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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 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

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

¹ API Number 30-015- 44253	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code	⁵ Property Name REMUDA SOUTH 25 STATE	⁶ Well Number 167H
⁷ OGRID No. 005380	⁸ Operator Name XTO ENERGY, INC.	⁹ Elevation 3,090'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	25	23 S	29 E		2,280	NORTH	735	EAST	EDDY

¹¹ 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
P	36	23 S	29 E		200	SOUTH	990	EAST	EDDY

¹² Dedicated Acres 480	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. 971
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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.

	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y= 464,639.9 X= 624,200.0 LAT.= 32.276772°N LONG.= 103.931471°W FIRST TAKE POINT NAD 27 NME Y= 463,928.8 X= 623,947.7 LAT.= 32.274820°N LONG.= 103.932296°W CORNER COORDINATES TABLE NAD 27 NME A - Y= 464,258.3 N, X= 624,936.3 E B - Y= 464,258.9 N, X= 623,667.2 E C - Y= 461,610.6 N, X= 624,947.7 E D - Y= 461,609.3 N, X= 623,619.4 E E - Y= 458,950.4 N, X= 624,961.0 E F - Y= 458,948.5 N, X= 623,632.7 E G - Y= 456,293.7 N, X= 624,971.6 E H - Y= 456,290.8 N, X= 623,644.7 E CORNER COORDINATES TABLE NAD 83 NME A - Y= 464,317.7 N, X= 666,119.3 E B - Y= 464,318.3 N, X= 664,850.2 E C - Y= 461,669.9 N, X= 666,130.8 E D - Y= 461,668.6 N, X= 664,802.5 E E - Y= 459,009.7 N, X= 666,144.1 E F - Y= 459,007.8 N, X= 664,815.8 E G - Y= 456,352.9 N, X= 666,154.8 E H - Y= 456,350.0 N, X= 664,827.9 E LAST TAKE POINT NAD 27 NME Y= 456,621.5 X= 623,980.2 LAT.= 32.254733°N LONG.= 103.932279°W BOTTOM HOLE LOCATION NAD 27 NME Y= 456,491.5 X= 623,980.8 LAT.= 32.254375°N LONG.= 103.932279°W	GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION Y= 464,699.3 X= 665,383.0 LAT.= 32.276895°N LONG.= 103.931962°W FIRST TAKE POINT NAD 83 NME Y= 463,988.2 X= 665,130.7 LAT.= 32.274943°N LONG.= 103.932787°W CORNER COORDINATES TABLE NAD 83 NME A - Y= 464,317.7 N, X= 666,119.3 E B - Y= 464,318.3 N, X= 664,850.2 E C - Y= 461,669.9 N, X= 666,130.8 E D - Y= 461,668.6 N, X= 664,802.5 E E - Y= 459,009.7 N, X= 666,144.1 E F - Y= 459,007.8 N, X= 664,815.8 E G - Y= 456,352.9 N, X= 666,154.8 E H - Y= 456,350.0 N, X= 664,827.9 E LAST TAKE POINT NAD 83 NME Y= 456,680.7 X= 665,163.4 LAT.= 32.254856°N LONG.= 103.932769°W BOTTOM HOLE LOCATION NAD 83 NME Y= 456,550.7 X= 665,164.0 LAT.= 32.254498°N LONG.= 103.932769°W	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Kelly Kardos 6/3/19 Signature Date Kelly Kardos Printed Name kelly_kardos@xtoenergy.com E-mail Address
	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 05-17-2019 Date of Survey Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number AW 2019010056		

Rev. 6-12-19

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Intent ☒ As Drilled ☐

JUN 11 2019

API # 30-015-44253		DISTRICT II-ARTESIA O.C.D.	
Operator Name: XTO ENERGY INC		Property Name: REMUDA SOUTH 25 STATE	Well Number 167H

Kick Off Point (KOP)

UL H	Section 25	Township 23S	Range 29E	Lot	Feet 2280	From N/S NORTH	Feet 735	From E/W EAST	County EDDY
Latitude 32.276895					Longitude -103.931962			NAD NAD83	

First Take Point (FTP)

UL I	Section 25	Township 23S	Range 29E	Lot	Feet 2319	From N/S SOUTH	Feet 990	From E/W EAST	County EDDY
Latitude 32.274943					Longitude -103.932787			NAD NAD83	

Last Take Point (LTP)

UL P	Section 36	Township 23S	Range 29E	Lot	Feet 330	From N/S SOUTH	Feet 990	From E/W EAST	County EDDY
Latitude 32.254856					Longitude -103.932769			NAD NAD83	

Is this well the defining well for the Horizontal Spacing Unit?

