



Weatherford[®]

Drilling Services

Proposal



DOE CANYON #14

DOLORES CO., COLORADO

WELL FILE: **PLAN 1**

APRIL 1, 2013

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Doe Canyon #14 Dolores Co., Colorado

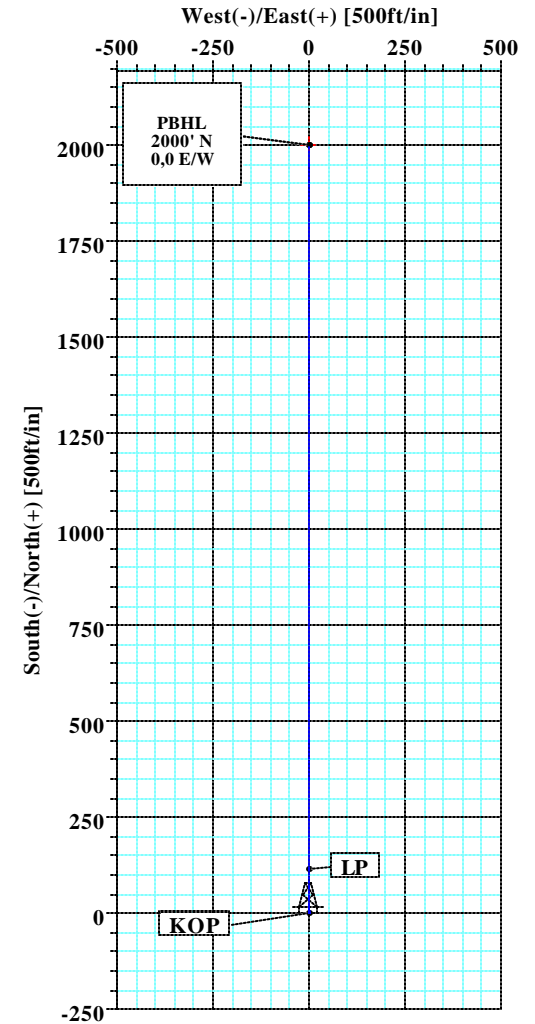
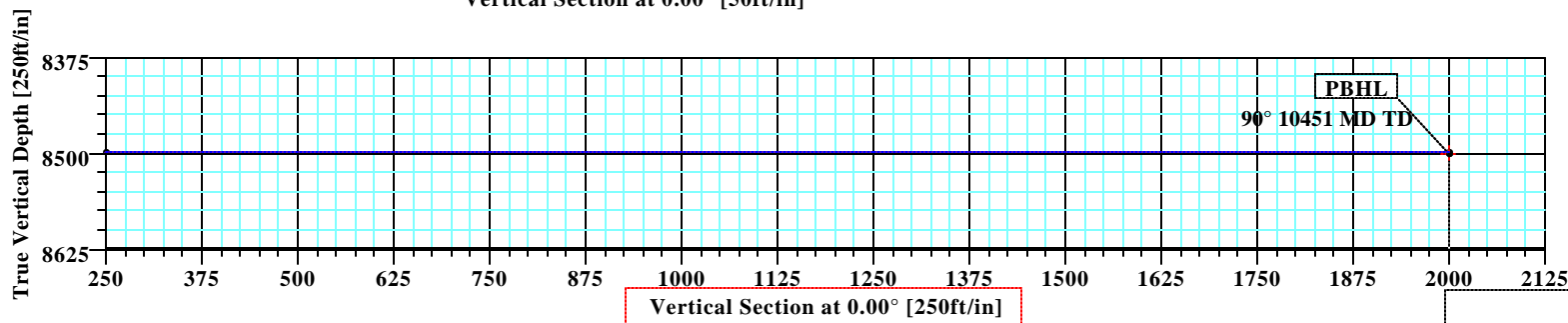
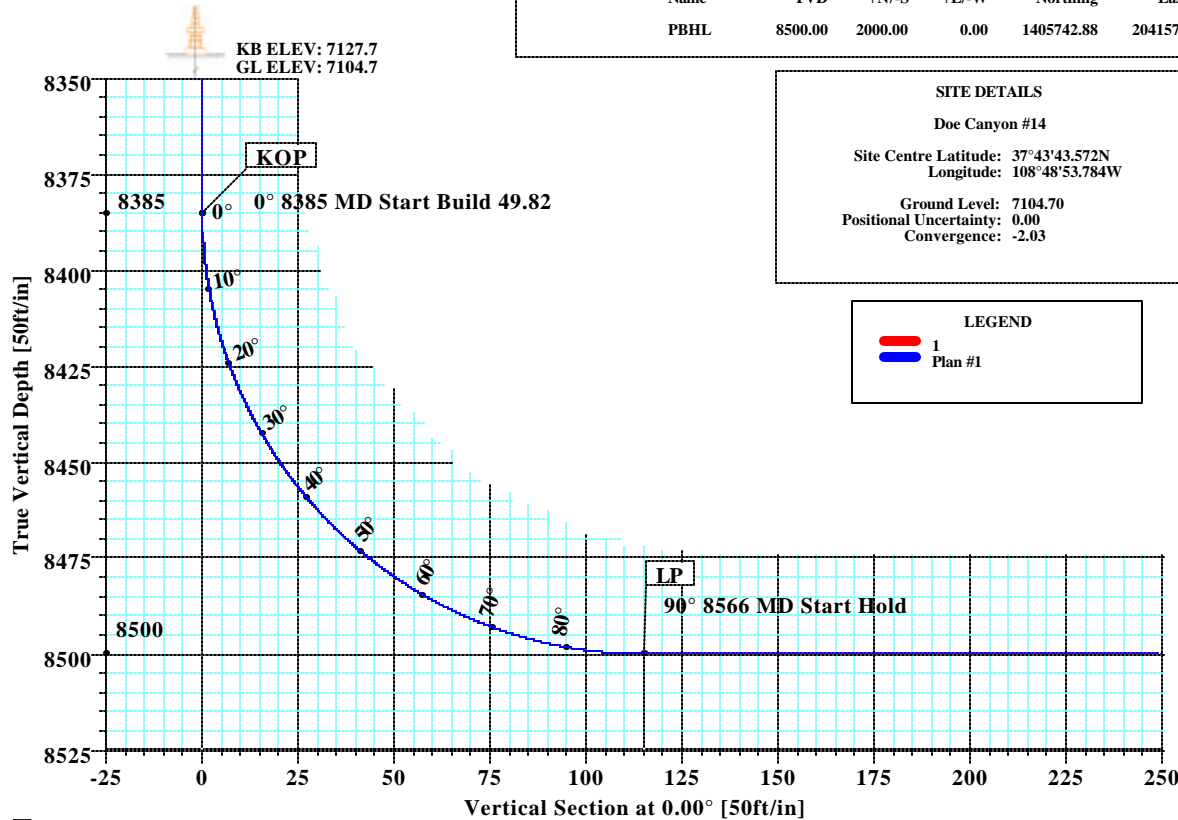
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	8385.00	0.00	0.00	8385.00	0.00	0.00	0.00	0.00	0.00	
3	8565.64	90.00	0.00	8500.00	115.00	0.00	49.82	0.00	115.00	
4	10450.64	90.00	0.00	8500.00	2000.00	0.00	0.00	0.00	2000.00	PBHL

