

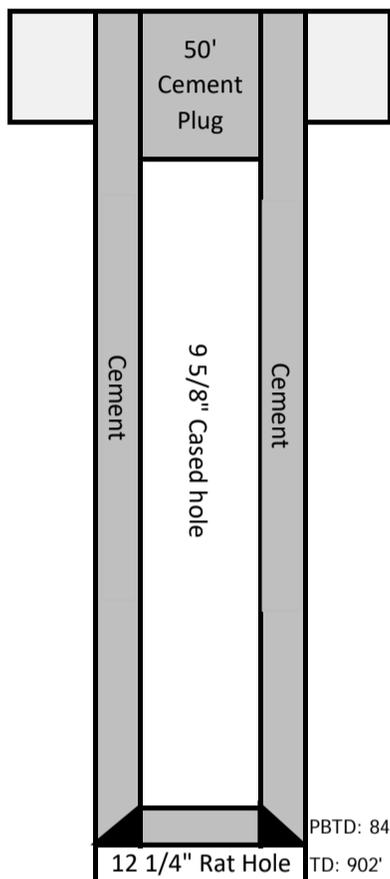
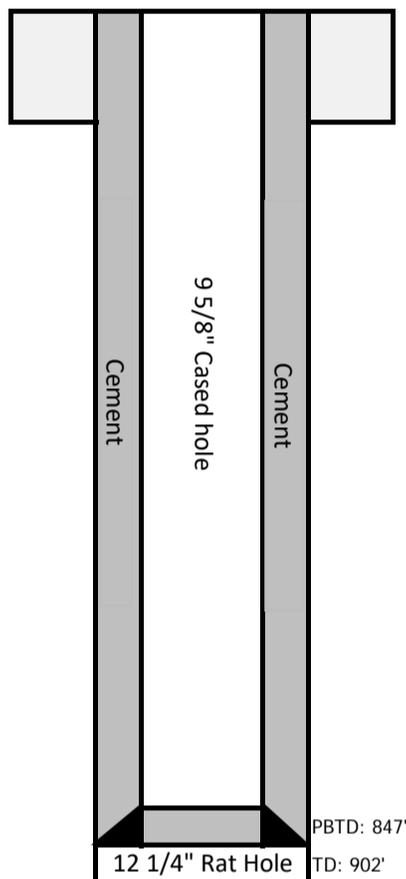


Surface Casing P&A Procedure

WELL NAME: Federal 44A-33-691		FIELD: MAMM CREEK	
QTR QTR: SESE	SEC: 33	TWN: 6S	RNG: 91W
COUNTY: Garfield	ST:	CO	API: 05-045-20858
KB: 6770'	GL: 6747'	TD: 902'	PBTD: 847' Shoe Depth: 890'
Spud Date: 12/14/2011			Float Collar: 847'

Before P&A

After P&A



CASING DETAILS

PURPOSE	HOLE SIZE	CASING SIZE	WEIGHT	GRADE	SET DEPTH	CMT	CMT TOP
CONDUCTOR	24"	14"	36#	Grout	40'	8 yds	0'
SURFACE	12 1/4"	9 5/8"	36#	J-55	891'	250 sxs	0'

PROCEDURE:

1. Perform JSA and review job procedure with all personnel on location.
2. Pressure test each of the surface casings by installing an MIT test flange on the 9 5/8" casing flange and pressure up to 1,500 psi. Monitor and record pressure test falloff using Vanguard owned pressure recording gauge for 15 minutes. After successful test, move to the next well and repeat.
3. MIRU pole rig and RIH with 2 jts 2 3/8" yellow or blue band tubing.
4. Mix and pump 25 sacks Class A cement with 2% CaCl₂. Circulate cement to surface, do not displace tubing with water.
5. POOH and LD tubing.
6. Top off as needed with 5 sacks Class A cement with 2% CaCl₂.
7. Move to the next well and repeat steps 3 through 6.
8. Mark steel flange plate with Company Name, Lease Serial Number, Well Name, and Surveyed Description. Make a small weep hole in the plate and bolt to the flange. **DO NOT** cut the casing below grade.
9. Replace cellar grate.