WELL ABANDONMENT PROCEDURE

WELL: South Carlsbad Gas Communitized No. 3-1 DATE: 04-28-87 OBJECTIVE: To plug and abandon the well.

BACKGROUND: This well is currently open in the Bone Springs formation and is incapable of producing in paying quantities. Reservoir engineering has not identified any stimulation, rework or recompletion potential for this wellbore.

Formation psi:3225 psiProd. Csg.:7", 23, 26, & 29#W.O. fluid:9.5 ppg salt mudMinimum drift ID:6.059"Max Anticipated SITP:Max Burst (w/l.l SF)BOP class:IIIH2S: NoneBOP variances apply:NoBOP service:SweetHigh Risk H2S Equip Req:No

PROCEDURE:

- 1. MIRU WSU. Nipple up class III BOP. Load tubing with 9.5 ppg brine mud to kill well. Unset retrievable packer and TOH with 2-3/8" tubing string.
- 2. MIRU electricline unit and class II wireline lubricator. Install lubricator on top of BOP and test to class II wireline lubricator specifications. RIH with a CIBP on electricline and set at approximately 7650'. Dump bail a minimum 35-foot cement cap on top of the bridge plug using 6 sxs of class "C" neat cement mixed as follows: weight: 14.8 ppg, yield: 1.32 cfps, water required: 6.0 gps. Retrieve bailer. Ful 7" with 9.5 PPG while AND 1357 to 500 ps.
- 3. Weld a 7" lift sub on the casing. If unable to weld onto 7" casing, use a casing spear. Pick up on casing and remove slips. Nipple up a BOP with 7" casing rams onto the 9-5/8" casinghead.
- 4. RU electricline unit and class II wireline lubricator again. Install lubricator on top of BOP and test to class II lubricator specifications. RIH with freepoint indicator and determine free point of casing. If casing is free at or below 5350', cut the 7-inch casing at 5350' with a chemical cutter. Retrieve casing cutting tool and rig down lubricator. If casing is not free above 5350', POH with free point indicator. Proceed with step no. 8.
- 5. TOH with and lay down recovered 7" casing. Have a crossover swage with a value on top of it to 7" 8-round casing threads in case the need to circulate arises while pulling casing. Nipple down 7" casing BOP- (or change out rams to 23/8" pipe rams) and nipple up tubing BOP.
- 6. TIH with open-ended 2-3/8" tubing to 50' below the top of the cut casing (approximately 5400'). Circulate bottoms up to