

BONANZA CREEK ENERGY OPERATING

Well Name: **Pronghorn F-J-15HNB**

Surface Location: Pronghorn F-15 Pad Sec.15-T5N-R61W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

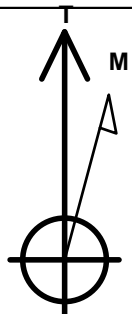
Ground Elevation: 4648.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1393815.16	3362015.15	40.407140	-104.199990	

RKB - 13' WELL @ 4661.0ft (RKB - 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 470'FSL & 1333'FWL	6094.0	-4437.3	100.3	Point
T1 470'FNL & 1326'FWL	6094.0	-40.1	139.2	Point



Azimuths to True North
Magnetic North: 8.36°

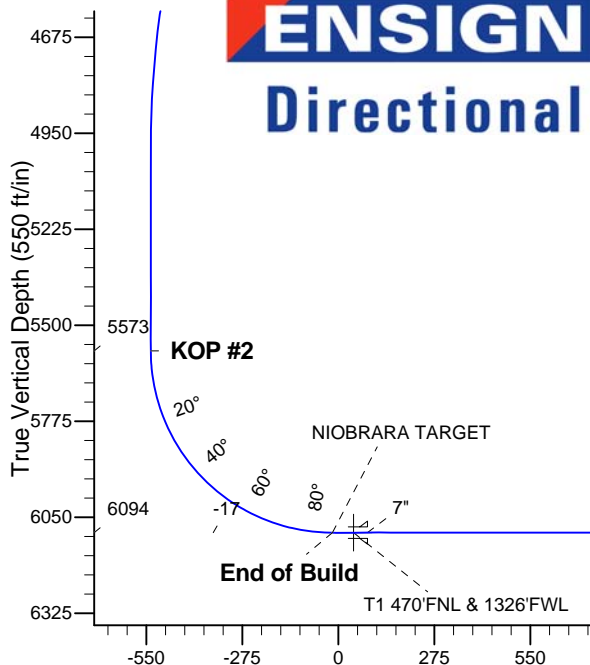
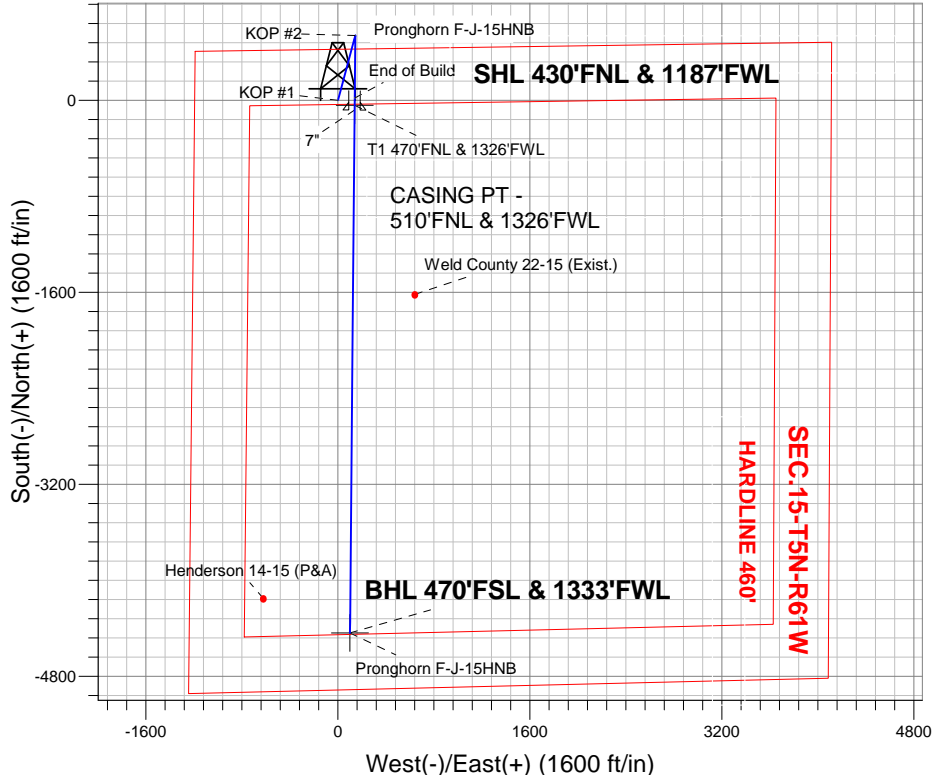
Magnetic Field
Strength: 53044.9nT
Dip Angle: 67.10°
Date: 11/19/2012
Model: IGRF2010

