Form 3160-3 (August 2007)				OMB No	APPROVE 0. 1004-013 uly 31, 201	7
UNITED STATES DEPARTMENT OF THE I BUREAU OF LAND MAN	5. Lease Serial No. NMNM14778					
APPLICATION FOR PERMIT TO I	6. If Indian, Allotee	or Tribe	Name			
la. Type of work: DRILL REENTE	R			7. If Unit or CA Agre	ement, Na	ame and No.
lb. Type of Well: Oil Well Gas Well Other	<b>✓</b> Sin	gle Zone Multip	le Zone	8. Lease Name and V Shanghai Rooster		d 107H
2. Name of Operator XTO Energy, Inc.				9. API Well No. 30-015-	5367	5
3a. Address 6401 Holiday Hill Road, Bldg 5 Midland, Texas 79701	3b. Phone No. 970-769-60	(include area code) 148		10. Field and Pool, or I 96217 Willow Lake;	-	-
<ol> <li>Location of Well (Report location clearly and in accordance with any At surface SESE / 400 FSL / 1185 FEL / LAT 32.123863</li> <li>At proposed prod. zone LOT 36 / 50 FSL / 1320 FEL / LAT 3</li> </ol>	11. Sec., T. R. M. or B SEC 15 / T25S / R2		-			
14. Distance in miles and direction from nearest town or post office*			•	12. County or Parish Eddy		13. State NM
15. Distance from proposed* 400 feet location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)			17. Spacin 959.4	g Unit dedicated to this v	well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	Troposed Septin			M/BIA Bond No. on file UTB000138		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3079 feet	22. Approximate date work will start* 04/07/2023			23. Estimated duration 90 Days		
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas	Order No.1, must be at	tached to the	is form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover the Item 20 above).	ne operation	ns unless covered by an	existing	bond on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	Lands, the	Operator certific     Such other site     BLM.		ormation and/or plans as	may be i	required by the
25. Signature Jessica Dooling		Date 03/31/2023		2023		
Title Regulatory Coordinator						
APPENDICT DHED WALLS Dig	1 -	48/10/9/CHRISTOF 3.31 16:47:32 -06		ALLS	Date	
Title	Office					
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equit	table title to those righ	ts in the sub	ject lease which would e	entitle the	applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as	rime for any po to any matter w	erson knowingly and vithin its jurisdiction.	willfully to n	nake to any department of	or agency	of the United
(Continued on page 2)				*(Inst	ruction	is on page 2)

Accepted for record – NMOCD

JRH 4/6/23

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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Energy

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

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

☐ AMENDED REPORT

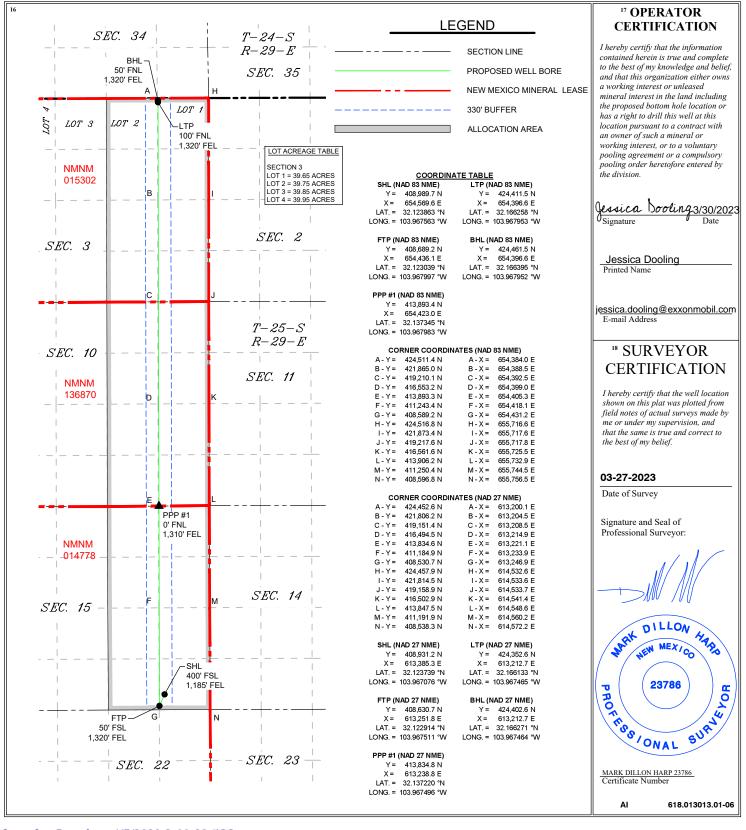
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code	<sup>3</sup> Pool Name		
<b>30-015- 53675</b>		96217 WILLOW LAKE; BONE SPRING, S		3OUTHEAST	
<sup>4</sup> Property Code 333604		<sup>6</sup> Well Number 107H			
<sup>7</sup> OGRID No. <b>005380</b>		<sup>9</sup> Elevation <b>3,079</b> '			

<sup>10</sup> Surface Location UL or lot no. Section Township Rang North/South lin Feet from the East/West line Ρ 25 S 29 E SOUTH 1,185 **EAST EDDY** 15 "Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	3	25 S	29 E		50	NORTH	1,320	EAST	EDDY
12 Dedicated Acres	ated Acres   13 Joint or Infill   14 Consolidation Code		Code 15 Ore	der No.					
959 4									

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



Released to Imaging: 4/7/2023 9:10:29 AM

# State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

# NATURAL GAS MANAGEMENT PLAN

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

# Section 1 – Plan Description Effective May 25, 2021

I. Operator: _XTO Energy, INC. OGRID: _05380 Date: _4/3/2023									
II. Type: ⊠ Original □ Amendment due to □ 19.15.27.9.D(6)(a) NMAC □ 19.15.27.9.D(6)(b) NMAC □ Other.									
If Other, please describe:									
III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.									
Well Name	API	ULSTR	Footages	Anticipated	Anticipated	Anticipated			
				Oil BBL/D	Gas MCF/D	Produced Water BBL/D			
Shanghai Rooster 15-3 Fed 107H		P-15-25S-29E	400' FSL, 1185' FEL	2000	3200	5500			

IV. Central Delivery Point Name: SR2227 100 CTB [Se	ee 19.15.27.9	D)(1)	NMAC1
---	---------------	-------	-------

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Shanghai Rooster 15-3 Fed 107H		TBD	TBD	TBD	TBD	TBD

- VI. Separation Equipment: ⊠ Attach a complete description of how Operator will size separation equipment to optimize gas capture.
- VII. Operational Practices: ⊠ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
- VIII. Best Management Practices: 

  ☐ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

# Section 2 – Enhanced Plan <u>EFFECTIVE APRIL 1, 2022</u>

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

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

## IX. Anticipated Natural Gas Production:

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

# X. Natural Gas Gathering System (NGGS):

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

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

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

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

	A 1	· •	1		4 .*		1		1.
1 1	Affach	( )nerator'	s nlan	to manage	production	in response	to the	increased	line pressure

XIV.	<b>Confidentiality:</b> Operator asserts confidentiality:	ntiality pursuant to	Section 71-2	2-8 NMSA 1	1978 for the	information	provided in
Section	on 2 as provided in Paragraph (2) of Subsection	D of 19.15.27.9 NN	IAC, and atta	aches a full	description of	the specific	information
for w	hich confidentiality is asserted and the basis for	such assertion.					

