

BONANZA CREEK ENERGY OPERATING

Well Name: **State Seventy Holes O-K-6HNB**

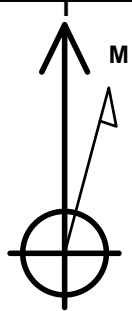
Surface Location: State Seventy Holes T-6 Pad Sec.6-T4N-R62W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4530.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1367051.79	3316962.22	40.335380	-104.362990	

RKB - 13' WELL @ 4543.0ft (RKB - 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 390'FSL & 1135'FEL	1.0	0.0	0.0	Point
BHL 470'FNL & 2322'FWL	6260.0	4517.5	-1714.2	Point
Landing Pt. 531'FSL & 2378'FWL	6260.0	134.8	-1488.7	Point



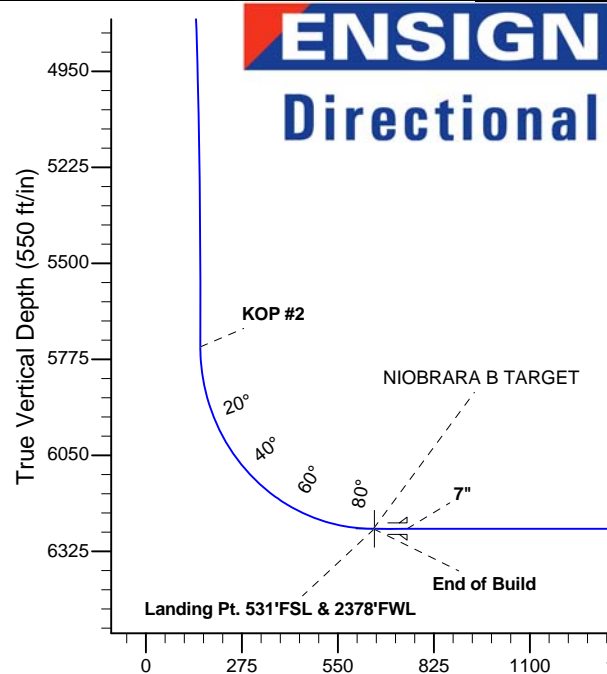
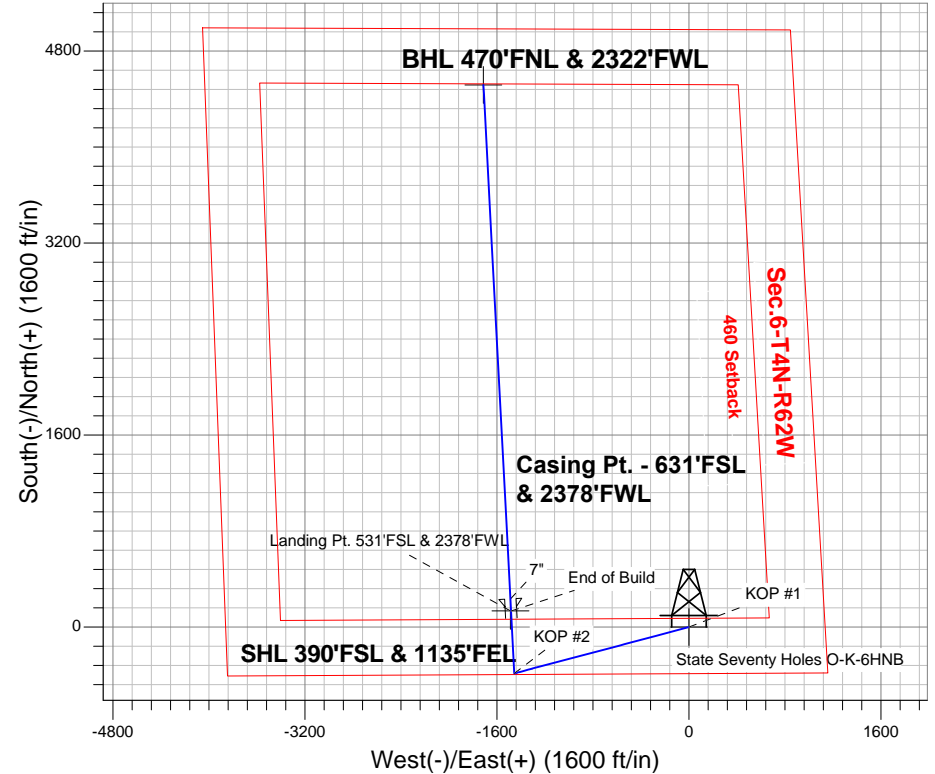
Azimuths to True North
Magnetic North: 8.36°

Magnetic Field
Strength: 52923.4snT
Dip Angle: 66.99°
Date: 7/12/2013
Model: IGRF2010

State Seventy Holes T-6 Pad Sec.6-T4N-R62W
State Seventy Holes O-K-6HNB
Plan #1 (7-12-13)
8:27, July 17 2013

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
5739.1	5970.0	KOP #2
6260.0	6788.2	End of Build



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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1133.4	18.67	255.15	1116.9	-38.6	-145.7	2.00	255.15	15.6	
4	4897.5	18.67	255.15	4683.1	-347.4	-1310.2	0.00	0.00	140.1	
5	5830.9	0.00	0.00	5600.0	-386.0	-1455.9	2.00	180.00	155.6	
6	5970.0	0.00	0.00	5739.1	-386.0	-1455.9	0.00	0.00	155.6	
7	6788.2	90.00	356.98	6260.0	134.1	-1483.4	11.00	356.98	651.7	
8	6889.0	90.00	356.98	6260.0	234.8	-1488.7	0.00	0.00	747.7	
9	6890.0	90.00	356.99	6260.0	235.8	-1488.8	1.00	90.00	748.6	
10	11177.6	90.00	356.99	6260.0	4517.5	-1714.2	0.00	0.00	4831.8	BHL 470'FNL & 2322'FWL

BHL 470'FNL & 2322'FWL

Vertical Section at 339.22° (550 ft/in)



Directional

BONANZA CREEK ENERGY OPERATING

SEC.6-T4N-R62W

State Seventy Holes T-6 Pad Sec.6-T4N-R62W

State Seventy Holes O-K-6HNB

Wellbore #1

Plan: Plan #1 (7-12-13)

Standard Planning Report

17 July, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Project:	SEC.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	North Reference:	True
Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-12-13)		

Project	SEC.6-T4N-R62W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site						State Seventy Holes T-6 Pad Sec.6-T4N-R62W											
Site Position:						Northing:			1,367,073.65 ft			Latitude:			40.335440		
From:			Lat/Long			Easting:			3,316,961.94 ft			Longitude:			-104.362990		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.73 °		

Well	State Seventy Holes O-K-6HNB					
Well Position	+N/-S	-21.9 ft	Northing:	1,367,051.79 ft	Latitude:	40.335380
	+E/-W	0.0 ft	Easting:	3,316,962.22 ft	Longitude:	-104.362990
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,530.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/12/2013	8.36	66.99	52,923

Design	Plan #1 (7-12-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	339.22

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,133.4	18.67	255.15	1,116.9	-38.6	-145.7	2.00	2.00	0.00	255.15	
4,897.5	18.67	255.15	4,683.1	-347.4	-1,310.2	0.00	0.00	0.00	0.00	
5,830.9	0.00	0.00	5,600.0	-386.0	-1,455.9	2.00	-2.00	0.00	180.00	
5,970.0	0.00	0.00	5,739.1	-386.0	-1,455.9	0.00	0.00	0.00	0.00	
6,788.2	90.00	356.98	6,260.0	134.1	-1,483.4	11.00	11.00	0.00	356.98	
6,889.0	90.00	356.98	6,260.0	234.8	-1,488.7	0.00	0.00	0.00	0.00	
6,890.0	90.00	356.99	6,260.0	235.8	-1,488.8	1.00	0.00	1.00	90.00	
11,177.6	90.00	356.99	6,260.0	4,517.5	-1,714.2	0.00	0.00	0.00	0.00	BHL 470'FNL & 232

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Project:	SEC.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	North Reference:	True
Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-12-13)		

