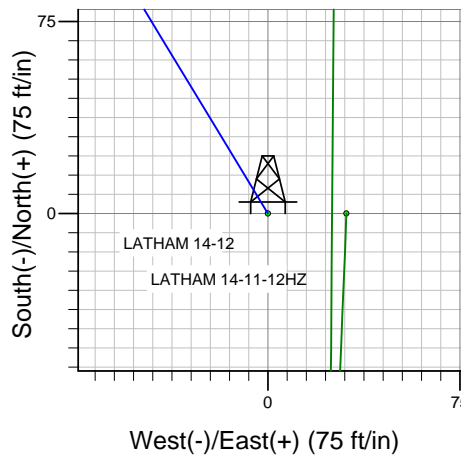
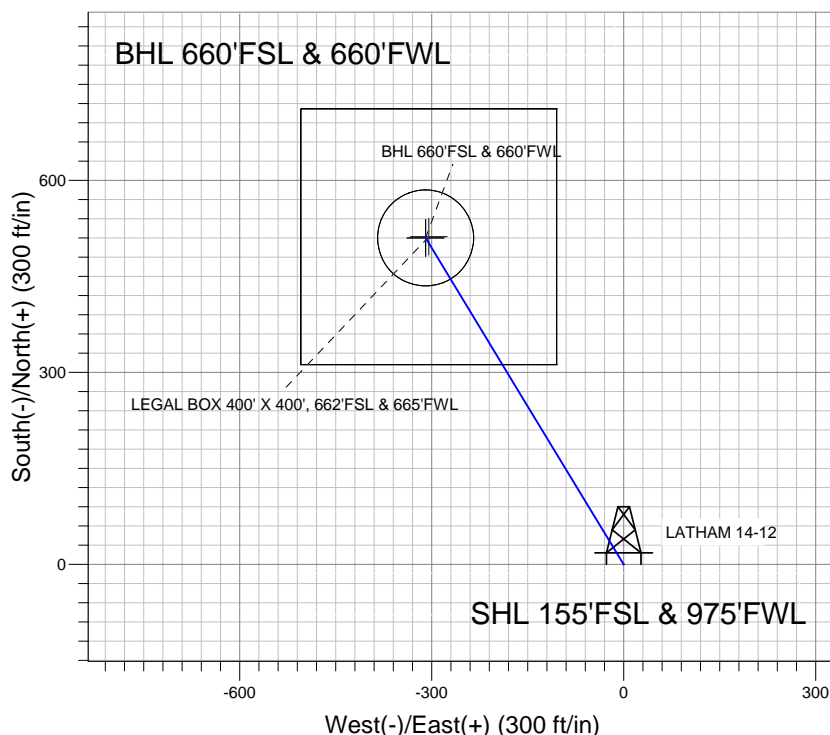
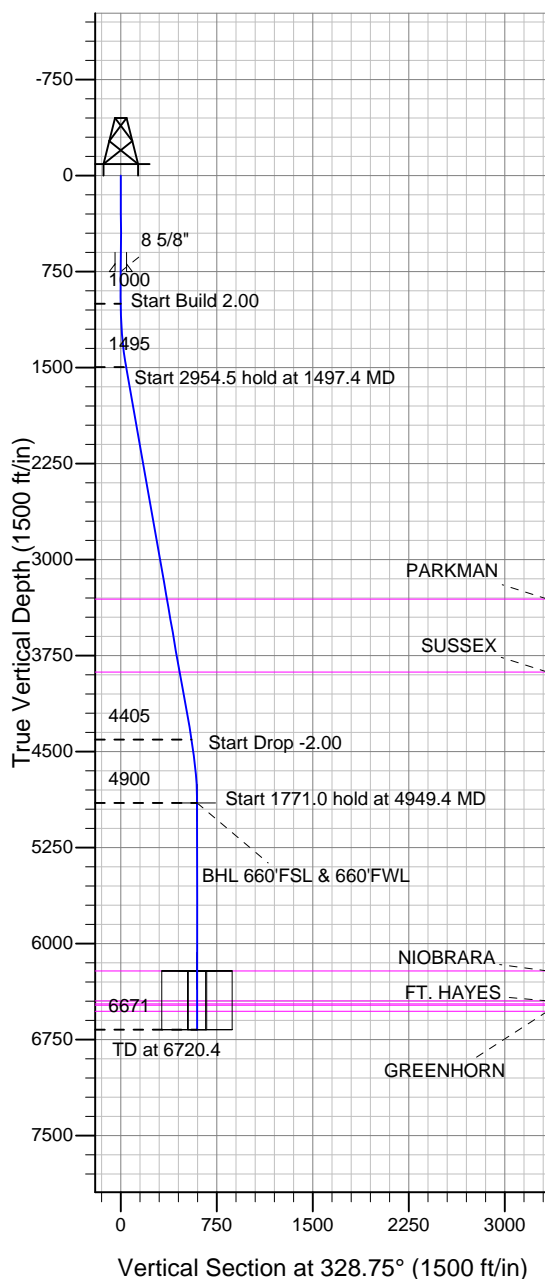


