Appendix 1: Audiomagnetotelluric (AMT) soundings in the Leetown area, West Virginia.

This appendix includes additional supporting material for the AMT survey of Leetown Science Center, West Virginia.

Table 1. Audiomagnettelluric (AMT) soundings in the Leetown area, West Virginia. [Universal Tranverse Mercator and coordinates are in NAD 83 with a central meridian of -75º and base latitude of 0º (zone 18). Latitude-Longitude coordinates are in NAD 83 and elevations are in NGVD88].

Station Number	UTM Easting (m)	UTM Northing (m)	Latitude	Longitude	GPS Elevation (m)	GPS Elevation (ft)
LT03	248992.4	4360066.5	39 21 13.0	77 54 47.0	158	518.4
LT04	249134.0	4360000.2	39 21 11.0	77 54 41.0	147	482.3
LT05	248872.7	4360070.3	39 21 13.0	77 54 52.0	163	534.8
LT06	248729.0	4360075.0	39 21 13.0	77 54 58.0	157	515.1
LT07	248060.7	4360158.3	39 21 15.0	77 55 26.0	166	544.6
LT08	247916.1	4360132.1	39 21 14.0	77 55 32.0	158	518.4
LT09	247768.5	4360013.4	39 21 10.0	77 55 38.0	155	508.6
LT10	248612.3	4360171.3	39 21 16.0	77 55 03.0	162	531.5
LT11	248591.4	4360264.6	39 21 19.0	77 55 04.0	170	557.8
LT12	248230.3	4360214.6	39 21 17.0	77 55 19.0	170	557.8
LT14	249058.2	4359879.1	39 21 07.0	77 54 44.0	157	515.1
LT15	249029.3	4359725.7	39 21 02.0	77 54 45.0	156	511.8
LT16	249024.3	4359571.6	39 20 57.0	77 54 45.0	158	518.4
LT17	249019.4	4359417.4	39 20 52.0	77 54 45.0	153	502.0
LT18	247606.9	4360203.9	39 21 16.0	77 55 45.0	146	479.0
LT19	247713.7	4360540.0	39 21 27.0	77 55 41.0	145	475.7
LT20	247620.9	4360635.6	39 21 30.0	77 55 45.0	151	495.4
LT21	248156.5	4359414.4	39 20 51.0	77 55 21.0	157	515.1
LT22	248127.5	4359261.0	39 20 46.0	77 55 22.0	159	521.7
LT23	248049.7	4359078.3	39 20 40.0	77 55 25.0	158	518.4
LT24	248022.8	4358986.6	39 20 37.0	77 55 26.0	154	505.3
LT25	248784.1	4358386.6	39 20 18.4	77 54 53.4	154	505.3
LT26	247947.0	4358865.6	39 20 33.0	77 55 29.0	144	472.5
LT27	247885.2	4359917.1	39 21 07.0	77 55 33.0	163	534.8
LT28	247696.3	4359634.6	39 20 57.6	77 55 40.5	149	488.9
LT29	247580.9	4359402.2	39 20 50.0	77 55 45.0	147	482.3
LT30	247782.4	4358963.5	39 20 36.0	77 55 36.0	151	495.4
LT31	247643.7	4359122.3	39 20 41.0	77 55 42.0	144	472.5
LT32	247336.5	4359255.8	39 20 45.0	77 55 55.0	150	492.2
LT33	248532.5	4359927.0	39 21 08.0	77 55 06.0	152	498.7
LT34	248455.7	4359775.1	39 21 03.0	77 55 09.0	152	498.7
LT35	248403.9	4359653.3	39 20 59.0	77 55 11.0	146	479.0
LT36	247087.1	4359696.0	39 20 59.0	77 56 06.0	133	436.4
LT37	248916.6	4359204.6	39 20 45.0	77 54 49.0	156	511.8
LT38	248302.9	4358696.6	39 20 27.9	77 55 13.9	162	531.5
LT39	248951.6	4358802.2	39 20 32.0	77 54 47.0	156	511.8
LT40	248275.2	4360861.3	39 21 38.0	77 55 18.0	150	492.2
LT41	248640.3	4359553.1	39 20 56.0	77 55 01.0	151	495.4
LT42	249465.1	4360606.8	39 21 31.0	77 54 28.0	159	521.7
LT43	249299.5	4360673.9	39 21 33.0	77 54 35.0	160	525.0
LT44	248653.2	4360694.8	39 21 33.0	77 55 02.0	153	502.0
LT45	249748.5	4359733.4	39 21 03.0	77 54 15.0	170	557.8
LT46	249480.9	4359389.0	39 20 51.6	77 54 25.7	170	557.8
LT47	247134.9	4358791.0	39 20 29.7	77 56 02.8	148	485.6
LT48	249051.4	4358181.7	39 20 12.0	77 54 42.0	180	590.6
LT49	247564.0	4359618.8	39 20 57.0	77 55 46.0	146	479.0
LT50	247974.9	4359728.9	39 21 01.0	77 55 29.0	157	515.1
LT51	247129.1	4360250.3	39 21 17.0	77 56 05.0	140	459.3
LT52	247317.4	4358669.9	39 20 26.0	77 55 55.0	150	492.2
LT53	247822.2	4357974.4	39 20 04.0	77 55 33.0	156	511.8

