



Weatherford®

Drilling Services

Proposal



YG-1

MONTEZUMA CO., CO

WELL FILE: **PLAN 1**

NOVEMBER 30, 2011

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YG-1 Montezuma Co., Colorado

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	8003.00	0.00	90.00	8003.00	0.00	0.00	0.00	0.00	0.00	
3	8202.49	90.00	90.00	8130.00	0.00	127.00	45.11	90.00	127.00	
4	9874.92	90.00	90.00	8130.00	0.05	1799.43	0.00	0.00	1799.43	Pbhl

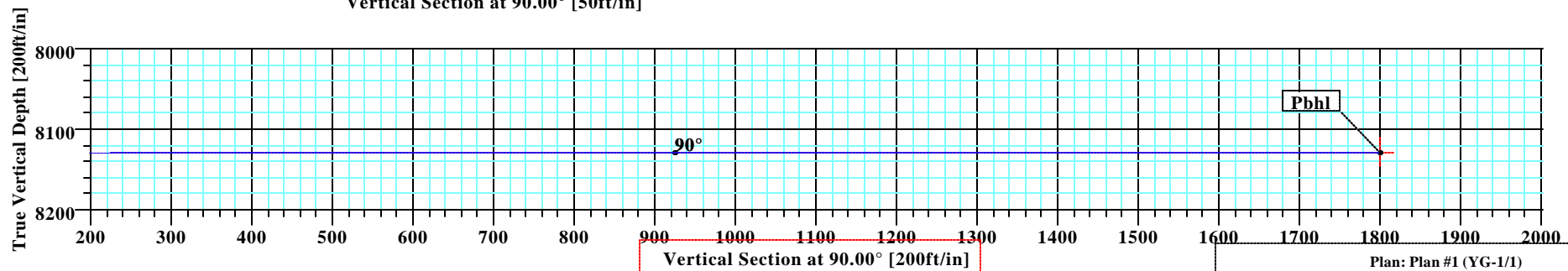
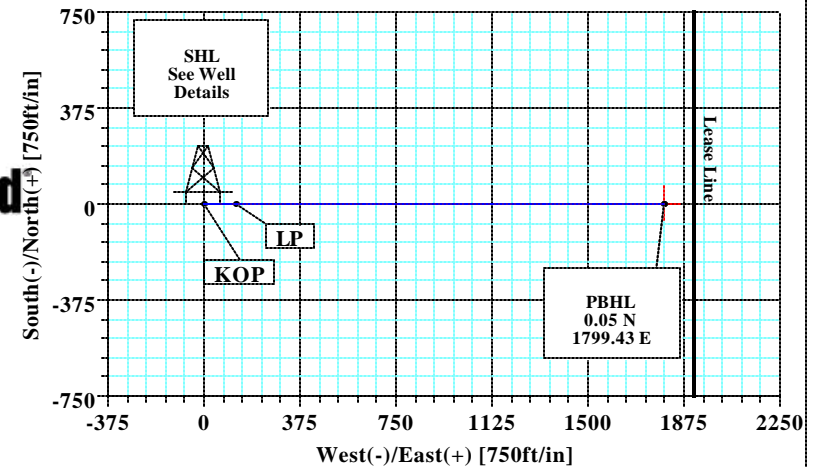
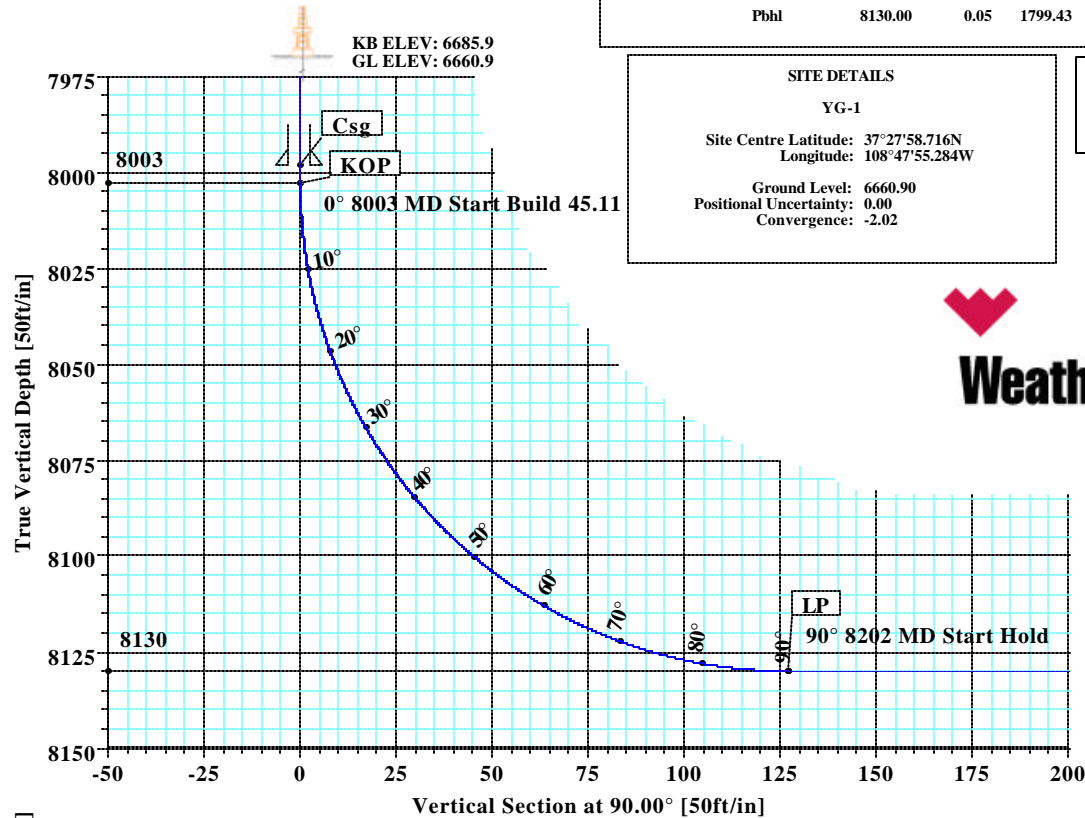
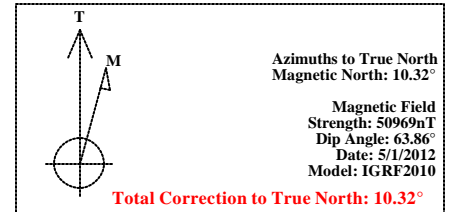
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
YG-1	0.00	0.00	1308070.38	2042825.80	37°27'58.716N	108°47'55.284W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	8130.00	0.05	1799.43	1308006.90	2044624.10	Point