### Well Name: LATHAM 14-12

Surface Location: LATHAM 14-12 PAD S12-4N-63W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4566.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1361487.79	3308837.86	40.320390	-104.392380	
		KB Est 12'	RKB @ 4578.0ft (KB Est 12')			

## BONANZA CREEK ENERGY OPERATING



LATHAM 14-12 PAD S12-4N-63W  
 LATHAM 14-12  
 PLAN 1 (AUG 1 2012)  
 15:45, August 01 2012



Azimuths to True North  
 Magnetic North: 8.54°  
 Magnetic Field  
 Strength: 53044.2snT  
 Dip Angle: 67.02°  
 Date: 4/12/2012  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
BHL 660'FSL & 660'FWL	4900.0	510.0	-309.5	40.321790	-104.393490	Point
LEGAL BOX 400' X 400', 662'FSL & 665'FWL	6213.0	512.0	-304.5	40.321795	-104.393472	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 600'FSL & 660'FWL	6213.0	510.0	-309.5	40.321790	-104.393490	Circle (Radius: 75.0)

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1497.4	9.95	328.75	1494.9	36.8	-22.3	2.00	328.75	43.1	
4	4452.0	9.95	328.75	4405.1	473.2	-287.2	0.00	0.00	553.5	
5	4949.4	0.00	0.00	4900.0	510.0	-309.5	2.00	180.00	596.6	BHL 660'FSL & 660'FWL
6	6720.4	0.00	0.00	6671.0	510.0	-309.5	0.00	0.00	596.6	



