

ENSIGN

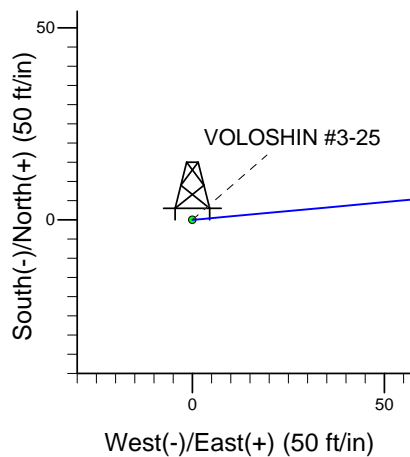
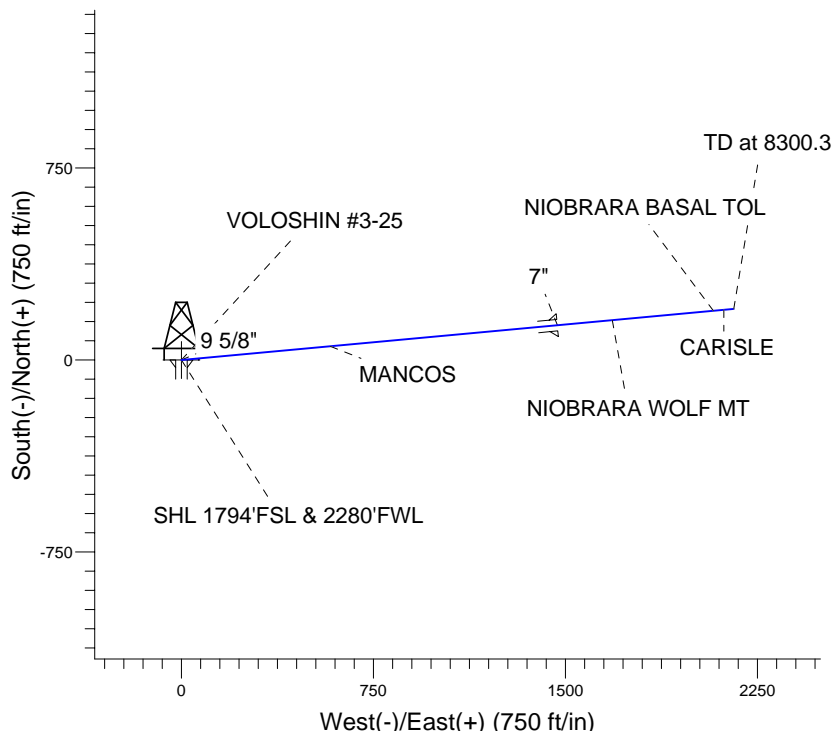
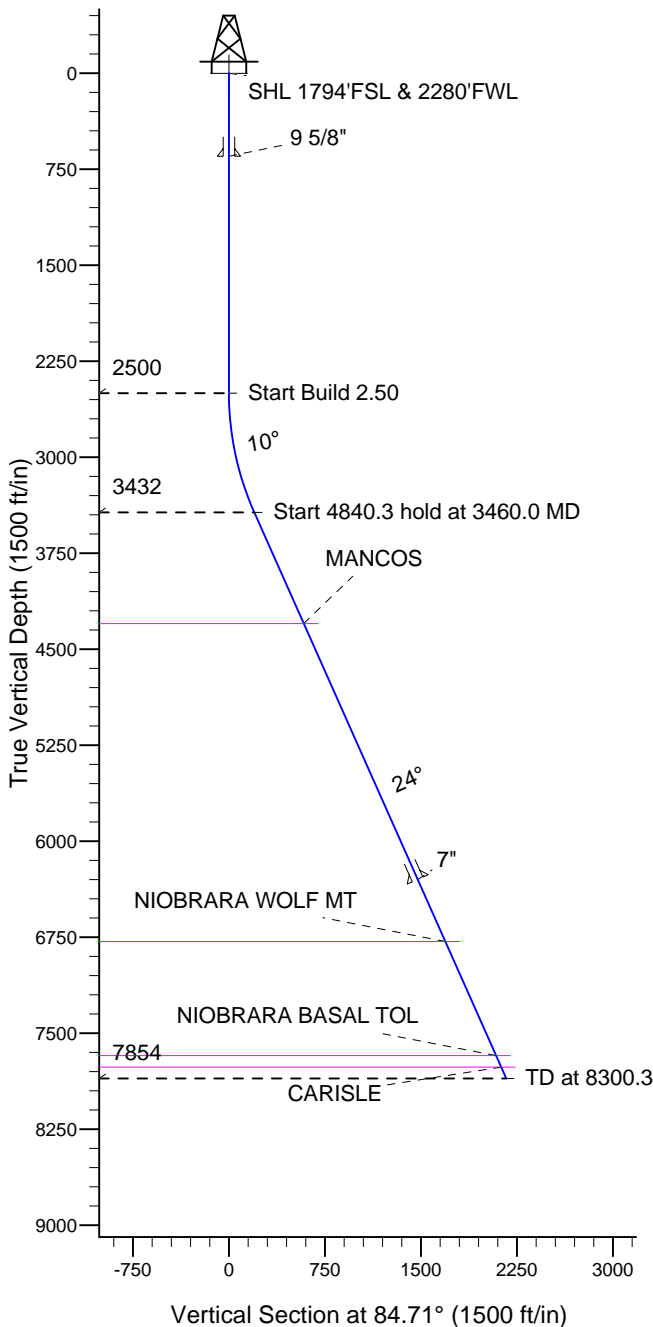
Directional

