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

Sundry Print Report

04/20/2023

Well Name: SHANGHAI ROOSTER 15-3 FED

Well Location: T25S / R29E / SEC 15 / SESE / 32.123604 / -103.967481

County or Parish/State: EDDY / NM

Well Number: 805H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM14778

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001550099

Well Status: Drilling Well

Operator: XTO ENERGY INCORPORATED

Notice of Intent

Sundry ID: 2726676

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/19/2023

Time Sundry Submitted: 02:18

Date proposed operation will begin: 04/21/2023

Procedure Description: While setting 9.625 intermediate casing on the Shanghai Rooster 15-3 Fed 805H (API:30-015-50099) the casing became stuck at 9032’ MD. We attempted to free the casing and were unsuccessful. The casing was set in place, a two-stage cement job was completed. Communication with formation was noted. Suspected casing damage tagged at 8444’ MD. A cement retainer was set at 8400’ MD with 423 sxs of cement, no evidence of cement to surface. A CIT was performed. XTO proposes to isolate the original wellbore and sidetrack from the intermediate hole. Attachments: Sidetrack Procedure Current WBD Proposed WBD Directional Plan

NOI Attachments

Procedure Description

Shanghai_Rooster_15_3_Fed_805H_Attachments_20230419141719.pdf

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County or Parish/State: EDDY / NM

Well Number: 805H

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Allottee or Tribe Name:

Lease Number: NMNM14778

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001550099

Well Status: Drilling Well

Operator: XTO ENERGY INCORPORATED

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: JESSICA DOOLING

Signed on: APR 19, 2023 02:18 PM

Name: XTO ENERGY INCORPORATED

Title: Lead Regulatory Coordinator

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND **State:** TX

Phone: (970) 769-6048

Email address: JESSICA.DOOLING@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 04/19/2023

Signature: Chris Walls

Sidetrack Procedure
Shanghai Rooster 15-3 Fed 805H

Current Status: XTO has set surface casing with cement to surface at 1108'MD. Intermediate drilled to MD of 10451'. Casing stuck at 9032' MD, unable to free casing. Suspected casing damage tagged at 8444' MD. Cement retainer set at 8400' MD, 100 bbls cement, 14.8 ppg, Class C Neat, 1.33 ft3/sx, 423 sks. EIRs: Starting rate 0.4 bpm at 1400 psi, ending rate 2.2 bpm at 1200 psi, lowest pressure 500 psi, highest pressure 1400 psi. CIT performed.

Requested Proposal: XTO proposes to sidetrack and redrill the remaining intermediate section as 8.75" hole size with a 7.625 liner hanger at 8129' MD, and drill 6.75" production hole with 5.5" casing to TD.

Proposed Procedure:

1. Set whipstock at ~8399' MD, mill window in 9.675"
2. Drill out with 8.75" assembly and complete sidetrack, 10450' TD
3. Run 7.265" 29.7# HCL80 liner hanger system from 8129' to 10450' MD (250' of overlap with previous casing)
4. Pump 131 bbls/553 sks of 1.33 ft3/sk 14.8 ppg class C neat cement from TD to top of liner hanger
5. WOC 8 hours and conduct CIT
6. Drill production section out of 7.625" shoe with 6.75" drilling assembly and 5.5" production casing

Current Well Information:

1. Surface: 17.5" hole at 1108' MD, 13.375" csg @ 1108' MD. Cemented w/Lead: 410sx 12.8ppg Cl C Cmt (1.78 yield) & Tail: 333sx 14.8ppg (1.35 yield). Circ to surface.
2. Intermediate: 12.25" hole @ 10451' MD
    1. Ran casing, casing stuck at 9032', 984 sk, 15.6 ppg Class H, 1.18 ft3/sk
    2. Set cement retainer at 8400' MD, 423 sk cement, 14.8 ppg, Class C Neat, 1.33 ft3/sx
    3. Preformed two-stage braidenhead squeeze, 1965 sks cement, 14.8 ppg, Class C Neat 1.33 ft3/sk, CMT from 5695' MD to surface

Formation Tops

Rustler: 817’

Top Salt: 1039’

Delaware: 3195’

Brushy Canyon 5695’

Bone Spring 6981’

