



Weatherford[®]

Drilling Services

Proposal



YA-7

MONTEZUMA CO., CO

WELL FILE: **PLAN 2**

MARCH 21, 2012

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YA-7 Montezuma Co., Colorado

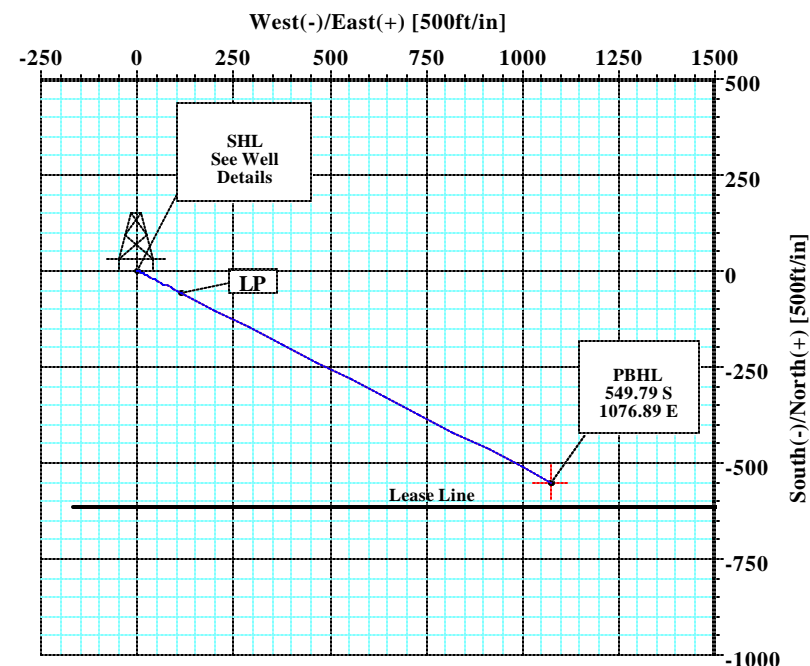
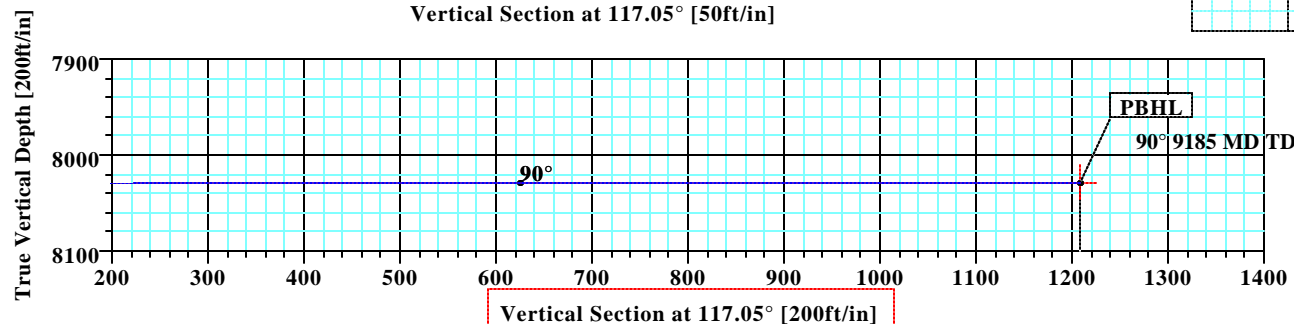
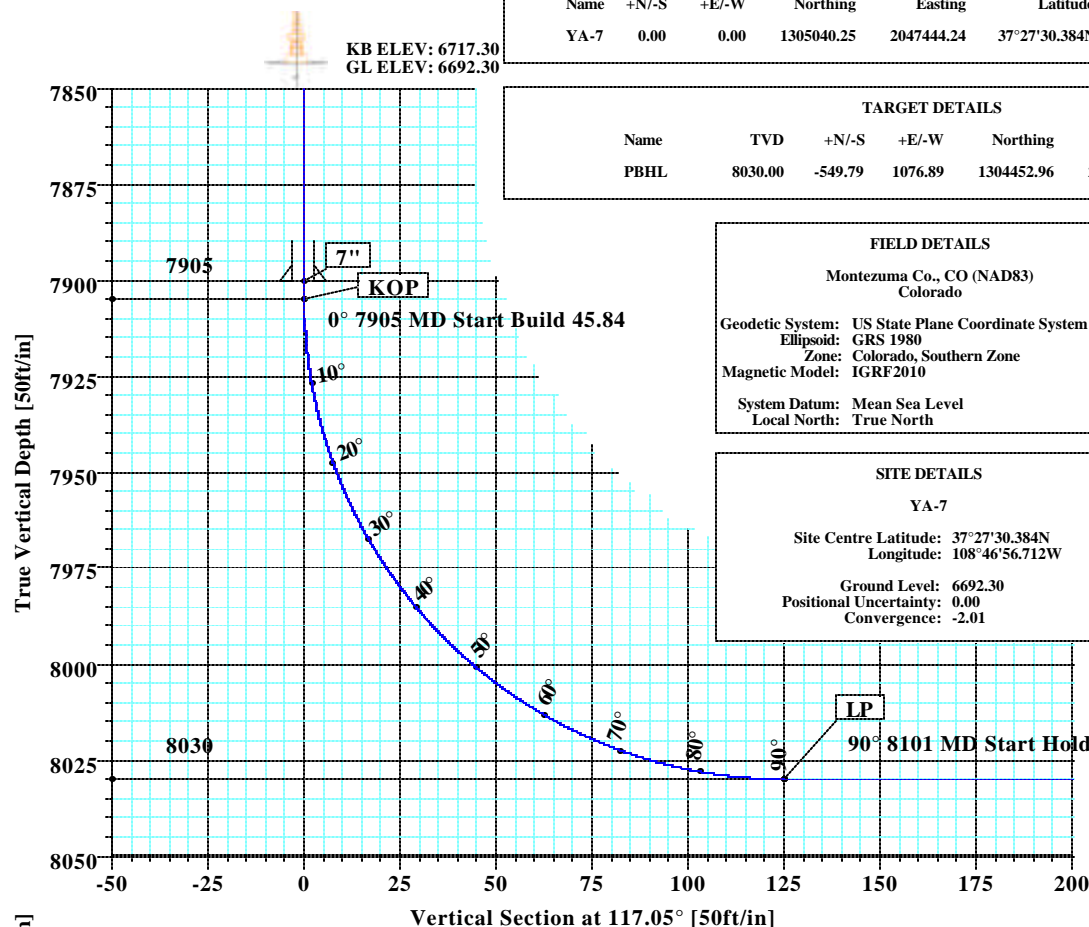
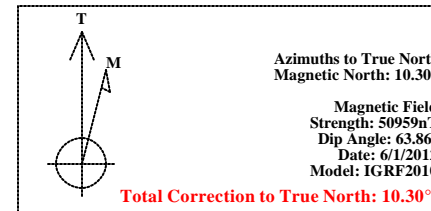
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	117.05	0.00	0.00	0.00	0.00	0.00	0.00	
2	7905.00	0.00	117.05	7905.00	0.00	0.00	0.00	0.00	0.00	
3	8101.35	90.00	117.05	8030.00	-56.84	111.33	45.84	117.05	125.00	
4	9185.47	90.00	117.05	8030.00	-549.79	1076.89	0.00	0.00	1209.12	PBHL