Well Name: **VOLOSHIN #3-25**

Surface Location: VOLOSHIN 3-25 PAD 25-6N-90W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 7469.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1410579.69	2460131.16	40.444233	-107.439836	
KB 16' RKB @ 7485.0ft (KB 16')						

PetroShare Corp



VOLOSHIN #3-25
 Plan 4 (Feb 25, 2013)
 15:45, February 25 2013



Azimuths to True North
 Magnetic North: 9.99°
 Magnetic Field
 Strength: 52647.9snT
 Dip Angle: 66.57°
 Date: 2/20/2013
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
SHL 1794'FSL & 2280'FWL	1.0	0.0	0.0	40.444233	-107.439836	

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	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
3	3460.0	24.00	84.71	3432.2	18.3	197.3	2.50	84.71	198.1	
4	8300.3	24.00	84.71	7854.0	199.7	2157.6	0.00	0.00	2166.9	



Directional

PetroShare Corp

**SEC.25-T6N-R90W MOFFAT CO
VOLOSHIN 3-25 PAD 25-6N-90W
VOLOSHIN #3-25**

Wellbore #1

Plan: Plan 4 (Feb 25, 2013)

Standard Planning Report

25 February, 2013

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	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,460.0	24.00	84.71	3,432.2	18.3	197.3	2.50	2.50	0.00	84.71	
8,300.3	24.00	84.71	7,854.0	199.7	2,157.6	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well VOLOSHIN #3-25
Company:	PetroShare Corp	TVD Reference:	RKB @ 7485.0ft (KB 16')
Project:	SEC.25-T6N-R90W MOFFAT CO	MD Reference:	RKB @ 7485.0ft (KB 16')
Site:	VOLOSHIN 3-25 PAD 25-6N-90W	North Reference:	True
Well:	VOLOSHIN #3-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 4 (Feb 25, 2013)		

