BISON OIL & GAS II, LLC

WELD COUNTY, COLORADO (NAD 83)
NE SE SEC. 15 T8N R61W 6th P.M.
SIEVERS 8-61 15B-9

ORIGINAL WELLBORE

27 September, 2017

Plan: PROPOSAL #1

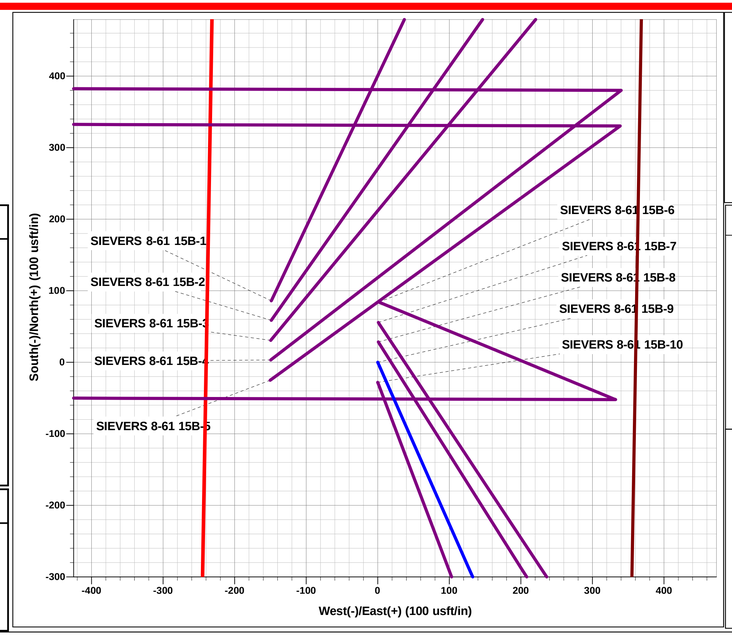
Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE SE SEC. 15 T8N R61W 6th P.M.
Well: SIEVERS 8-61 15B-9
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

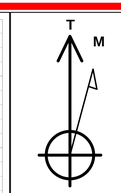
ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 1487ft FSL & 360ft FEL of Sec 15
200.0	200.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
795.6	800.0	12.00	156.14	-57.3	25.3	-14.5	62.6	EOB TO 12° INC
3741.2	3811.4	12.00	156.14	-629.8	278.6	-159.7	688.7	END OF TANGENT
4336.8	4411.4	0.00	0.00	-687.1	303.9	-174.2	751.3	EOD TO VERTICAL
5949.9	6024.5	0.00	0.00	-687.1	303.9	-174.2	751.3	KOP (10°/100ft BUR)
6522.9	6924.5	90.00	257.00	-816.0	-254.4	398.3	1324.3	BPI *NEW*: 671ft FSL & 600ft FEL of Sec 15
6522.9	7362.7	90.00	270.14	-864.9	-688.8	834.3	1762.5	EOT TO 270.14° AZ
6522.9	11011.4	90.00	270.14	-855.8	-4337.6	4420.8	5411.2	EPI: 656ft FSL & 600ft FWL of Sec 15
6522.9	11015.9	90.00	270.01	-855.8	-4342.0	4425.2	5415.7	EOT TO 270.01° AZ
6522.9	11312.2	90.00	270.01	-855.7	-4638.3	4716.6	5711.9	BHL: 658ft FSL & 300ft FWL of Sec 15

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - SIEVERS 8-61 15B-9	5949.9	-687.1	303.9	40.656797	-104.182280
BPI *NEW* - SIEVERS 8-61 15B-9	6522.9	-816.0	-254.4	40.656443	-104.184292
EPI - SIEVERS 8-61 15B-9	6522.9	-855.8	-4337.6	40.656333	-104.199008
BHL - SIEVERS 8-61 15B-9	6522.9	-855.7	-4638.3	40.656333	-104.200092





Azimuths to True North
Magnetic North: 7.89°

Magnetic Field
Strength: 52552.4snT
Dip Angle: 67.14°
Date: 27/09/2017
Model: IGRF2015

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
546.9	547.8	PIERRE SH (BASE FOX HILLS)
3507.9	3572.9	PARKMAN
4577.9	4652.5	SUSSEX
5517.9	5592.5	SHANNON
6312.9	6417.6	SHARON SPRINGS SHALE
6382.9	6515.3	NIOBRARA FORMATION
6392.9	6530.8	NIOBRARA A CHALK
6492.9	6738.3	NIOBRARA B CHALK