☐ N

Is this well an infill well?

☐ Y

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API # 30-015-44391			
Operator Name: XTO ENERGY INC		Property Name: REMUDA SOUTH 36 STATE	Well Number 166H

KZ 06/29/2018

NM STATE DRILLING PERMITTING

Remuda South 25 State 167H

KB 3083		Deepest TVD		11425		KOP		10811		End of Curve		11711		Measured depth		19191	
Casing Type	Fluid Type	Mud Weight	Hole Size	Casing Size	Casing Grade	Casing Weight	Top MD	Setting Depth	Lead Cement	Tail Cement	Total Sks Cement	TOC					
Surface	FW/Native	8.3 - 9.0	24	18.625	H40 STC	87.5	0	350	143	430	573	0					
1st Intermediate	Brine	9.8 - 10.3	17.5	13.325	J-55 STC	68	0	3153	1628	266	1894	0					
2nd Intermediate	FW/Cut Brine	8.7 - 9.7	12.25	9.625	J-55 LTC	40	0	10659	1981	208	2190	0					
Production	OBM	13.2	8.75	5.5	P110 BTC	20	0	19191	806	1119	1926	9659					

Max Expected Surface Pressure
5329

BOP
Cameron 10M Double Ram BOP
Test Pressure 10000

Total Vertical Section 7480

Contingencies
1. DV tool may be set in 2nd intermediate between 3203-3400'



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DISTRICT II-ARTESIA O.C.D.

XTO ENERGY, INC.

Eddy County, NM
Sec 25, T23S, R29E
Remuda South 25 State 167H

Wellbore #1

Plan: Design #1

QES Well Planning Report

07 June, 2019





Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project:		Eddy County, NM	
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		Sec 25, T23S, R29E			
Site Position:		Northing:	464,639.90 usft	Latitude:	32° 16' 36.381 N
From:	Map	Easting:	624,200.00 usft	Longitude:	103° 55' 53.295 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.21 °

Well	Remuda South 25 State 167H					
Well Position	+N/-S	0.0 usft	Northing:	464,639.90 usft	Latitude:	32° 16' 36.381 N
	+E/-W	0.0 usft	Easting:	624,200.00 usft	Longitude:	103° 55' 53.295 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:		3,090.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/7/2019	6.95	60.02	47,925.60000000

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	181.54

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,545.0	2.45	253.00	3,544.9	-1.5	-5.0	1.00	1.00	0.00	253.00	
10,811.4	2.45	253.00	10,804.6	-92.3	-302.1	0.00	0.00	0.00	0.00	
11,703.2	89.69	175.00	11,372.0	-662.1	-275.9	10.00	9.78	-8.75	-78.02	
11,873.2	89.69	175.00	11,372.9	-831.4	-261.1	0.00	0.00	0.00	0.00	
12,110.6	89.69	179.75	11,374.2	-1,068.5	-250.2	2.00	0.00	2.00	89.96	
19,190.6	89.69	179.75	11,412.0	-8,148.4	-219.2	0.00	0.00	0.00	0.00	PBHL - RS25S 167



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
Rustler Anh.										
249.0	0.00	0.00	249.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
Base Rustler Anh.										
339.0	0.00	0.00	339.0	0.0	0.0	0.0	0.00	0.00	0.00	
Salado Sh. Lm.										
366.0	0.00	0.00	366.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
Est. Top of Salt										
465.0	0.00	0.00	465.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
Base Salt										
3,056.0	0.00	0.00	3,056.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
Build 1°/100'										
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
Lamar Lm. (Del Mtn Grp.)										
3,343.0	0.43	253.00	3,343.0	0.0	-0.2	0.1	1.00	1.00	0.00	
Bell Canyon Ss.										
3,363.0	0.63	253.00	3,363.0	-0.1	-0.3	0.1	1.00	1.00	0.00	
3,400.0	1.00	253.00	3,400.0	-0.3	-0.8	0.3	1.00	1.00	0.00	
3,500.0	2.00	253.00	3,500.0	-1.0	-3.3	1.1	1.00	1.00	0.00	
EOB @ 2.45° Inc. / 253.00° Azm										
3,545.0	2.45	253.00	3,544.9	-1.5	-5.0	1.7	1.00	1.00	0.00	



