

**GOODMAN POINT #25
MONTEZUMA CO., COLORADO
Lateral**



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	8307.00	5.45	265.77	8162.18	273.12	-948.33	0.00	0.00	985.31	
2	8312.00	5.45	265.77	8167.16	273.08	-948.80	0.00	0.00	985.75	
3	8499.24	90.00	270.00	8282.00	272.28	-1075.09	45.16	4.25	1104.68	LP Tgt
4	9499.31	90.00	300.00	8282.00	528.22	-2030.08	3.00	90.00	2090.60	
5	10424.84	90.00	300.00	8282.00	991.05	-2831.58	0.00	0.00	3000.00	PBHL

WELL DETAILS							
Name/N-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
25	0.00	0.00	1292650.00	2032816.50	37°25'22.840N 08°49'52.540W	N/A	

TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL	8282.00	991.05	-2831.58	1293741.38	2030022.06	37°25'32.637N	108°50'27.644W
LP Tgt	8282.00	272.28	-1075.09	1292960.44	2031751.80	37°25'25.532N	108°50'05.868W

FIELD DETAILS
Montezuma Co., CO (NAD83)
Colorado

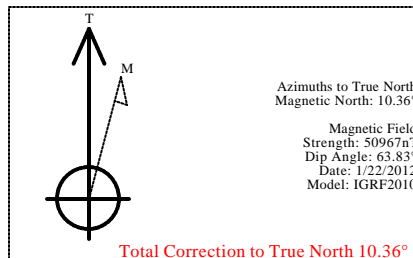
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: Colorado, Southern Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS
Goodman Point #25
1715' FNL & 862' FEL

Site Centre Latitude: 37°25'22.840N
Longitude: 108°49'52.540W

Ground Level: 6566.00
Positional Uncertainty: 0.00
Convergence: -2.04



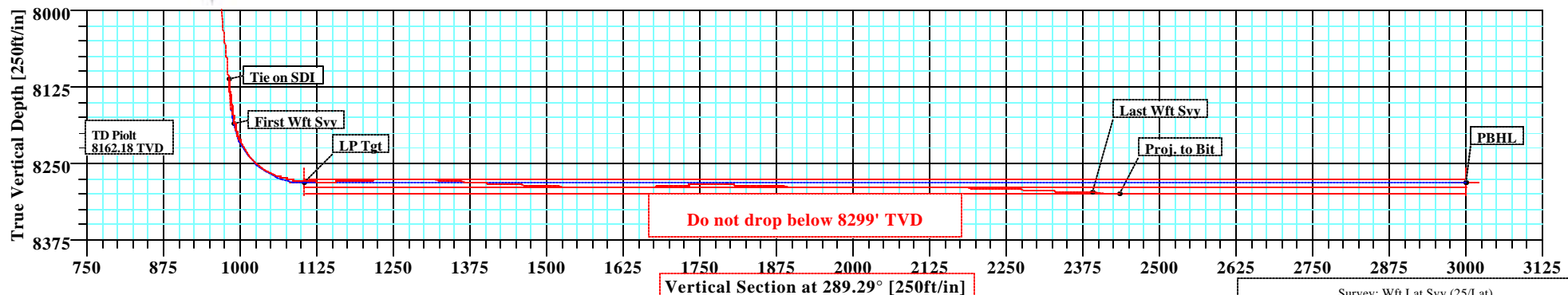
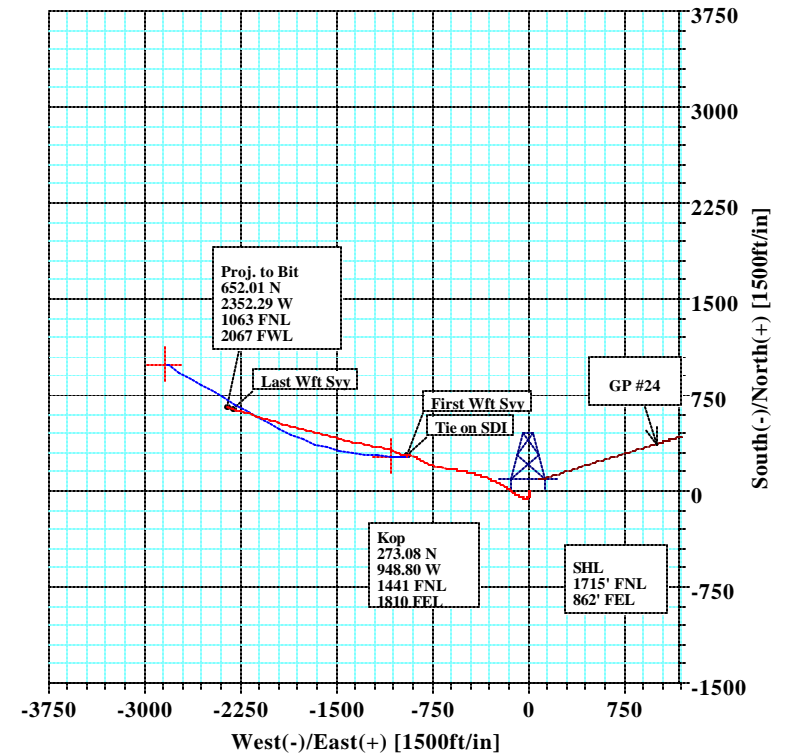
Total Correction to True North 10.36°