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
DC #14	0.00	0.00	1403744.14	2041503.28	37°43'43.572N	108°48'53.784W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8500.00	2000.00	0.00	1405742.88	2041574.24	Point

SITE DETAILS	
Doe Canyon #14	
Site Centre Latitude:	37°43'43.572N
Longitude:	108°48'53.784W
Ground Level:	7104.70
Positional Uncertainty:	0.00
Convergence:	-2.03

LEGEND	
—	1
—	Plan #1





Company: Kinder Morgan Field: Dolores County, CO (NAD 83) Site: Doe Canyon #14 Well: DC #14 Wellpath: 1	Date: 4/1/2013 Co-ordinate(NE) Reference: Well: DC #14, True North Vertical (TVD) Reference: SITE 7127.7 Section (VS) Reference: Well (0.00N,0.00E,0.00Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Page: 1

Plan: Plan #1 Principal: Yes	Date Composed: 4/1/2013 Version: 1 Tied-to: From Surface
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Field: Dolores County, CO (NAD 83)

USA

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: Doe Canyon #14

Site Position:	From: Geographic	Northings: 1403744.14 ft	Latitude: 37 43 43.572 N
Position Uncertainty: 0.00 ft		Easting: 2041503.28 ft	Longitude: 108 48 53.784 W
Ground Level: 7104.70 ft			North Reference: True
			Grid Convergence: -2.03 deg