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
3,600.0	2.45	253.00	3,599.9	-2.2	-7.3	2.4	0.00	0.00	0.00
3,700.0	2.45	253.00	3,699.8	-3.5	-11.3	3.8	0.00	0.00	0.00
3,800.0	2.45	253.00	3,799.7	-4.7	-15.4	5.1	0.00	0.00	0.00
3,900.0	2.45	253.00	3,899.6	-6.0	-19.5	6.5	0.00	0.00	0.00
4,000.0	2.45	253.00	3,999.5	-7.2	-23.6	7.9	0.00	0.00	0.00
4,100.0	2.45	253.00	4,099.4	-8.5	-27.7	9.2	0.00	0.00	0.00
Cherry Canyon Ss.									
4,189.7	2.45	253.00	4,189.0	-9.6	-31.4	10.4	0.00	0.00	0.00
4,200.0	2.45	253.00	4,199.3	-9.7	-31.8	10.6	0.00	0.00	0.00
4,300.0	2.45	253.00	4,299.2	-11.0	-35.9	11.9	0.00	0.00	0.00
4,400.0	2.45	253.00	4,399.1	-12.2	-40.0	13.3	0.00	0.00	0.00
4,500.0	2.45	253.00	4,499.1	-13.5	-44.0	14.6	0.00	0.00	0.00
4,600.0	2.45	253.00	4,599.0	-14.7	-48.1	16.0	0.00	0.00	0.00
4,700.0	2.45	253.00	4,698.9	-16.0	-52.2	17.4	0.00	0.00	0.00
4,800.0	2.45	253.00	4,798.8	-17.2	-56.3	18.7	0.00	0.00	0.00
4,900.0	2.45	253.00	4,898.7	-18.5	-60.4	20.1	0.00	0.00	0.00
5,000.0	2.45	253.00	4,998.6	-19.7	-64.5	21.4	0.00	0.00	0.00
5,100.0	2.45	253.00	5,098.5	-21.0	-68.6	22.8	0.00	0.00	0.00
5,200.0	2.45	253.00	5,198.4	-22.2	-72.7	24.2	0.00	0.00	0.00
5,300.0	2.45	253.00	5,298.3	-23.5	-76.8	25.5	0.00	0.00	0.00
5,400.0	2.45	253.00	5,398.2	-24.7	-80.8	26.9	0.00	0.00	0.00
5,500.0	2.45	253.00	5,498.1	-26.0	-84.9	28.2	0.00	0.00	0.00
5,600.0	2.45	253.00	5,598.0	-27.2	-89.0	29.6	0.00	0.00	0.00
5,700.0	2.45	253.00	5,698.0	-28.5	-93.1	31.0	0.00	0.00	0.00
5,800.0	2.45	253.00	5,797.9	-29.7	-97.2	32.3	0.00	0.00	0.00
Brushy Canyon Ss.									
5,815.1	2.45	253.00	5,813.0	-29.9	-97.8	32.5	0.00	0.00	0.00
5,900.0	2.45	253.00	5,897.8	-31.0	-101.3	33.7	0.00	0.00	0.00
6,000.0	2.45	253.00	5,997.7	-32.2	-105.4	35.0	0.00	0.00	0.00
6,100.0	2.45	253.00	6,097.6	-33.5	-109.5	36.4	0.00	0.00	0.00
6,200.0	2.45	253.00	6,197.5	-34.7	-113.5	37.8	0.00	0.00	0.00
6,300.0	2.45	253.00	6,297.4	-36.0	-117.6	39.1	0.00	0.00	0.00
6,400.0	2.45	253.00	6,397.3	-37.2	-121.7	40.5	0.00	0.00	0.00
6,500.0	2.45	253.00	6,497.2	-38.5	-125.8	41.8	0.00	0.00	0.00
6,600.0	2.45	253.00	6,597.1	-39.7	-129.9	43.2	0.00	0.00	0.00
6,700.0	2.45	253.00	6,697.0	-41.0	-134.0	44.6	0.00	0.00	0.00
6,800.0	2.45	253.00	6,796.9	-42.2	-138.1	45.9	0.00	0.00	0.00
Lower Brushy Canyon Ss.									
6,837.1	2.45	253.00	6,834.0	-42.7	-139.6	46.4	0.00	0.00	0.00
6,900.0	2.45	253.00	6,896.9	-43.5	-142.2	47.3	0.00	0.00	0.00
7,000.0	2.45	253.00	6,996.8	-44.7	-146.2	48.6	0.00	0.00	0.00
7,100.0	2.45	253.00	7,096.7	-46.0	-150.3	50.0	0.00	0.00	0.00
Bone Spring Lm.									
7,111.3	2.45	253.00	7,108.0	-46.1	-150.8	50.1	0.00	0.00	0.00
7,200.0	2.45	253.00	7,196.6	-47.2	-154.4	51.3	0.00	0.00	0.00
Avalon Ss.									
7,207.4	2.45	253.00	7,204.0	-47.3	-154.7	51.4	0.00	0.00	0.00
Bone Spg. Upper Avalon Lm.									
7,274.5	2.45	253.00	7,271.0	-48.1	-157.5	52.4	0.00	0.00	0.00
7,300.0	2.45	253.00	7,296.5	-48.5	-158.5	52.7	0.00	0.00	0.00
Bone Spg. Avalon Sh.									
7,358.6	2.45	253.00	7,355.0	-49.2	-160.9	53.5	0.00	0.00	0.00
7,400.0	2.45	253.00	7,396.4	-49.7	-162.6	54.1	0.00	0.00	0.00



