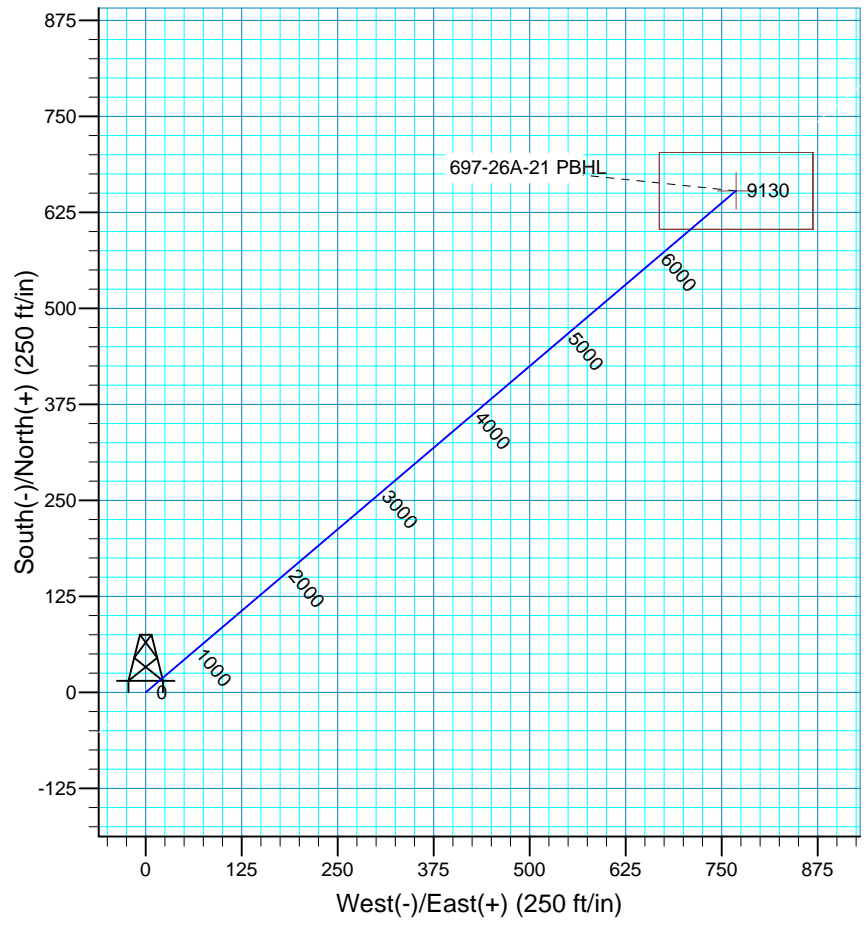
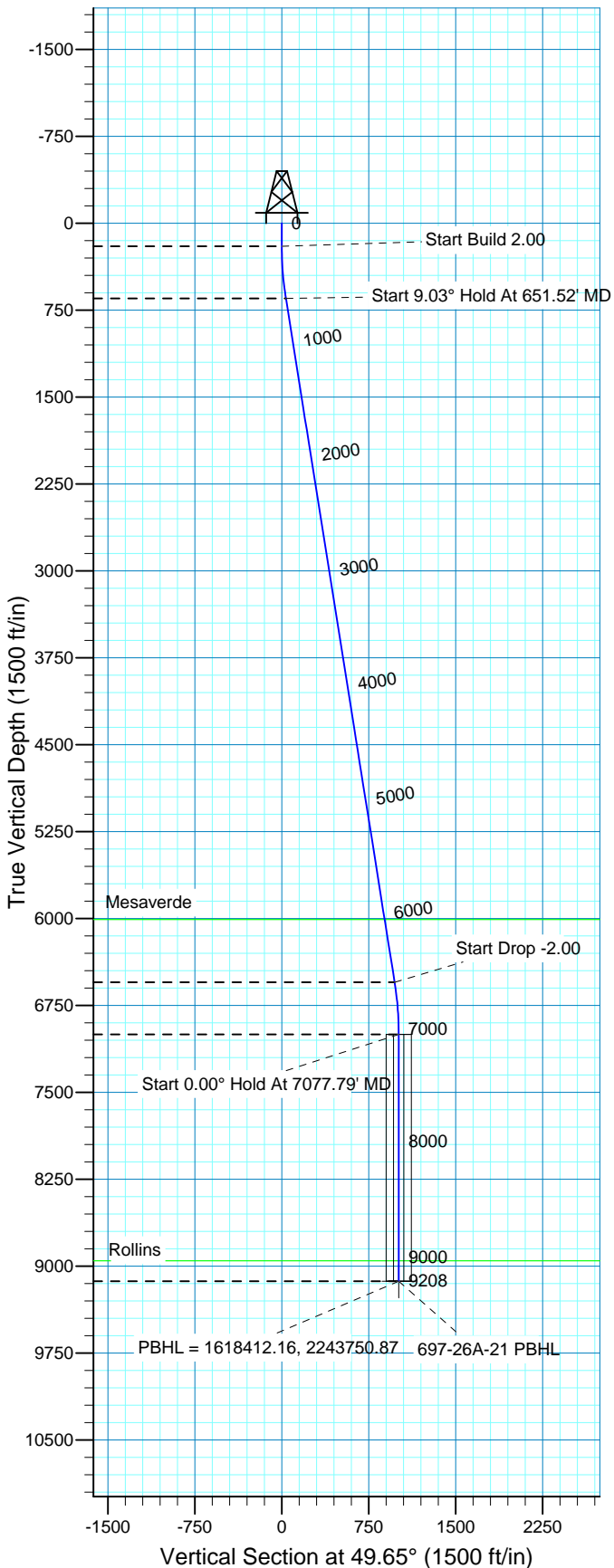