Pronghorn F-15 Pad Sec.15-T5N-R61W
Pronghorn F-J-15HNB
Plan #1 (11-19-12)
11:18, November 20 2012

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
5573.1	5615.2	KOP #2
6094.0	6433.4	End of Build

South(-)/North(+) (1600 ft/in)



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	1448.2	8.96	15.00	1446.4	33.8	9.1	2.00	15.00	-33.6	
4	4593.9	8.96	15.00	4553.6	507.2	135.9	0.00	0.00	-504.0	
5	5042.1	0.00	0.00	5000.0	541.0	145.0	2.00	180.00	-537.6	
6	5615.2	0.00	0.00	5573.1	541.0	145.0	0.00	0.00	-537.6	
7	6433.4	90.00	180.54	6094.0	20.2	140.1	11.00	180.54	-17.0	
8	6533.6	90.00	180.54	6094.0	-80.1	139.2	0.00	0.00	83.2	
9	6536.0	90.00	180.51	6094.0	-82.4	139.2	1.00	-90.00	85.5	
10	10891.0	90.00	180.51	6094.0	-4437.3	100.3	0.00	0.00	4438.4	BHL 470'FSL & 1333'FWL

BHL 470'FSL & 1333'FWL

Vertical Section at 178.71° (550 ft/in)



BONANZA CREEK ENERGY OPERATING

SEC.15-T5N-R61W

Pronghorn F-15 Pad Sec.15-T5N-R61W

Pronghorn F-J-15HNB

Wellbore #1

Plan: Plan #1 (11-19-12)

Standard Planning Report

20 November, 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	
1,448.2	8.96	15.00	1,446.4	33.8	9.1	2.00	2.00	0.00	15.00	
4,593.9	8.96	15.00	4,553.6	507.2	135.9	0.00	0.00	0.00	0.00	
5,042.1	0.00	0.00	5,000.0	541.0	145.0	2.00	-2.00	0.00	180.00	
5,615.2	0.00	0.00	5,573.1	541.0	145.0	0.00	0.00	0.00	0.00	
6,433.4	90.00	180.54	6,094.0	20.2	140.1	11.00	11.00	0.00	180.54	
6,533.6	90.00	180.54	6,094.0	-80.1	139.2	0.00	0.00	0.00	0.00	
6,536.0	90.00	180.51	6,094.0	-82.4	139.2	1.00	0.00	-1.00	-90.00	
10,891.0	90.00	180.51	6,094.0	-4,437.3	100.3	0.00	0.00	0.00	0.00	BHL 470'FSL & 133