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
7,500.0	2.45	253.00	7,496.3	-51.0	-166.7	55.4	0.00	0.00	0.00
Bone Spg. Lower Avalon Lm.									
7,568.8	2.45	253.00	7,565.0	-51.8	-169.5	56.4	0.00	0.00	0.00
7,600.0	2.45	253.00	7,596.2	-52.2	-170.8	56.8	0.00	0.00	0.00
7,700.0	2.45	253.00	7,696.1	-53.5	-174.9	58.1	0.00	0.00	0.00
7,800.0	2.45	253.00	7,796.0	-54.7	-179.0	59.5	0.00	0.00	0.00
7,900.0	2.45	253.00	7,895.9	-56.0	-183.0	60.9	0.00	0.00	0.00
8,000.0	2.45	253.00	7,995.9	-57.2	-187.1	62.2	0.00	0.00	0.00
8,100.0	2.45	253.00	8,095.8	-58.5	-191.2	63.6	0.00	0.00	0.00
First Bone Spring Ss.									
8,121.3	2.45	253.00	8,117.0	-58.7	-192.1	63.9	0.00	0.00	0.00
8,200.0	2.45	253.00	8,195.7	-59.7	-195.3	64.9	0.00	0.00	0.00
8,300.0	2.45	253.00	8,295.6	-61.0	-199.4	66.3	0.00	0.00	0.00
8,400.0	2.45	253.00	8,395.5	-62.2	-203.5	67.7	0.00	0.00	0.00
Second Bone Spring Lm.									
8,441.6	2.45	253.00	8,437.0	-62.7	-205.2	68.2	0.00	0.00	0.00
8,500.0	2.45	253.00	8,495.4	-63.5	-207.6	69.0	0.00	0.00	0.00
8,600.0	2.45	253.00	8,595.3	-64.7	-211.7	70.4	0.00	0.00	0.00
8,700.0	2.45	253.00	8,695.2	-66.0	-215.7	71.7	0.00	0.00	0.00
8,800.0	2.45	253.00	8,795.1	-67.2	-219.8	73.1	0.00	0.00	0.00
8,900.0	2.45	253.00	8,895.0	-68.5	-223.9	74.5	0.00	0.00	0.00
Second Bone Spring Ss.									
8,953.0	2.45	253.00	8,948.0	-69.1	-226.1	75.2	0.00	0.00	0.00
9,000.0	2.45	253.00	8,994.9	-69.7	-228.0	75.8	0.00	0.00	0.00
9,100.0	2.45	253.00	9,094.8	-71.0	-232.1	77.2	0.00	0.00	0.00
9,200.0	2.45	253.00	9,194.8	-72.2	-236.2	78.5	0.00	0.00	0.00
Third Bone Spring Lm.									
9,265.3	2.45	253.00	9,260.0	-73.0	-238.9	79.4	0.00	0.00	0.00
9,300.0	2.45	253.00	9,294.7	-73.5	-240.3	79.9	0.00	0.00	0.00
9,400.0	2.45	253.00	9,394.6	-74.7	-244.4	81.3	0.00	0.00	0.00
9,500.0	2.45	253.00	9,494.5	-76.0	-248.4	82.6	0.00	0.00	0.00
9,600.0	2.45	253.00	9,594.4	-77.2	-252.5	84.0	0.00	0.00	0.00
9,700.0	2.45	253.00	9,694.3	-78.5	-256.6	85.3	0.00	0.00	0.00
9,800.0	2.45	253.00	9,794.2	-79.7	-260.7	86.7	0.00	0.00	0.00
9,900.0	2.45	253.00	9,894.1	-81.0	-264.8	88.0	0.00	0.00	0.00
10,000.0	2.45	253.00	9,994.0	-82.2	-268.9	89.4	0.00	0.00	0.00
Third Bone Spring Ss.									
10,043.0	2.45	253.00	10,037.0	-82.7	-270.6	90.0	0.00	0.00	0.00
10,100.0	2.45	253.00	10,093.9	-83.5	-273.0	90.8	0.00	0.00	0.00
10,200.0	2.45	253.00	10,193.8	-84.7	-277.1	92.1	0.00	0.00	0.00
10,300.0	2.45	253.00	10,293.8	-86.0	-281.2	93.5	0.00	0.00	0.00
10,400.0	2.45	253.00	10,393.7	-87.2	-285.2	94.8	0.00	0.00	0.00
Wolfcamp Sh.									
10,406.3	2.45	253.00	10,400.0	-87.3	-285.5	94.9	0.00	0.00	0.00
Wolfcamp X Ss.									
10,414.4	2.45	253.00	10,408.0	-87.4	-285.8	95.0	0.00	0.00	0.00
Wolfcamp Y Ss.									
10,487.4	2.45	253.00	10,481.0	-88.3	-288.8	96.0	0.00	0.00	0.00
10,500.0	2.45	253.00	10,493.6	-88.5	-289.3	96.2	0.00	0.00	0.00
Wolfcamp A Sh.									
10,543.5	2.45	253.00	10,537.0	-89.0	-291.1	96.8	0.00	0.00	0.00
10,600.0	2.45	253.00	10,593.5	-89.7	-293.4	97.6	0.00	0.00	0.00
10,700.0	2.45	253.00	10,693.4	-91.0	-297.5	98.9	0.00	0.00	0.00



