

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Ground Elevation	3147	0	
Rustler	2497	650	
Castile	147	3000	
Lamar	-1553	4700	
Bell Canyon	-1833	4980	
Cherry Canyon	-2728	5875	
Brushy Canyon	-4278	7425	
Bone Spring Limestone	-5658	8805	
Upper Avalon	-5728	8875	
Lateral TD (Upper Avalon)	-5911	9058	13932

2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expected Base of Fresh Water		500
Water	Rustler	650
Water	Bell Canyon	4980
Water	Cherry Canyon	5875
Oil/Gas	Brushy Canyon	7425
Oil/Gas	Bone Spring Limestone	8805
Oil/Gas	Upper Avalon	8875

All shows of fresh water and minerals will be reported and protected.

3. BOP EQUIPMENT

Will have a minimum of a 5000 psi rig stack (see proposed schematic) for drill out below surface casing. Stack will be tested as specified in the attached testing requirements.

Chevron requests a variance to use a FMC UH2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipped up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal.

4. CASING PROGRAM

a. The proposed casing program will be as follows:

Purpose	From	To	TVD	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	650'	650'	17-1/2"	13-3/8"	54.5 #	J55	STC	New
Intermediate	0'	4,530'	4,503'	12-1/4"	9-5/8"	40 #	HCK-55	LTC	New
Production	0'	13,932'	9,058'	8-3/4"	5-1/2"	20.0 #	HCP-110	TXP BTC S	New

b. Casing design subject to revision based on geologic conditions encountered.

c. *****A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.**

d. Chevron will fill casing at a minimum of every 20 jts (840') while running for intermediate and production casing in order to maintain collapse SF.

SF Calculations based on the following "Worst Case" casing design:

Surface Casing: 850'
 Intermediate Casing: 4800'
 Production Casing: 22,000' MD/9,200' TVD (12,800' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.40	1.92	2.40	1.75
Intermediate	1.21	3.02	2.15	1.48
Production	1.30	2.51	2.48	1.51

Min SF is the smallest of a group of safety factors that include the following considerations:

	Surf	Int	Prod
Burst Design			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 15 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water	BBLs
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk	
Tail	Class C	0'	650'	14.8	1.35	125	749	6.57	180
Intermediate									
Lead	50:50 Poz	0'	3,530'	11.9	2.43	150	1025	14.21	444
Tail	Class C	3,530'	4,530'	14.8	1.33	85	464	6.37	110
Production									
1st Lead	50:50 Poz	3,680'	8,592'	11.5	2.51	50	702	15.51	314
2nd Lead	TXI	8,592'	12,932'	12.5	1.62	35	921	9.64	266
Tail	Acid Soluble	12,932'	13,932'	15	2.18	0	116	11.42	45

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one centralizer on every joint for the first 1000' from TD, then every other joint to EOB, then every third joint to KOP, and then every forth joint to intermediate casing.

6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	650'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
650'	4,530'	Brine	9.5 - 10.1	28 - 30	NC - NC
4,530'	8,592'	OBM	8.3 - 9.6	28 - 30	NC - NC
8,592'	9,340'	OBM	8.3 - 9.6	28 - 30	15 - 25
9,340'	13,932'	OBM	8.3 - 9.6	28 - 30	15 - 25

A closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

- a. Drill stem tests are not planned.
- b. The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
Mudlogs	2 man mudlog	Surface to TD	Drillout of Int Csg	TBD
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling	TBD

- c. Conventional hole core samples are not planned.
- d. A Directional Survey will be run.

8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. No abnormal pressures or temperatures are expected. Estimated BHP is: 4500 psi
- b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

For the latest performance data, always visit our website: www.tenaris.com

June 17 2015



Connection: TenarisXP™ BTC
Casing/Tubing: CAS
Coupling Option: REGULAR

Size: 5.500 in.
Wall: 0.361 in.
Weight: 20.00 lbs/ft
Grade: P110-IC
Min. Wall Thickness: 87.5 %

PIPE BODY DATA

GEOMETRY

Nominal OD	5.500 in.	Nominal Weight	20.00 lbs/ft	Standard Drift Diameter	4.653 in.
Nominal ID	4.778 in.	Wall Thickness	0.361 in.	Special Drift Diameter	N/A
Plain End Weight	19.83 lbs/ft				

PERFORMANCE

Body Yield Strength	641 x 1000 lbs	Internal Yield	12630 psi	SMYS	110000 psi
Collapse	12100 psi				

TENARISXP™ BTC CONNECTION DATA

GEOMETRY

Connection OD	6.100 in.	Coupling Length	9.450 in.	Connection ID	4.766 in.
Critical Section Area	5.828 sq. in.	Threads per in.	5.00	Make-Up Loss	4.204 in.

PERFORMANCE

Tension Efficiency	100 %	Joint Yield Strength	641 x 1000 lbs	Internal Pressure Capacity ⁽¹⁾	12630 psi
Structural Compression Efficiency	100 %	Structural Compression Strength	641 x 1000 lbs	Structural Bending ⁽²⁾	92 %/100 ft
External Pressure Capacity	12100 psi				

ESTIMATED MAKE-UP TORQUES⁽³⁾

Minimum	11270 ft-lbs	Optimum	12520 ft-lbs	Maximum	13770 ft-lbs
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OPERATIONAL LIMIT TORQUES

Operating Torque	21500 ft-lbs	Yield Torque	23900 ft-lbs		
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BLANKING DIMENSIONS

Blanking Dimensions

(1) Internal Pressure Capacity related to structural resistance only. Internal pressure leak resistance as per section 10.3 API 5C3 / ISO 10400 - 2007.

(2) Structural rating, pure bending to yield (i.e no other loads applied)

(3) Torque values calculated for API Modified thread compounds with Friction Factor=1. For other thread compounds please contact us at licensees@oilfield.tenaris.com. Torque values may be further reviewed. For additional information, please contact us at contact-tenarishydril@tenaris.com