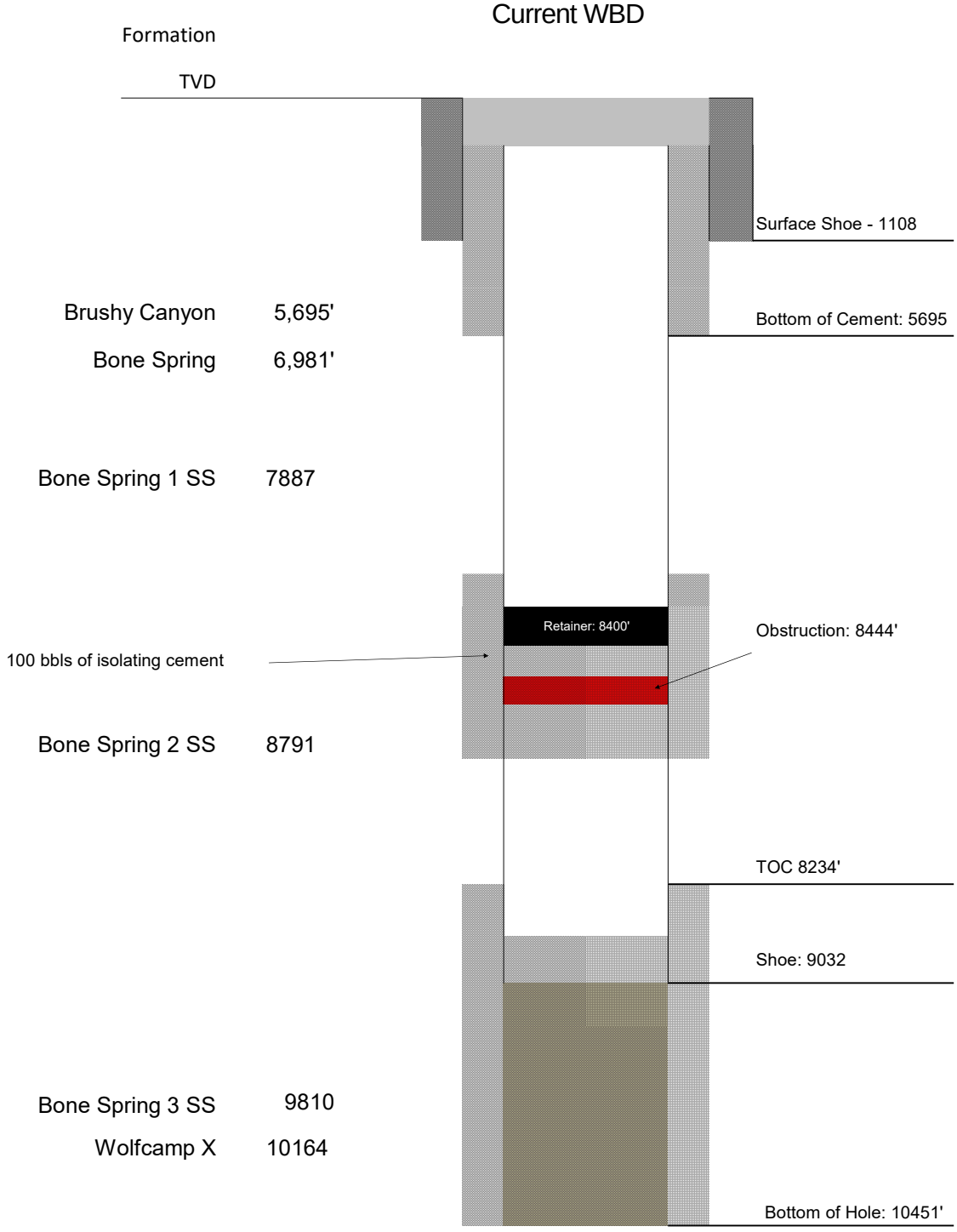
1st Bone Spring Ss 7887’

2nd Bone Spring Ss 8741’

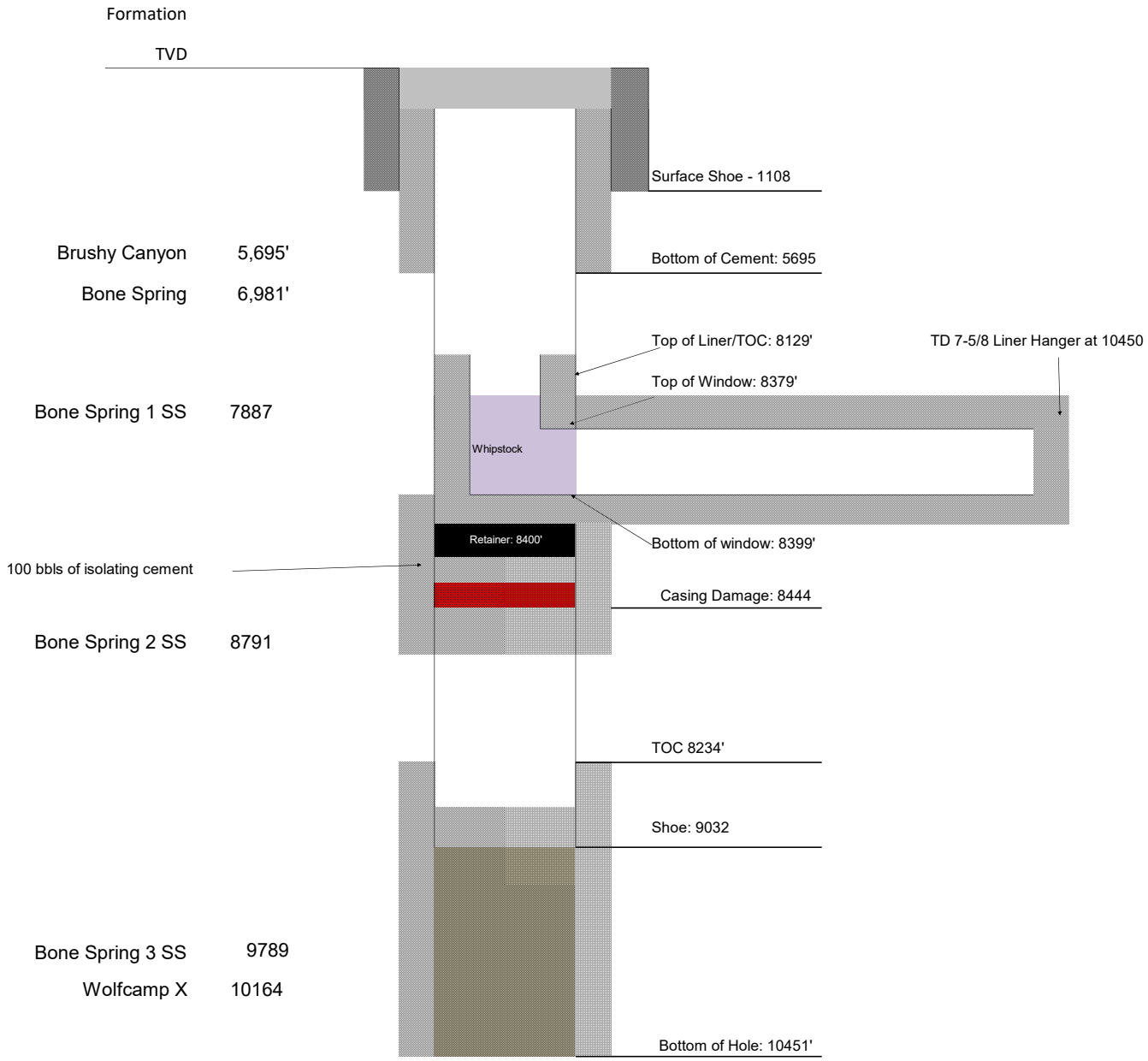
3rd Bone Spring Ss 9810’

