116		
6,400.00	6,391.43	6,594.57	6,576.72	22.54	23.54	119.51	-227.25	-2,131.59	2,259.55	2,227.21	32.34	69.869		
6,500.00	6,491.19	6,694.50	6,676.10	22.91	23.92	119.46	-235.29	-2,124.91	2,256.30	2,223.44	32.86	68.661		
6,600.00	6,590.94	6,794.43	6,775.48	23.28	24.30	119.41	-243.32	-2,118.22	2,253.06	2,219.68	33.38	67.490		
6,700.00	6,690.70	6,894.36	6,874.85	23.64	24.68	119.36	-251.35	-2,111.54	2,249.82	2,215.91	33.91	66.354		
6,803.27	6,793.72	6,976.53	6,956.62	24.02	25.00	119.33	-257.64	-2,106.31	2,246.84	2,212.44	34.40	65.319		
6,900.00	6,890.29	7,046.94	7,026.80	24.38	25.26	119.27	-262.01	-2,102.68	2,244.58	2,209.74	34.84	64.434		
7,000.00	6,990.24	7,119.75	7,099.47	24.73	25.53	119.20	-265.48	-2,099.79	2,242.17	2,206.90	35.28	63.557		
7,069.77	7,060.00	7,170.58	7,150.24	24.98	25.71	-90.48	-267.27	-2,098.30	2,240.46	2,204.88	35.58	62.973		
7,100.00	7,090.23	7,200.00	7,179.65	25.08	25.82	-90.50	-268.07	-2,097.63	2,239.78	2,204.05	35.73	62.694		
7,200.00	7,190.23	7,265.53	7,245.16	25.42	26.05	-90.53	-269.23	-2,096.67	2,238.25	2,202.13	36.12	61.962		
7,300.00	7,290.23	7,345.21	7,324.83	25.76	26.32	-90.53	-269.53	-2,096.42	2,237.91	2,201.36	36.55	61.226		
7,400.00	7,390.23	7,445.21	7,424.83	26.10	26.66	-90.53	-269.53	-2,096.42	2,237.91	2,200.88	37.03	60.432		
7,500.00	7,490.23	7,545.21	7,524.83	26.44	26.99	-90.53	-269.53	-2,096.42	2,237.91	2,200.39	37.51	59.658		
7,600.00	7,590.23	7,645.21	7,624.83	26.78	27.33	-90.53	-269.53	-2,096.42	2,237.91	2,199.91	37.99	58.902		
7,700.00	7,690.23	7,745.21	7,724.83	27.12	27.67	-90.53	-269.53	-2,096.42	2,237.91	2,199.43	38.48	58.164		
7,800.00	7,790.23	7,845.21	7,824.83	27.46	28.00	-90.53	-269.53	-2,096.42	2,237.91	2,198.95	38.96	57.443		
7,900.00	7,890.23	7,945.21	7,924.83	27.80	28.34	-90.53	-269.53	-2,096.42	2,237.91	2,198.47	39.44	56.739		
8,000.00	7,990.23	8,045.21	8,024.83	28.14	28.68	-90.53	-269.53	-2,096.42	2,237.91	2,197.98	39.93	56.052		
8,100.00	8,090.23	8,145.21	8,124.83	28.49	29.02	-90.53	-269.53	-2,096.42	2,237.91	2,197.50	40.41	55.380		
8,200.00	8,190.23	8,245.21	8,224.83	28.83	29.36	-90.53	-269.53	-2,096.42	2,237.91	2,197.01	40.90	54.723		
8,300.00	8,290.23	8,345.21	8,324.83	29.17	29.70	-90.53	-269.53	-2,096.42	2,237.91	2,196.53	41.38	54.081		
8,400.00	8,390.23	8,445.21	8,424.83	29.52	30.04	-90.53	-269.53	-2,096.42	2,237.91	2,196.04	41.87	53.453		
8,500.00	8,490.23	8,545.21	8,524.83	29.86	30.38	-90.53	-269.53	-2,096.42	2,237.91	2,195.55	42.35	52.839		
8,600.00	8,590.23	8,645.21	8,624.83	30.21	30.72	-90.53	-269.53	-2,096.42	2,237.91	2,195.07	42.84	52.238		
8,700.00	8,690.23	8,745.21	8,724.83	30.55	31.07	-90.53	-269.53	-2,096.42	2,237.91	2,194.58	43.33	51.651		
8,800.00	8,790.23	8,845.21	8,824.83	30.90	31.41	-90.53	-269.53	-2,096.42	2,237.91	2,194.09	43.82	51.076		
8,900.00	8,890.23	8,945.21	8,924.83	31.24	31.75	-90.53	-269.53	-2,096.42	2,237.91	2,193.60	44.30	50.513		
9,000.00	8,990.23	9,045.21	9,024.83	31.59	32.09	-90.53	-269.53	-2,096.42	2,237.91	2,193.11	44.79	49.961		
9,100.00	9,090.23	9,145.21	9,124.83	31.93	32.44	-90.53	-269.53	-2,096.42	2,237.91	2,192.63	45.28	49.422		
9,200.00	9,190.23	9,245.21	9,224.83	32.28	32.78	-90.53	-269.53	-2,096.42	2,237.91	2,192.14	45.77	48.893		
9,300.00	9,290.23	9,345.21	9,324.83	32.63	33.13	-90.53	-269.53	-2,096.42	2,237.91	2,191.65	46.26	48.375		
9,400.00	9,390.23	9,445.21	9,424.83	32.97	33.47	-90.53	-269.53	-2,096.42	2,237.91	2,191.16	46.75	47.868		
9,500.00	9,490.23	9,545.21	9,524.83	33.32	33.82	-90.53	-269.53	-2,096.42	2,237.91	2,190.67	47.24	47.371		
9,600.00	9,590.23	9,645.21	9,624.83	33.67	34.16	-90.53	-269.53	-2,096.42	2,237.91	2,190.17	47.73	46.884		
9,700.00	9,690.23	9,745.21	9,724.83	34.02	34.51	-90.53	-269.53	-2,096.42	2,237.91	2,189.68	48.22	46.406		
9,800.00	9,790.23	9,845.21	9,824.83	34.37	34.85	-90.53	-269.53	-2,096.42	2,237.91	2,189.19	48.72	45.938		
9,900.00	9,890.23	9,945.21	9,924.83	34.71	35.20	-90.53	-269.53	-2,096.42	2,237.91	2,188.70	49.21	45.479		
10,000.00	9,990.23	10,045.21	10,024.83	35.06	35.54	-90.53	-269.53	-2,096.42	2,237.91	2,188.21	49.70	45.028		
10,100.00	10,090.23	10,145.21	10,124.83	35.41	35.89	-90.53	-269.53	-2,096.42	2,237.91	2,187.71	50.19	44.586		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	10,190.23	10,245.21	10,224.83	35.76	36.23	-90.53	-269.53	-2,096.42	2,237.91	2,187.22	50.69	44.153		
10,300.00	10,290.23	10,345.21	10,324.83	36.11	36.58	-90.53	-269.53	-2,096.42	2,237.91	2,186.73	51.18	43.727		
10,400.00	10,390.23	10,445.21	10,424.83	36.46	36.93	-90.53	-269.53	-2,096.42	2,237.91	2,186.24	51.67	43.310		
10,500.00	10,490.23	10,545.21	10,524.83	36.81	37.28	-90.53	-269.53	-2,096.42	2,237.91	2,185.74	52.17	42.900		
10,600.00	10,590.23	10,645.21	10,624.83	37.16	37.62	-90.53	-269.53	-2,096.42	2,237.91	2,185.25	52.66	42.498		
10,700.00	10,690.23	10,745.21	10,724.83	37.50	37.97	-90.53	-269.53	-2,096.42	2,237.91	2,184.75	53.15	42.103		
10,800.00	10,790.23	10,845.21	10,824.83	37.85	38.32	-90.53	-269.53	-2,096.42	2,237.91	2,184.26	53.65	41.715		
10,900.00	10,890.23	10,945.21	10,924.83	38.20	38.67	-90.53	-269.53	-2,096.42	2,237.91	2,183.76	54.14	41.334		
11,000.00	10,990.23	11,045.21	11,024.83	38.55	39.01	-90.53	-269.53	-2,096.42	2,237.91	2,183.27	54.64	40.959		
11,100.00	11,090.23	11,145.21	11,124.83	38.91	39.36	-90.53	-269.53	-2,096.42	2,237.91	2,182.78	55.13	40.592		
11,200.00	11,190.23	11,245.21	11,224.83	39.26	39.71	-90.53	-269.53	-2,096.42	2,237.91	2,182.28	55.63	40.230		
11,300.00	11,290.23	11,345.21	11,324.83	39.61	40.06	-90.53	-269.53	-2,096.42	2,237.91	2,181.78	56.12	39.875		
11,400.00	11,390.23	11,445.21	11,424.83	39.96	40.41	-90.53	-269.53	-2,096.42	2,237.91	2,181.29	56.62	39.526		
11,504.77	11,495.00	11,549.97	11,529.60	40.32	40.77	-90.53	-269.53	-2,096.42	2,237.91	2,180.77	57.14	39.167 CC		
11,550.00	11,540.19	11,595.16	11,574.79	40.48	40.93	90.07	-269.53	-2,096.42	2,237.91	2,180.55	57.36	39.014		
11,600.00	11,589.80	11,645.04	11,624.66	40.66	41.11	90.21	-270.06	-2,096.42	2,237.92	2,180.31	57.61	38.846		
11,650.00	11,638.68	11,695.48	11,674.89	40.84	41.28	90.37	-274.45	-2,096.38	2,237.96	2,180.09	57.86	38.676		
11,700.00	11,686.48	11,746.48	11,725.09	41.03	41.47	90.52	-283.35	-2,096.30	2,238.02	2,179.89	58.13	38.501		
11,750.00	11,732.81	11,798.04	11,774.84	41.22	41.66	90.67	-296.86	-2,096.18	2,238.09	2,179.69	58.40	38.323		
11,800.00	11,777.34	11,850.19	11,823.70	41.41	41.86	90.82	-315.00	-2,096.02	2,238.18	2,179.50	58.68	38.141		
11,850.00	11,819.72	11,902.90	11,871.22	41.61	42.06	90.96	-337.79	-2,095.82	2,238.29	2,179.32	58.97	37.956		
11,900.00	11,859.63	11,956.19	11,916.92	41.81	42.28	91.09	-365.15	-2,095.58	2,238.41	2,179.15	59.27	37.768		
11,950.00	11,896.76	12,010.03	11,960.31	42.01	42.50	91.21	-396.99	-2,095.30	2,238.55	2,178.97	59.57	37.576		
12,000.00	11,930.83	12,064.41	12,000.90	42.22	42.72	91.33	-433.14	-2,094.98	2,238.68	2,178.79	59.89	37.379		
12,050.00	11,961.59	12,119.29	12,038.21	42.44	42.96	91.44	-473.36	-2,094.63	2,238.82	2,178.61	60.22	37.179		
12,100.00	11,988.80	12,174.64	12,071.77	42.66	43.21	91.53	-517.34	-2,094.24	2,238.96	2,178.41	60.55	36.974		
12,150.00	12,012.24	12,230.41	12,101.14	42.89	43.47	91.61	-564.73	-2,093.83	2,239.10	2,178.19	60.90	36.765		
12,200.00	12,031.76	12,286.56	12,125.91	43.12	43.73	91.68	-615.09	-2,093.38	2,239.22	2,177.96	61.26	36.552		
12,250.00	12,047.18	12,343.02	12,145.73	43.36	44.01	91.73	-667.93	-2,092.92	2,239.34	2,177.71	61.63	36.335		
12,300.00	12,058.41	12,399.72	12,160.30	43.60	44.30	91.77	-722.70	-2,092.44	2,239.44	2,177.43	62.01	36.116		
12,350.00	12,065.34	12,456.60	12,169.41	43.85	44.59	91.79	-778.82	-2,091.95	2,239.52	2,177.13	62.39	35.895		
12,393.56	12,067.85	12,506.24	12,172.78	44.07	44.84	91.80	-828.33	-2,091.51	2,239.58	2,176.85	62.73	35.703		
12,400.00	12,067.97	12,513.58	12,172.92	44.10	44.88	91.80	-835.67	-2,091.45	2,239.58	2,176.81	62.78	35.675		
12,500.00	12,069.93	12,613.48	12,174.23	44.63	45.43	91.78	-935.56	-2,090.57	2,239.66	2,176.12	63.54	35.248		
12,600.00	12,071.88	12,713.48	12,175.55	45.21	46.03	91.77	-1,035.55	-2,089.69	2,239.75	2,175.37	64.38	34.791		
12,700.00	12,073.84	12,813.48	12,176.86	45.84	46.68	91.75	-1,135.53	-2,088.81	2,239.83	2,174.54	65.29	34.308		
12,800.00	12,075.79	12,913.48	12,178.17	46.53	47.38	91.74	-1,235.52	-2,087.93	2,239.91	2,173.64	66.26	33.802		
12,900.00	12,077.75	13,013.47	12,179.49	47.26	48.13	91.72	-1,335.50	-2,087.05	2,239.99	2,172.68	67.31	33.278		
13,000.00	12,079.70	13,113.47	12,180.80	48.04	48.92	91.70	-1,435.49	-2,086.18	2,240.07	2,171.65	68.42	32.740		
13,100.00	12,081.66	13,213.47	12,182.12	48.86	49.75	91.69	-1,535.47	-2,085.30	2,240.15	2,170.56	69.59	32.190		
13,200.00	12,083.61	13,313.47	12,183.43	49.72	50.62	91.67	-1,635.46	-2,084.42	2,240.23	2,169.41	70.82	31.633		
13,300.00	12,085.57	13,413.47	12,184.75	50.62	51.53	91.65	-1,735.45	-2,083.54	2,240.32	2,168.21	72.10	31.071		
13,400.00	12,087.53	13,513.46	12,186.06	51.56	52.48	91.64	-1,835.43	-2,082.66	2,240.40	2,166.96	73.44	30.507		
13,500.00	12,089.48	13,613.46	12,187.38	52.54	53.46	91.62	-1,935.42	-2,081.78	2,240.48	2,165.66	74.82	29.944		
13,600.00	12,091.44	13,713.46	12,188.69	53.54	54.47	91.60	-2,035.40	-2,080.90	2,240.56	2,164.31	76.25	29.383		
13,700.00	12,093.39	13,813.46	12,190.00	54.58	55.51	91.59	-2,135.39	-2,080.03	2,240.65	2,162.92	77.73	28.827		
13,800.00	12,095.35	13,913.46	12,191.32	55.65	56.59	91.57	-2,235.37	-2,079.15	2,240.73	2,161.49	79.24	28.276		
13,900.00	12,097.30	14,013.45	12,192.63	56.75	57.69	91.55	-2,335.36	-2,078.27	2,240.81	2,160.01	80.80	27.733		
14,000.00	12,099.26	14,113.45	12,193.95	57.87	58.81	91.54	-2,435.34	-2,077.39	2,240.90	2,158.50	82.39	27.198		
14,100.00	12,101.21	14,213.45	12,195.26	59.02	59.96	91.52	-2,535.33	-2,076.51	2,240.98	2,156.96	84.02	26.672		
14,200.00	12,103.17	14,313.45	12,196.58	60.19	61.14	91.50	-2,635.31	-2,075.63	2,241.06	2,155.38	85.68	26.157		
14,300.00	12,105.12	14,413.45	12,197.89	61.38	62.33	91.49	-2,735.30	-2,074.75	2,241.15	2,153.78	87.37	25.651		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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				
14,400.00	12,107.08	14,513.44	12,199.20	62.60	63.55	91.47	-2,835.28	-2,073.88	2,241.23	2,152.14	89.09	25.157				
14,500.00	12,109.03	14,613.44	12,200.52	63.83	64.78	91.46	-2,935.27	-2,073.00	2,241.32	2,150.48	90.84	24.674				
14,600.00	12,110.99	14,713.44	12,201.83	65.09	66.03	91.44	-3,035.26	-2,072.12	2,241.40	2,148.79	92.61	24.202				
14,700.00	12,112.94	14,813.44	12,203.15	66.36	67.31	91.42	-3,135.24	-2,071.24	2,241.48	2,147.08	94.41	23.742				
14,800.00	12,114.90	14,913.43	12,204.46	67.64	68.59	91.41	-3,235.23	-2,070.36	2,241.57	2,145.34	96.23	23.294				
14,900.00	12,116.85	15,013.43	12,205.78	68.94	69.89	91.39	-3,335.21	-2,069.48	2,241.65	2,143.58	98.07	22.857				
15,000.00	12,118.81	15,113.43	12,207.09	70.26	71.21	91.37	-3,435.20	-2,068.60	2,241.74	2,141.80	99.94	22.431				
15,100.00	12,120.76	15,213.43	12,208.41	71.59	72.54	91.36	-3,535.18	-2,067.73	2,241.83	2,140.00	101.82	22.017				
15,200.00	12,122.72	15,313.43	12,209.72	72.94	73.88	91.34	-3,635.17	-2,066.85	2,241.91	2,138.19	103.72	21.615				
15,300.00	12,124.67	15,413.42	12,211.03	74.29	75.24	91.32	-3,735.15	-2,065.97	2,242.00	2,136.36	105.64	21.223				
15,400.00	12,126.63	15,513.42	12,212.35	75.66	76.61	91.31	-3,835.14	-2,065.09	2,242.08	2,134.51	107.58	20.842				
15,500.00	12,128.58	15,613.42	12,213.66	77.04	77.98	91.29	-3,935.12	-2,064.21	2,242.17	2,132.64	109.53	20.471				
15,600.00	12,130.54	15,713.42	12,214.98	78.43	79.37	91.27	-4,035.11	-2,063.33	2,242.26	2,130.76	111.50	20.111				
15,700.00	12,132.49	15,813.42	12,216.29	79.83	80.77	91.26	-4,135.09	-2,062.46	2,242.34	2,128.87	113.48	19.761				
15,800.00	12,134.45	15,913.41	12,217.61	81.24	82.18	91.24	-4,235.08	-2,061.58	2,242.43	2,126.96	115.47	19.420				
15,900.00	12,136.40	16,013.41	12,218.92	82.66	83.60	91.23	-4,335.07	-2,060.70	2,242.52	2,125.04	117.48	19.089				
16,000.00	12,138.36	16,113.41	12,220.23	84.09	85.02	91.21	-4,435.05	-2,059.82	2,242.60	2,123.11	119.49	18.767				
16,100.00	12,140.31	16,213.41	12,221.55	85.52	86.46	91.19	-4,535.04	-2,058.94	2,242.69	2,121.17	121.52	18.455				
16,200.00	12,142.27	16,313.41	12,222.86	86.96	87.90	91.18	-4,635.02	-2,058.06	2,242.78	2,119.21	123.56	18.151				
16,300.00	12,144.22	16,413.40	12,224.18	88.42	89.35	91.16	-4,735.01	-2,057.18	2,242.86	2,117.25	125.62	17.855				
16,400.00	12,146.18	16,513.40	12,225.49	89.87	90.80	91.14	-4,834.99	-2,056.31	2,242.95	2,115.28	127.68	17.567				
16,500.00	12,148.13	16,613.40	12,226.81	91.34	92.26	91.13	-4,934.98	-2,055.43	2,243.04	2,113.29	129.75	17.288				
16,600.00	12,150.09	16,713.40	12,228.12	92.81	93.73	91.11	-5,034.96	-2,054.55	2,243.13	2,111.30	131.83	17.016				
16,700.00	12,152.04	16,813.39	12,229.44	94.28	95.21	91.09	-5,134.95	-2,053.67	2,243.22	2,109.30	133.91	16.751				
16,800.00	12,154.00	16,913.39	12,230.75	95.77	96.69	91.08	-5,234.93	-2,052.79	2,243.31	2,107.30	136.01	16.494				
16,900.00	12,155.95	17,013.39	12,232.06	97.25	98.17	91.06	-5,334.92	-2,051.91	2,243.39	2,105.28	138.11	16.243				
17,000.00	12,157.91	17,113.39	12,233.38	98.75	99.66	91.05	-5,434.90	-2,051.03	2,243.48	2,103.26	140.22	15.999				
17,100.00	12,159.86	17,213.39	12,234.69	100.24	101.16	91.03	-5,534.89	-2,050.16	2,243.57	2,101.23	142.34	15.762				
17,200.00	12,161.82	17,313.38	12,236.01	101.75	102.66	91.01	-5,634.88	-2,049.28	2,243.66	2,099.19	144.47	15.531				
17,300.00	12,163.77	17,413.38	12,237.32	103.25	104.17	91.00	-5,734.86	-2,048.40	2,243.75	2,097.15	146.60	15.306				
17,400.00	12,165.73	17,513.38	12,238.64	104.77	105.68	90.98	-5,834.85	-2,047.52	2,243.84	2,095.11	148.74	15.086				
17,500.00	12,167.68	17,613.38	12,239.95	106.28	107.19	90.96	-5,934.83	-2,046.64	2,243.93	2,093.05	150.88	14.872				
17,600.00	12,169.64	17,713.38	12,241.26	107.80	108.71	90.95	-6,034.82	-2,045.76	2,244.02	2,090.99	153.03	14.664				
17,700.00	12,171.59	17,813.37	12,242.58	109.32	110.23	90.93	-6,134.80	-2,044.88	2,244.11	2,088.93	155.18	14.461				
17,800.00	12,173.55	17,913.37	12,243.89	110.85	111.75	90.91	-6,234.79	-2,044.01	2,244.20	2,086.86	157.34	14.263				
17,900.00	12,175.50	18,013.37	12,245.21	112.38	113.28	90.90	-6,334.77	-2,043.13	2,244.29	2,084.79	159.51	14.070				
18,000.00	12,177.46	18,113.37	12,246.52	113.92	114.82	90.88	-6,434.76	-2,042.25	2,244.38	2,082.71	161.68	13.882				
18,100.00	12,179.41	18,213.37	12,247.84	115.45	116.35	90.86	-6,534.74	-2,041.37	2,244.47	2,080.62	163.85	13.698				
18,200.00	12,181.37	18,313.36	12,249.15	117.00	117.89	90.85	-6,634.73	-2,040.49	2,244.56	2,078.54	166.03	13.519				
18,300.00	12,183.32	18,413.36	12,250.47	118.54	119.43	90.83	-6,734.72	-2,039.61	2,244.66	2,076.44	168.21	13.344				
18,400.00	12,185.28	18,513.36	12,251.78	120.09	120.98	90.82	-6,834.70	-2,038.73	2,244.75	2,074.35	170.40	13.174				
18,500.00	12,187.23	18,613.36	12,253.09	121.64	122.53	90.80	-6,934.69	-2,037.86	2,244.84	2,072.25	172.59	13.007				
18,600.00	12,189.19	18,713.35	12,254.41	123.19	124.08	90.78	-7,034.67	-2,036.98	2,244.93	2,070.15	174.78	12.844				
18,700.00	12,191.14	18,813.35	12,255.72	124.74	125.63	90.77	-7,134.66	-2,036.10	2,245.02	2,068.04	176.98	12.685				
18,800.00	12,193.10	18,913.35	12,257.04	126.30	127.19	90.75	-7,234.64	-2,035.22	2,245.11	2,065.93	179.18	12.530				
18,900.00	12,195.05	19,013.35	12,258.35	127.86	128.74	90.73	-7,334.63	-2,034.34	2,245.21	2,063.82	181.39	12.378				
19,000.00	12,197.01	19,113.35	12,259.67	129.42	130.30	90.72	-7,434.61	-2,033.46	2,245.30	2,061.70	183.60	12.230				
19,100.00	12,198.96	19,213.34	12,260.98	130.99	131.87	90.70	-7,534.60	-2,032.59	2,245.39	2,059.58	185.81	12.084				
19,200.00	12,200.92	19,313.34	12,262.29	132.55	133.43	90.68	-7,634.58	-2,031.71	2,245.49	2,057.46	188.02	11.943				
19,300.00	12,202.87	19,413.34	12,263.61	134.12	135.00	90.67	-7,734.57	-2,030.83	2,245.58	2,055.34	190.24	11.804				
19,400.00	12,204.83	19,513.34	12,264.92	135.69	136.57	90.65	-7,834.55	-2,029.95	2,245.67	2,053.21	192.46	11.668				
19,500.00	12,206.78	19,613.34	12,266.24	137.26	138.14	90.64	-7,934.54	-2,029.07	2,245.77	2,051.08	194.68	11.535				

