Form 3160-3 (June 2015)

UNITED STATES

05/08/2020 ECEIVED

FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018

PARTMENT OF THE INTERIOR	RECEI	5. Lease S
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DEPARTMENT OF TH BUREAU OF LAND M		, RES	5. Lease Serial No.	
APPLICATION FOR PERMIT TO			6. If Indian, Allotee or	Tribe Name
1a. Type of work: DRILL	REENTER		7. If Unit or CA Agree	ement, Name and No.
1b. Type of Well: Oil Well Gas Well	Other	_	8. Lease Name and W	ell No.
1c. Type of Completion: Hydraulic Fracturing	Single Zone	Multiple Zone	[328237	
2. Name of Operator [373910]		9. API Well No. 30-	025-47173
3a. Address	3b. Phone N	o. (include area code)	10. Field and Pool, or	Exploratory [98098]
4. Location of Well (Report location clearly and in accordance	unce with any State	requirements.*)	11. Sec., T. R. M. or F	Blk. and Survey or Area
At surface At proposed prod. zone				
14. Distance in miles and direction from nearest town or po	st office*		12. County or Parish	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of ac	res in lease 17. Space	ing Unit dedicated to thi	s well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed	Depth 20. BLN	I/BIA Bond No. in file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxii	mate date work will start*	23. Estimated duration	1
	24. Attacl	hments		
The following, completed in accordance with the requireme (as applicable)	ents of Onshore Oil	and Gas Order No. 1, and the	Hydraulic Fracturing rul	e per 43 CFR 3162.3-3
Well plat certified by a registered surveyor. A Drilling Plan.		4. Bond to cover the operation Item 20 above).	ns unless covered by an e	existing bond on file (see
3. A Surface Use Plan (if the location is on National Forest SUPO must be filed with the appropriate Forest Service C		5. Operator certification.6. Such other site specific info BLM.	ormation and/or plans as n	nay be requested by the
25. Signature	Name	(Printed/Typed)	Ι	Date
Title	'			
Approved by (Signature)	Name	(Printed/Typed)	I	Date
Title	Office			
Application approval does not warrant or certify that the appart applicant to conduct operations thereon. Conditions of approval, if any, are attached.	plicant holds legal o	or equitable title to those rights	s in the subject lease whi	ch would entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 12 of the United States any false, fictitious or fraudulent statem				y department or agency
GCP Rec 05/08/2020			<u> </u>	
		TH CONDITIONS	KZ 05/14/	2020
SL	DOVED WI	H COMPTITO	3	
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Approval Date: 02/28/2020

*(Instructions on page 2)

Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED

E	BUREAU OF LAND MANA	GEMENT			Expires:	January 31, 2018
SUNDRY Do not use th	NOTICES AND REPO		5. Lease Serial No. NMNM12283			
apandoned we	ell. Use form 3160-3 (AP	D) for such	proposals.		6. If Indian, Allottee	or Tribe Name
	TRIPLICATE - Other ins	tructions o	page 2		7. If Unit or CA/Agr	eement, Name and/or No.
1. Type of Well Oil Well Gas Well Ot	her				Well Name and No OURAY FEDER	AL COM 702H
Name of Operator FRANKLIN MOUNTAIN ENER	Contact: RGY LLCE-Mail: roverbey@	RACHAEL of the lic.com	OVEREBY		9. API Well No.	
3a. Address 2401 E 2ND AVE SUITE 300 DENVER, CO 80206		3b. Phone N Ph: 720-4	o. (include area code) 14-7868		10. Field and Pool or WILDCAT	Exploratory Area
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description,)			11. County or Parish,	State
Sec 9 T24S R35E SWSW 325 32.225681 N Lat, 103.376930	5FSL 1255FWL W Lon				LEA COUNTY,	
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OT	HER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION		
Notice of Intent ■	☐ Acidize	□ De	epen	☐ Producti	on (Start/Resume)	☐ Water Shut-Off
C Subsequent Penert	□ Alter Casing	☐ Hy	draulic Fracturing	☐ Reclama	ntion	☐ Well Integrity
☐ Subsequent Report	□ Casing Repair	□ Ne	v Construction	☐ Recomp	lete	☑ Other
☐ Final Abandonment Notice	☐ Change Plans	□ Plu	g and Abandon	☐ Tempora	arily Abandon	Change to Original A
	☐ Convert to Injection	□ Plu	☐ Plug Back ☐ Water D		FD	
13. Describe Proposed or Completed Ope If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi APD ID 10400048842 was app approve and provide condition Please change well name to O	k will be performed or provide in operations. If the operation rest and onment Notices must be file that inspection.	the Bond No. o ults in a multip d only after all	n file with BLM/BIA. le completion or recor requirements, includi	Required sub npletion in a n ng reclamation	sequent reports must be ew interval, a Form 316 , have been completed a	filed within 30 days
	7021.					K.
14. I hereby certify that the foregoing is	trus and					
14. Thereby certify that the foregoing is	Electronic Submission #5	13546 verifie	d by the BLM Well	Information	System	
Com	For FRANKLIN MC mitted to AFMSS for proces	$M \rightarrow M \rightarrow M \rightarrow M$	-DCVIIC contt	· the Helen		
Name (Printed/Typed) RACHAEL	OVEREBY	Jenny Dy 1 IXI			G & REGULATORY	,
			2111.011	or Division	SANLOOLATOKI	
Signature (Electronic Su	ubmission)		Date 04/30/202	20		
	THIS SPACE FOR	R FEDERA	L OR STATE O	FFICE US	E	
Approved By Long Vo			Title Petrole	um End	ineer	Date 5/5/2020
Conditions of approval, if any, are attached, ertify that the applicant holds legal or equivable house to conduct the conduction of the conductin of the conduction of the conduction of the conduction of the co	table title to those rights in the	ot warrant or ubject lease	Office CFC		n. ————————————————————————————————————	
Title 18 U.S.C. Section 1001 and Title 43 U.States any false, fictitious or fraudulent states.	S.C. Section 1212, make it a cratements or representations as to	ime for any per any matter wi			e to any department or a	gency of the United

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

Franklin Mountain Energy, LLC, Golden Fed Com 603H, 704H, Breckenridge Fed Com 302H, 604H, 705H, 706H, Georgetown Fed Com 301H, 601H, 701H, Ouray Fed Com 602H, 702H, and 703H Federal Wells Project in Lea County, New Mexico

BLM Lease Number: NMNM-0001228 and NMNM-0001228A

Well Name	Surface Hole Legal Locati	Surface Ownership				
Golden Fed Com 603H, 704H, and Breckenridge Fed Com 302H, 604H, 705H, 706H Well Pad						
Golden Fed Com 603H	325 FSL and 1408 FEL	Township 24 South, Range 35				
Golden Fed Com 704H	325 FSL and 1373 FEL	East, Section 9				
Breckenridge Fed Com 302H	325 FSL and 1233 FEL					
Breckenridge Fed Com 604H	325 FSL and 1303 FEL					
Breckenridge Fed Com 705H	325 FSL and 1338 FEL					
Breckenridge Fed Com 706H	325 FSL and 1268 FEL					
Georgetown Fed Com 301H, 601H, 701H, and Ouray Fed Com 602H, 702H, 703H Well Pad						
Georgetown Fed Com 301H	325 FSL and 1150 FWL	Township 24 South, Range 35				
Georgetown Fed Com 601H	325 FSL and 1185 FWL	East, Section 9				
Georgetown Fed Com 701H	325 FSL and 1220 FWL					
Ouray Fed Com 602H	325 FSL and 1290 FWL					
Ouray Fed Com 702H	325 FSL and 1255 FWL					
Ouray Fed Com 703H	325 FSL and 1325 FWL					

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

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☐ Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Hydrology
☐ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
☐ Road Section Diagram
Production (Post Drilling)
Well Structures & Facilities
☐ Interim Reclamation
Final Abandonment & Reclamation

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Hydrology:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

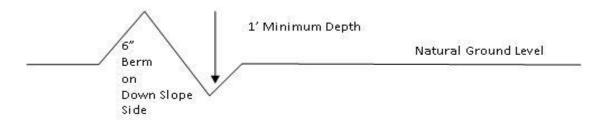
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\frac{400'}{4\%} + 100' = 200'$$
 lead-off ditch interval

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road 4. Revegetate slopes

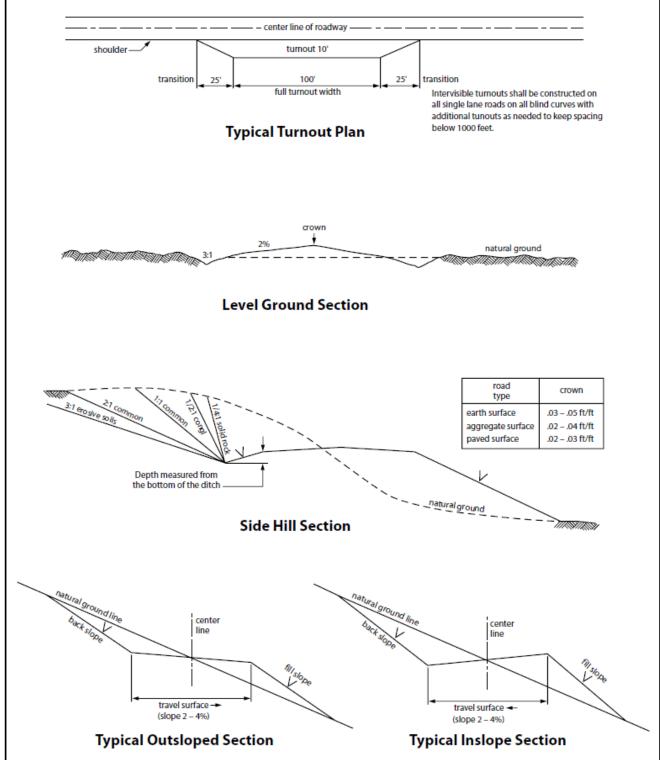


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1½ inches.