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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 390'FSL & 1135'FEL									
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
KOP #1									
300.0	2.00	255.15	300.0	-0.4	-1.7	0.2	2.00	2.00	0.00
400.0	4.00	255.15	399.8	-1.8	-6.7	0.7	2.00	2.00	0.00
500.0	6.00	255.15	499.5	-4.0	-15.2	1.6	2.00	2.00	0.00
600.0	8.00	255.15	598.7	-7.1	-26.9	2.9	2.00	2.00	0.00
700.0	10.00	255.15	697.5	-11.2	-42.1	4.5	2.00	2.00	0.00
800.0	12.00	255.15	795.6	-16.0	-60.5	6.5	2.00	2.00	0.00
900.0	14.00	255.15	893.1	-21.8	-82.3	8.8	2.00	2.00	0.00
1,000.0	16.00	255.15	989.6	-28.4	-107.3	11.5	2.00	2.00	0.00
1,100.0	18.00	255.15	1,085.3	-35.9	-135.5	14.5	2.00	2.00	0.00
1,133.4	18.67	255.15	1,116.9	-38.6	-145.7	15.6	2.00	2.00	0.00
1,200.0	18.67	255.15	1,180.1	-44.1	-166.3	17.8	0.00	0.00	0.00
1,300.0	18.67	255.15	1,274.8	-52.3	-197.2	21.1	0.00	0.00	0.00
1,400.0	18.67	255.15	1,369.5	-60.5	-228.2	24.4	0.00	0.00	0.00
1,500.0	18.67	255.15	1,464.3	-68.7	-259.1	27.7	0.00	0.00	0.00
1,600.0	18.67	255.15	1,559.0	-76.9	-290.0	31.0	0.00	0.00	0.00
1,700.0	18.67	255.15	1,653.8	-85.1	-321.0	34.3	0.00	0.00	0.00
1,800.0	18.67	255.15	1,748.5	-93.3	-351.9	37.6	0.00	0.00	0.00
1,900.0	18.67	255.15	1,843.2	-101.5	-382.9	40.9	0.00	0.00	0.00
2,000.0	18.67	255.15	1,938.0	-109.7	-413.8	44.2	0.00	0.00	0.00
2,100.0	18.67	255.15	2,032.7	-117.9	-444.7	47.5	0.00	0.00	0.00
2,200.0	18.67	255.15	2,127.5	-126.1	-475.7	50.8	0.00	0.00	0.00
2,300.0	18.67	255.15	2,222.2	-134.3	-506.6	54.2	0.00	0.00	0.00
2,400.0	18.67	255.15	2,316.9	-142.5	-537.5	57.5	0.00	0.00	0.00
2,500.0	18.67	255.15	2,411.7	-150.7	-568.5	60.8	0.00	0.00	0.00
2,600.0	18.67	255.15	2,506.4	-158.9	-599.4	64.1	0.00	0.00	0.00
2,700.0	18.67	255.15	2,601.2	-167.1	-630.4	67.4	0.00	0.00	0.00
2,800.0	18.67	255.15	2,695.9	-175.3	-661.3	70.7	0.00	0.00	0.00
2,900.0	18.67	255.15	2,790.6	-183.5	-692.2	74.0	0.00	0.00	0.00
3,000.0	18.67	255.15	2,885.4	-191.7	-723.2	77.3	0.00	0.00	0.00
3,100.0	18.67	255.15	2,980.1	-199.9	-754.1	80.6	0.00	0.00	0.00
3,200.0	18.67	255.15	3,074.9	-208.1	-785.1	83.9	0.00	0.00	0.00
3,300.0	18.67	255.15	3,169.6	-216.3	-816.0	87.2	0.00	0.00	0.00
3,400.0	18.67	255.15	3,264.3	-224.5	-846.9	90.5	0.00	0.00	0.00
3,500.0	18.67	255.15	3,359.1	-232.7	-877.9	93.8	0.00	0.00	0.00
3,600.0	18.67	255.15	3,453.8	-240.9	-908.8	97.2	0.00	0.00	0.00
3,700.0	18.67	255.15	3,548.6	-249.2	-939.7	100.5	0.00	0.00	0.00
3,800.0	18.67	255.15	3,643.3	-257.4	-970.7	103.8	0.00	0.00	0.00
3,900.0	18.67	255.15	3,738.0	-265.6	-1,001.6	107.1	0.00	0.00	0.00
4,000.0	18.67	255.15	3,832.8	-273.8	-1,032.6	110.4	0.00	0.00	0.00
4,100.0	18.67	255.15	3,927.5	-282.0	-1,063.5	113.7	0.00	0.00	0.00
4,200.0	18.67	255.15	4,022.3	-290.2	-1,094.4	117.0	0.00	0.00	0.00
4,300.0	18.67	255.15	4,117.0	-298.4	-1,125.4	120.3	0.00	0.00	0.00
4,400.0	18.67	255.15	4,211.7	-306.6	-1,156.3	123.6	0.00	0.00	0.00
4,500.0	18.67	255.15	4,306.5	-314.8	-1,187.2	126.9	0.00	0.00	0.00
4,600.0	18.67	255.15	4,401.2	-323.0	-1,218.2	130.2	0.00	0.00	0.00
4,700.0	18.67	255.15	4,495.9	-331.2	-1,249.1	133.5	0.00	0.00	0.00
4,800.0	18.67	255.15	4,590.7	-339.4	-1,280.1	136.8	0.00	0.00	0.00

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Project:	SEC.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site:	State Seventy Holes T-6 Pad	North Reference:	True
	Sec.6-T4N-R62W		
Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-12-13)		

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)
4,897.5	18.67	255.15	4,683.1	-347.4	-1,310.2	140.1	0.00	0.00	0.00
4,900.0	18.62	255.15	4,685.4	-347.6	-1,311.0	140.1	2.00	-2.00	0.00
5,000.0	16.62	255.15	4,780.7	-355.3	-1,340.3	143.3	2.00	-2.00	0.00
5,100.0	14.62	255.15	4,877.0	-362.2	-1,366.3	146.1	2.00	-2.00	0.00
5,200.0	12.62	255.15	4,974.2	-368.3	-1,389.0	148.5	2.00	-2.00	0.00
5,300.0	10.62	255.15	5,072.2	-373.4	-1,408.5	150.6	2.00	-2.00	0.00
5,400.0	8.62	255.15	5,170.8	-377.7	-1,424.6	152.3	2.00	-2.00	0.00
5,500.0	6.62	255.15	5,269.9	-381.1	-1,437.5	153.7	2.00	-2.00	0.00
5,600.0	4.62	255.15	5,369.4	-383.6	-1,446.9	154.7	2.00	-2.00	0.00
5,700.0	2.62	255.15	5,469.2	-385.2	-1,453.0	155.3	2.00	-2.00	0.00
5,800.0	0.62	255.15	5,569.1	-386.0	-1,455.7	155.6	2.00	-2.00	0.00
5,830.9	0.00	0.00	5,600.0	-386.0	-1,455.9	155.6	2.00	-2.00	0.00
5,900.0	0.00	0.00	5,669.1	-386.0	-1,455.9	155.6	0.00	0.00	0.00
5,970.0	0.00	0.00	5,739.1	-386.0	-1,455.9	155.6	0.00	0.00	0.00
KOP #2									
6,000.0	3.30	356.98	5,769.1	-385.1	-1,455.9	156.5	11.00	11.00	0.00
6,100.0	14.30	356.98	5,867.8	-369.9	-1,456.8	171.0	11.00	11.00	0.00
6,200.0	25.30	356.98	5,961.7	-336.1	-1,458.5	203.2	11.00	11.00	0.00
6,300.0	36.30	356.98	6,047.5	-285.1	-1,461.2	251.9	11.00	11.00	0.00
6,400.0	47.30	356.98	6,121.9	-218.6	-1,464.7	315.3	11.00	11.00	0.00
6,500.0	58.30	356.98	6,182.3	-139.2	-1,468.9	391.0	11.00	11.00	0.00
6,600.0	69.30	356.98	6,226.4	-49.7	-1,473.7	476.4	11.00	11.00	0.00
6,700.0	80.30	356.98	6,252.6	46.5	-1,478.8	568.1	11.00	11.00	0.00
6,788.2	90.00	356.98	6,260.0	134.1	-1,483.4	651.7	11.00	11.00	0.00
End of Build - NIOBRARA B TARGET									
6,789.2	90.00	356.98	6,260.0	135.1	-1,483.4	652.6	0.00	0.00	0.00
Landing Pt. 531'FSL & 2378'FWL									
6,800.0	90.00	356.98	6,260.0	146.0	-1,484.0	663.0	0.00	0.00	0.00
6,889.0	90.00	356.98	6,260.0	234.8	-1,488.7	747.7	0.00	0.00	0.00
7"									
6,890.0	90.00	356.99	6,260.0	235.8	-1,488.8	748.6	1.03	0.00	1.03
6,900.0	90.00	356.99	6,260.0	245.8	-1,489.3	758.2	0.00	0.00	0.00
7,000.0	90.00	356.99	6,260.0	345.7	-1,494.5	853.4	0.00	0.00	0.00
7,100.0	90.00	356.99	6,260.0	445.5	-1,499.8	948.7	0.00	0.00	0.00
7,200.0	90.00	356.99	6,260.0	545.4	-1,505.1	1,043.9	0.00	0.00	0.00
7,300.0	90.00	356.99	6,260.0	645.3	-1,510.3	1,139.1	0.00	0.00	0.00
7,400.0	90.00	356.99	6,260.0	745.1	-1,515.6	1,234.3	0.00	0.00	0.00
7,500.0	90.00	356.99	6,260.0	845.0	-1,520.8	1,329.6	0.00	0.00	0.00
7,600.0	90.00	356.99	6,260.0	944.8	-1,526.1	1,424.8	0.00	0.00	0.00
7,700.0	90.00	356.99	6,260.0	1,044.7	-1,531.4	1,520.0	0.00	0.00	0.00
7,800.0	90.00	356.99	6,260.0	1,144.6	-1,536.6	1,615.3	0.00	0.00	0.00
7,900.0	90.00	356.99	6,260.0	1,244.4	-1,541.9	1,710.5	0.00	0.00	0.00
8,000.0	90.00	356.99	6,260.0	1,344.3	-1,547.1	1,805.7	0.00	0.00	0.00
8,100.0	90.00	356.99	6,260.0	1,444.2	-1,552.4	1,901.0	0.00	0.00	0.00
8,200.0	90.00	356.99	6,260.0	1,544.0	-1,557.6	1,996.2	0.00	0.00	0.00
8,300.0	90.00	356.99	6,260.0	1,643.9	-1,562.9	2,091.4	0.00	0.00	0.00
8,400.0	90.00	356.99	6,260.0	1,743.7	-1,568.2	2,186.7	0.00	0.00	0.00
8,500.0	90.00	356.99	6,260.0	1,843.6	-1,573.4	2,281.9	0.00	0.00	0.00
8,600.0	90.00	356.99	6,260.0	1,943.5	-1,578.7	2,377.1	0.00	0.00	0.00
8,700.0	90.00	356.99	6,260.0	2,043.3	-1,583.9	2,472.4	0.00	0.00	0.00
8,800.0	90.00	356.99	6,260.0	2,143.2	-1,589.2	2,567.6	0.00	0.00	0.00
8,900.0	90.00	356.99	6,260.0	2,243.0	-1,594.5	2,662.8	0.00	0.00	0.00
9,000.0	90.00	356.99	6,260.0	2,342.9	-1,599.7	2,758.0	0.00	0.00	0.00