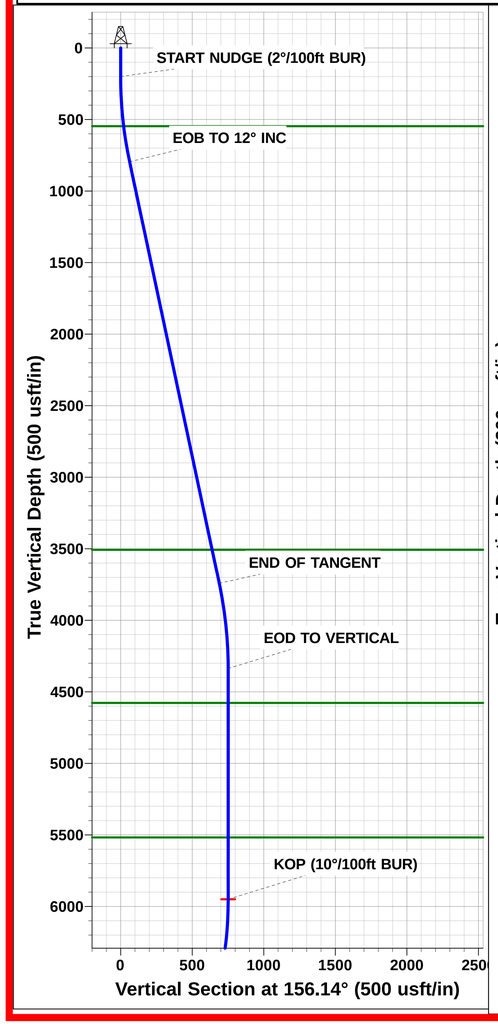
PROPOSED LOCAL COORDINATES:

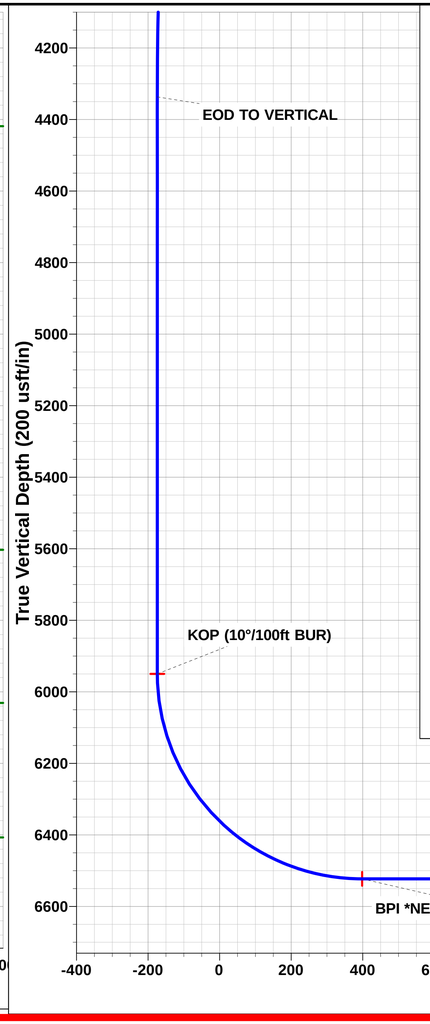
SHL:1487ft FSL & 360ft FEL of Sec 15

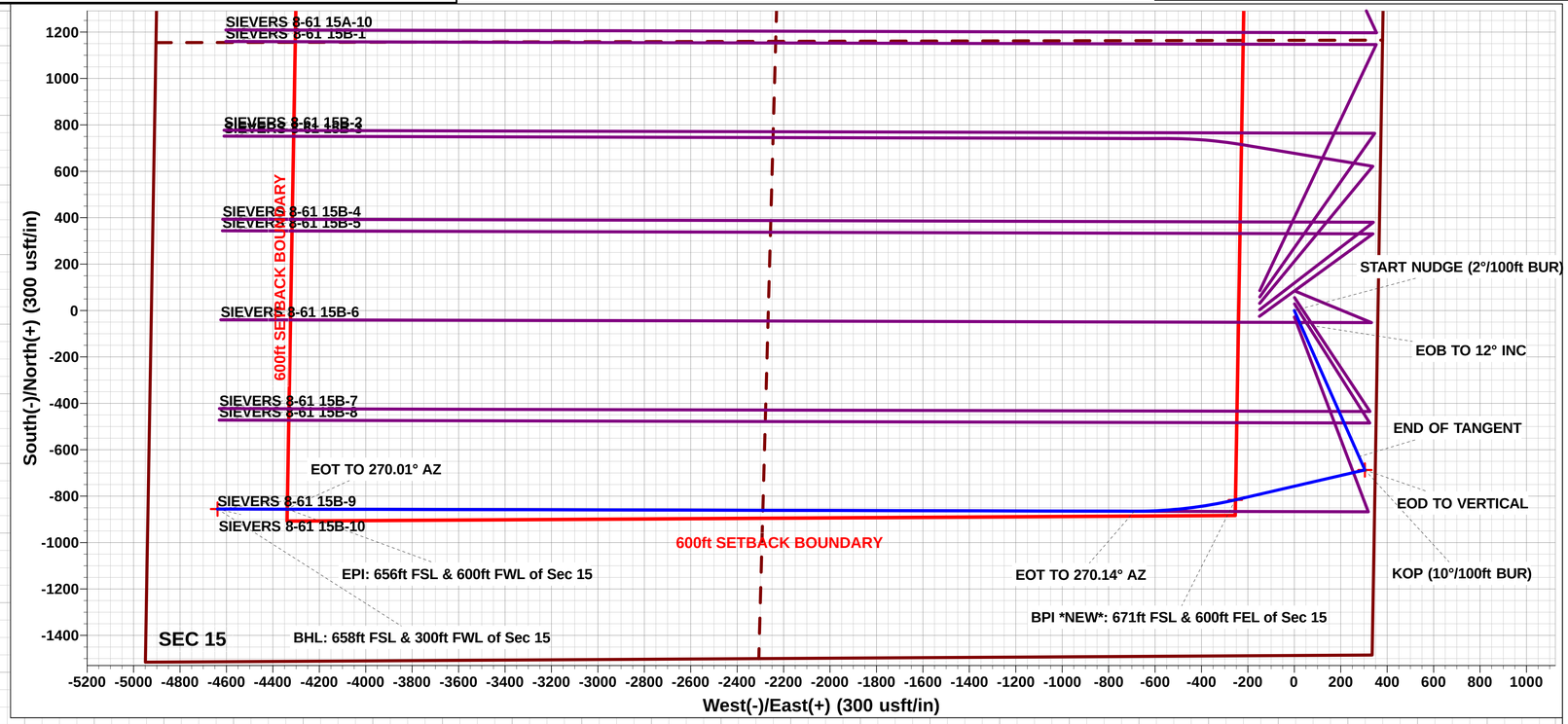
BEGIN PROD INT *NEW*: 671ft FSL & 600ft FEL of Sec 15

END PROD INTERVAL: 656ft FSL & 600ft FWL of Sec 15

BHL: 658ft FSL & 300ft FWL of Sec 15







Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well SIEVERS 8-61 15B-9
Company:	BISON OIL & GAS II, LLC	**TVD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Site:	NE SE SEC. 15 T8N R61W 6th P.M.	**North Reference:**	True
Well:	SIEVERS 8-61 15B-9	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project WELD COUNTY, COLORADO (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site NE SE SEC. 15 T8N R61W 6th P.M.

Site Position:		**Northing:**	1,485,596.41 usft	**Latitude:**	40.658919
From:	Lat/Long	**Easting:**	3,365,131.04 usft	**Longitude:**	-104.183911
Position Uncertainty:	0.0 usft	**Slot Radius:**	1.10000 ft	**Grid Convergence:**	0.85 °

Well SIEVERS 8-61 15B-9

Well Position	**+N/-S**	-86.0 usft	**Northing:**	1,485,512.64 usft	**Latitude:**	40.658683
	+E/-W	148.7 usft	**Easting:**	3,365,281.02 usft	**Longitude:**	-104.183375
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	4,977.9 usft

Wellbore ORIGINAL WELLBORE

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	27/09/2017	7.89	67.14	52,552

Design PROPOSAL #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,522.9	0.0	0.0	259.55