Open-Vent Exhaust Stack Exclosures

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

Containment Structures

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

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

VIII. OIL AND GAS RELATED SITES

STANDARD STIPULATIONS FOR OIL AND GAS RELATED SITES

A copy of the application (Grant/Sundry Notice) and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant and for all response costs, penalties, damages, claims, and other costs arising from the provisions of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Chap. 82, Section 6901 et. seq., from the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Chap. 109, Section 9601 et. seq., and from other applicable environmental statues.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the

Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

- 4. If, during any phase of the construction, operation, maintenance, or termination of the site or related pipeline(s), any oil or other pollutant should be discharged from site facilities, the pipeline(s) or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.
- 5. Sites shall be maintained in an orderly, sanitary condition at all times. Waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, brines, chemicals, oil drums, ashes, and equipment.
- 6. The operator will notify the Bureau of Land Management (BLM) authorized officer and nearest Fish and Wildlife Service (FWS) Law Enforcement office within 24 hours, if the operator discovers a dead or injured federally protected species (i.e., migratory bird species, bald or golden eagle, or species listed by the FWS as threatened or endangered) in or adjacent to a pit, trench, tank, exhaust stack, or fence. (If the operator is unable to contact the FWS Law Enforcement office, the operator must contact the nearest FWS Ecological Services office.)
- 7. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is **Shale Green**, Munsell Soil Color Chart Number 5Y 4/2.
- 8. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of

significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

- 9. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. There are several options available for purchasing mineral material: contact the BLM office (575-234-5972).
- 10. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 11. Once the site is no longer in service or use, the site must undergo final abandonment. At final abandonment, the site and access roads must undergo "final" reclamation so that the character and productivity of the land are restored. Earthwork for final reclamation must be completed within six (6) months of the abandonment of the site. All pads and facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact. After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

12. The holder shall stockpile an adequate amount of topsoil where blading occurs.	The
topsoil to be stripped is approximately6 inches in depth. The topsoil will be	
segregated from other spoil piles. The topsoil will be used for final reclamation.	

13. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

() seed mixture 1	() seed mixture 3
() seed mixture 2	() seed mixture 4
(X) seed mixture 2/LPC	() Aplomado Falcon Mixture

14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.

- 15. Open-topped Tanks The operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1½ inches. The netting must not be in contact with fluids and must not have holes or gaps
- 16. The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an

impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1½ inches.

- 17. Open-Vent Exhaust Stack Exclosures The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.
- 18. Containment Structures Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

19. Special Stipulations:

Hydrology:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around

the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

^{*}Pounds of pure live seed:

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
Handlin Mountain Energy LLC
NMNM12283
Ouray Federal 702H
325'/S & 1255'/W
150'/N & 1350'/W
Section 9, T.24 S., R.35 E., NMPM
Lea County, New Mexico

COA

H2S	€ Yes	CNo	
Potash	☑ None	C Secretary	CR-111-P
Cave/Karst Potential	€ Low	☐ Medium	C High
Cave/Karst Potential	Critical		
Variance	☑ None	C Flex Hose	C Other
Wellhead	C Conventional	© Multibowl	□ Both
Other	✓ 4 String Area	Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	☐ Pilot Hole
Special Requirements		₩ COM	┌ Unit

Operator is NOT approved for flex hose variance.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Cinta Rojo Mr.** play. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 1300 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing shall be set at approximately 5400 feet is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

- 3. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:
 - Cement should tie-back at least 200 feet into previous casing string.
 Operator shall provide method of verification.
- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least 200 feet into previous casing string.
 Operator shall provide method of verification.

C. PRESSURE CONTROL

- Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - ☐ Lea County
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
 393-3612
- Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL

- All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

- hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.



Ouray Fed Com 702H

- 1. Geologic name of surface location: Permian
- 2. Estimated tops of important geological markers:

Formations	PROG SS	PROG TVD
Cenozoic Alluvium (surface)	3,392'	21'
Rustler	2,431'	982'
Salado	2,334'	1,079'
Base Salt	409'	3,004'
Lamar	-1,887'	5,300'
Bell Canyon	-1,991'	5,404'
Cherry Canyon	-2,897'	6,310'
Brushy Canyon	-4,239'	7,652'
Bone Spring Lime	-5,548'	8,961'
Avalon	-5,574'	8,987'
First Bone Spring Sand	-6,665'	10,078'
Second Bone Spring Carbonates	-6,833'	10,246'
Second Bone Spring Sand	-7,240'	10,653'
Third Bone Spring Carbonates	-7,764'	11,177'
Third Bone Spring Sand	-8,206'	11,619'
Wolfcamp	-8,566'	11,979'
HZ Target	-8,580'	11,993'
Wolfcamp A	-8,594'	12,007'
Wolfcamp B	-8,793'	

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

Upper Permian Sands 0- 400' Fresh Water

Delaware Sands 5,404' Oil
Bone Spring 10,078' Oil
Wolfcamp 11,979 Oil

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

4. Casing Program:

All casings strings will be run new. Preliminary plan is to set 7 5/8" string before entering Wolcamp formation at 11,966'TVD/12,100'MD at 78° Inc due too potential overpressure.

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
						BTC					
Surface 13 3/8"	54.5	J-55	2730	1130	853	909	1300	1.18	1.67	4.99	5.32
						BTC					
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	1042	5400	1.72	1.67	2.90	3.30
						Stinger					
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	564	12100	1.10	1.26	1.80	1.23
						Anaconda					
Long string 5 1/2"	20	P-110	12640	11080	641	577	21827	1.15	1.08	1.19	1.08



Cementing Program:

String	Hole	Cas	sing		Lea	d					Tail			Excess
Туре	Size	Size	Setting	Sacks	Type of cmt	Yield	Water	тос	Sacks	Type of cmt	Yield	Water	тос	
			Depth			ft3/sk	gal/sk	ft			ft3/sk	gal/sk		
Surf	17.5	13.375	1300	803	Extenda Cem, 13.5 ppg Class C, 4%	1.728	9.21	0	330	HalCem TM, 14.8 ppg, Class C,	1.364	6.61	1000	100%
					Bentonite, 2%CaCl2,0.25pps Cello-Flake					2% CaCl2, 0.25pps Celo- Flake HalCem				
					Econocem TM,					TM,				
Int1	12.25	9.625	5400	1523	12.9 ppg, Class C 50:50 Poz	1.872	10.11	0	154	14.8 ppg, Class C, 0.25 pps	1.332	6.42	5100	100%
					Gel, 0.25 pps Cello-Flake, 5% Salt, 2% Sodium					Cello- Flake, 2% CalCl2				
					NeoCem, 9 ppg,					NeoCem				
Int2	8.5	7.625	12100	220	Class C 60:40 Poz Gel, 5%	3.501	14.21	4400	120	15 ppg, Class C 0.25 pps	1.049	4.31	9561	50%
					Salt, 5pps LCM, 0.25pps Cello- Flake					Cello- Flake, 2% CalCl2				
Prod	6.75	5.5	21827	409	SoluCem, 15 ppg, 0.25 D-Air,	2.619	11.3	9561						20%
Prod	0.75	5.5	2102/	409	0.85% HR 601	2.019	11.5	1005						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 $4 \frac{1}{2}$ " 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	Туре	Weight (ppg)	Viscosity	Water Loss
0 – 1,300′	Fresh - Gel	8.6-8.8	28-34	N/c
1,300′ – 12,100′	Brine	8.8-10.2	28-34	N/c
12,100' – 21,827' Lateral	Oil Base	10.0-11.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 11 ppg. In order to maintain hole stability, mud weights up to 13.0 ppg may be utilized.

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

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

7. Auxiliary well control and monitoring equipment:

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

8. Logging, testing and coring program:

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

Open-hole logs are not planned for this well.

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

The estimated bottom-hole temperature at 11,978' TVD (deepest point of the well) is 190F with an estimated maximum bottom-hole pressure (BHP) at the same point of 8,097 psig (based on 13 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

- A. All personnel shall receive proper awareness H2S training.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment
 - a. Well Control Equipment
 - i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.
 - ii. Choke manifold with a remotely operated hydraulic choke.
 - iii. Mud/gas separator
 - b. Protective equipment for essential personnel
 - i. Breathing Apparatus
 - 1. Rescue packs (SCBA) 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.
 - 2. Work/Escape packs 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity



- 3. Emergency Escape Packs 4 packs shall be stored in the doghouse for emergency evacuation
- ii. Auxiliary Rescue Equipment
 - 1. Stretcher
 - 2. Two OSHA full body harnesses
 - 3. 100 feet of 5/8 inches OSHA approved rope
 - 4. 1-20# class ABC fire extinguisher
- c. H2S Detection and Monitoring Equipment
 - i. A stationary detector with three sensors will be placed in the doghouse if equipped, set to visually alarm at 10 ppm and audible at 14 ppm. The detector will be calibrated a minimum of every 30 days or as needed. The sensors will be placed in the following places:
 - 1. Rig Floor
 - 2. Below Rig Floor / Near BOPs
 - 3. End of flow line or where well bore fluid is being discharged (near shakers)
 - ii. If H2S is encountered, measured values and formations will be provided to the BLM.
- d. Visual Warning Systems
 - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - iii. Two windsocks will be placed in strategic locations, visible from all angles.
- e. Mud Program
 - 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. The drilling rig with walking/skidding capabilities will be used.