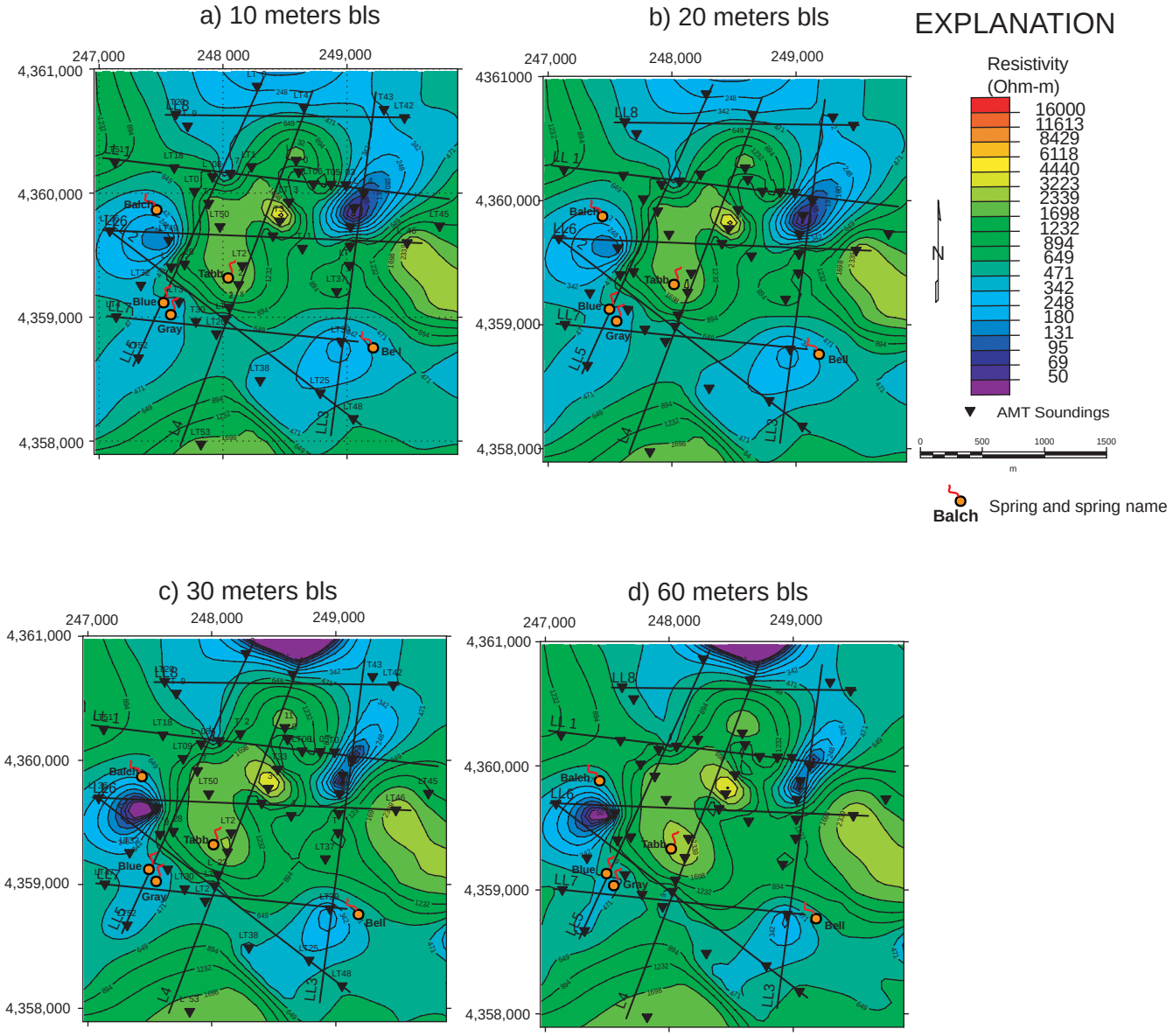

Figure 1. A series of 2-dimensional resistivity maps made for 10, 20, 30, and 60 meters below land surface (bls). These maps show that the rocks become progressively more resistive with depth, most likeley as a function of decreasing weathering, porosity, fluid storage, or fracture density.

