

XTO ENERGY INC.

Jones KK #2

APD Data

April 7, 2011

Location: 1201' FNL x 1295' FEL Sec 26, T33N, R07W County: LaPlata

State: CO

Bottomhole Location: 665' FNL x 665' FEL Sec 26, T33N, R07W

GREATEST PROJECTED TD: 3678' MD, 3550 TVD

APPROX GR ELEV: 6422'

OBJECTIVE: Fruitland Coal

Est KB ELEV: 6434' (12' AGL)

Please note attached directional program.

1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 3678'
HOLE SIZE	12.25"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer
WEIGHT	8.6-9.0	8.4-9.6
VISCOSITY	28-32	28-38
WATER LOSS	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

2. CASING PROGRAM:

Surface Casing: 8.625" casing to be set at \pm 225' in a 12-1/4" hole filled with 8.50 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-225'	225'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	13.78	29.66	45.19

Production Casing: 5.5" casing to be set at TD (\pm 3678') in 7-7/8" hole filled with 9.20ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-3678'	3678'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	2.38	2.83	3.54

Note: Safety factors are calculated based on a 9.2 ppg mwe with no backup using measured depth assumed to be in a vertical wellbore.

3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

4. OPERATORS MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

- A. Production Hole: Prior to drilling out the surface casing shoe, 3000 psi or even higher pressure rated BOP equipment shall be installed. This system will be compliant with BLM Onshore Order #2 for 3M psi Well Control Systems.

Note: See attached BOP and Choke Manifold diagrams for the Description of the Well Control Systems that are to be used.

5. BOPE testing procedures and frequency:

- A. All BOPE tests will be performed using clear water.
- B. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70% of internal yield pressure of casing if BOP stack is not isolated from casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer.
- C. Annular type preventers shall be tested to 50% of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.
- D. As a minimum, the above test shall be performed:
- a. when initially installed
 - b. whenever any seal subject to test pressure is broken
 - c. following related repairs; and
 - d. at 30 day intervals.
- E. Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.
- F. When testing the kill line valve(s), the check valve shall be held open or the ball removed.
- G. Annular preventers shall be functionally operated at least once weekly.
- H. Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.
- I. A BOPE pit level drill shall be conducted weekly for each drilling crew.
- J. Pressure tests shall apply to all related well control equipment.
- K. All of the above described tests and/or drills shall be recorded in the drilling log.

6. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):

- A. Surface: 8.625", 24.0#, J-55, ST&C casing to be set at $\pm 225'$ in 12-1/4" hole.

134 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 186 ft³, 100% excess of calculated annular volume to 225'.

B. Production: 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at $\pm 3678'$ in 7.875" hole.

LEAD:

± 362 sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft³/sk, 10.55 gal wtr/sx.

TAIL:

± 100 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

Total estimated slurry volume for the 5-1/2" production casing is 881 ft³.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 40%. It will be attempted to circulate cement to the surface.

7. LOGGING PROGRAM:

A. Mud Logger: If requested by Fort Worth Geology, the mud logger will come on after setting surface casing and will remain on the hole until TD. The mud will be logged in 10' intervals.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (3678') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (3678') to the projected top of the Fruitland Formation.

C. Coring and Drill stem Testing: No operations are planned for this site.

8. FORMATION TOPS:

Est. KB Elevation: 6434'

FORMATION	Sub-Sea	TVD
Nacimiento Formation	Surface	Surface
Animas Formation	4981	1453
Ojo Alamo SS	4335	2099
Kirtland Shale	4201	2233
Farmington SS		
Fruitland Formation	3568	2866
Upper Fruitland Coal**	3361	3073
Middle Fruitland Coal*	3271	3163
Pictured Cliffs Tongue	3184	3250
Lower Fruitland Coal**	3000	3434
Pictured Cliffs SS	2994	3440
TD	2884	3550

* Primary Objective

** Secondary Objective

**** Maximum anticipated BHP should be <1,500 psig ****

**** Target formations will be Fracture Stimulated. ****

9. ANTICIPATED OIL, GAS, & WATER ZONES:

A.