# Section 3 - Certifications <u>Effective May 25, 2021</u>

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

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

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

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

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

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

# **Section 4 - Notices**

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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

Signature: Jessica Dooling
Printed Name: Jessica Dooling
Title: Regulatory Coordinator
E-mail Address: jessica.dooling@exxonmobil.com
Date: 04/03/2023
Phone: 970-769-6048
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

#### **VI. Separation Equipment:**

XTO Permian Operating, LLC. production tank batteries include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool in conjunction with the total number of wells planned to or existing within the facility. Separation equipment is upgraded prior to well being drilled or completed, if determined to be undersized or needed. The separation equipment is designed and built according to the relevant industry specifications (API Specification 12J and ASME Sec VIII Div I). Other recognized industry publications such as the Gas Processors Suppliers Association (GPSA) are referenced when designing separation equipment to optimize gas capture.

#### **VII. Operational Practices:**

#### **1.** Subsection B.

- During drilling, flare stacks will be located a minimum of 150 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

#### 2. Subsection C.

During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.

For emergencies, equipment malfunction, or if the operator decides to produce oil and gas during well completion:

- Flowlines will be routed for flowback fluids into a completion or storage tank and, if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

#### 3. Subsection D.

- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.
- Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.

 Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

#### 4. Subsection E.

- All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
- Flare stack was installed prior to May 25, 2021 but has been designed for proper size and combustion efficiency. Flare currently has a continuous pilot and is located more than 100 feet from any known well and storage tanks.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

## 5. Subsection F.

- Measurement equipment is installed to measure the volume of natural gas flared from process piping or a flowline piped from the equipment associated with a well and facility associated with the approved application for permit to drill that has an average daily production greater than 60 mcf of natural gas.
- Measurement equipment installed is not designed or equipped with a manifold to allow diversion of natural gas around the metering equipment, except for the sole purpose of inspecting and servicing the measurement equipment, as noted in NMAC 19.15.27.8 Subsection G.

#### **VIII. Best Management Practices:**

- 1. During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- 2. Operator does not flow well (well shut in) during initial production until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational.
- 3. Operator equips storage tanks with an automatic gauging system to reduce venting of natural gas.
- 4. Operator reduces the number of blowdowns by looking for opportunities to coordinate repair and maintenance activities.
- 5. Operator combusts natural gas that would otherwise be vented or flared, when feasible.
- 6. Operator has a flare stack designed in accordance with need and to handle sufficient volume to ensure proper combustion efficiency. Flare stacks are equipped with continuous pilots and securely anchored at least 100 feet (at minimum) from storage tanks and wells.
- 7. Operator minimizes venting (when feasible) through pump downs of vessels and reducing time required to purge equipment before returning equipment to service.
- 8. Operator will shut in wells (when feasible) in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.



# U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report

08/19/2020

**APD ID**: 10400037543

Submission Date: 01/28/2019

Highlighted data reflects the most recent changes

Operator Name: XTO ENERGY INCORPORATED

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL

Well Number: 907H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

# **Section 1 - Geologic Formations**

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
366890	PERMIAN	3080	0	0	OTHER : Quaternary	NONE	N
366891	RUSTLER	2427	644	644	SILTSTONE	USEABLE WATER	N
366888	TOP SALT	2108	963	963	SALT	NONE	N
366885	BASE OF SALT	113	2958	2958	SALT	NONE	N
366892	DELAWARE	-77	3148	3148	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
366893	BONE SPRING	-3839	6910	6910	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
366889	BONE SPRING 1ST	-4781	7852	7852	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
366886	BONE SPRING 2ND	-5801	8881	8881	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	Y
366895	BONE SPRING 3RD	-6668	9748	9748	SANDSTONE	NATURAL GAS, OIL, OTHER, USEABLE WATER : produced water	Y

#### **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M Rating Depth: 10077

**Equipment:** The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP.

Requesting Variance? YES

**Variance request:** A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors. XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

**Testing Procedure:** All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling up on the 9-5/8", the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

**Choke Diagram Attachment:** 

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

Shanghai\_22\_27\_Fed\_5MCM\_20181227083818.pdf

# **BOP Diagram Attachment:**

Shanghai\_22\_27\_Fed\_5MBOP\_20181227083831.pdf

# **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	928	0	928			928	J-55	54.5	ST&C	2.66	1.18	DRY	10.1 6		10.1 6
1	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	7550	0	7550			7550	L-80	40	LT&C	1.32	2.01	DRY	2.41	DRY	2.41
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	20504	0	10077			20504	P- 110	17	BUTT	1.47	1.12	DRY	2.31	DRY	2.31

# **Casing Attachments**

Casing ID: 1 String Type: SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Shanghai\_22\_27\_Fed\_907H\_Csg\_20181227083535.pdf

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

# **Casing Attachments**

Casing ID: 2

String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Shanghai\_22\_27\_Fed\_907H\_Csg\_20181227083545.pdf

Casing ID: 3

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Shanghai\_22\_27\_Fed\_907H\_Csg\_20181227083610.pdf

# **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Тор МБ	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	928	460	1.87	12.9	860.2	100	EconoCem- HLTRRC	None
SURFACE	Tail		0		300	1.35	14.8	405	100	Halcem-C	2% CaCl
INTERMEDIATE	Lead	1003	0	1003	210	1.33	12.9	279.3	100	Halcem-C	2% CaCl

INTERMEDIATE	Lead	1003	1003	7550	2000	1.88	12.9	3760	100	HalCem-C	2% CaCl

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		0		230	1.33	14.8	305.9	100	HalCem-C	2% CaCl
PRODUCTION	Lead		0	2050 4	230	2.69	10.5	618.7	30	NeoCem	None
PRODUCTION	Tail		0		2330	1.61	13.2	3751. 3	30	VersaCem	None

# **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

**Describe what will be on location to control well or mitigate other conditions:** The necessary mud products for weight addition a fluid loss control will be on location at all times.

**Describe the mud monitoring system utilized:** A Pason or Totco will be used to detect changes in loss or gain of mud volume.

# **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	928	OTHER : FW/Native	8.4	8.8							A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hrs to determine: density, viscosity, strength, filtration and pH as necessary. Solids control equipment will be used to operate as a closed loop system.
928	7550	OTHER : Brine/Gel Sweeps	9.8	10.2							A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hrs to determine: density,

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
											viscosity, strength, filtration and pH as necessary. Solids control equipment will be used to operate as a closed loop system.
7550	1007 7	OIL-BASED MUD	9.4	9.7							A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hrs to determine: density, viscosity, strength, filtration and pH as necessary. Solids control equipment will be used to operate as a closed loop system.

# **Section 6 - Test, Logging, Coring**

List of production tests including testing procedures, equipment and safety measures:

Mud logging Unit (2 man) on below intermediate casing. Catch 20' samples fr/2950' to TD

List of open and cased hole logs run in the well:

CBL,CNL,DS,GR,MUDLOG

Coring operation description for the well:

No coring will take place on this well.

# **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5082 Anticipated Surface Pressure: 2865.06

**Anticipated Bottom Hole Temperature(F):** 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

Shanghai\_22\_27\_Fed\_H2S\_Plan\_20181227060909.pdf Shanghai\_22\_27\_Fed\_H2S\_Dia\_4W\_20181227100426.pdf

# **Section 8 - Other Information**

## Proposed horizontal/directional/multi-lateral plan submission:

Shanghai\_22\_27\_Fed\_907H\_DD\_20181227083731.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Shanghai 22 27 Fed 907H GCP 20181227083740.pdf

Other Variance attachment:

Shanghai\_22\_27\_Fed\_FH\_20181227060816.pdf Shanghai\_22\_27\_Fed\_MBS\_20200610064751.pdf

# DRILLING PLAN: BLM COMPLIANCE (Supplement to BLM 3160-3)

XTO Energy Inc.
Shanghai Rooster 15-3 Fed 107H
Projected TD: 25703' MD / 9401' TVD
SHL: 400' FSL & 1185' FEL , Section 15, T25S, R29E
BHL: 50' FNL & 1320' FEL , Section 3, T25S, R29E
Eddy County, NM

#### 1. Geologic Name of Surface Formation

A. Quaternary

#### 2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	641'	Water
Top of Salt	921'	Water
Base of Salt	2951'	Water
Delaware	3142'	Water
Brushy Canyon	5640'	Water/Oil/Gas
Bone Spring	6897'	Water
1st Bone Spring Ss	7860'	Water/Oil/Gas
2nd Bone Spring Ss	8686'	Water/Oil/Gas
Target/Land Curve	9401'	Water/Oil/Gas

<sup>\*\*\*</sup> Hydrocarbons @ Brushy Canyon

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 741' (180' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 5299.99' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 25703 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 4999.99 feet).

#### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 741'	9.625	40	J-55	втс	New	2.62	7.67	21.26
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.35	2.65	3.54
8.75	4000' – 5299.99'	7.625	29.7	HC L-80	Flush Joint	New	2.44	3.78	10.52
6.75	0' - 5199.99'	5.5	23	RY P-110	Semi-Premium	New	1.21	5.38	1.96
6.75	5199.99' - 25703'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.97	2.05

<sup>·</sup> XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry

- · XTO requests to not utilize centralizers in the curve and lateral
- · 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- · Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
- · XTO requests the option to use 5" BTC Float equipment for the the production casing

<sup>\*\*\*</sup> Groundwater depth 40' (per NM State Engineers Office).

#### Wellhead:

- Permanent Wellhead Multibowl System

  A. Starting Head: 11" 10M top flange x 9-5/8" bottom

  B. Tubing Head: 11" 10M bottom flange x 7-1/16" 15M top flange

  · Wellhead will be installed by manufacturer's representatives.

  - · Manufacturer will monitor welding process to ensure appropriate temperature of seal.
  - · Operator will test the 7-5/8" casing per BLM Onshore Order 2
  - $\cdot \ \text{Wellhead Manufacturer representative will not be present for BOP test plug installation}$

#### 4. Cement Program

#### Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 741'

Lead: 140 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water) Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

# 2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 5299.99'

st Stage

Optional Lead: 300 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: -30 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 5640

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water) Tail: 630 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Top of Cement: 0

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5640') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

#### Production Casing: 5.5, 23 New Semi-Flush, RY P-110 casing to be set at +/- 25703'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 4999.99 feet
Tail: 1450 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 5499.99 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

#### 5. Pressure Control Equipment

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2820 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 9.625, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production

hole on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

#### 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Tible Size	Mud Type	(ppg)	(sec/qt)	(cc)
0' - 741'	12.25	FW/Native	8.7-9.2	35-40	NC
741' - 5299.99'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
5299.99' - 25703'	6.75	ОВМ	10-10.5	50-60	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 9-5/8" surface casing with brine solution. A 9.7 ppg -10.2 ppg cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

#### 7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 9.625 casing.

#### 8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

#### 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 160 to 180 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 4889 psi.

#### 10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

# **Delaware Basin Asset - Clean**

Eddy County Shanghai Rooster 15 3 Federal 803H (Plan) SHANGHAI ROOSTER 15-3 107H

**SHANGHAI ROOSTER 15-3 107H** 

Plan: SHANGHAI ROOSTER 15-3 107H

# **Standard Planning Report**

30 March, 2023

#### Planning Report

LMRKPROD3 Database:

Company: Delaware Basin Asset - Clean

Project: **Eddy County** 

Site: Shanghai Rooster 15 3 Federal 803H (Plan) Well: SHANGHAI ROOSTER 15-3 107H Wellbore: SHANGHAI ROOSTER 15-3 107H

SHANGHAI ROOSTER 15-3 107H

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

Minimum Curvature

Eddy County Project

Design:

US State Plane 1927 (Exact solution) Map System: NAD 1927 (NADCON CONUS) Geo Datum:

New Mexico East 3001 Map Zone:

System Datum:

Mean Sea Level

Shanghai Rooster 15 3 Federal 803H (Plan) Site

Northing: 408,825.60 usft Site Position: Latitude: 32° 7' 24.449 N From: Мар Easting: 612,340.60 usft Longitude: 103° 58' 13.628 W

**Position Uncertainty:** 3.0 usft Slot Radius: 13-3/16 "

Well SHANGHAI ROOSTER 15-3 107H

**Well Position** +N/-S 0.0 usft408,931.20 usft Latitude: 32° 7' 25.459 N Northing: +E/-W 0.0 usft Easting: 613,385.30 usft Longitude: 103° 58' 1.475 W 3,081.0 usft

**Position Uncertainty** 0.0 usft Wellhead Elevation: usft **Ground Level:** 

0.19 **Grid Convergence:** 

SHANGHAI ROOSTER 15-3 107H Wellbore

Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) IGRF2020 3/27/2023 6.51 59.69 47,211.47582300

SHANGHAI ROOSTER 15-3 107H Design

Audit Notes:

**PROTOTYPE** Tie On Depth: 0.0 Version: Phase:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 359.86 0.0 0.0 0.0

**Plan Survey Tool Program** Date 3/30/2023

**Depth From** Depth To

(usft) (usft) Survey (Wellbore) **Tool Name** Remarks

SHANGHAI ROOSTER 15-3 107 0.0 25,703.2 XOM\_R2OWSG MWD+IFR1+ 1

OWSG MWD + IFR1 + Multi-St

## **Planning Report**

Database: LMRKPROD3

Company: Delaware Basin Asset - Clean

Project: Eddy County

Site: Shanghai Rooster 15 3 Federal 803H (Plan)
Well: SHANGHAI ROOSTER 15-3 107H
Wellbore: SHANGHAI ROOSTER 15-3 107H
Design: SHANGHAI ROOSTER 15-3 107H

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

lan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,598.9	13.98	187.38	1,592.0	-84.1	-10.9	2.00	2.00	0.00	187.38	
5,421.7	13.98	187.38	5,301.6	-999.9	-129.5	0.00	0.00	0.00	0.00	
5,561.5	0.00	0.00	5,440.0	-1,016.7	-131.7	10.00	-10.00	0.00	180.00	
8,806.3	0.00	0.00	8,684.8	-1,016.7	-131.7	0.00	0.00	0.00	0.00	
9,931.3	90.00	359.86	9,401.0	-300.5	-133.5	8.00	0.00	0.00	359.86	107H_FTP 15,135.4
90.00		359.86	9,401.0	4,903.6	-146.5	0.00	0.00	0.00	0.00	107H_PPP1
25,653.2	90.00	359.86	9,401.0	15,421.4	-172.8	0.00	0.00	0.00	0.00	107H_LTP 25,703.2
90.00		359.86	9,401.0	15,471.4	-172.9	0.00	0.00	0.00	0.00	107H_BHL

## Planning Report

LMRKPROD3 Database:

Company: Delaware Basin Asset - Clean

Project: **Eddy County** 

Shanghai Rooster 15 3 Federal 803H (Plan) Site: Well: SHANGHAI ROOSTER 15-3 107H SHANGHAI ROOSTER 15-3 107H Wellbore:

Local Co-ordinate Reference:

**Survey Calculation Method:** 

TVD Reference: MD Reference: North Reference:

RKB(30') @ 3111.0usft

RKB(30') @ 3111.0usft

Well SHANGHAI ROOSTER 15-3 107H

Grid

sign:	SHANGHAI R	OOSTER 15-3	107H						
nned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0 Start Build 2	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	2.00	187.38	1,000.0	-1.7	-0.2	-1.7	2.00	2.00	0.00
1,000.0	4.00	187.38	1,000.0	-1.7 -6.9	-0.2 -0.9	-1.7 -6.9	2.00		
,	6.00		,					2.00	0.00 0.00
1,200.0	6.00	187.38	1,199.5	-15.6	-2.0	-15.6	2.00	2.00	0.00
1,300.0	8.00	187.38	1,298.7	-27.6	-3.6	-27.6	2.00	2.00	0.00
1,400.0	10.00	187.38	1,397.5	-43.2	-5.6	-43.1	2.00	2.00	0.00
1,500.0	12.00	187.38	1,495.6	-62.1	-8.0	-62.1	2.00	2.00	0.00
1,598.9	13.98	187.38	1,592.0	-84.1	-10.9	-84.1	2.00	2.00	0.00
Start 3822.8	hold at 1598.9 N	/ID							
1,600.0	13.98	187.38	1,593.1	-84.4	-10.9	-84.4	0.00	0.00	0.00
1,700.0	13.98	187.38	1,690.1	-108.3	-14.0	-108.3	0.00	0.00	0.00
1,700.0	13.98	187.38	1,090.1	-108.3 -132.3	-14.0 -17.1	-108.3	0.00	0.00	0.00
1,800.0	13.98	187.38	1,787.1	-132.3 -156.3	-17.1 -20.2	-132.3 -156.2	0.00	0.00	0.00
2.000.0	13.98	187.38	1,884.2	-156.3 -180.2	-20.2 -23.3	-156.2 -180.2	0.00	0.00	0.00
2,100.0	13.98	187.38	2,078.2	-100.2 -204.2	-23.3 -26.4	-160.2 -204.1	0.00	0.00	0.00
2,200.0	13.98	187.38	2,175.3	-228.1	-29.6	-228.0	0.00	0.00	0.00
2,300.0	13.98	187.38	2,272.3	-252.1	-32.7	-252.0	0.00	0.00	0.00
2,400.0	13.98	187.38	2,369.4	-276.0	-35.8	-275.9	0.00	0.00	0.00
2,500.0	13.98	187.38	2,466.4	-300.0	-38.9	-299.9	0.00	0.00	0.00
2,600.0	13.98	187.38	2,563.4	-323.9	-42.0	-323.8	0.00	0.00	0.00
2,700.0	13.98	187.38	2,660.5	-347.9	-45.1	-347.8	0.00	0.00	0.00
2,800.0	13.98	187.38	2,757.5	-371.8	-48.2	-371.7	0.00	0.00	0.00
2,900.0	13.98	187.38	2,854.6	-395.8	-51.3	-395.7	0.00	0.00	0.00
3,000.0	13.98	187.38	2,951.6	-419.8	-54.4	-419.6	0.00	0.00	0.00
3,100.0	13.98	187.38	3,048.6	-443.7	-57.5	-443.6	0.00	0.00	0.00
3,200.0	13.98	187.38	3,145.7	-467.7	-60.6	-467.5	0.00	0.00	0.00
3,300.0	13.98	187.38	3,242.7	-491.6	-63.7	-491.5	0.00	0.00	0.00
3,400.0	13.98	187.38	3,339.8	-515.6	-66.8	-515.4	0.00	0.00	0.00
3,500.0	13.98	187.38	3,436.8	-539.5	-69.9	-539.4	0.00	0.00	0.00
3,600.0	13.98	187.38	3,533.8	-563.5	-73.0	-563.3	0.00	0.00	0.00
3,700.0	13.98	187.38	3,630.9	-587.4	-76.1	-587.3	0.00	0.00	0.00
3,800.0	13.98	187.38	3,727.9	-611.4	-79.2	-611.2	0.00	0.00	0.00
3,900.0	13.98	187.38	3,824.9	-635.3	-82.3	-635.1	0.00	0.00	0.00
4,000.0	13.98	187.38	3,922.0	-659.3	-85.4	-659.1	0.00	0.00	0.00
4,100.0	13.98	187.38	4,019.0	-683.3	-88.5	-683.0	0.00	0.00	0.00
4,200.0	13.98	187.38	4,116.1	-707.2	-91.6	-707.0	0.00	0.00	0.00
4,300.0	13.98	187.38	4,213.1	-707.2 -731.2	-91.0 -94.7	-707.0	0.00	0.00	0.00
4,400.0	13.98	187.38	4,310.1	-751.2 -755.1	-94.7 -97.8	-750.9 -754.9	0.00	0.00	0.00
4,500.0	13.98	187.38	4,407.2	-779.1	-100.9	-734.9 -778.8	0.00	0.00	0.00
4,600.0	13.98	187.38	4,504.2	-803.0	-104.0	-802.8	0.00	0.00	0.00
4,700.0	13.98	187.38	4,601.3	-827.0	-107.1	-826.7	0.00	0.00	0.00
4,800.0	13.98	187.38	4,698.3	-850.9	-110.2	-850.7	0.00	0.00	0.00
4,900.0	13.98	187.38	4,795.3	-874.9	-113.3	-874.6	0.00	0.00	0.00
5,000.0	13.98	187.38	4,892.4	-898.8	-116.4	-898.6	0.00	0.00	0.00
5,100.0	13.98	187.38	4,989.4	-922.8	-119.5	-922.5	0.00	0.00	0.00
5,200.0	13.98	187.38	5,086.5	-946.8	-122.7	-946.5	0.00	0.00	0.00
5,300.0	13.98	187.38	5,183.5	-970.7	-125.8	-970.4	0.00	0.00	0.00
5,400.0	13.98	187.38	5,280.5	-994.7	-128.9	-994.4	0.00	0.00	0.00
5,421.7	13.98	187.38	5,301.6	-999.9	-129.5	-999.6	0.00	0.00	0.00
Start Drop -1	10.00								
5,500.0	6.15	187.38	5,378.6	-1,013.4	-131.3	-1,013.1	10.00	-10.00	0.00

# **Planning Report**

Database: LMRKPROD3

Company: Delaware Basin Asset - Clean

Project: Eddy County

Site: Shanghai Rooster 15 3 Federal 803H (Plan)
Well: SHANGHAI ROOSTER 15-3 107H
Wellbore: SHANGHAI ROOSTER 15-3 107H
Design: SHANGHAI ROOSTER 15-3 107H