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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				
19,600.00	12,208.74	19,713.33	12,267.55	138.84	139.71	90.62	-8,034.53	-2,028.19	2,245.86	2,048.95	196.91	11.406				
19,700.00	12,210.69	19,813.33	12,268.87	140.41	141.28	90.60	-8,134.51	-2,027.31	2,245.95	2,046.82	199.14	11.278				
19,800.00	12,212.65	19,913.33	12,270.18	141.99	142.86	90.59	-8,234.50	-2,026.44	2,246.05	2,044.68	201.37	11.154				
19,900.00	12,214.60	20,013.33	12,271.50	143.57	144.44	90.57	-8,334.48	-2,025.56	2,246.14	2,042.54	203.60	11.032				
20,000.00	12,216.56	20,113.33	12,272.81	145.15	146.02	90.55	-8,434.47	-2,024.68	2,246.24	2,040.40	205.84	10.913				
20,100.00	12,218.51	20,213.32	12,274.12	146.73	147.60	90.54	-8,534.45	-2,023.80	2,246.33	2,038.26	208.07	10.796				
20,200.00	12,220.47	20,313.32	12,275.44	148.32	149.18	90.52	-8,634.44	-2,022.92	2,246.43	2,036.11	210.31	10.681				
20,300.00	12,222.43	20,413.32	12,276.75	149.90	150.77	90.50	-8,734.42	-2,022.04	2,246.52	2,033.96	212.56	10.569				
20,400.00	12,224.38	20,513.32	12,278.07	151.49	152.35	90.49	-8,834.41	-2,021.16	2,246.62	2,031.81	214.80	10.459				
20,500.00	12,226.34	20,613.32	12,279.38	153.08	153.94	90.47	-8,934.39	-2,020.29	2,246.71	2,029.66	217.05	10.351				
20,600.00	12,228.29	20,713.31	12,280.70	154.67	155.53	90.46	-9,034.38	-2,019.41	2,246.81	2,027.51	219.29	10.246				
20,700.00	12,230.25	20,813.31	12,282.01	156.26	157.12	90.44	-9,134.36	-2,018.53	2,246.90	2,025.36	221.54	10.142				
20,800.00	12,232.20	20,913.31	12,283.32	157.85	158.71	90.42	-9,234.35	-2,017.65	2,247.00	2,023.20	223.80	10.040				
20,900.00	12,234.16	21,013.31	12,284.64	159.45	160.30	90.41	-9,334.34	-2,016.77	2,247.09	2,021.05	226.05	9.941				
21,000.00	12,236.11	21,113.30	12,285.95	161.04	161.89	90.39	-9,434.32	-2,015.89	2,247.19	2,018.89	228.30	9.843				
21,100.00	12,238.07	21,213.30	12,287.27	162.64	163.49	90.37	-9,534.31	-2,015.01	2,247.29	2,016.73	230.56	9.747				
21,200.00	12,240.02	21,313.30	12,288.58	164.23	165.08	90.36	-9,634.29	-2,014.14	2,247.38	2,014.57	232.82	9.653				
21,300.00	12,241.98	21,413.30	12,289.90	165.83	166.68	90.34	-9,734.28	-2,013.26	2,247.48	2,012.40	235.08	9.561				
21,400.00	12,243.93	21,513.30	12,291.21	167.43	168.28	90.32	-9,834.26	-2,012.38	2,247.58	2,010.24	237.34	9.470				
21,500.00	12,245.89	21,613.29	12,292.53	169.03	169.88	90.31	-9,934.25	-2,011.50	2,247.67	2,008.07	239.60	9.381				
21,600.00	12,247.84	21,713.29	12,293.84	170.63	171.48	90.29	-10,034.23	-2,010.62	2,247.77	2,005.91	241.86	9.294				
21,700.00	12,249.80	21,813.29	12,295.15	172.23	173.08	90.28	-10,134.22	-2,009.74	2,247.87	2,003.74	244.13	9.208				
21,800.00	12,251.75	21,913.29	12,296.47	173.84	174.68	90.26	-10,234.20	-2,008.86	2,247.97	2,001.57	246.40	9.123				
21,900.00	12,253.71	22,013.29	12,297.78	175.44	176.28	90.24	-10,334.19	-2,007.99	2,248.06	1,999.40	248.66	9.041				
22,000.00	12,255.66	22,113.28	12,299.10	177.05	177.89	90.23	-10,434.18	-2,007.11	2,248.16	1,997.23	250.93	8.959				
22,100.00	12,257.62	22,213.28	12,300.41	178.65	179.49	90.21	-10,534.16	-2,006.23	2,248.26	1,995.06	253.20	8.879				
22,200.00	12,259.57	22,313.28	12,301.73	180.26	181.10	90.19	-10,634.15	-2,005.35	2,248.36	1,992.88	255.48	8.801				
22,253.13	12,260.61	22,366.41	12,302.42	181.02	181.95	90.18	-10,687.27	-2,004.88	2,248.41	1,991.80	256.62	8.762 ES, 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	38.10	38.10	0.00	0.05	-90.53	-40.18	-4,309.67	4,309.86					
100.00	100.00	138.10	138.10	0.14	0.28	-90.53	-40.18	-4,309.67	4,309.86	4,309.55	0.31	N/A		
200.00	200.00	238.10	238.10	0.50	0.64	-90.53	-40.18	-4,309.67	4,309.86	4,309.05	0.81	5,323.710		
300.00	300.00	338.10	338.10	0.86	1.00	-90.53	-40.18	-4,309.67	4,309.86	4,308.54	1.31	3,279.238		
400.00	400.00	438.10	438.10	1.22	1.35	-90.53	-40.18	-4,309.67	4,309.86	4,308.04	1.82	2,367.725		
500.00	500.00	538.10	538.10	1.58	1.71	-90.53	-40.18	-4,309.67	4,309.86	4,307.53	2.33	1,852.388		
600.00	600.00	638.10	638.10	1.93	2.07	-90.53	-40.18	-4,309.67	4,309.86	4,307.02	2.83	1,521.173		
700.00	700.00	738.10	738.10	2.29	2.43	-90.53	-40.18	-4,309.67	4,309.86	4,306.52	3.34	1,290.395		
800.00	800.00	838.10	838.10	2.65	2.79	-90.53	-40.18	-4,309.67	4,309.86	4,306.01	3.85	1,120.397		
900.00	900.00	938.10	938.10	3.01	3.15	-90.53	-40.18	-4,309.67	4,309.86	4,305.50	4.35	989.967		
1,000.00	1,000.00	1,038.10	1,038.10	3.37	3.50	-90.53	-40.18	-4,309.67	4,309.86	4,305.00	4.86	886.733		
1,100.00	1,100.00	1,138.10	1,138.10	3.73	3.86	-90.53	-40.18	-4,309.67	4,309.86	4,304.49	5.37	802.993		
1,200.00	1,200.00	1,238.10	1,238.10	4.08	4.22	-90.53	-40.18	-4,309.67	4,309.86	4,303.98	5.87	733.702		
1,300.00	1,300.00	1,338.10	1,338.10	4.44	4.58	-90.53	-40.18	-4,309.67	4,309.86	4,303.48	6.38	675.419		
1,400.00	1,400.00	1,438.10	1,438.10	4.80	4.94	-90.53	-40.18	-4,309.67	4,309.86	4,302.97	6.89	625.713		
1,500.00	1,500.00	1,538.10	1,538.10	5.16	5.30	-90.53	-40.18	-4,309.67	4,309.86	4,302.46	7.39	582.821		
1,600.00	1,600.00	1,638.10	1,638.10	5.52	5.66	-90.53	-40.18	-4,309.67	4,309.86	4,301.96	7.90	545.431		
1,700.00	1,700.00	1,738.10	1,738.10	5.88	6.01	-90.53	-40.18	-4,309.67	4,309.86	4,301.45	8.41	512.550		
1,800.00	1,800.00	1,838.10	1,838.10	6.24	6.37	-90.53	-40.18	-4,309.67	4,309.86	4,300.94	8.92	483.407		
1,900.00	1,900.00	1,938.10	1,938.10	6.59	6.73	-90.53	-40.18	-4,309.67	4,309.86	4,300.43	9.42	457.400		
2,000.00	2,000.00	2,038.10	2,038.10	6.95	7.09	-90.53	-40.18	-4,309.67	4,309.86	4,299.93	9.93	434.048		
2,100.00	2,100.00	2,138.10	2,138.10	7.31	7.45	-90.53	-40.18	-4,309.67	4,309.86	4,299.42	10.44	412.965		
2,200.00	2,200.00	2,238.10	2,238.10	7.67	7.81	-90.53	-40.18	-4,309.67	4,309.86	4,298.91	10.94	393.835		
2,300.00	2,300.00	2,338.10	2,338.10	8.03	8.16	-90.53	-40.18	-4,309.67	4,309.86	4,298.41	11.45	376.399		
2,400.00	2,400.00	2,438.10	2,438.10	8.39	8.52	-90.53	-40.18	-4,309.67	4,309.86	4,297.90	11.96	360.441		
2,500.00	2,500.00	2,538.10	2,538.10	8.74	8.88	-90.53	-40.18	-4,309.67	4,309.86	4,297.39	12.46	345.781		
2,600.00	2,600.00	2,638.10	2,638.10	9.10	9.24	-90.53	-40.18	-4,309.67	4,309.86	4,296.89	12.97	332.267		
2,700.00	2,700.00	2,738.10	2,738.10	9.46	9.60	-90.53	-40.18	-4,309.67	4,309.86	4,296.38	13.48	319.770 CC, ES		
2,800.00	2,799.99	2,838.09	2,838.09	9.80	9.96	119.09	-40.18	-4,309.67	4,310.49	4,296.52	13.97	308.493		
2,900.00	2,899.91	2,938.01	2,938.01	10.13	10.32	119.12	-40.18	-4,309.67	4,312.40	4,297.95	14.46	298.307		
2,966.50	2,966.28	3,004.38	3,004.38	10.35	10.55	119.14	-40.18	-4,309.67	4,314.38	4,299.60	14.78	291.937		
3,000.00	2,999.70	3,037.80	3,037.80	10.46	10.67	119.16	-40.18	-4,309.67	4,315.52	4,300.58	14.94	288.836		
3,100.00	3,099.46	3,137.56	3,137.56	10.79	11.03	119.24	-40.18	-4,309.67	4,318.93	4,303.50	15.43	279.948		
3,200.00	3,199.22	3,237.32	3,237.32	11.12	11.39	119.32	-40.18	-4,309.67	4,322.35	4,306.43	15.92	271.571		
3,300.00	3,298.97	3,337.07	3,337.07	11.46	11.75	119.40	-40.18	-4,309.67	4,325.77	4,309.36	16.41	263.665		
3,400.00	3,398.73	3,436.83	3,436.83	11.80	12.10	119.48	-40.18	-4,309.67	4,329.20	4,312.31	16.90	256.194		
3,500.00	3,498.49	3,536.59	3,536.59	12.14	12.46	119.57	-40.18	-4,309.67	4,332.65	4,315.25	17.39	249.125		
3,600.00	3,598.24	3,636.34	3,636.34	12.49	12.82	119.64	-40.18	-4,309.67	4,336.10	4,318.21	17.89	242.429		
3,700.00	3,698.00	3,720.00	3,720.00	12.83	13.12	119.71	-40.18	-4,309.67	4,339.59	4,321.24	18.34	236.615		
3,800.00	3,797.76	3,800.00	3,799.99	13.18	13.39	119.77	-40.93	-4,310.04	4,343.54	4,324.76	18.78	231.337		
3,900.00	3,897.51	3,863.85	3,863.82	13.53	13.60	119.79	-42.61	-4,310.87	4,348.28	4,329.11	19.16	226.894		
4,000.00	3,997.27	3,930.44	3,930.33	13.88	13.82	119.81	-45.38	-4,312.24	4,353.78	4,334.22	19.56	222.588		
4,100.00	4,097.03	4,000.00	3,999.75	14.23	14.04	119.81	-49.38	-4,314.21	4,360.05	4,340.09	19.96	218.405		
4,200.00	4,196.78	4,068.52	4,068.04	14.58	14.27	119.80	-54.40	-4,316.69	4,367.07	4,346.71	20.36	214.442		
4,300.00	4,296.54	4,168.24	4,167.38	14.94	14.60	119.78	-62.19	-4,320.54	4,374.36	4,353.52	20.85	209.851		
4,400.00	4,396.30	4,267.95	4,266.71	15.29	14.93	119.76	-69.98	-4,324.39	4,381.66	4,360.33	21.33	205.443		
4,500.00	4,496.05	4,367.67	4,366.05	15.65	15.26	119.73	-77.78	-4,328.24	4,388.95	4,367.14	21.81	201.209		
4,600.00	4,495.81	4,467.39	4,465.39	16.00	15.60	119.71	-85.57	-4,332.09	4,396.25	4,373.95	22.30	197.139		
4,700.00	4,495.57	4,567.11	4,564.73	16.36	15.94	119.69	-93.36	-4,335.94	4,403.55	4,380.76	22.79	193.226		
4,800.00	4,795.32	4,666.82	4,664.07	16.72	16.28	119.66	-101.16	-4,339.79	4,410.85	4,387.56	23.28	189.461		
4,900.00	4,895.08	4,766.54	4,763.41	17.08	16.62	119.64	-108.95	-4,343.63	4,418.14	4,394.37	23.77	185.838		
5,000.00	4,994.84	4,866.26	4,862.74	17.44	16.96	119.62	-116.74	-4,347.48	4,425.44	4,401.17	24.27	182.349		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	5,094.59	4,965.98	4,962.08	17.80	17.31	119.59	-124.53	-4,351.33	4,432.74	4,407.98	24.77	178.988		
5,200.00	5,194.35	5,065.70	5,061.42	18.16	17.66	119.57	-132.33	-4,355.18	4,440.04	4,414.78	25.26	175.749		
5,300.00	5,294.11	5,165.41	5,160.76	18.52	18.01	119.55	-140.12	-4,359.03	4,447.34	4,421.58	25.76	172.625		
5,400.00	5,393.86	5,265.13	5,260.10	18.89	18.36	119.53	-147.91	-4,362.88	4,454.65	4,428.38	26.26	169.612		
5,500.00	5,493.62	5,364.85	5,359.43	19.25	18.71	119.50	-155.70	-4,366.73	4,461.95	4,435.18	26.77	166.703		
5,600.00	5,593.38	5,464.57	5,458.77	19.61	19.06	119.48	-163.50	-4,370.58	4,469.25	4,441.98	27.27	163.894		
5,700.00	5,693.13	5,564.28	5,558.11	19.98	19.42	119.46	-171.29	-4,374.43	4,476.56	4,448.78	27.77	161.181		
5,800.00	5,792.89	5,664.00	5,657.45	20.34	19.77	119.44	-179.08	-4,378.27	4,483.86	4,455.58	28.28	158.558		
5,900.00	5,892.65	5,763.72	5,756.79	20.71	20.13	119.41	-186.87	-4,382.12	4,491.17	4,462.38	28.79	156.022		
6,000.00	5,992.40	5,863.44	5,856.13	21.07	20.49	119.39	-194.67	-4,385.97	4,498.47	4,469.18	29.29	153.568		
6,100.00	6,092.16	5,963.15	5,955.46	21.44	20.85	119.37	-202.46	-4,389.82	4,505.78	4,475.98	29.80	151.194		
6,200.00	6,191.92	6,062.87	6,054.80	21.81	21.21	119.35	-210.25	-4,393.67	4,513.09	4,482.78	30.31	148.895		
6,300.00	6,291.67	6,162.59	6,154.14	22.17	21.57	119.33	-218.05	-4,397.52	4,520.40	4,489.57	30.82	146.667		
6,400.00	6,391.43	6,262.31	6,253.48	22.54	21.93	119.30	-225.84	-4,401.37	4,527.70	4,496.37	31.33	144.509		
6,500.00	6,491.19	6,362.03	6,352.82	22.91	22.29	119.28	-233.63	-4,405.22	4,535.01	4,503.17	31.84	142.417		
6,600.00	6,590.94	6,461.74	6,452.15	23.28	22.65	119.26	-241.42	-4,409.07	4,542.32	4,509.97	32.36	140.388		
6,700.00	6,690.70	6,561.46	6,551.49	23.64	23.02	119.24	-249.22	-4,412.91	4,549.63	4,516.77	32.87	138.419		
6,803.27	6,793.72	6,664.44	6,654.08	24.02	23.39	119.22	-257.26	-4,416.89	4,557.18	4,523.78	33.40	136.447		
6,900.00	6,890.29	6,760.91	6,750.18	24.38	23.75	119.27	-264.80	-4,420.61	4,563.66	4,529.77	33.89	134.643		
7,000.00	6,990.24	6,860.63	6,849.53	24.73	24.11	119.27	-272.60	-4,424.46	4,569.10	4,534.70	34.40	132.812		
7,069.77	7,060.00	6,930.16	6,918.79	24.98	24.37	-90.37	-278.03	-4,427.15	4,572.15	4,537.39	34.75	131.564		
7,100.00	7,090.23	6,991.67	6,980.10	25.08	24.59	-90.42	-282.44	-4,429.32	4,573.24	4,538.25	34.99	130.706		
7,200.00	7,190.23	7,208.79	7,196.98	25.42	25.37	-90.53	-290.92	-4,433.51	4,575.21	4,539.42	35.79	127.842		
7,300.00	7,290.23	7,340.14	7,328.33	25.76	25.82	-90.53	-291.32	-4,433.71	4,575.30	4,538.95	36.35	125.867		
7,400.00	7,390.23	7,440.14	7,428.33	26.10	26.16	-90.53	-291.32	-4,433.71	4,575.30	4,538.46	36.83	124.211		
7,500.00	7,490.23	7,540.14	7,528.33	26.44	26.51	-90.53	-291.32	-4,433.71	4,575.30	4,537.98	37.32	122.596		
7,600.00	7,590.23	7,640.14	7,628.33	26.78	26.85	-90.53	-291.32	-4,433.71	4,575.30	4,537.49	37.81	121.021		
7,700.00	7,690.23	7,740.14	7,728.33	27.12	27.20	-90.53	-291.32	-4,433.71	4,575.30	4,537.01	38.29	119.484		
7,800.00	7,790.23	7,840.14	7,828.33	27.46	27.55	-90.53	-291.32	-4,433.71	4,575.30	4,536.52	38.78	117.983		
7,900.00	7,890.23	7,940.14	7,928.33	27.80	27.89	-90.53	-291.32	-4,433.71	4,575.30	4,536.03	39.27	116.519		
8,000.00	7,990.23	8,040.14	8,028.33	28.14	28.24	-90.53	-291.32	-4,433.71	4,575.30	4,535.54	39.75	115.089		
8,100.00	8,090.23	8,140.14	8,128.33	28.49	28.58	-90.53	-291.32	-4,433.71	4,575.30	4,535.06	40.24	113.693		
8,200.00	8,190.23	8,240.14	8,228.33	28.83	28.93	-90.53	-291.32	-4,433.71	4,575.30	4,534.57	40.73	112.328		
8,300.00	8,290.23	8,340.14	8,328.33	29.17	29.28	-90.53	-291.32	-4,433.71	4,575.30	4,534.08	41.22	110.995		
8,400.00	8,390.23	8,440.14	8,428.33	29.52	29.62	-90.53	-291.32	-4,433.71	4,575.30	4,533.59	41.71	109.692		
8,500.00	8,490.23	8,540.14	8,528.33	29.86	29.97	-90.53	-291.32	-4,433.71	4,575.30	4,533.10	42.20	108.418		
8,600.00	8,590.23	8,640.14	8,628.33	30.21	30.32	-90.53	-291.32	-4,433.71	4,575.30	4,532.61	42.69	107.173		
8,700.00	8,690.23	8,740.14	8,728.33	30.55	30.67	-90.53	-291.32	-4,433.71	4,575.30	4,532.12	43.18	105.955		
8,800.00	8,790.23	8,840.14	8,828.33	30.90	31.02	-90.53	-291.32	-4,433.71	4,575.30	4,531.63	43.67	104.763		
8,900.00	8,890.23	8,940.14	8,928.33	31.24	31.37	-90.53	-291.32	-4,433.71	4,575.30	4,531.13	44.16	103.597		
9,000.00	8,990.23	9,040.14	9,028.33	31.59	31.71	-90.53	-291.32	-4,433.71	4,575.30	4,530.64	44.66	102.456		
9,100.00	9,090.23	9,140.14	9,128.33	31.93	32.06	-90.53	-291.32	-4,433.71	4,575.30	4,530.15	45.15	101.339		
9,200.00	9,190.23	9,240.14	9,228.33	32.28	32.41	-90.53	-291.32	-4,433.71	4,575.30	4,529.66	45.64	100.245		
9,300.00	9,290.23	9,340.14	9,328.33	32.63	32.76	-90.53	-291.32	-4,433.71	4,575.30	4,529.16	46.13	99.174		
9,400.00	9,390.23	9,440.14	9,428.33	32.97	33.11	-90.53	-291.32	-4,433.71	4,575.30	4,528.67	46.63	98.125		
9,500.00	9,490.23	9,540.14	9,528.33	33.32	33.46	-90.53	-291.32	-4,433.71	4,575.30	4,528.18	47.12	97.098		
9,600.00	9,590.23	9,640.14	9,628.33	33.67	33.81	-90.53	-291.32	-4,433.71	4,575.30	4,527.68	47.61	96.091		
9,700.00	9,690.23	9,740.14	9,728.33	34.02	34.16	-90.53	-291.32	-4,433.71	4,575.30	4,527.19	48.11	95.104		
9,800.00	9,790.23	9,840.14	9,828.33	34.37	34.51	-90.53	-291.32	-4,433.71	4,575.30	4,526.70	48.60	94.137		
9,900.00	9,890.23	9,940.14	9,928.33	34.71	34.86	-90.53	-291.32	-4,433.71	4,575.30	4,526.20	49.10	93.189		
10,000.00	9,990.23	10,040.14	10,028.33	35.06	35.21	-90.53	-291.32	-4,433.71	4,575.30	4,525.71	49.59	92.259		
10,100.00	10,090.23	10,140.14	10,128.33	35.41	35.56	-90.53	-291.32	-4,433.71	4,575.30	4,525.21	50.09	91.347		

