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PETROLEUM ENGINEER  
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## PETROSHARE CORP.

### Voloshin No. 3-25

Location: SHL: 1794' FSL and 2280' FWL of Section 25, T 6N, R 90W, 6<sup>th</sup> P.M.,  
Moffat Co., Colorado.

BHL: 2069' FSL and 864' FEL of Section 25, T 6N, R 90W, 6<sup>th</sup> P.M.,  
Moffat Co., Colorado.

Elevation: +7469' ground.

Lat: 40.444364, Long: -107.439783, Nad 83

### 1. Estimated Formation Tops (based on surface elevation)

	<u>Vertical Depth</u>	<u>Measured Depth</u>
Williams Fork	Surface	Surface
Iles	1283'	1283'
Trout Creek	1933'	1933'
Morapas	4053'	4140'
Mancos	4300'	4410'
Niobrara-Tow Creek	6483'	6800'
Niobrara-Wolf Mtn	6784'	7129'
Niobrara Basal-Top	7676'	8105'
Carlisle	7766'	8204'
TD	7854'	8300'

### 2. Estimated depth of top and bottom of water, oil, gas, or other mineral Bearing formations and plan for protection.

Possible Aquifers: Less than 650'.

Possible Oil and Gas: Mancos formation around 4300'.

Oil: Niobrara

Protection for shallow aquifers by cementing 9-5/8" surface casing at  
650' with sufficient cement volume to bring cement to surface.

Protection for possible Oil & Gas bearing formations above Niobrara will  
be accomplished by cementing 7" intermediate casing at 6300' VD = 6599'  
MD with sufficient cement volume to bring cement top to 3800' VD = 3862'  
MD which is 500' vertical depth above Mancos formation.

Well will be completed with 4-1/2" slotted liner in Niobrara formation.

3. Pressure Control Equipment

No BOP will be required to drill the surface hole to 650'.

After cementing 9-5/8" casing at 650' a 9-5/8", 3000# casing will be installed.

A 3000# 9-5/8" X 7" screw type casing head will be installed. 11-3/4", 8rd 3000# flange will be screwed on to casing head for BOP stack. BOP will be 3000# double gated rams and a 3000# annular preventer. The pipe ram will be installed on bottom with the blind ram on top. The choke and kill lines will be connected either to the body of the lower preventer or to a drilling spool above the casing head.

The maximum anticipated surface pressure is less than 2500 psig.

4. Supplemental Drilling Equipment and Casing Information

All the casing will be new pipe and tested to 1500 psig.

<u>Casing</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Stage</u>	<u>Centralizers</u>
9-5/8"	36 #/ft	J-55	ST&C	No	*
7"	23 #/ft	N-80	LT&C	No	As needed

\*Centralizers will be placed at 10' above shoe and on 2<sup>nd</sup>, and 3<sup>rd</sup> collars.

Casing Design Information (9-5/8" casing @ 650'):

Collapse value for new pipe	2,020 psig	Actual Load	300 psig	SF 6.73
Burst value for new pipe	3,520 psig	Actual Load	~2000 psig	SF 1.76
Tension value for new pipe	394,000#	Actual Load	23,400#	SF 16.8

Casing Design Information (7" intermediate casing @ 6300'VD = 6599'MD):

Collapse value for new pipe	3,830 psig	Actual Load	2945 psig	SF 1.3
Burst value for new pipe	6,340 psig	Actual Load	~2300 psig	SF 2.76
Tension value for new pipe	442,000#	Actual Load	144,900#	SF 3.05

Cement Information:9-5/8" casing in 12-1/4" hole at 650'.

Oilfield type cement: Pump 20 bbls of water ahead and cement 9-5/8" casing at 650' with 290 sacks of Premium plus - Type II Premixed 2% CaCl<sub>2</sub> plus 2% Versaset (14.5 ppg, yield=1.41 cf/sx).

Displace cement with water. Bump top plug. The cement volume is

calculated to bring cement to surface with 100% excess.

7" casing in 8-3/4" hole at 6300' VD = 6599' MD.

Oilfield type cement: Pump 20 bbls of mud flush ahead and cement 7" casing at 6599' MD with 100 sacks (1800 lineal feet) of light cement (11.1 ppg, yield=2.74 cf/sx) followed with 240 sacks (2000 lineal feet) of cement 50/50 Poz premium AG + 2% gel + 2% Micro bond + 6% Halad-322 + 3% salt + 0.2% Super CBL + 0.125#/sx Poly-E-Flake (14.35 PPG, yield = 1.26 cf/sx). Displace with fresh water. Bump top plug. The cement volume is calculated to bring top of cement 600' above Mancos formation at 4410' MD plus 30% excess.