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

n:	SHANGHAIR	OOSTER 15-3	107H						
ned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,561.5	0.00	0.00	5,440.0	-1,016.7	-131.7	-1,016.4	10.00	-10.00	0.00
Start 3244.8	hold at 5561.5 N	ИD							
8,806.3	0.00	0.00	8,684.8	-1,016.7	-131.7	-1,016.4	0.00	0.00	0.00
Start Turn 0	.00								
8,900.0	7.50	359.86	8,778.2	-1,010.6	-131.7	-1,010.2	8.00	8.00	0.00
9,000.0	15.50	359.86	8,876.2	-990.7	-131.8	-990.3	8.00	8.00	0.00
9,100.0	23.50	359.86	8,970.3	-957.3	-131.9	-957.0	8.00	8.00	0.00
9,200.0	31.50	359.86	9,059.0	-911.2	-132.0	-910.9	8.00	8.00	0.00
9,300.0	39.50	359.86	9,140.3	-853.2	-132.1	-852.8	8.00	8.00	0.00
9,400.0	47.50	359.86	9,212.8	-784.4	-132.3	-784.1	8.00	8.00	0.00
9,500.0	55.50	359.86	9,275.0	-706.2	-132.5	-705.9	8.00	8.00	0.00
9,600.0	63.50	359.86	9,325.7	-620.1	-132.7	-619.8	8.00	8.00	0.00
9,700.0	71.50	359.86	9,364.0	-527.8	-132.9	-527.5	8.00	8.00	0.00
9,800.0	79.50	359.86	9,389.0	-431.1	-133.2	-430.7	8.00	8.00	0.00
9,900.0	87.50	359.86	9,400.3	-331.8	-133.4	-331.5	8.00	8.00	0.00
9,931.3	90.00	359.86	9,401.0	-300.5	-133.5	-300.2	8.00	8.00	0.00
	hold at 9931.3 M		0.40:-	201.5	165 =	00:-		6.55	
10,000.0	90.00	359.86	9,401.0	-231.8	-133.7	-231.5	0.00	0.00	0.00
10,100.0	90.00	359.86	9,401.0	-131.8	-133.9	-131.5	0.00	0.00	0.00
10,200.0	90.00	359.86	9,401.0	-31.8	-134.2	-31.5	0.00	0.00	0.00
10,300.0	90.00	359.86	9,401.0	68.2	-134.4	68.5	0.00	0.00	0.00
10,400.0	90.00	359.86	9,401.0	168.2	-134.7	168.5	0.00	0.00	0.00
10,500.0	90.00	359.86	9,401.0	268.2	-134.9	268.5	0.00	0.00	0.00
10,600.0	90.00	359.86	9,401.0	368.2	-135.2	368.5	0.00	0.00	0.00
10,700.0	90.00	359.86	9,401.0	468.2	-135.4	468.5	0.00	0.00	0.00
10,800.0	90.00	359.86	9,401.0	568.2	-135.7	568.5	0.00	0.00	0.00
10,900.0	90.00	359.86	9,401.0	668.2	-135.9	668.5	0.00	0.00	0.00
11,000.0	90.00	359.86	9,401.0	768.2	-136.2	768.5	0.00	0.00	0.00
11,100.0	90.00	359.86	9,401.0	868.2	-136.4	868.5	0.00	0.00	0.00
11,200.0	90.00	359.86	9,401.0	968.2	-136.7	968.5	0.00	0.00	0.00
11,300.0	90.00	359.86	9,401.0	1,068.2	-136.9	1,068.5	0.00	0.00	0.00
11,400.0	90.00	359.86	9,401.0	1,168.2	-137.2	1,168.5	0.00	0.00	0.00
11,500.0	90.00	359.86	9,401.0	1,268.2	-137.4	1,268.5	0.00	0.00	0.00
11,600.0	90.00	359.86	9,401.0	1,368.2	-137.7	1,368.5	0.00	0.00	0.00
11,700.0	90.00	359.86	9,401.0	1,468.2	-137.9	1,468.5	0.00	0.00	0.00
11,800.0	90.00	359.86	9,401.0	1,568.2	-138.2	1,568.5	0.00	0.00	0.00
11,900.0	90.00	359.86	9,401.0	1,668.2	-138.4	1,668.5	0.00	0.00	0.00
12,000.0	90.00	359.86	9,401.0	1,768.2	-138.7	1,768.5	0.00	0.00	0.00
12,100.0	90.00	359.86	9,401.0	1,868.2	-138.9	1,868.5	0.00	0.00	0.00
12,200.0	90.00	359.86	9,401.0	1,968.2	-139.2	1,968.5	0.00	0.00	0.00
12,300.0	90.00	359.86	9,401.0	2,068.2	-139.4	2,068.5	0.00	0.00	0.00
12,400.0 12,500.0	90.00	359.86	9,401.0	2,168.2	-139.7	2,168.5	0.00	0.00	0.00
	90.00	359.86	9,401.0	2,268.2	-139.9	2,268.5	0.00	0.00	0.00
12,600.0	90.00	359.86	9,401.0	2,368.2	-140.2	2,368.5	0.00	0.00	0.00
12,700.0	90.00	359.86	9,401.0	2,468.2	-140.4	2,468.5	0.00	0.00	0.00
12,800.0	90.00	359.86	9,401.0	2,568.2	-140.7	2,568.5	0.00	0.00	0.00
12,900.0	90.00	359.86 350.86	9,401.0	2,668.2	-140.9	2,668.5	0.00	0.00	0.00
13,000.0	90.00	359.86	9,401.0	2,768.2	-141.2	2,768.5	0.00	0.00	0.00
13,100.0	90.00	359.86	9,401.0	2,868.2	-141.4	2,868.5	0.00	0.00	0.00
13,200.0	90.00	359.86	9,401.0	2,968.2	-141.7	2,968.5	0.00	0.00	0.00
13,300.0	90.00	359.86	9,401.0	3,068.2	-141.9	3,068.5	0.00	0.00	0.00
13,400.0	90.00	359.86	9,401.0	3,168.2	-142.2	3,168.5	0.00	0.00	0.00
13,500.0	90.00	359.86	9,401.0	3,268.2	-142.4	3,268.5	0.00	0.00	0.00

## **Planning Report**

Database: LMRKPROD3

Company: Delaware Basin Asset - Clean

Project: Eddy County

Site: Shanghai Rooster 15 3 Federal 803H (Plan)

