Page 3 Zink (Hilliard)

ZINK STATE #1-Northeast North Gladiola Lea County, New Mexico

- 7/17/79 Activities on 7/17/79, reported at 6:45 CST, ran and set retainer at 10,260' below K9, mixed 75 sx class H, 0.5% CFR2, 5# salt per sx pumped 1.4 bbl slurry into formation at 2600# PSI. Reversed out 12.4 bbls cement. Pulled out of hole with tubing and stinger. Picked up drill collars and bit and started in hole. Will run tubing to 8000' then shutdown over night.
- 7/18/79 Activities on 7/18/79, reported at 9:00 CST, making trip to replace bit, continued going in hole with bit, and drill collars and drilled, retainer and cement from 10,255' to 10,295', drill bit gave out at 10,295'. Encountered difficulty in drilling up Pengo cement retainer, will continue drilling up cement and then pressure test Canyon perforations. W.O. rig working 12 to 14 hour days.
- 7/19/79 Activities on 7/19/79, reported at 9:15 PM CST. Drilling cement plug at top of strawn, completed drilling and cement at approximately 10,356' by tubing tally. Cleaned out hole, tested cement squeeze at 2100# PSI, held. Ran bit, drill collars and tubing to 10,541', rotated through bridge. Found retainer and cast iron bridge plug at 10,596' and drilled approximately 1'. Cleaned hole and shutdown over night. Estimated costs incurred since 12:00 noon on July 13, 1979, \$19,597.00. Heavy rains at location this date have only moderately slowed down work progress. Road and location remain in good condition.
- 7/20/79 Activities on 7/20/79, reported at 7:20 PM CST. Drilled balance of broken retainer, cement and bridge plug at 10,600'. Pushed debris to bridge plug at 11,594' and stopped. Pulled out of hole with tubing, preparing to squeeze Strawn perforations tomorrow. Est. cost this date \$2,992.00, cumulative costs to date \$22,589.00.
- 7/21/79 Activities on 7/21/79, reported at 6:30 PM CST. Ran tubing retainer and set retainer at 10,567', mixed 75 sx class H cement with 5# salt, 0.5% CFR II per sack, pumped cement and 52 bbls.+ flush and formation broke down, stopped pump. Let cement and flush go to formation with hydrostatic pressure. After cement cleared retainer Wolf thought squeeze jcb had not been effective, however, after pumping cement away, the zone squeezed off completely. Pressured off to 2500# and held. Reversed tubing and recovered no cement. Pulled out of hole with tubing. Picked up bit, drill collars and ran tubing to 8,350'. Shutdown over Sunday. Cost this date \$6,794.00, cumulative cost to date \$29,383.00.
- 7/22/79 Shutdown over Sunday.
- 7/23/79 Activities on 7/23/79, reported at 7:40 PM CST. Making trip for new bit. Ran the remaining tubing to the retainer at 10,567', drilled retainer and pushed to approximately 10,935' and stopped and started drilling. Drilled retainer and what appears to be remainder of plug that was pushed to 11,600'. Also drilled some cement. Drilled metal and began recovering 100% cement. Drilled to approximately 10,975' and drilled very slowly in mush cement. Started out of hole for bit. Shut down over night. Will change to drag bit in order to effectively drill anticipated cement. What has appeared to have happened is that there was a split in the casing at some point below the Strawn perforations and that such split was interconnected to a channel behind the casing by reason that our fresh cement was considerably lower in the casing than anticipated. Therefore, it appears that the previous testing of the Strawn Zone of interest was not effective. Cost this date \$2,822.00, cumulative cost to date \$32,205.00.
- 7/24/79 Activities on 7/24/79, reported at 8:30 PM CST. Finished trip for new bit. Drilled 290' of cement to 11,267'. Cleaned tubing shutdown over night. Cost this date \$3,256.00, cumulative cost to date \$35,461. Position of split in casing between Strawn and Morrow is unknown at this time.