#### Drilling Equipment

##### Surface Hole (surface to 650')

Conventional rotary rig will be used to drill 12-1/4" surface hole to 650'. To our knowledge shallow gas above 600' has never been encountered in the area therefore there will be no need for a BOP. Fresh water and gel will be used for the drilling of the surface hole.

##### Intermediate Hole (650' to 6599' MD)

Conventional rotary rig will be used to directionally drill 8-3/4" intermediate hole to 6599' MD. 3000# rated Double gated rams preventer and annular preventer will be used during the drilling process. Fresh water dispersed mud system will be used.

##### Production Hole (6599' MD to 8300' MD)

6-1/4" hole will be drilled directionally from shoe of 7" casing at 6599' MD to TD at 8300' MD. 7 ppg mineral oil mud will be used for this portion of the hole.

#### 5. Circulating Medium, Mud Type, Minimum Quantities of Weight Material and Monitoring Equipment.

##### Surface Hole (Surface to 650')

A rotary rig will be used to drill 12-1/4" hole to 650'. Fresh water-based drilling fluid consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, and polymers will be used. No chromates will be used. We will not use oil in the mud system.

The maximum anticipated mud weigh is  $\pm$  9 ppg. Enough mud material will be kept on site to raise mud weight by 0.6 ppg.

##### Intermediate hole (650' to 6599' MD)

8-3/4" hole will be directionally drilled below surface casing using

fresh water based drilling fluid consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, and polymers. No chromates will be used. It is not intended to use oil in the mud; however, in the event it is used, oil concentration will be less than 4% by volume.

The maximum anticipated mud weight is  $\pm 9$  ppg. Enough mud material will be kept on site to raise mud weight by 0.6 ppg.

Production Hole (6599' MD to 8301'MD)

6-1/4" hole will be directionally drilled below intermediate casing to TD of 8301' using mineral oil-based mud with polymer viscosifiers for rheology control and oil wetting agents to aide in hole cleaning.

The maximum anticipated mud weight is 7.0 ppg with maximum anticipated formation pore pressure of 6.7 ppg. Enough mud material will be kept on site to raise mud weight by 0.6 ppg.

6. Anticipated Type And Amount of Testing, Logging, and Coring.

Logging

Mud Logging: From surface casing shoe to TD.

Electric Logging: A complete suite of open hole logs will be run from surface casing shoe to TD.

Coring:

None planned but is possible

Testing:

None is planned but is possible.

7. Expected Bottom Hole Pressure and Any Anticipated Abnormal Pressure, Temperatures, Or Other Hazards (H2S, Steam, ETC) and Associated Contingency Plans:

Subnormal pressure gradient to TD.

MASP and casing design parameters were determined using 0.35 psig/ft

Maximum expected BHP @ bottom of Niobrara ~ 2700 psig

Maximum expected BHT @ 7855'VD ~200 degrees

No hazards gases such as H2S or steam are expected in this area. Numerous wells have been drilled in the area with no incidents.

8. Others:

Auxiliary Equipment

Conventional Rotary Drilling Rig  
Geologgraph  
PVT-Flowmeter  
Desilter  
Desander  
Full Opening Safety Valve  
Upper Kelly Valve  
Lower Kelly Valve