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
YA-7	0.00	0.00	1305040.25	2047444.24	37°27'30.384N	108°46'56.712W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8030.00	-549.79	1076.89	1304452.96	2048501.15	Point

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	
YA-7	
Site Centre Latitude:	37°27'30.384N
Longitude:	108°46'56.712W
Ground Level:	6692.30
Positional Uncertainty:	0.00
Convergence:	-2.01



Company: Kinder Morgan	Date: 3/21/2012	Time: 12:46:28	Page: 1
Field: Montezuma Co., CO (NAD83)	Co-ordinate(NE) Reference: Well: YA-7, True North		
Site: YA-7	Vertical (TVD) Reference: SITE 6717.3		
Well: YA-7	Section (VS) Reference: Well (0.00N,0.00E,117.05Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Plan: Plan #2	Date Composed: 12/1/2011
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: YA-7

Site Position:	Northing: 1305040.25 ft	Latitude: 37 27 30.384 N
From: Geographic	Easting: 2047444.24 ft	Longitude: 108 46 56.712 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6692.30 ft		Grid Convergence: -2.01 deg

Well: YA-7	Slot Name:
Well Position: +N/-S 0.00 ft	Latitude: 37 27 30.384 N
+E/-W 0.00 ft	Longitude: 108 46 56.712 W
Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 6/1/2012	Above System Datum: Mean Sea Level
Field Strength: 50959 nT	Declination: 10.30 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 63.86 deg
ft	+N/-S ft
	+E/-W ft
	Direction deg
8030.00	0.00 0.00 117.05