12. Disposal/environmental concerns:

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

13. Wellhead:

A multi-bowl wellhead system will be utilized.

After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

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

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

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

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

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

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

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

14. Additional variance requests

A. Casing.



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

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

Franklin Mountain Energy

DrilTech, LLC

Georgetown - Ouray Site Ouray FED COM 702H Lateral Profile 702H Plan #1 TBD



SURFACE LOCATION

US State Plane 1983 New Mexico Eastern Zone Elevation: 3392' + 21'RKB @ 3413.00ft (TBD)

447152.68

Easting 837087.82

Latittude 32° 13′ 32.450 N

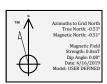
103° 22' 36.957 W

SECTION DETAILS

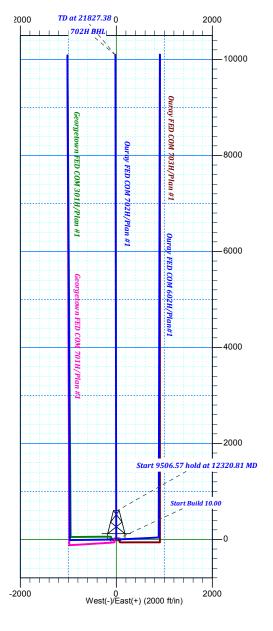
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11404.81	0.00	0.00	11404.81	0.00	0.00	0.00	0.00	0.00
12320.81	91.60	359.90	11977.55	588.95	-1.00	10.00	359.90	588.96
21827 38	91.60	359 90	11712 11	10091 80	-17.05	0.00	0.00	10091 81

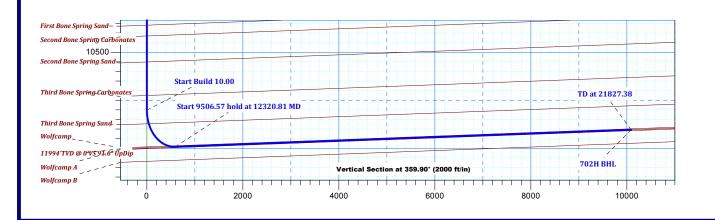
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

`					
Name	TVD	+N/-S	+E/-W	Northing	Easting
702H BHL	11712.11	10091.80	-17.05	457244.46	837070.77











Franklin Mountain Energy

Georgetown - Ouray Site Lea County NM (NAD 83) Ouray FED COM 702H

Lateral Profile 702H

Plan: Plan #1

Standard Planning Report

08 July, 2019



Planning Report

Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Site: Lea County NM (NAD 83) Well: Ouray FED COM 702H

Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H

3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Grid

Minimum Curvature

Project Georgetown - Ouray Site, 6 - well pad

Map System: Geo Datum:

Map Zone:

Wellbore:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone System Datum:

Mean Sea Level

Site Lea County NM (NAD 83)

Northing: 447,152.68 usft Site Position: Latitude: 32° 13' 32.450 N From: Мар Easting: 837,087.82 usft Longitude: 103° 22' 36.957 W **Position Uncertainty:** 0.00 ft Slot Radius: 13.200 in **Grid Convergence:** 0.51°

Well Ouray FED COM 702H

+N/-S **Well Position** 0.00 ft Northing: 447,152.68 usft Latitude: 32° 13' 32.450 N 0.00 ft +E/-W Easting: 837,087.82 usft Longitude: 103° 22' 36.957 W **Position Uncertainty** 0.00 ft Wellhead Elevation: Ground Level: 3,392.00 ft

Wellbore Lateral Profile 702H

 Magnetics
 Model Name
 Sample Date (°)
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 User Defined
 4/16/2019
 0.00
 0.00
 0.000000000

Design Plan #1

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0.00

 Vertical Section:
 Depth From (TVD) (ft)
 +N/-S (ft)
 +E/-W (ft)
 Direction (°)

 0.00
 0.00
 0.00
 359.90

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (°/100ft) (°/100ft) (°/100ft) (ft) (ft) (ft) (ft) **Target** (°) (°) (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 11,404.81 0.00 0.00 11,404.81 0.00 0.00 0.00 0.00 0.00 0.00 12,320.81 91.60 359.90 11,977.55 588.95 -1.0010.00 10.00 0.00 359.90 21,827.38 91.60 -17.05 0.00 0.00 0.00 702H BHL 359.90 11,712.11 10,091.80 0.00



Planning Report

Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Site: Lea County NM (NAD 83) Ouray FED COM 702H Well: Wellbore:

Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference: TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:** Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Minimum Curvature

esign:	Plan #1								
lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00 200.00 300.00	Alluvium (surfa 0.00 0.00 0.00	0.00 0.00 0.00 0.00	100.00 200.00 300.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	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
982.00	0.00	0.00	982.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler 1,000.00 1,079.00 Salado	0.00 0.00	0.00 0.00	1,000.00 1,079.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,004.00	0.00	0.00	3,004.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14 Single User Db Franklin Mountain Energy Company: Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Ouray FED COM 702H Well:

Lateral Profile 702H

Plan #1 Design:

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar 5,400.00 5,404.00 Bell Canyo	0.00 0.00	0.00 0.00	5,400.00 5,404.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
5,500.00 5,600.00 5,700.00 5,800.00 5,900.00 6,000.00 6,100.00 6,200.00 6,300.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5,500.00 5,600.00 5,700.00 5,800.00 5,900.00 6,000.00 6,100.00 6,200.00 6,300.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
6,310.00 Cherry Ca 6,400.00	0.00	0.00	6,310.00 6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,652.00	0.00	0.00	7,652.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Ca 7,700.00	nyon 0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00 8,900.00 8,961.00 Bone Spri i	0.00 0.00 0.00 ng Lime	0.00 0.00 0.00	8,800.00 8,900.00 8,961.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00



Planning Report

Database: EDM 5000.14 Single User Db Franklin Mountain Energy Company: Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Ouray FED COM 702H Well:

Lateral Profile 702H

Plan #1 Design:

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

ed Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,987.00	0.00	0.00	8,987.00	0.00	0.00	0.00	0.00	0.00	0.00
Avalon 9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00 9,800.00	0.00	0.00	0.00	0.00 0.00	0.00	0.00
9,800.00 9,900.00	0.00 0.00	0.00 0.00	9,800.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10.078.00	0.00	0.00	10,078.00	0.00	0.00	0.00	0.00	0.00	0.00
-,	Spring Sand	0.00	. 5,57 0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,246.00	0.00	0.00	10,246.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	one Spring Ca 0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
			•						
10,400.00 10,500.00	0.00 0.00	0.00 0.00	10,400.00 10.500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
10,600.00	0.00	0.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00
10,653.00	0.00	0.00	10,653.00	0.00	0.00	0.00	0.00	0.00	0.00
	one Spring Sa								
10,700.00	0.00	0.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00
10,800.00	0.00	0.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.00
10,900.00	0.00	0.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.00
11,000.00 11,100.00	0.00 0.00	0.00 0.00	11,000.00 11,100.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
11,100.00	0.00	0.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.00
	e Spring Carbo		11,111.00	0.00	0.00	0.00	0.00	0.00	0.00
11,200.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00	0.00
11,300.00	0.00	0.00	11,300.00	0.00	0.00	0.00	0.00	0.00	0.00
11,400.00	0.00	0.00	11,400.00	0.00	0.00	0.00	0.00	0.00	0.00
11,404.81	0.00	0.00	11,404.81	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 11,500.00	9.52	359.90	11.499.56	7.89	-0.01	7.89	10.00	10.00	0.00
			,						
11,600.00	19.52 21.83	359.90 359.90	11,596.25 11,617.85	32.93 41.08	-0.06 -0.07	32.93 41.08	10.00 10.00	10.00 10.00	0.00 0.00
11,623.09 Third Bon	21.83 e Spring Sand		11,017.00	41.00	-0.07	41.00	10.00	10.00	0.00
11,700.00	29.52	359.90	11,687.11	74.37	-0.13	74.37	10.00	10.00	0.00
11,800.00	39.52	359.90	11,769.40	130.97	-0.22	130.97	10.00	10.00	0.00
11,900.00	49.52	359.90	11,840.62	200.99	-0.34	200.99	10.00	10.00	0.00
12,000.00	59.52	359.90	11,898.59	282.32	-0.48	282.32	10.00	10.00	0.00
12,100.00	69.52	359.90	11,941.55	372.48	-0.63	372.48	10.00	10.00	0.00
12,189.45	78.46	359.90	11,966.20	458.37	-0.77	458.37	10.00	10.00	0.00
Wolfcamp		050.00	44.000.04	400 70	A 70	400 70	40.00	40.00	2.22
12,200.00	79.52 89.52	359.90 359.90	11,968.21 11,977.75	468.73 568.14	-0.79 -0.96	468.73 568.14	10.00 10.00	10.00 10.00	0.00 0.00
12,300.00			•						
12,320.43	91.56	359.90	11,977.56	588.57	-0.99	588.57	10.00	10.00	0.00
11994 TVL 12,320.81	91.60 90'VS	359.90	11,977.55	588.95	-1.00	588.96	10.00	10.00	0.00