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 1794'FSL & 2280'FWL									
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
650.0	0.00	0.00	650.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8"									
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
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP									
2,600.0	2.50	84.71	2,600.0	0.2	2.2	2.2	2.50	2.50	0.00
2,700.0	5.00	84.71	2,699.7	0.8	8.7	8.7	2.50	2.50	0.00
2,800.0	7.50	84.71	2,799.1	1.8	19.5	19.6	2.50	2.50	0.00
2,900.0	10.00	84.71	2,898.0	3.2	34.7	34.8	2.50	2.50	0.00
3,000.0	12.50	84.71	2,996.0	5.0	54.1	54.3	2.50	2.50	0.00
3,100.0	15.00	84.71	3,093.2	7.2	77.8	78.1	2.50	2.50	0.00
3,200.0	17.50	84.71	3,189.2	9.8	105.6	106.1	2.50	2.50	0.00
3,300.0	20.00	84.71	3,283.9	12.7	137.6	138.2	2.50	2.50	0.00
3,400.0	22.50	84.71	3,377.0	16.1	173.7	174.5	2.50	2.50	0.00
3,460.0	24.00	84.71	3,432.2	18.3	197.3	198.1	2.50	2.50	0.00
3,500.0	24.00	84.71	3,468.7	19.8	213.5	214.4	0.00	0.00	0.00
3,600.0	24.00	84.71	3,560.1	23.5	254.0	255.1	0.00	0.00	0.00
3,700.0	24.00	84.71	3,651.4	27.3	294.5	295.8	0.00	0.00	0.00
3,800.0	24.00	84.71	3,742.8	31.0	335.0	336.4	0.00	0.00	0.00
3,900.0	24.00	84.71	3,834.1	34.7	375.5	377.1	0.00	0.00	0.00
4,000.0	24.00	84.71	3,925.5	38.5	416.0	417.8	0.00	0.00	0.00
4,100.0	24.00	84.71	4,016.8	42.2	456.5	458.5	0.00	0.00	0.00
4,200.0	24.00	84.71	4,108.2	46.0	497.0	499.1	0.00	0.00	0.00
4,300.0	24.00	84.71	4,199.6	49.7	537.5	539.8	0.00	0.00	0.00
4,400.0	24.00	84.71	4,290.9	53.5	578.0	580.5	0.00	0.00	0.00
4,410.0	24.00	84.71	4,300.0	53.9	582.0	584.5	0.00	0.00	0.00
MANCOS									
4,500.0	24.00	84.71	4,382.3	57.2	618.5	621.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well VOLOSHIN #3-25
Company:	PetroShare Corp	TVD Reference:	RKB @ 7485.0ft (KB 16')
Project:	SEC.25-T6N-R90W MOFFAT CO	MD Reference:	RKB @ 7485.0ft (KB 16')
Site:	VOLOSHIN 3-25 PAD 25-6N-90W	North Reference:	True
Well:	VOLOSHIN #3-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 4 (Feb 25, 2013)		