Completion

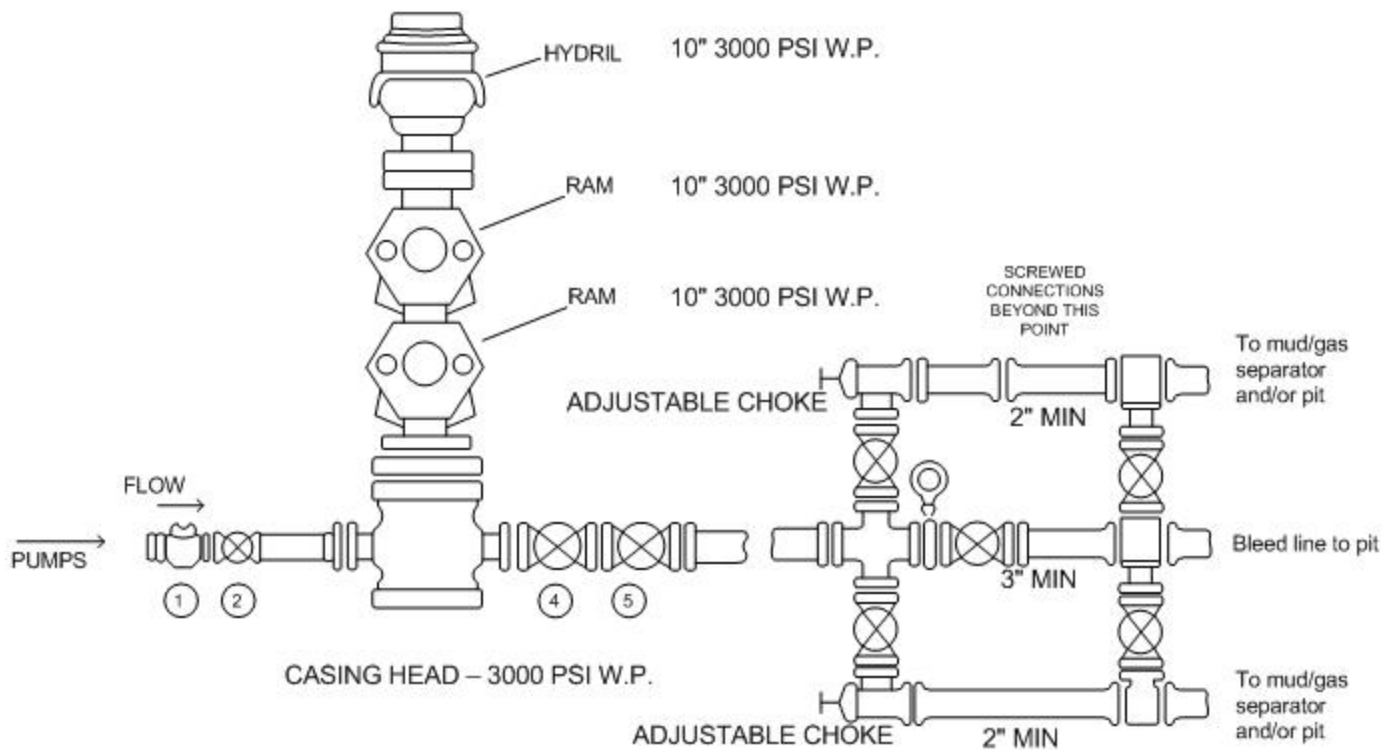
We will run a 4-1/2" slotted liner to TD and hang above the shoe of 7" casing.  
Rod pump will be used for production. No formation simulation is planned at this time.

February 24, 2013

# MINIMUM BOP Requirements

3000 PSI W.P.

FILL LINE ABOVE THE UPPERMOST PREVENTER



## KILL LINE

- Valve #1 – Flanged check valve  
Full working pressure of BOP
- Valve #2 – Flanged, minimum 2" bore  
Full working pressure of BOP