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,800.0	2.45	253.00	10,793.3	-92.2	-301.6	100.3	0.00	0.00	0.00
Build 10°/100'									
10,811.4	2.45	253.00	10,804.6	-92.3	-302.1	100.4	0.00	0.00	0.00
10,850.0	4.99	203.66	10,843.2	-94.1	-303.5	102.3	10.00	6.56	-127.69
Wolfcamp B Sh. Lm.									
10,864.9	6.33	197.16	10,858.0	-95.5	-304.0	103.6	10.00	9.04	-43.74
10,900.0	9.67	189.20	10,892.8	-100.3	-305.1	108.4	10.00	9.51	-22.64
10,950.0	14.57	184.26	10,941.7	-110.7	-306.2	118.9	10.00	9.79	-9.90
11,000.0	19.51	181.77	10,989.5	-125.3	-306.9	133.5	10.00	9.90	-4.97
Wolfcamp C Lm. Sh.									
11,049.1	24.40	180.28	11,035.0	-143.7	-307.2	151.9	10.00	9.94	-3.03
11,050.0	24.48	180.26	11,035.8	-144.0	-307.2	152.2	10.00	9.95	-2.44
11,100.0	29.46	179.24	11,080.3	-166.7	-307.1	174.9	10.00	9.96	-2.05
11,150.0	34.45	178.49	11,122.8	-193.2	-306.6	201.3	10.00	9.97	-1.50
11,200.0	39.43	177.90	11,162.7	-223.2	-305.6	231.3	10.00	9.98	-1.16
11,250.0	44.42	177.43	11,199.9	-256.5	-304.3	264.6	10.00	9.98	-0.94
Wolfcamp D Lm. Sh.									
11,261.5	45.57	177.34	11,208.0	-264.6	-303.9	272.7	10.00	9.98	-0.84
11,300.0	49.42	177.04	11,234.0	-293.0	-302.5	301.0	10.00	9.98	-0.77
11,350.0	54.41	176.70	11,264.9	-332.3	-300.3	340.3	10.00	9.99	-0.68
11,400.0	59.40	176.41	11,292.2	-374.1	-297.8	382.0	10.00	9.99	-0.60
11,450.0	64.40	176.14	11,315.7	-418.1	-295.0	425.9	10.00	9.99	-0.54
Wolfcamp E Sh. Lm.									
11,490.8	68.47	175.93	11,332.0	-455.4	-292.4	463.1	10.00	9.99	-0.50
11,500.0	69.39	175.89	11,335.3	-464.0	-291.8	471.6	10.00	9.99	-0.48
11,550.0	74.39	175.66	11,350.9	-511.3	-288.3	518.9	10.00	9.99	-0.46
11,600.0	79.38	175.44	11,362.2	-559.9	-284.5	567.3	10.00	9.99	-0.44
11,650.0	84.38	175.22	11,369.3	-609.2	-280.4	616.5	10.00	9.99	-0.43
EOB @ 89.69° Inc. / 175.00° Azm									
11,703.2	89.69	175.00	11,372.0	-662.1	-275.9	669.3	10.00	9.99	-0.42
11,800.0	89.69	175.00	11,372.5	-758.5	-267.5	765.5	0.00	0.00	0.00
Turn 2°/100'									
11,873.2	89.69	175.00	11,372.9	-831.4	-261.1	838.1	0.00	0.00	0.00
11,900.0	89.69	175.54	11,373.1	-858.2	-258.9	864.8	2.00	0.00	2.00
12,000.0	89.69	177.54	11,373.6	-958.0	-252.8	964.4	2.00	0.00	2.00
12,100.0	89.69	179.54	11,374.1	-1,057.9	-250.3	1,064.3	2.00	0.00	2.00
EOT @ 89.69° Inc. / 179.75° Azm									
12,110.6	89.69	179.75	11,374.2	-1,068.5	-250.2	1,074.9	2.00	0.00	2.00
12,200.0	89.69	179.75	11,374.7	-1,157.9	-249.8	1,164.2	0.00	0.00	0.00
12,300.0	89.69	179.75	11,375.2	-1,257.9	-249.4	1,264.2	0.00	0.00	0.00
12,400.0	89.69	179.75	11,375.8	-1,357.9	-249.0	1,364.1	0.00	0.00	0.00
12,500.0	89.69	179.75	11,376.3	-1,457.9	-248.5	1,464.1	0.00	0.00	0.00
12,600.0	89.69	179.75	11,376.8	-1,557.9	-248.1	1,564.0	0.00	0.00	0.00
12,700.0	89.69	179.75	11,377.4	-1,657.9	-247.6	1,664.0	0.00	0.00	0.00
12,800.0	89.69	179.75	11,377.9	-1,757.9	-247.2	1,763.9	0.00	0.00	0.00
12,900.0	89.69	179.75	11,378.4	-1,857.9	-246.8	1,863.9	0.00	0.00	0.00
13,000.0	89.69	179.75	11,379.0	-1,957.9	-246.3	1,963.8	0.00	0.00	0.00
13,100.0	89.69	179.75	11,379.5	-2,057.9	-245.9	2,063.8	0.00	0.00	0.00
13,200.0	89.69	179.75	11,380.0	-2,157.9	-245.5	2,163.7	0.00	0.00	0.00
13,300.0	89.69	179.75	11,380.6	-2,257.9	-245.0	2,263.7	0.00	0.00	0.00
13,400.0	89.69	179.75	11,381.1	-2,357.9	-244.6	2,363.6	0.00	0.00	0.00
13,500.0	89.69	179.75	11,381.6	-2,457.9	-244.1	2,463.6	0.00	0.00	0.00
13,600.0	89.69	179.75	11,382.2	-2,557.9	-243.7	2,563.5	0.00	0.00	0.00