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Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Project:	SEC.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	North Reference:	True
Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-12-13)		

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)
9,100.0	90.00	356.99	6,260.0	2,442.8	-1,605.0	2,853.3	0.00	0.00	0.00
9,200.0	90.00	356.99	6,260.0	2,542.6	-1,610.2	2,948.5	0.00	0.00	0.00
9,300.0	90.00	356.99	6,260.0	2,642.5	-1,615.5	3,043.7	0.00	0.00	0.00
9,400.0	90.00	356.99	6,260.0	2,742.4	-1,620.8	3,139.0	0.00	0.00	0.00
9,500.0	90.00	356.99	6,260.0	2,842.2	-1,626.0	3,234.2	0.00	0.00	0.00
9,600.0	90.00	356.99	6,260.0	2,942.1	-1,631.3	3,329.4	0.00	0.00	0.00
9,700.0	90.00	356.99	6,260.0	3,041.9	-1,636.5	3,424.7	0.00	0.00	0.00
9,800.0	90.00	356.99	6,260.0	3,141.8	-1,641.8	3,519.9	0.00	0.00	0.00
9,900.0	90.00	356.99	6,260.0	3,241.7	-1,647.0	3,615.1	0.00	0.00	0.00
10,000.0	90.00	356.99	6,260.0	3,341.5	-1,652.3	3,710.4	0.00	0.00	0.00
10,100.0	90.00	356.99	6,260.0	3,441.4	-1,657.6	3,805.6	0.00	0.00	0.00
10,200.0	90.00	356.99	6,260.0	3,541.2	-1,662.8	3,900.8	0.00	0.00	0.00
10,300.0	90.00	356.99	6,260.0	3,641.1	-1,668.1	3,996.1	0.00	0.00	0.00
10,400.0	90.00	356.99	6,260.0	3,741.0	-1,673.3	4,091.3	0.00	0.00	0.00
10,500.0	90.00	356.99	6,260.0	3,840.8	-1,678.6	4,186.5	0.00	0.00	0.00
10,600.0	90.00	356.99	6,260.0	3,940.7	-1,683.9	4,281.7	0.00	0.00	0.00
10,700.0	90.00	356.99	6,260.0	4,040.6	-1,689.1	4,377.0	0.00	0.00	0.00
10,800.0	90.00	356.99	6,260.0	4,140.4	-1,694.4	4,472.2	0.00	0.00	0.00
10,900.0	90.00	356.99	6,260.0	4,240.3	-1,699.6	4,567.4	0.00	0.00	0.00
11,000.0	90.00	356.99	6,260.0	4,340.1	-1,704.9	4,662.7	0.00	0.00	0.00
11,100.0	90.00	356.99	6,260.0	4,440.0	-1,710.2	4,757.9	0.00	0.00	0.00
11,177.6	90.00	356.99	6,260.0	4,517.5	-1,714.2	4,831.8	0.00	0.00	0.00
BHL 470'FNL & 2322'FWL									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL 390'FSL & 1135'I	0.00	0.00	1.0	0.0	0.0	1,367,051.80	3,316,962.22	40.335380	-104.362990
- plan hits target center									
- Point									
Landing Pt. 531'FSL & 1135'I	0.00	0.00	6,260.0	134.8	-1,488.7	1,367,167.53	3,315,471.96	40.335750	-104.368330
- plan misses target center by 5.3ft at 6789.2ft MD (6260.0 TVD, 135.1 N, -1483.4 E)									
- Point									
BHL 470'FNL & 2322'	0.00	0.00	6,260.0	4,517.5	-1,714.2	1,371,546.73	3,315,190.28	40.347780	-104.369140
- plan hits target center									
- Point									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,889.0	6,260.0	7"	7	7-1/2

Database:	Landmark	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Project:	SEC.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site:	State Seventy Holes T-6 Pad	North Reference:	True
	Sec.6-T4N-R62W		
Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-12-13)		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,788.2	6,260.0	NIOBRARA B TARGET		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP #1	
5,970.0	5,739.1	-386.0	-1,455.9	KOP #2	
6,788.2	6,260.0	134.2	-1,483.4	End of Build	



Directional

BONANZA CREEK ENERGY OPERATING

SEC.6-T4N-R62W

State Seventy Holes T-6 Pad Sec.6-T4N-R62W

State Seventy Holes O-K-6HNB

Wellbore #1

Plan #1 (7-12-13)

Anticollision Report

17 July, 2013

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Project:	SEC.6-T4N-R62W	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (7-12-13)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 7/16/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,177.6	Plan #1 (7-12-13) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
State Seventy Holes T-6 Pad Sec.6-T4N-R62W						
State Seventy Holes 34-31-6HNB - Wellbore #1 - Plan #1	200.0	200.0	21.9	21.2	32.417	CC, ES
State Seventy Holes 34-31-6HNB - Wellbore #1 - Plan #1	11,177.6	11,031.9	646.7	464.4	3.547	SF
State Seventy Holes T-P-6HNB - Wellbore #1 - Plan #1 (	200.0	200.0	40.2	39.5	59.574	CC
State Seventy Holes T-P-6HNB - Wellbore #1 - Plan #1 (	300.0	300.0	40.5	39.4	36.488	ES
State Seventy Holes T-P-6HNB - Wellbore #1 - Plan #1 (	11,177.6	10,952.0	1,360.3	1,178.2	7.472	SF

Offset Design		State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes 34-31-6HNB - Wellbore #1 - Plan										Offset Site Error:		0.0 ft			
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
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	Warning				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	21.9	0.0	21.9								
100.0	100.0	100.0	100.0	0.1	0.1	0.00	21.9	0.0	21.9	21.6	0.22	97.250					
200.0	200.0	200.0	200.0	0.3	0.3	0.00	21.9	0.0	21.9	21.2	0.67	32.417	CC, ES				
300.0	300.0	300.0	300.0	0.5	0.6	109.16	21.9	0.0	22.4	21.3	1.11	20.128					
400.0	399.8	399.8	399.8	0.8	0.8	120.71	21.9	0.0	24.6	23.0	1.56	15.799					
500.0	499.5	499.5	499.5	1.0	1.0	135.07	21.9	0.0	30.0	28.0	2.02	14.847					
600.0	598.7	598.7	598.7	1.3	1.2	147.49	21.9	0.0	39.6	37.1	2.49	15.909					
700.0	697.5	697.5	697.5	1.6	1.5	156.41	21.9	0.0	53.5	50.5	2.95	18.105					
800.0	795.6	795.6	795.6	2.0	1.7	162.43	21.9	0.0	71.4	68.0	3.42	20.898					
900.0	893.1	893.1	893.1	2.5	1.9	166.50	21.9	0.0	93.1	89.2	3.88	23.999					
1,000.0	989.6	989.6	989.6	3.0	2.1	169.32	21.9	0.0	118.5	114.1	4.35	27.262					
1,100.0	1,085.3	1,089.9	1,089.8	3.6	2.3	171.46	21.2	-1.3	146.0	141.2	4.80	30.432					
1,133.4	1,116.9	1,123.7	1,123.6	3.8	2.4	172.07	20.7	-2.4	155.2	150.3	4.94	31.397					
1,200.0	1,180.1	1,191.7	1,191.6	4.2	2.5	173.20	19.0	-5.7	172.9	167.6	5.24	32.974					
1,300.0	1,274.8	1,295.4	1,294.9	4.9	2.7	174.62	15.0	-13.6	196.6	190.9	5.71	34.422					
1,400.0	1,369.5	1,400.8	1,399.5	5.6	3.0	175.87	9.3	-25.0	216.9	210.7	6.20	34.976					
1,500.0	1,464.3	1,507.6	1,505.0	6.2	3.3	177.05	1.7	-40.1	233.6	226.9	6.71	34.810					
1,600.0	1,559.0	1,615.6	1,610.9	6.9	3.6	178.24	-7.8	-58.8	246.8	239.6	7.24	34.073					
1,700.0	1,653.8	1,716.8	1,709.6	7.6	4.0	179.34	-17.8	-78.7	257.6	249.8	7.79	33.082					
1,800.0	1,748.5	1,816.1	1,806.4	8.2	4.4	-179.66	-27.7	-98.3	268.3	260.0	8.34	32.163					
1,900.0	1,843.2	1,915.4	1,903.3	8.9	4.8	-178.74	-37.6	-117.8	279.2	270.3	8.91	31.347					