Plan Sections

MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf	Build Rate (°/100usf	Turn Rate (°/100usf	TFO (°)	Target
0.0	0.00	0.00	0.0	-5,002.9	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	-4,802.9	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	12.00	156.14	795.6	-4,207.3	-57.3	25.3	2.00	2.00	0.00	156.14	
3,811.4	12.00	156.14	3,741.2	-1,261.7	-629.8	278.6	0.00	0.00	0.00	0.00	
4,411.4	0.00	0.00	4,336.8	-666.1	-687.1	303.9	2.00	-2.00	0.00	180.00	
6,024.5	0.00	0.00	5,949.9	947.0	-687.1	303.9	0.00	0.00	0.00	0.00	KOP - SIEVERS 8-(
6,924.5	90.00	257.00	6,522.9	1,520.0	-816.0	-254.4	10.00	10.00	-11.44	257.00	BPI *NEW* - SIEVI
7,362.7	90.00	270.14	6,522.9	1,520.0	-864.9	-688.8	3.00	0.00	3.00	90.01	
11,011.4	90.00	270.14	6,522.9	1,520.0	-855.8	-4,337.6	0.00	0.00	0.00	0.00	EPI - SIEVERS 8-6
11,015.9	90.00	270.01	6,522.9	1,520.0	-855.8	-4,342.0	3.00	0.00	-3.00	-89.95	
11,312.2	90.00	270.01	6,522.9	1,520.0	-855.7	-4,638.3	0.00	0.00	0.00	0.00	BHL - SIEVERS 8-(