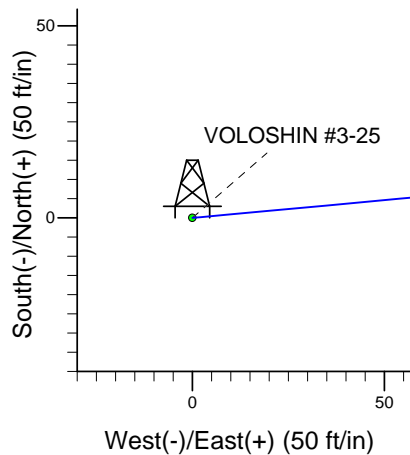
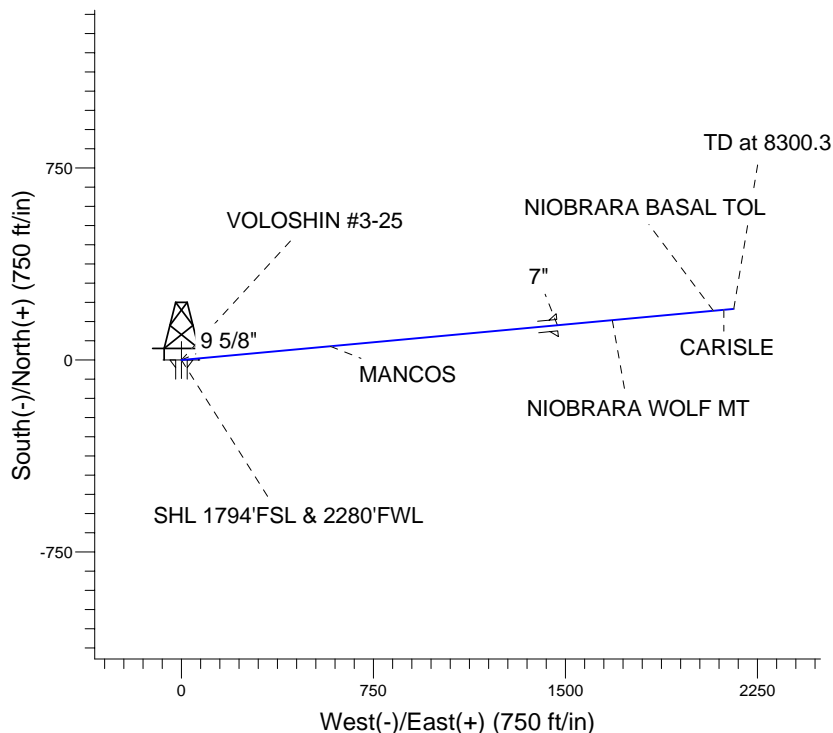
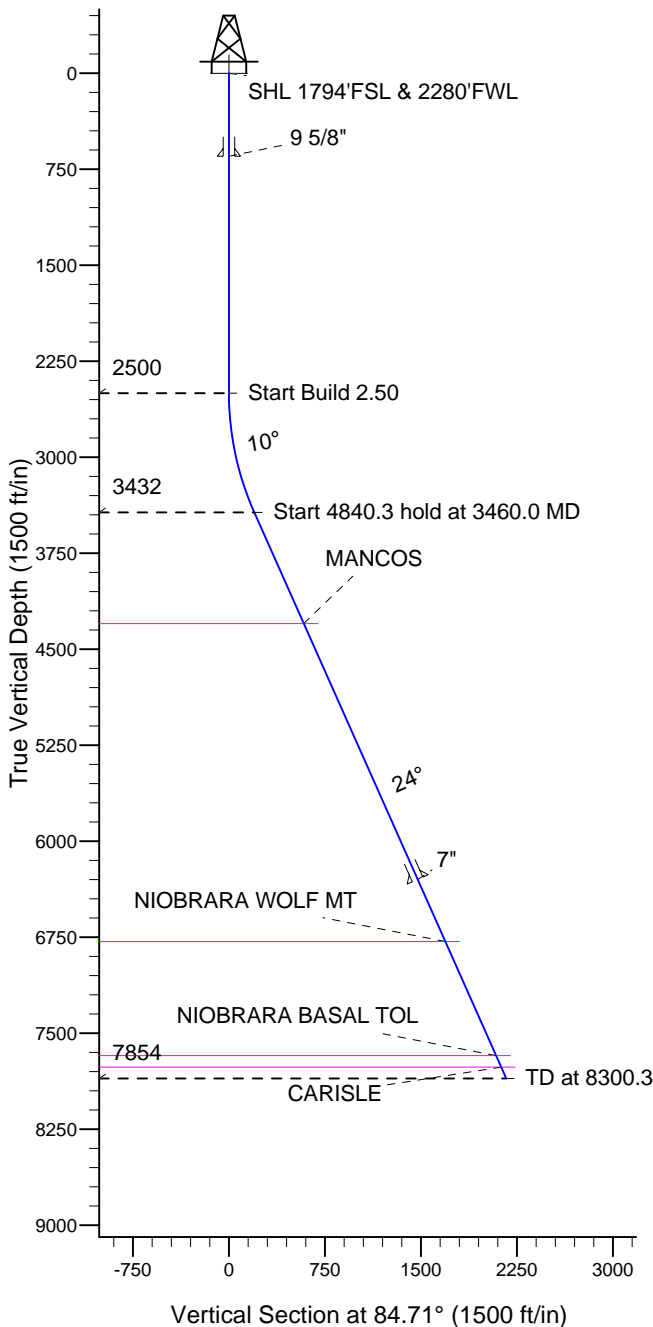
## CHOKE LINE

- Valves #4 & 5 – Flanged minimum 3" bore  
Full working pressure of BOP
- (Note: An HCR can be used instead of Valve # 5)

## GENERAL RULES AND RECOMMENDATIONS

All lines to manifold are to be at right angles (90 deg.). No 45 deg. angles are to be used.  
Blind flanges are to be used for blanking.  
All studs and nuts are to be installed on all flanges.

## 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**



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

<b>Project</b>	SEC.25-T6N-R90W MOFFAT CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Well</b>	VOLOSHIN #3-25			
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,410,579.69 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,460,131.16 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Latitude:</b>	40.444233
			<b>Longitude:</b>	-107.439836
			<b>Ground Level:</b>	7,469.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/20/2013	9.99	66.57	52,648

<b>Design</b>	Plan 4 (Feb 25, 2013)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	84.71

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
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	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well VOLOSHIN #3-25
<b>Company:</b>	PetroShare Corp	<b>TVD Reference:</b>	RKB @ 7485.0ft (KB 16')
<b>Project:</b>	SEC.25-T6N-R90W MOFFAT CO	<b>MD Reference:</b>	RKB @ 7485.0ft (KB 16')
<b>Site:</b>	VOLOSHIN 3-25 PAD 25-6N-90W	<b>North Reference:</b>	True
<b>Well:</b>	VOLOSHIN #3-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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
<b>SHL 1794'FSL &amp; 2280'FWL</b>									
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
<b>9 5/8"</b>									
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
<b>KOP</b>									
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
<b>MANCOS</b>									
4,500.0	24.00	84.71	4,382.3	57.2	618.5	621.1	0.00	0.00	0.00

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

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