

WELL DATA:

T.D.: 762' 4½" casing @ 747'
P.B.T.D.: 743'
Perforations: 648'-672' & 682'-688'

OBJECTIVE: To Repair Shallow Casing LeakAugust 4, 1993:

Loaded the hole with the injection system water. The objective was to determine if the well would stand full of fluid. The well took as much water as the injection system would put out.

Ran Arrow tension packer, two joints of 2" tubing, and packed the annulus with a stuffing box. Pressured up the annulus with the plant and it held. Ran in the hole with one joint and pressured up with the packer rubber at a depth of 65'. Lowered the packer one foot and it stopped. It was assumed that the centralizers hung up in the hole. Set packer and pressured up; the fluid came around. Marked tubing and tallied pipe; 66.35'.

NOTE: Well records indicate that in June of 1989, the packer was initially set at 96.20' and did not hold. The packer was run to 120', set and it held. Injection was resumed.

August 8, 1993:

Ran 1" tubing to 200'. Mixed five gallons cement and poured into tubing. Chased cement with water and let it equalize. Pulled 1" tubing.

August 10, 1993:

Ran in hole with 1" tubing to tag the cement plug (200'); didn't find any cement. Ran to bottom, 743'. Tagged a soft bottom @ 723'. Tried to circulate the hole clean. Pressured up with plant pressure. The tubing was plugged. Pulled out of hole (wet).

Ran 10 joints tubing to a depth of 250'. Circulated hole clean and did not recover any cement.

Mixed nine gallons of cement and poured in 1" tubing. Chased cement with water and let it equalize. Pulled out of hole and filled with water. Put a valve on the 4½" casing and closed valve. Rigged down and moved rig to No. H-20.

Savonburg Field

Nelson KW-9

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August 11, 1993:

Ran in hole with 1" tubing (250'); didn't tag any cement. Ran to depth of 700' and began circulating while running in hole with 1" tubing. While circulating, ran in hole to a depth of 741'; tagged a solid bottom. Circulated iron sulfide and scale along with cement. Took a water sample from the circulated water to test the chlorides (4077 mg/liter). The formation was taking water, not allowing the plug to set up. Took another water sample from bottom for chloride (5460 mg/liter). Suspended operations.

October 12, 1993:

Set up Klein pulling unit. Ran 33' (4 joints) with Baker 4" x 2" packer in tension mode. Set anchor at 132', pulled tight and clamped off. Pulled off well and rigged down unit.