

APPENDIX

Magma-La Grande Well No. 1
 Union County, Oregon
 NW 1/4, Sec. 9, T4S, R39E
 (1150' S of N line; 1900' E of W line)

| Sampled Drilling Depth (Feet) | Bulk Lithology | Remarks | Rock Unit Drilled |
|--|---------------------|--|----------------------------|
| 0-30 | Mixed rock types | Andesite and basalt | Alluvium and Colluvium |
| 30-60 | Mixed rock types | Basalt dominant, rounded fragments common | |
| 60-90 | Mixed rock types | Basalt, andesite, and many cavings | |
| 90-120 | Mixed rock types | As above, iron-oxide cement abundant | |
| 120-150 | Mixed rock types | As above, rounded fragments, iron-oxide staining | |
| 150-180 | Mixed rock types | As above, cavings common | |
| 180-210 | Mixed rock types | As above, rounded fragments common | |
| 210-240 | Mixed rock types | As above | |
| 240-270 | Mixed rock types | As above | |
| 270-300 | Mudstone | As above, minor cavings, micaceous flecks common | |
| 300-330 | Mudstone | As above | Lacustrine deposits |
| 330-360 | Mudstone | As above | |
| 360-390 | Mudstone | As above | |
| 390-420 | Mudstone | As above | |
| 420-450 | Mudstone | As above | |
| 450-480 | Mudstone | As above | |
| 480-510 | Mudstone | As above | |
| 510-540 | Mixed rock types | Abundant red mottled-to-gray glass-rich andesite, bedrock reported at 518 ft | |
| 540-570 | Glassy andesite | As above, microcavities lined with silica, less mottling | Andesite of Craig Mountain |
| 570-600 | Glassy andesite | As above, silica overgrowths | |
| 600-630 | Glassy andesite | As above, red discoloration present | |
| 630-660 | Glassy andesite | As above | |
| 660-690 | Glassy andesite | As above | |
| 690-720 | Glassy andesite | As above | |
| 720-750 | Glassy andesite | As above, red-gray mottling common | |
| 750-780 | Glassy andesite | As above | |
| 780-810 | Glassy andesite | As above | |
| 810-850 | Glassy andesite | As above | |
| 850-870 | Glassy andesite | As above | |
| 870-900 | Glassy andesite | As above | |
| 900-930 | Glassy andesite | As above | |
| 930-960 | Glassy andesite | As above | |
| 960-990 | Glassy andesite | As above | |
| 990-1020 | Glassy andesite | As above | |
| 1020-1050 | Glassy andesite | As above | Basalt of Glass Hill |
| 1050-1080 | Mixed rock types | Andesite, minor volcanic rock fragments, much alteration | |
| 1080-1110 | Mixed rock types | Volcanic rock fragments, andesite (cavings), opalized material | |
| 1110-1140 | Mixed rock types | As above | |
| 1140-1170 | Med.-grained basalt | Grainy, greenish-gray basalt, reddish andesite (cavings) | |
| 1170-1200 | Med.-grained basalt | Grainy, greenish-gray, olivine-rich basalt, minor red discoloration | |
| 1200-1230 | Med.-grained basalt | As above | |
| 1230-1260 | Med.-grained basalt | As above | |

| Sampled Drilling Depth (Feet) | Bulk Lithology | Remarks | Rock Unit Drilled |
|--|---------------------|---|-------------------------------|
| 1260-1290 | Med.-grained basalt | As above | Basalt of Glass Hill |
| 1290-1320 | Med.-grained basalt | As above, reddish discoloration common, olivine content decreased | |
| 1320-1350 | Med.-grained basalt | As above | |
| 1350-1380 | Med.-grained basalt | As above | |
| 1380-1410 | Med.-grained basalt | As above | |
| 1410-1440 | Mixed basalt types | Medium-grained and fine-grained basalt | |
| 1440-1470 | Mixed basalt types | As above, minor flow banding, glassy, vesicular textures present | |
| 1470-1500 | Mixed basalt types | As above, much fine-grained vesicular material | |
| 1500-1530 | Fine-grained basalt | Fine-grained and vesicular basalt, minor medium-grained basalt, weak blue-green (copper ?) stain, siliceous void fillings | |
| 1530-1560 | Fine-grained basalt | Gray basalt, much medium-grained basalt (cavings) green staining and fillings | |
| 1560-1590 | Fine-grained basalt | As above, many cavings | |
| 1590-1620 | Mixed rock types | Everything up hole, much quartz filling material | |
| 1620-1650 | Mixed rock types | Coarse cuttings, all cavings | |
| 1650-1680 | Cavings | As above, (lost circulation interval) | |
| 1680-1710 | Cavings | As above | |
| 1710-1740 | Cavings | As above | |
| 1740-1770 | Cavings | As above | |
| 1770-1800 | No returns | | |
| 1800-1830 | No returns | | |
| 1830-1860 | No returns | | Hot Lake fault zone |
| 1860-1890 | Mixed rock types | Much lost-circulation material | |
| 1890-1920 | Greenstone | Mottled green, white lithologies, coarse cuttings | |
| 1920-1950 | Greenstone | As above, pyrite mineralization | |
| 1950-1980 | Greenstone | As above, (much lost-circulation material) | |
| 1980-2010 | Greenstone | As above, pyrite mineralization, metamorphic texture | |
| 2010-2040 | Greenstone | As above | |
| 2040-2070 | Greenstone | As above | |
| 2070-2100 | Greenstone | As above | |
| 2100-2130 | Greenstone | As above | |
| 2130-2160 | Greenstone | As above | |
| 2160-2190 | Greenstone | As above | |
| 2190-2220 | Greenstone | As above | |
| 2220-2250 | Greenstone | As above, pyrite mineralization, quartz veinlets | Pre-Tertiary metamorphic rock |
| 2250-2280 | Greenstone | As above | |
| 2280-2310 | Greenstone | As above | |
| 2310-2340 | Greenstone | As above | |
| 2340-2370 | Greenstone | As above | |
| 2370-2400 | Greenstone | As above | |
| 2400-2430 | Greenstone | As above | |
| 2430-2460 | Greenstone | As above | |
| 2460-2490 | Greenstone | As above, cavings common | |
| 2490-2520 | Greenstone | As above | |
| 2530-2550 | Greenstone | As above | |
| 2550-2580 | Greenstone | As above | |
| 2580-2610 | Greenstone | As above, pyrite mineralization, minor apple green coloration | |

| Sampled Drilling Depth (Feet) | Bulk Lithology | Remarks | Rock Unit Drilled |
|--|-------------------|---------------------------------|-------------------------------------|
| 2610-2640 | Greenstone | As above; pyrite mineralization | Pre-Tertiary metamorphic rock |
| 2640-2670 | Greenstone | As above | |
| 2670-2700 | Greenstone | As above | |
| 2700-2729 | Greenstone | As above | |