Wolfcamp 10164’

Shanghai Rooster 15-3 Fed 805H
Current WBD



Shanghai Rooster 15-3 Fed 805H
Proposed WBD



ROC

508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)
(545) Shanghai Rooster 15-3 Fed Pad D - Plans
Shanghai Rooster 15-3 Fed 805H

ST01

Plan: Plan 4

Standard Planning Report

17 April, 2023

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well Shanghai Rooster 15-3 Fed 805H
Company:	ROC	**TVD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Project:	508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)	**MD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Site:	(545) Shanghai Rooster 15-3 Fed Pad D - Plans	**North Reference:**	Grid
Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Project 508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site (545) Shanghai Rooster 15-3 Fed Pad D - Plans

Site Position:		**Northing:**	408,872.50 usft	**Latitude:**	32° 7' 24.88 N
From:	Map	**Easting:**	613,385.70 usft	**Longitude:**	103° 58' 1.47 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in		

Well Shanghai Rooster 15-3 Fed 805H

Well Position	**+N/-S**	0.00 usft	**Northing:**	408,901.40 usft	**Latitude:**	32° 7' 25.16 N
	+E/-W	0.00 usft	**Easting:**	613,385.40 usft	**Longitude:**	103° 58' 1.48 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,079.00 usft
Grid Convergence:		0.19 °				

Wellbore ST01

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	4/6/2023	6.51	59.69	47,208.59749197

Design Plan 4

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	8,308.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.86

Plan Survey Tool Program **Date** 4/17/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	8,308.00	26,663.65	Plan 4 (ST01)	XOMR2_OWSG MWD+IFR	
				OWSG MWD + IFR1 + Mult	

ExxonMobil

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Wellbore:	ST01		
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Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
8,308.00	0.86	235.55	8,272.93	-413.68	-227.54	0.00	0.00	0.00	0.00	
8,379.00	0.74	223.53	8,343.92	-414.31	-228.30	0.29	-0.17	-16.93	-131.48	
8,399.00	2.50	2.80	8,363.92	-413.97	-228.36	15.49	8.80	696.35	148.23	
8,524.00	5.00	2.80	8,488.64	-405.80	-227.97	2.00	2.00	0.00	0.00	
8,774.00	5.00	2.80	8,737.69	-384.04	-226.90	0.00	0.00	0.00	0.00	
9,024.00	0.00	0.00	8,987.37	-373.15	-226.37	2.00	-2.00	0.00	180.00	
10,611.67	0.00	0.00	10,575.04	-373.15	-226.37	0.00	0.00	0.00	0.00	
11,511.67	90.00	2.80	11,148.00	199.12	-198.38	10.00	10.00	0.00	2.80	
11,658.85	90.00	359.86	11,148.00	346.25	-194.97	2.00	0.00	-2.00	-90.00	
26,663.65	90.00	359.86	11,148.00	15,351.00	-232.60	0.00	0.00	0.00	0.00	BHL - Shanghai Ro

ExxonMobil

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Site:	(545) Shanghai Rooster 15-3 Fed Pad D - Plans	**North Reference:**	Grid
Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,308.00	0.86	235.55	8,272.93	-413.68	-227.54	-413.12	0.18	0.08	-10.82
Tie-in									
8,379.00	0.74	223.53	8,343.92	-414.31	-228.30	-413.75	0.29	-0.17	-16.93
Top of Whip									
8,399.00	2.50	2.80	8,363.92	-413.97	-228.36	-413.41	15.49	8.80	696.35
SDTRK, Build 2°/100'									
8,400.00	2.52	2.80	8,364.92	-413.92	-228.36	-413.37	2.00	2.00	0.00
8,500.00	4.52	2.80	8,464.72	-407.79	-228.06	-407.23	2.00	2.00	0.00
8,524.00	5.00	2.80	8,488.64	-405.80	-227.97	-405.25	2.00	2.00	0.00
Hold 5.00° Inc									
8,600.00	5.00	2.80	8,564.35	-399.19	-227.64	-398.63	0.00	0.00	0.00
8,700.00	5.00	2.80	8,663.97	-390.48	-227.22	-389.93	0.00	0.00	0.00
8,750.22	5.00	2.80	8,714.00	-386.11	-227.00	-385.56	0.00	0.00	0.00
Bone Spring 2 Sand									
8,774.00	5.00	2.80	8,737.69	-384.04	-226.90	-383.49	0.00	0.00	0.00
Drop 2°/100'									
8,800.00	4.48	2.80	8,763.60	-381.89	-226.80	-381.34	2.00	-2.00	0.00
8,900.00	2.48	2.80	8,863.41	-375.83	-226.50	-375.28	2.00	-2.00	0.00
9,000.00	0.48	2.80	8,963.37	-373.25	-226.37	-372.70	2.00	-2.00	0.00
9,000.63	0.47	2.80	8,964.00	-373.25	-226.37	-372.69	2.00	-2.00	0.00
Bone Spring 3 Lime									
9,024.00	0.00	0.00	8,987.37	-373.15	-226.37	-372.60	2.00	-2.00	0.00
Hold Vertical									
9,100.00	0.00	0.00	9,063.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,200.00	0.00	0.00	9,163.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,300.00	0.00	0.00	9,263.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,370.63	0.00	0.00	9,334.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Harkey Sand									
9,400.00	0.00	0.00	9,363.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,415.63	0.00	0.00	9,379.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Bone Spring 3 Upper Shale									
9,500.00	0.00	0.00	9,463.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,600.00	0.00	0.00	9,563.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,620.63	0.00	0.00	9,584.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Bone Spring 3 Upper Shale Base									
9,668.63	0.00	0.00	9,632.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Bone Spring 3 Lower Shale									
9,700.00	0.00	0.00	9,663.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,800.00	0.00	0.00	9,763.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
9,823.63	0.00	0.00	9,787.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Bone Spring 3 Sand									
9,900.00	0.00	0.00	9,863.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,000.00	0.00	0.00	9,963.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,022.63	0.00	0.00	9,986.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Warwink									
10,100.00	0.00	0.00	10,063.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,113.63	0.00	0.00	10,077.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Red Hills									
10,177.63	0.00	0.00	10,141.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Wolfcamp									