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



Total Directional Services

Anticollision Report



Company:	Franklin Mountain Energy	Local Co-ordinate Reference:	Well LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	10,190.23	10,240.14	10,228.33	35.76	35.92	-90.53	-291.32	-4,433.71	4,575.30	4,524.72	50.58	90.453		
10,300.00	10,290.23	10,340.14	10,328.33	36.11	36.27	-90.53	-291.32	-4,433.71	4,575.30	4,524.22	51.08	89.575		
10,400.00	10,390.23	10,440.14	10,428.33	36.46	36.62	-90.53	-291.32	-4,433.71	4,575.30	4,523.73	51.57	88.714		
10,500.00	10,490.23	10,540.14	10,528.33	36.81	36.97	-90.53	-291.32	-4,433.71	4,575.30	4,523.23	52.07	87.869		
10,600.00	10,590.23	10,640.14	10,628.33	37.16	37.32	-90.53	-291.32	-4,433.71	4,575.30	4,522.73	52.57	87.040		
10,700.00	10,690.23	10,740.14	10,728.33	37.50	37.67	-90.53	-291.32	-4,433.71	4,575.30	4,522.24	53.06	86.226		
10,800.00	10,790.23	10,840.14	10,828.33	37.85	38.02	-90.53	-291.32	-4,433.71	4,575.30	4,521.74	53.56	85.426		
10,900.00	10,890.23	10,940.14	10,928.33	38.20	38.38	-90.53	-291.32	-4,433.71	4,575.30	4,521.24	54.06	84.641		
11,000.00	10,990.23	11,040.14	11,028.33	38.55	38.73	-90.53	-291.32	-4,433.71	4,575.30	4,520.75	54.55	83.870		
11,100.00	11,090.23	11,140.14	11,128.33	38.91	39.08	-90.53	-291.32	-4,433.71	4,575.30	4,520.25	55.05	83.113		
11,200.00	11,190.23	11,240.14	11,228.33	39.26	39.43	-90.53	-291.32	-4,433.71	4,575.30	4,519.75	55.55	82.369		
11,300.00	11,290.23	11,340.14	11,328.33	39.61	39.78	-90.53	-291.32	-4,433.71	4,575.30	4,519.25	56.04	81.637		
11,301.07	11,291.31	11,341.21	11,329.41	39.61	39.79	-90.53	-291.32	-4,433.71	4,575.30	4,519.25	56.05	81.630		
11,400.00	11,390.23	11,439.92	11,428.08	39.96	40.14	-90.55	-292.59	-4,433.70	4,575.30	4,518.76	56.54	80.920		
11,504.77	11,495.00	11,541.46	11,528.27	40.32	40.50	-90.75	-308.25	-4,433.56	4,575.34	4,518.28	57.06	80.188		
11,550.00	11,540.19	11,583.52	11,568.68	40.48	40.65	89.68	-319.89	-4,433.46	4,575.40	4,518.12	57.28	79.878		
11,600.00	11,589.80	11,629.22	11,611.49	40.66	40.82	89.54	-335.86	-4,433.32	4,575.50	4,517.98	57.53	79.536		
11,650.00	11,638.68	11,674.18	11,652.23	40.84	40.99	89.40	-354.85	-4,433.15	4,575.63	4,517.85	57.78	79.192		
11,700.00	11,686.48	11,718.44	11,690.76	41.03	41.16	89.27	-376.60	-4,432.96	4,575.79	4,517.75	58.03	78.849		
11,750.00	11,732.81	11,762.08	11,727.00	41.22	41.33	89.14	-400.90	-4,432.75	4,575.96	4,517.67	58.29	78.504		
11,800.00	11,777.34	11,805.15	11,760.85	41.41	41.51	89.01	-427.52	-4,432.51	4,576.15	4,517.60	58.55	78.159		
11,850.00	11,819.72	11,850.00	11,793.86	41.61	41.69	88.89	-457.85	-4,432.25	4,576.35	4,517.54	58.82	77.803		
11,900.00	11,859.63	11,889.83	11,821.12	41.81	41.86	88.79	-486.89	-4,431.99	4,576.56	4,517.48	59.08	77.463		
11,950.00	11,896.76	11,931.53	11,847.42	42.01	42.03	88.69	-519.24	-4,431.71	4,576.78	4,517.42	59.35	77.111		
12,000.00	11,930.83	11,972.89	11,871.11	42.22	42.21	88.59	-553.12	-4,431.41	4,576.99	4,517.35	59.63	76.756		
12,050.00	11,961.59	12,013.93	11,892.14	42.44	42.40	88.51	-588.35	-4,431.10	4,577.19	4,517.27	59.91	76.398		
12,100.00	11,988.80	12,054.70	11,910.49	42.66	42.58	88.43	-624.75	-4,430.78	4,577.38	4,517.18	60.20	76.035		
12,150.00	12,012.24	12,095.25	11,926.13	42.89	42.77	88.37	-662.15	-4,430.45	4,577.55	4,517.06	60.49	75.669		
12,200.00	12,031.76	12,135.61	11,939.02	43.12	42.97	88.32	-700.39	-4,430.12	4,577.71	4,516.92	60.79	75.298		
12,250.00	12,047.18	12,175.83	11,949.17	43.36	43.16	88.27	-739.30	-4,429.78	4,577.85	4,516.75	61.10	74.924		
12,300.00	12,058.41	12,215.95	11,956.54	43.60	43.36	88.24	-778.72	-4,429.43	4,577.96	4,516.55	61.41	74.549		
12,350.00	12,065.34	12,255.99	11,961.13	43.85	43.55	88.22	-818.49	-4,429.08	4,578.05	4,516.33	61.72	74.173		
12,393.56	12,067.85	12,290.85	11,962.85	44.07	43.73	88.21	-853.30	-4,428.78	4,578.11	4,516.11	61.99	73.846		
12,400.00	12,067.97	12,296.09	11,962.93	44.10	43.75	88.21	-858.54	-4,428.73	4,578.11	4,516.08	62.04	73.798		
12,500.00	12,069.93	12,396.09	11,964.00	44.63	44.28	88.20	-958.53	-4,427.85	4,578.24	4,515.46	62.78	72.924		
12,600.00	12,071.88	12,496.08	11,965.08	45.21	44.86	88.19	-1,058.51	-4,426.98	4,578.37	4,514.77	63.60	71.984		
12,700.00	12,073.84	12,596.08	11,966.16	45.84	45.50	88.18	-1,158.50	-4,426.10	4,578.50	4,514.00	64.50	70.986		
12,800.00	12,075.79	12,696.08	11,967.23	46.53	46.18	88.17	-1,258.49	-4,425.22	4,578.63	4,513.17	65.47	69.940		
12,900.00	12,077.75	12,796.07	11,968.31	47.26	46.91	88.15	-1,358.47	-4,424.34	4,578.76	4,512.26	66.50	68.853		
13,000.00	12,079.70	12,896.07	11,969.38	48.04	47.69	88.14	-1,458.46	-4,423.46	4,578.89	4,511.29	67.60	67.735		
13,100.00	12,081.66	12,996.06	11,970.46	48.86	48.51	88.13	-1,558.45	-4,422.59	4,579.02	4,510.26	68.76	66.592		
13,200.00	12,083.61	13,096.06	11,971.53	49.72	49.38	88.12	-1,658.43	-4,421.71	4,579.15	4,509.17	69.98	65.433		
13,300.00	12,085.57	13,196.06	11,972.61	50.62	50.28	88.11	-1,758.42	-4,420.83	4,579.28	4,508.02	71.26	64.263		
13,400.00	12,087.53	13,296.05	11,973.68	51.56	51.22	88.10	-1,858.41	-4,419.95	4,579.41	4,506.82	72.59	63.089		
13,500.00	12,089.48	13,396.05	11,974.76	52.54	52.20	88.09	-1,958.39	-4,419.08	4,579.54	4,505.58	73.97	61.914		
13,600.00	12,091.44	13,496.04	11,975.83	53.54	53.21	88.08	-2,058.38	-4,418.20	4,579.67	4,504.28	75.39	60.745		
13,700.00	12,093.39	13,596.04	11,976.91	54.58	54.25	88.07	-2,158.36	-4,417.32	4,579.80	4,502.94	76.86	59.585		
13,800.00	12,095.35	13,696.04	11,977.98	55.65	55.32	88.06	-2,258.35	-4,416.44	4,579.94	4,501.56	78.37	58.437		
13,900.00	12,097.30	13,796.03	11,979.06	56.75	56.42	88.04	-2,358.34	-4,415.56	4,580.07	4,500.14	79.93	57.304		
14,000.00	12,099.26	13,896.03	11,980.13	57.87	57.54	88.03	-2,458.32	-4,414.69	4,580.20	4,498.68	81.52	56.188		
14,100.00	12,101.21	13,996.03	11,981.21	59.02	58.69	88.02	-2,558.31	-4,413.81	4,580.33	4,497.19	83.14	55.092		
14,200.00	12,103.17	14,096.02	11,982.28	60.19	59.86	88.01	-2,658.30	-4,412.93	4,580.46	4,495.66	84.80	54.016		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 #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				
14,300.00	12,105.12	14,196.02	11,983.36	61.38	61.06	88.00	-2,758.28	-4,412.05	4,580.59	4,494.11	86.49	52.963				
14,400.00	12,107.08	14,296.01	11,984.43	62.60	62.28	87.99	-2,858.27	-4,411.18	4,580.73	4,492.52	88.21	51.933				
14,500.00	12,109.03	14,396.01	11,985.51	63.83	63.51	87.98	-2,958.26	-4,410.30	4,580.86	4,490.91	89.95	50.926				
14,600.00	12,110.99	14,496.01	11,986.59	65.09	64.77	87.97	-3,058.24	-4,409.42	4,580.99	4,489.27	91.72	49.943				
14,700.00	12,112.94	14,596.00	11,987.66	66.36	66.04	87.96	-3,158.23	-4,408.54	4,581.12	4,487.60	93.52	48.985				
14,800.00	12,114.90	14,696.00	11,988.74	67.64	67.33	87.95	-3,258.22	-4,407.66	4,581.26	4,485.91	95.34	48.051				
14,900.00	12,116.85	14,795.99	11,989.81	68.94	68.63	87.94	-3,358.20	-4,406.79	4,581.39	4,484.21	97.18	47.141				
15,000.00	12,118.81	14,895.99	11,990.89	70.26	69.95	87.92	-3,458.19	-4,405.91	4,581.52	4,482.48	99.05	46.256				
15,100.00	12,120.76	14,995.99	11,991.96	71.59	71.29	87.91	-3,558.17	-4,405.03	4,581.66	4,480.73	100.93	45.394				
15,200.00	12,122.72	15,095.98	11,993.04	72.94	72.63	87.90	-3,658.16	-4,404.15	4,581.79	4,478.96	102.83	44.556				
15,300.00	12,124.67	15,195.98	11,994.11	74.29	73.99	87.89	-3,758.15	-4,403.28	4,581.92	4,477.17	104.75	43.741				
15,400.00	12,126.63	15,295.97	11,995.19	75.66	75.36	87.88	-3,858.13	-4,402.40	4,582.06	4,475.37	106.69	42.949				
15,500.00	12,128.58	15,395.97	11,996.26	77.04	76.74	87.87	-3,958.12	-4,401.52	4,582.19	4,473.55	108.64	42.179				
15,600.00	12,130.54	15,495.97	11,997.34	78.43	78.13	87.86	-4,058.11	-4,400.64	4,582.33	4,471.72	110.60	41.430				
15,700.00	12,132.49	15,595.96	11,998.41	79.83	79.54	87.85	-4,158.09	-4,399.77	4,582.46	4,469.88	112.58	40.703				
15,800.00	12,134.45	15,695.96	11,999.49	81.24	80.95	87.84	-4,258.08	-4,398.89	4,582.59	4,468.02	114.58	39.996				
15,900.00	12,136.40	15,795.95	12,000.56	82.66	82.37	87.83	-4,358.07	-4,398.01	4,582.73	4,466.15	116.58	39.309				
16,000.00	12,138.36	15,895.95	12,001.64	84.09	83.80	87.81	-4,458.05	-4,397.13	4,582.86	4,464.26	118.60	38.641				
16,100.00	12,140.31	15,995.95	12,002.71	85.52	85.23	87.80	-4,558.04	-4,396.25	4,583.00	4,462.37	120.63	37.992				
16,200.00	12,142.27	16,095.94	12,003.79	86.96	86.68	87.79	-4,658.03	-4,395.38	4,583.13	4,460.46	122.67	37.361				
16,300.00	12,144.22	16,195.94	12,004.86	88.42	88.13	87.78	-4,758.01	-4,394.50	4,583.27	4,458.55	124.72	36.748				
16,400.00	12,146.18	16,295.93	12,005.94	89.87	89.59	87.77	-4,858.00	-4,393.62	4,583.41	4,456.62	126.78	36.152				
16,500.00	12,148.13	16,395.93	12,007.01	91.34	91.05	87.76	-4,957.99	-4,392.74	4,583.54	4,454.69	128.85	35.572				
16,600.00	12,150.09	16,495.93	12,008.09	92.81	92.53	87.75	-5,057.97	-4,391.87	4,583.68	4,452.75	130.93	35.008				
16,700.00	12,152.04	16,595.92	12,009.17	94.28	94.00	87.74	-5,157.96	-4,390.99	4,583.81	4,450.79	133.02	34.460				
16,800.00	12,154.00	16,695.92	12,010.24	95.77	95.49	87.73	-5,257.94	-4,390.11	4,583.95	4,448.84	135.11	33.926				
16,900.00	12,155.95	16,795.92	12,011.32	97.25	96.98	87.72	-5,357.93	-4,389.23	4,584.09	4,446.87	137.22	33.408				
17,000.00	12,157.91	16,895.91	12,012.39	98.75	98.47	87.71	-5,457.92	-4,388.35	4,584.22	4,444.89	139.33	32.902				
17,100.00	12,159.86	16,995.91	12,013.47	100.24	99.97	87.69	-5,557.90	-4,387.48	4,584.36	4,442.91	141.44	32.411				
17,200.00	12,161.82	17,095.90	12,014.54	101.75	101.47	87.68	-5,657.89	-4,386.60	4,584.50	4,440.93	143.57	31.932				
17,300.00	12,163.77	17,195.90	12,015.62	103.25	102.98	87.67	-5,757.88	-4,385.72	4,584.63	4,438.93	145.70	31.466				
17,400.00	12,165.73	17,295.90	12,016.69	104.77	104.49	87.66	-5,857.86	-4,384.84	4,584.77	4,436.93	147.84	31.012				
17,500.00	12,167.68	17,395.89	12,017.77	106.28	106.01	87.65	-5,957.85	-4,383.97	4,584.91	4,434.93	149.98	30.570				
17,600.00	12,169.64	17,495.89	12,018.84	107.80	107.53	87.64	-6,057.84	-4,383.09	4,585.05	4,432.92	152.13	30.140				
17,700.00	12,171.59	17,595.88	12,019.92	109.32	109.06	87.63	-6,157.82	-4,382.21	4,585.18	4,430.90	154.28	29.720				
17,800.00	12,173.55	17,695.88	12,020.99	110.85	110.58	87.62	-6,257.81	-4,381.33	4,585.32	4,428.88	156.44	29.311				
17,900.00	12,175.50	17,795.88	12,022.07	112.38	112.12	87.61	-6,357.80	-4,380.46	4,585.46	4,426.86	158.60	28.912				
18,000.00	12,177.46	17,895.87	12,023.14	113.92	113.65	87.60	-6,457.78	-4,379.58	4,585.60	4,424.83	160.77	28.523				
18,100.00	12,179.41	17,995.87	12,024.22	115.45	115.19	87.59	-6,557.77	-4,378.70	4,585.74	4,422.79	162.94	28.143				
18,200.00	12,181.37	18,095.86	12,025.29	117.00	116.73	87.57	-6,657.75	-4,377.82	4,585.87	4,420.75	165.12	27.773				
18,300.00	12,183.32	18,195.86	12,026.37	118.54	118.28	87.56	-6,757.74	-4,376.94	4,586.01	4,418.71	167.30	27.411				
18,400.00	12,185.28	18,295.86	12,027.44	120.09	119.82	87.55	-6,857.73	-4,376.07	4,586.15	4,416.66	169.49	27.059				
18,500.00	12,187.23	18,395.85	12,028.52	121.64	121.37	87.54	-6,957.71	-4,375.19	4,586.29	4,414.61	171.68	26.714				
18,600.00	12,189.19	18,495.85	12,029.60	123.19	122.93	87.53	-7,057.70	-4,374.31	4,586.43	4,412.56	173.87	26.378				
18,700.00	12,191.14	18,595.84	12,030.67	124.74	124.48	87.52	-7,157.69	-4,373.43	4,586.57	4,410.50	176.07	26.050				
18,800.00	12,193.10	18,695.84	12,031.75	126.30	126.04	87.51	-7,257.67	-4,372.56	4,586.71	4,408.44	178.27	25.729				
18,900.00	12,195.05	18,795.84	12,032.82	127.86	127.60	87.50	-7,357.66	-4,371.68	4,586.85	4,406.38	180.47	25.416				
19,000.00	12,197.01	18,895.83	12,033.90	129.42	129.16	87.49	-7,457.65	-4,370.80	4,586.99	4,404.31	182.68	25.110				
19,100.00	12,198.96	18,995.83	12,034.97	130.99	130.73	87.48	-7,557.63	-4,369.92	4,587.13	4,402.24	184.89	24.810				
19,200.00	12,200.92	19,095.83	12,036.05	132.55	132.30	87.47	-7,657.62	-4,369.04	4,587.27	4,400.17	187.10	24.518				
19,300.00	12,202.87	19,195.82	12,037.12	134.12	133.86	87.45	-7,757.61	-4,368.17	4,587.41	4,398.09	189.32	24.231				
19,400.00	12,204.83	19,295.82	12,038.20	135.69	135.44	87.44	-7,857.59	-4,367.29	4,587.55	4,396.01	191.54	23.951				

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	12,206.78	19,395.81	12,039.27	137.26	137.01	87.43	-7,957.58	-4,366.41	4,587.69	4,393.93	193.76	23.678		
19,600.00	12,208.74	19,495.81	12,040.35	138.84	138.58	87.42	-8,057.56	-4,365.53	4,587.83	4,391.85	195.98	23.410		
19,700.00	12,210.69	19,595.81	12,041.42	140.41	140.16	87.41	-8,157.55	-4,364.66	4,587.97	4,389.77	198.21	23.147		
19,800.00	12,212.65	19,695.80	12,042.50	141.99	141.74	87.40	-8,257.54	-4,363.78	4,588.11	4,387.68	200.44	22.891		
19,900.00	12,214.60	19,795.80	12,043.57	143.57	143.32	87.39	-8,357.52	-4,362.90	4,588.26	4,385.59	202.67	22.639		
20,000.00	12,216.56	19,895.79	12,044.65	145.15	144.90	87.38	-8,457.51	-4,362.02	4,588.40	4,383.50	204.90	22.393		
20,100.00	12,218.51	19,995.79	12,045.72	146.73	146.48	87.37	-8,557.50	-4,361.14	4,588.54	4,381.40	207.14	22.152		
20,200.00	12,220.47	20,095.79	12,046.80	148.32	148.07	87.36	-8,657.48	-4,360.27	4,588.68	4,379.31	209.37	21.916		
20,300.00	12,222.43	20,195.78	12,047.87	149.90	149.65	87.34	-8,757.47	-4,359.39	4,588.82	4,377.21	211.61	21.685		
20,400.00	12,224.38	20,295.78	12,048.95	151.49	151.24	87.33	-8,857.46	-4,358.51	4,588.96	4,375.11	213.85	21.458		
20,500.00	12,226.34	20,395.77	12,050.02	153.08	152.83	87.32	-8,957.44	-4,357.63	4,589.11	4,373.01	216.10	21.236		
20,600.00	12,228.29	20,495.77	12,051.10	154.67	154.42	87.31	-9,057.43	-4,356.76	4,589.25	4,370.91	218.34	21.019		
20,700.00	12,230.25	20,595.77	12,052.18	156.26	156.01	87.30	-9,157.42	-4,355.88	4,589.39	4,368.80	220.59	20.805		
20,800.00	12,232.20	20,695.76	12,053.25	157.85	157.60	87.29	-9,257.40	-4,355.00	4,589.54	4,366.70	222.84	20.596		
20,900.00	12,234.16	20,795.76	12,054.33	159.45	159.20	87.28	-9,357.39	-4,354.12	4,589.68	4,364.59	225.09	20.391		
21,000.00	12,236.11	20,895.75	12,055.40	161.04	160.79	87.27	-9,457.38	-4,353.25	4,589.82	4,362.48	227.34	20.189		
21,100.00	12,238.07	20,995.75	12,056.48	162.64	162.39	87.26	-9,557.36	-4,352.37	4,589.97	4,360.37	229.59	19.992		
21,200.00	12,240.02	21,095.75	12,057.55	164.23	163.99	87.25	-9,657.35	-4,351.49	4,590.11	4,358.26	231.85	19.798		
21,300.00	12,241.98	21,195.74	12,058.63	165.83	165.59	87.24	-9,757.33	-4,350.61	4,590.25	4,356.15	234.11	19.608		
21,400.00	12,243.93	21,295.74	12,059.70	167.43	167.19	87.22	-9,857.32	-4,349.73	4,590.40	4,354.03	236.37	19.421		
21,500.00	12,245.89	21,395.73	12,060.78	169.03	168.79	87.21	-9,957.31	-4,348.86	4,590.54	4,351.92	238.62	19.237		
21,600.00	12,247.84	21,495.73	12,061.85	170.63	170.39	87.20	-10,057.29	-4,347.98	4,590.68	4,349.80	240.89	19.058		
21,700.00	12,249.80	21,595.73	12,062.93	172.23	171.99	87.19	-10,157.28	-4,347.10	4,590.83	4,347.68	243.15	18.881		
21,800.00	12,251.75	21,695.72	12,064.00	173.84	173.59	87.18	-10,257.27	-4,346.22	4,590.97	4,345.56	245.41	18.707		
21,900.00	12,253.71	21,795.72	12,065.08	175.44	175.20	87.17	-10,357.25	-4,345.35	4,591.12	4,343.44	247.68	18.537		
22,000.00	12,255.66	21,895.72	12,066.15	177.05	176.80	87.16	-10,457.24	-4,344.47	4,591.26	4,341.32	249.94	18.369		
22,100.00	12,257.62	21,995.71	12,067.23	178.65	178.41	87.15	-10,557.23	-4,343.59	4,591.41	4,339.20	252.21	18.205		
22,200.00	12,259.57	22,095.71	12,068.30	180.26	180.02	87.14	-10,657.21	-4,342.71	4,591.55	4,337.08	254.48	18.043		
22,253.13	12,260.61	22,148.35	12,068.87	181.02	180.86	87.13	-10,709.85	-4,342.25	4,591.63	4,336.02	255.61	17.964 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	37.80	37.80	0.00	0.05	-90.53	-39.86	-4,274.68	4,274.87						
100.00	100.00	137.80	137.80	0.14	0.28	-90.53	-39.86	-4,274.68	4,274.87	4,274.55	0.31	N/A			
200.00	200.00	237.80	237.80	0.50	0.64	-90.53	-39.86	-4,274.68	4,274.87	4,274.06	0.81	5,286.008			
300.00	300.00	337.80	337.80	0.86	0.99	-90.53	-39.86	-4,274.68	4,274.87	4,273.55	1.31	3,254.630			
400.00	400.00	437.80	437.80	1.22	1.35	-90.53	-39.86	-4,274.68	4,274.87	4,273.05	1.82	2,349.534			
500.00	500.00	537.80	537.80	1.58	1.71	-90.53	-39.86	-4,274.68	4,274.87	4,272.54	2.33	1,837.974			
600.00	600.00	637.80	637.80	1.93	2.07	-90.53	-39.86	-4,274.68	4,274.87	4,272.03	2.83	1,509.242			
700.00	700.00	737.80	737.80	2.29	2.43	-90.53	-39.86	-4,274.68	4,274.87	4,271.53	3.34	1,280.218			
800.00	800.00	837.80	837.80	2.65	2.79	-90.53	-39.86	-4,274.68	4,274.87	4,271.02	3.85	1,111.526			
900.00	900.00	937.80	937.80	3.01	3.14	-90.53	-39.86	-4,274.68	4,274.87	4,270.51	4.35	982.105			
1,000.00	1,000.00	1,037.80	1,037.80	3.37	3.50	-90.53	-39.86	-4,274.68	4,274.87	4,270.01	4.86	879.674			
1,100.00	1,100.00	1,137.80	1,137.80	3.73	3.86	-90.53	-39.86	-4,274.68	4,274.87	4,269.50	5.37	796.588			
1,200.00	1,200.00	1,237.80	1,237.80	4.08	4.22	-90.53	-39.86	-4,274.68	4,274.87	4,268.99	5.87	727.841			
1,300.00	1,300.00	1,337.80	1,337.80	4.44	4.58	-90.53	-39.86	-4,274.68	4,274.87	4,268.49	6.38	670.016			
1,400.00	1,400.00	1,437.80	1,437.80	4.80	4.94	-90.53	-39.86	-4,274.68	4,274.87	4,267.98	6.89	620.702			
1,500.00	1,500.00	1,537.80	1,537.80	5.16	5.30	-90.53	-39.86	-4,274.68	4,274.87	4,267.47	7.39	578.149			
1,600.00	1,600.00	1,637.80	1,637.80	5.52	5.65	-90.53	-39.86	-4,274.68	4,274.87	4,266.96	7.90	541.056			
1,700.00	1,700.00	1,737.80	1,737.80	5.88	6.01	-90.53	-39.86	-4,274.68	4,274.87	4,266.46	8.41	508.435			
1,800.00	1,800.00	1,837.80	1,837.80	6.24	6.37	-90.53	-39.86	-4,274.68	4,274.87	4,265.95	8.91	479.524			
1,900.00	1,900.00	1,937.80	1,937.80	6.59	6.73	-90.53	-39.86	-4,274.68	4,274.87	4,265.44	9.42	453.723			
2,000.00	2,000.00	2,037.80	2,037.80	6.95	7.09	-90.53	-39.86	-4,274.68	4,274.87	4,264.94	9.93	430.558			
2,100.00	2,100.00	2,137.80	2,137.80	7.31	7.45	-90.53	-39.86	-4,274.68	4,274.87	4,264.43	10.44	409.642			
2,200.00	2,200.00	2,237.80	2,237.80	7.67	7.81	-90.53	-39.86	-4,274.68	4,274.87	4,263.92	10.94	390.665			
2,300.00	2,300.00	2,337.80	2,337.80	8.03	8.16	-90.53	-39.86	-4,274.68	4,274.87	4,263.42	11.45	373.368			
2,400.00	2,400.00	2,437.80	2,437.80	8.39	8.52	-90.53	-39.86	-4,274.68	4,274.87	4,262.91	11.96	357.537			
2,500.00	2,500.00	2,537.80	2,537.80	8.74	8.88	-90.53	-39.86	-4,274.68	4,274.87	4,262.40	12.46	342.995			
2,600.00	2,600.00	2,637.80	2,637.80	9.10	9.24	-90.53	-39.86	-4,274.68	4,274.87	4,261.90	12.97	329.589			
2,700.00	2,700.00	2,788.85	2,788.85	9.46	9.77	-90.55	-40.74	-4,274.14	4,274.64	4,261.04	13.60	314.395			
2,800.00	2,799.99	2,990.98	2,990.70	9.80	10.43	119.01	-49.25	-4,268.94	4,272.60	4,258.29	14.30	298.700			
2,900.00	2,899.91	3,090.93	3,090.41	10.13	10.76	119.00	-55.20	-4,265.31	4,270.92	4,256.16	14.77	289.214			
2,966.50	2,966.28	3,157.42	3,156.74	10.35	10.98	119.00	-59.16	-4,262.88	4,270.51	4,255.44	15.08	283.234			
3,000.00	2,999.70	3,190.93	3,190.16	10.46	11.10	119.00	-61.16	-4,261.67	4,270.45	4,255.21	15.23	280.315			
3,100.00	3,099.46	3,290.93	3,289.92	10.79	11.43	119.00	-67.11	-4,258.03	4,270.25	4,254.55	15.71	271.898			
3,200.00	3,199.22	3,390.93	3,389.67	11.12	11.77	119.01	-73.07	-4,254.39	4,270.06	4,253.88	16.18	263.913			
3,300.00	3,298.97	3,490.93	3,489.43	11.46	12.11	119.01	-79.02	-4,250.75	4,269.86	4,253.20	16.66	256.332			
3,400.00	3,398.73	3,590.93	3,589.19	11.80	12.46	119.01	-84.98	-4,247.11	4,269.67	4,252.53	17.14	249.131			
3,500.00	3,498.49	3,690.92	3,688.94	12.14	12.80	119.01	-90.94	-4,243.47	4,269.47	4,251.85	17.62	242.285			
3,600.00	3,598.24	3,790.92	3,788.70	12.49	13.15	119.01	-96.89	-4,239.83	4,269.28	4,251.17	18.11	235.772			
3,700.00	3,698.00	3,890.92	3,888.45	12.83	13.50	119.01	-102.85	-4,236.19	4,269.08	4,250.48	18.60	229.570			
3,800.00	3,797.76	3,990.92	3,988.21	13.18	13.85	119.01	-108.80	-4,232.55	4,268.89	4,249.80	19.09	223.661			
3,900.00	3,897.51	4,090.92	4,087.97	13.53	14.20	119.01	-114.76	-4,228.91	4,268.69	4,249.11	19.58	218.026			
4,000.00	3,997.27	4,190.92	4,187.72	13.88	14.55	119.02	-120.72	-4,225.27	4,268.49	4,248.42	20.07	212.648			
4,100.00	4,097.03	4,290.92	4,287.48	14.23	14.91	119.02	-126.67	-4,221.63	4,268.30	4,247.73	20.57	207.511			
4,200.00	4,196.78	4,390.92	4,387.23	14.58	15.26	119.02	-132.63	-4,217.99	4,268.10	4,247.04	21.07	202.601			
4,300.00	4,296.54	4,490.92	4,486.99	14.94	15.62	119.02	-138.59	-4,214.35	4,267.91	4,246.34	21.57	197.904			
4,400.00	4,396.30	4,590.92	4,586.74	15.29	15.98	119.02	-144.54	-4,210.71	4,267.71	4,245.65	22.07	193.407			
4,500.00	4,496.05	4,690.92	4,686.50	15.65	16.33	119.02	-150.50	-4,207.07	4,267.52	4,244.95	22.57	189.099			
4,600.00	4,495.81	4,790.92	4,786.26	16.00	16.69	119.02	-156.45	-4,203.43	4,267.32	4,244.25	23.07	184.969			
4,700.00	4,495.57	4,890.92	4,886.01	16.36	17.05	119.03	-162.41	-4,199.79	4,267.13	4,243.55	23.57	181.006			
4,800.00	4,495.32	4,990.92	4,985.77	16.72	17.41	119.03	-168.37	-4,196.15	4,266.93	4,242.85	24.08	177.201			
4,900.00	4,495.08	5,090.92	5,085.52	17.08	17.77	119.03	-174.32	-4,192.51	4,266.74	4,242.15	24.59	173.546			
5,000.00	4,994.84	5,190.92	5,185.28	17.44	18.14	119.03	-180.28	-4,188.87	4,266.54	4,241.45	25.09	170.032			

