

**CATCLAW LAW UNIT #11 - Recomplete t. Delaware**  
(Attachment to Forms C-103 and 3160-5)

**PART I - PROCEDURE: (BRUSHY CANYON TEST)**

1. MIRUSU. ND tree and NU BOP's.
2. RU wireline and run in hole with gauge ring for 17-20# 5.50" casing. Shoot 8 squeeze holes at 4,450', RIH w/ cement retainer and set at 4420'.
3. TIH with stinger and tubing. Tag retainer and pressure test plug and casing to 500#. Sting into retainer, open backside and attempt to get circulation with 2% KCl water. Pump 20-25 barrels of mud flush /spacer and 250-300 cubic feet of cement (200-250 sxs).
4. Sting out of retainer and TOH. WOC
5. RU and run a CBL log to evaluate cement job.
6. Perforate 4,125'-4,168' at 2 spf, 90 or 180 deg. phasing. Correlate to the PNP log dated 7-30-93.
7. TIH with a treating packer and acid this zone with 1500 gallons of 7-1/2% HCl and 60 ball sealers.
8. Swab zone for 1 full day to determine the need for a frac job, fluid entry and oil / water cuts.
9. Frac well per forthcoming procedure.
10. Swab and/or flowback.

**PART II - PROCEDURE: (UPPER DELAWARE TEST)**

1. If Brushy Canyon test above is unsuccessful proceed with this shallow Delaware test.
2. Follow the same basic procedure as above but perforate squeeze holes at 2850'.
3. Set retainer and squeeze (circulate) 20-30 barrels of mud flush and 300 cubic feet of cement.
4. Run CBL if necessary and then perforate the following:

2340 - 50'	(10 feet)
2365 - 75'	(10 feet)
2397 - 2412'	(15 feet)
2422 - 42'	(20 feet)
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TOTAL                      55 feet

Note: Correlate to PNP log and perf 2 spf.

5. Acidize and frac per procedure similar to above.
6. Swab test well to determine productivity.