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Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,200.00	0.00	0.00	10,163.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,203.63	0.00	0.00	10,167.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Wolfcamp X									
10,272.63	0.00	0.00	10,236.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Wolfcamp Y									
10,300.00	0.00	0.00	10,263.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,316.63	0.00	0.00	10,280.00	-373.15	-226.37	-372.60	0.00	0.00	0.00
Wolfcamp A									
10,400.00	0.00	0.00	10,363.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,500.00	0.00	0.00	10,463.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,600.00	0.00	0.00	10,563.37	-373.15	-226.37	-372.60	0.00	0.00	0.00
10,611.67	0.00	0.00	10,575.04	-373.15	-226.37	-372.60	0.00	0.00	0.00
Curve KOP, Build 10°/100'									
10,650.00	3.83	2.80	10,613.34	-371.87	-226.31	-371.32	10.00	10.00	0.00
10,659.68	4.80	2.80	10,623.00	-371.14	-226.27	-370.59	10.00	10.00	0.00
Wolfcamp B									
10,700.00	8.83	2.80	10,663.02	-366.36	-226.04	-365.81	10.00	10.00	0.00
10,750.00	13.83	2.80	10,712.03	-356.55	-225.56	-356.00	10.00	10.00	0.00
10,800.00	18.83	2.80	10,760.00	-342.51	-224.87	-341.96	10.00	10.00	0.00
10,850.00	23.83	2.80	10,806.56	-324.35	-223.98	-323.80	10.00	10.00	0.00
10,900.00	28.83	2.80	10,851.36	-302.21	-222.90	-301.66	10.00	10.00	0.00
10,928.54	31.69	2.80	10,876.00	-287.85	-222.20	-287.30	10.00	10.00	0.00
Wolfcamp C									
10,950.00	33.83	2.80	10,894.05	-276.24	-221.63	-275.70	10.00	10.00	0.00
11,000.00	38.83	2.80	10,934.32	-246.67	-220.18	-246.13	10.00	10.00	0.00
11,050.00	43.83	2.80	10,971.85	-213.69	-218.57	-213.16	10.00	10.00	0.00
11,100.00	48.83	2.80	11,006.36	-177.58	-216.80	-177.05	10.00	10.00	0.00
11,150.00	53.83	2.80	11,037.59	-138.60	-214.90	-138.07	10.00	10.00	0.00
11,200.00	58.83	2.80	11,065.30	-97.05	-212.86	-96.53	10.00	10.00	0.00
11,217.24	60.56	2.80	11,074.00	-82.18	-212.14	-81.66	10.00	10.00	0.00
Wolfcamp D									
11,250.00	63.83	2.80	11,089.28	-53.24	-210.72	-52.73	10.00	10.00	0.00
11,300.00	68.83	2.80	11,109.34	-7.52	-208.49	-7.01	10.00	10.00	0.00
11,350.00	73.83	2.80	11,125.34	39.78	-206.17	40.28	10.00	10.00	0.00
11,400.00	78.83	2.80	11,137.15	88.29	-203.80	88.79	10.00	10.00	0.00
11,450.00	83.83	2.80	11,144.68	137.65	-201.39	138.14	10.00	10.00	0.00
11,500.00	88.83	2.80	11,147.88	187.47	-198.95	187.95	10.00	10.00	0.00
11,511.67	90.00	2.80	11,148.00	199.12	-198.38	199.60	10.00	10.00	0.00
LP @ 90.00° Inc, Turn 2°/100'									
11,600.00	90.00	1.03	11,148.00	287.40	-195.43	287.88	2.00	0.00	-2.00
11,658.85	90.00	359.86	11,148.00	346.25	-194.97	346.72	2.00	0.00	-2.00
Hold 359.86° Azm									
11,700.00	90.00	359.86	11,148.00	387.40	-195.07	387.87	0.00	0.00	0.00
11,800.00	90.00	359.86	11,148.00	487.40	-195.32	487.87	0.00	0.00	0.00
11,900.00	90.00	359.86	11,148.00	587.40	-195.57	587.87	0.00	0.00	0.00
12,000.00	90.00	359.86	11,148.00	687.40	-195.82	687.87	0.00	0.00	0.00
12,100.00	90.00	359.86	11,148.00	787.40	-196.07	787.87	0.00	0.00	0.00
12,200.00	90.00	359.86	11,148.00	887.40	-196.33	887.87	0.00	0.00	0.00
12,300.00	90.00	359.86	11,148.00	987.40	-196.58	987.87	0.00	0.00	0.00
12,400.00	90.00	359.86	11,148.00	1,087.40	-196.83	1,087.87	0.00	0.00	0.00
12,500.00	90.00	359.86	11,148.00	1,187.40	-197.08	1,187.87	0.00	0.00	0.00