SITE DETAILS	
YG-1	
Site Centre Latitude:	37°27'58.716N
Longitude:	108°47'55.284W
Ground Level:	6660.90
Positional Uncertainty:	0.00
Convergence:	-2.02

LEGEND	
—	1
—	Plan #1

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





Company: Kinder Morgan	Date: 11/30/2011	Time: 11:32:33	Page: 1
Field: Montezuma Co., CO (NAD83)	Co-ordinate(NE) Reference: Well: YG-1, True North		
Site: YG-1	Vertical (TVD) Reference: SITE 6685.9		
Well: YG-1	Section (VS) Reference: Well (0.00N,0.00E,90.00Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Plan: Plan #1	Date Composed: 11/30/2011
Principal: Yes	Version: 1
	Tied-to: From Surface

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: YG-1

Site Position:	Northing: 1308070.38 ft	Latitude: 37 27 58.716 N
From: Geographic	Easting: 2042825.80 ft	Longitude: 108 47 55.284 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6660.90 ft		Grid Convergence: -2.02 deg

Well: YG-1	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 1308070.38 ft
+E/-W 0.00 ft	Easting : 2042825.80 ft
Position Uncertainty: 0.00 ft	Latitude: 37 27 58.716 N
	Longitude: 108 47 55.284 W

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 5/1/2012	Above System Datum: Mean Sea Level
Field Strength: 50969 nT	Declination: 10.32 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 63.86 deg
ft	+N/-S
	+E/-W
	Direction
	deg
0.00	0.00
0.00	0.00
0.00	90.00

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8003.00	0.00	90.00	8003.00	0.00	0.00	0.00	0.00	0.00	0.00	
8202.49	90.00	90.00	8130.00	0.00	127.00	45.11	45.11	0.00	90.00	
9874.92	90.00	90.00	8130.00	0.05	1799.43	0.00	0.00	0.00	0.00	Pbhl

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
8003.00	0.00	90.00	8003.00	0.00	0.00	0.00	0.00	1308070.38	2042825.80	KOP
8010.00	3.16	90.00	8010.00	0.00	0.19	0.19	45.11	1308070.38	2042825.99	
8020.00	7.67	90.00	8019.95	0.00	1.14	1.14	45.11	1308070.34	2042826.93	
8030.00	12.18	90.00	8029.80	0.00	2.86	2.86	45.11	1308070.28	2042828.66	
8040.00	16.69	90.00	8039.48	0.00	5.35	5.35	45.11	1308070.19	2042831.15	
8050.00	21.20	90.00	8048.93	0.00	8.60	8.60	45.11	1308070.08	2042834.39	
8060.00	25.72	90.00	8058.11	0.00	12.58	12.58	45.11	1308069.94	2042838.37	
8070.00	30.23	90.00	8066.94	0.00	17.27	17.27	45.11	1308069.77	2042843.05	
8080.00	34.74	90.00	8075.37	0.00	22.64	22.64	45.11	1308069.58	2042848.42	
8090.00	39.25	90.00	8083.35	0.00	28.65	28.65	45.11	1308069.37	2042854.43	
8100.00	43.76	90.00	8090.84	0.00	35.28	35.28	45.11	1308069.14	2042861.05	
8110.00	48.27	90.00	8097.78	0.00	42.47	42.47	45.11	1308068.88	2042868.24	
8120.00	52.78	90.00	8104.14	0.00	50.19	50.19	45.11	1308068.61	2042875.96	
8130.00	57.30	90.00	8109.87	0.00	58.38	58.38	45.11	1308068.32	2042884.14	
8140.00	61.81	90.00	8114.93	0.00	67.00	67.00	45.11	1308068.02	2042892.76	
8150.00	66.32	90.00	8119.31	0.00	75.99	75.99	45.11	1308067.70	2042901.74	
8160.00	70.83	90.00	8122.96	0.00	85.30	85.30	45.11	1308067.37	2042911.04	