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	5,094.59	5,290.92	5,285.04	17.80	18.50	119.03	-186.23	-4,185.23	4,266.35	4,240.75	25.60	166.651		
5,200.00	5,194.35	5,390.92	5,384.79	18.16	18.86	119.03	-192.19	-4,181.59	4,266.15	4,240.04	26.11	163.397		
5,300.00	5,294.11	5,490.92	5,484.55	18.52	19.22	119.03	-198.15	-4,177.95	4,265.96	4,239.34	26.62	160.263		
5,400.00	5,393.86	5,590.92	5,584.30	18.89	19.59	119.04	-204.10	-4,174.31	4,265.76	4,238.63	27.13	157.242		
5,500.00	5,493.62	5,690.92	5,684.06	19.25	19.95	119.04	-210.06	-4,170.67	4,265.57	4,237.93	27.64	154.328		
5,600.00	5,593.38	5,790.92	5,783.81	19.61	20.32	119.04	-216.01	-4,167.03	4,265.37	4,237.22	28.15	151.517		
5,700.00	5,693.13	5,890.92	5,883.57	19.98	20.68	119.04	-221.97	-4,163.39	4,265.18	4,236.51	28.66	148.803		
5,800.00	5,792.89	5,990.92	5,983.33	20.34	21.05	119.04	-227.93	-4,159.75	4,264.98	4,235.80	29.18	146.182		
5,900.00	5,892.65	6,090.92	6,083.08	20.71	21.41	119.04	-233.88	-4,156.11	4,264.79	4,235.10	29.69	143.648		
6,000.00	5,992.40	6,190.92	6,182.84	21.07	21.78	119.04	-239.84	-4,152.47	4,264.59	4,234.39	30.20	141.198		
6,100.00	6,092.16	6,290.92	6,282.59	21.44	22.15	119.04	-245.79	-4,148.83	4,264.39	4,233.68	30.72	138.828		
6,200.00	6,191.92	6,390.92	6,382.35	21.81	22.51	119.05	-251.75	-4,145.19	4,264.20	4,232.97	31.23	136.533		
6,300.00	6,291.67	6,490.92	6,482.11	22.17	22.88	119.05	-257.71	-4,141.55	4,264.00	4,232.26	31.75	134.311		
6,400.00	6,391.43	6,590.92	6,581.86	22.54	23.25	119.05	-263.66	-4,137.91	4,263.81	4,231.55	32.26	132.159		
6,500.00	6,491.19	6,690.92	6,681.62	22.91	23.62	119.05	-269.62	-4,134.27	4,263.61	4,230.84	32.78	130.072		
6,600.00	6,590.94	6,790.92	6,781.37	23.28	23.99	119.05	-275.57	-4,130.63	4,263.42	4,230.12	33.30	128.049		
6,700.00	6,690.70	6,884.44	6,874.67	23.64	24.33	119.05	-281.13	-4,127.24	4,263.24	4,229.44	33.80	126.148		
6,705.06	6,695.75	6,887.66	6,877.88	23.66	24.34	119.05	-281.31	-4,127.12	4,263.24	4,229.42	33.82	126.067 CC		
6,803.27	6,793.72	6,950.10	6,940.22	24.02	24.57	119.06	-284.39	-4,125.24	4,263.65	4,229.42	34.23	124.553		
6,900.00	6,890.29	7,000.00	6,990.07	24.38	24.75	119.08	-286.23	-4,124.12	4,264.29	4,229.68	34.61	123.225		
7,000.00	6,990.24	7,075.15	7,065.19	24.73	25.02	119.09	-287.95	-4,123.07	4,264.49	4,229.45	35.04	121.688		
7,069.77	7,060.00	7,119.50	7,109.53	24.98	25.17	-90.53	-288.37	-4,122.81	4,264.40	4,229.08	35.32	120.727		
7,100.00	7,090.23	7,139.96	7,130.00	25.08	25.24	-90.53	-288.42	-4,122.78	4,264.36	4,228.91	35.44	120.313		
7,134.00	7,124.24	7,172.00	7,162.04	25.19	25.35	-90.53	-288.42	-4,122.78	4,264.36	4,228.75	35.60	119.779		
7,200.00	7,190.23	7,238.00	7,228.03	25.42	25.57	-90.53	-288.42	-4,122.78	4,264.36	4,228.44	35.92	118.722		
7,300.00	7,290.23	7,338.00	7,328.03	25.76	25.91	-90.53	-288.42	-4,122.78	4,264.36	4,227.96	36.40	117.155		
7,400.00	7,390.23	7,438.00	7,428.03	26.10	26.25	-90.53	-288.42	-4,122.78	4,264.36	4,227.47	36.88	115.626		
7,500.00	7,490.23	7,538.00	7,528.03	26.44	26.59	-90.53	-288.42	-4,122.78	4,264.36	4,226.99	37.36	114.134		
7,600.00	7,590.23	7,638.00	7,628.03	26.78	26.93	-90.53	-288.42	-4,122.78	4,264.36	4,226.51	37.85	112.678		
7,700.00	7,690.23	7,738.00	7,728.03	27.12	27.27	-90.53	-288.42	-4,122.78	4,264.36	4,226.03	38.33	111.258		
7,800.00	7,790.23	7,838.00	7,828.03	27.46	27.62	-90.53	-288.42	-4,122.78	4,264.36	4,225.54	38.81	109.871		
7,900.00	7,890.23	7,938.00	7,928.03	27.80	27.96	-90.53	-288.42	-4,122.78	4,264.36	4,225.06	39.30	108.516		
8,000.00	7,990.23	8,038.00	8,028.03	28.14	28.30	-90.53	-288.42	-4,122.78	4,264.36	4,224.57	39.78	107.193		
8,100.00	8,090.23	8,138.00	8,128.03	28.49	28.64	-90.53	-288.42	-4,122.78	4,264.36	4,224.09	40.27	105.900		
8,200.00	8,190.23	8,238.00	8,228.03	28.83	28.99	-90.53	-288.42	-4,122.78	4,264.36	4,223.60	40.75	104.637		
8,300.00	8,290.23	8,338.00	8,328.03	29.17	29.33	-90.53	-288.42	-4,122.78	4,264.36	4,223.12	41.24	103.403		
8,400.00	8,390.23	8,438.00	8,428.03	29.52	29.67	-90.53	-288.42	-4,122.78	4,264.36	4,222.63	41.73	102.196		
8,500.00	8,490.23	8,538.00	8,528.03	29.86	30.02	-90.53	-288.42	-4,122.78	4,264.36	4,222.14	42.21	101.015		
8,600.00	8,590.23	8,638.00	8,628.03	30.21	30.36	-90.53	-288.42	-4,122.78	4,264.36	4,221.65	42.70	99.861		
8,700.00	8,690.23	8,738.00	8,728.03	30.55	30.71	-90.53	-288.42	-4,122.78	4,264.36	4,221.16	43.19	98.732		
8,800.00	8,790.23	8,838.00	8,828.03	30.90	31.05	-90.53	-288.42	-4,122.78	4,264.36	4,220.68	43.68	97.627		
8,900.00	8,890.23	8,938.00	8,928.03	31.24	31.40	-90.53	-288.42	-4,122.78	4,264.36	4,220.19	44.17	96.545		
9,000.00	8,990.23	9,038.00	9,028.03	31.59	31.74	-90.53	-288.42	-4,122.78	4,264.36	4,219.70	44.66	95.487		
9,100.00	9,090.23	9,138.00	9,128.03	31.93	32.09	-90.53	-288.42	-4,122.78	4,264.36	4,219.21	45.15	94.450		
9,200.00	9,190.23	9,238.00	9,228.03	32.28	32.43	-90.53	-288.42	-4,122.78	4,264.36	4,218.72	45.64	93.435		
9,300.00	9,290.23	9,338.00	9,328.03	32.63	32.78	-90.53	-288.42	-4,122.78	4,264.36	4,218.22	46.13	92.441		
9,400.00	9,390.23	9,438.00	9,428.03	32.97	33.13	-90.53	-288.42	-4,122.78	4,264.36	4,217.73	46.62	91.467		
9,500.00	9,490.23	9,538.00	9,528.03	33.32	33.47	-90.53	-288.42	-4,122.78	4,264.36	4,217.24	47.11	90.513		
9,600.00	9,590.23	9,638.00	9,628.03	33.67	33.82	-90.53	-288.42	-4,122.78	4,264.36	4,216.75	47.60	89.578		
9,700.00	9,690.23	9,738.00	9,728.03	34.02	34.17	-90.53	-288.42	-4,122.78	4,264.36	4,216.26	48.10	88.662		
9,800.00	9,790.23	9,838.00	9,828.03	34.37	34.52	-90.53	-288.42	-4,122.78	4,264.36	4,215.77	48.59	87.763		
9,900.00	9,890.23	9,938.00	9,928.03	34.71	34.86	-90.53	-288.42	-4,122.78	4,264.36	4,215.27	49.08	86.882		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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		
10,000.00	9,990.23	10,038.00	10,028.03	35.06	35.21	-90.53	-288.42	-4,122.78	4,264.36	4,214.78	49.58	86.018		
10,100.00	10,090.23	10,138.00	10,128.03	35.41	35.56	-90.53	-288.42	-4,122.78	4,264.36	4,214.29	50.07	85.171		
10,200.00	10,190.23	10,238.00	10,228.03	35.76	35.91	-90.53	-288.42	-4,122.78	4,264.36	4,213.79	50.56	84.339		
10,300.00	10,290.23	10,338.00	10,328.03	36.11	36.26	-90.53	-288.42	-4,122.78	4,264.36	4,213.30	51.06	83.524		
10,400.00	10,390.23	10,438.00	10,428.03	36.46	36.61	-90.53	-288.42	-4,122.78	4,264.36	4,212.81	51.55	82.723		
10,500.00	10,490.23	10,538.00	10,528.03	36.81	36.95	-90.53	-288.42	-4,122.78	4,264.36	4,212.31	52.04	81.938		
10,600.00	10,590.23	10,638.00	10,628.03	37.16	37.30	-90.53	-288.42	-4,122.78	4,264.36	4,211.82	52.54	81.166		
10,700.00	10,690.23	10,738.00	10,728.03	37.50	37.65	-90.53	-288.42	-4,122.78	4,264.36	4,211.32	53.03	80.409		
10,800.00	10,790.23	10,838.00	10,828.03	37.85	38.00	-90.53	-288.42	-4,122.78	4,264.36	4,210.83	53.53	79.665		
10,900.00	10,890.23	10,938.00	10,928.03	38.20	38.35	-90.53	-288.42	-4,122.78	4,264.36	4,210.33	54.02	78.935		
11,000.00	10,990.23	11,038.00	11,028.03	38.55	38.70	-90.53	-288.42	-4,122.78	4,264.36	4,209.84	54.52	78.218		
11,100.00	11,090.23	11,138.00	11,128.03	38.91	39.05	-90.53	-288.42	-4,122.78	4,264.36	4,209.34	55.01	77.513		
11,200.00	11,190.23	11,238.00	11,228.03	39.26	39.40	-90.53	-288.42	-4,122.78	4,264.36	4,208.84	55.51	76.821		
11,300.00	11,290.23	11,338.00	11,328.03	39.61	39.75	-90.53	-288.42	-4,122.78	4,264.36	4,208.35	56.01	76.140		
11,400.00	11,390.23	11,438.00	11,428.03	39.96	40.10	-90.53	-288.42	-4,122.78	4,264.36	4,207.85	56.50	75.472		
11,504.77	11,495.00	11,542.76	11,532.80	40.32	40.47	-90.53	-288.42	-4,122.78	4,264.36	4,207.33	57.02	74.783		
11,550.00	11,540.19	11,587.95	11,577.99	40.48	40.63	90.05	-288.42	-4,122.78	4,264.36	4,207.11	57.25	74.490		
11,600.00	11,589.80	11,637.56	11,627.60	40.66	40.80	90.13	-288.42	-4,122.78	4,264.37	4,206.87	57.50	74.168		
11,650.00	11,638.68	11,686.45	11,676.48	40.84	40.98	90.26	-288.42	-4,122.78	4,264.40	4,206.66	57.75	73.847		
11,700.00	11,686.48	11,736.45	11,726.45	41.03	41.15	90.43	-290.07	-4,122.77	4,264.49	4,206.49	58.00	73.524		
11,750.00	11,732.81	11,787.89	11,777.49	41.22	41.33	90.60	-296.26	-4,122.71	4,264.62	4,206.35	58.27	73.193		
11,800.00	11,777.34	11,840.64	11,829.05	41.41	41.52	90.76	-307.35	-4,122.62	4,264.79	4,206.25	58.54	72.854		
11,850.00	11,819.72	11,894.79	11,880.68	41.61	41.72	90.93	-323.60	-4,122.47	4,264.99	4,206.17	58.82	72.506		
11,900.00	11,859.63	11,950.40	11,931.86	41.81	41.93	91.08	-345.28	-4,122.29	4,265.24	4,206.12	59.12	72.150		
11,950.00	11,896.76	12,007.52	11,981.99	42.01	42.15	91.23	-372.62	-4,122.05	4,265.51	4,206.09	59.42	71.786		
12,000.00	11,930.83	12,066.18	12,030.38	42.22	42.38	91.38	-405.73	-4,121.76	4,265.79	4,206.06	59.74	71.411		
12,050.00	11,961.59	12,126.38	12,076.25	42.44	42.63	91.51	-444.68	-4,121.42	4,266.09	4,206.03	60.06	71.027		
12,100.00	11,988.80	12,188.10	12,118.77	42.66	42.88	91.64	-489.37	-4,121.04	4,266.39	4,205.99	60.40	70.632		
12,150.00	12,012.24	12,251.25	12,157.04	42.89	43.15	91.74	-539.55	-4,120.60	4,266.68	4,205.92	60.76	70.225		
12,200.00	12,031.76	12,315.72	12,190.18	43.12	43.44	91.84	-594.81	-4,120.12	4,266.94	4,205.82	61.13	69.806		
12,250.00	12,047.18	12,381.34	12,217.32	43.36	43.74	91.91	-654.52	-4,119.60	4,267.18	4,205.67	61.51	69.376		
12,300.00	12,058.41	12,447.91	12,237.69	43.60	44.06	91.97	-717.85	-4,119.05	4,267.38	4,205.48	61.90	68.937		
12,350.00	12,065.34	12,515.16	12,250.68	43.85	44.38	92.00	-783.79	-4,118.48	4,267.53	4,205.22	62.31	68.491		
12,393.56	12,067.85	12,574.09	12,255.65	44.07	44.67	92.02	-842.49	-4,117.97	4,267.62	4,204.95	62.66	68.102		
12,400.00	12,067.97	12,582.81	12,255.87	44.10	44.71	92.02	-851.21	-4,117.89	4,267.63	4,204.91	62.72	68.045		
12,500.00	12,069.93	12,683.85	12,256.97	44.63	45.23	92.01	-952.24	-4,117.02	4,267.71	4,204.25	63.46	67.249		
12,600.00	12,071.88	12,783.85	12,258.05	45.21	45.80	91.99	-1,052.22	-4,116.15	4,267.79	4,203.51	64.27	66.399		
12,700.00	12,073.84	12,883.84	12,259.13	45.84	46.42	91.98	-1,152.21	-4,115.28	4,267.87	4,202.71	65.16	65.497		
12,800.00	12,075.79	12,983.84	12,260.20	46.53	47.09	91.97	-1,252.20	-4,114.41	4,267.95	4,201.83	66.12	64.549		
12,900.00	12,077.75	13,083.84	12,261.28	47.26	47.81	91.96	-1,352.18	-4,113.54	4,268.03	4,200.88	67.14	63.564		
13,000.00	12,079.70	13,183.83	12,262.36	48.04	48.57	91.95	-1,452.17	-4,112.67	4,268.11	4,199.88	68.23	62.550		
13,100.00	12,081.66	13,283.83	12,263.43	48.86	49.38	91.93	-1,552.16	-4,111.81	4,268.19	4,198.80	69.39	61.513		
13,200.00	12,083.61	13,383.82	12,264.51	49.72	50.23	91.92	-1,652.14	-4,110.94	4,268.27	4,197.68	70.60	60.460		
13,300.00	12,085.57	13,483.82	12,265.59	50.62	51.11	91.91	-1,752.13	-4,110.07	4,268.35	4,196.49	71.86	59.396		
13,400.00	12,087.53	13,583.82	12,266.67	51.56	52.04	91.90	-1,852.11	-4,109.20	4,268.44	4,195.26	73.18	58.327		
13,500.00	12,089.48	13,683.81	12,267.74	52.54	53.00	91.89	-1,952.10	-4,108.33	4,268.52	4,193.97	74.55	57.258		
13,600.00	12,091.44	13,783.81	12,268.82	53.54	53.99	91.88	-2,052.09	-4,107.47	4,268.60	4,192.64	75.96	56.192		
13,700.00	12,093.39	13,883.80	12,269.90	54.58	55.02	91.86	-2,152.07	-4,106.60	4,268.68	4,191.26	77.43	55.133		
13,800.00	12,095.35	13,983.80	12,270.98	55.65	56.07	91.85	-2,252.06	-4,105.73	4,268.77	4,189.84	78.93	54.085		
13,900.00	12,097.30	14,083.80	12,272.05	56.75	57.15	91.84	-2,352.05	-4,104.86	4,268.85	4,188.38	80.47	53.049		
14,000.00	12,099.26	14,183.79	12,273.13	57.87	58.26	91.83	-2,452.03	-4,103.99	4,268.93	4,186.88	82.05	52.029		
14,100.00	12,101.21	14,283.79	12,274.21	59.02	59.40	91.82	-2,552.02	-4,103.12	4,269.01	4,185.35	83.66	51.025		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	12,103.17	14,383.78	12,275.29	60.19	60.56	91.80	-2,652.01	-4,102.26	4,269.10	4,183.78	85.31	50.040		
14,300.00	12,105.12	14,483.78	12,276.36	61.38	61.74	91.79	-2,751.99	-4,101.39	4,269.18	4,182.19	86.99	49.075		
14,400.00	12,107.08	14,583.78	12,277.44	62.60	62.94	91.78	-2,851.98	-4,100.52	4,269.26	4,180.56	88.70	48.130		
14,500.00	12,109.03	14,683.77	12,278.52	63.83	64.16	91.77	-2,951.97	-4,099.65	4,269.35	4,178.91	90.44	47.206		
14,600.00	12,110.99	14,783.77	12,279.60	65.09	65.41	91.76	-3,051.95	-4,098.78	4,269.43	4,177.23	92.21	46.303		
14,700.00	12,112.94	14,883.76	12,280.67	66.36	66.67	91.75	-3,151.94	-4,097.91	4,269.52	4,175.52	93.99	45.423		
14,800.00	12,114.90	14,983.76	12,281.75	67.64	67.94	91.73	-3,251.93	-4,097.05	4,269.60	4,173.79	95.81	44.564		
14,900.00	12,116.85	15,083.76	12,282.83	68.94	69.23	91.72	-3,351.91	-4,096.18	4,269.68	4,172.04	97.64	43.728		
15,000.00	12,118.81	15,183.75	12,283.91	70.26	70.54	91.71	-3,451.90	-4,095.31	4,269.77	4,170.27	99.50	42.913		
15,100.00	12,120.76	15,283.75	12,284.98	71.59	71.86	91.70	-3,551.89	-4,094.44	4,269.85	4,168.48	101.38	42.119		
15,200.00	12,122.72	15,383.75	12,286.06	72.94	73.20	91.69	-3,651.87	-4,093.57	4,269.94	4,166.67	103.27	41.347		
15,300.00	12,124.67	15,483.74	12,287.14	74.29	74.55	91.67	-3,751.86	-4,092.71	4,270.02	4,164.84	105.18	40.596		
15,400.00	12,126.63	15,583.74	12,288.22	75.66	75.90	91.66	-3,851.84	-4,091.84	4,270.11	4,163.00	107.11	39.866		
15,500.00	12,128.58	15,683.73	12,289.29	77.04	77.28	91.65	-3,951.83	-4,090.97	4,270.20	4,161.14	109.06	39.155		
15,600.00	12,130.54	15,783.73	12,290.37	78.43	78.66	91.64	-4,051.82	-4,090.10	4,270.28	4,159.26	111.02	38.465		
15,700.00	12,132.49	15,883.73	12,291.45	79.83	80.05	91.63	-4,151.80	-4,089.23	4,270.37	4,157.37	112.99	37.793		
15,800.00	12,134.45	15,983.72	12,292.52	81.24	81.45	91.62	-4,251.79	-4,088.36	4,270.45	4,155.47	114.98	37.140		
15,900.00	12,136.40	16,083.72	12,293.60	82.66	82.86	91.60	-4,351.78	-4,087.50	4,270.54	4,153.56	116.98	36.506		
16,000.00	12,138.36	16,183.71	12,294.68	84.09	84.28	91.59	-4,451.76	-4,086.63	4,270.63	4,151.63	119.00	35.889		
16,100.00	12,140.31	16,283.71	12,295.76	85.52	85.71	91.58	-4,551.75	-4,085.76	4,270.71	4,149.69	121.02	35.289		
16,200.00	12,142.27	16,383.71	12,296.83	86.96	87.15	91.57	-4,651.74	-4,084.89	4,270.80	4,147.74	123.06	34.706		
16,300.00	12,144.22	16,483.70	12,297.91	88.42	88.59	91.56	-4,751.72	-4,084.02	4,270.89	4,145.78	125.10	34.138		
16,400.00	12,146.18	16,583.70	12,298.99	89.87	90.04	91.54	-4,851.71	-4,083.15	4,270.97	4,143.81	127.16	33.587		
16,500.00	12,148.13	16,683.69	12,300.07	91.34	91.50	91.53	-4,951.70	-4,082.29	4,271.06	4,141.83	129.23	33.051		
16,600.00	12,150.09	16,783.69	12,301.14	92.81	92.96	91.52	-5,051.68	-4,081.42	4,271.15	4,139.85	131.30	32.529		
16,700.00	12,152.04	16,883.69	12,302.22	94.28	94.43	91.51	-5,151.67	-4,080.55	4,271.24	4,137.85	133.39	32.021		
16,800.00	12,154.00	16,983.68	12,303.30	95.77	95.91	91.50	-5,251.66	-4,079.68	4,271.32	4,135.84	135.48	31.527		
16,900.00	12,155.95	17,083.68	12,304.38	97.25	97.39	91.49	-5,351.64	-4,078.81	4,271.41	4,133.83	137.58	31.047		
17,000.00	12,157.91	17,183.68	12,305.45	98.75	98.88	91.47	-5,451.63	-4,077.95	4,271.50	4,131.81	139.69	30.579		
17,100.00	12,159.86	17,283.67	12,306.53	100.24	100.37	91.46	-5,551.62	-4,077.08	4,271.59	4,129.79	141.80	30.123		
17,200.00	12,161.82	17,383.67	12,307.61	101.75	101.87	91.45	-5,651.60	-4,076.21	4,271.68	4,127.75	143.92	29.680		
17,300.00	12,163.77	17,483.66	12,308.69	103.25	103.37	91.44	-5,751.59	-4,075.34	4,271.77	4,125.71	146.05	29.248		
17,400.00	12,165.73	17,583.66	12,309.76	104.77	104.88	91.43	-5,851.58	-4,074.47	4,271.86	4,123.67	148.19	28.827		
17,500.00	12,167.68	17,683.66	12,310.84	106.28	106.39	91.41	-5,951.56	-4,073.60	4,271.95	4,121.62	150.33	28.417		
17,600.00	12,169.64	17,783.65	12,311.92	107.80	107.90	91.40	-6,051.55	-4,072.74	4,272.03	4,119.56	152.47	28.018		
17,700.00	12,171.59	17,883.65	12,313.00	109.32	109.42	91.39	-6,151.53	-4,071.87	4,272.12	4,117.50	154.63	27.629		
17,800.00	12,173.55	17,983.64	12,314.07	110.85	110.95	91.38	-6,251.52	-4,071.00	4,272.21	4,115.43	156.78	27.249		
17,900.00	12,175.50	18,083.64	12,315.15	112.38	112.47	91.37	-6,351.51	-4,070.13	4,272.30	4,113.36	158.95	26.879		
18,000.00	12,177.46	18,183.64	12,316.23	113.92	114.00	91.36	-6,451.49	-4,069.26	4,272.39	4,111.28	161.11	26.518		
18,100.00	12,179.41	18,283.63	12,317.30	115.45	115.54	91.34	-6,551.48	-4,068.39	4,272.48	4,109.20	163.29	26.166		
18,200.00	12,181.37	18,383.63	12,318.38	117.00	117.07	91.33	-6,651.47	-4,067.53	4,272.57	4,107.11	165.46	25.822		
18,300.00	12,183.32	18,483.62	12,319.46	118.54	118.61	91.32	-6,751.45	-4,066.66	4,272.67	4,105.02	167.64	25.487		
18,400.00	12,185.28	18,583.62	12,320.54	120.09	120.16	91.31	-6,851.44	-4,065.79	4,272.76	4,102.93	169.83	25.159		
18,500.00	12,187.23	18,683.62	12,321.61	121.64	121.70	91.30	-6,951.43	-4,064.92	4,272.85	4,100.83	172.02	24.840		
18,600.00	12,189.19	18,783.61	12,322.69	123.19	123.25	91.28	-7,051.41	-4,064.05	4,272.94	4,098.73	174.21	24.528		
18,700.00	12,191.14	18,883.61	12,323.77	124.74	124.80	91.27	-7,151.40	-4,063.19	4,273.03	4,096.62	176.41	24.223		
18,800.00	12,193.10	18,983.60	12,324.85	126.30	126.35	91.26	-7,251.39	-4,062.32	4,273.12	4,094.52	178.61	23.925		
18,900.00	12,195.05	19,083.60	12,325.92	127.86	127.91	91.25	-7,351.37	-4,061.45	4,273.21	4,092.40	180.81	23.634		
19,000.00	12,197.01	19,183.60	12,327.00	129.42	129.47	91.24	-7,451.36	-4,060.58	4,273.31	4,090.29	183.02	23.349		
19,100.00	12,198.96	19,283.59	12,328.08	130.99	131.03	91.23	-7,551.35	-4,059.71	4,273.40	4,088.17	185.23	23.071		
19,200.00	12,200.92	19,383.59	12,329.16	132.55	132.59	91.21	-7,651.33	-4,058.84	4,273.49	4,086.05	187.44	22.799		
19,300.00	12,202.87	19,483.59	12,330.23	134.12	134.16	91.20	-7,751.32	-4,057.98	4,273.58	4,083.93	189.66	22.533		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 #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			
19,400.00	12,204.83	19,583.58	12,331.31	135.69	135.72	91.19	-7,851.31	-4,057.11	4,273.67	4,081.80	191.88	22.273			
19,500.00	12,206.78	19,683.58	12,332.39	137.26	137.29	91.18	-7,951.29	-4,056.24	4,273.77	4,079.67	194.10	22.019			
19,600.00	12,208.74	19,783.57	12,333.47	138.84	138.87	91.17	-8,051.28	-4,055.37	4,273.86	4,077.54	196.32	21.770			
19,700.00	12,210.69	19,883.57	12,334.54	140.41	140.44	91.15	-8,151.27	-4,054.50	4,273.95	4,075.41	198.55	21.526			
19,800.00	12,212.65	19,983.57	12,335.62	141.99	142.01	91.14	-8,251.25	-4,053.63	4,274.05	4,073.27	200.78	21.287			
19,900.00	12,214.60	20,083.56	12,336.70	143.57	143.59	91.13	-8,351.24	-4,052.77	4,274.14	4,071.13	203.01	21.054			
20,000.00	12,216.56	20,183.56	12,337.78	145.15	145.17	91.12	-8,451.22	-4,051.90	4,274.23	4,068.99	205.24	20.825			
20,100.00	12,218.51	20,283.55	12,338.85	146.73	146.75	91.11	-8,551.21	-4,051.03	4,274.33	4,066.85	207.48	20.601			
20,200.00	12,220.47	20,383.55	12,339.93	148.32	148.33	91.10	-8,651.20	-4,050.16	4,274.42	4,064.70	209.72	20.382			
20,300.00	12,222.43	20,483.55	12,341.01	149.90	149.91	91.08	-8,751.18	-4,049.29	4,274.52	4,062.56	211.96	20.167			
20,400.00	12,224.38	20,583.54	12,342.09	151.49	151.50	91.07	-8,851.17	-4,048.43	4,274.61	4,060.41	214.20	19.956			
20,500.00	12,226.34	20,683.54	12,343.16	153.08	153.08	91.06	-8,951.16	-4,047.56	4,274.71	4,058.26	216.45	19.749			
20,600.00	12,228.29	20,783.53	12,344.24	154.67	154.67	91.05	-9,051.14	-4,046.69	4,274.80	4,056.10	218.70	19.547			
20,700.00	12,230.25	20,883.53	12,345.32	156.26	156.26	91.04	-9,151.13	-4,045.82	4,274.90	4,053.95	220.95	19.348			
20,800.00	12,232.20	20,983.53	12,346.39	157.85	157.85	91.03	-9,251.12	-4,044.95	4,274.99	4,051.80	223.20	19.154			
20,900.00	12,234.16	21,083.52	12,347.47	159.45	159.44	91.01	-9,351.10	-4,044.08	4,275.09	4,049.64	225.45	18.963			
21,000.00	12,236.11	21,183.52	12,348.55	161.04	161.03	91.00	-9,451.09	-4,043.22	4,275.18	4,047.48	227.70	18.775			
21,100.00	12,238.07	21,283.51	12,349.63	162.64	162.63	90.99	-9,551.08	-4,042.35	4,275.28	4,045.32	229.96	18.592			
21,200.00	12,240.02	21,383.51	12,350.70	164.23	164.22	90.98	-9,651.06	-4,041.48	4,275.37	4,043.16	232.22	18.411			
21,300.00	12,241.98	21,483.51	12,351.78	165.83	165.82	90.97	-9,751.05	-4,040.61	4,275.47	4,041.00	234.47	18.234			
21,400.00	12,243.93	21,583.50	12,352.86	167.43	167.41	90.95	-9,851.04	-4,039.74	4,275.57	4,038.83	236.74	18.061			
21,500.00	12,245.89	21,683.50	12,353.94	169.03	169.01	90.94	-9,951.02	-4,038.87	4,275.66	4,036.67	239.00	17.890			
21,600.00	12,247.84	21,783.50	12,355.01	170.63	170.61	90.93	-10,051.01	-4,038.01	4,275.76	4,034.50	241.26	17.723			
21,700.00	12,249.80	21,883.49	12,356.09	172.23	172.21	90.92	-10,151.00	-4,037.14	4,275.86	4,032.33	243.53	17.558			
21,800.00	12,251.75	21,983.49	12,357.17	173.84	173.81	90.91	-10,250.98	-4,036.27	4,275.95	4,030.16	245.79	17.397			
21,900.00	12,253.71	22,083.48	12,358.25	175.44	175.41	90.90	-10,350.97	-4,035.40	4,276.05	4,027.99	248.06	17.238			
22,000.00	12,255.66	22,183.48	12,359.32	177.05	177.02	90.88	-10,450.95	-4,034.53	4,276.15	4,025.82	250.33	17.082			
22,100.00	12,257.62	22,283.48	12,360.40	178.65	178.62	90.87	-10,550.94	-4,033.67	4,276.25	4,023.65	252.60	16.929			
22,200.00	12,259.57	22,383.47	12,361.48	180.26	180.23	90.86	-10,650.93	-4,032.80	4,276.34	4,021.47	254.87	16.779			
22,253.13	12,260.61	22,436.60	12,362.05	181.02	181.08	90.85	-10,704.05	-4,032.34	4,276.39	4,020.39	256.01	16.704 ES, 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 #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	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-90.51	-0.31	-35.00	35.00					
100.00	100.00	99.60	99.60	0.14	0.14	-90.51	-0.31	-35.00	35.00	34.80	0.20	175.140		
200.00	200.00	199.60	199.60	0.50	0.50	-90.51	-0.31	-35.00	35.00	34.30	0.71	49.564		
300.00	300.00	299.60	299.60	0.86	0.86	-90.51	-0.31	-35.00	35.00	33.79	1.21	28.852		
400.00	400.00	399.60	399.60	1.22	1.22	-90.51	-0.31	-35.00	35.00	33.28	1.72	20.348		
500.00	500.00	499.60	499.60	1.58	1.57	-90.51	-0.31	-35.00	35.00	32.77	2.23	15.716		
600.00	600.00	599.60	599.60	1.93	1.93	-90.51	-0.31	-35.00	35.00	32.27	2.73	12.802		
700.00	700.00	699.60	699.60	2.29	2.29	-90.51	-0.31	-35.00	35.00	31.76	3.24	10.800		
800.00	800.00	799.60	799.60	2.65	2.65	-90.51	-0.31	-35.00	35.00	31.25	3.75	9.339		
900.00	900.00	899.60	899.60	3.01	3.01	-90.51	-0.31	-35.00	35.00	30.75	4.25	8.226		
1,000.00	1,000.00	999.60	999.60	3.37	3.37	-90.51	-0.31	-35.00	35.00	30.24	4.76	7.350		
1,100.00	1,100.00	1,099.60	1,099.60	3.73	3.72	-90.51	-0.31	-35.00	35.00	29.73	5.27	6.643		
1,200.00	1,200.00	1,199.60	1,199.60	4.08	4.08	-90.51	-0.31	-35.00	35.00	29.23	5.78	6.060		
1,300.00	1,300.00	1,299.60	1,299.60	4.44	4.44	-90.51	-0.31	-35.00	35.00	28.72	6.28	5.571		
1,400.00	1,400.00	1,399.60	1,399.60	4.80	4.80	-90.51	-0.31	-35.00	35.00	28.21	6.79	5.155		
1,500.00	1,500.00	1,499.60	1,499.60	5.16	5.16	-90.51	-0.31	-35.00	35.00	27.70	7.30	4.797		
1,600.00	1,600.00	1,599.60	1,599.60	5.52	5.52	-90.51	-0.31	-35.00	35.00	27.20	7.80	4.485		
1,700.00	1,700.00	1,699.60	1,699.60	5.88	5.88	-90.51	-0.31	-35.00	35.00	26.69	8.31	4.212		
1,800.00	1,800.00	1,799.60	1,799.60	6.24	6.23	-90.51	-0.31	-35.00	35.00	26.18	8.82	3.970		
1,900.00	1,900.00	1,899.60	1,899.60	6.59	6.59	-90.51	-0.31	-35.00	35.00	25.68	9.32	3.754		
2,000.00	2,000.00	1,999.60	1,999.60	6.95	6.95	-90.51	-0.31	-35.00	35.00	25.17	9.83	3.560		
2,100.00	2,100.00	2,099.60	2,099.60	7.31	7.31	-90.51	-0.31	-35.00	35.00	24.66	10.34	3.386		
2,200.00	2,200.00	2,199.60	2,199.60	7.67	7.67	-90.51	-0.31	-35.00	35.00	24.16	10.85	3.227		
2,300.00	2,300.00	2,299.60	2,299.60	8.03	8.03	-90.51	-0.31	-35.00	35.00	23.65	11.35	3.083		
2,400.00	2,400.00	2,399.60	2,399.60	8.39	8.39	-90.51	-0.31	-35.00	35.00	23.14	11.86	2.951		
2,500.00	2,500.00	2,499.60	2,499.60	8.74	8.74	-90.51	-0.31	-35.00	35.00	22.64	12.37	2.830		
2,600.00	2,600.00	2,599.60	2,599.60	9.10	9.10	-90.51	-0.31	-35.00	35.00	22.13	12.87	2.719		
2,700.00	2,700.00	2,699.60	2,699.60	9.46	9.46	-90.51	-0.31	-35.00	35.00	21.62	13.38	2.616 CC, ES		
2,800.00	2,799.99	2,799.10	2,799.09	9.80	9.80	119.17	-1.41	-35.67	36.32	22.46	13.86	2.621		
2,900.00	2,899.91	2,898.50	2,898.41	10.13	10.13	119.29	-4.71	-37.69	40.29	25.98	14.31	2.815		
2,966.50	2,966.28	2,964.49	2,964.27	10.35	10.34	119.38	-8.12	-39.77	44.39	29.78	14.62	3.037		
3,000.00	2,999.70	2,997.89	2,997.60	10.46	10.45	119.43	-10.11	-40.99	46.76	31.99	14.77	3.166		
3,100.00	3,099.46	3,097.64	3,097.11	10.79	10.78	119.56	-16.05	-44.61	53.84	38.60	15.24	3.533		
3,200.00	3,199.22	3,197.39	3,196.61	11.12	11.12	119.66	-21.99	-48.24	60.92	45.21	15.71	3.878		
3,300.00	3,298.97	3,297.14	3,296.12	11.46	11.45	119.74	-27.92	-51.87	68.00	51.82	16.18	4.202		
3,400.00	3,398.73	3,396.89	3,395.62	11.80	11.79	119.81	-33.86	-55.49	75.08	58.42	16.66	4.507		
3,500.00	3,498.49	3,496.64	3,495.13	12.14	12.13	119.86	-39.80	-59.12	82.15	65.01	17.14	4.793		
3,600.00	3,598.24	3,596.39	3,594.64	12.49	12.47	119.91	-45.74	-62.75	89.23	71.61	17.62	5.064		
3,700.00	3,698.00	3,696.14	3,694.14	12.83	12.82	119.94	-51.68	-66.38	96.31	78.20	18.11	5.319		
3,800.00	3,797.76	3,795.88	3,793.65	13.18	13.16	119.98	-57.61	-70.00	103.39	84.79	18.59	5.560		
3,900.00	3,897.51	3,895.63	3,893.15	13.53	13.51	120.01	-63.55	-73.63	110.47	91.38	19.08	5.789		
4,000.00	3,997.27	3,995.38	3,992.66	13.88	13.86	120.03	-69.49	-77.26	117.54	97.97	19.57	6.005		
4,100.00	4,097.03	4,095.13	4,092.17	14.23	14.21	120.05	-75.43	-80.88	124.62	104.55	20.07	6.210		
4,200.00	4,196.78	4,194.88	4,191.67	14.58	14.56	120.07	-81.37	-84.51	131.70	111.14	20.56	6.405		
4,300.00	4,296.54	4,294.63	4,291.18	14.94	14.92	120.09	-87.31	-88.14	138.78	117.72	21.06	6.590		
4,400.00	4,396.30	4,394.38	4,390.69	15.29	15.27	120.11	-93.24	-91.77	145.86	124.30	21.56	6.766		
4,500.00	4,496.05	4,494.13	4,490.19	15.65	15.63	120.12	-99.18	-95.39	152.94	130.88	22.06	6.934		
4,600.00	4,595.81	4,593.88	4,589.70	16.00	15.98	120.14	-105.12	-99.02	160.01	137.46	22.56	7.094		
4,700.00	4,695.57	4,693.63	4,689.20	16.36	16.34	120.15	-111.06	-102.65	167.09	144.03	23.06	7.247		
4,800.00	4,795.32	4,793.38	4,788.71	16.72	16.70	120.16	-117.00	-106.28	174.17	150.61	23.56	7.392		
4,900.00	4,895.08	4,893.13	4,888.22	17.08	17.06	120.17	-122.93	-109.90	181.25	157.18	24.06	7.532		
5,000.00	4,994.84	4,992.87	4,987.72	17.44	17.42	120.18	-128.87	-113.53	188.33	163.76	24.57	7.665		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 #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				
5,100.00	5,094.59	5,092.62	5,087.23	17.80	17.78	120.19	-134.81	-117.16	195.40	170.33	25.07	7.793				
5,200.00	5,194.35	5,192.37	5,186.73	18.16	18.14	120.20	-140.75	-120.78	202.48	176.90	25.58	7.915				
5,300.00	5,294.11	5,292.12	5,286.24	18.52	18.50	120.21	-146.69	-124.41	209.56	183.47	26.09	8.033				
5,400.00	5,393.86	5,391.87	5,385.75	18.89	18.86	120.21	-152.63	-128.04	216.64	190.04	26.60	8.145				
5,500.00	5,493.62	5,491.62	5,485.25	19.25	19.22	120.22	-158.56	-131.67	223.72	196.61	27.11	8.253				
5,600.00	5,593.38	5,591.37	5,584.76	19.61	19.59	120.23	-164.50	-135.29	230.80	203.18	27.62	8.357				
5,700.00	5,693.13	5,691.12	5,684.27	19.98	19.95	120.23	-170.44	-138.92	237.87	209.75	28.13	8.457				
5,800.00	5,792.89	5,790.87	5,783.77	20.34	20.31	120.24	-176.38	-142.55	244.95	216.32	28.64	8.554				
5,900.00	5,892.65	5,890.62	5,883.28	20.71	20.68	120.24	-182.32	-146.17	252.03	222.88	29.15	8.647				
6,000.00	5,992.40	5,990.37	5,982.78	21.07	21.04	120.25	-188.25	-149.80	259.11	229.45	29.66	8.736				
6,100.00	6,092.16	6,090.12	6,082.29	21.44	21.41	120.25	-194.19	-153.43	266.19	236.02	30.17	8.822				
6,200.00	6,191.92	6,189.86	6,181.80	21.81	21.77	120.26	-200.13	-157.06	273.27	242.58	30.69	8.905				
6,300.00	6,291.67	6,289.61	6,281.30	22.17	22.14	120.26	-206.07	-160.68	280.35	249.15	31.20	8.986				
6,400.00	6,391.43	6,389.36	6,380.81	22.54	22.51	120.27	-212.01	-164.31	287.42	255.71	31.71	9.063				
6,500.00	6,491.19	6,489.11	6,480.31	22.91	22.87	120.27	-217.95	-167.94	294.50	262.27	32.23	9.138				
6,600.00	6,590.94	6,588.86	6,579.82	23.28	23.24	120.27	-223.88	-171.56	301.58	268.84	32.74	9.211				
6,700.00	6,690.70	6,688.61	6,679.33	23.64	23.61	120.28	-229.82	-175.19	308.66	275.40	33.26	9.281				
6,803.27	6,793.72	6,791.62	6,782.09	24.02	23.99	120.28	-235.95	-178.94	315.97	282.18	33.79	9.351				
6,900.00	6,890.29	6,888.14	6,878.37	24.38	24.34	120.18	-241.70	-182.45	322.20	287.91	34.29	9.397				
7,000.00	6,990.24	6,990.96	6,980.98	24.73	24.72	119.73	-247.31	-185.88	327.07	292.26	34.81	9.395				
7,069.77	7,060.00	7,063.95	7,053.90	24.98	24.98	-90.23	-249.96	-187.49	328.94	293.76	35.18	9.351				
7,100.00	7,090.23	7,095.61	7,085.54	25.08	25.10	-90.36	-250.74	-187.97	329.40	294.07	35.33	9.324				
7,200.00	7,190.23	7,199.91	7,189.83	25.42	25.46	-90.53	-251.74	-188.58	329.98	294.16	35.83	9.210				
7,300.00	7,290.23	7,299.91	7,289.83	25.76	25.80	-90.53	-251.74	-188.58	329.98	293.68	36.31	9.089				
7,400.00	7,390.23	7,399.91	7,389.83	26.10	26.13	-90.53	-251.74	-188.58	329.98	293.20	36.79	8.970				
7,500.00	7,490.23	7,499.91	7,489.83	26.44	26.47	-90.53	-251.74	-188.58	329.98	292.71	37.27	8.854				
7,600.00	7,590.23	7,599.91	7,589.83	26.78	26.81	-90.53	-251.74	-188.58	329.98	292.23	37.75	8.741				
7,700.00	7,690.23	7,699.91	7,689.83	27.12	27.15	-90.53	-251.74	-188.58	329.98	291.75	38.24	8.630				
7,800.00	7,790.23	7,799.91	7,789.83	27.46	27.49	-90.53	-251.74	-188.58	329.98	291.27	38.72	8.523				
7,900.00	7,890.23	7,899.91	7,889.83	27.80	27.84	-90.53	-251.74	-188.58	329.98	290.78	39.20	8.417				
8,000.00	7,990.23	7,999.91	7,989.83	28.14	28.18	-90.53	-251.74	-188.58	329.98	290.30	39.69	8.314				
8,100.00	8,090.23	8,099.91	8,089.83	28.49	28.52	-90.53	-251.74	-188.58	329.98	289.81	40.17	8.214				
8,200.00	8,190.23	8,199.91	8,189.83	28.83	28.86	-90.53	-251.74	-188.58	329.98	289.33	40.66	8.116				
8,300.00	8,290.23	8,299.91	8,289.83	29.17	29.20	-90.53	-251.74	-188.58	329.98	288.84	41.15	8.020				
8,400.00	8,390.23	8,399.91	8,389.83	29.52	29.55	-90.53	-251.74	-188.58	329.98	288.35	41.63	7.926				
8,500.00	8,490.23	8,499.91	8,489.83	29.86	29.89	-90.53	-251.74	-188.58	329.98	287.86	42.12	7.834				
8,600.00	8,590.23	8,599.91	8,589.83	30.21	30.23	-90.53	-251.74	-188.58	329.98	287.38	42.61	7.745				
8,700.00	8,690.23	8,699.91	8,689.83	30.55	30.58	-90.53	-251.74	-188.58	329.98	286.89	43.10	7.657				
8,800.00	8,790.23	8,799.91	8,789.83	30.90	30.92	-90.53	-251.74	-188.58	329.98	286.40	43.58	7.571				
8,900.00	8,890.23	8,899.91	8,889.83	31.24	31.27	-90.53	-251.74	-188.58	329.98	285.91	44.07	7.487				
9,000.00	8,990.23	8,999.91	8,989.83	31.59	31.61	-90.53	-251.74	-188.58	329.98	285.42	44.56	7.405				
9,100.00	9,090.23	9,099.91	9,089.83	31.93	31.96	-90.53	-251.74	-188.58	329.98	284.93	45.05	7.324				
9,200.00	9,190.23	9,199.91	9,189.83	32.28	32.30	-90.53	-251.74	-188.58	329.98	284.44	45.54	7.246				
9,300.00	9,290.23	9,299.91	9,289.83	32.63	32.65	-90.53	-251.74	-188.58	329.98	283.95	46.03	7.168				
9,400.00	9,390.23	9,399.91	9,389.83	32.97	33.00	-90.53	-251.74	-188.58	329.98	283.46	46.52	7.093				
9,500.00	9,490.23	9,499.91	9,489.83	33.32	33.34	-90.53	-251.74	-188.58	329.98	282.97	47.02	7.019				
9,600.00	9,590.23	9,599.91	9,589.83	33.67	33.69	-90.53	-251.74	-188.58	329.98	282.48	47.51	6.946				
9,700.00	9,690.23	9,699.91	9,689.83	34.02	34.04	-90.53	-251.74	-188.58	329.98	281.98	48.00	6.875				
9,800.00	9,790.23	9,799.91	9,789.83	34.37	34.38	-90.53	-251.74	-188.58	329.98	281.49	48.49	6.805				
9,900.00	9,890.23	9,899.91	9,889.83	34.71	34.73	-90.53	-251.74	-188.58	329.98	281.00	48.98	6.737				
10,000.00	9,990.23	9,999.91	9,989.83	35.06	35.08	-90.53	-251.74	-188.58	329.98	280.51	49.48	6.669				
10,100.00	10,090.23	10,099.91	10,089.83	35.41	35.43	-90.53	-251.74	-188.58	329.98	280.01	49.97	6.604				

