

DRILLING HISTORY

McGee 1500-2, Humboldt County, Nevada

10 June - 23 June 79

1. OPERATOR: Earth Power Production Company
Tulsa, Oklahoma
 2. CONTRACTOR: American Geothermal Drilling Co.
Tulsa, Oklahoma
 3. WELL LOCATION: T.45N, R.27E, Sec. 26 - NE NE
Elevation: 4610'
 4. SPUD DATE: 10 June 79
 5. COMPLETION DATE: 23 June 79
 6. RIG DESCRIPTION: Portadrill Model 524, Serial #662,
60,000 lb. mast, 5½x8 Gardner-Denver
mud pump, Atlas Copco 125 psi @ 330
CFM air compressor. 2000 ft. 2-7/8"
IF drill pipe. 80 ft. 4½" drill
collars.
 7. TOTAL DEPTH: 1680'
Cased to 1670' with 2-3/8" tubing.
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<u>DATE</u>	<u>DEPTH</u>	<u>SUMMARY OF OPERATIONS</u>
10 June 79	0-400	Rig up. Spud 9-7/8" hole with air at 11:15 a.m. Large cavities forming in hole. Hole won't stay clean. Set 10 ft. of 8-5/8" casing. Drill with 6-3/4" bit. Depth is 120 ft. at 2:30 p.m. Drilling with air but hole is too wet to stay clean. Mud up. Drilling is fast in interlayered sandstones. Thin air fall tuff at 110 ft. Depth is 400 ft. at midnight.
11 June 79	400-500	Depth is 500 ft. at 2:30 a.m. Trip out of hole. Rig shut down from 3:00 a.m. until noon. At noon, run 463 ft. of 2-3/8" tubing. Standby for temperature survey.
12 June 79	0-209	Pull 2-3/8" tubing after temperature survey. Pull 8-5/8" conductor. Ream hole with 12-1/4" bit to 209 ft. Run 202 ft. of 8-5/8" T&C casing set at 205 ft. Cement thru casing with 72 sax Portland Type I-II cement. Plug down at 11:00 p.m. Clean out mud pumps.
13 June 79	209	Cement 25 ft. down (6 ft. above top casing collar). Cement with 6 sax to surface. Nipple up to 6" double manual BOP; blind rams on bottom, 2-7/8" pipe rams on top. Pressure up to 250 psi on blind rams. Pressure drops to 242 after 30 minutes. Go in hole with drill pipe. Pressure up on pipe rams to 225 psi. Pressure steady at 225 for 30 minutes. BOP test passes. Begin drilling out cement at 2:30 p.m. Top of cement @ 100 ft. Drill out cement to 160'. Stop to pump out mud pits. Haul contaminated mud to Denio dump.
14 June 79	209-785	Drill cement to 209 ft. with 6" bit. Clean out mud pits once more. Mix up fresh pits. Wash to 505 ft. Hole is fairly clean. Depth is 605 ft. at noon. Depth is 780 ft. at 10:00 p.m. Bit not cutting.

<u>DATE</u>	<u>DEPTH</u>	<u>SUMMARY OF OPERATIONS</u>
15 June 79	780	Trip for new bit. Bearings frozen and bit worn flat. Out of 6" bits. Re-enter hole with 6-1/4" bit. Wash to 505 ft. Ream to 780 ft. by noon. Mud pump clutch shot. Rig is down.
16 June 79	780	Rig down. Work on clutches.
17 June 79	780	Rig down.
18 June 79	780	Rig down.
19 June 79	780-1020	Rig back in operation at 4:00 p.m. Trip into hole with 6" bit. Making mud at 900 ft. At 1020 ft. mud too thick to pump. Pump out pits.
20 June 79	1020-1200	Pump out mud pits. Mix up fresh pits. Drilling again at 4:00 a.m. Depth is 1120 at 8:00 a.m. Drawworks clutch overheated. Trip out of hole. Work on drawworks clutch. Trip into hole at 8:00 p.m. Drilling ahead at 9:00 p.m. Depth is 1200 ft. at midnight.
21 June 79	1200-1550	Drilling ahead. Intermittently hard and soft layers. Hole still making mud. Depth is 1520 at noon. Pump out pits. Mix up fresh pits.
22 June 79	1550-1680	Trip out at 1:00 a.m. for new bit. Trip in with 5-5/8" bit. On bottom at 5:45 a.m. Depth is 1680 ft. @ 10:00 a.m. Trip out of hole. Mix up fresh pit to condition hole. Condition hole for 4 hours.
23 June 79	1680	Trip out of hole. Haul tubing to site. Run 1670 ft. of 2-3/8" tubing.