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

Offset Design											State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes 34-31-6HNB - Wellbore #1 - Plan			Offset Site Error:	0.0 ft
Survey Program: 0-MWD											Offset Well Error:			0.0 ft	
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
2,000.0	1,938.0	2,014.7	2,000.2	9.6	5.2	-177.89	-47.4	-137.4	290.1	280.6	9.49	30.579			
2,100.0	2,032.7	2,114.0	2,097.0	10.3	5.6	-177.10	-57.3	-157.0	301.0	290.9	10.08	29.873			
2,200.0	2,127.5	2,213.3	2,193.9	11.0	6.0	-176.36	-67.2	-176.5	312.0	301.4	10.68	29.221			
2,300.0	2,222.2	2,312.7	2,290.8	11.7	6.5	-175.68	-77.0	-196.1	323.1	311.8	11.29	28.618			
2,400.0	2,316.9	2,412.0	2,387.6	12.3	6.9	-175.04	-86.9	-215.7	334.2	322.3	11.91	28.059			
2,500.0	2,411.7	2,511.3	2,485.0	13.0	7.4	-174.44	-96.8	-235.2	345.3	332.8	12.54	27.540			
2,600.0	2,506.4	2,610.6	2,581.4	13.7	7.9	-173.88	-106.6	-254.8	356.5	343.3	13.18	27.057			
2,700.0	2,601.2	2,709.9	2,678.2	14.4	8.3	-173.35	-116.5	-274.4	367.7	353.9	13.82	26.607			
2,800.0	2,695.9	2,809.2	2,775.1	15.1	8.8	-172.86	-126.4	-294.0	379.0	364.5	14.47	26.187			
2,900.0	2,790.6	2,908.5	2,872.0	15.8	9.2	-172.39	-136.2	-313.5	390.2	375.1	15.13	25.794			
3,000.0	2,885.4	3,007.9	2,968.8	16.4	9.7	-171.95	-146.1	-333.1	401.5	385.7	15.79	25.426			
3,100.0	2,980.1	3,107.2	3,065.7	17.1	10.2	-171.53	-156.0	-352.7	412.8	396.4	16.46	25.082			
3,200.0	3,074.9	3,206.5	3,162.6	17.8	10.7	-171.14	-165.8	-372.2	424.1	407.0	17.13	24.758			
3,300.0	3,169.6	3,305.8	3,259.4	18.5	11.1	-170.77	-175.7	-391.8	435.5	417.7	17.81	24.453			
3,400.0	3,264.3	3,405.1	3,356.3	19.2	11.6	-170.41	-185.6	-411.4	446.9	428.4	18.49	24.166			
3,500.0	3,359.1	3,504.4	3,453.2	19.9	12.1	-170.07	-195.4	-430.9	458.2	439.1	19.18	23.896			
3,600.0	3,453.8	3,603.8	3,550.0	20.6	12.6	-169.75	-205.3	-450.5	469.6	449.8	19.87	23.640			
3,700.0	3,548.6	3,703.1	3,646.9	21.2	13.0	-169.45	-215.2	-470.1	481.0	460.5	20.56	23.399			
3,800.0	3,643.3	3,802.4	3,743.8	21.9	13.5	-169.16	-225.0	-489.7	492.5	471.2	21.25	23.170			
3,900.0	3,738.0	3,901.7	3,840.6	22.6	14.0	-168.88	-234.9	-509.2	503.9	482.0	21.95	22.953			
4,000.0	3,832.8	4,001.0	3,937.5	23.3	14.5	-168.61	-244.8	-528.8	515.4	492.7	22.66	22.748			
4,100.0	3,927.5	4,100.3	4,034.4	24.0	14.9	-168.36	-254.7	-548.4	526.8	503.4	23.36	22.552			
4,200.0	4,022.3	4,199.6	4,131.2	24.7	15.4	-168.11	-264.5	-567.9	538.3	514.2	24.07	22.366			
4,300.0	4,117.0	4,299.0	4,228.1	25.4	15.9	-167.88	-274.4	-587.5	549.8	525.0	24.78	22.189			
4,400.0	4,211.7	4,398.3	4,325.0	26.0	16.4	-167.66	-284.3	-607.1	561.2	535.7	25.49	22.021			
4,500.0	4,306.5	4,497.6	4,421.8	26.7	16.9	-167.44	-294.1	-626.6	572.7	546.5	26.20	21.860			
4,600.0	4,401.2	4,596.9	4,518.7	27.4	17.3	-167.23	-304.0	-646.2	584.2	557.3	26.92	21.706			
4,700.0	4,495.9	4,696.2	4,615.6	28.1	17.8	-167.04	-313.9	-665.8	595.7	568.1	27.63	21.559			
4,800.0	4,590.7	4,795.5	4,712.4	28.8	18.3	-166.85	-323.7	-685.3	607.2	578.9	28.35	21.419			
4,897.5	4,683.1	4,892.4	4,806.9	29.5	18.8	-166.67	-333.3	-704.4	618.5	589.4	29.05	21.288			
4,900.0	4,685.4	4,894.8	4,809.3	29.5	18.8	-166.66	-333.6	-704.9	618.8	589.7	29.07	21.284			
5,000.0	4,780.7	4,994.3	4,906.3	30.0	19.3	-166.49	-343.5	-724.5	628.5	598.7	29.78	21.102			
5,100.0	4,877.0	5,088.0	4,997.7	30.4	19.7	-166.26	-352.7	-742.8	635.1	604.6	30.44	20.861			
5,200.0	4,974.2	5,171.1	5,079.2	30.8	20.0	-166.07	-360.0	-757.4	640.4	609.4	30.96	20.684			
5,300.0	5,072.2	5,254.2	5,161.1	31.2	20.2	-165.92	-366.3	-769.8	644.9	613.5	31.41	20.532			
5,400.0	5,170.8	5,337.2	5,243.3	31.4	20.4	-165.79	-371.5	-780.1	648.6	616.9	31.79	20.403			
5,500.0	5,269.9	5,420.2	5,325.8	31.7	20.6	-165.68	-375.6	-788.3	651.6	619.5	32.11	20.295			
5,600.0	5,369.4	5,500.0	5,405.3	31.9	20.8	-165.61	-378.6	-794.1	653.8	621.5	32.35	20.212			
5,700.0	5,469.2	5,586.2	5,491.4	32.0	20.9	-165.56	-380.6	-798.2	655.2	622.7	32.53	20.140			
5,800.0	5,569.1	5,669.2	5,574.4	32.1	21.0	-165.54	-381.5	-799.9	655.9	623.2	32.65	20.087			
5,830.9	5,600.0	5,694.8	5,600.0	32.2	21.1	89.61	-381.5	-800.0	655.9	622.2	33.70	19.463			
5,900.0	5,669.1	5,763.9	5,669.1	32.2	21.2	89.61	-381.5	-800.0	655.9	622.0	33.89	19.352			
5,970.0	5,739.1	5,834.1	5,739.3	32.3	21.2	89.61	-381.5	-800.0	655.9	621.8	34.09	19.241			
6,000.0	5,769.1	5,866.0	5,771.1	32.3	21.3	92.62	-380.4	-800.1	655.9	622.7	33.16	19.779			
6,050.0	5,818.8	5,919.1	5,823.9	32.3	21.3	92.57	-374.3	-800.4	655.9	622.6	33.23	19.735			
6,100.0	5,867.8	5,972.1	5,875.6	32.3	21.3	92.50	-362.8	-801.0	655.8	622.6	33.22	19.739			
6,150.0	5,915.6	6,025.1	5,925.9	32.3	21.3	92.41	-346.2	-801.9	655.8	622.6	33.14	19.786			
6,200.0	5,961.7	6,077.8	5,974.0	32.3	21.3	92.29	-324.6	-803.1	655.7	622.7	33.00	19.868			
6,250.0	6,005.8	6,130.5	6,019.6	32.3	21.2	92.15	-298.4	-804.5	655.6	622.8	32.82	19.976			
6,300.0	6,047.5	6,182.9	6,062.1	32.3	21.2	91.98	-267.9	-806.2	655.5	622.9	32.61	20.099			
6,350.0	6,086.3	6,235.1	6,101.2	32.2	21.1	91.80	-233.4	-808.0	655.3	622.9	32.41	20.223			