WELL DETAILS: 697-26A-21

GL 8400' & RKB 24' @ 8424.00ft (H&P 324)8400.00						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1617782.01	2242963.08	39° 29' 56.026 N	108° 10' 59.237 W	J



FORMATION TOP DETAILS						Plan: Plan #1 (697-26A-21/OH)					
TVDPPath 6009.00 8954.00	MDPath 6078.13 9031.79	Formation Mesaverde Rollins	Created By: Rex Hall Date: 2010-02-10								
			PROJECT DETAILS: Garfield County, CO NAD 83								
			Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Central Zone								
			System Datum: Mean Sea Level Local North: True								
SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00		
3	651.52	9.03	49.65	649.66	22.99	27.06	2.00	49.65	35.51		
4	6626.27	9.03	49.65	6550.34	630.15	741.78	0.00	0.00	973.31		
5	7077.79	0.00	0.00	7000.00	653.14	768.84	2.00	180.00	1008.81		
6	9207.79	0.00	0.00	9130.00	653.14	768.84	0.00	0.00	1008.81	697-26A-21 PBHL	



## **Marathon Oil Co.**

**Garfield County, CO NAD 83**

**697-26A Pad**

**697-26A-21 - Slot J**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**10 February, 2010**



<b>Database:</b>	EDM 2003.16 Multi-User Db	<b>Local Co-ordinate Reference:</b>	Well 697-26A-21 - Slot J
<b>Company:</b>	Marathon Oil Co.	<b>TVD Reference:</b>	GL 8400' & RKB 24' @ 8424.00ft (H&P 324)
<b>Project:</b>	Garfield County, CO NAD 83	<b>MD Reference:</b>	GL 8400' & RKB 24' @ 8424.00ft (H&P 324)
<b>Site:</b>	697-26A Pad	<b>North Reference:</b>	True
<b>Well:</b>	697-26A-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	Garfield County, CO NAD 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		697-26A Pad, Sec 26 T6S R97W			
Site Position:		Northing:	1,617,794.11 ft	Latitude:	39° 29' 56.147 N
From:	Map	Easting:	2,242,966.23 ft	Longitude:	108° 10' 59.202 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	-1.69 °

Well	697-26A-21 - Slot J, 854' FNL & 1429' FWL					
Well Position	+N/-S	0.00 ft	Northing:	1,617,782.01 ft	Latitude:	39° 29' 56.026 N
	+E/-W	0.00 ft	Easting:	2,242,963.08 ft	Longitude:	108° 10' 59.237 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	8,400.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	IGRF200510	12/31/2009	10.60	65.76	52,382