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Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Site:	NE SE SEC. 15 T8N R61W 6th P.M.	**North Reference:**	True
Well:	SIEVERS 8-61 15B-9	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
SHL: 1487ft FSL & 360ft FEL of Sec 15										
0.0	***0.00***	***0.00***	***0.0***	***5,002.90***	***0.0***	***0.0***	***0.0***	***0.00***	***0.00***	***0.00***
100.0	0.00	0.00	100.0	4,902.90	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
200.0	***0.00***	***0.00***	***200.0***	***4,802.90***	***0.0***	***0.0***	***0.0***	***0.00***	***0.00***	***0.00***
300.0	2.00	156.14	300.0	4,702.92	-1.6	0.7	-0.4	2.00	2.00	0.00
400.0	4.00	156.14	399.8	4,603.06	-6.4	2.8	-1.6	2.00	2.00	0.00
500.0	6.00	156.14	499.5	4,503.45	-14.4	6.3	-3.6	2.00	2.00	0.00
PIERRE SHALE (BASE FOX HILLS)										
547.8	***6.96***	***156.14***	***546.9***	***4,456.00***	***-19.3***	***8.5***	***-4.9***	***2.00***	***2.00***	***0.00***
600.0	8.00	156.14	598.7	4,404.20	-25.5	11.3	-6.5	2.00	2.00	0.00
700.0	10.00	156.14	697.5	4,305.43	-39.8	17.6	-10.1	2.00	2.00	0.00
EOB TO 12° INC										
800.0	***12.00***	***156.14***	***795.6***	***4,207.28***	***-57.3***	***25.3***	***-14.5***	***2.00***	***2.00***	***0.00***
900.0	12.00	156.14	893.4	4,109.46	-76.3	33.7	-19.3	0.00	0.00	0.00
1,000.0	12.00	156.14	991.3	4,011.65	-95.3	42.1	-24.2	0.00	0.00	0.00
1,100.0	12.00	156.14	1,089.1	3,913.83	-114.3	50.6	-29.0	0.00	0.00	0.00
1,200.0	12.00	156.14	1,186.9	3,816.02	-133.3	59.0	-33.8	0.00	0.00	0.00
1,300.0	12.00	156.14	1,284.7	3,718.20	-152.3	67.4	-38.6	0.00	0.00	0.00
1,400.0	12.00	156.14	1,382.5	3,620.39	-171.3	75.8	-43.4	0.00	0.00	0.00
1,500.0	12.00	156.14	1,480.3	3,522.57	-190.4	84.2	-48.3	0.00	0.00	0.00
1,600.0	12.00	156.14	1,578.1	3,424.76	-209.4	92.6	-53.1	0.00	0.00	0.00
1,700.0	12.00	156.14	1,676.0	3,326.94	-228.4	101.0	-57.9	0.00	0.00	0.00
1,800.0	12.00	156.14	1,773.8	3,229.13	-247.4	109.4	-62.7	0.00	0.00	0.00
1,900.0	12.00	156.14	1,871.6	3,131.31	-266.4	117.8	-67.5	0.00	0.00	0.00
2,000.0	12.00	156.14	1,969.4	3,033.50	-285.4	126.2	-72.4	0.00	0.00	0.00
2,100.0	12.00	156.14	2,067.2	2,935.68	-304.4	134.7	-77.2	0.00	0.00	0.00
2,200.0	12.00	156.14	2,165.0	2,837.87	-323.5	143.1	-82.0	0.00	0.00	0.00
2,300.0	12.00	156.14	2,262.8	2,740.06	-342.5	151.5	-86.8	0.00	0.00	0.00
2,400.0	12.00	156.14	2,360.7	2,642.24	-361.5	159.9	-91.6	0.00	0.00	0.00
2,500.0	12.00	156.14	2,458.5	2,544.43	-380.5	168.3	-96.5	0.00	0.00	0.00
2,600.0	12.00	156.14	2,556.3	2,446.61	-399.5	176.7	-101.3	0.00	0.00	0.00
2,700.0	12.00	156.14	2,654.1	2,348.80	-418.5	185.1	-106.1	0.00	0.00	0.00
2,800.0	12.00	156.14	2,751.9	2,250.98	-437.5	193.5	-110.9	0.00	0.00	0.00
2,900.0	12.00	156.14	2,849.7	2,153.17	-456.6	201.9	-115.7	0.00	0.00	0.00
3,000.0	12.00	156.14	2,947.5	2,055.35	-475.6	210.3	-120.6	0.00	0.00	0.00
3,100.0	12.00	156.14	3,045.4	1,957.54	-494.6	218.8	-125.4	0.00	0.00	0.00
3,200.0	12.00	156.14	3,143.2	1,859.72	-513.6	227.2	-130.2	0.00	0.00	0.00
3,300.0	12.00	156.14	3,241.0	1,761.91	-532.6	235.6	-135.0	0.00	0.00	0.00
3,400.0	12.00	156.14	3,338.8	1,664.09	-551.6	244.0	-139.9	0.00	0.00	0.00
3,500.0	12.00	156.14	3,436.6	1,566.28	-570.6	252.4	-144.7	0.00	0.00	0.00
PARKMAN										
3,572.9	***12.00***	***156.14***	***3,507.9***	***1,495.00***	***-584.5***	***258.5***	***-148.2***	***0.00***	***0.00***	***0.00***
3,600.0	12.00	156.14	3,534.4	1,468.46	-589.7	260.8	-149.5	0.00	0.00	0.00
3,700.0	12.00	156.14	3,632.3	1,370.65	-608.7	269.2	-154.3	0.00	0.00	0.00
3,800.0	12.00	156.14	3,730.1	1,272.83	-627.7	277.6	-159.1	0.00	0.00	0.00
END OF TANGENT										
3,811.4	***12.00***	***156.14***	***3,741.2***	***1,261.70***	***-629.8***	***278.6***	***-159.7***	***0.00***	***0.00***	***0.00***
3,900.0	10.23	156.14	3,828.2	1,174.75	-645.5	285.5	-163.6	2.00	-2.00	0.00
4,000.0	8.23	156.14	3,926.9	1,076.05	-660.1	292.0	-167.4	2.00	-2.00	0.00
4,100.0	6.23	156.14	4,026.1	976.85	-671.6	297.1	-170.3	2.00	-2.00	0.00
4,200.0	4.23	156.14	4,125.6	877.27	-680.0	300.7	-172.4	2.00	-2.00	0.00
4,300.0	2.23	156.14	4,225.5	777.43	-685.1	303.0	-173.7	2.00	-2.00	0.00