Database:	Landmark	Local Co-ordinate Reference:	Well Pronghorn F-J-15HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4661.0ft (RKB - 13')
Project:	SEC.15-T5N-R61W	MD Reference:	WELL @ 4661.0ft (RKB - 13')
Site:	Pronghorn F-15 Pad Sec.15-T5N-R61W	North Reference:	True
Well:	Pronghorn F-J-15HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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
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
KOP #1									
1,100.0	2.00	15.00	1,100.0	1.7	0.5	-1.7	2.00	2.00	0.00
1,200.0	4.00	15.00	1,199.8	6.7	1.8	-6.7	2.00	2.00	0.00
1,300.0	6.00	15.00	1,299.5	15.2	4.1	-15.1	2.00	2.00	0.00
1,400.0	8.00	15.00	1,398.7	26.9	7.2	-26.8	2.00	2.00	0.00
1,448.2	8.96	15.00	1,446.4	33.8	9.1	-33.6	2.00	2.00	0.00
1,500.0	8.96	15.00	1,497.5	41.6	11.1	-41.3	0.00	0.00	0.00
1,600.0	8.96	15.00	1,596.3	56.6	15.2	-56.3	0.00	0.00	0.00
1,700.0	8.96	15.00	1,695.1	71.7	19.2	-71.2	0.00	0.00	0.00
1,800.0	8.96	15.00	1,793.9	86.7	23.2	-86.2	0.00	0.00	0.00
1,900.0	8.96	15.00	1,892.7	101.8	27.3	-101.1	0.00	0.00	0.00
2,000.0	8.96	15.00	1,991.4	116.8	31.3	-116.1	0.00	0.00	0.00
2,100.0	8.96	15.00	2,090.2	131.9	35.3	-131.1	0.00	0.00	0.00
2,200.0	8.96	15.00	2,189.0	146.9	39.4	-146.0	0.00	0.00	0.00
2,300.0	8.96	15.00	2,287.8	162.0	43.4	-161.0	0.00	0.00	0.00
2,400.0	8.96	15.00	2,386.6	177.0	47.4	-175.9	0.00	0.00	0.00
2,500.0	8.96	15.00	2,485.3	192.1	51.5	-190.9	0.00	0.00	0.00
2,600.0	8.96	15.00	2,584.1	207.1	55.5	-205.8	0.00	0.00	0.00
2,700.0	8.96	15.00	2,682.9	222.2	59.6	-220.8	0.00	0.00	0.00
2,800.0	8.96	15.00	2,781.7	237.2	63.6	-235.7	0.00	0.00	0.00
2,900.0	8.96	15.00	2,880.4	252.3	67.6	-250.7	0.00	0.00	0.00
3,000.0	8.96	15.00	2,979.2	267.3	71.7	-265.6	0.00	0.00	0.00
3,100.0	8.96	15.00	3,078.0	282.4	75.7	-280.6	0.00	0.00	0.00
3,200.0	8.96	15.00	3,176.8	297.4	79.7	-295.6	0.00	0.00	0.00
3,300.0	8.96	15.00	3,275.6	312.5	83.8	-310.5	0.00	0.00	0.00
3,400.0	8.96	15.00	3,374.3	327.5	87.8	-325.5	0.00	0.00	0.00
3,500.0	8.96	15.00	3,473.1	342.6	91.8	-340.4	0.00	0.00	0.00
3,600.0	8.96	15.00	3,571.9	357.6	95.9	-355.4	0.00	0.00	0.00
3,700.0	8.96	15.00	3,670.7	372.7	99.9	-370.3	0.00	0.00	0.00
3,800.0	8.96	15.00	3,769.5	387.7	103.9	-385.3	0.00	0.00	0.00
3,900.0	8.96	15.00	3,868.2	402.8	108.0	-400.2	0.00	0.00	0.00