# **BONANZA CREEK ENERGY OPERATING**

**SEC.12-T4N-R63W**

**LATHAM 14-12 PAD S12-4N-63W**

**LATHAM 14-12**

**Wellbore #1**

**Plan: PLAN 1 (AUG 1 2012)**

## **Standard Planning Report**

**01 August, 2012**

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,497.4	9.95	328.75	1,494.9	36.8	-22.3	2.00	2.00	0.00	328.75	
4,452.0	9.95	328.75	4,405.1	473.2	-287.2	0.00	0.00	0.00	0.00	
4,949.4	0.00	0.00	4,900.0	510.0	-309.5	2.00	-2.00	0.00	180.00	BHL 660'FSL & 660'FSL
6,720.4	0.00	0.00	6,671.0	510.0	-309.5	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Project:</b>	SEC.12-T4N-R63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>North Reference:</b>	True
<b>Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 1 (AUG 1 2012)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	2.00	328.75	1,100.0	1.5	-0.9	1.7	2.00	2.00	0.00
1,200.0	4.00	328.75	1,199.8	6.0	-3.6	7.0	2.00	2.00	0.00
1,300.0	6.00	328.75	1,299.5	13.4	-8.1	15.7	2.00	2.00	0.00
1,400.0	8.00	328.75	1,398.7	23.8	-14.5	27.9	2.00	2.00	0.00
1,497.4	9.95	328.75	1,494.9	36.8	-22.3	43.1	2.00	2.00	0.00
1,500.0	9.95	328.75	1,497.5	37.2	-22.6	43.5	0.00	0.00	0.00
1,600.0	9.95	328.75	1,596.0	52.0	-31.5	60.8	0.00	0.00	0.00
1,700.0	9.95	328.75	1,694.5	66.7	-40.5	78.1	0.00	0.00	0.00
1,800.0	9.95	328.75	1,793.0	81.5	-49.5	95.4	0.00	0.00	0.00
1,900.0	9.95	328.75	1,891.5	96.3	-58.4	112.6	0.00	0.00	0.00
2,000.0	9.95	328.75	1,989.9	111.1	-67.4	129.9	0.00	0.00	0.00
2,100.0	9.95	328.75	2,088.4	125.8	-76.4	147.2	0.00	0.00	0.00
2,200.0	9.95	328.75	2,186.9	140.6	-85.3	164.5	0.00	0.00	0.00
2,300.0	9.95	328.75	2,285.4	155.4	-94.3	181.7	0.00	0.00	0.00
2,400.0	9.95	328.75	2,383.9	170.1	-103.2	199.0	0.00	0.00	0.00
2,500.0	9.95	328.75	2,482.4	184.9	-112.2	216.3	0.00	0.00	0.00
2,600.0	9.95	328.75	2,580.9	199.7	-121.2	233.6	0.00	0.00	0.00
2,700.0	9.95	328.75	2,679.4	214.4	-130.1	250.8	0.00	0.00	0.00
2,800.0	9.95	328.75	2,777.9	229.2	-139.1	268.1	0.00	0.00	0.00
2,900.0	9.95	328.75	2,876.4	244.0	-148.1	285.4	0.00	0.00	0.00
3,000.0	9.95	328.75	2,974.9	258.8	-157.0	302.7	0.00	0.00	0.00
3,100.0	9.95	328.75	3,073.4	273.5	-166.0	320.0	0.00	0.00	0.00
3,200.0	9.95	328.75	3,171.9	288.3	-175.0	337.2	0.00	0.00	0.00
3,300.0	9.95	328.75	3,270.4	303.1	-183.9	354.5	0.00	0.00	0.00
3,338.2	9.95	328.75	3,308.0	308.7	-187.3	361.1	0.00	0.00	0.00
PARKMAN									
3,400.0	9.95	328.75	3,368.9	317.8	-192.9	371.8	0.00	0.00	0.00
3,500.0	9.95	328.75	3,467.4	332.6	-201.8	389.1	0.00	0.00	0.00
3,600.0	9.95	328.75	3,565.9	347.4	-210.8	406.3	0.00	0.00	0.00
3,700.0	9.95	328.75	3,664.4	362.1	-219.8	423.6	0.00	0.00	0.00
3,800.0	9.95	328.75	3,762.9	376.9	-228.7	440.9	0.00	0.00	0.00
3,900.0	9.95	328.75	3,861.4	391.7	-237.7	458.2	0.00	0.00	0.00
3,916.9	9.95	328.75	3,878.0	394.2	-239.2	461.1	0.00	0.00	0.00
SUSSEX									
4,000.0	9.95	328.75	3,959.9	406.5	-246.7	475.4	0.00	0.00	0.00
4,100.0	9.95	328.75	4,058.4	421.2	-255.6	492.7	0.00	0.00	0.00
4,200.0	9.95	328.75	4,156.9	436.0	-264.6	510.0	0.00	0.00	0.00
4,300.0	9.95	328.75	4,255.4	450.8	-273.5	527.3	0.00	0.00	0.00
4,400.0	9.95	328.75	4,353.9	465.5	-282.5	544.5	0.00	0.00	0.00
4,452.0	9.95	328.75	4,405.1	473.2	-287.2	553.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Project:</b>	SEC.12-T4N-R63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>North Reference:</b>	True
<b>Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 1 (AUG 1 2012)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.0	8.99	328.75	4,452.4	480.0	-291.3	561.4	2.00	-2.00	0.00
4,600.0	6.99	328.75	4,551.4	491.8	-298.5	575.3	2.00	-2.00	0.00
4,700.0	4.99	328.75	4,650.9	500.8	-303.9	585.8	2.00	-2.00	0.00
4,800.0	2.99	328.75	4,750.6	506.7	-307.5	592.7	2.00	-2.00	0.00
4,900.0	0.99	328.75	4,850.6	509.7	-309.3	596.2	2.00	-2.00	0.00
4,949.4	0.00	0.00	4,900.0	510.0	-309.5	596.6	2.00	-2.00	63.24
<b>BHL 660'FSL &amp; 660'FWL</b>									
5,000.0	0.00	0.00	4,950.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,100.0	0.00	0.00	5,050.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,200.0	0.00	0.00	5,150.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,300.0	0.00	0.00	5,250.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,400.0	0.00	0.00	5,350.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,450.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,550.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,700.0	0.00	0.00	5,650.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,750.6	510.0	-309.5	596.6	0.00	0.00	0.00
5,900.0	0.00	0.00	5,850.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,950.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,050.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,150.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,262.4	0.00	0.00	6,213.0	510.0	-309.5	596.6	0.00	0.00	0.00
<b>NIORARA - TARGET CIRCLE 600'FSL &amp; 660'FWL - LEGAL BOX 400' X 400', 662'FSL &amp; 665'FWL</b>									
6,300.0	0.00	0.00	6,250.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,350.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,495.4	0.00	0.00	6,446.0	510.0	-309.5	596.6	0.00	0.00	0.00
<b>FT. HAYES</b>									
6,500.0	0.00	0.00	6,450.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,520.4	0.00	0.00	6,471.0	510.0	-309.5	596.6	0.00	0.00	0.00
<b>CODELL</b>									
6,530.4	0.00	0.00	6,481.0	510.0	-309.5	596.6	0.00	0.00	0.00
<b>CARLILE</b>									
6,576.4	0.00	0.00	6,527.0	510.0	-309.5	596.6	0.00	0.00	0.00
<b>GREENHORN</b>									
6,600.0	0.00	0.00	6,550.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,650.6	510.0	-309.5	596.6	0.00	0.00	0.00
6,720.4	0.00	0.00	6,671.0	510.0	-309.5	596.6	0.00	0.00	0.00

Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	
- Shape									Latitude Longitude
TARGET CIRCLE 600'	- plan hits target center	0.00	0.00	6,213.0	510.0	-309.5	1,361,993.90	3,308,522.01	40.321790 -104.393490
- Circle (radius 75.0)									
LEGAL BOX 400' X 400'	- plan misses target center by 5.4ft at 6262.4ft MD (6213.0 TVD, 510.0 N, -309.5 E)	0.00	0.00	6,213.0	512.0	-304.5	1,361,995.93	3,308,527.00	40.321795 -104.393472
- Rectangle (sides W400.0 H400.0 D458.0)									
BHL 660'FSL & 660'FWL	- plan hits target center	0.00	0.00	4,900.0	510.0	-309.5	1,361,993.90	3,308,522.01	40.321790 -104.393490
- Point									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Project:</b>	SEC.12-T4N-R63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>North Reference:</b>	True
<b>Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 1 (AUG 1 2012)		

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
750.0	750.0	8 5/8"	8-5/8	12-1/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,338.2	3,308.0	PARKMAN		0.00	
3,916.9	3,878.0	SUSSEX		0.00	
6,262.4	6,213.0	NIOBRARA		0.00	
6,495.4	6,446.0	FT. HAYES		0.00	
6,520.4	6,471.0	CODELL		0.00	
6,530.4	6,481.0	CARLILE		0.00	
6,576.4	6,527.0	GREENHORN		0.00	



# **BONANZA CREEK ENERGY OPERATING**

**SEC.12-T4N-R63W**

**LATHAM 14-12 PAD S12-4N-63W**

**LATHAM 14-12**

**Wellbore #1**

**PLAN 1 (AUG 1 2012)**

## **Anticollision Report**

**01 August, 2012**

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
<b>Project:</b>	SEC.12-T4N-R63W	<b>TVD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Reference Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	PLAN 1 (AUG 1 2012)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PLAN 1 (AUG 1 2012)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 8/1/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	6,720.4	PLAN 1 (AUG 1 2012) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Distance Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
LATHAM 14-12 PAD S12-4N-63W						
LATHAM 14-11-12HZ - Wellbore #1 - PLAN 3 (July 31, 2	1,000.0	1,000.0	30.7	26.4	7.183	CC, ES
LATHAM 14-11-12HZ - Wellbore #1 - PLAN 3 (July 31, 2	1,100.0	1,100.0	31.6	26.9	6.702	SF