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Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.0	0.23	156.14	4,325.4	677.46	-687.1	303.9	-174.2	2.00	-2.00	0.00
EOD TO VERTICAL										
4,411.4	***0.00***	***0.00***	***4,336.8***	***666.08***	***-687.1***	***303.9***	***-174.2***	***2.00***	***-2.00***	***0.00***
4,500.0	0.00	0.00	4,425.4	577.46	-687.1	303.9	-174.2	0.00	0.00	0.00
4,600.0	0.00	0.00	4,525.4	477.46	-687.1	303.9	-174.2	0.00	0.00	0.00
SUSSEX										
4,652.5	***0.00***	***0.00***	***4,577.9***	***425.00***	***-687.1***	***303.9***	***-174.2***	***0.00***	***0.00***	***0.00***
4,700.0	0.00	0.00	4,625.4	377.46	-687.1	303.9	-174.2	0.00	0.00	0.00
4,800.0	0.00	0.00	4,725.4	277.46	-687.1	303.9	-174.2	0.00	0.00	0.00
4,900.0	0.00	0.00	4,825.4	177.46	-687.1	303.9	-174.2	0.00	0.00	0.00
5,000.0	0.00	0.00	4,925.4	77.46	-687.1	303.9	-174.2	0.00	0.00	0.00
5,100.0	0.00	0.00	5,025.4	-22.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,200.0	0.00	0.00	5,125.4	-122.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,300.0	0.00	0.00	5,225.4	-222.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,325.4	-322.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,425.4	-422.54	-687.1	303.9	-174.2	0.00	0.00	0.00
SHANNON										
5,592.5	***0.00***	***0.00***	***5,517.9***	***-515.00***	***-687.1***	***303.9***	***-174.2***	***0.00***	***0.00***	***0.00***
5,600.0	0.00	0.00	5,525.4	-522.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,700.0	0.00	0.00	5,625.4	-622.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,725.4	-722.54	-687.1	303.9	-174.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,825.4	-822.54	-687.1	303.9	-174.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,925.4	-922.54	-687.1	303.9	-174.2	0.00	0.00	0.00
KOP (10°/100ft BUR)										
6,024.5	***0.00***	***0.00***	***5,949.9***	***-947.00***	***-687.1***	***303.9***	***-174.2***	***0.00***	***0.00***	***0.00***
6,100.0	7.55	257.00	6,025.2	-1,022.32	-688.2	299.1	-169.2	10.00	10.00	0.00
6,200.0	17.55	257.00	6,122.7	-1,119.81	-693.1	277.9	-147.5	10.00	10.00	0.00
6,300.0	27.55	257.00	6,214.9	-1,212.04	-701.7	240.6	-109.3	10.00	10.00	0.00
6,400.0	37.55	257.00	6,299.1	-1,296.23	-713.8	188.2	-55.6	10.00	10.00	0.00
SHARON SPRINGS SHALE										
6,417.6	***39.31***	***257.00***	***6,312.9***	***-1,310.00***	***-716.3***	***177.6***	***-44.7***	***10.00***	***10.00***	***0.00***
6,500.0	47.55	257.00	6,372.7	-1,369.80	-729.0	122.4	11.9	10.00	10.00	0.00
NIOBRARA FORMATION										
6,515.3	***49.08***	***257.00***	***6,382.9***	***-1,380.00***	***-731.6***	***111.3***	***23.3***	***10.00***	***10.00***	***0.00***
NIOBRARA A CHALK										
6,530.8	***50.64***	***257.00***	***6,392.9***	***-1,390.00***	***-734.2***	***99.7***	***35.2***	***10.00***	***10.00***	***0.00***
6,600.0	57.55	257.00	6,433.4	-1,430.53	-746.8	45.2	91.1	10.00	10.00	0.00
6,700.0	67.55	257.00	6,479.5	-1,476.57	-766.8	-41.2	179.6	10.00	10.00	0.00
NIOBRARA B CHALK										
6,738.3	***71.38***	***257.00***	***6,492.9***	***-1,490.00***	***-774.8***	***-76.1***	***215.4***	***10.00***	***10.00***	***0.00***
6,800.0	77.55	257.00	6,509.4	-1,506.52	-788.2	-134.0	274.8	10.00	10.00	0.00
6,900.0	87.55	257.00	6,522.4	-1,519.48	-810.5	-230.5	373.7	10.00	10.00	0.00
BPI *NEW*: 671ft FSL & 600ft FEL of Sec 15										
6,924.5	***90.00***	***257.00***	***6,522.9***	***-1,520.00***	***-816.0***	***-254.4***	***398.3***	***10.00***	***10.00***	***0.00***
7,000.0	90.00	259.26	6,522.9	-1,520.00	-831.5	-328.3	473.7	3.00	0.00	3.00
7,100.0	90.00	262.26	6,522.9	-1,520.00	-847.6	-427.0	573.6	3.00	0.00	3.00
7,200.0	90.00	265.26	6,522.9	-1,519.99	-858.4	-526.4	673.4	3.00	0.00	3.00
7,300.0	90.00	268.26	6,522.9	-1,519.99	-864.1	-626.2	772.6	3.00	0.00	3.00
EOT TO 270.14° AZ										
7,362.7	***90.00***	***270.14***	***6,522.9***	***-1,519.99***	***-864.9***	***-688.8***	***834.3***	***3.00***	***0.00***	***3.00***