Company: Kinder Morgan Field: Montezuma Co., CO (NAD83) Site: YG-1 Well: YG-1 Wellpath: 1	Date: 11/30/2011 Co-ordinate(NE) Reference: Well: YG-1, True North Vertical (TVD) Reference: SITE 6685.9 Section (VS) Reference: Well (0.00N,0.00E,90.00Azi) Survey Calculation Method: Minimum Curvature	Time: 11:32:33 Page: 2 Db: Sybase
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Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
8170.00	75.34	90.00	8125.87	0.00	94.86	94.86	45.11	1308067.04	2042920.60	
8180.00	79.85	90.00	8128.01	0.00	104.63	104.63	45.11	1308066.69	2042930.36	
8190.00	84.36	90.00	8129.39	0.00	114.53	114.53	45.11	1308066.34	2042940.26	
8200.00	88.88	90.00	8129.98	0.00	124.51	124.51	45.11	1308065.99	2042950.23	
8202.49	90.00	90.00	8130.00	0.00	127.00	127.00	45.11	1308065.90	2042952.72	LP
8300.00	90.00	90.00	8130.00	0.01	224.51	224.51	0.00	1308062.46	2043050.17	
8400.00	90.00	90.00	8130.00	0.01	324.51	324.51	0.00	1308058.93	2043150.10	
8500.00	90.00	90.00	8130.00	0.01	424.51	424.51	0.00	1308055.41	2043250.04	
8600.00	90.00	90.00	8130.00	0.02	524.51	524.51	0.00	1308051.88	2043349.98	
8700.00	90.00	90.00	8130.00	0.02	624.51	624.51	0.00	1308048.35	2043449.92	
8800.00	90.00	90.00	8130.00	0.02	724.51	724.51	0.00	1308044.82	2043549.86	
8900.00	90.00	90.00	8130.00	0.03	824.51	824.51	0.00	1308041.30	2043649.79	
9000.00	90.00	90.00	8130.00	0.03	924.51	924.51	0.00	1308037.77	2043749.73	
9100.00	90.00	90.00	8130.00	0.03	1024.51	1024.51	0.00	1308034.24	2043849.67	
9200.00	90.00	90.00	8130.00	0.03	1124.51	1124.51	0.00	1308030.71	2043949.61	
9300.00	90.00	90.00	8130.00	0.04	1224.51	1224.51	0.00	1308027.19	2044049.54	
9400.00	90.00	90.00	8130.00	0.04	1324.51	1324.51	0.00	1308023.66	2044149.48	
9500.00	90.00	90.00	8130.00	0.04	1424.51	1424.51	0.00	1308020.13	2044249.42	
9600.00	90.00	90.00	8130.00	0.05	1524.51	1524.51	0.00	1308016.60	2044349.36	
9700.00	90.00	90.00	8130.00	0.05	1624.51	1624.51	0.00	1308013.08	2044449.30	
9800.00	90.00	90.00	8130.00	0.05	1724.51	1724.51	0.00	1308009.55	2044549.23	
9874.92	90.00	90.00	8130.00	0.05	1799.43	1799.43	0.00	1308006.90	2044624.10	Pbhl

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
Pbhl			8130.00	0.05	1799.43	1308006.90	2044624.10	37	27	58.716 N	108	47	32.964 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
7998.00	7998.00	7.000	0.000	Csg

Annotation

MD ft	TVD ft	
8003.00	8003.00	KOP
8202.49	8130.00	LP
9874.91	8130.00	Pbhl

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

**Weatherford®****Weatherford Drilling Services**

GeoDec v5.03

Report Date: November 30, 2011

Job Number: _____

Customer: Kinder Morgan

Well Name: YG-1

API Number: _____

Rig Name: _____

Location: Montezuma Co., CO

Block: _____

Engineer: Patrick Rudolph

Geodetic Latitude / Longitude

Geodetic Latitude / Longitude

System: Latitude / Longitude

System: Latitude / Longitude

Projection: Geodetic Latitude and Longitude

Projection: Geodetic Latitude and Longitude

Datum: North American Datum 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Ellipsoid: GRS 1980

Latitude 37.4663100 DEG

Latitude 37 27 58.7160000 DMS

Longitude -108.7986900 DEG

Longitude -108 47 55.2840000 DMS

Geodetic Location WGS84

Elevation = 0.0 Meters

Latitude = 37.46631° N 37° 27 min 58.716 sec

Longitude = 108.79869° W 108° 47 min 55.284 sec

Magnetic Declination = 10.32° [True North Offset]

Local Gravity = .9993 g CheckSum = 7498

Local Field Strength = 50965 nT Magnetic Vector X = 22087 nT

Magnetic Dip = 63.86° Magnetic Vector Y = 4021 nT

Magnetic Model = IGRF-2010g11 Magnetic Vector Z = 45754 nT

Spud Date = May 01, 2012 Magnetic Vector H = 22450 nT

Signed: _____

Date: _____