<b>Offset Design</b> LATHAM 14-12 PAD S12-4N-63W - LATHAM 14-11-12HZ - Wellbore #1 - PLAN 3 (July 31, 2012)													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b>	0.0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>				<b>Warning</b>						
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
0.0	0.0	0.0	0.0	0.0	0.0	90.01	0.0	30.7	30.7					
100.0	100.0	100.0	100.0	0.1	0.1	90.01	0.0	30.7	30.7	30.4	0.22	136.468		
200.0	200.0	200.0	200.0	0.3	0.3	90.01	0.0	30.7	30.7	30.0	0.67	45.489		
300.0	300.0	300.0	300.0	0.6	0.6	90.01	0.0	30.7	30.7	29.5	1.12	27.294		
400.0	400.0	400.0	400.0	0.8	0.8	90.01	0.0	30.7	30.7	29.1	1.57	19.495		
500.0	500.0	500.0	500.0	1.0	1.0	90.01	0.0	30.7	30.7	28.7	2.02	15.163		
600.0	600.0	600.0	600.0	1.2	1.2	90.01	0.0	30.7	30.7	28.2	2.47	12.406		
700.0	700.0	700.0	700.0	1.5	1.5	90.01	0.0	30.7	30.7	27.8	2.92	10.498		
800.0	800.0	800.0	800.0	1.7	1.7	90.01	0.0	30.7	30.7	27.3	3.37	9.098		
900.0	900.0	900.0	900.0	1.9	1.9	90.01	0.0	30.7	30.7	26.9	3.82	8.028		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.01	0.0	30.7	30.7	26.4	4.27	7.183	CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	123.95	0.0	30.7	31.6	26.9	4.72	6.702	SF	
1,200.0	1,199.8	1,199.8	1,199.8	2.6	2.6	131.06	0.0	30.7	34.8	29.6	5.16	6.746		
1,300.0	1,299.5	1,299.5	1,299.5	2.8	2.8	140.17	0.0	30.7	41.1	35.5	5.60	7.332		
1,400.0	1,398.7	1,398.7	1,398.7	3.1	3.0	148.84	0.0	30.7	51.0	45.0	6.04	8.454		
1,497.4	1,494.9	1,494.9	1,494.9	3.3	3.2	155.71	0.0	30.7	64.6	58.1	6.46	9.998		
1,500.0	1,497.5	1,497.5	1,497.5	3.3	3.3	155.87	0.0	30.7	65.0	58.5	6.47	10.043		
1,600.0	1,596.0	1,596.0	1,596.0	3.6	3.5	160.86	0.0	30.7	81.1	74.2	6.92	11.721		
1,700.0	1,694.5	1,694.5	1,694.5	3.9	3.7	164.19	0.0	30.7	97.6	90.2	7.37	13.243		
1,800.0	1,793.0	1,793.0	1,793.0	4.3	3.9	166.54	0.0	30.7	114.3	106.5	7.82	14.613		
1,900.0	1,891.5	1,891.5	1,891.5	4.6	4.1	168.30	0.0	30.7	131.2	122.9	8.28	15.845		
2,000.0	1,989.9	1,989.9	1,989.9	5.0	4.4	169.65	0.0	30.7	148.2	139.4	8.74	16.955		
2,100.0	2,088.4	2,088.4	2,088.4	5.3	4.6	170.73	0.0	30.7	165.2	156.0	9.20	17.958		
2,200.0	2,186.9	2,186.9	2,186.9	5.7	4.8	171.60	0.0	30.7	182.3	172.6	9.66	18.867		
2,300.0	2,285.4	2,285.4	2,285.4	6.0	5.0	172.33	0.0	30.7	199.4	189.3	10.12	19.695		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