ExxonMobil

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Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,600.00	90.00	359.86	11,148.00	1,287.40	-197.33	1,287.87	0.00	0.00	0.00
12,700.00	90.00	359.86	11,148.00	1,387.40	-197.58	1,387.87	0.00	0.00	0.00
12,800.00	90.00	359.86	11,148.00	1,487.39	-197.83	1,487.87	0.00	0.00	0.00
12,900.00	90.00	359.86	11,148.00	1,587.39	-198.08	1,587.87	0.00	0.00	0.00
13,000.00	90.00	359.86	11,148.00	1,687.39	-198.33	1,687.87	0.00	0.00	0.00
13,100.00	90.00	359.86	11,148.00	1,787.39	-198.58	1,787.87	0.00	0.00	0.00
13,200.00	90.00	359.86	11,148.00	1,887.39	-198.83	1,887.87	0.00	0.00	0.00
13,300.00	90.00	359.86	11,148.00	1,987.39	-199.08	1,987.87	0.00	0.00	0.00
13,400.00	90.00	359.86	11,148.00	2,087.39	-199.34	2,087.87	0.00	0.00	0.00
13,500.00	90.00	359.86	11,148.00	2,187.39	-199.59	2,187.87	0.00	0.00	0.00
13,600.00	90.00	359.86	11,148.00	2,287.39	-199.84	2,287.87	0.00	0.00	0.00
13,700.00	90.00	359.86	11,148.00	2,387.39	-200.09	2,387.87	0.00	0.00	0.00
13,800.00	90.00	359.86	11,148.00	2,487.39	-200.34	2,487.87	0.00	0.00	0.00
13,900.00	90.00	359.86	11,148.00	2,587.39	-200.59	2,587.87	0.00	0.00	0.00
14,000.00	90.00	359.86	11,148.00	2,687.39	-200.84	2,687.87	0.00	0.00	0.00
14,100.00	90.00	359.86	11,148.00	2,787.39	-201.09	2,787.87	0.00	0.00	0.00
14,200.00	90.00	359.86	11,148.00	2,887.39	-201.34	2,887.87	0.00	0.00	0.00
14,300.00	90.00	359.86	11,148.00	2,987.39	-201.59	2,987.87	0.00	0.00	0.00
14,400.00	90.00	359.86	11,148.00	3,087.39	-201.84	3,087.87	0.00	0.00	0.00
14,500.00	90.00	359.86	11,148.00	3,187.39	-202.09	3,187.87	0.00	0.00	0.00
14,600.00	90.00	359.86	11,148.00	3,287.39	-202.34	3,287.87	0.00	0.00	0.00
14,700.00	90.00	359.86	11,148.00	3,387.39	-202.60	3,387.87	0.00	0.00	0.00
14,800.00	90.00	359.86	11,148.00	3,487.39	-202.85	3,487.87	0.00	0.00	0.00
14,900.00	90.00	359.86	11,148.00	3,587.39	-203.10	3,587.87	0.00	0.00	0.00
15,000.00	90.00	359.86	11,148.00	3,687.39	-203.35	3,687.87	0.00	0.00	0.00
15,100.00	90.00	359.86	11,148.00	3,787.39	-203.60	3,787.87	0.00	0.00	0.00
15,200.00	90.00	359.86	11,148.00	3,887.39	-203.85	3,887.87	0.00	0.00	0.00
15,300.00	90.00	359.86	11,148.00	3,987.39	-204.10	3,987.87	0.00	0.00	0.00
15,400.00	90.00	359.86	11,148.00	4,087.39	-204.35	4,087.87	0.00	0.00	0.00
15,500.00	90.00	359.86	11,148.00	4,187.39	-204.60	4,187.87	0.00	0.00	0.00
15,600.00	90.00	359.86	11,148.00	4,287.39	-204.85	4,287.87	0.00	0.00	0.00
15,700.00	90.00	359.86	11,148.00	4,387.39	-205.10	4,387.87	0.00	0.00	0.00
15,800.00	90.00	359.86	11,148.00	4,487.39	-205.35	4,487.87	0.00	0.00	0.00
15,900.00	90.00	359.86	11,148.00	4,587.39	-205.61	4,587.87	0.00	0.00	0.00
16,000.00	90.00	359.86	11,148.00	4,687.38	-205.86	4,687.87	0.00	0.00	0.00
16,100.00	90.00	359.86	11,148.00	4,787.38	-206.11	4,787.87	0.00	0.00	0.00
16,200.00	90.00	359.86	11,148.00	4,887.38	-206.36	4,887.87	0.00	0.00	0.00
16,300.00	90.00	359.86	11,148.00	4,987.38	-206.61	4,987.87	0.00	0.00	0.00
16,400.00	90.00	359.86	11,148.00	5,087.38	-206.86	5,087.87	0.00	0.00	0.00
16,500.00	90.00	359.86	11,148.00	5,187.38	-207.11	5,187.87	0.00	0.00	0.00
16,600.00	90.00	359.86	11,148.00	5,287.38	-207.36	5,287.87	0.00	0.00	0.00
16,700.00	90.00	359.86	11,148.00	5,387.38	-207.61	5,387.87	0.00	0.00	0.00
16,800.00	90.00	359.86	11,148.00	5,487.38	-207.86	5,487.87	0.00	0.00	0.00
16,900.00	90.00	359.86	11,148.00	5,587.38	-208.11	5,587.87	0.00	0.00	0.00
17,000.00	90.00	359.86	11,148.00	5,687.38	-208.36	5,687.87	0.00	0.00	0.00
17,100.00	90.00	359.86	11,148.00	5,787.38	-208.61	5,787.87	0.00	0.00	0.00
17,200.00	90.00	359.86	11,148.00	5,887.38	-208.87	5,887.87	0.00	0.00	0.00
17,300.00	90.00	359.86	11,148.00	5,987.38	-209.12	5,987.87	0.00	0.00	0.00
17,400.00	90.00	359.86	11,148.00	6,087.38	-209.37	6,087.87	0.00	0.00	0.00
17,500.00	90.00	359.86	11,148.00	6,187.38	-209.62	6,187.87	0.00	0.00	0.00
17,600.00	90.00	359.86	11,148.00	6,287.38	-209.87	6,287.87	0.00	0.00	0.00
17,700.00	90.00	359.86	11,148.00	6,387.38	-210.12	6,387.87	0.00	0.00	0.00