4,000.0	8.96	15.00	3,967.0	417.8	112.0	-415.2	0.00	0.00	0.00
4,100.0	8.96	15.00	4,065.8	432.9	116.0	-430.1	0.00	0.00	0.00
4,200.0	8.96	15.00	4,164.6	447.9	120.1	-445.1	0.00	0.00	0.00
4,300.0	8.96	15.00	4,263.3	463.0	124.1	-460.1	0.00	0.00	0.00
4,400.0	8.96	15.00	4,362.1	478.0	128.1	-475.0	0.00	0.00	0.00
4,500.0	8.96	15.00	4,460.9	493.1	132.2	-490.0	0.00	0.00	0.00
4,593.9	8.96	15.00	4,553.6	507.2	135.9	-504.0	0.00	0.00	0.00
4,600.0	8.84	15.00	4,559.7	508.1	136.2	-504.9	2.00	-2.00	0.00
4,700.0	6.84	15.00	4,658.7	521.3	139.7	-518.0	2.00	-2.00	0.00
4,800.0	4.84	15.00	4,758.2	531.1	142.4	-527.8	2.00	-2.00	0.00
4,900.0	2.84	15.00	4,858.0	537.6	144.1	-534.2	2.00	-2.00	0.00
5,000.0	0.84	15.00	4,957.9	540.7	144.9	-537.3	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Pronghorn F-J-15HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4661.0ft (RKB - 13')
Project:	SEC.15-T5N-R61W	MD Reference:	WELL @ 4661.0ft (RKB - 13')
Site:	Pronghorn F-15 Pad Sec.15-T5N-R61W	North Reference:	True
Well:	Pronghorn F-J-15HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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)
5,042.1	0.00	0.00	5,000.0	541.0	145.0	-537.6	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,057.9	541.0	145.0	-537.6	0.00	0.00	0.00
5,200.0	0.00	0.00	5,157.9	541.0	145.0	-537.6	0.00	0.00	0.00
5,300.0	0.00	0.00	5,257.9	541.0	145.0	-537.6	0.00	0.00	0.00
5,400.0	0.00	0.00	5,357.9	541.0	145.0	-537.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,457.9	541.0	145.0	-537.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,557.9	541.0	145.0	-537.6	0.00	0.00	0.00
5,615.2	0.00	0.00	5,573.1	541.0	145.0	-537.6	0.00	0.00	0.00
KOP #2									
5,700.0	9.33	180.54	5,657.6	534.1	144.9	-530.7	11.00	11.00	0.00
5,800.0	20.33	180.54	5,754.1	508.6	144.7	-505.2	11.00	11.00	0.00
5,900.0	31.33	180.54	5,844.0	465.1	144.3	-461.7	11.00	11.00	0.00
6,000.0	42.33	180.54	5,923.9	405.2	143.7	-401.9	11.00	11.00	0.00
6,100.0	53.33	180.54	5,990.9	331.2	143.0	-327.9	11.00	11.00	0.00
6,200.0	64.33	180.54	6,042.6	245.8	142.2	-242.5	11.00	11.00	0.00
6,300.0	75.33	180.54	6,077.0	152.1	141.4	-148.8	11.00	11.00	0.00
6,400.0	86.33	180.54	6,092.9	53.5	140.4	-50.3	11.00	11.00	0.00