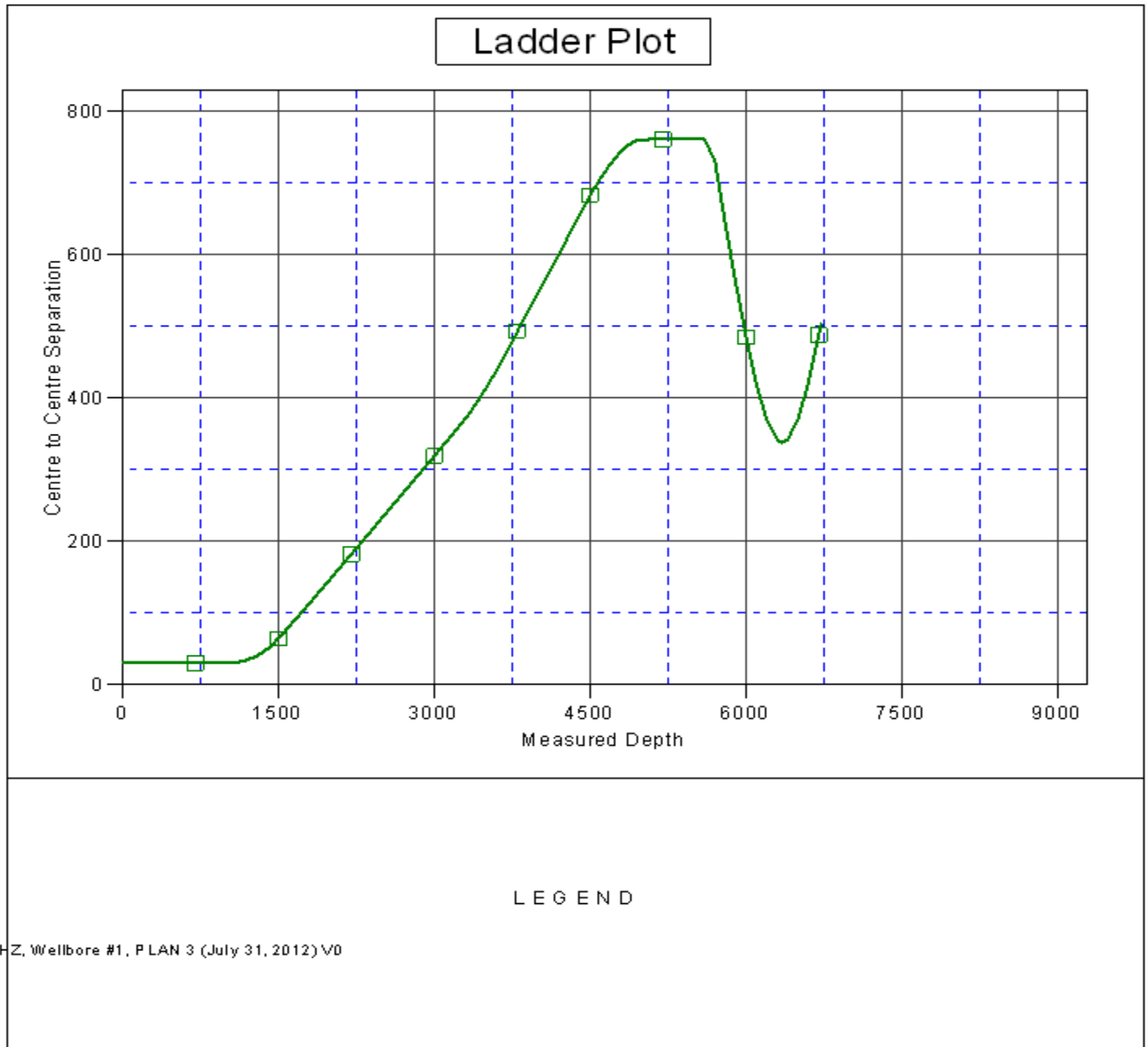
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
<b>Project:</b>	SEC.12-T4N-R63W	<b>TVD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Reference Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	PLAN 1 (AUG 1 2012)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design LATHAM 14-12 PAD S12-4N-63W - LATHAM 14-11-12HZ - Wellbore #1 - PLAN 3 (July 31, 2012)													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,400.0	2,383.9	2,383.9	2,383.9	6.4	5.2	172.94	0.0	30.7	216.5	205.9	10.59	20.450		
2,500.0	2,482.4	2,482.4	2,482.4	6.8	5.5	173.46	0.0	30.7	233.7	222.6	11.05	21.142		
2,600.0	2,580.9	2,580.9	2,580.9	7.1	5.7	173.91	0.0	30.7	250.9	239.3	11.52	21.778		
2,700.0	2,679.4	2,679.4	2,679.4	7.5	5.9	174.30	0.0	30.7	268.0	256.1	11.99	22.365		
2,800.0	2,777.9	2,777.9	2,777.9	7.9	6.1	174.65	0.0	30.7	285.2	272.8	12.45	22.907		
2,900.0	2,876.4	2,876.4	2,876.4	8.3	6.4	174.95	0.0	30.7	302.5	289.5	12.92	23.409		
3,000.0	2,974.9	2,974.9	2,974.9	8.7	6.6	175.22	0.0	30.7	319.7	306.3	13.39	23.876		
3,100.0	3,073.4	3,073.4	3,073.4	9.0	6.8	175.47	0.0	30.7	336.9	323.0	13.86	24.311		
3,200.0	3,171.9	3,171.9	3,171.9	9.4	7.0	175.69	0.0	30.7	354.1	339.8	14.33	24.717		
3,300.0	3,270.4	3,263.8	3,263.8	9.8	7.2	175.94	-0.7	30.6	372.0	357.2	14.76	25.195		
3,400.0	3,368.9	3,352.3	3,352.3	10.2	7.4	176.41	-4.0	30.5	392.2	377.0	15.17	25.846		
3,500.0	3,467.4	3,439.7	3,439.5	10.6	7.5	177.06	-10.0	30.3	414.8	399.2	15.57	26.636		
3,600.0	3,565.9	3,525.9	3,525.2	10.9	7.7	177.84	-18.5	29.9	439.9	423.9	15.97	27.537		
3,700.0	3,664.4	3,619.9	3,618.5	11.3	7.8	178.75	-29.7	29.5	466.6	450.2	16.39	28.470		
3,800.0	3,762.9	3,716.0	3,713.9	11.7	8.0	179.58	-41.1	29.0	493.6	476.7	16.81	29.355		
3,900.0	3,861.4	3,812.0	3,809.3	12.1	8.2	-179.67	-52.6	28.6	520.6	503.3	17.24	30.190		