LEGEND

- 25 Lat. Plan #8
- 24 (Lat)
- 25 (Pilot Hole)
- Lat
- Wrt Lat Svy



Survey: Wrt Lat Svy (25/Lat)										
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
51	9828.00	87.37	286.74	8300.17	652.01	-2352.29	0.41	180.00	2435.62	



Company: Kinder Morgan	Date: 3/22/2012	Time: 07:12:52	Page: 1
Field: Montezuma Co., CO (NAD83)	Co-ordinate(NE) Reference: Well: 25, True North		
Site: Goodman Point #25	Vertical (TVD) Reference: SITE 6586.0		
Well: 25	Section (VS) Reference: Well (0.00N,0.00E,289.29Azi)		
Wellpath: Lat	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Lat Svy	Start Date: 3/19/2012
Company: Weatherford International Ltd.	Engineer: Keith Noack
Tool: MWD;MWD - Standard	Tied-to: User Defined

Field: Montezuma Co., CO (NAD83)
Colorado

Map System: US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level

Map Zone: Colorado, Southern Zone
Coordinate System: Well Centre
Geomagnetic Model: IGRF2010

Site: Goodman Point #25

1715' FNL & 862' FEL

Site Position:	Northing: 1292650.00 ft	Latitude: 37 25 22.840 N
From: Geographic	Easting: 2032816.50 ft	Longitude: 108 49 52.540 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6566.00 ft		Grid Convergence: -2.04 deg

Well: 25

Slot Name:

Well Position: +N/-S 0.00 ft	Northing: 1292650.00 ft	Latitude: 37 25 22.840 N
+E/-W 0.00 ft	Easting : 2032816.50 ft	Longitude: 108 49 52.540 W
Position Uncertainty: 0.00 ft		

Wellpath: Lat

Drilled From: Pilot Hole
Tie-on Depth: 8307.00 ft
Above System Datum: Mean Sea Level
Declination: 10.36 deg
Mag Dip Angle: 63.83 deg
+E/-W
ft
Direction
deg

Current Datum: SITE
Magnetic Data: 1/22/2012
Field Strength: 50967 nT
Vertical Section: Depth From (TVD)
ft
+N/-S
ft

0.00 0.00 0.00 289.29

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Lat	Min	Sec	Long	Min	Sec	Comment
8257.08	5.45	265.77	8112.49	273.47	-943.60	980.97	0.00	37	25	25.544	108	50	4.238	Tie on SDI First Wft Sv
8329.00	10.44	279.57	8183.70	274.30	-953.44	990.53	7.38	37	25	25.552	108	50	4.360	
8361.00	23.39	285.29	8214.26	276.47	-962.46	999.76	40.75	37	25	25.573	108	50	4.472	
8391.00	41.94	284.49	8239.40	280.58	-978.05	1015.83	61.85	37	25	25.614	108	50	4.665	
8406.00	49.50	285.49	8249.87	283.36	-988.41	1026.53	50.62	37	25	25.641	108	50	4.793	
8423.00	58.25	288.24	8259.88	287.36	-1001.54	1040.24	53.09	37	25	25.681	108	50	4.956	
8438.00	64.81	294.16	8267.03	292.14	-1013.81	1053.40	55.80	37	25	25.728	108	50	5.108	
8446.00	68.85	296.20	8270.18	295.27	-1020.46	1060.71	55.67	37	25	25.759	108	50	5.191	
8485.00	85.75	292.11	8278.72	310.74	-1055.06	1098.48	44.51	37	25	25.912	108	50	5.619	
8517.00	89.50	287.36	8280.05	321.53	-1085.14	1130.44	18.90	37	25	26.019	108	50	5.992	
8549.00	91.38	282.24	8279.81	329.70	-1116.07	1162.33	17.04	37	25	26.099	108	50	6.376	
8581.00	92.77	281.01	8278.65	336.15	-1147.39	1194.02	5.80	37	25	26.163	108	50	6.764	
8612.00	94.10	281.38	8276.79	342.15	-1177.74	1224.65	4.45	37	25	26.223	108	50	7.140	
8644.00	90.94	281.99	8275.38	348.63	-1209.04	1256.34	10.06	37	25	26.287	108	50	7.528	
8675.00	87.95	282.97	8275.68	355.33	-1239.31	1287.11	10.15	37	25	26.353	108	50	7.904	
8707.00	86.75	282.36	8277.16	362.33	-1270.49	1318.86	4.21	37	25	26.422	108	50	8.290	
8739.00	86.25	282.36	8279.12	369.17	-1301.69	1350.57	1.56	37	25	26.490	108	50	8.677	
8770.00	85.94	282.11	8281.23	375.72	-1331.92	1381.26	1.28	37	25	26.554	108	50	9.052	
8801.00	87.67	282.59	8282.95	382.34	-1362.15	1411.99	5.79	37	25	26.620	108	50	9.427	
8833.00	87.31	281.99	8284.36	389.15	-1393.39	1443.72	2.19	37	25	26.687	108	50	9.814	
8864.00	87.81	282.49	8285.68	395.72	-1423.66	1474.46	2.28	37	25	26.752	108	50	10.189	
8896.00	87.63	283.61	8286.95	402.94	-1454.81	1506.24	3.54	37	25	26.823	108	50	10.575	
8928.00	87.25	283.88	8288.38	410.53	-1485.86	1538.06	1.46	37	25	26.898	108	50	10.960	
8960.00	87.81	284.49	8289.76	418.37	-1516.85	1569.90	2.59	37	25	26.976	108	50	11.344	