Planning Report

Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Site: Lea County NM (NAD 83) Well: Ouray FED COM 702H

Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference: TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Grid

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start 950	6.57 hold at 123	320.81 MD							
12,400.00 12,500.00 12,600.00	91.60 91.60	359.90 359.90 359.90	11,975.34 11,972.55 11,969.75	668.11 768.07 868.03	-1.13 -1.30 -1.47	668.11 768.07 868.03	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
12,700.00 12,800.00 12,900.00 13,000.00 13,100.00	91.60 91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,966.96 11,964.17 11,961.38 11,958.59 11,955.79	967.99 1,067.95 1,167.91 1,267.87 1,367.84	-1.64 -1.80 -1.97 -2.14 -2.31	967.99 1,067.95 1,167.92 1,267.88 1,367.84	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,200.00 13,300.00 13,400.00 13,500.00 13,600.00	91.60 91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,953.00 11,950.21 11,947.42 11,944.62 11,941.83	1,467.80 1,567.76 1,667.72 1,767.68 1,867.64	-2.48 -2.65 -2.82 -2.99 -3.16	1,467.80 1,567.76 1,667.72 1,767.68 1,867.64	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
13,700.00 13,800.00 13,900.00 14,000.00 14,100.00	91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,939.04 11,936.25 11,933.46 11,930.66 11,927.87	1,967.60 2,067.56 2,167.52 2,267.48 2,367.44	-3.32 -3.49 -3.66 -3.83 -4.00	1,967.60 2,067.56 2,167.53 2,267.49 2,367.45	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
14,200.00 14,300.00 14,400.00 14,500.00 14,600.00	91.60 91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,925.08 11,922.29 11,919.50 11,916.70 11,913.91	2,467.40 2,567.37 2,667.33 2,767.29 2,867.25	-4.17 -4.34 -4.51 -4.68 -4.84	2,467.41 2,567.37 2,667.33 2,767.29 2,867.25	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
14,700.00 14,800.00 14,900.00 15,000.00 15,100.00	91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,911.12 11,908.33 11,905.53 11,902.74 11,899.95	2,967.21 3,067.17 3,167.13 3,267.09 3,367.05	-5.01 -5.18 -5.35 -5.52 -5.69	2,967.21 3,067.17 3,167.14 3,267.10 3,367.06	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
15,200.00 15,300.00 15,400.00 15,500.00 15,600.00	91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,897.16 11,894.37 11,891.57 11,888.78 11,885.99	3,467.01 3,566.97 3,666.94 3,766.90 3,866.86	-5.86 -6.03 -6.20 -6.36 -6.53	3,467.02 3,566.98 3,666.94 3,766.90 3,866.86	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
15,700.00 15,800.00 15,900.00 16,000.00 16,100.00	91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,883.20 11,880.40 11,877.61 11,874.82 11,872.03	3,966.82 4,066.78 4,166.74 4,266.70 4,366.66	-6.70 -6.87 -7.04 -7.21 -7.38	3,966.82 4,066.78 4,166.75 4,266.71 4,366.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
16,200.00 16,300.00 16,400.00 16,500.00 16,600.00	91.60 91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,869.24 11,866.44 11,863.65 11,860.86 11,858.07	4,466.62 4,566.58 4,666.54 4,766.50 4,866.47	-7.55 -7.72 -7.88 -8.05 -8.22	4,466.63 4,566.59 4,666.55 4,766.51 4,866.47	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
16,700.00 16,800.00 16,900.00 17,000.00 17,100.00	91.60 91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,855.28 11,852.48 11,849.69 11,846.90 11,844.11	4,966.43 5,066.39 5,166.35 5,266.31 5,366.27	-8.39 -8.56 -8.73 -8.90 -9.07	4,966.43 5,066.39 5,166.36 5,266.32 5,366.28	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,200.00 17,300.00 17,400.00 17,500.00 17,600.00	91.60 91.60 91.60	359.90 359.90 359.90 359.90 359.90	11,841.31 11,838.52 11,835.73 11,832.94 11,830.15	5,466.23 5,566.19 5,666.15 5,766.11 5,866.07	-9.24 -9.40 -9.57 -9.74 -9.91	5,466.24 5,566.20 5,666.16 5,766.12 5,866.08	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00



Planning Report

Database: EDM 5000.14 Single User Db Franklin Mountain Energy Company: Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Ouray FED COM 702H Well:

Lateral Profile 702H

Plan #1 Design:

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
17,700.00	91.60	359.90	11,827.35	5,966.04	-10.08	5,966.04	0.00	0.00	0.00
17,800.00	91.60	359.90	11,824.56	6,066.00	-10.25	6,066.00	0.00	0.00	0.00
17,900.00	91.60	359.90	11,821.77	6,165.96	-10.42	6,165.97	0.00	0.00	0.00
18,000.00	91.60	359.90	11,818.98	6,265.92	-10.59	6,265.93	0.00	0.00	0.00
18,100.00	91.60	359.90	11,816.19	6,365.88	-10.76	6,365.89	0.00	0.00	0.00
18,200.00	91.60	359.90	11,813.39	6,465.84	-10.92	6,465.85	0.00	0.00	0.00
18,300.00	91.60	359.90	11,810.60	6,565.80	-11.09	6,565.81	0.00	0.00	0.00
18,400.00	91.60	359.90	11,807.81	6,665.76	-11.26	6,665.77	0.00	0.00	0.00
18,500.00	91.60	359.90	11,805.02	6,765.72	-11.43	6,765.73	0.00	0.00	0.00
18,600.00	91.60	359.90	11,802.22	6,865.68	-11.60	6,865.69	0.00	0.00	0.00
18,700.00	91.60	359.90	11,799.43	6,965.64	-11.77	6,965.65	0.00	0.00	0.00
18,800.00	91.60	359.90	11,796.64	7,065.60	-11.94	7,065.62	0.00	0.00	0.00
18,900.00	91.60	359.90	11,793.85	7,165.57	-12.11	7,165.58	0.00	0.00	0.00
19,000.00	91.60	359.90	11,791.06	7,265.53	-12.28	7,265.54	0.00	0.00	0.00
19,100.00	91.60	359.90	11,788.26	7,365.49	-12.44	7,365.50	0.00	0.00	0.00
19,200.00	91.60	359.90	11,785.47	7,465.45	-12.61	7,465.46	0.00	0.00	0.00
19,300.00	91.60	359.90	11,782.68	7,565.41	-12.78	7,565.42	0.00	0.00	0.00
19,400.00	91.60	359.90	11,779.89	7,665.37	-12.95	7,665.38	0.00	0.00	0.00
19,500.00	91.60	359.90	11,777.09	7,765.33	-13.12	7,765.34	0.00	0.00	0.00
19,600.00	91.60	359.90	11,774.30	7,865.29	-13.29	7,865.30	0.00	0.00	0.00
19,700.00	91.60	359.90	11,771.51	7,965.25	-13.46	7,965.26	0.00	0.00	0.00
19,800.00	91.60	359.90	11,768.72	8,065.21	-13.63	8,065.23	0.00	0.00	0.00
19,900.00	91.60	359.90	11,765.93	8,165.17	-13.80	8,165.19	0.00	0.00	0.00
20,000.00	91.60	359.90	11,763.13	8,265.14	-13.96	8,265.15	0.00	0.00	0.00
20,100.00	91.60	359.90	11,760.34	8,365.10	-14.13	8,365.11	0.00	0.00	0.00
20,200.00	91.60	359.90	11,757.55	8,465.06	-14.30	8,465.07	0.00	0.00	0.00
20,300.00	91.60	359.90	11,754.76	8,565.02	-14.47	8,565.03	0.00	0.00	0.00
20,400.00	91.60	359.90	11,751.97	8,664.98	-14.64	8,664.99	0.00	0.00	0.00
20,500.00	91.60	359.90	11,749.17	8,764.94	-14.81	8,764.95	0.00	0.00	0.00
20,600.00	91.60	359.90	11,746.38	8,864.90	-14.98	8,864.91	0.00	0.00	0.00
20,700.00	91.60	359.90	11,743.59	8,964.86	-15.15	8,964.87	0.00	0.00	0.00
20,800.00	91.60	359.90	11,740.80	9,064.82	-15.31	9,064.84	0.00	0.00	0.00
20,900.00	91.60	359.90	11,738.00	9,164.78	-15.48	9,164.80	0.00	0.00	0.00
21,000.00	91.60	359.90	11,735.21	9,264.74	-15.65	9,264.76	0.00	0.00	0.00
21,100.00	91.60	359.90	11,732.42	9,364.70	-15.82	9,364.72	0.00	0.00	0.00
21,200.00	91.60	359.90	11,729.63	9,464.67	-15.99	9,464.68	0.00	0.00	0.00
21,300.00	91.60	359.90	11,726.84	9,564.63	-16.16	9,564.64	0.00	0.00	0.00
21,400.00	91.60	359.90	11,724.04	9,664.59	-16.33	9,664.60	0.00	0.00	0.00
21,500.00	91.60	359.90	11,721.25	9,764.55	-16.50	9,764.56	0.00	0.00	0.00
21,600.00	91.60	359.90	11,718.46	9,864.51	-16.67	9,864.52	0.00	0.00	0.00
21,700.00 21,800.00 21,827.38 TD at 2182	91.60 91.60 91.60 7.38 - 702H BH	359.90 359.90 359.90	11,715.67 11,712.87 11,712.11	9,964.47 10,064.43 10,091.80	-16.83 -17.00 -17.05	9,964.48 10,064.45 10,091.81	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00