4,000.0	3,959.9	3,908.1	3,904.7	12.5	8.4	-179.00	-64.0	28.1	547.6	530.0	17.68	30.982		
4,100.0	4,058.4	4,004.2	4,000.1	12.9	8.6	-178.39	-75.5	27.7	574.8	556.7	18.11	31.731		
4,200.0	4,156.9	4,100.3	4,095.4	13.3	8.8	-177.84	-87.0	27.2	602.0	583.4	18.56	32.441		
4,300.0	4,255.4	4,196.3	4,190.8	13.7	9.0	-177.33	-98.4	26.7	629.2	610.2	19.00	33.115		
4,400.0	4,353.9	4,292.4	4,286.2	14.0	9.2	-176.87	-109.9	26.3	656.5	637.1	19.45	33.754		
4,452.0	4,405.1	4,342.3	4,335.8	14.2	9.4	-176.64	-115.8	26.0	670.7	651.0	19.68	34.073		
4,500.0	4,452.4	4,388.6	4,381.7	14.4	9.5	-176.45	-121.3	25.8	683.5	663.5	19.92	34.318		
4,600.0	4,551.4	4,485.5	4,478.0	14.7	9.7	-176.07	-132.9	25.4	707.5	687.2	20.35	34.759		
4,700.0	4,650.9	4,583.2	4,575.0	14.9	9.9	-175.69	-144.6	24.9	728.2	707.4	20.77	35.058		
4,800.0	4,750.6	4,685.9	4,676.9	15.1	10.2	-175.29	-156.7	24.4	745.5	724.3	21.18	35.204		
4,900.0	4,850.6	4,814.9	4,805.3	15.3	10.5	-174.91	-168.4	23.9	756.9	735.3	21.63	34.998		
4,949.4	4,900.0	4,879.2	4,869.5	15.3	10.7	153.96	-172.0	23.8	759.8	737.9	21.84	34.792		
5,000.0	4,950.6	4,945.1	4,935.5	15.4	10.8	154.04	-174.3	23.7	761.3	739.2	22.07	34.492		
5,100.0	5,050.6	5,060.3	5,050.6	15.6	11.0	154.06	-175.0	23.7	761.8	739.3	22.51	33.837		
5,200.0	5,150.6	5,160.3	5,150.6	15.7	11.2	154.06	-175.0	23.7	761.8	738.8	22.93	33.222		
5,300.0	5,250.6	5,260.3	5,250.6	15.9	11.5	154.06	-175.0	23.7	761.8	738.4	23.35	32.622		
5,400.0	5,350.6	5,360.3	5,350.6	16.0	11.7	154.06	-175.0	23.7	761.8	738.0	23.78	32.041		
5,500.0	5,450.6	5,460.3	5,450.6	16.2	11.9	154.06	-175.0	23.7	761.8	737.6	24.20	31.479		
5,600.0	5,550.6	5,560.3	5,550.6	16.4	12.1	154.06	-175.0	23.7	761.8	737.2	24.62	30.936		
5,700.0	5,650.6	5,766.5	6,298.0	16.5	16.9	90.44	507.4	29.0	730.6	698.1	32.45	22.515		
5,800.0	5,750.6	6,766.5	6,298.0	16.7	16.9	90.44	507.4	29.0	643.6	611.0	32.62	19.730		
