

USA

NEW MEXICO

TREBUCHET FEE 23 28 19 (WXY3H,WA5H,TB6H,WXY10H)

TREBUCHET FEE 23 28 19 WXY 3H

TREBUCHET FEE 23 28 19 WXY 3H

Plan: PRELIM A

Survey Report - Geographic

13 December, 2017

Marathon Oil

Survey Report - Geographic

Company:	USA	Local Co-ordinate Reference:	Well TREBUCHET FEE 23 28 19 WXY 3H
Project:	NEW MEXICO	TVD Reference:	RKB @ 3113.5usft
Site:	TREBUCHET FEE 23 28 19 (WXY3H,WA5H,TB6H,WXY10H)	MD Reference:	RKB @ 3113.5usft
Well:	TREBUCHET FEE 23 28 19 WXY 3H	North Reference:	Grid
Wellbore:	TREBUCHET FEE 23 28 19 WXY 3H	Survey Calculation Method:	Minimum Curvature
Design:	PRELIM A	Database:	EDMPROD

Project:	NEW MEXICO		
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		TREBUCHET FEE 23 28 19 (WXY3H,WA5H,TB6H,WXY10H)			
Site Position:		Northing:	467,096.80 usft	Latitude:	32° 17' 2.410 N
From:	Map	Easting:	562,703.28 usft	Longitude:	104° 7' 49.561 W
Position Uncertainty:	3.3 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.11 °

Well	TREBUCHET FEE 23 28 19 WXY 3H, WELL 3 OF 4					
Well Position	+N-S	0.0 usft	Northing:	467,096.80 usft	Latitude:	32° 17' 2.411 N
	+E-W	0.0 usft	Easting:	562,643.28 usft	Longitude:	104° 7' 50.260 W
Position Uncertainty		1.1 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,087.0 usft

Wellbore:	TREBUCHET FEE 23 28 19 WXY 3H				
Magnetic	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/13/2017	7.16	60.02	47,866

Design:	PRELIM A				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.0	0.0	0.0	359.97	

Survey Tool Program	Date 12/13/2017				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	13,867.1	PRELIM A (TREBUCHET FEE 23 28 19 W)	MWD	OWSG MWD - Standard	

Planned Survey:										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	467,096.80	562,643.28	32° 17' 2.411 N	104° 7' 50.260 W	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	467,096.80	562,643.28	32° 17' 2.411 N	104° 7' 50.260 W	
3,000.0	10.00	274.10	2,997.5	3.1	-43.4	467,099.91	562,599.87	32° 17' 2.443 N	104° 7' 50.765 W	
7,739.5	10.00	274.10	7,665.0	62.0	-864.3	467,158.78	561,778.97	32° 17' 3.041 N	104° 8' 0.327 W	
8,739.5	0.00	0.00	8,659.9	68.2	-951.1	467,165.01	561,692.15	32° 17' 3.104 N	104° 8' 1.338 W	
8,894.6	0.00	0.00	8,815.0	68.2	-951.1	467,165.01	561,692.15	32° 17' 3.104 N	104° 8' 1.338 W	
9,794.6	90.00	359.97	9,388.0	641.2	-951.4	467,737.97	561,691.85	32° 17' 8.774 N	104° 8' 1.329 W	
13,867.1	90.00	359.97	9,388.0	4,713.7	-953.6	471,810.50	561,689.72	32° 17' 49.077 N	104° 8' 1.266 W	

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Checked By: _____	Approved By: _____	Date: _____
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