6,433.4	90.00	180.54	6,094.0	20.2	140.1	-17.0	11.00	11.00	0.00
End of Build - NIOBRARA TARGET									
6,493.6	90.00	180.54	6,094.0	-40.1	139.6	43.2	0.00	0.00	0.00
T1 470'FNL & 1326'FWL									
6,500.0	90.00	180.54	6,094.0	-46.5	139.5	49.6	0.00	0.00	0.00
6,533.6	90.00	180.54	6,094.0	-80.1	139.2	83.2	0.00	0.00	0.00
7"									
6,536.0	90.00	180.51	6,094.0	-82.4	139.2	85.5	0.98	0.00	-0.98
6,600.0	90.00	180.51	6,094.0	-146.5	138.6	149.6	0.00	0.00	0.00
6,700.0	90.00	180.51	6,094.0	-246.5	137.7	249.5	0.00	0.00	0.00
6,800.0	90.00	180.51	6,094.0	-346.5	136.8	349.5	0.00	0.00	0.00
6,900.0	90.00	180.51	6,094.0	-446.4	135.9	449.4	0.00	0.00	0.00
7,000.0	90.00	180.51	6,094.0	-546.4	135.0	549.4	0.00	0.00	0.00
7,100.0	90.00	180.51	6,094.0	-646.4	134.1	649.3	0.00	0.00	0.00
7,200.0	90.00	180.51	6,094.0	-746.4	133.2	749.3	0.00	0.00	0.00
7,300.0	90.00	180.51	6,094.0	-846.4	132.4	849.2	0.00	0.00	0.00
7,400.0	90.00	180.51	6,094.0	-946.4	131.5	949.2	0.00	0.00	0.00
7,500.0	90.00	180.51	6,094.0	-1,046.4	130.6	1,049.1	0.00	0.00	0.00
7,600.0	90.00	180.51	6,094.0	-1,146.4	129.7	1,149.1	0.00	0.00	0.00
7,700.0	90.00	180.51	6,094.0	-1,246.4	128.8	1,249.0	0.00	0.00	0.00
7,800.0	90.00	180.51	6,094.0	-1,346.4	127.9	1,349.0	0.00	0.00	0.00
7,900.0	90.00	180.51	6,094.0	-1,446.4	127.0	1,448.9	0.00	0.00	0.00
8,000.0	90.00	180.51	6,094.0	-1,546.4	126.1	1,548.9	0.00	0.00	0.00
8,100.0	90.00	180.51	6,094.0	-1,646.4	125.2	1,648.8	0.00	0.00	0.00
8,200.0	90.00	180.51	6,094.0	-1,746.4	124.3	1,748.8	0.00	0.00	0.00
8,300.0	90.00	180.51	6,094.0	-1,846.4	123.4	1,848.7	0.00	0.00	0.00
8,400.0	90.00	180.51	6,094.0	-1,946.4	122.5	1,948.7	0.00	0.00	0.00
8,500.0	90.00	180.51	6,094.0	-2,046.4	121.6	2,048.6	0.00	0.00	0.00
8,600.0	90.00	180.51	6,094.0	-2,146.4	120.7	2,148.6	0.00	0.00	0.00
8,700.0	90.00	180.51	6,094.0	-2,246.4	119.8	2,248.5	0.00	0.00	0.00
8,800.0	90.00	180.51	6,094.0	-2,346.4	119.0	2,348.5	0.00	0.00	0.00
8,900.0	90.00	180.51	6,094.0	-2,446.4	118.1	2,448.4	0.00	0.00	0.00
9,000.0	90.00	180.51	6,094.0	-2,546.4	117.2	2,548.4	0.00	0.00	0.00
9,100.0	90.00	180.51	6,094.0	-2,646.4	116.3	2,648.3	0.00	0.00	0.00
9,200.0	90.00	180.51	6,094.0	-2,746.4	115.4	2,748.3	0.00	0.00	0.00
9,300.0	90.00	180.51	6,094.0	-2,846.4	114.5	2,848.2	0.00	0.00	0.00