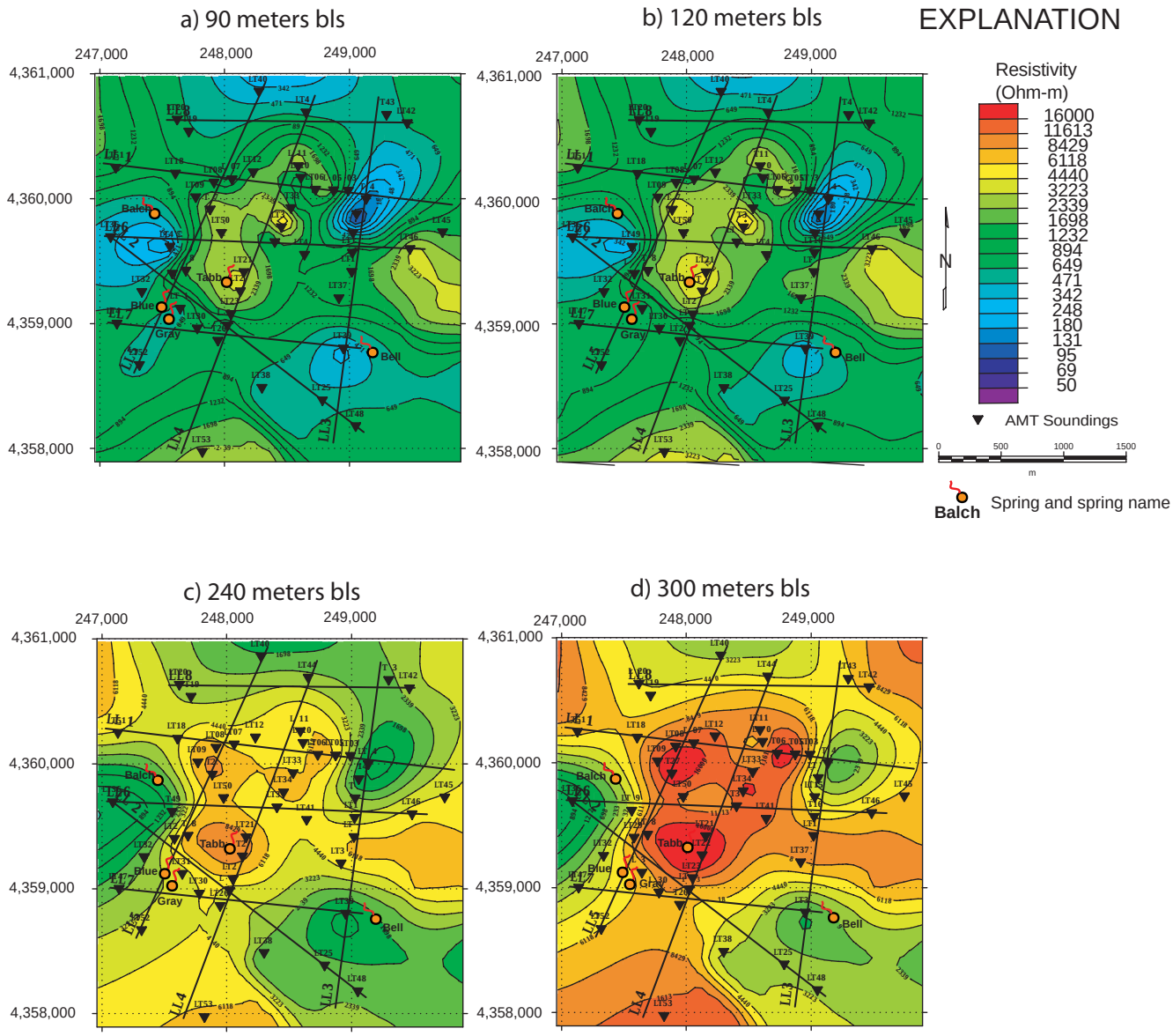

Figure 2. A series of 2-dimensional resistivity maps made for 90, 120, 240, and 300 meters below land surface (bls). These maps show that the rocks become progressively more resistive with depth, most likeley as a function of decreasing weathering, porosity, fluid storage, or fracture density.

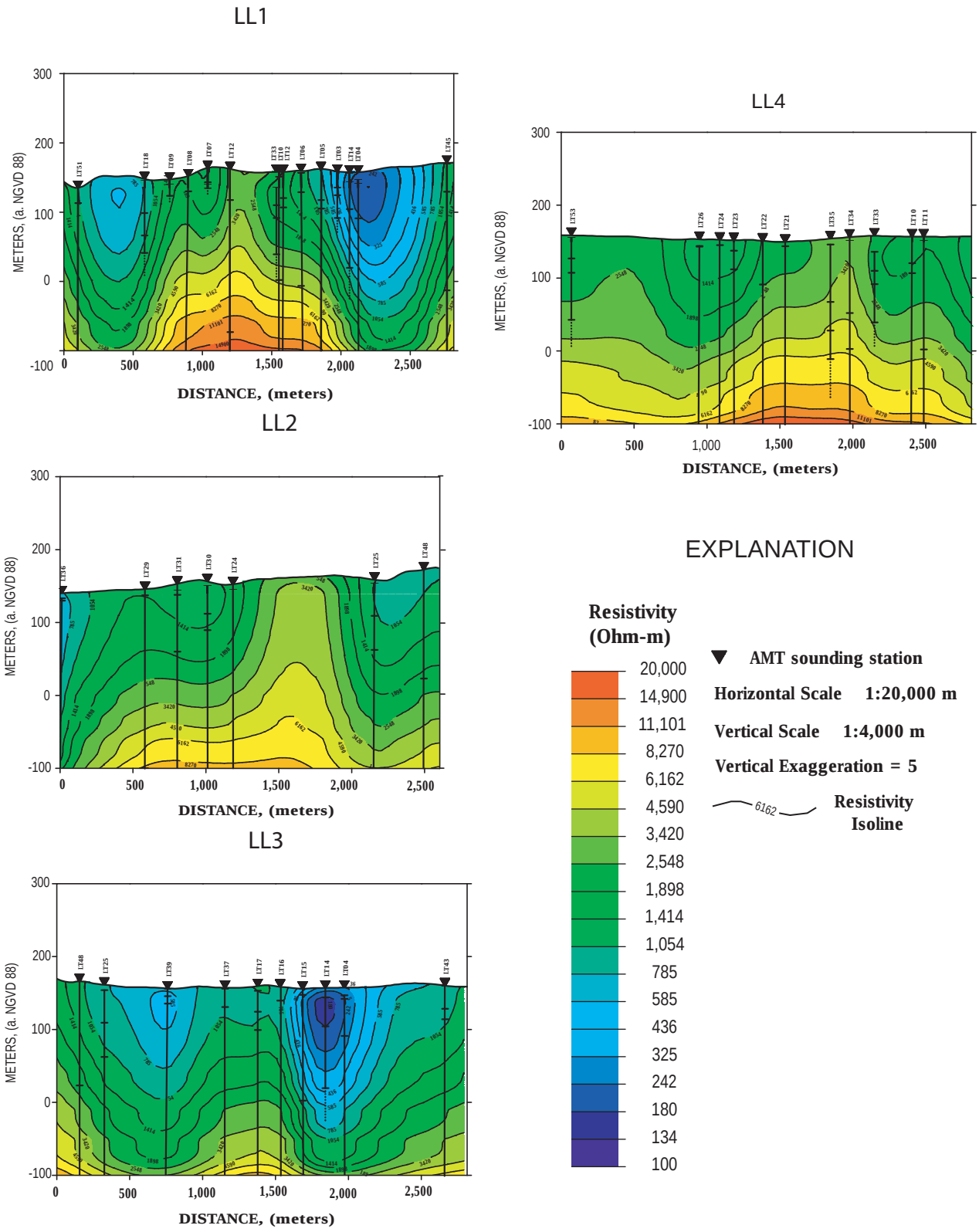

Figure 3. A series of 2-dimensional resistivity cross sections (LL1 - LL4) across the USGS Leetown Science Center area.
[See fig. 8 in main text for locations of the sections].