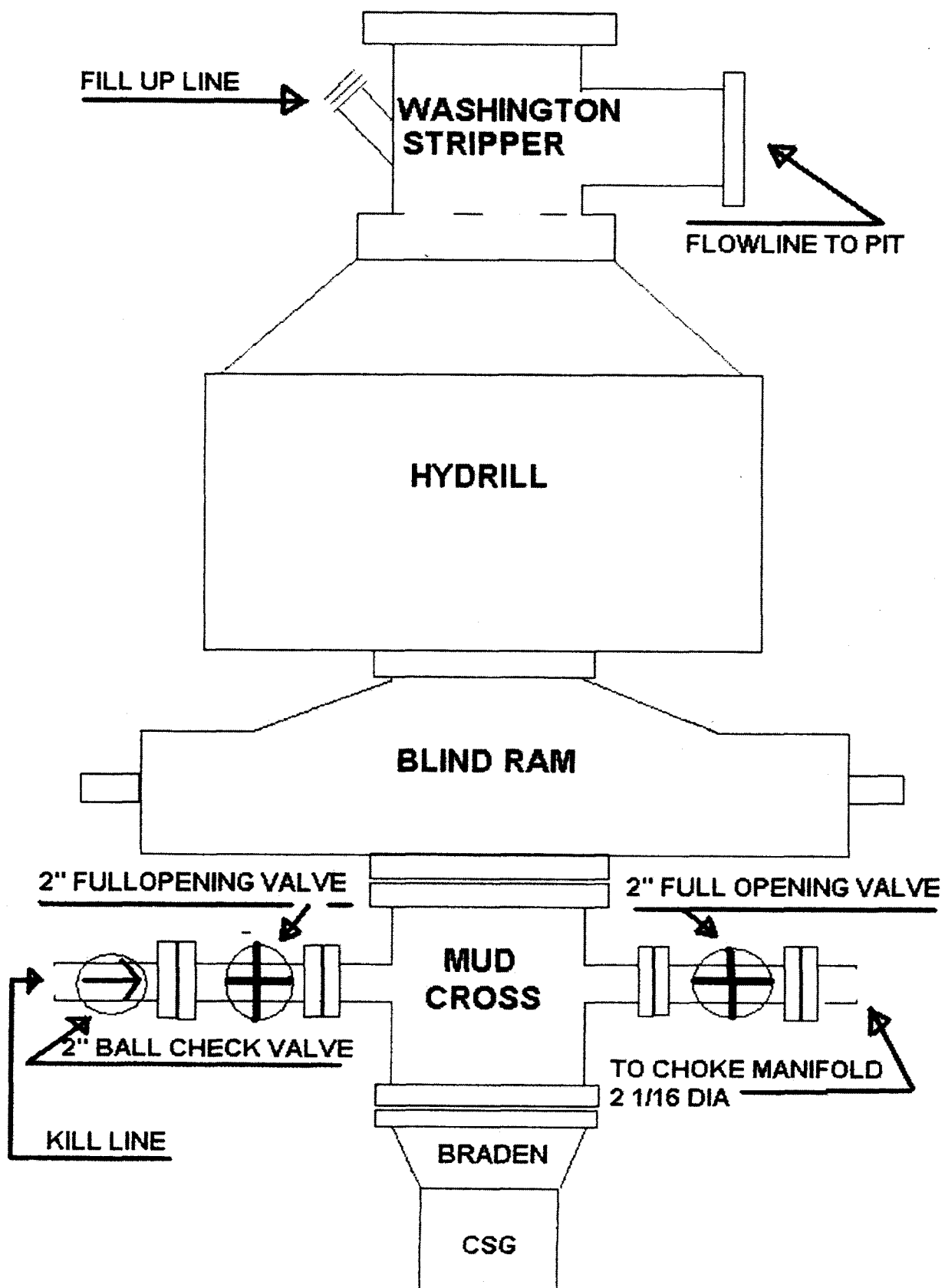
Formation	Expected Fluids	Well Depth TVD
Nacimiento Formation	Water	Surface
Animas Formation	Water	1453
Ojo Alamo SS	Water	2099
Kirtland Shale	Water	2233
Farmington SS	Water	
Fruitland Formation	Water	2866
Upper Fruitland Coal	Gas	3073
Middle Fruitland Coal	Gas	3163
Pictured Cliffs Tongue	Gas	3250
Lower Fruitland Coal	Gas	3434
Pictured Cliffs SS	Gas	3440

- A. All anticipated Appreciable Water Zones will be covered by surface casing.
B. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.
C. H₂S is not anticipated at this site.

10. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
Brian Henthorne	Project Geologist	817-885-2800	N/A

JDN
4/7/11



CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

TESTING PROCEDURE