Well: SHANGHAI ROOSTER 15-3 107H

Wellbore: SHANGHAI ROOSTER 15-3 107H

Design: SHANGHAI ROOSTER 15-3 107H

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

sign:		OOSTER 15-3							
anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,600.0	90.00	359.86	9,401.0	3,368.2	-142.7	3,368.5	0.00	0.00	0.00
13,700.0	90.00	359.86	9,401.0	3,468.2	-142.9	3,468.5	0.00	0.00	0.00
13,800.0	90.00	359.86	9,401.0	3,568.2	-143.2	3,568.5	0.00	0.00	0.00
13,900.0	90.00	359.86	9,401.0	3,668.2	-143.4	3,668.5	0.00	0.00	0.00
14,000.0	90.00	359.86	9,401.0	3,768.2	-143.7	3,768.5	0.00	0.00	0.00
14,100.0	90.00	359.86	9,401.0	3,868.2	-143.9	3,868.5	0.00	0.00	0.00
14,200.0	90.00	359.86	9,401.0	3,968.2	-144.2	3,968.5	0.00	0.00	0.00
14,300.0	90.00	359.86	9,401.0	4,068.2	-144.4	4,068.5	0.00	0.00	0.00
14,400.0	90.00	359.86	9,401.0	4,168.2	-144.7	4,168.5	0.00	0.00	0.00
14,500.0	90.00	359.86	9,401.0	4,268.2	-144.9	4,268.5	0.00	0.00	0.00
14,600.0	90.00	359.86	9,401.0	4,368.2	-145.2	4,368.5	0.00	0.00	0.00
14,700.0	90.00	359.86	9,401.0	4,468.2	-145.4	4,468.5	0.00	0.00	0.00
14,800.0	90.00	359.86	9,401.0	4,568.2	-145.7	4,568.5	0.00	0.00	0.00
14,900.0	90.00	359.86	9,401.0	4,668.2	-145.9	4,668.5	0.00	0.00	0.00
15,000.0	90.00	359.86	9,401.0	4,768.2	-146.2	4,768.5	0.00	0.00	0.00
15,100.0	90.00	359.86	9,401.0	4,868.2	-146.4	4,868.5	0.00	0.00	0.00
15,135.4	90.00	359.86	9,401.0	4,903.6	-146.5	4,903.9	0.00	0.00	0.00
	.8 hold at 15135.4								
15,200.0	90.00	359.86	9,401.0	4,968.2	-146.7	4,968.5	0.00	0.00	0.00
15,300.0	90.00	359.86	9,401.0	5,068.2	-146.9	5,068.5	0.00	0.00	0.00
15,400.0	90.00	359.86	9,401.0	5,168.2	-147.2	5,168.5	0.00	0.00	0.00
15,500.0	90.00	359.86	9,401.0	5,268.2	-147.4	5,268.5	0.00	0.00	0.00
15,600.0	90.00	359.86	9,401.0	5,368.2	-147.7	5,368.5	0.00	0.00	0.00
15,700.0	90.00	359.86	9,401.0	5,468.2	-147.9	5,468.5	0.00	0.00	0.00
15,800.0	90.00	359.86	9,401.0	5,568.2	-148.2	5,568.5	0.00	0.00	0.00
15,900.0	90.00	359.86	9,401.0	5,668.2	-148.4	5,668.5	0.00	0.00	0.00
16,000.0	90.00	359.86	9,401.0	5,768.2	-148.7	5,768.5	0.00	0.00	0.00
16,100.0	90.00	359.86	9,401.0	5,868.2	-148.9	5,868.5	0.00	0.00	0.00
16,200.0	90.00	359.86	9,401.0	5,968.2	-149.2	5,968.5	0.00	0.00	0.00
16,300.0	90.00	359.86	9,401.0	6,068.2	-149.4	6,068.5	0.00	0.00	0.00
16,400.0	90.00	359.86	9,401.0	6,168.2	-149.7	6,168.5	0.00	0.00	0.00
16,500.0	90.00	359.86	9,401.0	6,268.2	-149.9	6,268.5	0.00	0.00	0.00
16,600.0	90.00	359.86	9,401.0	6,368.2	-150.2	6,368.5	0.00	0.00	0.00
16,700.0	90.00	359.86	9,401.0	6,468.2	-150.4	6,468.5	0.00	0.00	0.00
16,800.0	90.00	359.86	9,401.0	6,568.2	-150.7	6,568.5	0.00	0.00	0.00
16,900.0	90.00	359.86	9,401.0	6,668.2	-150.9	6,668.5	0.00	0.00	0.00
17,000.0	90.00	359.86	9,401.0	6,768.2	-151.2	6,768.5	0.00	0.00	0.00
17,100.0	90.00	359.86	9,401.0	6,868.2	-151.4	6,868.5	0.00	0.00	0.00
17,200.0	90.00	359.86	9,401.0	6,968.2	-151.7	6,968.5	0.00	0.00	0.00
17,300.0	90.00	359.86	9,401.0	7,068.2	-151.9	7,068.5	0.00	0.00	0.00
17,400.0	90.00	359.86	9,401.0	7,168.2	-152.2	7,168.5	0.00	0.00	0.00
17,500.0	90.00	359.86	9,401.0	7,268.2	-152.4	7,268.5	0.00	0.00	0.00
17,600.0	90.00	359.86	9,401.0	7,368.2	-152.7	7,368.5	0.00	0.00	0.00
17,700.0	90.00	359.86	9,401.0	7,468.2	-152.9	7,468.5	0.00	0.00	0.00
17,800.0	90.00	359.86	9,401.0	7,568.2	-153.2	7,568.5	0.00	0.00	0.00
17,900.0	90.00	359.86	9,401.0	7,668.2	-153.4	7,668.5	0.00	0.00	0.00
18,000.0	90.00	359.86	9,401.0	7,768.2	-153.7	7,768.5	0.00	0.00	0.00
18,100.0	90.00	359.86	9,401.0	7,868.2	-153.9	7,868.5	0.00	0.00	0.00
18,200.0	90.00	359.86	9,401.0	7,968.2	-154.2	7,968.5	0.00	0.00	0.00
18,300.0	90.00	359.86	9,401.0	8,068.2	-154.4	8,068.5	0.00	0.00	0.00
18,400.0	90.00	359.86	9,401.0	8,168.2	-154.7	8,168.5	0.00	0.00	0.00
18,500.0	90.00	359.86	9,401.0	8,268.2	-154.9	8,268.5	0.00	0.00	0.00
18,600.0	90.00	359.86	9,401.0	8,368.2	-155.2	8,368.5	0.00	0.00	0.00
18,700.0	90.00	359.86	9,401.0	8,468.2	-155.4	8,468.5	0.00	0.00	0.00

## **Planning Report**

Database: LMRKPROD3

Company: Delaware Basin Asset - Clean

Project: Eddy County

Site: Shanghai Rooster 15 3 Federal 803H (Plan)

Well: SHANGHAI ROOSTER 15-3 107H

Wellbore: SHANGHAI ROOSTER 15-3 107H

SHANGHAI ROOSTER 15-3 107H

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

Vellbore: Design:		00STER 15-3							
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,800.0 18,900.0		359.86 359.86	9,401.0 9,401.0	8,568.2 8,668.2	-155.7 -155.9	8,568.5 8,668.5	0.00 0.00	0.00 0.00	0.00 0.00
19,000.0	90.00	359.86	9.401.0	8,768.2	-156.2	8,768.5	0.00	0.00	0.00
19,100.0		359.86	9,401.0	8,868.2	-156.4	8,868.5	0.00	0.00	0.00
19,200.0		359.86	9,401.0	8,968.2	-156.7	8,968.5	0.00	0.00	0.00
19,300.0		359.86	9,401.0	9,068.2	-156.9	9,068.5	0.00	0.00	0.00
19,400.0		359.86	9,401.0	9,168.2	-157.2	9,168.5	0.00	0.00	0.00
19,500.0	90.00	359.86	9,401.0	9,268.2	-157.4	9,268.5	0.00	0.00	0.00
19,600.0		359.86	9,401.0	9,368.2	-157.7	9,368.5	0.00	0.00	0.00
19,700.0	90.00	359.86	9,401.0	9,468.2	-157.9	9,468.5	0.00	0.00	0.00
19,800.0		359.86	9,401.0	9,568.2	-158.2	9,568.5	0.00	0.00	0.00
19,900.0		359.86	9,401.0	9,668.2	-158.4	9,668.5	0.00	0.00	0.00
20,000.0		359.86	9,401.0	9,768.2	-158.7	9,768.5	0.00	0.00	0.00
20,100.0		359.86	9,401.0	9,868.2	-158.9	9,868.5	0.00	0.00	0.00
20,200.0		359.86	9,401.0	9,968.2	-159.2	9,968.5	0.00	0.00	0.00
20,300.0 20,400.0		359.86 359.86	9,401.0 9,401.0	10,068.2 10,168.2	-159.4 -159.7	10,068.5 10,168.5	0.00 0.00	0.00 0.00	0.00 0.00
20,500.0		359.86	9,401.0	10,268.2	-159.9	10,268.5	0.00	0.00	0.00
20,600.0		359.86	9,401.0	10,368.2	-160.2	10,368.5	0.00	0.00	0.00
20,700.0	90.00	359.86	9,401.0	10,468.2	-160.4	10,468.5	0.00	0.00	0.00
20,800.0	90.00	359.86	9,401.0	10,568.2	-160.7	10,568.5	0.00	0.00	0.00
20,900.0	90.00	359.86	9,401.0	10,668.2	-160.9	10,668.5	0.00	0.00	0.00
21,000.0		359.86	9,401.0	10,768.2	-161.1	10,768.5	0.00	0.00	0.00
21,100.0		359.86	9,401.0	10,868.2	-161.4	10,868.5	0.00	0.00	0.00
21,200.0		359.86	9,401.0	10,968.2	-161.6	10,968.5	0.00	0.00	0.00
21,300.0 21,400.0		359.86 359.86	9,401.0 9,401.0	11,068.2 11,168.2	-161.9 -162.1	11,068.5 11,168.5	0.00 0.00	0.00 0.00	0.00 0.00
21,500.0	90.00	359.86	9,401.0	11,268.2	-162.4	11,268.5	0.00	0.00	0.00
21,600.0		359.86	9,401.0	11,368.2	-162.6	11,368.5	0.00	0.00	0.00
21,700.0		359.86	9,401.0	11,468.2	-162.9	11,468.5	0.00	0.00	0.00
21,800.0		359.86	9,401.0	11,568.2	-163.1	11,568.5	0.00	0.00	0.00
21,900.0	90.00	359.86	9,401.0	11,668.2	-163.4	11,668.5	0.00	0.00	0.00
22,000.0		359.86	9,401.0	11,768.2	-163.6	11,768.5	0.00	0.00	0.00
22,100.0		359.86	9,401.0	11,868.2	-163.9	11,868.5	0.00	0.00	0.00
22,200.0		359.86	9,401.0	11,968.2	-164.1	11,968.5	0.00	0.00	0.00
22,300.0 22,400.0		359.86 359.86	9,401.0 9,401.0	12,068.2 12,168.2	-164.4 -164.6	12,068.5 12,168.5	0.00 0.00	0.00 0.00	0.00 0.00
22,500.0		359.86	9,401.0	12,268.2	-164.9	12,268.5	0.00	0.00	0.00
22,600.0		359.86	9,401.0	12,368.2	-165.1	12,368.5	0.00	0.00	0.00
22,700.0		359.86	9,401.0	12,468.2	-165.4	12,468.5	0.00	0.00	0.00
22,800.0		359.86	9,401.0	12,568.2	-165.6	12,568.5	0.00	0.00	0.00
22,900.0	90.00	359.86	9,401.0	12,668.2	-165.9	12,668.5	0.00	0.00	0.00
23,000.0		359.86	9,401.0	12,768.2	-166.1	12,768.5	0.00	0.00	0.00
23,100.0	90.00	359.86	9,401.0	12,868.2	-166.4	12,868.5	0.00	0.00	0.00
23,200.0		359.86	9,401.0	12,968.2	-166.6	12,968.5	0.00	0.00	0.00
23,300.0 23,400.0		359.86 359.86	9,401.0 9,401.0	13,068.2 13,168.2	-166.9 -167.1	13,068.5 13,168.5	0.00 0.00	0.00 0.00	0.00 0.00
23,500.0		359.86	9,401.0	13,268.2	-167.4	13,268.5	0.00	0.00	0.00
23,600.0		359.86	9,401.0	13,368.2	-167.6	13,368.5	0.00	0.00	0.00
23,700.0		359.86	9,401.0	13,468.2	-167.9	13,468.5	0.00	0.00	0.00
23,800.0 23,900.0		359.86 359.86	9,401.0 9,401.0	13,568.2 13,668.2	-168.1 -168.4	13,568.5 13,668.5	0.00 0.00	0.00 0.00	0.00 0.00
24,000.0		359.86	9,401.0	13,768.2	-168.6	13,768.5	0.00	0.00	0.00
24,100.0	90.00	359.86	9,401.0	13,868.2	-168.9	13,868.5	0.00	0.00	0.00