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well Shanghai Rooster 15-3 Fed 805H
Company:	ROC	**TVD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Project:	508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)	**MD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Site:	(545) Shanghai Rooster 15-3 Fed Pad D - Plans	**North Reference:**	Grid
Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
17,800.00	90.00	359.86	11,148.00	6,487.38	-210.37	6,487.87	0.00	0.00	0.00
17,900.00	90.00	359.86	11,148.00	6,587.38	-210.62	6,587.87	0.00	0.00	0.00
18,000.00	90.00	359.86	11,148.00	6,687.38	-210.87	6,687.87	0.00	0.00	0.00
18,100.00	90.00	359.86	11,148.00	6,787.38	-211.12	6,787.87	0.00	0.00	0.00
18,200.00	90.00	359.86	11,148.00	6,887.38	-211.37	6,887.87	0.00	0.00	0.00
18,300.00	90.00	359.86	11,148.00	6,987.38	-211.62	6,987.87	0.00	0.00	0.00
18,400.00	90.00	359.86	11,148.00	7,087.38	-211.88	7,087.87	0.00	0.00	0.00
18,500.00	90.00	359.86	11,148.00	7,187.38	-212.13	7,187.87	0.00	0.00	0.00
18,600.00	90.00	359.86	11,148.00	7,287.38	-212.38	7,287.87	0.00	0.00	0.00
18,700.00	90.00	359.86	11,148.00	7,387.38	-212.63	7,387.87	0.00	0.00	0.00
18,800.00	90.00	359.86	11,148.00	7,487.38	-212.88	7,487.87	0.00	0.00	0.00
18,900.00	90.00	359.86	11,148.00	7,587.38	-213.13	7,587.87	0.00	0.00	0.00
19,000.00	90.00	359.86	11,148.00	7,687.38	-213.38	7,687.87	0.00	0.00	0.00
19,100.00	90.00	359.86	11,148.00	7,787.38	-213.63	7,787.87	0.00	0.00	0.00
19,200.00	90.00	359.86	11,148.00	7,887.37	-213.88	7,887.87	0.00	0.00	0.00
19,300.00	90.00	359.86	11,148.00	7,987.37	-214.13	7,987.87	0.00	0.00	0.00
19,400.00	90.00	359.86	11,148.00	8,087.37	-214.38	8,087.87	0.00	0.00	0.00
19,500.00	90.00	359.86	11,148.00	8,187.37	-214.63	8,187.87	0.00	0.00	0.00
19,600.00	90.00	359.86	11,148.00	8,287.37	-214.88	8,287.87	0.00	0.00	0.00
19,700.00	90.00	359.86	11,148.00	8,387.37	-215.14	8,387.87	0.00	0.00	0.00
19,800.00	90.00	359.86	11,148.00	8,487.37	-215.39	8,487.87	0.00	0.00	0.00
19,900.00	90.00	359.86	11,148.00	8,587.37	-215.64	8,587.87	0.00	0.00	0.00
20,000.00	90.00	359.86	11,148.00	8,687.37	-215.89	8,687.87	0.00	0.00	0.00
20,100.00	90.00	359.86	11,148.00	8,787.37	-216.14	8,787.87	0.00	0.00	0.00
20,200.00	90.00	359.86	11,148.00	8,887.37	-216.39	8,887.87	0.00	0.00	0.00
20,300.00	90.00	359.86	11,148.00	8,987.37	-216.64	8,987.87	0.00	0.00	0.00
20,400.00	90.00	359.86	11,148.00	9,087.37	-216.89	9,087.87	0.00	0.00	0.00
20,500.00	90.00	359.86	11,148.00	9,187.37	-217.14	9,187.87	0.00	0.00	0.00
20,600.00	90.00	359.86	11,148.00	9,287.37	-217.39	9,287.87	0.00	0.00	0.00
20,700.00	90.00	359.86	11,148.00	9,387.37	-217.64	9,387.87	0.00	0.00	0.00
20,800.00	90.00	359.86	11,148.00	9,487.37	-217.89	9,487.87	0.00	0.00	0.00
20,900.00	90.00	359.86	11,148.00	9,587.37	-218.15	9,587.87	0.00	0.00	0.00
21,000.00	90.00	359.86	11,148.00	9,687.37	-218.40	9,687.87	0.00	0.00	0.00
21,100.00	90.00	359.86	11,148.00	9,787.37	-218.65	9,787.87	0.00	0.00	0.00
21,200.00	90.00	359.86	11,148.00	9,887.37	-218.90	9,887.87	0.00	0.00	0.00
21,300.00	90.00	359.86	11,148.00	9,987.37	-219.15	9,987.87	0.00	0.00	0.00
21,400.00	90.00	359.86	11,148.00	10,087.37	-219.40	10,087.87	0.00	0.00	0.00
21,500.00	90.00	359.86	11,148.00	10,187.37	-219.65	10,187.87	0.00	0.00	0.00
21,600.00	90.00	359.86	11,148.00	10,287.37	-219.90	10,287.87	0.00	0.00	0.00
21,700.00	90.00	359.86	11,148.00	10,387.37	-220.15	10,387.87	0.00	0.00	0.00
21,800.00	90.00	359.86	11,148.00	10,487.37	-220.40	10,487.87	0.00	0.00	0.00
21,900.00	90.00	359.86	11,148.00	10,587.37	-220.65	10,587.87	0.00	0.00	0.00
22,000.00	90.00	359.86	11,148.00	10,687.37	-220.90	10,687.87	0.00	0.00	0.00
22,100.00	90.00	359.86	11,148.00	10,787.37	-221.15	10,787.87	0.00	0.00	0.00
22,200.00	90.00	359.86	11,148.00	10,887.37	-221.41	10,887.87	0.00	0.00	0.00
22,300.00	90.00	359.86	11,148.00	10,987.37	-221.66	10,987.87	0.00	0.00	0.00
22,400.00	90.00	359.86	11,148.00	11,087.36	-221.91	11,087.87	0.00	0.00	0.00
22,500.00	90.00	359.86	11,148.00	11,187.36	-222.16	11,187.87	0.00	0.00	0.00
22,600.00	90.00	359.86	11,148.00	11,287.36	-222.41	11,287.87	0.00	0.00	0.00
22,700.00	90.00	359.86	11,148.00	11,387.36	-222.66	11,387.87	0.00	0.00	0.00
22,800.00	90.00	359.86	11,148.00	11,487.36	-222.91	11,487.87	0.00	0.00	0.00
22,900.00	90.00	359.86	11,148.00	11,587.36	-223.16	11,587.87	0.00	0.00	0.00