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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	10,190.23	10,199.91	10,189.83	35.76	35.78	-90.53	-251.74	-188.58	329.98	279.52	50.46	6.539		
10,300.00	10,290.23	10,299.91	10,289.83	36.11	36.12	-90.53	-251.74	-188.58	329.98	279.03	50.96	6.476		
10,400.00	10,390.23	10,399.91	10,389.83	36.46	36.47	-90.53	-251.74	-188.58	329.98	278.53	51.45	6.414		
10,500.00	10,490.23	10,499.91	10,489.83	36.81	36.82	-90.53	-251.74	-188.58	329.98	278.04	51.95	6.353		
10,600.00	10,590.23	10,599.91	10,589.83	37.16	37.17	-90.53	-251.74	-188.58	329.98	277.54	52.44	6.293		
10,700.00	10,690.23	10,699.91	10,689.83	37.50	37.52	-90.53	-251.74	-188.58	329.98	277.05	52.93	6.234		
10,800.00	10,790.23	10,799.91	10,789.83	37.85	37.87	-90.53	-251.74	-188.58	329.98	276.56	53.43	6.176		
10,900.00	10,890.23	10,899.91	10,889.83	38.20	38.22	-90.53	-251.74	-188.58	329.98	276.06	53.92	6.119		
11,000.00	10,990.23	10,999.91	10,989.83	38.55	38.57	-90.53	-251.74	-188.58	329.98	275.56	54.42	6.064		
11,100.00	11,090.23	11,099.91	11,089.83	38.91	38.92	-90.53	-251.74	-188.58	329.98	275.07	54.92	6.009		
11,200.00	11,190.23	11,199.91	11,189.83	39.26	39.27	-90.53	-251.74	-188.58	329.98	274.57	55.41	5.955		
11,300.00	11,290.23	11,299.91	11,289.83	39.61	39.62	-90.53	-251.75	-188.58	329.98	274.08	55.91	5.902		
11,310.82	11,301.05	11,310.72	11,300.65	39.64	39.65	-90.56	-251.90	-188.58	329.98	274.02	55.96	5.897		
11,400.00	11,390.23	11,398.85	11,388.24	39.96	39.97	-92.10	-260.76	-188.49	330.11	273.71	56.40	5.853		
11,504.77	11,495.00	11,496.29	11,482.23	40.32	40.33	-96.47	-286.03	-188.24	331.97	275.08	56.89	5.835		
11,550.00	11,540.19	11,535.86	11,518.94	40.48	40.48	81.62	-300.78	-188.10	333.98	276.92	57.06	5.853		
11,600.00	11,589.80	11,578.68	11,557.40	40.66	40.64	78.98	-319.56	-187.92	336.87	279.67	57.20	5.889		
11,650.00	11,638.68	11,620.63	11,593.63	40.84	40.80	76.47	-340.69	-187.71	340.37	283.09	57.28	5.942		
11,700.00	11,686.48	11,661.80	11,627.59	41.03	40.97	74.08	-363.96	-187.48	344.34	287.04	57.30	6.010		
11,750.00	11,732.81	11,700.00	11,657.53	41.22	41.12	71.94	-387.67	-187.25	348.67	291.48	57.19	6.097		
11,800.00	11,777.34	11,742.17	11,688.66	41.41	41.30	69.76	-416.10	-186.97	353.20	296.08	57.11	6.184		
11,850.00	11,819.72	11,781.51	11,715.74	41.61	41.46	67.85	-444.61	-186.69	357.84	300.91	56.92	6.286		
11,900.00	11,859.63	11,820.37	11,740.52	41.81	41.63	66.10	-474.54	-186.40	362.47	305.78	56.69	6.394		
11,950.00	11,896.76	11,858.81	11,762.97	42.01	41.80	64.52	-505.73	-186.09	366.97	310.56	56.42	6.505		
12,000.00	11,930.83	11,900.00	11,784.65	42.22	41.98	63.03	-540.74	-185.75	371.29	315.08	56.21	6.606		
12,050.00	11,961.59	11,934.65	11,800.90	42.44	42.14	61.87	-571.34	-185.45	375.27	319.42	55.84	6.720		
12,100.00	11,988.80	11,972.14	11,816.37	42.66	42.32	60.80	-605.48	-185.11	378.89	323.31	55.58	6.818		
12,150.00	12,012.24	12,009.40	11,829.50	42.89	42.50	59.90	-640.35	-184.77	382.07	326.73	55.35	6.903		
12,200.00	12,031.76	12,050.00	11,841.19	43.12	42.69	59.12	-679.21	-184.39	384.78	329.55	55.23	6.966		
12,250.00	12,047.18	12,083.41	11,848.72	43.36	42.86	58.59	-711.76	-184.07	386.91	331.85	55.06	7.027		
12,300.00	12,058.41	12,120.24	11,854.81	43.60	43.04	58.18	-748.07	-183.72	388.49	333.46	55.03	7.059		
12,350.00	12,065.34	12,156.98	11,858.56	43.85	43.23	57.92	-784.62	-183.36	389.48	334.38	55.10	7.069		
12,393.56	12,067.85	12,189.84	11,859.92	44.07	43.39	57.83	-817.44	-183.04	389.83	334.60	55.24	7.058		
12,400.00	12,067.97	12,196.27	11,860.04	44.10	43.43	57.83	-823.87	-182.97	389.84	334.57	55.27	7.053		
12,500.00	12,069.93	12,296.27	11,861.87	44.63	43.97	57.81	-923.85	-182.00	389.90	334.03	55.88	6.978		
12,600.00	12,071.88	12,396.27	11,863.71	45.21	44.56	57.80	-1,023.83	-181.02	389.97	333.42	56.54	6.897		
12,700.00	12,073.84	12,496.27	11,865.54	45.84	45.21	57.78	-1,123.81	-180.04	390.03	332.76	57.27	6.810		
12,800.00	12,075.79	12,596.27	11,867.37	46.53	45.91	57.77	-1,223.78	-179.06	390.10	332.04	58.06	6.719		
12,900.00	12,077.75	12,696.27	11,869.20	47.26	46.65	57.75	-1,323.76	-178.08	390.16	331.26	58.91	6.623		
13,000.00	12,079.70	12,796.27	11,871.04	48.04	47.44	57.74	-1,423.74	-177.10	390.23	330.42	59.81	6.525		
13,100.00	12,081.66	12,896.27	11,872.87	48.86	48.28	57.72	-1,523.72	-176.12	390.29	329.53	60.76	6.424		
13,200.00	12,083.61	12,996.27	11,874.70	49.72	49.15	57.71	-1,623.70	-175.14	390.36	328.60	61.76	6.320		
13,300.00	12,085.57	13,096.27	11,876.54	50.62	50.07	57.69	-1,723.68	-174.16	390.42	327.61	62.81	6.216		
13,400.00	12,087.53	13,196.27	11,878.37	51.56	51.02	57.68	-1,823.65	-173.18	390.49	326.59	63.90	6.111		
13,500.00	12,089.48	13,296.27	11,880.20	52.54	52.01	57.66	-1,923.63	-172.20	390.55	325.52	65.03	6.006		
13,600.00	12,091.44	13,396.27	11,882.04	53.54	53.03	57.65	-2,023.61	-171.22	390.62	324.41	66.20	5.900		
13,700.00	12,093.39	13,496.27	11,883.87	54.58	54.08	57.63	-2,123.59	-170.24	390.68	323.27	67.41	5.795		
13,800.00	12,095.35	13,596.27	11,885.70	55.65	55.16	57.62	-2,223.57	-169.26	390.75	322.09	68.65	5.692		
13,900.00	12,097.30	13,696.27	11,887.53	56.75	56.27	57.60	-2,323.55	-168.28	390.81	320.88	69.93	5.589		
14,000.00	12,099.26	13,796.27	11,889.37	57.87	57.41	57.59	-2,423.52	-167.30	390.88	319.64	71.23	5.487		
14,100.00	12,101.21	13,896.27	11,891.20	59.02	58.57	57.57	-2,523.50	-166.32	390.94	318.38	72.57	5.387		
14,200.00	12,103.17	13,996.27	11,893.03	60.19	59.75	57.56	-2,623.48	-165.34	391.01	317.08	73.93	5.289		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 #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	
14,300.00	12,105.12	14,096.27	11,894.87	61.38	60.95	57.54	-2,723.46	-164.37	391.07	315.76	75.31	5.193		
14,400.00	12,107.08	14,196.27	11,896.70	62.60	62.18	57.53	-2,823.44	-163.39	391.14	314.42	76.72	5.098		
14,500.00	12,109.03	14,296.27	11,898.53	63.83	63.42	57.51	-2,923.42	-162.41	391.20	313.06	78.15	5.006		
14,600.00	12,110.99	14,396.27	11,900.37	65.09	64.69	57.50	-3,023.39	-161.43	391.27	311.67	79.60	4.916		
14,700.00	12,112.94	14,496.27	11,902.20	66.36	65.97	57.48	-3,123.37	-160.45	391.33	310.27	81.07	4.827		
14,800.00	12,114.90	14,596.27	11,904.03	67.64	67.26	57.47	-3,223.35	-159.47	391.40	308.85	82.55	4.741		
14,900.00	12,116.85	14,696.27	11,905.87	68.94	68.57	57.45	-3,323.33	-158.49	391.46	307.41	84.05	4.657		
15,000.00	12,118.81	14,796.27	11,907.70	70.26	69.90	57.44	-3,423.31	-157.51	391.53	305.96	85.57	4.576		
15,100.00	12,120.76	14,896.27	11,909.53	71.59	71.24	57.42	-3,523.29	-156.53	391.60	304.49	87.10	4.496		
15,200.00	12,122.72	14,996.27	11,911.36	72.94	72.59	57.40	-3,623.26	-155.55	391.66	303.01	88.65	4.418		
15,300.00	12,124.67	15,096.27	11,913.20	74.29	73.96	57.39	-3,723.24	-154.57	391.73	301.52	90.20	4.343		
15,400.00	12,126.63	15,196.27	11,915.03	75.66	75.33	57.37	-3,823.22	-153.59	391.79	300.02	91.77	4.269		
15,500.00	12,128.58	15,296.27	11,916.86	77.04	76.72	57.36	-3,923.20	-152.61	391.86	298.51	93.35	4.198		
15,600.00	12,130.54	15,396.27	11,918.70	78.43	78.12	57.34	-4,023.18	-151.63	391.92	296.98	94.94	4.128		
15,700.00	12,132.49	15,496.27	11,920.53	79.83	79.53	57.33	-4,123.16	-150.65	391.99	295.45	96.54	4.061		
15,800.00	12,134.45	15,596.27	11,922.36	81.24	80.94	57.31	-4,223.13	-149.67	392.05	293.91	98.14	3.995		
15,900.00	12,136.40	15,696.27	11,924.20	82.66	82.37	57.30	-4,323.11	-148.69	392.12	292.36	99.76	3.931		
16,000.00	12,138.36	15,796.27	11,926.03	84.09	83.80	57.28	-4,423.09	-147.71	392.19	290.81	101.38	3.869		
16,100.00	12,140.31	15,896.27	11,927.86	85.52	85.24	57.27	-4,523.07	-146.73	392.25	289.25	103.00	3.808		
16,200.00	12,142.27	15,996.27	11,929.69	86.96	86.69	57.25	-4,623.05	-145.76	392.32	287.68	104.64	3.749		
16,300.00	12,144.22	16,096.27	11,931.53	88.42	88.15	57.24	-4,723.03	-144.78	392.38	286.11	106.27	3.692		
16,400.00	12,146.18	16,196.27	11,933.36	89.87	89.61	57.22	-4,823.00	-143.80	392.45	284.53	107.92	3.637		
16,500.00	12,148.13	16,296.27	11,935.19	91.34	91.08	57.21	-4,922.98	-142.82	392.52	282.95	109.57	3.582		
16,600.00	12,150.09	16,396.27	11,937.03	92.81	92.56	57.19	-5,022.96	-141.84	392.58	281.36	111.22	3.530		
16,700.00	12,152.04	16,496.27	11,938.86	94.28	94.04	57.18	-5,122.94	-140.86	392.65	279.77	112.87	3.479		
16,800.00	12,154.00	16,596.27	11,940.69	95.77	95.53	57.16	-5,222.92	-139.88	392.71	278.18	114.53	3.429		
16,900.00	12,155.95	16,696.27	11,942.53	97.25	97.02	57.15	-5,322.90	-138.90	392.78	276.59	116.19	3.380		
17,000.00	12,157.91	16,796.27	11,944.36	98.75	98.52	57.13	-5,422.87	-137.92	392.84	274.99	117.86	3.333		
17,100.00	12,159.86	16,896.27	11,946.19	100.24	100.02	57.12	-5,522.85	-136.94	392.91	273.39	119.52	3.287		
17,200.00	12,161.82	16,996.27	11,948.02	101.75	101.53	57.10	-5,622.83	-135.96	392.98	271.79	121.19	3.243		
17,300.00	12,163.77	17,096.27	11,949.86	103.25	103.04	57.09	-5,722.81	-134.98	393.04	270.18	122.86	3.199		
17,400.00	12,165.73	17,196.27	11,951.69	104.77	104.56	57.07	-5,822.79	-134.00	393.11	268.58	124.53	3.157		
17,500.00	12,167.68	17,296.27	11,953.52	106.28	106.08	57.06	-5,922.77	-133.02	393.18	266.97	126.20	3.115		
17,600.00	12,169.64	17,396.27	11,955.36	107.80	107.60	57.04	-6,022.74	-132.04	393.24	265.37	127.88	3.075		
17,700.00	12,171.59	17,496.27	11,957.19	109.32	109.13	57.03	-6,122.72	-131.06	393.31	263.76	129.55	3.036		
17,800.00	12,173.55	17,596.27	11,959.02	110.85	110.66	57.01	-6,222.70	-130.08	393.37	262.15	131.22	2.998		
17,900.00	12,175.50	17,696.27	11,960.86	112.38	112.20	57.00	-6,322.68	-129.10	393.44	260.54	132.90	2.961		
18,000.00	12,177.46	17,796.27	11,962.69	113.92	113.73	56.98	-6,422.66	-128.12	393.51	258.94	134.57	2.924		
18,100.00	12,179.41	17,896.27	11,964.52	115.45	115.28	56.97	-6,522.64	-127.15	393.57	257.33	136.24	2.889		
18,200.00	12,181.37	17,996.27	11,966.35	117.00	116.82	56.96	-6,622.61	-126.17	393.64	255.72	137.92	2.854		
18,300.00	12,183.32	18,096.27	11,968.19	118.54	118.37	56.94	-6,722.59	-125.19	393.70	254.12	139.59	2.820		
18,400.00	12,185.28	18,196.27	11,970.02	120.09	119.92	56.93	-6,822.57	-124.21	393.77	252.51	141.26	2.788		
18,500.00	12,187.23	18,296.27	11,971.85	121.64	121.47	56.91	-6,922.55	-123.23	393.84	250.91	142.93	2.755		
18,600.00	12,189.19	18,396.27	11,973.69	123.19	123.03	56.90	-7,022.53	-122.25	393.90	249.31	144.60	2.724		
18,700.00	12,191.14	18,496.27	11,975.52	124.74	124.58	56.88	-7,122.51	-121.27	393.97	247.70	146.27	2.694		
18,800.00	12,193.10	18,596.27	11,977.35	126.30	126.14	56.87	-7,222.48	-120.29	394.04	246.10	147.93	2.664		
18,900.00	12,195.05	18,696.27	11,979.19	127.86	127.71	56.85	-7,322.46	-119.31	394.10	244.51	149.60	2.634		
19,000.00	12,197.01	18,796.27	11,981.02	129.42	129.27	56.84	-7,422.44	-118.33	394.17	242.91	151.26	2.606		
19,100.00	12,198.96	18,896.27	11,982.85	130.99	130.84	56.82	-7,522.42	-117.35	394.24	241.31	152.92	2.578		
19,200.00	12,200.92	18,996.27	11,984.68	132.55	132.41	56.81	-7,622.40	-116.37	394.30	239.72	154.58	2.551		
19,300.00	12,202.87	19,096.27	11,986.52	134.12	133.98	56.79	-7,722.38	-115.39	394.37	238.13	156.24	2.524		
19,400.00	12,204.83	19,196.27	11,988.35	135.69	135.55	56.78	-7,822.35	-114.41	394.44	236.54	157.89	2.498		

