

Synergy Oil & Gas, Inc.

Plug and Abandon Procedure

Brown State Well #28-1

Lea County, NM

January 9, 1997

Total Depth: 12,493'

Plug Back TD: 10,031'

**Casing Record: 13-3/8" 48# H-40 @ 460' cemented w/ 350 sx CIRCULATED
8-5/8" 24# & 32# K-55 @ 4120' cemented w/ 2150 sx
CIRCULATED
5-1/2" 17# N-80 & S-95 @ 12493' 2 stage cemented w/ 2500 sx
DV tool @ 5757'
TOC estimated @ 1685'**

Procedure:

1. MIRU SERVICE UNIT. HANG OFF RODS AND PULL RODS X PUMP. LAY DOWN RODS X PUMP. UNSEAT TAC AND NUBOP. POH W/ TUBING AND TAC.
2. RU WL X TIH W/ 5-1/2" GR X JB TO 9800'. POH. RUN 5-1/2" CIBP AND SET AT 9800'. RD WL. TIH W/ TUBING (OPEN ENDED) X TAG CIBP. CIRCULATE HOLE W/ 10 PPG MUD LADEN FLUID. SPOT 25 SX CLASS "H" CEMENT FROM 9800'-9575'.
3. PULL UP HOLE TO 6950' AND SPOT 25 SX CLASS "C" (6950'-6700').
4. PULL UP HOLE TO 5750'. SPOT 25 SX CLASS "C" (5750'-5500').
5. PULL UP HOLE TO 4175'. SPOT 25 SX CLASS "C" (4175'-3925'). WOC. TAG PLUG.
6. POH. NDBOP X WELLHEAD. SPEAR 5-1/2" CASING. ESTIMATE FREEPOINT BY STRETCH. JET CUT CASING AT FREEPOINT (ESTIMATED AT 1600'). POH X LAY DOWN 5-1/2" CASING. TIH W/ TUBING OPEN ENDED TO 50' INSIDE CASING STUB. SPOT 50 SX CLASS "C" (ESTIMATED 1650'-1450'). WOC. TAG PLUG.
7. PULL UP HOLE TO 450'. PUMP 50 SX CLASS "C" (450'-250'). WOC X TAG PLUG. POH. REMOVE 8-5/8" HEAD AND 13-3/8" HEAD. SPOT 10 SX FROM 40' TO SURFACE. RD X MO SERVICE UNIT. ERECT PERMANENT PXA MARKER. CLEAN X LEVEL LOCATION.