

Continental Resources

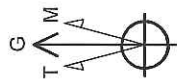
Field: Weld County, Co. (NAD 83)
 Site: Perrin 1-10H
 Well: 1-10H
 Wellpath: OH
 Plan: Plan #1

SITE DETAILS

Perrin 1-10H
 Sec 10, T7N, R62W
 SHL 476' FNL & 700' FEL
 PBHL 660' FSL & 700' FEL

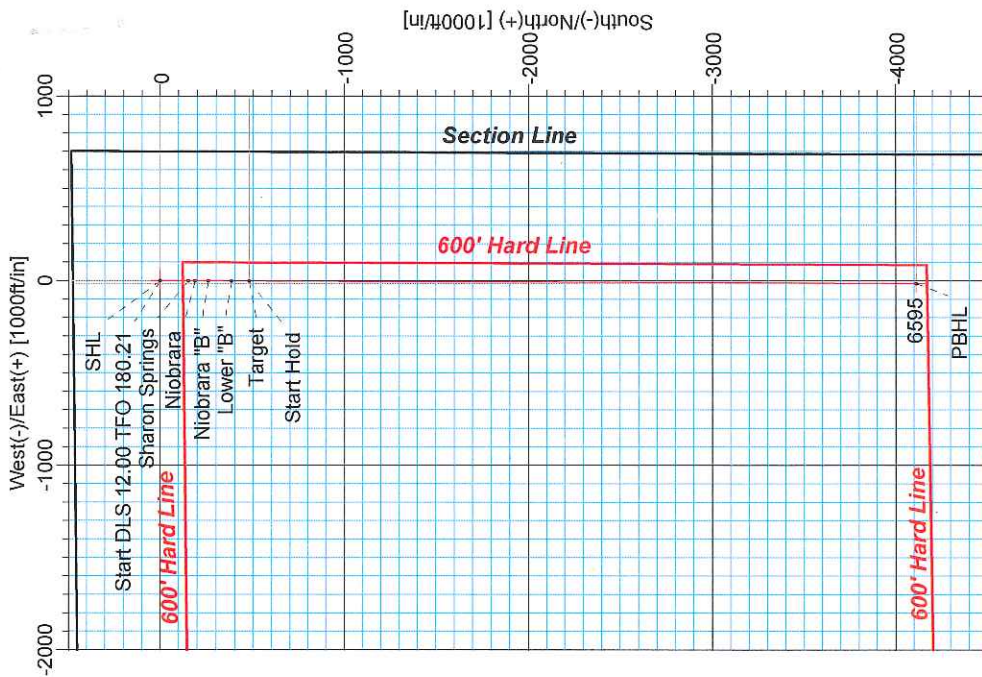
Site Centre Northing: 1461670.97
 Easting: 3333261.21

Ground Level: 4905.00
 KB: 16.00



Azimuths to Grid North
 True North: -0.78°
 Magnetic North: 7.85°
 Magnetic Field
 Strength: 53314nT
 Dip Angle: 67.28°
 Date: 7/13/2011
 Model: GRF2010

Continental
 RESOURCES



SECTION DETAILS

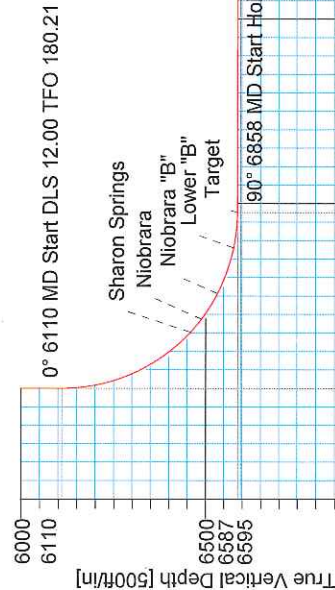
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	
2	6109.54	0.00	0.00	6109.54	0.00	0.00	0.00	0.00	-0.00	
3	6858.48	89.87	180.21	6587.00	-476.41	-1.76	12.00	180.21	476.41	
4	10492.16	89.87	180.21	6595.00	-4110.05	-15.21	0.00	0.00	4110.08	PBHL

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude	Shape
SHL	0.00	0.00	0.00	1461670.97	3333261.21	40°35'40.153N	104°17'59.856W	Point
PBHL	6595.00	-4110.05	-15.21	1457560.92	3333246.00	40°34'59.545N	104°18'00.774W	Point

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	1693.00	1693.00	Pierre
2	3589.00	3589.00	Laramie
3	6459.00	6501.60	Sharon Springs
4	6489.00	6548.13	Niobrara
5	6533.00	6630.26	Niobrara 'B'
6	6577.00	6761.64	Lower 'B'
7	6587.00	6858.48	Target



LEAM DRILLING SYSTEMS, INC.
 2010 East Davis, Conroe, Texas 77301
 Phone: 936-756-7577 Fax: 936-756-7595

Plan: Plan #1 (1-10H)
 Created By: Tyler Carlson
 Checked: _____ Date: 7/13/2011
 Reviewed: _____ Date: _____
 Approved: _____ Date: _____

LEAM Drilling Systems, Inc.

Planning Report

Company: Continental Resources Field: Weld County, Co. (NAD 83) Site: Perrin 1-10H Well: 1-10H Wellpath: OH	Date: 7/13/2011 Time: 13:36:11 Page: 1 Co-ordinate(NE) Reference: Well: 1-10H, Grid North Vertical (TVD) Reference: GE 4905' + KB 16' 4921.0 Section (VS) Reference: Well (0.00N,0.00E,180.21Azi) Survey Calculation Method: Minimum Curvature Db: Adapti
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Field: Weld County, Co. (NAD 83)	
Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level	Map Zone: Colorado, Northern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010

Site: Perrin 1-10H Sec 10, T7N, R62W 476' FNL & 700' FEL	
Site Position: From: Map Position Uncertainty: 0.00 ft Ground Level: 4905.00 ft	Northing: 1461670.97 ft Latitude: 40 35 40.153 N Easting: 3333261.21 ft Longitude: 104 17 59.856 W North Reference: Grid Grid Convergence: 0.78 deg

Well: 1-10H	Slot Name:
Well Position: +N/-S 0.00 ft Northing: 1461670.97 ft Latitude: 40 35 40.153 N +E/-W 0.00 ft Easting: 3333261.21 ft Longitude: 104 17 59.856 W Position Uncertainty: 0.00 ft	

Plan: Plan #1 Principal: No	Date Composed: 7/13/2011 Version: 1 Tied-to: User Defined
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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	
6109.54	0.00	0.00	6109.54	0.00	0.00	0.00	0.00	0.00	0.00	
6858.48	89.87	180.21	6587.00	-476.41	-1.76	12.00	12.00	-24.01	180.21	
10492.16	89.87	180.21	6595.00	-4110.05	-15.21	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	Build deg/100ft	Turn deg/100ft	Comment
6109.54	0.00	0.00	6109.54	0.00	0.00	-0.00	0.00	0.00	0.00	
6125.00	1.86	180.21	6125.00	-0.25	0.00	0.25	12.00	12.00	0.00	
6150.00	4.86	180.21	6149.95	-1.71	-0.01	1.71	12.00	12.00	0.00	
6175.00	7.86	180.21	6174.80	-4.48	-0.02	4.48	12.00	12.00	0.00	
6200.00	10.86	180.21	6199.46	-8.54	-0.03	8.54	12.00	12.00	0.00	
6225.00	13.86	180.21	6223.88	-13.89	-0.05	13.89	12.00	12.00	0.00	
6250.00	16.86	180.21	6247.98	-20.51	-0.08	20.51	12.00	12.00	0.00	
6275.00	19.86	180.21	6271.71	-28.38	-0.11	28.39	12.00	12.00	0.00	
6300.00	22.86	180.21	6294.99	-37.49	-0.14	37.49	12.00	12.00	0.00	
6325.00	25.86	180.21	6317.76	-47.80	-0.18	47.80	12.00	12.00	0.00	
6350.00	28.86	180.21	6339.96	-59.28	-0.22	59.28	12.00	12.00	0.00	
6375.00	31.86	180.21	6361.53	-71.92	-0.27	71.92	12.00	12.00	0.00	
6400.00	34.86	180.21	6382.41	-85.66	-0.32	85.66	12.00	12.00	0.00	
6425.00	37.86	180.21	6402.54	-100.48	-0.37	100.48	12.00	12.00	0.00	
6450.00	40.86	180.21	6421.87	-116.33	-0.43	116.33	12.00	12.00	0.00	
6475.00	43.86	180.21	6440.34	-133.17	-0.49	133.17	12.00	12.00	0.00	
6500.00	46.86	180.21	6457.91	-150.96	-0.56	150.96	12.00	12.00	0.00	
6501.60	47.05	180.21	6459.00	-152.12	-0.56	152.12	12.00	12.00	0.00	Sharon Springs
6525.00	49.86	180.21	6474.52	-169.64	-0.63	169.64	12.00	12.00	0.00	
6548.13	52.63	180.21	6489.00	-187.67	-0.69	187.67	12.00	12.00	0.00	Niobrara
6550.00	52.86	180.21	6490.13	-189.16	-0.70	189.16	12.00	12.00	0.00	
6575.00	55.86	180.21	6504.70	-209.47	-0.78	209.47	12.00	12.00	0.00	
6600.00	58.86	180.21	6518.18	-230.52	-0.85	230.52	12.00	12.00	0.00	
6625.00	61.86	180.21	6530.55	-252.25	-0.93	252.25	12.00	12.00	0.00	
6630.26	62.49	180.21	6533.00	-256.90	-0.95	256.90	12.00	12.00	0.00	Niobrara "B"

LEAM Drilling Systems, Inc.

Planning Report

Company: Continental Resources
Field: Weld County, Co. (NAD 83)
Site: Perrin 1-10H
Well: 1-10H
Wellpath: OH

Date: 7/13/2011 **Time:** 13:36:11 **Page:** 2
Co-ordinate(NE) Reference: Well: 1-10H, Grid North
Vertical (TVD) Reference: GE 4905' + KB 16' 4921.0
Section (VS) Reference: Well (0.00N,0.00E,180.21Azi)
Survey Calculation Method: Minimum Curvature **Db:** Adapti

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
6650.00	64.86	180.21	6541.76	-274.59	-1.02	274.59	12.00	12.00	0.00	
6675.00	67.86	180.21	6551.78	-297.49	-1.10	297.49	12.00	12.00	0.00	
6700.00	70.86	180.21	6560.59	-320.88	-1.19	320.88	12.00	12.00	0.00	
6725.00	73.86	180.21	6568.17	-344.70	-1.28	344.70	12.00	12.00	0.00	
6750.00	76.86	180.21	6574.49	-368.89	-1.37	368.89	12.00	12.00	0.00	
6761.64	78.25	180.21	6577.00	-380.25	-1.41	380.26	12.00	12.00	0.00	Lower "B"
6775.00	79.86	180.21	6579.54	-393.37	-1.46	393.37	12.00	12.00	0.00	
6800.00	82.86	180.21	6583.29	-418.08	-1.55	418.08	12.00	12.00	0.00	
6825.00	85.86	180.21	6585.75	-442.96	-1.64	442.96	12.00	12.00	0.00	
6850.00	88.86	180.21	6586.90	-467.93	-1.73	467.93	12.00	12.00	0.00	
6858.48	89.87	180.21	6587.00	-476.41	-1.76	476.41	12.00	12.00	0.00	Target
6900.00	89.87	180.21	6587.09	-517.93	-1.92	517.93	0.00	0.00	0.00	
7000.00	89.87	180.21	6587.31	-617.93	-2.29	617.93	0.00	0.00	0.00	
7100.00	89.87	180.21	6587.53	-717.92	-2.66	717.93	0.00	0.00	0.00	
7200.00	89.87	180.21	6587.75	-817.92	-3.03	817.93	0.00	0.00	0.00	
7300.00	89.87	180.21	6587.97	-917.92	-3.40	917.93	0.00	0.00	0.00	
7400.00	89.87	180.21	6588.19	-1017.92	-3.77	1017.93	0.00	0.00	0.00	
7500.00	89.87	180.21	6588.41	-1117.92	-4.14	1117.93	0.00	0.00	0.00	
7600.00	89.87	180.21	6588.63	-1217.92	-4.51	1217.93	0.00	0.00	0.00	
7700.00	89.87	180.21	6588.85	-1317.92	-4.88	1317.93	0.00	0.00	0.00	
7800.00	89.87	180.21	6589.07	-1417.92	-5.25	1417.93	0.00	0.00	0.00	
7900.00	89.87	180.21	6589.29	-1517.92	-5.62	1517.93	0.00	0.00	0.00	
8000.00	89.87	180.21	6589.51	-1617.92	-5.99	1617.93	0.00	0.00	0.00	
8100.00	89.87	180.21	6589.73	-1717.91	-6.36	1717.93	0.00	0.00	0.00	
8200.00	89.87	180.21	6589.95	-1817.91	-6.73	1817.93	0.00	0.00	0.00	
8300.00	89.87	180.21	6590.17	-1917.91	-7.10	1917.93	0.00	0.00	0.00	
8400.00	89.87	180.21	6590.39	-2017.91	-7.47	2017.93	0.00	0.00	0.00	
8500.00	89.87	180.21	6590.61	-2117.91	-7.84	2117.93	0.00	0.00	0.00	