Planning Report

Database: EDM 5000.14 Single User Db Franklin Mountain Energy Company: Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Ouray FED COM 702H Well: Wellbore:

Lateral Profile 702H

Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H

3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Minimum Curvature

Desi	ian	Tare	gets

Tar	get l	Name
-----	-------	------

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
702H BHL	0.00	0.07	11,712.11	10,091.80	-17.05	457,244.46	837,070.77	32° 15′ 12.306 N	103° 22' 36.109 W

plan hits target centerPoint

mations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	21.00	21.00	Cenozoic Alluvium (surface)		0.00	359.90
	982.00	982.00	Rustler		0.00	359.90
	1,079.00	1,079.00	Salado		0.00	359.90
	3,004.00	3,004.00	Base Salt		0.00	359.90
	5,300.00	5,300.00	Lamar		0.00	359.90
	5,404.00	5,404.00	Bell Canyon		0.00	359.90
	6,310.00	6,310.00	Cherry Canyon		-1.60	359.90
	7,652.00	7,652.00	Brushy Canyon		-1.60	359.90
	8,961.00	8,961.00	Bone Spring Lime		-1.60	359.90
	8,987.00	8,987.00	Avalon		-1.60	359.90
	10,078.00	10,078.00	First Bone Spring Sand		-1.60	359.90
	10,246.00	10,246.00	Second Bone Spring Carbonates		-1.60	359.90
	10,653.00	10,653.00	Second Bone Spring Sand		-1.60	359.90
	11,177.00	11,177.00	Third Bone Spring Carbonates		-1.60	359.90
	11,623.09	11,617.85	Third Bone Spring Sand		-1.60	359.90
	12,189.45	11,966.20	Wolfcamp		-1.60	359.90
	12,320.43	11,977.56	11994'TVD @ 0'VS 91.6° UpDip		-1.60	359.90

Plan Annota	ations				
	Measured	Vertical	Local Coor	dinates	
	Depth	Depth	+N/-S	+E/-W	
	(ft)	(ft)	(ft)	(ft)	Comment
	11,404.81	11,404.81	0.00	0.00	Start Build 10.00
	12,320.81	11,977.55	588.95	-1.00	Start 9506.57 hold at 12320.81 MD
	21,827.38	11,712.11	10,091.80	-17.05	TD at 21827.38



Franklin Mountain Energy

Georgetown - Ouray Site Lea County NM (NAD 83) Ouray FED COM 702H

Lateral Profile 702H

Plan: Plan #1

Standard Planning Report - Geographic

08 July, 2019



EDM 5000.14 Single User Db Database: Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Well: Ouray FED COM 702H

Lateral Profile 702H

Design: Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H

3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Minimum Curvature

Project Georgetown - Ouray Site, 6 - well pad

Map System: Geo Datum:

Map Zone:

Wellbore:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site Lea County NM (NAD 83)

447,152.68 usft Northing: Site Position: Latitude: 32° 13' 32.450 N 103° 22' 36.957 W Мар Easting: 837,087.82 usft Longitude: From: **Position Uncertainty:** 0.00 ft **Slot Radius:** 13.200 in **Grid Convergence:** 0.51°

Well Ouray FED COM 702H

Well Position +N/-S 0.00 ft Northing: 447,152.68 usft Latitude: 32° 13' 32.450 N +E/-W 0.00 ft Easting: 837,087.82 usft Longitude: 103° 22' 36.957 W 0.00 ft Wellhead Elevation: Ground Level: **Position Uncertainty** 3,392.00 ft

Wellbore Lateral Profile 702H **Magnetics Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) 0.00000000 User Defined 4/16/2019 0.00 0.00

Design Plan #1 **Audit Notes: PROTOTYPE** Version: Phase: Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 359.90

Plan Sections	s									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,404.81	0.00	0.00	11,404.81	0.00	0.00	0.00	0.00	0.00	0.00	
12,320.81	91.60	359.90	11,977.55	588.95	-1.00	10.00	10.00	0.00	359.90	
21,827.38	91.60	359.90	11,712.11	10,091.80	-17.05	0.00	0.00	0.00	0.00	702H BHL



Planning Report - Geographic

Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Lea County NM (NAD 83) Well: Ouray FED COM 702H

Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method:

d: Minimum Curvature

Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD)

3392' + 21'RKB @ 3413.00ft (TBD)

Planned Surv	/ey								
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
21.00		0.00	21.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
	oic Alluvium	(surface)							
100.00		0.00	100.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
200.00		0.00 0.00	200.00 300.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
300.00 400.00		0.00	400.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103 22 36.957 W 103° 22' 36.957 W
500.00		0.00	500.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
600.00		0.00	600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
700.00	0.00	0.00	700.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
800.00		0.00	800.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
900.00		0.00	900.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
982.00		0.00	982.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
Rustle 1,000.00		0.00	1,000.00	0.00	0.00	447.152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
1,079.00		0.00	1,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
Salado		0.00	.,0.0.00	0.00	0.00	,.02.00	331,331.132	02 .0 0200	
1,100.00		0.00	1,100.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
1,200.00		0.00	1,200.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
1,300.00		0.00	1,300.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
1,400.00		0.00	1,400.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
1,500.00 1,600.00		0.00 0.00	1,500.00 1,600.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
1,700.00		0.00	1,700.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
1,800.00		0.00	1,800.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
1,900.00		0.00	1,900.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
2,000.00		0.00	2,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
2,100.00		0.00	2,100.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
2,200.00		0.00 0.00	2,200.00	0.00 0.00	0.00 0.00	447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
2,300.00 2,400.00		0.00	2,300.00 2,400.00	0.00	0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N	103 22 36.957 W 103° 22' 36.957 W
2,500.00		0.00	2,500.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
2,600.00		0.00	2,600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
2,700.00	0.00	0.00	2,700.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
2,800.00		0.00	2,800.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
2,900.00		0.00	2,900.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
3,000.00 3,004.00		0.00 0.00	3,000.00 3,004.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
3,004.00		0.00	3,004.00	0.00	0.00	447,152.00	037,007.02	32 13 32.430 N	103 22 30.937 W
3,100.00		0.00	3,100.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
3,200.00		0.00	3,200.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
3,300.00		0.00	3,300.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
3,400.00		0.00	3,400.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
3,500.00		0.00	3,500.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
3,600.00		0.00	3,600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
3,700.00 3,800.00		0.00 0.00	3,700.00 3,800.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
3,900.00		0.00	3,900.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
4,000.00		0.00	4,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
4,100.00		0.00	4,100.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
4,200.00		0.00	4,200.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
4,300.00		0.00	4,300.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
4,400.00		0.00	4,400.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
4,500.00	0.00	0.00	4,500.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W



Database: EDM 5000.14 Single User Db Franklin Mountain Energy Company: Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Ouray FED COM 702H Well: Wellbore: Lateral Profile 702H

Plan #1

Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: **Survey Calculation Method:** Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Design:	Plan	#1							
Planned Surv	<i>r</i> ey								
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,600.00		0.00	4,600.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
4,700.00		0.00	4,700.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
4,800.00		0.00	4,800.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
4,900.00		0.00	4,900.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
5,000.00		0.00	5,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W
5,100.00 5,200.00		0.00 0.00	5,100.00 5,200.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
5,300.00		0.00	5,300.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
Lamar	0.00	0.00	0,000.00	0.00	0.00	,.02.00	00.,0002	02 .0 0200	.00 11 00.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
5,404.00	0.00	0.00	5,404.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
Bell Ca									
5,500.00		0.00	5,500.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
5,600.00		0.00	5,600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
5,700.00 5,800.00		0.00 0.00	5,700.00 5,800.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
5,900.00		0.00	5,900.00	0.00	0.00	447.152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
6,000.00		0.00	6,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
6,100.00		0.00	6,100.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
6,200.00	0.00	0.00	6,200.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
6,300.00		0.00	6,300.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
6,310.00		0.00	6,310.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
	Canyon	0.00	6,400.00	0.00	0.00	447,152.68	837,087.82	22° 12' 22 450 N	103° 22' 36.957 W
6,400.00 6,500.00		0.00 0.00	6,500.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103 22 36.957 W 103° 22' 36.957 W
6,600.00		0.00	6,600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
6,700.00		0.00	6,700.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
6,800.00		0.00	6,800.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
6,900.00		0.00	6,900.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,000.00		0.00	7,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,100.00 7,200.00		0.00 0.00	7,100.00 7,200.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
7,300.00		0.00	7,200.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,400.00		0.00	7,400.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,500.00		0.00	7,500.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
7,600.00		0.00	7,600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,652.00		0.00	7,652.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
	Canyon	0.00	7,700.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,700.00 7,800.00		0.00 0.00	7,700.00	0.00	0.00 0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
7,900.00		0.00	7,900.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,000.00		0.00	8,000.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,100.00		0.00	8,100.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,200.00		0.00	8,200.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,300.00		0.00	8,300.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,400.00 8,500.00		0.00 0.00	8,400.00 8,500.00	0.00 0.00	0.00 0.00	447,152.68 447,152.68	837,087.82 837,087.82	32° 13' 32.450 N 32° 13' 32.450 N	103° 22' 36.957 W 103° 22' 36.957 W
8,600.00		0.00	8,600.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,700.00		0.00	8,700.00	0.00	0.00	447,152.68	837,087.82	32° 13' 32.450 N	103° 22' 36.957 W
8,800.00		0.00	8,800.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
8,900.00		0.00	8,900.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
8,961.00		0.00	8,961.00	0.00	0.00	447,152.68	837,087.82	32° 13′ 32.450 N	103° 22' 36.957 W
Bone S	Spring Lime								