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	117.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7905.00	0.00	117.05	7905.00	0.00	0.00	0.00	0.00	0.00	0.00	
8101.35	90.00	117.05	8030.00	-56.84	111.33	45.84	45.84	0.00	117.05	
9185.47	90.00	117.05	8030.00	-549.79	1076.89	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	Lat	Min	Sec	Long	Min	Sec	Comment
7900.00	0.00	117.05	7900.00	0.00	0.00	0.00	0.00	37	27	30.384	108	46	56.712	7"
7905.00	0.00	117.05	7905.00	0.00	0.00	0.00	0.00	37	27	30.384	108	46	56.712	KOP
8000.00	43.54	117.05	7991.12	-15.64	30.63	34.40	45.84	37	27	30.229	108	46	56.332	
8100.00	89.38	117.05	8029.99	-56.22	110.13	123.65	45.84	37	27	29.828	108	46	55.346	
8101.35	90.00	117.05	8030.00	-56.84	111.33	125.00	45.84	37	27	29.822	108	46	55.331	LP
8200.00	90.00	117.05	8030.00	-101.70	199.19	223.65	0.00	37	27	29.378	108	46	54.241	
8300.00	90.00	117.05	8030.00	-147.17	288.26	323.65	0.00	37	27	28.929	108	46	53.137	
8400.00	90.00	117.05	8030.00	-192.64	377.32	423.65	0.00	37	27	28.479	108	46	52.032	
8500.00	90.00	117.05	8030.00	-238.11	466.38	523.65	0.00	37	27	28.030	108	46	50.928	
8600.00	90.00	117.05	8030.00	-283.58	555.45	623.65	0.00	37	27	27.580	108	46	49.823	
8700.00	90.00	117.05	8030.00	-329.05	644.51	723.65	0.00	37	27	27.131	108	46	48.718	
8800.00	90.00	117.05	8030.00	-374.52	733.58	823.65	0.00	37	27	26.681	108	46	47.614	
8900.00	90.00	117.05	8030.00	-419.99	822.64	923.65	0.00	37	27	26.231	108	46	46.509	
9000.00	90.00	117.05	8030.00	-465.46	911.71	1023.65	0.00	37	27	25.782	108	46	45.405	
9100.00	90.00	117.05	8030.00	-510.93	1000.77	1123.65	0.00	37	27	25.332	108	46	44.300	
9185.47	90.00	117.05	8030.00	-549.79	1076.89	1209.12	0.00	37	27	24.948	108	46	43.356	PBHL

Company: Kinder Morgan	Date: 3/21/2012	Time: 12:46:28	Page: 2
Field: Montezuma Co., CO (NAD83)	Co-ordinate(NE) Reference: Well: YA-7, True North		
Site: YA-7	Vertical (TVD) Reference: SITE 6717.3		
Well: YA-7	Section (VS) Reference: Well (0.00N,0.00E,117.05Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

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			8030.00	-549.79	1076.89	1304452.96	2048501.15	37	27	24.948 N	108	46	43.356 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
7900.00	7900.00	7.000	8.500	7"

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Annotation

MD ft	TVD ft	
7905.00	7905.00	KOP
8101.35	8030.00	LP
9185.46	8030.00	PBHL

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

GeoDec v5.03

Report Date: March 21, 2012

Job Number: _____

Customer: Kinder Morgan

Well Name: YA-7

API Number: _____

Rig Name: _____

Location: Montezuma Co., CO

Block: _____

Engineer: KRN

Geodetic Latitude / Longitude

System: Latitude / Longitude

Projection: Geodetic Latitude and Longitude

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Latitude 37.4584400 DEG

Longitude -108.7824200 DEG

Geodetic Latitude / Longitude

System: Latitude / Longitude

Projection: Geodetic Latitude and Longitude

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Latitude 37 27 30.3840000 DMS

Longitude -108 46 56.7120000 DMS

Geodetic Location WGS84

Elevation = 0.0 Meters

Latitude = 37.45844° N 37° 27 min 30.384 sec

Longitude = 108.78242° W 108° 46 min 56.712 sec

Magnetic Declination = 10.30° [True North Offset]

Local Gravity = .9993 g CheckSum = 7472

Local Field Strength = 50955 nT Magnetic Vector X = 22088 nT

Magnetic Dip = 63.86° Magnetic Vector Y = 4014 nT

Magnetic Model = IGRF-2010g11 Magnetic Vector Z = 45743 nT

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

Signed: _____

Date: _____