## Southern California Federal Unit #9

**7/21/96** Spud well @ 2:30 am, 7/21/96. Drilled to 160' w/17 1/2" bit. On 7/22/96, drilled to 850' & TD 17 1/2" hole @ 6:00 am, 7/22/96.

7/23/96 Ran 19 jts., 13 3/8", 54.5# JSR3 ERW casing landed @ 850'. Cemented w/475 sks 35/65 Poz "C" + 6% gel + 5% salt + .25 lb/sk Cello Flake. Yield 1.94 cu-ft/sk + 200 sks "C" + 2% CaCl2 + .25 lb/sk Cello-seal. Yield 1.34 cu-ft/sk. Total of 675 sks pumped. Plug down @ 4:45 pm 7/22/96. Circulated 260 sks cement to surface. 13 3/8" weld on wellhead. Nipple up BOP's. WOC for 12 hrs.

7/24/96 Test blank and pipe rams, hydril & choke manifold to 1000 psig. Held OK. Continued drilling operation w/11" bit. Drlg cement & formation from 850' to 1850'.

7/25/96 Continued drilling w/11" bit from 1850' to 4015' (7/25-7/27/96). Rigged up Halliburton Logging Service & ran logs SDL/DSN/DDL/GR/Caliper from TD (4015') to 3000'.

**7/28/96** Continued drilling w/11" bit from 4015' to 4050'. TD 11" hole @ 4050' @ 7:00 am, 7/27/96. Ran 96 jts, 8 5/8", 32# & 24#, J-55 csg. w/shoe landed @ 4004'. Ran free point tool, and csg. is free @ 3967'. Perforated 8 5/8" csg @ 3900'. Pump in @ 6 BPM rate @ 250 psig. DV stage tool @ 2552'. Cemented 1st stage w/100 sks thickset + 300 sks 35/65 Poz "C" w/6% gel + 5% salt + .25 lb/sk Celloseal + tailed in w/150 sks "C" w/1% CaCl2 + .25 lb/sk Celoseal. Total of 550 sks cmt pumped. Note: Cemented through 4 perforations @ 3900'. Plug down @ 3:00 am, 7/28/96. No sks of cement circulated to surface. WOC 4 hrs between stages. Open stage tool @ 2552'. Cemented 2nd stage w/650 sks 35/65 Poz "C" w/6% gel + 5% salt + .25 lb/sk celloseal + tailed in w/125 sks "C" + 2% CaCl2 + .25 lb/sk celloseal. Total of 775 sks cement pumped. Plug down @ 8:00 am, 7/28/96. No sks of cement circulated to surface after 5 min. of pumping on 2nd stage began. Decreased to 30% to 50% returns by end of displacement. Note: Complete total of 1325 sks cement pumped for intermediate 8 5/8" casing string.

7/29/96 WOC a total of 12 hrs. Cut off 8 5/8" csg. Nipple up wellhead & BOP. Test BOP & choke manifold to 3000 psig. Held OK. Drill cement from 2511' to 2552' and drill stage tool @ 2552'. Pressure test csg & DV stage tool to 1000 psig. Held OK. Drilling cmt @ 3200'.

7/30/96 Drlg cement from 3200' to float collar @ 3959'. Drill float collar and shoe to TD of 4050'. Batch mix 65 sks "C" neat cement. Spot cement plug from 4050' to 3800' @ 1:00 am, 7/30/96. Pressure hole to 500 psig, holding. WOC for 4 hrs.

7/31/96 Tag cement @ 3910' w/7 7/8" bit. Drill cement from 3910' to 4050'. Continued drilling formation w/7 7/8" bit from 4050' to 4480'.

**8/1/96** Continued drilling operation with 7 7/8" bit from 4480' to 7210', (8/1-8/10/96). TD 7 7/8" hole @ 7210' @ 9:30 pm, 8/9/96. Circulated & condition hole and prepared hole for logs.

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**8/11/96** Rigged up Halliburton Logging Service and ran DLL/DSN/SDL/GR/Caliper in 1 run from loggers TD of 7192' to 4008'. Rigged up wireline & ran magnetic resonance log from 7150' to 4390'. Cut 26 side wall cores.

**8/12/96** Ran 164 jts., 5 1/2", 15.5# K-55, LT&C csg & landed @ 7210'. Top of float collar @ 7163'. Cemented production csg w/1265 sks 50/50 Poz "C" + 2% gel + .5% FL-24 + 5% salt. Plug down @ 4:45 am, 8/12/96. Circulated 266 sks cement to surface. Float held.

8/13/96 Raise BOP's, cut off 5 1/2" csg., nipple down BOP, nipple up wellhead. Released rig @ 9:00 am 8/13/96.

