ORNI 4, LLC July 5, 2002

## Newberry Well 88-21TCH Abandonment Lease Number 45505 Location

## 100' W and 500' N of SE corner Section 21 T21S R12E Deschutes County, Oregon

- 6/12/02 Moved Snow Oilfield Service from Woodland Ca. to Newberry Crater. Shut down for night at 9pm.
- Moved in and rigged up on Well 88-21TCH. Pumped 34 BBLS fresh water down the annulus to kill well. Circulated well with 60 BBLs; no temperature. Nippled down tree; could not pick up on donut because of threads in donuts. Nippled up tree. Shut down for night 5 pm.
- Opened well; well on vacuum. Nippled down tree; welded tubing collar on donut. Picked up to check tubing under donut; set back in head. Nippled up 6 1/16", 5000 double gate and Hydril; rigged up floor. Pulled out of hole with tubing, well flowing at 3742.5'. Shut in and circulated well. Pulled out of hole with tubing. Hole in tubing 51 joints down (1555'). Circulated gas out of well. Tubing plugged. Pulled out w/plug turbine. Shut in well and pressure tested blind. Shut down for night at 9 pm.
- Picked up 3 ½" inside fishing tools. Latched on 3 ½" drill rod, 16' below ground level. Worked tubing from 0 to 40,000; pipe stuck. Released fishing tool, shut well in with blind and pressure tested blind rams. Shut down for night 4pm.
- Pumped 30 BBLs fresh water to kill well. Rigged up Halliburton wire line service. Ran in hole to 1610' with shot rod, set charge off. Pulled out of hole and rigged down Halliburton. Picked up fishing tool and stabbed into top of fish. Worked pipe from 0 to 50,000; pipe came in two. Pulled out of hole laying down 3 ½" drill rod. Drill rod pulled in two at 1224', 10' KB, and 16' to top of fish. Top of fish at 1276'. Closed in blind ram and pressure tested. Shut down for night at 8pm.
- Checked pressure on well, had 15 to 20 psi. Pumped 1 ½ BBLs per min, 500 psi. Pumped a total of 55 BBLs fresh water. Changed out rams to 2 1/16" pipe rams. Ran in hole to 1597'. Rigged up Halliburton. Cement with 30 sacks (8.3 BBLs) 538' of class "G" with 40% SF .65 CFR-3. Pulled out of hole with tubing. Filled well with water. Shut blind rams. Pumped cement down with 3.1 BBLS water. Waited on cement. Shut down for night at 4pm.

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Checked pressure on well; no pressure. Opened well and ran in hole with tubing. Tagged top of cement at 1536'. Rigged up Halliburton. Cemented with class "G" with 40% SF and .65 CFR-3, Pumped 8.3 BBLs (30 sacks) 538'. Pulled out of hole with tubing. Shut well in. Shut down for night at 4pm.

De-iced rig. Well had no pressure. Ran in hole with tubing; tagged cement at 667', Circulated bottom up. Cemented with 11 BBLs of class "G" cement with 40% SF and .65% CFR-3. Circulated cement to surface. Laid down tubing. Rigged down and moved to 23-22. Cut off 7" casing 5' below surface and welded on top plate. Filled in hole and cleaned location. Moved rig to well 23-22. Shut down for night 8pm. Left 1.90 Tubing, 3 1/2" drill rod and 7" wellhead on site.

7/2/02 Loaded out 3 ½" drill rod, 1.90 tubing, 7" well head, 22" well head off well 88-21TCH pad, 22" x 12" expansion spool and 12" master valve off well 23-22 pad. Moved back to yard in Newell, Ca.