## **Planning Report**

Database: LMRKPROD3

Company: Delaware Basin Asset - Clean

Project: Eddy County

Site: Shanghai Rooster 15 3 Federal 803H (Plan)
Well: SHANGHAI ROOSTER 15-3 107H
Wellbore: SHANGHAI ROOSTER 15-3 107H
Design: SHANGHAI ROOSTER 15-3 107H

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

ned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
24,200.0	90.00	359.86	9,401.0	13,968.2	-169.1	13,968.5	0.00	0.00	0.00
24,300.0	90.00	359.86	9,401.0	14,068.2	-169.4	14,068.5	0.00	0.00	0.00
24,400.0	90.00	359.86	9,401.0	14,168.2	-169.6	14,168.5	0.00	0.00	0.00
24,500.0	90.00	359.86	9,401.0	14,268.2	-169.9	14,268.5	0.00	0.00	0.00
24,600.0	90.00	359.86	9,401.0	14,368.2	-170.1	14,368.5	0.00	0.00	0.00
24,700.0	90.00	359.86	9,401.0	14,468.2	-170.4	14,468.5	0.00	0.00	0.00
24,800.0	90.00	359.86	9,401.0	14,568.2	-170.6	14,568.5	0.00	0.00	0.00
24,900.0	90.00	359.86	9,401.0	14,668.2	-170.9	14,668.5	0.00	0.00	0.00
25,000.0	90.00	359.86	9,401.0	14,768.2	-171.1	14,768.5	0.00	0.00	0.00
25,100.0	90.00	359.86	9,401.0	14,868.2	-171.4	14,868.5	0.00	0.00	0.00
25,200.0	90.00	359.86	9,401.0	14,968.2	-171.6	14,968.5	0.00	0.00	0.00
25,300.0	90.00	359.86	9,401.0	15,068.2	-171.9	15,068.5	0.00	0.00	0.00
25,400.0	90.00	359.86	9,401.0	15,168.2	-172.1	15,168.5	0.00	0.00	0.00
25,500.0	90.00	359.86	9,401.0	15,268.2	-172.4	15,268.5	0.00	0.00	0.00
25,600.0	90.00	359.86	9,401.0	15,368.2	-172.6	15,368.5	0.00	0.00	0.00
25,653.2	90.00	359.86	9,401.0	15,421.4	-172.8	15,421.8	0.00	0.00	0.00
	ld at 25653.2 MD								
25,700.0	90.00	359.86	9,401.0	15,468.2	-172.9	15,468.5	0.00	0.00	0.00
25,703.2	90.00	359.86	9,401.0	15,471.4	-172.9	15,471.8	0.00	0.00	0.00
TD at 25703.	2								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
107H_SHL - plan hits target cel - Rectangle (sides \		0.00	0.0	0.0	0.0	408,931.20	613,385.30	32° 7' 25.459 N	103° 58' 1.475 W
107H_PPP1 - plan hits target cer - Point	0.00 nter	0.00	9,401.0	4,903.6	-146.5	413,834.80	613,238.80	32° 8' 13.991 N	103° 58' 2.985 W
107H_LTP - plan misses target - Point	0.00 center by 0.2u	0.00 usft at 25653	9,401.0 .2usft MD (9	15,421.4 401.0 TVD, 1	-172.6 5421.4 N, -172	424,352.60 2.8 E)	613,212.70	32° 9′ 58.080 N	103° 58' 2.873 W
107H_FTP - plan hits target cer - Point	0.00 nter	0.00	9,401.0	-300.5	-133.5	408,630.70	613,251.80	32° 7' 22.489 N	103° 58' 3.039 W
107H_BHL - plan misses target - Point	0.00 center by 0.3u	0.00 usft at 25703	9,401.0 .2usft MD (9	15,471.4 401.0 TVD, 1	-172.6 5471.4 N, -172	424,402.60 2.9 E)	613,212.70	32° 9′ 58.574 N	103° 58' 2.871 W

## **Planning Report**

Database: LMRKPROD3

Company: Delaware Basin Asset - Clean

Project: Eddy County

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Wellbore: SHANGHAI ROOSTER 15-3 107H
Design: SHANGHAI ROOSTER 15-3 107H

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well SHANGHAI ROOSTER 15-3 107H

RKB(30') @ 3111.0usft RKB(30') @ 3111.0usft

Grid

Annotations					
Measured	Vertical	Local Coor	dinates		
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
900.0	900.0	0.0	0.0	Start Build 2.00	
1,598.9	1,592.0	-84.1	-10.9	Start 3822.8 hold at 1598.9 MD	
5,421.7	5,301.6	-999.9	-129.5	Start Drop -10.00	
5,561.5	5,440.0	-1,016.7	-131.7	Start 3244.8 hold at 5561.5 MD	
8,806.3	8,684.8	-1,016.7	-131.7	Start Turn 0.00	
9,931.3	9,401.0	-300.5	-133.5	Start 5204.1 hold at 9931.3 MD	
15,135.4	9,401.0	4,903.6	-146.5	Start 10517.8 hold at 15135.4 MD	
25,653.2	9,401.0	15,421.4	-172.8	Start 50.0 hold at 25653.2 MD	
25,703.2	9,401.0	15,471.4	-172.9	TD at 25703.2	

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO Energy Incorporated
WELL NAME & NO.:
LOCATION: Sec 15-25S-29E-NMP

COUNTY: Eddy County, New Mexico

Previously known as **Shanghai Rooster 22-27 Fed 907H**. Changes approved through engineering via Sundry **2714222** on **02/13/2023**. Any previous COAs not addressed within the updated COAs still apply.