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Project:	SEC.6-T4N-R62W	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Offset Design State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes 34-31-6HNB - Wellbore #1 - Plan													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,400.0	6,121.9	6,287.0	6,136.5	32.2	21.0	91.61		-195.3	-810.1	655.2	623.0	32.22	20.335	
6,450.0	6,154.0	6,338.7	6,167.7	32.2	20.9	91.40		-154.2	-812.3	655.1	623.0	32.08	20.418	
6,500.0	6,182.3	6,390.2	6,194.5	32.1	20.8	91.17		-110.4	-814.7	655.0	623.0	32.01	20.460	
6,550.0	6,206.5	6,441.3	6,216.7	32.1	20.8	90.94		-64.4	-817.2	654.9	622.9	32.02	20.449	
6,600.0	6,226.4	6,492.2	6,234.2	32.1	20.7	90.69		-16.7	-819.8	654.8	622.6	32.13	20.377	
6,650.0	6,241.8	6,542.8	6,247.0	32.1	20.7	90.44		32.1	-822.4	654.7	622.3	32.34	20.242	
6,700.0	6,252.6	6,593.0	6,254.9	32.1	20.7	90.19		81.7	-825.1	654.6	621.9	32.66	20.045	
6,750.0	6,258.6	6,643.0	6,258.0	32.1	20.7	89.94		131.5	-827.8	654.5	621.5	33.06	19.796	
6,788.2	6,260.0	6,681.2	6,258.0	32.1	20.8	89.82		169.6	-829.9	654.5	621.0	33.46	19.561	
6,800.0	6,260.0	6,693.0	6,258.0	32.2	20.8	89.82		181.4	-830.5	654.5	620.9	33.59	19.481	
6,889.0	6,260.0	6,782.3	6,258.0	32.3	21.0	89.82		270.6	-835.4	654.3	619.6	34.76	18.822	
6,890.0	6,260.0	6,783.3	6,258.0	32.3	21.0	89.82		271.5	-835.4	654.3	619.5	34.78	18.816	
6,900.0	6,260.0	6,793.3	6,258.0	32.3	21.1	89.82		281.6	-836.0	654.3	619.4	34.91	18.744	
7,000.0	6,260.0	6,893.3	6,258.0	32.6	21.6	89.82		381.4	-841.4	654.1	617.5	36.64	17.850	
7,100.0	6,260.0	6,993.3	6,258.0	33.0	22.2	89.82		481.3	-846.9	653.9	615.2	38.70	16.896	
7,200.0	6,260.0	7,093.3	6,258.0	33.5	23.1	89.82		581.1	-852.4	653.7	612.7	41.02	15.935	
7,300.0	6,260.0	7,193.3	6,258.0	34.1	24.2	89.82		681.0	-857.8	653.5	609.9	43.57	14.999	
7,400.0	6,260.0	7,293.3	6,258.0	34.8	25.4	89.82		780.8	-863.3	653.3	607.0	46.30	14.110	
7,500.0	6,260.0	7,393.3	6,258.0	35.6	26.7	89.82		880.7	-868.7	653.1	603.9	49.18	13.278	
7,600.0	6,260.0	7,493.3	6,258.0	36.5	28.1	89.82		980.5	-874.2	652.9	600.7	52.20	12.507	
7,700.0	6,260.0	7,593.3	6,258.0	37.6	29.5	89.82		1,080.4	-879.7	652.7	597.3	55.32	11.797	
7,800.0	6,260.0	7,693.3	6,258.0	38.7	31.0	89.82		1,180.2	-885.1	652.5	593.9	58.54	11.146	
7,900.0	6,260.0	7,793.3	6,258.0	39.8	32.6	89.82		1,280.1	-890.6	652.2	590.4	61.83	10.549	
8,000.0	6,260.0	7,893.3	6,258.0	41.1	34.2	89.82		1,379.9	-896.1	652.0	586.9	65.18	10.003	
8,100.0	6,260.0	7,993.3	6,258.0	42.4	35.9	89.82		1,479.8	-901.5	651.8	583.2	68.60	9.503	
8,200.0	6,260.0	8,093.3	6,258.0	43.7	37.5	89.82		1,579.6	-907.0	651.6	579.6	72.06	9.043	
8,300.0	6,260.0	8,193.3	6,258.0	45.1	39.2	89.82		1,679.5	-912.5	651.4	575.9	75.56	8.622	
8,400.0	6,260.0	8,293.3	6,258.0	46.6	40.9	89.82		1,779.3	-917.9	651.2	572.1	79.09	8.234	
8,500.0	6,260.0	8,393.3	6,258.0	48.1	42.7	89.82		1,879.2	-923.4	651.0	568.4	82.66	7.876	
8,600.0	6,260.0	8,493.3	6,258.0	49.6	44.4	89.82		1,979.0	-928.8	650.8	564.6	86.26	7.545	
8,700.0	6,260.0	8,593.3	6,258.0	51.2	46.2	89.82		2,078.9	-934.3	650.6	560.7	89.87	7.239	
8,800.0	6,260.0	8,693.3	6,258.0	52.8	48.0	89.82		2,178.7	-939.8	650.4	556.9	93.51	6.955	
8,900.0	6,260.0	8,793.3	6,258.0	54.4	49.8	89.82		2,278.6	-945.2	650.2	553.0	97.17	6.691	
9,000.0	6,260.0	8,893.3	6,258.0	56.0	51.6	89.82		2,378.4	-950.7	650.0	549.1	100.85	6.445	
9,100.0	6,260.0	8,993.3	6,258.0	57.7	53.4	89.82		2,478.3	-956.2	649.8	545.2	104.54	6.216	
9,200.0	6,260.0	9,093.3	6,258.0	59.4	55.2	89.82		2,578.1	-961.6	649.6	541.3	108.25	6.001	
9,300.0	6,260.0	9,193.3	6,258.0	61.0	57.0	89.82		2,678.0	-967.1	649.4	537.4	111.96	5.800	
9,400.0	6,260.0	9,293.3	6,258.0	62.8	58.9	89.82		2,777.8	-972.6	649.2	533.5	115.69	5.611	
9,500.0	6,260.0	9,393.3	6,258.0	64.5	60.7	89.82		2,877.7	-978.0	649.0	529.5	119.43	5.434	
9,600.0	6,260.0	9,493.3	6,258.0	66.2	62.6	89.82		2,977.5	-983.5	648.8	525.6	123.17	5.267	
9,700.0	6,260.0	9,593.3	6,258.0	68.0	64.4	89.82		3,077.4	-989.0	648.5	521.6	126.93	5.109	
9,800.0	6,260.0	9,693.3	6,258.0	69.7	66.3	89.82		3,177.2	-994.4	648.3	517.6	130.69	4.961	
9,900.0	6,260.0	9,793.3	6,258.0	71.5	68.1	89.82		3,277.1	-999.9	648.1	513.7	134.46	4.820	
10,000.0	6,260.0	9,893.3	6,258.0	73.3	70.0	89.82		3,376.9	-1,005.3	647.9	509.7	138.24	4.687	
10,100.0	6,260.0	9,993.3	6,258.0	75.0	71.9	89.82		3,476.8	-1,010.8	647.7	505.7	142.02	4.561	
10,200.0	6,260.0	10,093.3	6,258.0	76.8	73.7	89.82		3,576.6	-1,016.3	647.5	501.7	145.81	4.441	
10,300.0	6,260.0	10,193.3	6,258.0	78.6	75.6	89.82		3,676.5	-1,021.7	647.3	497.7	149.60	4.327	
10,400.0	6,260.0	10,293.3	6,258.0	80.4	77.5	89.82		3,776.3	-1,027.2	647.1	493.7	153.39	4.219	
10,500.0	6,260.0	10,393.3	6,258.0	82.3	79.4	89.82		3,876.2	-1,032.7	646.9	489.7	157.19	4.115	
10,600.0	6,260.0	10,493.3	6,258.0	84.1	81.3	89.82		3,976.0	-1,038.1	646.7	485.7	161.00	4.017	
10,700.0	6,260.0	10,593.3	6,258.0	85.9	83.2	89.82		4,075.9	-1,043.6	646.5	481.7	164.81	3.923	