ExxonMobil
Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well Shanghai Rooster 15-3 Fed 805H
Company:	ROC	**TVD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Project:	508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)	**MD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Site:	(545) Shanghai Rooster 15-3 Fed Pad D - Plans	**North Reference:**	Grid
Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
23,000.00	90.00	359.86	11,148.00	11,687.36	-223.41	11,687.87	0.00	0.00	0.00
23,100.00	90.00	359.86	11,148.00	11,787.36	-223.66	11,787.87	0.00	0.00	0.00
23,200.00	90.00	359.86	11,148.00	11,887.36	-223.91	11,887.87	0.00	0.00	0.00
23,300.00	90.00	359.86	11,148.00	11,987.36	-224.16	11,987.87	0.00	0.00	0.00
23,400.00	90.00	359.86	11,148.00	12,087.36	-224.41	12,087.87	0.00	0.00	0.00
23,500.00	90.00	359.86	11,148.00	12,187.36	-224.67	12,187.87	0.00	0.00	0.00
23,600.00	90.00	359.86	11,148.00	12,287.36	-224.92	12,287.87	0.00	0.00	0.00
23,700.00	90.00	359.86	11,148.00	12,387.36	-225.17	12,387.87	0.00	0.00	0.00
23,800.00	90.00	359.86	11,148.00	12,487.36	-225.42	12,487.87	0.00	0.00	0.00
23,900.00	90.00	359.86	11,148.00	12,587.36	-225.67	12,587.87	0.00	0.00	0.00
24,000.00	90.00	359.86	11,148.00	12,687.36	-225.92	12,687.87	0.00	0.00	0.00
24,100.00	90.00	359.86	11,148.00	12,787.36	-226.17	12,787.87	0.00	0.00	0.00
24,200.00	90.00	359.86	11,148.00	12,887.36	-226.42	12,887.87	0.00	0.00	0.00
24,300.00	90.00	359.86	11,148.00	12,987.36	-226.67	12,987.87	0.00	0.00	0.00
24,400.00	90.00	359.86	11,148.00	13,087.36	-226.92	13,087.87	0.00	0.00	0.00
24,500.00	90.00	359.86	11,148.00	13,187.36	-227.17	13,187.87	0.00	0.00	0.00
24,600.00	90.00	359.86	11,148.00	13,287.36	-227.42	13,287.87	0.00	0.00	0.00
24,700.00	90.00	359.86	11,148.00	13,387.36	-227.68	13,387.87	0.00	0.00	0.00
24,800.00	90.00	359.86	11,148.00	13,487.36	-227.93	13,487.87	0.00	0.00	0.00
24,900.00	90.00	359.86	11,148.00	13,587.36	-228.18	13,587.87	0.00	0.00	0.00
25,000.00	90.00	359.86	11,148.00	13,687.36	-228.43	13,687.87	0.00	0.00	0.00
25,100.00	90.00	359.86	11,148.00	13,787.36	-228.68	13,787.87	0.00	0.00	0.00
25,200.00	90.00	359.86	11,148.00	13,887.36	-228.93	13,887.87	0.00	0.00	0.00
25,300.00	90.00	359.86	11,148.00	13,987.36	-229.18	13,987.87	0.00	0.00	0.00
25,400.00	90.00	359.86	11,148.00	14,087.36	-229.43	14,087.87	0.00	0.00	0.00
25,500.00	90.00	359.86	11,148.00	14,187.36	-229.68	14,187.87	0.00	0.00	0.00
25,600.00	90.00	359.86	11,148.00	14,287.35	-229.93	14,287.87	0.00	0.00	0.00
25,700.00	90.00	359.86	11,148.00	14,387.35	-230.18	14,387.87	0.00	0.00	0.00
25,800.00	90.00	359.86	11,148.00	14,487.35	-230.43	14,487.87	0.00	0.00	0.00
25,900.00	90.00	359.86	11,148.00	14,587.35	-230.68	14,587.87	0.00	0.00	0.00
26,000.00	90.00	359.86	11,148.00	14,687.35	-230.94	14,687.87	0.00	0.00	0.00
26,100.00	90.00	359.86	11,148.00	14,787.35	-231.19	14,787.87	0.00	0.00	0.00
26,200.00	90.00	359.86	11,148.00	14,887.35	-231.44	14,887.87	0.00	0.00	0.00
26,300.00	90.00	359.86	11,148.00	14,987.35	-231.69	14,987.87	0.00	0.00	0.00
26,400.00	90.00	359.86	11,148.00	15,087.35	-231.94	15,087.87	0.00	0.00	0.00
26,500.00	90.00	359.86	11,148.00	15,187.35	-232.19	15,187.87	0.00	0.00	0.00
26,600.00	90.00	359.86	11,148.00	15,287.35	-232.44	15,287.87	0.00	0.00	0.00
26,663.65	90.00	359.86	11,148.00	15,351.00	-232.60	15,351.52	0.00	0.00	0.00
PBHL									