C	0	٨
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H2S	O Yes	No	
Potash	None	Secretary	© R-111-P
Cave/Karst Potential	C Low	• Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	<ul><li>Multibowl</li></ul>	O Both
Other	☐ 4 String Area	☐ Capitan Reef	$\square$ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	□ СОМ	□ Unit
Break Testing	• Yes	O No	

#### A. HYDROGEN SULFIDE

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

#### B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 678 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run

- to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
    - Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

#### C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. 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)

# **BOPE Break Testing Variance (Note: For 5M BOPE or less)**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required.
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

# **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)

  - Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> 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. <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24</u>

- <u>hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

## B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to

Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

# C. DRILLING MUD

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

# D. WASTE MATERIAL AND FLUIDS

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

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



# **HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN**

# **Assumed 100 ppm ROE = 3000'**

100 ppm H2S concentration shall trigger activation of this plan.

# **Emergency Procedures**

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H<sub>2</sub>S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - o Detection of H<sub>2</sub>S, and
  - o Measures for protection against the gas,
  - o Equipment used for protection and emergency response.

# **Ignition of Gas source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

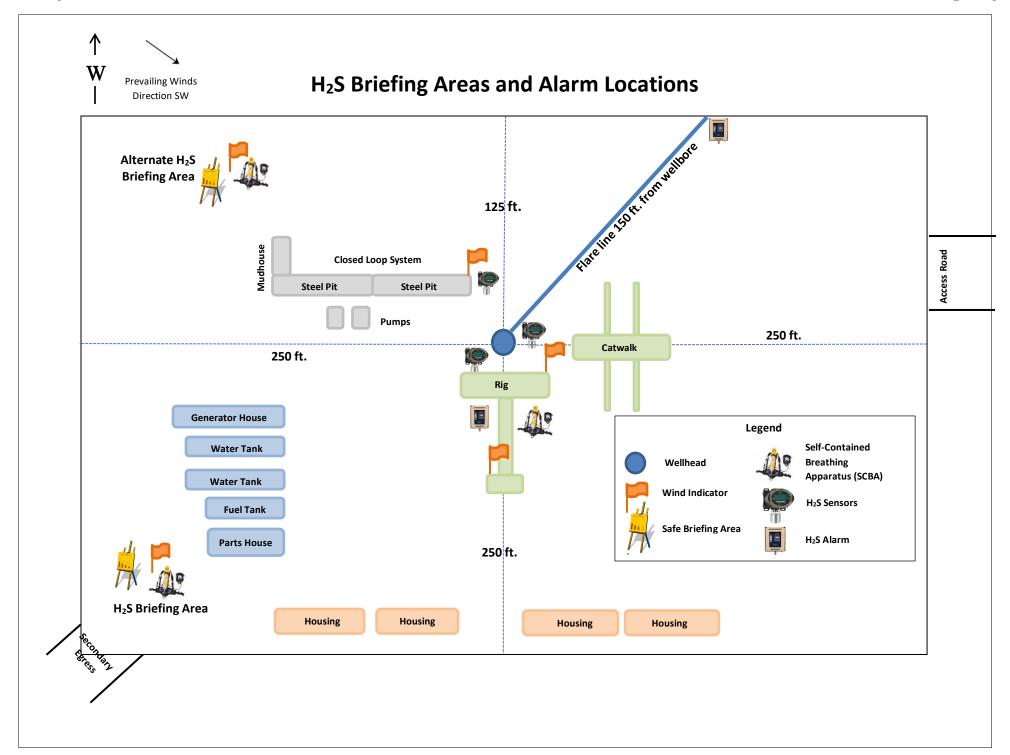
Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = I	2 ppm	N/A	1000 ppm

## **Contacting Authorities**

XTO Energy, Inc. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

# **CARLSBAD OFFICE – EDDY & LEA COUNTIES**

3104 E. Greene St., Carlsbad, NM 88220 Carlsbad, NM	575-887-7329
XTO Energy, Inc. PERSONNEL: Kendall Decker, Drilling Manager Milton Turman, Drilling Superintendent Jeff Raines, Construction Foreman Toady Sanders, EH & S Manager Wes McSpadden, Production Foreman	903-521-6477 817-524-5107 432-557-3159 903-520-1601 575-441-1147
SHERIFF DEPARTMENTS: Eddy County Lea County	575-887-7551 575-396-3611
NEW MEXICO STATE POLICE:	575-392-5588
FIRE DEPARTMENTS: Carlsbad Eunice Hobbs Jal Lovington	911 575-885-2111 575-394-2111 575-397-9308 575-395-2221 575-396-2359
HOSPITALS: Carlsbad Medical Emergency Eunice Medical Emergency Hobbs Medical Emergency Jal Medical Emergency Lovington Medical Emergency	911 575-885-2111 575-394-2112 575-397-9308 575-395-2221 575-396-2359
AGENT NOTIFICATIONS: For Lea County: Bureau of Land Management – Hobbs New Mexico Oil Conservation Division – Hobbs	575-393-3612 575-393-6161
For Eddy County: Bureau of Land Management - Carlsbad New Mexico Oil Conservation Division - Artesia	575-234-5972 575-748-1283



Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Disposal location description: A licensed 3rd party contractor will be used to haul and dispose human waste

Waste type: DRILLING

Waste content description: Fluids

Amount of waste: 500 barrels

Waste disposal frequency: One Time Only

Safe containment description: Steel mud pits

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Disposal location description: R360 Environmental Solutions, 4507 W Carlsbad HWY, Hobbs, NM 88240, 575-393-1079

Waste type: DRILLING

Waste content description: Cuttings

Amount of waste: 2100 pounds

Waste disposal frequency: One Time Only

Safe containment description: The well will be drilled utilizing a closed-loop mud system. Drill cuttings will be held in roll-off

style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Disposal location description: R360 Environmental Solutions, 4507 W Carlsbad HWY, Hobbs, NM 88240, 575-393-1079

# **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Well Name: SHANGHAI ROOSTER 22-27 FEDERAL Well Number: 907H

#### Reserve pit liner

Reserve pit liner specifications and installation description

# **Cuttings Area**

**Cuttings Area being used? NO** 

Are you storing cuttings on location? YES

Description of cuttings location Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil

Conservation Division (NMOCD) approved disposal site.

Cuttings area length (ft.)

Cuttings area width (ft.)

**Cuttings area depth (ft.)** 

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

**WCuttings** area liner

Cuttings area liner specifications and installation description

# **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: NO

**Ancillary Facilities attachment:** 

#### **Comments:**

# **Section 9 - Well Site Layout**

# Well Site Layout Diagram:

Shanghai\_22\_27\_Fed\_907H\_Well\_20200610065206.pdf Shanghai\_22\_27\_Fed\_907H\_RL\_20200615134651.pdf

Comments: Multi-Well Pad

# Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: SHANGHAI 22-27

**Multiple Well Pad Number: 4** 

#### **Recontouring attachment:**

Shanghai\_22\_27\_Fed\_Int\_Rec\_P1\_20181227060215.pdf

Shanghai\_22\_27\_Fed\_Int\_Rec\_P2\_20181227060224.pdf

Shanghai\_22\_27\_Fed\_Int\_Rec\_P3\_20181227060233.pdf

Shanghai\_22\_27\_Fed\_Int\_Rec\_P4\_20200610065243.pdf

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

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

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

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

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

CONDITIONS

Action 203861

## **CONDITIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	203861
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
john.harrison	Will require a File As Drilled C-102 and a Directional Survey with the C-104	4/6/2023
john.harrison	Notify OCD 24 hours prior to casing & cement	4/6/2023
john.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	4/6/2023
john.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing	4/6/2023
john.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	4/6/2023

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