7,400.0	90.00	270.14	6,522.9	-1,519.99	-864.8	-726.2	871.0	0.00	0.00	0.00
7,500.0	90.00	270.14	6,522.9	-1,519.99	-864.6	-826.2	969.3	0.00	0.00	0.00
7,600.0	90.00	270.14	6,522.9	-1,519.99	-864.3	-926.2	1,067.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well SIEVERS 8-61 15B-9
Company:	BISON OIL & GAS II, LLC	**TVD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Site:	NE SE SEC. 15 T8N R61W 6th P.M.	**North Reference:**	True
Well:	SIEVERS 8-61 15B-9	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,700.0	90.00	270.14	6,522.9	-1,519.99	-864.1	-1,026.2	1,165.9	0.00	0.00	0.00
7,800.0	90.00	270.14	6,522.9	-1,519.99	-863.8	-1,126.2	1,264.2	0.00	0.00	0.00
7,900.0	90.00	270.14	6,522.9	-1,519.99	-863.6	-1,226.2	1,362.5	0.00	0.00	0.00
8,000.0	90.00	270.14	6,522.9	-1,519.99	-863.3	-1,326.2	1,460.8	0.00	0.00	0.00
8,100.0	90.00	270.14	6,522.9	-1,519.99	-863.1	-1,426.2	1,559.1	0.00	0.00	0.00
8,200.0	90.00	270.14	6,522.9	-1,519.99	-862.8	-1,526.2	1,657.4	0.00	0.00	0.00
8,300.0	90.00	270.14	6,522.9	-1,519.99	-862.6	-1,626.2	1,755.7	0.00	0.00	0.00
8,400.0	90.00	270.14	6,522.9	-1,520.00	-862.3	-1,726.2	1,854.0	0.00	0.00	0.00
8,500.0	90.00	270.14	6,522.9	-1,520.00	-862.1	-1,826.2	1,952.3	0.00	0.00	0.00
8,600.0	90.00	270.14	6,522.9	-1,520.00	-861.8	-1,926.2	2,050.6	0.00	0.00	0.00
8,700.0	90.00	270.14	6,522.9	-1,520.00	-861.6	-2,026.2	2,148.9	0.00	0.00	0.00
8,800.0	90.00	270.14	6,522.9	-1,520.00	-861.3	-2,126.2	2,247.2	0.00	0.00	0.00
8,900.0	90.00	270.14	6,522.9	-1,520.00	-861.1	-2,226.2	2,345.5	0.00	0.00	0.00
9,000.0	90.00	270.14	6,522.9	-1,520.00	-860.8	-2,326.2	2,443.7	0.00	0.00	0.00
9,100.0	90.00	270.14	6,522.9	-1,520.00	-860.6	-2,426.2	2,542.0	0.00	0.00	0.00
9,200.0	90.00	270.14	6,522.9	-1,520.00	-860.3	-2,526.2	2,640.3	0.00	0.00	0.00
9,300.0	90.00	270.14	6,522.9	-1,520.00	-860.1	-2,626.2	2,738.6	0.00	0.00	0.00
9,400.0	90.00	270.14	6,522.9	-1,520.00	-859.8	-2,726.2	2,836.9	0.00	0.00	0.00
9,500.0	90.00	270.14	6,522.9	-1,520.00	-859.6	-2,826.2	2,935.2	0.00	0.00	0.00
9,600.0	90.00	270.14	6,522.9	-1,520.00	-859.3	-2,926.2	3,033.5	0.00	0.00	0.00
9,700.0	90.00	270.14	6,522.9	-1,520.00	-859.1	-3,026.2	3,131.8	0.00	0.00	0.00
9,800.0	90.00	270.14	6,522.9	-1,520.00	-858.8	-3,126.2	3,230.1	0.00	0.00	0.00
9,900.0	90.00	270.14	6,522.9	-1,520.00	-858.6	-3,226.2	3,328.4	0.00	0.00	0.00
10,000.0	90.00	270.14	6,522.9	-1,520.00	-858.3	-3,326.2	3,426.7	0.00	0.00	0.00
10,100.0	90.00	270.14	6,522.9	-1,520.00	-858.1	-3,426.2	3,525.0	0.00	0.00	0.00
10,200.0	90.00	270.14	6,522.9	-1,520.00	-857.8	-3,526.2	3,623.3	0.00	0.00	0.00
10,300.0	90.00	270.14	6,522.9	-1,520.00	-857.6	-3,626.2	3,721.6	0.00	0.00	0.00
10,400.0	90.00	270.14	6,522.9	-1,520.00	-857.3	-3,726.2	3,819.9	0.00	0.00	0.00
10,500.0	90.00	270.14	6,522.9	-1,520.00	-857.1	-3,826.2	3,918.2	0.00	0.00	0.00
10,600.0	90.00	270.14	6,522.9	-1,520.00	-856.8	-3,926.2	4,016.5	0.00	0.00	0.00
10,700.0	90.00	270.14	6,522.9	-1,520.00	-856.6	-4,026.2	4,114.8	0.00	0.00	0.00
10,800.0	90.00	270.14	6,522.9	-1,520.00	-856.3	-4,126.2	4,213.1	0.00	0.00	0.00
10,900.0	90.00	270.14	6,522.9	-1,520.00	-856.1	-4,226.2	4,311.3	0.00	0.00	0.00
11,000.0	90.00	270.14	6,522.9	-1,520.00	-855.8	-4,326.2	4,409.6	0.00	0.00	0.00
EPI: 656ft FSL & 600ft FWL of Sec 15										
11,011.4	***90.00***	***270.14***	***6,522.9***	***-1,520.00***	***-855.8***	***-4,337.6***	***4,420.8***	***0.00***	***0.00***	***0.00***
EOT TO 270.01° AZ										
11,015.9	***90.00***	***270.01***	***6,522.9***	***-1,520.00***	***-855.8***	***-4,342.0***	***4,425.2***	***3.00***	***0.00***	***-3.00***
11,100.0	90.00	270.01	6,522.9	-1,520.00	-855.8	-4,426.2	4,508.0	0.00	0.00	0.00
11,200.0	90.00	270.01	6,522.9	-1,520.00	-855.7	-4,526.2	4,606.3	0.00	0.00	0.00
11,300.0	90.00	270.01	6,522.9	-1,520.00	-855.7	-4,626.2	4,704.6	0.00	0.00	0.00
BHL: 658ft FSL & 300ft FWL of Sec 15										
11,312.2	***90.00***	***270.01***	***6,522.9***	***-1,520.00***	***-855.7***	***-4,638.3***	***4,716.6***	***0.00***	***0.00***	***0.00***