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,433.4	6,094.0	NIORARA TARGET		0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Pronghorn F-J-15HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4661.0ft (RKB - 13')
Project:	SEC.15-T5N-R61W	MD Reference:	WELL @ 4661.0ft (RKB - 13')
Site:	Pronghorn F-15 Pad Sec.15-T5N-R61W	North Reference:	True
Well:	Pronghorn F-J-15HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP #1
5,615.2	5,573.1	541.0	145.0	KOP #2
6,433.4	6,094.0	20.1	140.1	End of Build



BONANZA CREEK ENERGY OPERATING

SEC.15-T5N-R61W

Pronghorn F-15 Pad Sec.15-T5N-R61W

Pronghorn F-J-15HNB

Wellbore #1

Plan #1 (11-19-12)

Anticollision Report

20 November, 2012

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Pronghorn F-J-15HNB
Project:	SEC.15-T5N-R61W	TVD Reference:	WELL @ 4661.0ft (RKB - 13')
Reference Site:	Pronghorn F-15 Pad Sec.15-T5N-R61W	MD Reference:	WELL @ 4661.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pronghorn F-J-15HNB	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 (11-19-12)	Offset TVD Reference:	Offset Datum

Offset Design		Pronghorn F-15 Pad Sec.15-T5N-R61W - Weld County 22-15 (Exist.) - Wellbore #1 - Wellbore #1										Offset Site Error:		0.0 ft			
Survey Program: 6200-UNKNOWN														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)						
7,300.0	6,094.0	6,112.0	6,112.0	23.5	122.2	-90.00	-1,617.5	640.6	923.5	777.9	145.66	6.340					
7,400.0	6,094.0	6,112.0	6,112.0	25.0	122.2	-90.00	-1,617.5	640.6	842.4	695.2	147.21	5.722					
7,500.0	6,094.0	6,112.0	6,112.0	26.6	122.2	-90.00	-1,617.5	640.6	765.7	616.9	148.81	5.146					
7,600.0	6,094.0	6,112.0	6,112.0	28.3	122.2	-90.00	-1,617.5	640.6	695.0	544.5	150.44	4.619					
7,700.0	6,094.0	6,112.0	6,112.0	29.9	122.2	-90.00	-1,617.5	640.6	632.2	480.1	152.12	4.156					
7,800.0	6,094.0	6,112.0	6,112.0	31.6	122.2	-90.00	-1,617.5	640.6	580.0	426.2	153.81	3.771					
7,900.0	6,094.0	6,112.0	6,112.0	33.3	122.2	-90.00	-1,617.5	640.6	541.3	385.8	155.54	3.480					
8,000.0	6,094.0	6,112.0	6,112.0	35.1	122.2	-90.00	-1,617.5	640.6	519.4	362.1	157.28	3.302					
8,066.5	6,094.0	6,112.0	6,112.0	36.3	122.2	-90.00	-1,617.5	640.6	515.1	356.6	158.45	3.251 CC, ES					
8,100.0	6,094.0	6,112.0	6,112.0	36.8	122.2	-90.00	-1,617.5	640.6	516.2	357.1	159.04	3.245 SF					
8,200.0	6,094.0	6,112.0	6,112.0	38.6	122.2	-90.00	-1,617.5	640.6	532.1	371.3	160.82	3.309					
8,300.0	6,094.0	6,112.0	6,112.0	40.4	122.2	-90.00	-1,617.5	640.6	565.5	402.9	162.61	3.478					
8,400.0	6,094.0	6,112.0	6,112.0	42.2	122.2	-90.00	-1,617.5	640.6	613.6	449.2	164.41	3.732					
8,500.0	6,094.0	6,112.0	6,112.0	44.0	122.2	-90.00	-1,617.5	640.6	673.2	507.0	166.22	4.050					
8,600.0	6,094.0	6,112.0	6,112.0	45.8	122.2	-90.00	-1,617.5	640.6	741.6	573.5	168.04	4.413					
8,700.0	6,094.0	6,112.0	6,112.0	47.7	122.2	-90.00	-1,617.5	640.6	816.4	646.6	169.87	4.806					
8,800.0	6,094.0	6,112.0	6,112.0	49.5	122.2	-90.00	-1,617.5	640.6	896.3	724.6	171.70	5.220					
8,900.0	6,094.0	6,112.0	6,112.0	51.3	122.2	-90.00	-1,617.5	640.6	979.8	806.2	173.54	5.646					

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Pronghorn F-J-15HNB
Project:	SEC.15-T5N-R61W	TVD Reference:	WELL @ 4661.0ft (RKB - 13')
Reference Site:	Pronghorn F-15 Pad Sec.15-T5N-R61W	MD Reference:	WELL @ 4661.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pronghorn F-J-15HNB	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 (11-19-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4661.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Pronghorn F-J-15HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.84°



Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Pronghorn F-J-15HNB
Project:	SEC.15-T5N-R61W	TVD Reference:	WELL @ 4661.0ft (RKB - 13')
Reference Site:	Pronghorn F-15 Pad Sec.15-T5N-R61W	MD Reference:	WELL @ 4661.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pronghorn F-J-15HNB	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 (11-19-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4661.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Pronghorn F-J-15HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.84°