Planning Report - Geographic

Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Site: Lea County NM (NAD 83) Well: Ouray FED COM 702H

11994'TVD @ 0'VS 91.6° UpDip

Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference: TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Minimum Curvature

Planned Survey Measured Vertical Map Map Depth Inclination Azimuth Depth +N/-S +E/-W **Northing Easting** (ft) (usft) (usft) (ft) (ft) (ft) (°) (°) Latitude Longitude 8,987.00 0.00 0.00 8,987.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W **Avalon** 9,000.00 0.00 0.00 9,000.00 0.00 0.00 447.152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 9,100.00 0.00 0.00 9,100.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 32° 13′ 32.450 N 103° 22' 36.957 W 9,200.00 0.00 0.00 9 200 00 0.00 0.00 447,152.68 837,087.82 9.300.00 0.00 0.00 9.300.00 0.00 0.00 447.152.68 837.087.82 32° 13' 32.450 N 103° 22' 36.957 W 9.400.00 0.00 0.00 9.400.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 9,500.00 0.00 0.00 9,500.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 9.600.00 0.00 0.00 9.600.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 9,700.00 0.00 0.00 9.700.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 32° 13′ 32.450 N 9,800.00 0.00 0.00 9,800.00 0.00 0.00 447,152.68 837,087.82 103° 22' 36.957 W 0.00 0.00 0.00 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 9 900 00 9 900 00 0.00 447,152.68 10,000.00 0.00 0.00 10,000.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 10,078.00 0.00 0.00 10,078.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W First Bone Spring Sand 10,100.00 0.00 0.00 10,100.00 0.00 0.00 447,152.68 837.087.82 32° 13' 32.450 N 103° 22' 36.957 W 10,200.00 0.00 0.00 10,200.00 0.00 0.00 837,087.82 32° 13' 32.450 N 447.152.68 103° 22' 36.957 W 0.00 10,246.00 0.00 0.00 837,087.82 32° 13' 32.450 N 10,246.00 0.00 447,152.68 103° 22' 36.957 W **Second Bone Spring Carbonates** 10,300.00 0.00 0.00 10,300.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 32° 13' 32.450 N 10,400.00 0.00 0.00 10,400.00 0.00 0.00 447,152.68 837,087.82 103° 22' 36.957 W 103° 22' 36.957 W 10,500.00 0.00 0.00 10.500.00 0.00 0.00 447.152.68 837,087.82 32° 13' 32.450 N 10,600.00 32° 13' 32.450 N 10,600.00 0.00 0.00 0.00 0.00 447,152.68 837,087.82 103° 22' 36.957 W 10,653.00 0.00 0.00 10,653.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W **Second Bone Spring Sand** 10,700.00 0.00 10.700.00 0.00 0.00 837,087.82 32° 13' 32.450 N 0.00 447,152.68 103° 22' 36 957 W 10.800.00 0.00 0.00 10.800.00 0.00 0.00 447.152.68 837.087.82 32° 13' 32.450 N 103° 22' 36.957 W 10,900.00 0.00 0.00 10,900.00 0.00 0.00 447,152.68 837.087.82 32° 13' 32.450 N 103° 22' 36.957 W 32° 13' 32.450 N 0.00 0.00 0.00 0.00 447,152.68 837,087.82 103° 22' 36.957 W 11,000.00 11.000.00 11 100 00 0.00 0.00 11.100.00 0.00 0.00 447.152.68 837.087.82 32° 13' 32.450 N 103° 22' 36.957 W 11,177.00 0.00 0.00 11,177.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W Third Bone Spring Carbonates 11,200.00 0.00 0.00 11,200.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 11,300.00 11,300.00 0.00 0.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 11,400.00 0.00 0.00 11,400.00 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W 11,404.81 0.00 0.00 11,404.81 0.00 0.00 447,152.68 837,087.82 32° 13' 32.450 N 103° 22' 36.957 W Start Build 10.00 103° 22' 36.956 W 359.90 -0.01 11,500.00 9.52 11,499.56 7.89 447,160.57 837,087.81 32° 13' 32.528 N 11 600 00 19 52 359 90 11 596 25 32 93 -0.06 447,185.61 837,087.76 32° 13' 32.775 N 103° 22' 36.954 W 359.90 11,623.09 21.83 11,617.85 41.08 -0.07447,193.76 837,087.75 32° 13' 32.856 N 103° 22' 36.954 W Third Bone Spring Sand 29.52 359.90 11,687.11 74.37 -0.13 447,227.05 837,087.69 32° 13' 33.185 N 103° 22' 36.951 W 11,700.00 11,769.40 11,800.00 39.52 359.90 130.97 -0.22447,283.65 837,087.60 32° 13' 33.745 N 103° 22' 36.946 W 11,900.00 49.52 359.90 11,840.62 200.99 -0.34 447,353.67 837,087.48 32° 13' 34.438 N 103° 22' 36.940 W 12,000.00 59.52 359.90 11,898.59 282.32 -0.48447,435.00 837,087.34 32° 13' 35.243 N 103° 22' 36.933 W 32° 13' 36.135 N 12,100.00 69.52 359.90 11,941.55 372.48 -0.63447,525.16 837,087.19 103° 22' 36.926 W 32° 13' 36.985 N 103° 22' 36.919 W 12,189.45 78.46 359.90 11,966.20 458.37 -0.77447,611.05 837,087.04 Wolfcamp 79.52 359.90 11.968.21 468.73 -0.79447.621.41 837.087.03 32° 13' 37.087 N 103° 22' 36.918 W 12.200.00 837,086.86 103° 22' 36.909 W 12,300.00 89.52 359.90 11,977.75 568.14 -0.96447,720.82 32° 13' 38.071 N 12,320.43 91.56 359.90 11,977.56 588 57 -0.99447,741.25 837,086.82 32° 13' 38.273 N 103° 22' 36.908 W



Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Site: Lea County NM (NAD 83) Well: Ouray FED COM 702H

