



Wellbore Schematic

Well Name: MARINER FEE 23 28 19 WXY 6H

State/Province NEW MEXICO	Prospect Area MALAGA	Field Name CARLSBAD	Well Subtype	Lat/Long Datum NAD27	Latitude (°) 32.299738	Longitude (°) -104.123051
Well Configuration Type HORIZONTAL	Well Objective EXPLOITATION	Well Status DRILLING	Ground Elevation (ft) 3,066.00	KB-Ground Distance (ft) 26.50		

HORIZONTAL - MARINER FEE 23 28 19 WXY 6H, 6/22/2018 10:55:43 AM

MD (ftKB)	TVD (ftKB)	Incl. (°)	Vertical schematic (actual)	
26.6	26.6	0.3	Des: Conductor Cement; Depth MD:26.5-46.5 ftKB; Date:3/1/2018	No.:1; Des: Conductor 1; OD:20.000 in; ID:19.000 in; Depth MD:26.5-46.5 ftKB; Length:20.00 ft
27.9	27.9	0.3		
29.2	29.2	0.3	Des: Surface Casing Cement; Depth MD:26.6-450.8 ftKB; Date:5/2/2018	No.:2; Des: Surface; OD:13.375 in; ID:12.615 in; Depth MD:26.5-450.8 ftKB; Length:424.29 ft
46.6	46.6	0.3		
72.5	72.5	0.3	Des: Intermediate Casing Cement; Depth MD:26.5-2,445.0 ftKB; Date:5/13/2018	No.:3; Des: Intermediate 1; OD:9.625 in; ID:8.921 in; Depth MD:26.5-2,438.4 ftKB; Length:2,411.92 ft
406.2	406.2	0.8		
407.8	407.8	0.8	Des: Intermediate Casing Cement; Depth MD:26.5-9,720.0 ftKB; Date:5/20/2018	No.:4; Des: Intermediate 2; OD:7.000 in; ID:6.184 in; Depth MD:26.5-9,710.0 ftKB; Length:9,683.45 ft
449.1	449.1	0.9		
450.8	450.8	0.9	Des: Liner Cement; Depth MD:8,815.3-14,448.0 ftKB; Date:6/19/2018	No.:5; Des: Liner 1; OD:4.500 in; ID:3.920 in; Depth MD:8,815.3-14,441.0 ftKB; Length:5,625.66 ft
1,147.6	1,147.6	0.8		
1,169.3	1,189.2	0.9		
1,355.3	1,355.2	1.1		
1,397.0	1,396.9	0.8		
2,393.7	2,392.1	3.9		
2,395.3	2,393.8	3.9		
2,436.7	2,435.0	3.7		
2,458.3	2,436.6	3.7		
2,444.9	2,443.2	3.7		
8,815.3	8,770.9	1.5		
8,831.7	8,787.3	1.6		
8,834.3	8,789.9	1.6		
8,855.0	8,790.6	1.6		
8,840.2	8,795.8	1.6		
8,841.9	8,797.5	1.6		
9,665.7	9,390.3	82.1		
9,667.0	9,390.5	82.2		
9,708.3	9,394.6	84.7		
9,710.0	9,394.7	84.8		
9,720.1	9,395.7	85.5		
14,394.4	9,385.3	90.6		
14,397.3	9,385.2	90.6		
14,439.0	9,384.8	90.6		
14,440.9	9,384.8	90.6		
14,448.2	9,384.7	90.6		

Directions to Well: FROM THE MARATHON OFFICE AT 411 TIDWELL ROAD, OTIS, NEW MEXICO, HEAD SOUTH ON TIDWELL ROAD TOWARD U.S. HIGHWAY 285 FOR 0.2 MILES. TURN LEFT ON U.S. HIGHWAY 285 SOUTH HEADING SOUTH FOR 5.9 MILES TO A CALICHE ROAD. TURN RIGHT ON CALICHE ROAD HEADING SOUTHWEST, CROSSING A CATTLE ROAD, FOR 0.4 MILES TO THE PROPOSED LEASE ROAD FOR MARINER FEE 23-28-19 WELL LOCATIONS. TURN LEFT ON PROPOSED LEASE ROAD FOR 0.3 MILES ENTERING THE NORTHEAST CORNER OF THE MARINER FEE 23-28-19 WELL LOCATIONS.