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well SIEVERS 8-61 15B-9
Company:	BISON OIL & GAS II, LLC	**TVD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 5002.9usft (Original Well Elev)
Site:	NE SE SEC. 15 T8N R61W 6th P.M.	**North Reference:**	True
Well:	SIEVERS 8-61 15B-9	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
547.8	546.9	PIERRE SHALE (BASE FOX HILLS			
3,572.9	3,507.9	PARKMAN			
4,652.5	4,577.9	SUSSEX			
5,592.5	5,517.9	SHANNON			
6,417.6	6,312.9	SHARON SPRINGS SHALE			
6,515.3	6,382.9	NIOBRARA FORMATION			
6,530.8	6,392.9	NIOBRARA A CHALK			
6,738.3	6,492.9	NIOBRARA B CHALK			

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
0.0	0.0	0.0	0.0	SHL: 1487ft FSL & 360ft FEL of Sec 15
200.0	200.0	0.0	0.0	START NUDGE (2°/100ft BUR)
800.0	795.6	-57.3	25.3	EOB TO 12° INC
3,811.4	3,741.2	-629.8	278.6	END OF TANGENT
4,411.4	4,336.8	-687.1	303.9	EOD TO VERTICAL
6,024.5	5,949.9	-687.1	303.9	KOP (10°/100ft BUR)
6,924.5	6,522.9	-816.0	-254.4	BPI *NEW*: 671ft FSL & 600ft FEL of Sec 15
7,362.7	6,522.9	-864.9	-688.8	EOT TO 270.14° AZ
11,011.4	6,522.9	-855.8	-4,337.6	EPI: 656ft FSL & 600ft FWL of Sec 15
11,015.9	6,522.9	-855.8	-4,342.0	EOT TO 270.01° AZ
11,312.2	6,522.9	-855.7	-4,638.3	BHL: 658ft FSL & 300ft FWL of Sec 15