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

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Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Offset Design													State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes 34-31-6HNB - Wellbore #1 - Plan		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft			
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)							
10,800.0	6,260.0	10,693.3	6,258.0	87.7	85.1	89.82	4,175.7	-1,049.1	646.3	477.7	168.62	3.833						
10,900.0	6,260.0	10,793.3	6,258.0	89.6	87.0	89.82	4,275.6	-1,054.5	646.1	473.6	172.44	3.747						
11,000.0	6,260.0	10,893.3	6,258.0	91.4	88.9	89.82	4,375.4	-1,060.0	645.9	469.6	176.25	3.664						
11,100.0	6,260.0	10,993.3	6,258.0	93.2	90.7	89.82	4,475.3	-1,065.5	645.7	465.6	180.07	3.586						
11,135.1	6,260.0	11,028.5	6,258.0	93.9	91.4	89.82	4,510.4	-1,067.4	645.6	464.2	181.42	3.559						
11,177.6	6,260.0	11,031.9	6,258.0	94.7	91.5	89.82	4,513.8	-1,067.6	646.7	464.4	182.29	3.547 SF						

Offset Design													State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes T-P-6HNB - Wellbore #1 - Plan #		Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
0.0	0.0	0.0	0.0	0.0	0.0	-3.98	40.1	-2.8	40.2							
100.0	100.0	100.0	100.0	0.1	0.1	-3.98	40.1	-2.8	40.2	39.9	0.22	178.722				
200.0	200.0	200.0	200.0	0.3	0.3	-3.98	40.1	-2.8	40.2	39.5	0.67	59.574	CC			
300.0	300.0	300.0	300.0	0.5	0.6	103.28	40.1	-2.8	40.5	39.4	1.11	36.488	ES			
400.0	399.8	399.8	399.8	0.8	0.8	110.20	40.1	-2.8	42.0	40.5	1.56	27.032				
500.0	499.5	499.5	499.5	1.0	1.0	120.40	40.1	-2.8	45.8	43.8	2.02	22.622				
600.0	598.7	598.7	598.7	1.3	1.2	131.67	40.1	-2.8	53.0	50.5	2.51	21.147				
700.0	697.5	697.5	697.5	1.6	1.5	141.90	40.1	-2.8	64.6	61.6	2.99	21.577				
800.0	795.6	795.6	795.6	2.0	1.7	150.11	40.1	-2.8	80.5	77.0	3.47	23.212				
900.0	893.1	893.1	893.1	2.5	1.9	156.31	40.1	-2.8	100.7	96.8	3.94	25.569				
1,000.0	989.6	989.6	989.6	3.0	2.1	160.91	40.1	-2.8	124.9	120.5	4.41	28.350				
1,100.0	1,085.3	1,085.3	1,085.3	3.6	2.3	164.32	40.1	-2.8	153.0	148.1	4.88	31.376				
1,133.4	1,116.9	1,116.9	1,116.9	3.8	2.4	165.26	40.1	-2.8	163.1	158.1	5.03	32.421				
1,200.0	1,180.1	1,180.1	1,180.1	4.2	2.5	166.95	40.1	-2.8	183.9	178.5	5.35	34.355				
1,300.0	1,274.8	1,278.4	1,278.4	4.9	2.7	169.17	39.0	-3.0	214.6	208.8	5.82	36.888				
1,400.0	1,369.5	1,378.4	1,378.3	5.6	2.9	171.51	34.6	-4.0	243.7	237.5	6.26	38.944				
1,500.0	1,464.3	1,479.0	1,478.6	6.2	3.1	173.99	26.8	-5.6	271.2	264.5	6.71	40.451				
1,600.0	1,559.0	1,578.7	1,577.6	6.9	3.3	176.55	15.7	-8.0	297.4	290.3	7.17	41.463				
1,700.0	1,653.8	1,674.5	1,672.7	7.6	3.5	178.76	4.2	-10.5	323.7	316.0	7.68	42.169				
1,800.0	1,748.5	1,770.3	1,767.7	8.2	3.7	-179.36	-7.3	-12.9	350.2	342.0	8.20	42.702				
1,900.0	1,843.2	1,866.1	1,862.8	8.9	4.0	-177.75	-18.9	-15.4	377.1	368.4	8.75	43.095				
2,000.0	1,938.0	1,961.9	1,957.9	9.6	4.2	-176.35	-30.4	-17.9	404.3	395.0	9.32	43.376				
2,100.0	2,032.7	2,057.7	2,053.0	10.3	4.5	-175.12	-41.9	-20.3	431.6	421.7	9.90	43.579				
2,200.0	2,127.5	2,153.5	2,148.0	11.0	4.8	-174.04	-53.5	-22.8	459.1	448.6	10.50	43.710				
2,300.0	2,222.2	2,249.3	2,243.1	11.7	5.0	-173.08	-65.0	-25.3	486.7	475.6	11.11	43.793				
2,400.0	2,316.9	2,345.1	2,338.2	12.3	5.3	-172.23	-76.5	-27.8	514.5	502.8	11.74	43.839				
2,500.0	2,411.7	2,440.9	2,433.3	13.0	5.6	-171.46	-88.1	-30.2	542.3	530.0	12.37	43.857				
2,600.0	2,506.4	2,536.7	2,528.3	13.7	5.9	-170.76	-99.6	-32.7	570.3	557.2	13.00	43.855				
2,700.0	2,601.2	2,632.5	2,623.4	14.4	6.1	-170.13	-111.1	-35.2	598.2	584.6	13.65	43.837				
2,800.0	2,695.9	2,728.3	2,718.5	15.1	6.4	-169.56	-122.6	-37.6	626.3	612.0	14.30	43.807				
2,900.0	2,790.6	2,824.1	2,813.6	15.8	6.7	-169.04	-134.2	-40.1	654.4	639.5	14.95	43.769				
3,000.0	2,885.4	2,919.9	2,908.6	16.4	7.0	-168.56	-145.7	-42.6	682.6	666.9	15.61	43.725				
3,100.0	2,980.1	3,015.7	3,003.7	17.1	7.3	-168.11	-157.2	-45.0	710.8	694.5	16.27	43.677				
3,200.0	3,074.9	3,111.5	3,098.8	17.8	7.6	-167.70	-168.8	-47.5	739.0	722.0	16.94	43.626				
3,300.0	3,169.6	3,207.3	3,193.9	18.5	7.9	-167.32	-180.3	-50.0	767.2	749.6	17.61	43.574				
3,400.0	3,264.3	3,303.1	3,288.9	19.2	8.2	-166.97	-191.8	-52.4	795.5	777.3	18.28	43.520				
3,500.0	3,359.1	3,398.9	3,384.0	19.9	8.5	-166.64	-203.4	-54.9	823.9	804.9	18.95	43.467				
3,600.0	3,453.8	3,494.7	3,479.1	20.6	8.8	-166.34	-214.9	-57.4	852.2	832.6	19.63	43.413				
3,700.0	3,548.6	3,590.6	3,574.2	21.2	9.1	-166.05	-226.4	-59.9	880.6	860.2	20.31	43.360				
3,800.0	3,643.3	3,686.4	3,669.2	21.9	9.4	-165.78	-238.0	-62.3	908.9	887.9	20.99	43.307				
3,900.0	3,738.0	3,782.2	3,764.3	22.6	9.7	-165.53	-249.5	-64.8	937.3	915.7	21.67	43.256				
4,000.0	3,832.8	3,878.0	3,859.4	23.3	10.0	-165.29	-261.0	-67.3	965.7	943.4	22.35	43.205				
4,100.0	3,927.5	3,973.8	3,954.5	24.0	10.3	-165.07	-272.6	-69.7	994.2	971.1	23.04	43.156				
4,200.0	4,022.3	4,069.6	4,049.5	24.7	10.6	-164.86	-284.1	-72.2	1,022.6	998.9	23.72	43.108				
4,300.0	4,117.0	4,165.4	4,144.6	25.4	10.9	-164.66	-295.6	-74.7	1,051.1	1,026.7	24.41	43.061				
4,400.0	4,211.7	4,261.2	4,239.7	26.0	11.3	-164.47	-307.2	-77.1	1,079.5	1,054.4	25.10	43.015				
4,500.0	4,306.5	4,357.0	4,334.8	26.7	11.6	-164.29	-318.7	-79.6	1,108.0	1,082.2	25.79	42.971				
4,600.0	4,401.2	4,452.8	4,429.8	27.4	11.9	-164.12	-330.2	-82.1	1,136.5	1,110.0	26.47	42.928				
4,700.0	4,495.9	4,548.6	4,524.9	28.1	12.2	-163.95	-341.8	-84.5	1,165.0	1,137.8	27.16	42.886				
4,800.0	4,590.7	4,644.4	4,620.0	28.8	12.5	-163.80	-353.3	-87.0	1,193.5	1,165.6	27.86	42.845				
4,897.5	4,683.1	4,732.7	4,707.7	29.5	12.7	-163.69	-363.3	-89.2	1,221.4	1,193.0	28.46	42.910				