Company: Kinder Morgan	Date: 3/22/2012	Time: 07:12:52	Page: 2
Field: Montezuma Co., CO (NAD83)	Co-ordinate(NE) Reference: Well: 25, True North		
Site: Goodman Point #25	Vertical (TVD) Reference: SITE 6586.0		
Well: 25	Section (VS) Reference: Well (0.00N,0.00E,289.29Azi)		
Wellpath: Lat	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Lat	Min	Sec	Long	Min	Sec	Comment
8992.00	91.50	285.11	8289.95	426.54	-1547.79	1601.80	11.69	37	25	27.057	108	50	11.728	
9023.00	91.44	284.36	8289.15	434.42	-1577.76	1632.69	2.43	37	25	27.135	108	50	12.099	
9055.00	91.88	284.49	8288.23	442.39	-1608.74	1664.56	1.43	37	25	27.213	108	50	12.483	
9086.00	92.85	284.02	8286.95	450.02	-1638.75	1695.42	3.48	37	25	27.289	108	50	12.856	
9118.00	92.75	283.24	8285.39	457.55	-1669.82	1727.22	2.45	37	25	27.363	108	50	13.241	
9149.00	89.75	284.36	8284.71	464.94	-1699.91	1758.07	10.33	37	25	27.436	108	50	13.614	
9181.00	89.56	284.86	8284.90	473.01	-1730.87	1789.96	1.67	37	25	27.516	108	50	13.998	
9213.00	88.25	284.74	8285.51	481.18	-1761.81	1821.86	4.11	37	25	27.597	108	50	14.381	
9245.00	87.38	284.74	8286.73	489.32	-1792.73	1853.73	2.72	37	25	27.677	108	50	14.764	
9277.00	89.21	285.75	8287.69	497.73	-1823.59	1885.64	6.53	37	25	27.760	108	50	15.147	
9308.00	89.38	285.86	8288.07	506.17	-1853.42	1916.58	0.65	37	25	27.844	108	50	15.517	
9340.00	89.31	285.86	8288.43	514.92	-1884.19	1948.52	0.22	37	25	27.930	108	50	15.898	
9371.00	88.94	285.99	8288.91	523.42	-1914.00	1979.46	1.27	37	25	28.014	108	50	16.268	
9403.00	88.44	285.74	8289.64	532.17	-1944.77	2011.39	1.75	37	25	28.101	108	50	16.649	
9434.00	89.81	286.11	8290.11	540.67	-1974.58	2042.34	4.58	37	25	28.185	108	50	17.019	
9466.00	90.91	286.01	8289.91	549.52	-2005.33	2074.28	3.45	37	25	28.272	108	50	17.400	
9497.00	91.00	285.49	8289.39	557.94	-2035.16	2105.22	1.70	37	25	28.356	108	50	17.770	
9529.00	89.13	286.24	8289.36	566.68	-2065.94	2137.16	6.30	37	25	28.442	108	50	18.151	
9560.00	88.81	286.24	8289.91	575.35	-2095.70	2168.11	1.03	37	25	28.528	108	50	18.520	
9592.00	88.50	286.61	8290.67	584.40	-2126.39	2200.06	1.51	37	25	28.617	108	50	18.901	
9624.00	88.31	286.74	8291.56	593.58	-2157.03	2232.02	0.72	37	25	28.708	108	50	19.281	
9656.00	88.06	286.74	8292.57	602.79	-2187.66	2263.97	0.78	37	25	28.799	108	50	19.660	
9687.00	87.19	286.61	8293.85	611.68	-2217.33	2294.91	2.84	37	25	28.887	108	50	20.028	
9719.00	87.19	286.36	8295.42	620.75	-2247.97	2326.83	0.78	37	25	28.976	108	50	20.408	
9751.00	87.69	286.74	8296.85	629.85	-2278.62	2358.77	1.96	37	25	29.066	108	50	20.788	
9782.00	87.56	286.74	8298.14	638.77	-2308.28	2389.71	0.42	37	25	29.155	108	50	21.156	Last Wft Svy
9828.00	87.37	286.74	8300.17	652.01	-2352.29	2435.62	0.41	37	25	29.285	108	50	21.701	Proj. to Bit

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
8257.08	8112.49	Tie on SDI
8329.00	8183.70	First Wft Svy
9782.00	8298.14	Last Wft Svy
9828.00	8300.17	Proj. to Bit

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction