CEBH NO. 7
WELL HISTORY

6/30/92 Moved in and rigged up Longyear rig # 601 on Bend Highlands Location. Dug sump, set 500 barrel water tank, installed piping. Installed and tested 6" 900 SOW casing head on 4 1/2" 11.5# casing.

7/1/92 Installed and tested 6"900 double Shaffer and Shaffer annular preventer. Double Shaffer would not test. Removed BOP.

7/2/92 Installed replacement BOP. No test.

7/3/92 Installed replacement parts. Dug to first collar on casing below ground, chipped cement off of casing and made joint up 1/2 turn. Cemented casing to surface. Tested all BOP segments and kelly cock to 700 psi., OK. Test witnessed by Mr. Dennis Davis, BLM representative. Cored cement w/ 3.895" bit to 150'.

7/4/92 Cored cement to 400'. Tested casing and BOP to 750 psi. Test OK. Cored unconsolidated formation from the 4 1/2", 11.5# K55 Buttress casing at 446' to 476'.

7/5/92 Cored 3.895" hole to 550' in unconsolidated formation. Cemented for hole stabilization from 550' to 410', w 7 sacks cement w/ 3% Cacl2. CIP @1230 hours. WOC

7/6/92 Cored firm cement from 440' to 550' and formation from 550' to 666'. Fluid level at 60, w/ temperature at 60 degrees F.

7/7/92 Cored 3.895" hole from 666' to 830' with no returns. Temperature reading 58 degrees F. Fluid level at 500'.

7/8 92 Cored 3.895" hole from 830' to 977'. Experienced high torque. Wiped hole. No circulation. Function tested BOP'S.

7/9/92 Cored 3.895" hole from 977' to 1086' Fluid level at 600'. Temperature 60 degrees F. No circulation. Continually mixing and adding drilling fluid.

7/10/92 Continued to core unconsolidated formation from 1086' to 1233'. Pipe torque increased. Found a bent HQ tube that had been at 680'. Function tested BOP'S. Washed and reamed to 1233'.

7/11/92 Pulled core barrel. Found to be full of broken formation. Cored 3,895' hole from 1233' to 1307. Adding fluid with no returns. Experiencing hole sloughing.
7/12/92  Cored 3.895" hole from 1307' to 1333'. Jammed core barrel and parted line. Pulled string. Function tested BOP's. Washed assembly to T.D. Cored to 1415 with no circulation in unconsolidated formation.

7/13/92  Encountered high torque while coring from 1415' to 1478', worked pipe and washed hole.

7/14/92  Cored 3.895" hole from 1478' to 1654' with no circulation. Temperature over cored interval, 60 to 68 degrees F. Continually adding drilling fluid.

7/15/92  POH. Function tested BOP's. Wased into hole. Wiped hole. Found hole had bridged at 550', 680' and 1000'. Had 50' rubble on bottom. Cored from 1654' to 1778'.

7/16/92  Cored 3.895" hole from 1778' to 1819'. Stuck HQ string, worked free. POH and found dented and bent pipe that was located at 480' while drilling. Function tested BOP's. RIH with no obstructions. Cored from 1819' to 1918' W/ 3.895' bit.

7/17/92  Cored 3.895" hole from 1918' to 2020', with no circulation and high torque. Added gel, fiber and polymer down pipe and annulus with no returns.

7/18/92  Cored 3.895' hole from 2020' to 2038'. Experienced high torque. Attempted to work string and condition hole. Stuck string with bit at 2010'. Had small amount of movement for a short period. Pipe stretch indicated problem area between 700' and 1000'. Fished inner barrel with NQ pipe.

7/19/92  Made up a 2" pipe stinger on bottom of NQ pipe. Ran through the center of the HQ bit to 2038. Washed hole and displaced a cement plug from 2038' to 1973'. CIP at 1600 hours. Cut off HQ pipe approximately one foot below side outlets on casing head. Installed NQ size rams in BOP. Function tested BOP's.

7/20/92  Found 3' fill on bottom. Repeated cement plug with .250 lineal ft. cement with 3% CaCl2 through 2" stinger at 2038'. Regained circulation during the displacement. CIP at 1000 hours. WOC. Found soft cement at 1930'.