Well Planning Report



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Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
13,700.0	89.69	179.75	11,382.7	-2,657.9	-243.3	2,663.5	0.00	0.00	0.00
13,800.0	89.69	179.75	11,383.2	-2,757.9	-242.8	2,763.4	0.00	0.00	0.00
13,900.0	89.69	179.75	11,383.8	-2,857.9	-242.4	2,863.4	0.00	0.00	0.00
14,000.0	89.69	179.75	11,384.3	-2,957.9	-241.9	2,963.3	0.00	0.00	0.00
14,100.0	89.69	179.75	11,384.8	-3,057.9	-241.5	3,063.3	0.00	0.00	0.00
14,200.0	89.69	179.75	11,385.4	-3,157.9	-241.1	3,163.2	0.00	0.00	0.00
14,300.0	89.69	179.75	11,385.9	-3,257.9	-240.6	3,263.2	0.00	0.00	0.00
14,400.0	89.69	179.75	11,386.4	-3,357.9	-240.2	3,363.1	0.00	0.00	0.00
14,500.0	89.69	179.75	11,387.0	-3,457.9	-239.8	3,463.1	0.00	0.00	0.00
14,600.0	89.69	179.75	11,387.5	-3,557.9	-239.3	3,563.0	0.00	0.00	0.00
14,700.0	89.69	179.75	11,388.0	-3,657.9	-238.9	3,663.0	0.00	0.00	0.00
14,800.0	89.69	179.75	11,388.6	-3,757.9	-238.4	3,762.9	0.00	0.00	0.00
14,900.0	89.69	179.75	11,389.1	-3,857.9	-238.0	3,862.9	0.00	0.00	0.00
15,000.0	89.69	179.75	11,389.6	-3,957.9	-237.6	3,962.8	0.00	0.00	0.00
15,100.0	89.69	179.75	11,390.2	-4,057.9	-237.1	4,062.8	0.00	0.00	0.00
15,200.0	89.69	179.75	11,390.7	-4,157.9	-236.7	4,162.7	0.00	0.00	0.00
15,300.0	89.69	179.75	11,391.2	-4,257.9	-236.3	4,262.7	0.00	0.00	0.00
15,400.0	89.69	179.75	11,391.8	-4,357.9	-235.8	4,362.6	0.00	0.00	0.00
15,500.0	89.69	179.75	11,392.3	-4,457.9	-235.4	4,462.6	0.00	0.00	0.00
15,600.0	89.69	179.75	11,392.8	-4,557.9	-234.9	4,562.5	0.00	0.00	0.00
15,700.0	89.69	179.75	11,393.4	-4,657.8	-234.5	4,662.5	0.00	0.00	0.00
15,800.0	89.69	179.75	11,393.9	-4,757.8	-234.1	4,762.4	0.00	0.00	0.00
15,900.0	89.69	179.75	11,394.4	-4,857.8	-233.6	4,862.4	0.00	0.00	0.00
16,000.0	89.69	179.75	11,395.0	-4,957.8	-233.2	4,962.3	0.00	0.00	0.00
16,100.0	89.69	179.75	11,395.5	-5,057.8	-232.7	5,062.3	0.00	0.00	0.00
16,200.0	89.69	179.75	11,396.0	-5,157.8	-232.3	5,162.2	0.00	0.00	0.00