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	49.65

<b>Plan Sections</b>										
<b>Measured Depth</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical Depth</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Dogleg Rate</b>	<b>Build Rate</b>	<b>Turn Rate</b>	<b>TFO</b>	<b>Target</b>
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
651.52	9.03	49.65	649.66	22.99	27.06	2.00	2.00	0.00	49.65	
6,626.27	9.03	49.65	6,550.34	630.15	741.78	0.00	0.00	0.00	0.00	
7,077.79	0.00	0.00	7,000.00	653.14	768.84	2.00	-2.00	0.00	180.00	
9,207.79	0.00	0.00	9,130.00	653.14	768.84	0.00	0.00	0.00	0.00	697-26A-21 PBHL

<b>Database:</b>	EDM 2003.16 Multi-User Db	<b>Local Co-ordinate Reference:</b>	Well 697-26A-21 - Slot J
<b>Company:</b>	Marathon Oil Co.	<b>TVD Reference:</b>	GL 8400' & RKB 24' @ 8424.00ft (H&P 324)
<b>Project:</b>	Garfield County, CO NAD 83	<b>MD Reference:</b>	GL 8400' & RKB 24' @ 8424.00ft (H&P 324)
<b>Site:</b>	697-26A Pad	<b>North Reference:</b>	True
<b>Well:</b>	697-26A-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
300.00	2.00	49.65	299.98	1.13	1.33	1.75	2.00	2.00	0.00
400.00	4.00	49.65	399.84	4.52	5.32	6.98	2.00	2.00	0.00
500.00	6.00	49.65	499.45	10.16	11.96	15.69	2.00	2.00	0.00
600.00	8.00	49.65	598.70	18.05	21.25	27.88	2.00	2.00	0.00
651.52	9.03	49.65	649.66	22.99	27.06	35.51	2.00	2.00	0.00
<b>Start 9.03° Hold At 651.52' MD</b>									
700.00	9.03	49.65	697.53	27.92	32.86	43.12	0.00	0.00	0.00
800.00	9.03	49.65	796.29	38.08	44.82	58.81	0.00	0.00	0.00
900.00	9.03	49.65	895.05	48.24	56.79	74.51	0.00	0.00	0.00
1,000.00	9.03	49.65	993.81	58.40	68.75	90.21	0.00	0.00	0.00
1,100.00	9.03	49.65	1,092.57	68.56	80.71	105.90	0.00	0.00	0.00
1,200.00	9.03	49.65	1,191.33	78.73	92.67	121.60	0.00	0.00	0.00
1,300.00	9.03	49.65	1,290.10	88.89	104.63	137.29	0.00	0.00	0.00
1,400.00	9.03	49.65	1,388.86	99.05	116.60	152.99	0.00	0.00	0.00
1,500.00	9.03	49.65	1,487.62	109.21	128.56	168.69	0.00	0.00	0.00
1,600.00	9.03	49.65	1,586.38	119.38	140.52	184.38	0.00	0.00	0.00
1,700.00	9.03	49.65	1,685.14	129.54	152.48	200.08	0.00	0.00	0.00
1,800.00	9.03	49.65	1,783.90	139.70	164.45	215.77	0.00	0.00	0.00
1,900.00	9.03	49.65	1,882.66	149.86	176.41	231.47	0.00	0.00	0.00
2,000.00	9.03	49.65	1,981.42	160.02	188.37	247.17	0.00	0.00	0.00
2,100.00	9.03	49.65	2,080.18	170.19	200.33	262.86	0.00	0.00	0.00
2,200.00	9.03	49.65	2,178.94	180.35	212.30	278.56	0.00	0.00	0.00
2,300.00	9.03	49.65	2,277.70	190.51	224.26	294.25	0.00	0.00	0.00
2,400.00	9.03	49.65	2,376.46	200.67	236.22	309.95	0.00	0.00	0.00
2,500.00	9.03	49.65	2,475.22	210.83	248.18	325.65	0.00	0.00	0.00
2,600.00	9.03	49.65	2,573.98	221.00	260.14	341.34	0.00	0.00	0.00
2,700.00	9.03	49.65	2,672.74	231.16	272.11	357.04	0.00	0.00	0.00
2,800.00	9.03	49.65	2,771.50	241.32	284.07	372.73	0.00	0.00	0.00
2,900.00	9.03	49.65	2,870.26	251.48	296.03	388.43	0.00	0.00	0.00
3,000.00	9.03	49.65	2,969.02	261.64	307.99	404.13	0.00	0.00	0.00
3,100.00	9.03	49.65	3,067.78	271.81	319.96	419.82	0.00	0.00	0.00
3,200.00	9.03	49.65	3,166.54	281.97	331.92	435.52	0.00	0.00	0.00
3,300.00	9.03	49.65	3,265.30	292.13	343.88	451.21	0.00	0.00	0.00
3,400.00	9.03	49.65	3,364.07	302.29	355.84	466.91	0.00	0.00	0.00
3,500.00	9.03	49.65	3,462.83	312.46	367.80	482.61	0.00	0.00	0.00
3,600.00	9.03	49.65	3,561.59	322.62	379.77	498.30	0.00	0.00	0.00
3,700.00	9.03	49.65	3,660.35	332.78	391.73	514.00	0.00	0.00	0.00
3,800.00	9.03	49.65	3,759.11	342.94	403.69	529.69	0.00	0.00	0.00
3,900.00	9.03	49.65	3,857.87	353.10	415.65	545.39	0.00	0.00	0.00
4,000.00	9.03	49.65	3,956.63	363.27	427.62	561.09	0.00	0.00	0.00
4,100.00	9.03	49.65	4,055.39	373.43	439.58	576.78	0.00	0.00	0.00
4,200.00	9.03	49.65	4,154.15	383.59	451.54	592.48	0.00	0.00	0.00
4,300.00	9.03	49.65	4,252.91	393.75	463.50	608.17	0.00	0.00	0.00
4,400.00	9.03	49.65	4,351.67	403.91	475.47	623.87	0.00	0.00	0.00
4,500.00	9.03	49.65	4,450.43	414.08	487.43	639.57	0.00	0.00	0.00
4,600.00	9.03	49.65	4,549.19	424.24	499.39	655.26	0.00	0.00	0.00
4,700.00	9.03	49.65	4,647.95	434.40	511.35	670.96	0.00	0.00	0.00
4,800.00	9.03	49.65	4,746.71	444.56	523.31	686.65	0.00	0.00	0.00
4,900.00	9.03	49.65	4,845.47	454.73	535.28	702.35	0.00	0.00	0.00