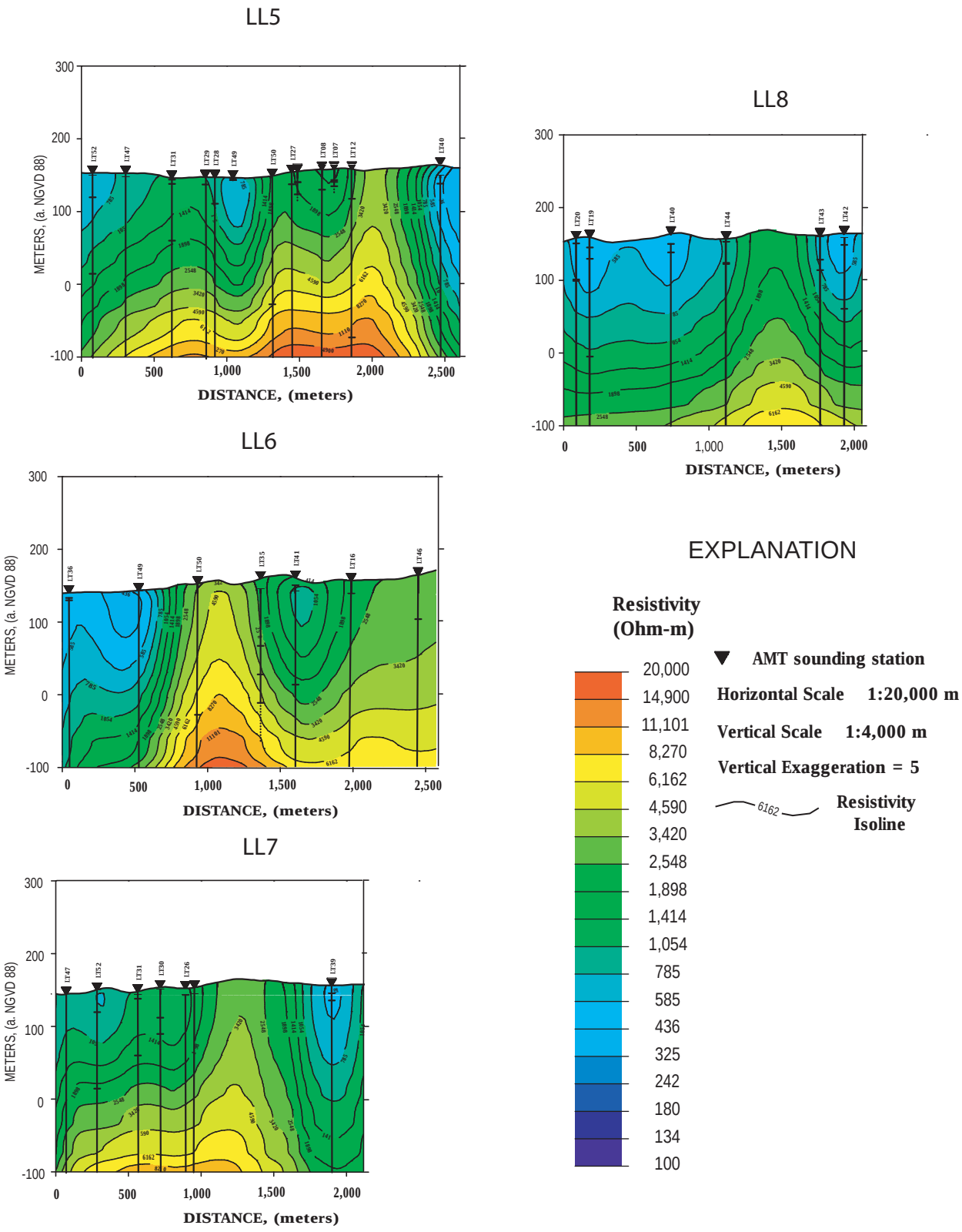

Figure 4. A series of 2-dimensional resistivity cross sections (LL5 - LL8) across the USGS Leetown Science Center area.
[See fig. 8 in main text for locations of the sections].