16,300.0	89.69	179.75	11,396.6	-5,257.8	-231.9	5,262.2	0.00	0.00	0.00
16,400.0	89.69	179.75	11,397.1	-5,357.8	-231.4	5,362.1	0.00	0.00	0.00
16,500.0	89.69	179.75	11,397.6	-5,457.8	-231.0	5,462.1	0.00	0.00	0.00
16,600.0	89.69	179.75	11,398.2	-5,557.8	-230.6	5,562.0	0.00	0.00	0.00
16,700.0	89.69	179.75	11,398.7	-5,657.8	-230.1	5,662.0	0.00	0.00	0.00
16,800.0	89.69	179.75	11,399.2	-5,757.8	-229.7	5,761.9	0.00	0.00	0.00
16,900.0	89.69	179.75	11,399.8	-5,857.8	-229.2	5,861.9	0.00	0.00	0.00
17,000.0	89.69	179.75	11,400.3	-5,957.8	-228.8	5,961.8	0.00	0.00	0.00
17,100.0	89.69	179.75	11,400.8	-6,057.8	-228.4	6,061.8	0.00	0.00	0.00
17,200.0	89.69	179.75	11,401.4	-6,157.8	-227.9	6,161.7	0.00	0.00	0.00
17,300.0	89.69	179.75	11,401.9	-6,257.8	-227.5	6,261.7	0.00	0.00	0.00
17,400.0	89.69	179.75	11,402.4	-6,357.8	-227.0	6,361.6	0.00	0.00	0.00
17,500.0	89.69	179.75	11,403.0	-6,457.8	-226.6	6,461.6	0.00	0.00	0.00
17,600.0	89.69	179.75	11,403.5	-6,557.8	-226.2	6,561.5	0.00	0.00	0.00
17,700.0	89.69	179.75	11,404.0	-6,657.8	-225.7	6,661.5	0.00	0.00	0.00
17,800.0	89.69	179.75	11,404.6	-6,757.8	-225.3	6,761.4	0.00	0.00	0.00
17,900.0	89.69	179.75	11,405.1	-6,857.8	-224.9	6,861.4	0.00	0.00	0.00
18,000.0	89.69	179.75	11,405.6	-6,957.8	-224.4	6,961.3	0.00	0.00	0.00
18,100.0	89.69	179.75	11,406.2	-7,057.8	-224.0	7,061.3	0.00	0.00	0.00
18,200.0	89.69	179.75	11,406.7	-7,157.8	-223.5	7,161.2	0.00	0.00	0.00
18,300.0	89.69	179.75	11,407.2	-7,257.8	-223.1	7,261.2	0.00	0.00	0.00
18,400.0	89.69	179.75	11,407.8	-7,357.8	-222.7	7,361.1	0.00	0.00	0.00
18,500.0	89.69	179.75	11,408.3	-7,457.8	-222.2	7,461.1	0.00	0.00	0.00
18,600.0	89.69	179.75	11,408.8	-7,557.8	-221.8	7,561.0	0.00	0.00	0.00
18,700.0	89.69	179.75	11,409.4	-7,657.8	-221.4	7,661.0	0.00	0.00	0.00
18,800.0	89.69	179.75	11,409.9	-7,757.8	-220.9	7,760.9	0.00	0.00	0.00
18,900.0	89.69	179.75	11,410.4	-7,857.8	-220.5	7,860.9	0.00	0.00	0.00
19,000.0	89.69	179.75	11,411.0	-7,957.8	-220.0	7,960.8	0.00	0.00	0.00



