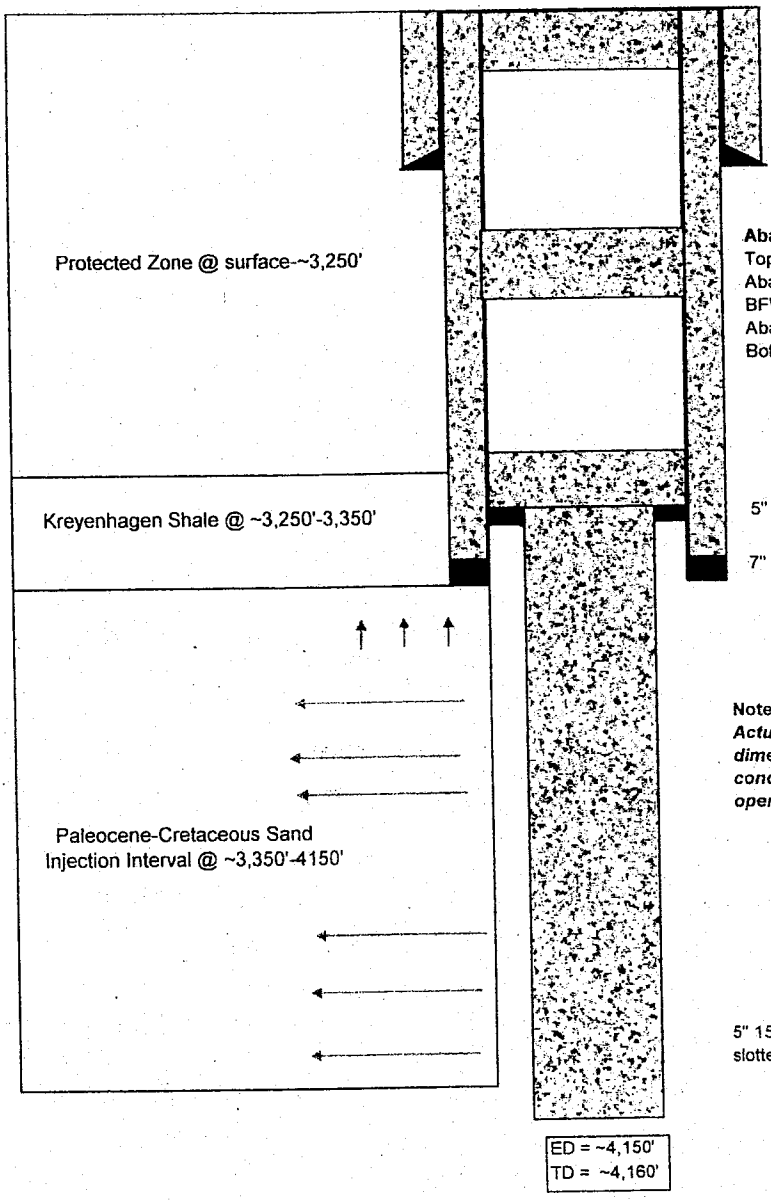
Hilmar Cheese Company: Proposed Injection Well Schematic

General Abandonment Plan - All Wells

KB = ~95' (Mat +10')



9 5/8", 36# J-55 cem @ ~800' to surface

Abandonment Plugs Detail:
Top Cement plug @ 0-100'
Abandonment Mud @ 100-450'
BFW Cement Plug @ 400-600'
Abandonment Mud @ 600-3200'
Bottom Cement Plug @ 3200-4150'

5" Top Liner Hanger @ ~3,300'

7" 23# J-55 cem @ ~3,350' to surface.

Note:
Actual depths, csg diameters, and slot dimensions subject to change based on conditions encountered during drilling operations

5" 15# J-55 Liner @ ~3,300-4,150'
slotted 2" X 200M, 24R, 6" C @ ~3,350-4,150'

HILMAR CHEESE COMPANY

ABANDONMENT PROCEDURE FOR CLASS I INJECTION WELLS

Note: Notify EPA at least 30 days before scheduled abandonment. EPA to approve final abandonment procedure and witness abandonment work.

1. MIRU workover rig, pump, portable tank and 140 joints of 2 3/8" work string. Fill tank with fresh water. Remove wellhead, unland tbg, install & function test BOPE.

2. POOH and lay down 5" tubing and seal assembly. Pick up and RIH with 2 3/8" work string to ED @ ~4,150' (EPA to witness cleanout tag).

3. Circulate hole clean (hole volume ~146 bbls). Pull tbg tail 10' off bottom to ~4,140'.

4. MIRU cementers. Lay a cement plug from 4,150' to 3,200' (at least 100' above liner top) as follows:
   a. Pump 5 bbls fresh water preflush at 3 BPM.
   b. Pump 20 bbls class "G" neat cement at 3 BPM.
   c. Displace cement with 13 bbls water.

5. Slowly pull tbg to 3,100'. Reverse circulate hole clean, SDFN.

6. RIH, tag TOC (EPA to witness). If cement found below 3,200', consult engineering and prepare to bail or pump additional cement to bring TOC above 3,200'.

7. Circulate 102 bbls EPA-approved abandonment mud down tbg to fill csg to 600'. Slowly pull tbg tail to 600'.

8. MIRU cementers. Lay a cement plug from 600' to 400' across BFW @ 500' as follows:
   a. Pump 5 bbls fresh water preflush at 3 BPM.
   b. Pump 8 bbls class "G" neat cement at 3 BPM.
   c. Displace cement with 1.5 bbls water.

9. Slowly pull tbg to 300', reverse hole clean, POOH & SDFN.

10. Tag TOC in AM with tbg. Consult engineering and pump additional cement to bring TOC to at least 400' if necessary. Circulate ~16 bbls EPA-approved mud down tbg to fill well.

11. Pull tbg tail to 100' and circulate ~4.0 bbls cement down tbg to fill csg with cement from 100' to surfaced.

12. Cut and retrieve 7" csg from 5' below surface.

13. RIH with 2 3/8" tbg to 100' and circulate ~4.0 bbls cement down tbg to fill csg with cement from 100' to surface. POOH, RDMO workover rig.

14. Remove cellar. Surface pour cement in all exposed annuli. Weld cap on well & install abandonment marker.