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 #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		
19,500.00	12,206.78	19,296.27	11,990.18	137.26	137.13	56.76	-7,922.33	-113.43	394.50	234.96	159.55	2.473		
19,600.00	12,208.74	19,396.27	11,992.02	138.84	138.70	56.75	-8,022.31	-112.45	394.57	233.37	161.20	2.448		
19,700.00	12,210.69	19,496.27	11,993.85	140.41	140.28	56.73	-8,122.29	-111.47	394.64	231.79	162.84	2.423		
19,800.00	12,212.65	19,596.27	11,995.68	141.99	141.86	56.72	-8,222.27	-110.49	394.70	230.21	164.49	2.400		
19,900.00	12,214.60	19,696.27	11,997.52	143.57	143.44	56.70	-8,322.25	-109.52	394.77	228.64	166.13	2.376		
20,000.00	12,216.56	19,796.27	11,999.35	145.15	145.03	56.69	-8,422.22	-108.54	394.84	227.06	167.77	2.353		
20,100.00	12,218.51	19,896.27	12,001.18	146.73	146.61	56.67	-8,522.20	-107.56	394.90	225.49	169.41	2.331		
20,200.00	12,220.47	19,996.27	12,003.02	148.32	148.20	56.66	-8,622.18	-106.58	394.97	223.92	171.05	2.309		
20,300.00	12,222.43	20,096.27	12,004.85	149.90	149.79	56.64	-8,722.16	-105.60	395.04	222.36	172.68	2.288		
20,400.00	12,224.38	20,196.27	12,006.68	151.49	151.38	56.63	-8,822.14	-104.62	395.10	220.80	174.31	2.267		
20,500.00	12,226.34	20,296.27	12,008.51	153.08	152.97	56.61	-8,922.12	-103.64	395.17	219.24	175.93	2.246		
20,600.00	12,228.29	20,396.27	12,010.35	154.67	154.56	56.60	-9,022.09	-102.66	395.24	217.68	177.55	2.226		
20,700.00	12,230.25	20,496.27	12,012.18	156.26	156.15	56.58	-9,122.07	-101.68	395.30	216.13	179.17	2.206		
20,800.00	12,232.20	20,596.27	12,014.01	157.85	157.75	56.57	-9,222.05	-100.70	395.37	214.58	180.79	2.187		
20,900.00	12,234.16	20,696.27	12,015.85	159.45	159.34	56.55	-9,322.03	-99.72	395.44	213.04	182.40	2.168		
21,000.00	12,236.11	20,796.27	12,017.68	161.04	160.94	56.54	-9,422.01	-98.74	395.51	211.49	184.01	2.149		
21,100.00	12,238.07	20,896.27	12,019.51	162.64	162.54	56.52	-9,521.99	-97.76	395.57	209.95	185.62	2.131		
21,200.00	12,240.02	20,996.27	12,021.35	164.23	164.14	56.51	-9,621.96	-96.78	395.64	208.42	187.22	2.113		
21,300.00	12,241.98	21,096.27	12,023.18	165.83	165.74	56.49	-9,721.94	-95.80	395.71	206.89	188.82	2.096		
21,400.00	12,243.93	21,196.27	12,025.01	167.43	167.34	56.48	-9,821.92	-94.82	395.77	205.36	190.42	2.078		
21,500.00	12,245.89	21,296.27	12,026.84	169.03	168.94	56.47	-9,921.90	-93.84	395.84	203.83	192.01	2.062		
21,600.00	12,247.84	21,396.27	12,028.68	170.63	170.54	56.45	-10,021.88	-92.86	395.91	202.31	193.60	2.045		
21,700.00	12,249.80	21,496.27	12,030.51	172.23	172.15	56.44	-10,121.86	-91.88	395.98	200.79	195.18	2.029		
21,800.00	12,251.75	21,596.27	12,032.34	173.84	173.75	56.42	-10,221.83	-90.91	396.04	199.28	196.77	2.013		
21,900.00	12,253.71	21,696.27	12,034.18	175.44	175.36	56.41	-10,321.81	-89.93	396.11	197.77	198.34	1.997		
22,000.00	12,255.66	21,796.27	12,036.01	177.05	176.96	56.39	-10,421.79	-88.95	396.18	196.26	199.92	1.982		
22,100.00	12,257.62	21,896.27	12,037.84	178.65	178.57	56.38	-10,521.77	-87.97	396.24	194.76	201.49	1.967		
22,200.00	12,259.57	21,996.27	12,039.68	180.26	180.18	56.36	-10,621.75	-86.99	396.31	193.25	203.06	1.952		
22,202.30	12,259.62	21,998.57	12,039.72	180.29	180.22	56.36	-10,624.04	-86.96	396.31	193.22	203.09	1.951		
22,253.13	12,260.61	22,043.99	12,040.55	181.02	180.95	56.36	-10,669.46	-86.52	396.38	192.66	203.72	1.946 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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 3031.9' GE + 21' KB @ 3052.90usft