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Project:	SEC.6-T4N-R62W	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Offset Design		State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes T-P-6HNB - Wellbore #1 - Plan #										Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
4,900.0	4,685.4	4,734.9	4,709.9	29.5	12.7	-163.70	-363.5	-89.2	1,222.1	1,193.7	28.48	42.913		
5,000.0	4,780.7	4,823.5	4,798.1	30.0	12.9	-163.86	-371.0	-90.8	1,249.7	1,220.6	29.03	43.054		
5,100.0	4,877.0	4,912.5	4,887.0	30.4	13.1	-164.08	-375.7	-91.8	1,274.6	1,245.1	29.50	43.211		
5,200.0	4,974.2	5,001.9	4,976.4	30.8	13.2	-164.37	-377.8	-92.3	1,296.8	1,266.9	29.89	43.384		
5,300.0	5,072.2	5,097.7	5,072.2	31.2	13.4	-164.71	-377.9	-92.3	1,316.2	1,286.0	30.24	43.529		
5,400.0	5,170.8	5,196.3	5,170.8	31.4	13.5	-164.98	-377.9	-92.3	1,332.4	1,301.8	30.54	43.622		
5,500.0	5,269.9	5,295.4	5,269.9	31.7	13.7	-165.19	-377.9	-92.3	1,345.2	1,314.3	30.82	43.648		
5,600.0	5,369.4	5,394.9	5,369.4	31.9	13.9	-165.35	-377.9	-92.3	1,354.6	1,323.6	31.06	43.611		
5,700.0	5,469.2	5,494.7	5,469.2	32.0	14.0	-165.44	-377.9	-92.3	1,360.7	1,329.5	31.27	43.511		
5,800.0	5,569.1	5,594.6	5,569.1	32.1	14.2	-165.49	-377.9	-92.3	1,363.5	1,332.0	31.45	43.351		
5,830.9	5,600.0	5,625.5	5,600.0	32.2	14.2	89.66	-377.9	-92.3	1,363.6	1,331.4	32.19	42.365		
5,900.0	5,669.1	5,694.6	5,669.1	32.2	14.3	89.66	-377.9	-92.3	1,363.6	1,331.2	32.39	42.101		
5,970.0	5,739.1	5,765.4	5,739.8	32.3	14.4	89.66	-377.9	-92.3	1,363.6	1,331.0	32.59	41.838		
6,000.0	5,769.1	5,799.6	5,774.0	32.3	14.5	92.66	-376.4	-92.4	1,363.6	1,331.6	32.00	42.609		
6,050.0	5,818.8	5,856.5	5,830.5	32.3	14.5	92.61	-369.0	-92.8	1,363.5	1,331.5	32.07	42.514		
6,100.0	5,867.8	5,913.3	5,885.5	32.3	14.5	92.53	-355.5	-93.5	1,363.5	1,331.4	32.06	42.527		
6,150.0	5,915.6	5,969.7	5,938.5	32.3	14.5	92.42	-336.2	-94.5	1,363.3	1,331.4	31.98	42.633		
6,200.0	5,961.7	6,025.7	5,988.8	32.3	14.4	92.29	-311.5	-95.8	1,363.2	1,331.3	31.84	42.814		
6,250.0	6,005.8	6,081.3	6,035.7	32.3	14.3	92.13	-281.9	-97.4	1,363.0	1,331.4	31.66	43.046		
6,300.0	6,047.5	6,136.3	6,078.8	32.3	14.3	91.95	-247.7	-99.3	1,362.9	1,331.4	31.47	43.300		
6,350.0	6,086.3	6,190.8	6,117.7	32.2	14.2	91.76	-209.7	-101.3	1,362.7	1,331.4	31.29	43.546		
6,400.0	6,121.9	6,244.7	6,152.1	32.2	14.1	91.55	-168.2	-103.5	1,362.5	1,331.4	31.14	43.749		
6,450.0	6,154.0	6,298.0	6,181.6	32.2	14.1	91.32	-124.0	-105.9	1,362.3	1,331.3	31.05	43.878		
6,500.0	6,182.3	6,350.6	6,206.2	32.1	14.1	91.08	-77.6	-108.4	1,362.2	1,331.2	31.03	43.901		
6,550.0	6,206.5	6,402.6	6,225.8	32.1	14.1	90.84	-29.5	-110.9	1,362.1	1,331.0	31.10	43.796		
6,600.0	6,226.4	6,453.9	6,240.3	32.1	14.2	90.59	19.7	-113.6	1,362.0	1,330.7	31.27	43.553		
6,650.0	6,241.8	6,504.7	6,249.9	32.1	14.4	90.33	69.4	-116.2	1,361.9	1,330.3	31.55	43.171		
6,700.0	6,252.6	6,554.8	6,254.5	32.1	14.6	90.07	119.2	-118.9	1,361.8	1,329.9	31.92	42.664		
6,750.0	6,258.6	6,604.5	6,255.0	32.1	14.9	89.85	168.8	-121.5	1,361.8	1,329.4	32.40	42.032		
6,788.2	6,260.0	6,642.6	6,255.0	32.1	15.2	89.79	206.9	-123.6	1,361.8	1,328.9	32.85	41.448		
6,800.0	6,260.0	6,654.4	6,255.0	32.2	15.3	89.79	218.7	-124.2	1,361.8	1,328.8	33.00	41.261		
6,889.0	6,260.0	6,743.5	6,255.0	32.3	16.0	89.79	307.6	-129.0	1,361.7	1,327.4	34.29	39.708		
6,890.0	6,260.0	6,744.5	6,255.0	32.3	16.0	89.79	308.6	-129.0	1,361.7	1,327.4	34.31	39.690		
6,900.0	6,260.0	6,754.5	6,255.0	32.3	16.1	89.79	318.6	-129.6	1,361.7	1,327.2	34.47	39.505		
7,000.0	6,260.0	6,854.5	6,255.0	32.6	17.1	89.79	418.5	-134.9	1,361.6	1,325.3	36.32	37.493		
7,100.0	6,260.0	6,954.5	6,255.0	33.0	18.3	89.79	518.3	-140.2	1,361.5	1,323.0	38.47	35.395		
7,200.0	6,260.0	7,054.5	6,255.0	33.5	19.6	89.79	618.2	-145.6	1,361.4	1,320.5	40.87	33.309		
7,300.0	6,260.0	7,154.5	6,255.0	34.1	21.0	89.79	718.0	-150.9	1,361.3	1,317.8	43.49	31.301		
7,400.0	6,260.0	7,254.5	6,255.0	34.8	22.5	89.79	817.9	-156.3	1,361.2	1,315.0	46.29	29.409		
7,500.0	6,260.0	7,354.5	6,255.0	35.6	24.0	89.79	917.8	-161.6	1,361.2	1,311.9	49.23	27.649		
7,600.0	6,260.0	7,454.5	6,255.0	36.5	25.6	89.79	1,017.6	-167.0	1,361.1	1,308.8	52.30	26.026		
7,700.0	6,260.0	7,554.5	6,255.0	37.6	27.3	89.79	1,117.5	-172.3	1,361.0	1,305.5	55.46	24.538		
7,800.0	6,260.0	7,654.5	6,255.0	38.7	28.9	89.79	1,217.3	-177.7	1,360.9	1,302.2	58.72	23.177		
7,900.0	6,260.0	7,754.5	6,255.0	39.8	30.6	89.79	1,317.2	-183.0	1,360.8	1,298.8	62.04	21.933		
8,000.0	6,260.0	7,854.5	6,255.0	41.1	32.4	89.79	1,417.0	-188.4	1,360.7	1,295.3	65.43	20.797		
8,100.0	6,260.0	7,954.5	6,255.0	42.4	34.1	89.79	1,516.9	-193.7	1,360.6	1,291.8	68.87	19.757		
8,200.0	6,260.0	8,054.5	6,255.0	43.7	35.9	89.79	1,616.8	-199.1	1,360.5	1,288.2	72.35	18.804		
8,300.0	6,260.0	8,154.5	6,255.0	45.1	37.7	89.79	1,716.6	-204.4	1,360.4	1,284.6	75.88	17.930		
8,400.0	6,260.0	8,254.5	6,255.0	46.6	39.5	89.79	1,816.5	-209.8	1,360.4	1,280.9	79.43	17.126		
8,500.0	6,260.0	8,354.5	6,255.0	48.1	41.3	89.79	1,916.3	-215.1	1,360.3	1,277.3	83.02	16.385		
8,600.0	6,260.0	8,454.5	6,255.0	49.6	43.2	89.79	2,016.2	-220.5	1,360.2	1,273.6	86.63	15.701		