Well: DC #14

Slot Name:

Well Position:	+N/-S	0.00 ft	Northings: 1403744.14 ft	Latitude: 37 43 43.572 N
	+E/-W	0.00 ft	Easting: 2041503.28 ft	Longitude: 108 48 53.784 W
Position Uncertainty:		0.00 ft		

Wellpath: 1

Current Datum: SITE	Height 7127.70 ft	Drilled From: Surface	Tie-on Depth: 0.00 ft
Magnetic Data: 9/1/2013		Above System Datum: Mean Sea Level	
Field Strength: 50985 nT		Declination: 10.20 deg	
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 64.05 deg	
ft	ft	+E/-W	Direction
		ft	deg
0.00	0.00	0.00	0.00

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8385.00	0.00	0.00	8385.00	0.00	0.00	0.00	0.00	0.00	0.00	
8565.64	90.00	0.00	8500.00	115.00	0.00	49.82	49.82	0.00	0.00	
10450.64	90.00	0.00	8500.00	2000.00	0.00	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
8300.00	0.00	0.00	8300.00	0.00	0.00	0.00	0.00	37	43	43.572	108	48	53.784	
8380.00	0.00	0.00	8380.00	0.00	0.00	0.00	0.00	37	43	43.572	108	48	53.784	
8385.00	0.00	0.00	8385.00	0.00	0.00	0.00	0.00	37	43	43.572	108	48	53.784	
8390.00	2.49	0.00	8390.00	0.11	0.00	0.11	49.82	37	43	43.573	108	48	53.784	
8400.00	7.47	0.00	8399.96	0.98	0.00	0.98	49.82	37	43	43.582	108	48	53.784	
8410.00	12.46	0.00	8409.80	2.71	0.00	2.71	49.82	37	43	43.599	108	48	53.784	
8420.00	17.44	0.00	8419.46	5.29	0.00	5.29	49.82	37	43	43.624	108	48	53.784	
8430.00	22.42	0.00	8428.86	8.69	0.00	8.69	49.82	37	43	43.658	108	48	53.784	
8440.00	27.40	0.00	8437.93	12.90	0.00	12.90	49.82	37	43	43.700	108	48	53.784	
8450.00	32.38	0.00	8446.59	17.89	0.00	17.89	49.82	37	43	43.749	108	48	53.784	
8460.00	37.37	0.00	8454.80	23.60	0.00	23.60	49.82	37	43	43.805	108	48	53.784	
8470.00	42.35	0.00	8462.47	30.01	0.00	30.01	49.82	37	43	43.869	108	48	53.784	
8480.00	47.33	0.00	8469.56	37.06	0.00	37.06	49.82	37	43	43.938	108	48	53.784	
8490.00	52.31	0.00	8476.01	44.70	0.00	44.70	49.82	37	43	44.014	108	48	53.784	
8500.00	57.30	0.00	8481.77	52.87	0.00	52.87	49.82	37	43	44.095	108	48	53.784	
8510.00	62.28	0.00	8486.80	61.50	0.00	61.50	49.82	37	43	44.180	108	48	53.784	
8520.00	67.26	0.00	8491.06	70.55	0.00	70.55	49.82	37	43	44.269	108	48	53.784	