**Database:** EDM 2003.16 Multi-User Db  
**Company:** Marathon Oil Co.  
**Project:** Garfield County, CO NAD 83  
**Site:** 697-26A Pad  
**Well:** 697-26A-21  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well 697-26A-21 - Slot J  
**TVD Reference:** GL 8400' & RKB 24' @ 8424.00ft (H&P 324)  
**MD Reference:** GL 8400' & RKB 24' @ 8424.00ft (H&P 324)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,000.00	9.03	49.65	4,944.23	464.89	547.24	718.05	0.00	0.00	0.00
5,100.00	9.03	49.65	5,042.99	475.05	559.20	733.74	0.00	0.00	0.00
5,200.00	9.03	49.65	5,141.75	485.21	571.16	749.44	0.00	0.00	0.00
5,300.00	9.03	49.65	5,240.51	495.37	583.13	765.13	0.00	0.00	0.00
5,400.00	9.03	49.65	5,339.28	505.54	595.09	780.83	0.00	0.00	0.00
5,500.00	9.03	49.65	5,438.04	515.70	607.05	796.53	0.00	0.00	0.00
5,600.00	9.03	49.65	5,536.80	525.86	619.01	812.22	0.00	0.00	0.00
5,700.00	9.03	49.65	5,635.56	536.02	630.97	827.92	0.00	0.00	0.00
5,800.00	9.03	49.65	5,734.32	546.18	642.94	843.61	0.00	0.00	0.00
5,900.00	9.03	49.65	5,833.08	556.35	654.90	859.31	0.00	0.00	0.00
6,000.00	9.03	49.65	5,931.84	566.51	666.86	875.01	0.00	0.00	0.00
6,078.13	9.03	49.65	6,009.00	574.45	676.21	887.27	0.00	0.00	0.00
<b>Mesaverde</b>									
6,100.00	9.03	49.65	6,030.60	576.67	678.82	890.70	0.00	0.00	0.00
6,200.00	9.03	49.65	6,129.36	586.83	690.79	906.40	0.00	0.00	0.00
6,300.00	9.03	49.65	6,228.12	596.99	702.75	922.09	0.00	0.00	0.00
6,400.00	9.03	49.65	6,326.88	607.16	714.71	937.79	0.00	0.00	0.00
6,500.00	9.03	49.65	6,425.64	617.32	726.67	953.49	0.00	0.00	0.00
6,600.00	9.03	49.65	6,524.40	627.48	738.63	969.18	0.00	0.00	0.00
6,626.27	9.03	49.65	6,550.34	630.15	741.78	973.31	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
6,700.00	7.56	49.65	6,623.30	637.04	749.88	983.94	2.00	-2.00	0.00
6,800.00	5.56	49.65	6,722.64	644.43	758.58	995.36	2.00	-2.00	0.00
6,900.00	3.56	49.65	6,822.32	649.57	764.64	1,003.30	2.00	-2.00	0.00
7,000.00	1.56	49.65	6,922.22	652.46	768.03	1,007.76	2.00	-2.00	0.00
7,077.79	0.00	0.00	7,000.00	653.14	768.84	1,008.81	2.00	-2.00	0.00
<b>Start 0.00° Hold At 7077.79' MD</b>									
7,100.00	0.00	0.00	7,022.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,200.00	0.00	0.00	7,122.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,300.00	0.00	0.00	7,222.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,400.00	0.00	0.00	7,322.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,500.00	0.00	0.00	7,422.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,600.00	0.00	0.00	7,522.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,700.00	0.00	0.00	7,622.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,800.00	0.00	0.00	7,722.21	653.14	768.84	1,008.81	0.00	0.00	0.00
7,900.00	0.00	0.00	7,822.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,000.00	0.00	0.00	7,922.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,100.00	0.00	0.00	8,022.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,200.00	0.00	0.00	8,122.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,300.00	0.00	0.00	8,222.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,400.00	0.00	0.00	8,322.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,500.00	0.00	0.00	8,422.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,600.00	0.00	0.00	8,522.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,700.00	0.00	0.00	8,622.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,800.00	0.00	0.00	8,722.21	653.14	768.84	1,008.81	0.00	0.00	0.00
8,900.00	0.00	0.00	8,822.21	653.14	768.84	1,008.81	0.00	0.00	0.00
9,000.00	0.00	0.00	8,922.21	653.14	768.84	1,008.81	0.00	0.00	0.00
9,031.79	0.00	0.00	8,954.00	653.14	768.84	1,008.81	0.00	0.00	0.00
<b>Rollins</b>									
9,100.00	0.00	0.00	9,022.21	653.14	768.84	1,008.81	0.00	0.00	0.00
9,200.00	0.00	0.00	9,122.21	653.14	768.84	1,008.81	0.00	0.00	0.00
9,207.79	0.00	0.00	9,130.00	653.14	768.84	1,008.81	0.00	0.00	0.00
<b>PBHL = 1618412.16, 2243750.87 - 697-26A-21 PBHL</b>									