Wellbore: Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

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Planned Surv	ey								
Measured			Vertical			Мар	Мар		
Depth	Inclination		Depth	+N/-S	+E/-W	Northing	Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
12,320.81	91.60	359.90	11,977.55	588.95	-1.00	447,741.63	837,086.82	32° 13′ 38.277 N	103° 22' 36.908 W
Start 9506.57 hold at 12320.81 MD									
12,400.00		359.90	11,975.34	668.11	-1.13	447,820.79	837,086.69	32° 13' 39.060 N	103° 22' 36.901 W
12,500.00		359.90	11,972.55	768.07	-1.30	447,920.75	837,086.52	32° 13' 40.049 N 32° 13' 41.039 N	103° 22' 36.893 W
12,600.00 12,700.00		359.90 359.90	11,969.75 11,966.96	868.03 967.99	-1.47 -1.64	448,020.71 448,120.67	837,086.35 837,086.18	32° 13' 42.028 N	103° 22' 36.884 W 103° 22' 36.876 W
12,800.00		359.90	11,964.17	1,067.95	-1.80	448,220.63	837,086.01	32° 13' 43.017 N	103° 22' 36.867 W
12,900.00		359.90	11,961.38	1,167.91	-1.97	448,320.59	837,085.85	32° 13' 44.006 N	103° 22' 36.859 W
13,000.00		359.90	11,958.59	1,267.87	-2.14	448,420.55	837,085.68	32° 13' 44.995 N	103° 22' 36.851 W
13,100.00	91.60	359.90	11,955.79	1,367.84	-2.31	448,520.51	837,085.51	32° 13′ 45.984 N	103° 22' 36.842 W
13,200.00		359.90	11,953.00	1,467.80	-2.48	448,620.47	837,085.34	32° 13' 46.973 N	103° 22' 36.834 W
13,300.00		359.90	11,950.21	1,567.76	-2.65	448,720.43	837,085.17	32° 13' 47.962 N	103° 22' 36.826 W
13,400.00		359.90	11,947.42	1,667.72	-2.82	448,820.39	837,085.00	32° 13' 48.951 N	103° 22' 36.817 W
13,500.00		359.90	11,944.62	1,767.68	-2.99 2.16	448,920.36	837,084.83	32° 13′ 49.940 N	103° 22' 36.809 W
13,600.00 13,700.00		359.90 359.90	11,941.83 11,939.04	1,867.64 1,967.60	-3.16 -3.32	449,020.32 449,120.28	837,084.66 837,084.49	32° 13' 50.929 N 32° 13' 51.919 N	103° 22' 36.800 W 103° 22' 36.792 W
13,800.00		359.90	11,939.04	2,067.56	-3.49	449,120.28	837,084.33	32° 13' 52.908 N	103° 22' 36.784 W
13,900.00		359.90	11,933.46	2,167.52	-3.66	449,320.20	837,084.16	32° 13' 53.897 N	103° 22' 36.775 W
14,000.00		359.90	11,930.66	2,267.48	-3.83	449,420.16	837,083.99	32° 13' 54.886 N	103° 22' 36.767 W
14,100.00	91.60	359.90	11,927.87	2,367.44	-4.00	449,520.12	837,083.82	32° 13' 55.875 N	103° 22' 36.758 W
14,200.00		359.90	11,925.08	2,467.40	-4.17	449,620.08	837,083.65	32° 13′ 56.864 N	103° 22' 36.750 W
14,300.00		359.90	11,922.29	2,567.37	-4.34	449,720.04	837,083.48	32° 13' 57.853 N	103° 22' 36.742 W
14,400.00		359.90	11,919.50	2,667.33	-4.51	449,820.00	837,083.31	32° 13' 58.842 N	103° 22' 36.733 W
14,500.00		359.90	11,916.70	2,767.29	-4.68	449,919.96	837,083.14	32° 13' 59.831 N	103° 22' 36.725 W
14,600.00 14,700.00		359.90 359.90	11,913.91 11,911.12	2,867.25 2,967.21	-4.84 -5.01	450,019.92 450,119.88	837,082.97 837,082.81	32° 14' 0.820 N 32° 14' 1.809 N	103° 22' 36.716 W 103° 22' 36.708 W
14,800.00		359.90	11,908.33	3,067.17	-5.18	450,719.88	837,082.64	32° 14' 2.799 N	103° 22' 36.700 W
14,900.00		359.90	11,905.53	3,167.13	-5.35	450,319.80	837,082.47	32° 14' 3.788 N	103° 22' 36.691 W
15,000.00		359.90	11,902.74	3,267.09	-5.52	450,419.77	837,082.30	32° 14' 4.777 N	103° 22' 36.683 W
15,100.00	91.60	359.90	11,899.95	3,367.05	-5.69	450,519.73	837,082.13	32° 14' 5.766 N	103° 22' 36.674 W
15,200.00		359.90	11,897.16	3,467.01	-5.86	450,619.69	837,081.96	32° 14' 6.755 N	103° 22' 36.666 W
15,300.00		359.90	11,894.37	3,566.97	-6.03	450,719.65	837,081.79	32° 14' 7.744 N	103° 22' 36.658 W
15,400.00		359.90	11,891.57	3,666.94	-6.20	450,819.61	837,081.62	32° 14' 8.733 N	103° 22' 36.649 W
15,500.00 15,600.00		359.90 359.90	11,888.78 11,885.99	3,766.90 3,866.86	-6.36 -6.53	450,919.57 451,019.53	837,081.45 837,081.29	32° 14' 9.722 N 32° 14' 10.711 N	103° 22' 36.641 W 103° 22' 36.632 W
15,700.00		359.90	11,883.20	3,966.82	-6.70	451,119.49	837,081.12	32° 14' 10.711 N	103° 22' 36.624 W
15,800.00		359.90	11,880.40	4,066.78	-6.87	451,219.45	837,080.95	32° 14' 12.689 N	103° 22' 36.616 W
15,900.00		359.90	11,877.61	4,166.74	-7.04	451,319.41	837,080.78	32° 14' 13.679 N	103° 22' 36.607 W
16,000.00		359.90	11,874.82	4,266.70	-7.21	451,419.37	837,080.61	32° 14' 14.668 N	103° 22' 36.599 W
16,100.00		359.90	11,872.03	4,366.66	-7.38	451,519.33	837,080.44	32° 14' 15.657 N	103° 22' 36.590 W
16,200.00		359.90	11,869.24	4,466.62	-7.55	451,619.29	837,080.27	32° 14' 16.646 N	103° 22' 36.582 W
16,300.00		359.90	11,866.44	4,566.58	-7.72	451,719.25	837,080.10	32° 14' 17.635 N	103° 22' 36.574 W
16,400.00		359.90	11,863.65	4,666.54	-7.88	451,819.21	837,079.93	32° 14' 18.624 N	103° 22' 36.565 W
16,500.00 16,600.00		359.90 359.90	11,860.86 11,858.07	4,766.50	-8.05 -8.22	451,919.18 452,019.14	837,079.77	32° 14' 19.613 N	103° 22' 36.557 W 103° 22' 36.548 W
16,700.00		359.90	11,855.28	4,866.47 4,966.43	-0.22 -8.39	452,019.14 452,119.10	837,079.60 837,079.43	32° 14' 20.602 N 32° 14' 21.591 N	103 22 36.546 W
16,800.00		359.90	11,852.48	5,066.39	-8.56	452,219.06	837,079.26	32° 14' 22.580 N	103° 22' 36.532 W
16,900.00		359.90	11,849.69	5,166.35	-8.73	452,319.02	837,079.09	32° 14' 23.569 N	103° 22' 36.523 W
17,000.00		359.90	11,846.90	5,266.31	-8.90	452,418.98	837,078.92	32° 14' 24.559 N	103° 22' 36.515 W
17,100.00		359.90	11,844.11	5,366.27	-9.07	452,518.94	837,078.75	32° 14' 25.548 N	103° 22' 36.506 W
17,200.00		359.90	11,841.31	5,466.23	-9.24	452,618.90	837,078.58	32° 14' 26.537 N	103° 22' 36.498 W
17,300.00		359.90	11,838.52	5,566.19	-9.40	452,718.86	837,078.41	32° 14' 27.526 N	103° 22' 36.490 W
17,400.00		359.90	11,835.73	5,666.15	-9.57 0.74	452,818.82	837,078.25	32° 14' 28.515 N	103° 22' 36.481 W
17,500.00	91.60	359.90	11,832.94	5,766.11	-9.74	452,918.78	837,078.08	32° 14' 29.504 N	103° 22' 36.473 W



Database: EDM 5000.14 Single User Db Company: Franklin Mountain Energy Project: Georgetown - Ouray Site Site: Lea County NM (NAD 83) Well: Ouray FED COM 702H Wellbore: Lateral Profile 702H

