

Ten Point Plan

BOPCO, L. P.

Yellow Creek Federal 29-13-1

Surface Location NW ¼ of the SW ¼, Section 29, T. 1N., R. 98W.

1. Surface Formation

Uinta

2. Estimated Formation Tops and Datum:

Formation	Depth (KB = 6806')	Datum
Green River	554'	+ 6,252'
T/A-Groove	904'	+ 5,902'
T/Mahogany	999'	+ 5,807'
T/B-Groove	1,144'	+ 5,662'
T/Nahcolite	1,589'	+ 5,217'
B/Nahcolite	2,319'	+ 4,487'
T/Blue Marker	2,409'	+ 4,397'
T/Orange Marker	2,589'	+ 4,217'
T/Wasatch	2,779'	+ 4,027'
T/Mesa Verde	6,139'	+ 667'
T/Rollins	9,689'	- 2,883'
T/Lower Sego	10,814'	- 4,008'
Castlegate	11,289'	- 4,483'
TD	11,589'	- 4,783'

A 14 ¾" hole will be drilled to 3,529 +/- . The hole depth will depend on the top of Wasatch. The hole will be drilled 750' beyond the top of the Wasatch.

3. Producing Formation Depth:

Formation objective includes the Sego, Rollins, Mesa Verde and its sub-members.

4. Proposed Casing:

Hole Size	Casing Size	Weight/FT	Grade	Coupling & Tread	Casing Depth	New/Used
14 ¾"	9 5/8"	36#	K-55	LTC	3,529'	NEW
8 ¾"	4 ½"	11.6#	LS-110	LTC	6,145'	NEW
7 7/8"	4 ½"	11.6#	LS-110	LTC	T.D.	NEW

Cement Program:

The Surface Casing will be cemented from 3,529' to the Surface as follows:

Multiple stage cementing tool will be used at 1,489'(MD) and cement baskets as per BLM requirements please see attached Wellbore Schematic.

Stage #1

Fluid #1 Water Spacer

Water Spacer: Fluid Density: 8.34 lbm/gal. Fluid Volume: 10 bbl.

Fluid #2 Reactive Spacer

Superflush XLC (or equivalent): Fluid Density: 10 lbm/gal. Fluid Volume: 10 bbl.

Fluid #3 Water Spacer

Water Spacer: Fluid Density: 8.34 lbm/gal. Fluid Volume: 10 bbl.

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Lead: Fluid #4 Excess of 30%				
9 5/8"	Premium Lite	240 sx	2.35ft ³ /sx	12.3 ppg
	0.25 lbm/sk D-Air 3000			
	0.25 lbm/sk Poly-E-Flake			
	0.25 lbm/sk Gilsonite			
Tail: Fluid #5 Excess of 30%				
9 5/8"	Premium Lite	650 sx	2.09ft ³ /sx	12.8 ppg
	0.25 lbm/sk D-Air 3000			
	0.25 lbm/sk Poly-E-Flake			
	0.25 lbm/sk Gilsonite			

Fluid #6 Water Spacer

Displacement Fluid: Fluid Density: 0 lbm/gal. Fluid Volume: 271.28 bbl.

Stage #2

Fluid #1 Water Spacer

Water Spacer: Fluid Density: 8.34 lbm/gal. Fluid Volume: 10 bbl.

Fluid #2 Water Spacer

Superflush XLC (or equivalent): Fluid Density: 10 lbm/gal. Fluid Volume: 20 bbl.

Fluid #3 Water Spacer

Water Spacer: Fluid Density: 8.34 lbm/gal. Fluid Volume: 10 bbl.

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Tail: Fluid #4 2 nd Stage Primary Cement Excess of 75%				
9 5/8"	Premium Lite	730 sx	2.35ft ³ /sx	12.3 ppg
	0.25 lbm/sk D-Air 3000			
	0.25 lbm/sk Poly-E-Flake			
	0.25 lbm/sk Gilsonite			

Fluid #5: Water Spacer

Displacement Fluid: Fluid Density: 0 lbm/gal. Fluid Volume: 110.79 bbl.

Top Out Cement: Fluid #6

Standard Cement	350 sx	2.20ft ³ /sx	12.3 ppg
2% Calcium Chloride:			

Cement volume = Caliper + 20%

Production casing will be cemented to 100' inside surface casing or higher as follows:

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Lead: #1				
4 1/2"	Premium Lite	263 sx	3.38ft ³ /sx	11.0 ppg
	0.05 lbs/sx Static Free			
	3% bwow Potassium Chloride			
	0.25 lbs/sx Cello Flake			
	5 lbs/sx Kol Seal			
	10% bwoc Bentonite			
	0.5% bwoc Sodium Metasilicate			
	196.7% Fresh Water			
Lead: #2				
4 1/2"	Premium Lite	163 sx	2.13ft ³ /sx	12.5 ppg
	0.2% bwoc BA-90			
	1% bwoc R-3			
	0.6% bwoc FL-63			
	0.25% bwoc Sodium Metasilicate			
	109.3% Fresh Water			
Tail: #3				
4 1/2"	Premium Lite II High Strength	499 sx	2.44ft ³ /sx	13.0 ppg
	35% bwoc Silica Flour			
	0.2% bwoc BA-90			
	1% bwoc R-31			

0.65% bwoc FL-63
0.25% bwoc Sodium Metasilicate
118.4% Fresh Water

Note: All cement slurries will meet or exceed minimum BLM and COGCC requirements. Slurries used will be the slurries listed above, or equivalent slurries depending on service provider selected. Cement yield may change depending on slurries selected, but cement volume in cubic feet will be based on the above excess numbers.

5. BOP and Pressure Containment Data:

The anticipated bottom hole pressure will be less than 5000 psi. (0.4 gradient as measured by offset wells)

A 5000-psi WP BOP system as described in Diagram 1 (attached) will be installed and maintained from the 9 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

BOP tests with 200 psi minimum and 5000 psi maximum except for the annular (2500 psi) will be conducted:

1. After initial installation.
2. After any component change.
3. Twenty-one days after previous test.
4. As required by well conditions.

6. Mud Program:

<u>Interval</u>	<u>Mud weight lbs./gal.</u>	<u>Viscosity Sec./OT.</u>	<u>Fluid Loss Ml/30 Mins.</u>	<u>Mud Type</u>
0-3,529'	Air/Clear Water	-----	No Control	Air/Water
3,529'-T.D.	8.0-9.5	45-50	less than 10	Water/Gel LSND

7. Auxiliary Equipment

Upper kelly cock, full opening stabbing valve, and 3" 5000 psi WP choke manifold to be tested with BOPs. A flow/show and pit level indicator will be installed.

8. Testing, Coring, Sampling and Logging:

- a) Test: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.