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

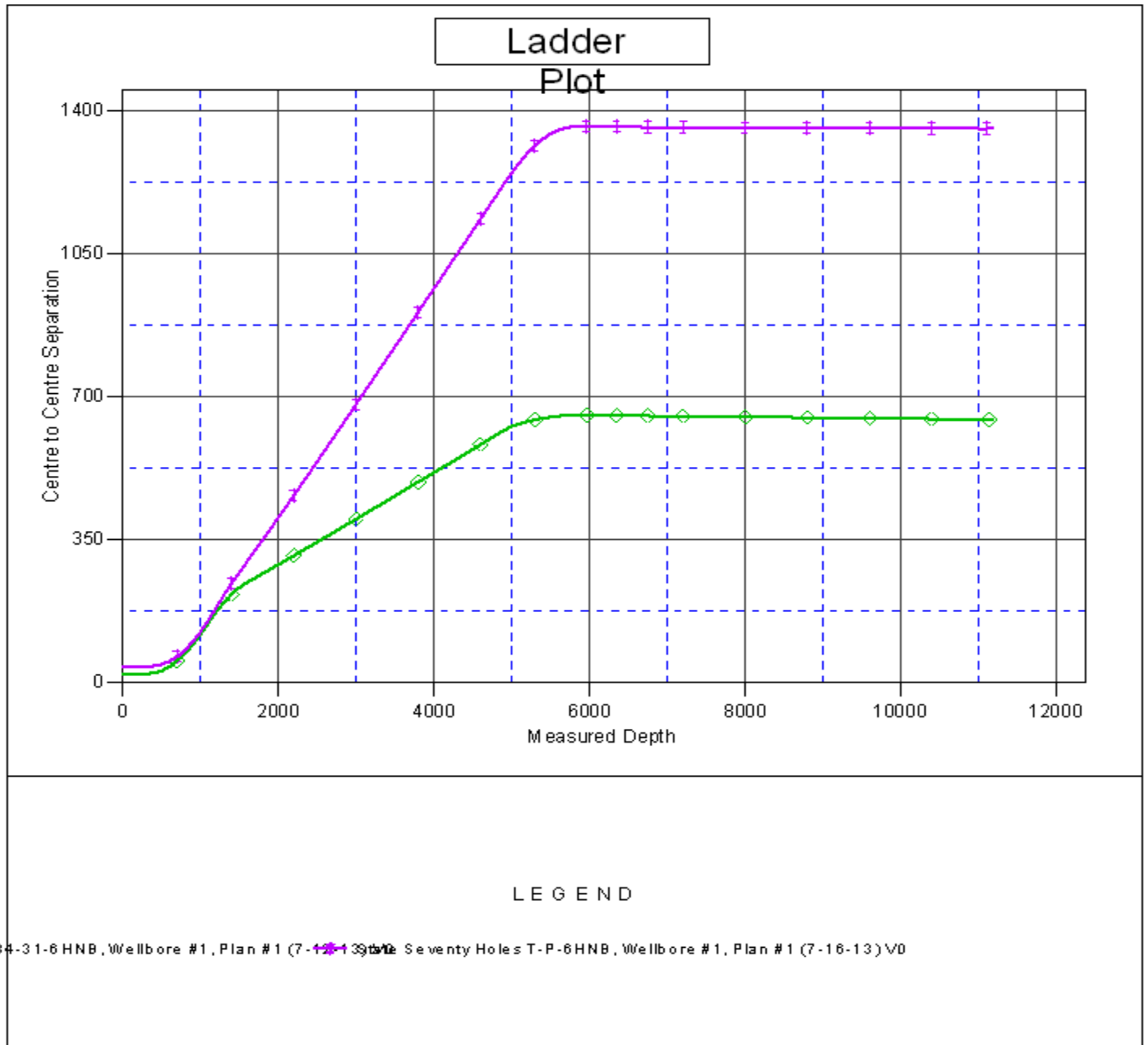
Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Project:	SEC.6-T4N-R62W	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Offset Design State Seventy Holes T-6 Pad Sec.6-T4N-R62W - State Seventy Holes T-P-6HNB - Wellbore #1 - Plan #													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
8,700.0	6,260.0	8,554.5	6,255.0	51.2	45.0	89.79	2,116.0	-225.8	1,360.1	1,269.8	90.26	15.068		
8,800.0	6,260.0	8,654.5	6,255.0	52.8	46.9	89.79	2,215.9	-231.1	1,360.0	1,266.1	93.92	14.481		
8,900.0	6,260.0	8,754.5	6,255.0	54.4	48.7	89.79	2,315.8	-236.5	1,359.9	1,262.3	97.59	13.935		
9,000.0	6,260.0	8,854.5	6,255.0	56.0	50.6	89.79	2,415.6	-241.8	1,359.8	1,258.6	101.28	13.427		
9,100.0	6,260.0	8,954.5	6,255.0	57.7	52.4	89.79	2,515.5	-247.2	1,359.7	1,254.8	104.98	12.953		
9,200.0	6,260.0	9,054.5	6,255.0	59.4	54.3	89.79	2,615.3	-252.5	1,359.7	1,251.0	108.69	12.509		
9,300.0	6,260.0	9,154.5	6,255.0	61.0	56.2	89.79	2,715.2	-257.9	1,359.6	1,247.1	112.42	12.094		
9,400.0	6,260.0	9,254.5	6,255.0	62.8	58.1	89.79	2,815.0	-263.2	1,359.5	1,243.3	116.15	11.704		
9,500.0	6,260.0	9,354.5	6,255.0	64.5	60.0	89.79	2,914.9	-268.6	1,359.4	1,239.5	119.90	11.338		
9,600.0	6,260.0	9,454.5	6,255.0	66.2	61.9	89.79	3,014.8	-273.9	1,359.3	1,235.6	123.65	10.993		
9,700.0	6,260.0	9,554.5	6,255.0	68.0	63.7	89.79	3,114.6	-279.3	1,359.2	1,231.8	127.41	10.668		
9,800.0	6,260.0	9,654.5	6,255.0	69.7	65.6	89.79	3,214.5	-284.6	1,359.1	1,227.9	131.18	10.361		
9,900.0	6,260.0	9,754.5	6,255.0	71.5	67.5	89.79	3,314.3	-290.0	1,359.0	1,224.1	134.96	10.070		
10,000.0	6,260.0	9,854.5	6,255.0	73.3	69.4	89.79	3,414.2	-295.3	1,358.9	1,220.2	138.74	9.795		
10,100.0	6,260.0	9,954.5	6,255.0	75.0	71.3	89.79	3,514.0	-300.7	1,358.9	1,216.3	142.53	9.534		
10,200.0	6,260.0	10,054.5	6,255.0	76.8	73.2	89.79	3,613.9	-306.0	1,358.8	1,212.5	146.32	9.286		
10,300.0	6,260.0	10,154.5	6,255.0	78.6	75.2	89.79	3,713.8	-311.4	1,358.7	1,208.6	150.11	9.051		
10,400.0	6,260.0	10,254.5	6,255.0	80.4	77.1	89.79	3,813.6	-316.7	1,358.6	1,204.7	153.92	8.827		
10,500.0	6,260.0	10,354.5	6,255.0	82.3	79.0	89.79	3,913.5	-322.0	1,358.5	1,200.8	157.72	8.613		
10,600.0	6,260.0	10,454.5	6,255.0	84.1	80.9	89.79	4,013.3	-327.4	1,358.4	1,196.9	161.53	8.410		
10,700.0	6,260.0	10,554.5	6,255.0	85.9	82.8	89.79	4,113.2	-332.7	1,358.3	1,193.0	165.34	8.215		
10,800.0	6,260.0	10,654.5	6,255.0	87.7	84.7	89.79	4,213.0	-338.1	1,358.2	1,189.1	169.16	8.029		
10,900.0	6,260.0	10,754.5	6,255.0	89.6	86.6	89.79	4,312.9	-343.4	1,358.2	1,185.2	172.97	7.852		
11,000.0	6,260.0	10,854.5	6,255.0	91.4	88.5	89.79	4,412.8	-348.8	1,358.1	1,181.3	176.80	7.682		
11,085.3	6,260.0	10,939.8	6,255.0	93.0	90.2	89.79	4,497.9	-353.3	1,358.0	1,177.9	180.06	7.542		
11,100.0	6,260.0	10,952.0	6,255.0	93.2	90.4	89.79	4,510.1	-354.0	1,358.0	1,177.4	180.57	7.520		
11,177.6	6,260.0	10,952.0	6,255.0	94.7	90.4	89.79	4,510.1	-354.0	1,360.3	1,178.2	182.05	7.472 SF		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Project:	SEC.6-T4N-R62W	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4543.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: State Seventy Holes O-K-6HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.73°



Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Seventy Holes O-K-6HNB
Project:	SEC.6-T4N-R62W	TVD Reference:	WELL @ 4543.0ft (RKB - 13')
Reference Site:	State Seventy Holes T-6 Pad Sec.6-T4N-R62W	MD Reference:	WELL @ 4543.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Seventy Holes O-K-6HNB	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (7-12-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4543.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: State Seventy Holes O-K-6HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.73°