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,100.0	89.69	179.75	11,411.5	-8,057.8	-219.6	8,060.8	0.00	0.00	0.00
TD @ 19190.6' MD / 11412.0' TVD									
19,190.6	89.69	179.75	11,412.0	-8,148.4	-219.2	8,151.3	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
FTP - RS25S 167H	0.00	0.00	11,382.0	-710.4	-252.3	463,929.50	623,947.70	32° 16' 29.360 N	103° 55' 56.265 W
- plan misses target center by 21.6usft at 11753.4usft MD (11372.3 TVD, -712.1 N, -271.5 E)									
- Point									
LTP - RS25S 167H	0.00	0.00	11,411.8	-8,018.4	-219.8	456,621.50	623,980.20	32° 15' 17.038 N	103° 55' 56.205 W
- plan misses target center by 0.5usft at 19060.6usft MD (11411.3 TVD, -8018.4 N, -219.8 E)									
- Point									
PBHL - RS25S 167H	0.00	0.00	11,412.0	-8,148.4	-219.2	456,491.50	623,980.80	32° 15' 15.752 N	103° 55' 56.203 W
- plan hits target center									
- Point									



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Remuda South 25 State 167H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB @ 3113.0usft (Nabors M7507)
Project:	Eddy County, NM	MD Reference:	RKB @ 3113.0usft (Nabors M7507)
Site:	Sec 25, T23S, R29E	North Reference:	Grid
Well:	Remuda South 25 State 167H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
249.0	249.0	Rustler Anh.		0.00	
339.0	339.0	Base Rustler Anh.		0.00	
366.0	366.0	Salado Sh. Lm.		0.00	
465.0	465.0	Est. Top of Salt		0.00	
3,056.0	3,056.0	Base Salt		0.00	
3,343.0	3,343.0	Lamar Lm. (Del Mtn Grp.)		0.00	
3,363.0	3,363.0	Bell Canyon Ss.		0.00	
4,189.7	4,189.0	Cherry Canyon Ss.		0.00	
5,815.1	5,813.0	Brushy Canyon Ss.		0.00	
6,837.1	6,834.0	Lower Brushy Canyon Ss.		0.00	
7,111.3	7,108.0	Bone Spring Lm.		0.00	
7,207.4	7,204.0	Avalon Ss.		0.00	
7,274.5	7,271.0	Bone Spg. Upper Avalon Lm.		0.00	
7,358.6	7,355.0	Bone Spg. Avalon Sh.		0.00	
7,568.8	7,565.0	Bone Spg. Lower Avalon Lm.		0.00	
8,121.3	8,117.0	First Bone Spring Ss.		0.00	
8,441.6	8,437.0	Second Bone Spring Lm.		0.00	
8,953.0	8,948.0	Second Bone Spring Ss.		0.00	
9,265.3	9,260.0	Third Bone Spring Lm.		0.00	
10,043.0	10,037.0	Third Bone Spring Ss.		0.00	
10,406.3	10,400.0	Wolfcamp Sh.		0.00	
10,414.4	10,408.0	Wolfcamp X Ss.		0.00	
10,487.4	10,481.0	Wolfcamp Y Ss.		0.00	
10,543.5	10,537.0	Wolfcamp A Sh.		0.00	
10,864.9	10,858.0	Wolfcamp B Sh. Lm.		0.00	
11,049.1	11,035.0	Wolfcamp C Lm. Sh.		0.00	
11,261.5	11,208.0	Wolfcamp D Lm. Sh.		0.00	
11,490.8	11,332.0	Wolfcamp E Sh. Lm.		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,300.0	3,300.0	0.0	0.0	Build 1"/100'
3,545.0	3,544.9	-1.5	-5.0	EOB @ 2.45° Inc. / 253.00° Azm
10,811.4	10,804.6	-92.3	-302.1	Build 10"/100'
11,703.2	11,372.0	-662.1	-275.9	EOB @ 89.69° Inc. / 175.00° Azm
11,873.2	11,372.9	-831.4	-261.1	Turn 2"/100'
12,110.6	11,374.2	-1,068.5	-250.2	EOT @ 89.69° Inc. / 179.75° Azm
19,190.6	11,412.0	-8,148.4	-219.2	TD @ 19190.6' MD / 11412.0' TVD