5,900.0	5,850.6	6,766.5	6,298.0	16.8	16.9	90.44	507.4	29.0	561.0	528.2	32.80	17.107		
6,000.0	5,950.6	6,766.5	6,298.0	17.0	16.9	90.44	507.4	29.0	485.1	452.1	32.97	14.712		
6,100.0	6,050.6	6,766.5	6,298.0	17.2	16.9	90.44	507.4	29.0	419.3	386.1	33.15	12.649		
6,200.0	6,150.6	6,766.5	6,298.0	17.4	16.9	90.44	507.4	29.0	369.2	335.9	33.33	11.079		
6,300.0	6,250.6	6,766.5	6,298.0	17.5	16.9	90.44	507.4	29.0	341.8	308.3	33.50	10.202		
6,347.4	6,298.0	6,766.5	6,298.0	17.6	16.9	90.44	507.4	29.0	338.5	304.9	33.59	10.077		
6,400.0	6,350.6	6,766.5	6,298.0	17.7	16.9	90.44	507.4	29.0	342.6	308.9	33.68	10.169		
6,500.0	6,450.6	6,766.5	6,298.0	17.9	16.9	90.44	507.4	29.0	371.3	337.4	33.87	10.964		
6,600.0	6,550.6	6,766.5	6,298.0	18.0	16.9	90.44	507.4	29.0	422.3	388.3	34.05	12.404		
6,700.0	6,650.6	6,766.5	6,298.0	18.2	16.9	90.44	507.4	29.0	488.8	454.5	34.23	14.278		
6,720.4	6,671.0	6,766.5	6,298.0	18.3	16.9	90.44	507.4	29.0	503.7	469.4	34.27	14.698		

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
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<b>Reference Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	PLAN 1 (AUG 1 2012)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB @ 4578.0ft (KB Est 12')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: LATHAM 14-12  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.72°



<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well LATHAM 14-12
<b>Project:</b>	SEC.12-T4N-R63W	<b>TVD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Reference Site:</b>	LATHAM 14-12 PAD S12-4N-63W	<b>MD Reference:</b>	RKB @ 4578.0ft (KB Est 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	LATHAM 14-12	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	PLAN 1 (AUG 1 2012)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB @ 4578.0ft (KB Est 12')  
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