8600.00	89.87	180.21	6590.83	-2217.91	-8.21	2217.93	0.00	0.00	0.00	
8700.00	89.87	180.21	6591.05	-2317.91	-8.58	2317.93	0.00	0.00	0.00	
8800.00	89.87	180.21	6591.27	-2417.91	-8.95	2417.92	0.00	0.00	0.00	
8900.00	89.87	180.21	6591.49	-2517.91	-9.32	2517.92	0.00	0.00	0.00	
9000.00	89.87	180.21	6591.71	-2617.91	-9.69	2617.92	0.00	0.00	0.00	
9100.00	89.87	180.21	6591.93	-2717.91	-10.06	2717.92	0.00	0.00	0.00	
9200.00	89.87	180.21	6592.15	-2817.90	-10.43	2817.92	0.00	0.00	0.00	
9300.00	89.87	180.21	6592.37	-2917.90	-10.80	2917.92	0.00	0.00	0.00	
9400.00	89.87	180.21	6592.60	-3017.90	-11.17	3017.92	0.00	0.00	0.00	
9500.00	89.87	180.21	6592.82	-3117.90	-11.54	3117.92	0.00	0.00	0.00	
9600.00	89.87	180.21	6593.04	-3217.90	-11.91	3217.92	0.00	0.00	0.00	
9700.00	89.87	180.21	6593.26	-3317.90	-12.28	3317.92	0.00	0.00	0.00	
9800.00	89.87	180.21	6593.48	-3417.90	-12.65	3417.92	0.00	0.00	0.00	
9900.00	89.87	180.21	6593.70	-3517.90	-13.02	3517.92	0.00	0.00	0.00	
10000.00	89.87	180.21	6593.92	-3617.90	-13.39	3617.92	0.00	0.00	0.00	
10100.00	89.87	180.21	6594.14	-3717.90	-13.76	3717.92	0.00	0.00	0.00	
10200.00	89.87	180.21	6594.36	-3817.90	-14.13	3817.92	0.00	0.00	0.00	
10300.00	89.87	180.21	6594.58	-3917.89	-14.50	3917.92	0.00	0.00	0.00	
10400.00	89.87	180.21	6594.80	-4017.89	-14.87	4017.92	0.00	0.00	0.00	
10492.16	89.87	180.21	6595.00	-4110.05	-15.21	4110.08	0.00	0.00	0.00	PBHL

LEAM Drilling Systems, Inc.

Planning Report

Company: Continental Resources	Date: 7/13/2011	Time: 13:36:11	Page: 3
Field: Weld County, Co. (NAD 83)	Co-ordinate(NE) Reference: Well: 1-10H, Grid North		
Site: Perrin 1-10H	Vertical (TVD) Reference: GE 4905' + KB 16' 4921.0		
Well: 1-10H	Section (VS) Reference: Well (0.00N,0.00E,180.21Azi)		
Wellpath: OH	Survey Calculation Method: Minimum Curvature	Db: Adapti	

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
SHL			0.00	0.00	0.00	1461670.973333261.21		40 35 40.153 N	104 17 59.856 W
PBHL			6595.00	-4110.05	-15.21	1457560.923333246.00		40 34 59.545 N	104 18 0.774 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1693.00	1693.00	Pierre		0.00	180.21
3589.00	3589.00	Laramie		0.00	180.21
6501.60	6459.00	Sharon Springs		0.00	180.21
6548.13	6489.00	Niobrara		0.00	180.21
6630.26	6533.00	Niobrara "B"		0.00	180.21
6761.64	6577.00	Lower "B"		0.00	180.21
6858.48	6587.00	Target		0.00	180.21