<b>Database:</b>	EDM 2003.16 Multi-User Db	<b>Local Co-ordinate Reference:</b>	Well 697-26A-21 - Slot J
<b>Company:</b>	Marathon Oil Co.	<b>TVD Reference:</b>	GL 8400' & RKB 24' @ 8424.00ft (H&P 324)
<b>Project:</b>	Garfield County, CO NAD 83	<b>MD Reference:</b>	GL 8400' & RKB 24' @ 8424.00ft (H&P 324)
<b>Site:</b>	697-26A Pad	<b>North Reference:</b>	True
<b>Well:</b>	697-26A-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
697-26A-21 PBHL	0.00	0.00	9,130.00	653.14	768.84	1,618,412.16	2,243,750.87	39° 30' 2.482 N	108° 10' 49.429 W
- plan hits target center									
- Rectangle (sides W100.00 H200.00 D0.00)									

Formations					
Measured Depth	Vertical Depth				
(ft)	(ft)	Name	Lithology	Dip	Dip Direction
				(°)	(°)
6,078.13	6,009.00	Mesaverde		0.00	
9,031.79	8,954.00	Rollins		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		
(ft)	(ft)	+N/-S	+E/-W	Comment
		(ft)	(ft)	
200.00	200.00	0.00	0.00	Start Build 2.00
651.52	649.66	22.99	27.06	Start 9.03° Hold At 651.52' MD
6,626.27	6,550.34	630.15	741.78	Start Drop -2.00
7,077.79	7,000.00	653.14	768.84	Start 0.00° Hold At 7077.79' MD
9,207.79	9,130.00	653.14	768.84	PBHL = 1618412.16, 2243750.87