Design: Plan #1

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H 3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Design:	Plan	#1								
Planned Surv	/ev									
Measured			Vertical			Мар	Мар			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting			
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude	
47 000 00		359.90	44 000 45			450.040.74	007.077.04		103° 22' 36.464 W	
17,600.00 17,700.00		359.90	11,830.15 11,827.35	5,866.07 5,966.04	-9.91 -10.08	453,018.74 453,118.70	837,077.91 837,077.74	32° 14' 30.493 N 32° 14' 31.482 N	103° 22' 36.456 W	
17,700.00		359.90	11,824.56	6,066.00	-10.06	453,116.70	837,077.57	32° 14' 31.462 N	103° 22' 36.448 W	
17,800.00		359.90	11,824.30	•	-10.23 -10.42	453,318.62	837,077.40	32° 14' 33.460 N	103° 22' 36.439 W	
18,000.00		359.90	11,818.98	6,165.96 6,265.92	-10.42 -10.59	453,418.59	837,077.23	32° 14' 33.460 N	103° 22' 36.431 W	
18,100.00		359.90	11,816.19	6,365.88	-10.59	453,518.55	837,077.06	32° 14' 35.439 N	103° 22' 36.422 W	
18,200.00		359.90	11,813.39	6,465.84	-10.70	453,618.51	837,076.89	32° 14' 36.428 N	103° 22' 36.414 W	
18,300.00		359.90	11,810.60	6,565.80	-10.92	453,718.47	837,076.73	32° 14' 37.417 N	103° 22' 36.406 W	
18,400.00		359.90	11,810.00	6,665.76	-11.09	453,818.43	837,076.56	32° 14' 38.406 N	103° 22' 36.397 W	
18,500.00		359.90	11,805.02	6,765.72	-11.43	453,918.39	837,076.39	32° 14' 39.395 N	103° 22' 36.389 W	
18,600.00		359.90	11,802.22	6,865.68	-11.60	454,018.35	837,076.22	32° 14' 40.384 N	103° 22' 36.380 W	
18,700.00		359.90	11,799.43	6,965.64	-11.77	454,118.31	837,076.05	32° 14' 41.373 N	103° 22' 36.372 W	
18,800.00		359.90	11,796.64	7,065.60	-11.94	454,218.27	837,075.88	32° 14' 42.362 N	103° 22' 36.364 W	
18,900.00		359.90	11,793.85	7,005.00	-12.11	454,318.23	837,075.71	32° 14' 43.351 N	103° 22' 36.355 W	
19,000.00		359.90	11,791.06	7,105.57	-12.11	454,418.19	837,075.54	32° 14' 44.340 N	103° 22' 36.347 W	
19,100.00		359.90	11,788.26	7,265.33	-12.20	454,518.15	837,075.37	32° 14' 45.329 N	103° 22' 36.338 W	
19,200.00		359.90	11,785.47	7,465.45	-12.61	454,618.11	837,075.21	32° 14' 46.319 N	103° 22' 36.330 W	
19,300.00		359.90	11,782.68	7,565.41	-12.78	454,718.07	837,075.04	32° 14' 47.308 N	103° 22' 36.322 W	
19,400.00		359.90	11,779.89	7,665.37	-12.75	454,818.03	837,074.87	32° 14' 48.297 N	103° 22' 36.313 W	
19,500.00		359.90	11,777.09	7,765.33	-13.12	454,918.00	837,074.70	32° 14' 49.286 N	103° 22' 36.305 W	
19,600.00		359.90	11,774.30	7,865.29	-13.29	455,017.96	837,074.53	32° 14' 50.275 N	103° 22' 36.296 W	
19,700.00		359.90	11,771.51	7,965.25	-13.46	455,117.92	837,074.36	32° 14' 51.264 N	103° 22' 36.288 W	
19,800.00		359.90	11,768.72	8,065.21	-13.63	455,217.88	837,074.19	32° 14' 52.253 N	103° 22' 36.280 W	
19,900.00		359.90	11,765.93	8,165.17	-13.80	455,317.84	837,074.02	32° 14' 53.242 N	103° 22' 36.271 W	
20,000.00		359.90	11,763.13	8,265.14	-13.96	455,417.80	837,073.85	32° 14' 54.231 N	103° 22' 36.263 W	
20,100.00		359.90	11,760.34	8,365.10	-14.13	455,517.76	837,073.69	32° 14' 55.220 N	103° 22' 36.254 W	
20,200.00		359.90	11,757.55	8,465.06	-14.30	455,617.72	837,073.52	32° 14' 56.209 N	103° 22' 36.246 W	
20,300.00		359.90	11,754.76	8,565.02	-14.47	455,717.68	837,073.35	32° 14' 57.199 N	103° 22' 36.238 W	
20,400.00		359.90	11,751.97	8,664.98	-14.64	455,817.64	837,073.18	32° 14' 58.188 N	103° 22' 36.229 W	
20,500.00		359.90	11,749.17	8,764.94	-14.81	455,917.60	837,073.01	32° 14' 59.177 N	103° 22' 36.221 W	
20,600.00	91.60	359.90	11,746.38	8,864.90	-14.98	456,017.56	837,072.84	32° 15' 0.166 N	103° 22' 36.212 W	
20,700.00		359.90	11,743.59	8,964.86	-15.15	456,117.52	837,072.67	32° 15' 1.155 N	103° 22' 36.204 W	
20,800.00		359.90	11,740.80	9,064.82	-15.31	456,217.48	837,072.50	32° 15′ 2.144 N	103° 22' 36.196 W	
20,900.00	91.60	359.90	11,738.00	9,164.78	-15.48	456,317.44	837,072.33	32° 15' 3.133 N	103° 22' 36.187 W	
21,000.00	91.60	359.90	11,735.21	9,264.74	-15.65	456,417.41	837,072.17	32° 15′ 4.122 N	103° 22' 36.179 W	
21,100.00	91.60	359.90	11,732.42	9,364.70	-15.82	456,517.37	837,072.00	32° 15′ 5.111 N	103° 22' 36.170 W	
21,200.00	91.60	359.90	11,729.63	9,464.67	-15.99	456,617.33	837,071.83	32° 15′ 6.100 N	103° 22' 36.162 W	
21,300.00	91.60	359.90	11,726.84	9,564.63	-16.16	456,717.29	837,071.66	32° 15' 7.089 N	103° 22' 36.154 W	
21,400.00		359.90	11,724.04	9,664.59	-16.33	456,817.25	837,071.49	32° 15' 8.079 N	103° 22' 36.145 W	
21,500.00	91.60	359.90	11,721.25	9,764.55	-16.50	456,917.21	837,071.32	32° 15' 9.068 N	103° 22' 36.137 W	
21,600.00	91.60	359.90	11,718.46	9,864.51	-16.67	457,017.17	837,071.15	32° 15′ 10.057 N	103° 22' 36.128 W	
21,700.00	91.60	359.90	11,715.67	9,964.47	-16.83	457,117.13	837,070.98	32° 15′ 11.046 N	103° 22' 36.120 W	
21,800.00		359.90	11,712.87	10,064.43	-17.00	457,217.09	837,070.81	32° 15′ 12.035 N	103° 22' 36.112 W	
21,827.38	91.60	359.90	11,712.11	10,091.80	-17.05	457,244.46	837,070.77	32° 15′ 12.306 N	103° 22' 36.109 W	
TD at 2	1827.38 - 70	2H BHL								



Database: EDM 5000.14 Single User Db Franklin Mountain Energy Company: Project: Georgetown - Ouray Site Lea County NM (NAD 83) Site: Ouray FED COM 702H Well:

Lateral Profile 702H

Design: Plan #1 **Local Co-ordinate Reference:**

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Ouray FED COM 702H

3392' + 21'RKB @ 3413.00ft (TBD) 3392' + 21'RKB @ 3413.00ft (TBD)

Minimum Curvature

Design Targets	
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Target Name

Wellbore:

- hit/miss target Dip Angle Dip Dir. **TVD** +N/-S +E/-W **Northing Easting** - Shape (ft) (ft) (usft) (usft) (ft) Latitude Longitude 702H BHL 0.00 0.07 11,712.11 10,091.80 -17.05 457,244.46 837,070.77 32° 15' 12.306 N 103° 22' 36.109 W

plan hits target centerPoint

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	21.00	21.00	Cenozoic Alluvium (surface)		0.00	359.90
	982.00	982.00	Rustler		0.00	359.90
	1,079.00	1,079.00	Salado		0.00	359.90
	3,004.00	3,004.00	Base Salt		0.00	359.90
	5,300.00	5,300.00	Lamar		0.00	359.90
	5,404.00	5,404.00	Bell Canyon		0.00	359.90
	6,310.00	6,310.00	Cherry Canyon		-1.60	359.90
	7,652.00	7,652.00	Brushy Canyon		-1.60	359.90
	8,961.00	8,961.00	Bone Spring Lime		-1.60	359.90
	8,987.00	8,987.00	Avalon		-1.60	359.90
	10,078.00	10,078.00	First Bone Spring Sand		-1.60	359.90
	10,246.00	10,246.00	Second Bone Spring Carbonates		-1.60	359.90
	10,653.00	10,653.00	Second Bone Spring Sand		-1.60	359.90
	11,177.00	11,177.00	Third Bone Spring Carbonates		-1.60	359.90
	11,623.09	11,617.85	Third Bone Spring Sand		-1.60	359.90
	12,189.45	11,966.20	Wolfcamp		-1.60	359.90
	12,320.43	11,977.56	11994'TVD @ 0'VS 91.6° UpDip		-1.60	359.90

Plan Annotations										
Measure		Local Cool	dinates							
Depth	Depth	+N/-S	+E/-W							
(ft)	(ft)	(ft)	(ft)	Comment						
11,404.8	1 11,404.81	0.00	0.00	Start Build 10.00						
12,320.8	1 11,977.55	588.95	-1.00	Start 9506.57 hold at 12320.81 MD						
21,827.3	8 11,712.11	10,091.80	-17.05	TD at 21827.38						



Hydrogen Sulfide Plan

- A. All personnel shall receive proper awareness H₂S training.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment
 - a. Well Control Equipment
 - i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.
 - ii. Choke manifold with a remotely operated hydraulic choke.
 - iii. Mud/gas separator
 - b. Protective equipment for essential personnel
 - i. Breathing Apparatus
 - 1. Rescue packs (SCBA) 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.
 - 2. Work/Escape packs 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
 - 3. Emergency Escape Packs 4 packs shall be stored in the doghouse for emergency evacuation
 - ii. Auxiliary Rescue Equipment
 - 1. Stretcher
 - 2. Two OSHA full body harnesses
 - 3. 100 feet of 5/8 inches OSHA approved rope
 - 4. 1-20# class ABC fire extinguisher
 - c. H₂S Detection and Monitoring Equipment
 - i. A stationary detector with three sensors will be placed in the doghouse if equipped, set to visually alarm at 10 ppm and audible at 14 ppm. The detector will be calibrated a minimum of every 30 days or as needed. The sensors will be placed in the following places:
 - 1. Rig Floor
 - 2. Below Rig Floor / Near BOPs
 - 3. End of flow line or where well bore fluid is being discharged (near shakers)
 - ii. If H_2S is encountered, measured values and formations will be provided to the BLM.
 - d. Visual Warning Systems
 - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - iii. Two windsocks will be placed in strategic locations, visible from all angles.
 - e. Mud Program
 - i. The Mud program will be designed to minimize the volume of H_2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H_2S bearing zones.



f. Metallurgy

i. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for 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 H_2S contingency plan is required for the proposed well. Based on concentrations of offset wells, proximity to main roads, and distance to populated areas, the radius of exposure created by a potential release was determined to be minimal and low enough to not necessitate an H_2S contingency plan. This will be reevaluated during wellbore construction if H_2S is observed and after the well is on production.



Emergency Contact List:

Vladimir Roudakov, Drilling Engineer Cell 720 933 9784

Rachael Overbey, Project and Regulatory Director Cell 303 570 4057

Franklin Mountain Energy Afterhours Emergency Call Tree: 720-640-7517

EMERGENCY NUMBERS:

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