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well Shanghai Rooster 15-3 Fed 805H
Company:	ROC	**TVD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Project:	508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)	**MD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Site:	(545) Shanghai Rooster 15-3 Fed Pad D - Plans	**North Reference:**	Grid
Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL - Shanghai Roos - plan hits target center - Point	0.00	0.00	11,148.00	15,351.00	-232.60	424,252.40	613,152.80	32° 9' 57.09 N	103° 58' 3.57 W
FTP - Shanghai Roos - plan misses target center by 50.55usft at 11285.50usft MD (11103.94 TVD, -20.95 N, -209.14 E) - Point	0.00	0.00	11,148.00	-41.00	-194.60	408,860.40	613,190.80	32° 7' 24.76 N	103° 58' 3.74 W
LTP - Shanghai Roost - plan misses target center by 0.33usft at 26533.65usft MD (11148.00 TVD, 15221.00 N, -232.27 E) - Point	0.00	0.00	11,148.00	15,221.00	-232.60	424,122.40	613,152.80	32° 9' 55.80 N	103° 58' 3.58 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
669.06	669.00	Rustler		0.00	
949.14	949.00	Salado		0.00	
2,997.41	2,979.00	Base of Salt		0.00	
3,191.35	3,170.00	Delaware		0.00	
4,106.43	4,074.00	Cherry Canyon		0.00	
5,702.82	5,668.00	Brushy Canyon		0.00	
6,751.96	6,717.00	Basal Brushy Canyon		0.00	
6,959.97	6,925.00	Bone Spring		0.00	
7,136.98	7,102.00	Avalon		0.00	
7,565.00	7,530.00	Avalon Lower		0.00	
7,873.04	7,838.00	Bone Spring 1 Lime		0.00	
7,923.04	7,888.00	Bone Spring 1 Sand		0.00	
8,229.06	8,194.00	Bone Spring 2 Lime		0.00	
8,750.22	8,714.00	Bone Spring 2 Sand		0.00	
9,000.63	8,964.00	Bone Spring 3 Lime		0.00	
9,370.63	9,334.00	Harkey Sand		0.00	
9,415.63	9,379.00	Bone Spring 3 Upper Shale		0.00	
9,620.63	9,584.00	Bone Spring 3 Upper Shale Base		0.00	
9,668.63	9,632.00	Bone Spring 3 Lower Shale		0.00	
9,823.63	9,787.00	Bone Spring 3 Sand		0.00	
10,022.63	9,986.00	Warwink		0.00	
10,113.63	10,077.00	Red Hills		0.00	
10,177.63	10,141.00	Wolfcamp		0.00	
10,203.63	10,167.00	Wolfcamp X		0.00	
10,272.63	10,236.00	Wolfcamp Y		0.00	
10,316.63	10,280.00	Wolfcamp A		0.00	
10,659.68	10,623.00	Wolfcamp B		0.00	
10,928.54	10,876.00	Wolfcamp C		0.00	
11,217.24	11,074.00	Wolfcamp D		0.00	

ExxonMobil
Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well Shanghai Rooster 15-3 Fed 805H
Company:	ROC	**TVD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Project:	508,545,X20,X34 - SR Eddy CO, NM (NAD 27 NME)	**MD Reference:**	RKB 30 @ 3109.00usft (HP 545)
Site:	(545) Shanghai Rooster 15-3 Fed Pad D - Plans	**North Reference:**	Grid
Well:	Shanghai Rooster 15-3 Fed 805H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ST01		
Design:	Plan 4		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,308.00	8,272.93	-413.68	-227.54	Tie-in
8,379.00	8,343.92	-414.31	-228.30	Top of Whip
8,399.00	8,363.92	-413.97	-228.36	SDTRK, Build 2°/100'
8,524.00	8,488.64	-405.80	-227.97	Hold 5.00° Inc
8,774.00	8,737.69	-384.04	-226.90	Drop 2°/100'
9,024.00	8,987.37	-373.15	-226.37	Hold Vertical
10,611.67	10,575.04	-373.15	-226.37	Curve KOP, Build 10°/100'
11,511.67	11,148.00	199.12	-198.38	LP @ 90.00° Inc, Turn 2°/100'
11,658.85	11,148.00	346.25	-194.97	Hold 359.86° Azm
26,663.65	11,148.00	15,351.00	-232.60	PBHL

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Energy Incorporated
WELL NAME & NO.:	Shanghai Rooster 15-3 Fed 805H
LOCATION:	Sec 15-25S-29E-NMP
COUNTY:	Eddy County, New Mexico

*Previously known as **Shanghai Rooster 22-27 Fed 707H**. Changes approved through engineering via Sundry **2714218** on **02/13/2023**. Any previous COAs not addressed within the updated COAs still apply.*

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☐ Unit

Break Testing	◉ Yes	○ 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)

☒ 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) 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 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

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.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 209225

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 209225
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	If a bradenhead squeeze was used during the cementing of the intermediate casing, then a CBL is required to verify the integrity of the cement behind the intermediate casing.	9/27/2023