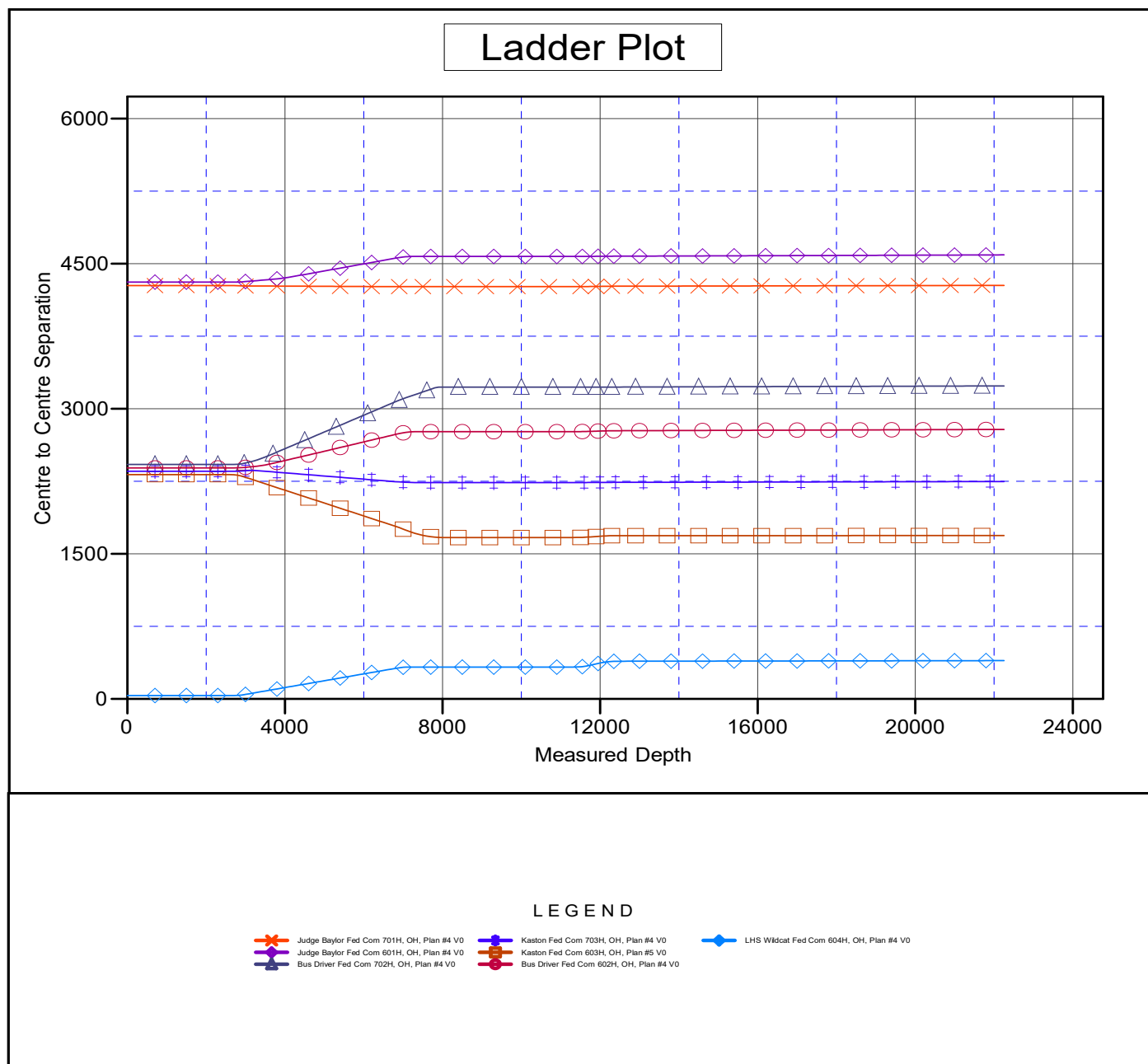
Offset Depths are relative to Offset Datum

Central Meridian is -104.333334

Coordinates are relative to: LHS Wildcat Fed Com 705H

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

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 LHS Wildcat Fed Com 705H
Project:	Lea County, NM (NAD83)	TVD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Reference Site:	LHS Wildcat Fed Com	MD Reference:	3031.9' GE + 21' KB @ 3052.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	LHS Wildcat Fed Com 705H	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 3031.9' GE + 21' KB @ 3052.90usft

Offset Depths are relative to Offset Datum

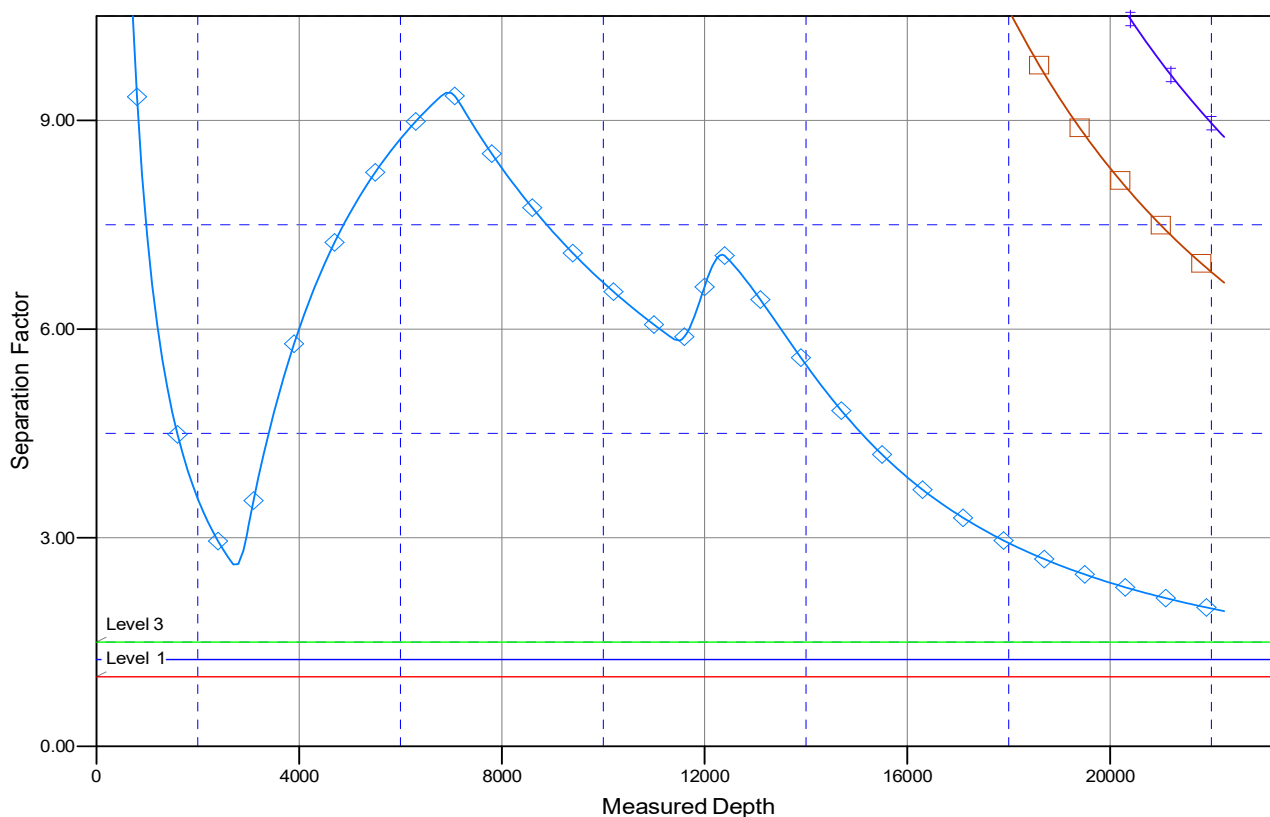
Central Meridian is -104.333334

Coordinates are relative to: LHS Wildcat Fed Com 705H

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 #4 V0	Kaston Fed Com 703H, OH, Plan #4 V0	LHS Wildcat Fed Com 604H, OH, Plan #4 V0
Judge Baylor Fed Com 601H, OH, Plan #4 V0	Kaston Fed Com 603H, OH, Plan #5 V0	
Bus Driver Fed Com 702H, OH, Plan #4 V0	Bus Driver Fed Com 602H, OH, Plan #4 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	LHS Wildcat Fed Com 705H
Operator	Franklin Mountain Energy, LLC
Project Area	PF Unit
Well Type	10,000' Upper Wolfcamp Lateral
API	
Permit Number	
Rig	

State	NM	County	Lea						
SHL	Township	25S/35E	Section	36	488'	FEL	250'	FSL	
BHL	Township	26S/35E	Section	12	350'	FEL	150'	FNL	
Surface Latitude	NAD 83	32.08026							
Surface Longitude	NAD 83	103.314298							
Bottom Hole Latitude	NAD 83	32.050933							
Bottom Hole Longitude	NAD 83	103.313837							
Ground Level	3,032'	Rig KB	30'	KB	3,062'				

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,032'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,165'	897'			Carbonates
Salado	1,656'	1,406'			Salt, Carbonate & Clastics
Base Salt	474'	2,588'			Shaley Carbonate & Shale
Capitan Reef	-1,197'	4,259'			Carbonates
Lamar	-2,023'	5,085'			Carbonate & Clastics
Bell Canyon	-2,064'	5,126'			Sandstone - oil/gas/water
Cherry Canyon	-2,869'	5,931'			Sandstone - oil/gas/water
Brushy Canyon	-4,242'	7,304'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,225'	8,287'			Shale/Carbonates - oil/gas
Avalon	-5,574'	8,636'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,676'	9,738'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,815'	9,877'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,200'	10,262'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,900'	10,962'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,571'	11,633'			Sandstone - oil/gas/water
Wolfcamp	-8,813'	11,875'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,874'	11,936'			Overpressure Shale - Oil/Gas
HZ Target	-9,000'	12,062'			Overpressure Shale - Oil/Gas
Wolfcamp B	-9,094'	12,156'			Overpressure Shale - Oil/Gas

Target interval is expected to have an average apparent dip of 1.1 degrees down along the lateral based on the Wolfcamp A structure

Target window tolerance is set at +/- 10'

Target Line: 12052' KBTVD @ 0' VS w/ 88.88° inc.

Offset Log: Talco Unit 001 (300252674700)

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:				
Start logging at 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

COMMENTS

Action 28434

COMMENTS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 28434
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
jagarcia	Accepted for record	6/25/2021

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 28434

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 28434
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	Adhere to previous COA.	6/25/2021