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)
4,600.0	24.00	84.71	4,473.6	61.0	659.0	661.8	0.00	0.00	0.00
4,700.0	24.00	84.71	4,565.0	64.7	699.5	702.5	0.00	0.00	0.00
4,800.0	24.00	84.71	4,656.3	68.5	740.0	743.2	0.00	0.00	0.00
4,900.0	24.00	84.71	4,747.7	72.2	780.5	783.8	0.00	0.00	0.00
5,000.0	24.00	84.71	4,839.0	76.0	821.0	824.5	0.00	0.00	0.00
5,100.0	24.00	84.71	4,930.4	79.7	861.5	865.2	0.00	0.00	0.00
5,200.0	24.00	84.71	5,021.7	83.5	902.0	905.9	0.00	0.00	0.00
5,300.0	24.00	84.71	5,113.1	87.2	942.5	946.5	0.00	0.00	0.00
5,400.0	24.00	84.71	5,204.5	91.0	983.0	987.2	0.00	0.00	0.00
5,500.0	24.00	84.71	5,295.8	94.7	1,023.5	1,027.9	0.00	0.00	0.00
5,600.0	24.00	84.71	5,387.2	98.5	1,064.0	1,068.6	0.00	0.00	0.00
5,700.0	24.00	84.71	5,478.5	102.2	1,104.5	1,109.2	0.00	0.00	0.00
5,800.0	24.00	84.71	5,569.9	106.0	1,145.0	1,149.9	0.00	0.00	0.00
5,900.0	24.00	84.71	5,661.2	109.7	1,185.5	1,190.6	0.00	0.00	0.00
6,000.0	24.00	84.71	5,752.6	113.5	1,226.0	1,231.2	0.00	0.00	0.00
6,100.0	24.00	84.71	5,843.9	117.2	1,266.5	1,271.9	0.00	0.00	0.00
6,200.0	24.00	84.71	5,935.3	120.9	1,307.0	1,312.6	0.00	0.00	0.00
6,300.0	24.00	84.71	6,026.6	124.7	1,347.5	1,353.3	0.00	0.00	0.00
6,400.0	24.00	84.71	6,118.0	128.4	1,388.0	1,393.9	0.00	0.00	0.00
6,500.0	24.00	84.71	6,209.4	132.2	1,428.5	1,434.6	0.00	0.00	0.00
6,599.2	24.00	84.71	6,300.0	135.9	1,468.7	1,475.0	0.00	0.00	0.00
7"									
6,600.0	24.00	84.71	6,300.7	135.9	1,469.0	1,475.3	0.00	0.00	0.00
6,700.0	24.00	84.71	6,392.1	139.7	1,509.5	1,516.0	0.00	0.00	0.00
6,800.0	24.00	84.71	6,483.4	143.4	1,550.0	1,556.6	0.00	0.00	0.00
6,900.0	24.00	84.71	6,574.8	147.2	1,590.5	1,597.3	0.00	0.00	0.00
7,000.0	24.00	84.71	6,666.1	150.9	1,631.0	1,638.0	0.00	0.00	0.00
7,100.0	24.00	84.71	6,757.5	154.7	1,671.5	1,678.7	0.00	0.00	0.00
7,129.0	24.00	84.71	6,784.0	155.8	1,683.3	1,690.5	0.00	0.00	0.00
NIOBRARA WOLF MT									
7,200.0	24.00	84.71	6,848.8	158.4	1,712.0	1,719.3	0.00	0.00	0.00
7,300.0	24.00	84.71	6,940.2	162.2	1,752.5	1,760.0	0.00	0.00	0.00
7,400.0	24.00	84.71	7,031.5	165.9	1,793.0	1,800.7	0.00	0.00	0.00
7,500.0	24.00	84.71	7,122.9	169.7	1,833.5	1,841.4	0.00	0.00	0.00
7,600.0	24.00	84.71	7,214.3	173.4	1,874.0	1,882.0	0.00	0.00	0.00
7,700.0	24.00	84.71	7,305.6	177.2	1,914.5	1,922.7	0.00	0.00	0.00
7,800.0	24.00	84.71	7,397.0	180.9	1,955.0	1,963.4	0.00	0.00	0.00
7,900.0	24.00	84.71	7,488.3	184.7	1,995.5	2,004.0	0.00	0.00	0.00
8,000.0	24.00	84.71	7,579.7	188.4	2,036.0	2,044.7	0.00	0.00	0.00
8,100.0	24.00	84.71	7,671.0	192.2	2,076.5	2,085.4	0.00	0.00	0.00
8,105.4	24.00	84.71	7,676.0	192.4	2,078.7	2,087.6	0.00	0.00	0.00
NIOBRARA BASAL TOL									
8,200.0	24.00	84.71	7,762.4	195.9	2,117.0	2,126.1	0.00	0.00	0.00
8,204.0	24.00	84.71	7,766.0	196.1	2,118.6	2,127.7	0.00	0.00	0.00
CARISLE									
8,300.0	24.00	84.71	7,853.7	199.7	2,157.5	2,166.7	0.00	0.00	0.00
8,300.3	24.00	84.71	7,854.0	199.7	2,157.6	2,166.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well VOLOSHIN #3-25
Company:	PetroShare Corp	TVD Reference:	RKB @ 7485.0ft (KB 16')
Project:	SEC.25-T6N-R90W MOFFAT CO	MD Reference:	RKB @ 7485.0ft (KB 16')
Site:	VOLOSHIN 3-25 PAD 25-6N-90W	North Reference:	True
Well:	VOLOSHIN #3-25	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 4 (Feb 25, 2013)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
SHL 1794'FSL & 2280'	0.00	0.00	1.0	0.0	0.0	1,410,579.69	2,460,131.16	40.444233	-107.439836
- plan hits target center									
- Point									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(")	(")
	650.0	650.0	9 5/8"	9-5/8	12-1/4
	6,599.2	6,300.0	7"	7	8-3/4

Formations					
	Measured Depth	Vertical Depth		Dip	Dip Direction
	(ft)	(ft)	Name	(°)	(°)
	4,410.0	4,300.0	MANCOS	0.00	
	7,129.0	6,784.0	NIOBRARA WOLF MT	0.00	
	8,105.4	7,676.0	NIOBRARA BASAL TOL	0.00	
	8,204.0	7,766.0	CARISLE	0.00	

Plan Annotations					
	Measured Depth	Vertical Depth	Local Coordinates		
	(ft)	(ft)	+N/-S	+E/-W	Comment
	(ft)	(ft)	(ft)	(ft)	
	2,500.0	2,500.0	0.0	0.0	KOP