7/21/92  Drilled soft cement to HQ shoe at 2010'. Drilled landing ring and center out of the HQ bit. Found hard cement below HQ shoe. Drilled hard cement to 2038', with partial circulation. Cored formation with 2.980" Longyear NQ diamond core bit. Cored from 2038' to 2050'.

7/22/92  Cored from 2050' to 2186' with no returns while adding drilling fluid to both the annulus and the pipe.

7/23/92  Cored 2.980" hole from 2186' to 2269'. Encountered a void that offered no resistance to lowering the string, from 2260' to 2264'. Void filled with rubble. Washed and cleaned hole. Fluid level fell from 300' to 1200' and returned to 300'. Operated BOP's.
7/24/92 Cored 2.980" hole from 2269' to 2284' in unconsolidated formation. Displaced a 157 lineal ft. cement plug on bottom for hole stabilization.

7/25/92 Function tested BOP’s. Found top of cement at 2124'. Cleaned out soft to medium firm cement, to hard cement, from 2124' to 2284'. Previous void and rubble area presented no problems. Cored from 2284' to 2340' with no circulation. Temperature at 2340', 82 degrees F. Suspected inaccurate.

7/26/92 Cored 2.980" hole from 2340' to 2460', with no circulation and continual drilling fluid addition down the annulus and NQ pipe.

7/27/92 Cored from 2460' to 2535' with no returns. Temperature, 71 degrees F. POH. Changed bit and functioned BOP’s.

7/28/92 Cored from 2535' to 2665' with no returns. Temperature 71 degrees F.

7/29/92 Cored 2.980" hole from 2665' to 2704'. Repaired rig. Cored to 2740', with no circulation. Temperature at 2740', 71 degrees F.

7/30/92 Cored from 2740' to 2847' with no circulation. Fluid level dropped from 300' to 1800' while coring at 2825'. Level returned to 300' after a small loss of mud pit volume.

7/31/92 Cored from 2847' to 2935' with no circulation. Fluid level at 300'. Adding drilling fluid continually. Tested BOP functions. Temperature, 72 degrees F.

8/1/92 Cored 2.980" hole from 2935' to 3060' with no returns. Adding fluid. Fluid level at 50'. Temperature 76 degrees F.

8/2/92 Cored from 3060' to 3190', with continual addition of drilling fluid and no returns to surface. Temperature at 3100', 76 degrees F.

8/3/92 Cored 2.980" hole from 3190' to 3310' with no returns. Fluid level at 50' and temperature 80 degrees F.

8/4/92 Cored from 3310' to 3430' with no circulation, adding drilling fluid. Bottom hole temperature, 78 degrees F.

8/5/92 Short tripped drill string from T.D. at 3430' to HQ pipe shoe at 2010. Ran to 3430' and displaced a high viscosity gel, polymer fluid in the amount of two hole volumes. No fluid to surface. Pulled and laid down NQ pipe and tools. Ran 106 joints 2 1/16" OD integral thread tubing with an approximate 1 3/4" ID. Tubing manufactured with a Gulf States thread, similar to Hydril. Tagged bottom and picked up 20'. Hung tubing on 6" 900 Flange on 6" 900 casing head. Tubing inserted through flange and welded immediately below upset to the flange. Upset will not pass through hole in flange. Tubing hung at 3410'. Installed a 2" 800 psi working pressure, 1600# test gate valve crossed over to the tubing at the surface.
8/5/92 Installed a similar 2" valve on one casing head side outlet and bull plugged the opposite side. Placed a bull plug in the top valve, made up loosely, for a thread protector. Released rig and rigged down. Pumped water sufficient to clear the tubing. The tubing was drifted as it was run.

Note: The bottom joint of tubing is orange peeled with two 1/2" holes on each side, plus 4 additional perforated slots, approximately 8" X 1/2", 5' apart, beginning 5' above the bottom of the joint.

The valves were locked together with a chain and combination lock. An open ended barrel was placed over the well head with a piece of plywood over the top. An earth berm was placed around the barrel as protection for snowmobile riders.

THE COMBINATION IS 25---39---9