Company: Kinder Morgan	Date: 4/1/2013	Time: 13:01:56	Page: 2
Field: Dolores County, CO (NAD 83)	Co-ordinate(NE) Reference: Well: DC #14, True North		
Site: Doe Canyon #14	Vertical (TVD) Reference: SITE 7127.7		
Well: DC #14	Section (VS) Reference: Well (0.00N,0.00E,0.00Azi)		
Wellpath: 1	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
8530.00	72.24	0.00	8494.52	79.93	0.00	79.93	49.82	37	43	44.362	108	48	53.784	
8540.00	77.22	0.00	8497.15	89.57	0.00	89.57	49.82	37	43	44.458	108	48	53.784	
8550.00	82.21	0.00	8498.94	99.41	0.00	99.41	49.82	37	43	44.555	108	48	53.784	
8560.00	87.19	0.00	8499.86	109.36	0.00	109.36	49.82	37	43	44.653	108	48	53.784	
8565.64	90.00	0.00	8500.00	115.00	0.00	115.00	49.82	37	43	44.709	108	48	53.784	LP
8600.00	90.00	0.00	8500.00	149.36	0.00	149.36	0.00	37	43	45.049	108	48	53.784	
8700.00	90.00	0.00	8500.00	249.36	0.00	249.36	0.00	37	43	46.037	108	48	53.784	
8800.00	90.00	0.00	8500.00	349.36	0.00	349.36	0.00	37	43	47.026	108	48	53.784	
8900.00	90.00	0.00	8500.00	449.36	0.00	449.36	0.00	37	43	48.015	108	48	53.784	
9000.00	90.00	0.00	8500.00	549.36	0.00	549.36	0.00	37	43	49.003	108	48	53.784	
9100.00	90.00	0.00	8500.00	649.36	0.00	649.36	0.00	37	43	49.992	108	48	53.784	
9200.00	90.00	0.00	8500.00	749.36	0.00	749.36	0.00	37	43	50.981	108	48	53.784	
9300.00	90.00	0.00	8500.00	849.36	0.00	849.36	0.00	37	43	51.969	108	48	53.784	
9400.00	90.00	0.00	8500.00	949.36	0.00	949.36	0.00	37	43	52.958	108	48	53.784	
9500.00	90.00	0.00	8500.00	1049.36	0.00	1049.36	0.00	37	43	53.947	108	48	53.784	
9600.00	90.00	0.00	8500.00	1149.36	0.00	1149.36	0.00	37	43	54.935	108	48	53.784	
9700.00	90.00	0.00	8500.00	1249.36	0.00	1249.36	0.00	37	43	55.924	108	48	53.784	
9800.00	90.00	0.00	8500.00	1349.36	0.00	1349.36	0.00	37	43	56.913	108	48	53.784	
9900.00	90.00	0.00	8500.00	1449.36	0.00	1449.36	0.00	37	43	57.901	108	48	53.784	
10000.00	90.00	0.00	8500.00	1549.36	0.00	1549.36	0.00	37	43	58.890	108	48	53.784	
10100.00	90.00	0.00	8500.00	1649.36	0.00	1649.36	0.00	37	43	59.879	108	48	53.784	
10200.00	90.00	0.00	8500.00	1749.36	0.00	1749.36	0.00	37	44	0.867	108	48	53.784	
10300.00	90.00	0.00	8500.00	1849.36	0.00	1849.36	0.00	37	44	1.856	108	48	53.784	
10400.00	90.00	0.00	8500.00	1949.36	0.00	1949.36	0.00	37	44	2.845	108	48	53.784	
10450.64	90.00	0.00	8500.00	2000.00	0.00	2000.00	0.00	37	44	3.345	108	48	53.784	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->			<--- Longitude --->		
PBHL			8500.00	2000.00	0.00	1405742.88	2041574.24	37	44	3.345 N	108	48	53.784 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
8380.00	8380.00	0.000	0.000	Csg

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Annotation

MD ft	TVD ft	
8385.00	8385.00	KOP
8565.64	8500.00	LP
10450.64	8500.00	PBHL



Company: Kinder Morgan	Date: 4/1/2013	Time: 13:01:56	Page: 3
Field: Dolores County, CO (NAD 83)	Co-ordinate(NE) Reference: Well: DC #14, True North		
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Field: Dolores County, CO (NAD 83)

USA

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

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

GeoDec v5.03

Report Date: April 01, 2013
Job Number: _____
Customer: Kinder Morgan
Well Name: Doe Canyon 14
API Number: _____
Rig Name: _____
Location: Dolores Co., CO (Nad 83)
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 37.7287700 DEG	Latitude 37 43 43.5720000 DMS
Longitude -108.8149400 DEG	Longitude -108 48 53.7840000 DMS

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	37.72877° N	37° 43 min 43.572 sec
Longitude =	108.81494° W	108° 48 min 53.784 sec

Magnetic Declination =	10.23°	[True North Offset]
Local Gravity =	.9993 g	Checksum = 7295
Local Field Strength =	50902 nT	Magnetic Vector X = 21935 nT
Magnetic Dip =	64.03°	Magnetic Vector Y = 3958 nT
Magnetic Model =	bggm2012	Magnetic Vector Z = 45763 nT
Spud Date =	Sep 01, 2013	Magnetic Vector H = 22290 nT

Signed: _____

Date: _____