



Schlumberger Soundings at the Amargosa Desert

Research Site, Nevada

by

Robert J. Bisdorf*

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In 1999 the U.S. Geological Survey made 38 direct current (dc) electrical soundings at the Amargosa Desert Research Site (ADRS) near Beatty, Nevada (fig. 1.) using the Schlumberger array. An additional 16 Schlumberger soundings were made in 2000. The soundings were made to determine the subsurface resistivity distribution, and the location of faults. The purpose of this report is to present the data, its automatic interpretation, cross sections and resistivity depth maps.

Figure 2 is a map of the sounding locations. The soundings are represented by circles. The 1999 data are numbered 1 through 38 and the 2000 data are numbered 101 through 116. Table 1 gives the sounding number, x coordinate, and y coordinate of the soundings in UTM zone 11 NAD27.

The data were interpreted using an automatic computerized interpretation program (Zohdy and Bisdorf, 1989) written for IBM PC's and compatible computers. The soundings are designated ADRS 1 through ADRS 116. For each sounding curve, the data in the appendix includes:

- 1) A sounding title designated by the name of the survey area followed by the sounding number. Several sounding titles have a suffix that indicates what special treatment the sounding may have undergone. The suffix "S" denotes that the field data were smoothed before the inversion was performed, a suffix "F" indicates that the last layer resistivity was fixed at some value, and a suffix "X" indicates that the sounding's S-line (Zohdy and others, 1974 p., 36) was manually extended. Any or all of the suffixes may be attached to the sounding number. In general, only the interpreted sounding titles will have suffixes.
- 2) A tabulation of the AB/2 electrode spacings (in meters and feet) and corresponding apparent resistivities (in ohm-meters).
- 3) A log-log plot of the field data points. Each set of data points that were made with the same potential electrode spacing (MN) is connected with a solid line. Measurements were made at MN/2 spacings of 0.6, 2, 20, 60, and 200 ft. as appropriate.
- 4) A tabulation of the automatically interpreted layering, with depths in meters and feet and the corresponding resistivities in ohm-meters.
- 5) A log-log plot of the results of the automatic interpretation program. The circles represent the shifted-digitized field data, the continuous curve represents the sounding curve calculated from the interpreted layering, and the step-function curve represents the interpreted layering.

CROSS SECTIONS OF INTERPRETED RESISTIVITY

Resistivity cross sections are generated from individual sounding interpretations. Each sounding interpretation is sampled in a manner to approximate a continuous vertical distribution of resistivity with depth (Bisdorf, 1982). These vertical distributions are then horizontally interpolated to create a grid. Colors are assigned based on the interpolated resistivity values

and the desired contour levels. Triangles on the upper surface of the cross section designate the sounding locations. Topographic information, input as sounding elevations, is represented by connecting the surface location of the soundings by straight lines.

Figure 3 shows a cross section of interpreted resistivity (see fig. 2 for location). In the upper 30 m. there is a horizontal layer of high resistivity (45-200 ohm-m). Between soundings 107 and 103 a fault is inferred. The black line indicates an approximate position for the inferred fault. The high resistivity zone at a depth of about 190 m. under soundings 116 and 107 deepens to about 320 m. under sounding 103, and the overlying low resistivity zone (<45 ohm-m) doubles in thickness on the down thrown side of the inferred fault.

RESISTIVITY MAPS AT SELECTED DEPTHS

Maps of interpreted resistivity at a particular elevation are generated by sampling the sounding interpretations at depths determined by the difference between the surface elevation at that sounding and the desired elevation. The resultant sampled interpreted resistivities and the corresponding location values are gridded using a minimum-curvature algorithm (Webring, 1981). To prevent possible interpolated resistivities of less than zero, the logarithm of the resistivities is used for gridding. Colors are assigned based on the grid value and the desired logarithmically spaced contour levels. Since these maps are raster (pixel) based, a bicubic interpolation program is used to increase the size of the resultant image. An interpolating program is used to resample the grid, as opposed to simply gridding the data at the desired final interval, because the minimum-curvature algorithm generates undesirable results if the data are over sampled. The Kolor-map and section program (Zohdy, 1993) uses similar procedures and provides a discussion of the nuances of resistivity map generation.

Figure 4 shows a map of interpreted resistivity at a depth of 97 m. The major features on the map include:

- a) Low resistivity (<15 ohm-m) zone just to the southeast of the disposal site. Possibly indicative of increased clay content or increased water content.
- b) High resistivity zones on the eastern side of the map possibly indicating the presence of Quartzite.
- c) Linear resistivity contours separating the zones of high resistivity from the zones of lower resistivity. These linear trends may indicate the presence of faults.

Ninety seven m. was chosen because deeper maps would only have about ½ of the sounding locations of this map. This is because in the initial electrical resistivity survey the soundings were only expanded to an AB/2 of 800 to 1000 ft.

Summary

The interpretation of dc resistivity soundings were used to create an interpreted resistivity cross section and a map of interpreted resistivity at a depth of 97 m. Faults are inferred from the cross section and the depth map. Because of the limited number of soundings, the location and geometry of the faults are not well defined.

REFERENCES

- Bisdorf, R.J., 1982, Schlumberger sounding investigations in the Date Creek Basin, Arizona: U.S. Geological Survey Open-File Report 82-953, 55 p.
- Lucius, J. E., and Bisdorf, R. J., 1995, Results of geophysical investigations near the Norman, Oklahoma, municipal landfill, 1995: U.S. Geological Survey Open-File report 95-825, 125 p.
- Webring, Michael, 1981, MINC: A gridding program based on minimum curvature: U.S. Geological Survey Open-File Report 81-1224, 12 p.
- Zohdy, A. A. R., 1993, Program Kolor-Map & Section, Amiga Version: U.S. Geological Survey Open-File Report 93-585, 113 p.
- Zohdy, A. A. R., and Bisdorf, R. J., 1989, Programs for the automatic processing and interpretation of Schlumberger sounding curves in QuickBASIC 4.0: U.S. Geological Survey Open-File Report, 89-137 A&B, 64 p. + diskette.
- Zohdy, A. A. R., Eaton, G.P., and Mabey, D. R., 1974, Application of surface geophysics to ground-water investigations: Techniques of water-resources investigations of the United States Geological Survey, Book 2, Chapter D1, 116 p.

Sounding Number	X coordinate (km)	Y coordinate (km)		Sounding Number	X coordinate (km)	Y coordinate (km)
1	527.081	4068.750		28	527.516	4068.740
2	527.331	4068.450		29	527.321	4068.740
3	528.755	4068.491		30	529.866	4070.887
4	529.050	4068.495		31	528.111	4068.740
5	527.831	4068.650		32	528.416	4068.729
6	527.031	4068.650		33	528.031	4068.450
7	527.231	4068.650		34	528.031	4068.230
8	527.431	4068.650		35	528.031	4067.987
9	527.631	4068.650		36	527.731	4068.350
10	527.831	4068.450		37	527.731	4068.106
11	527.631	4068.450		38	528.231	4068.230
12	527.431	4068.450		101	526.499	4068.853
13	527.231	4068.450		102	527.219	4069.154
14	527.031	4068.450		103	528.050	4069.162
15	526.831	4068.450		104	527.676	4069.165
16	528.031	4068.650		105	528.050	4068.908
17	529.120	4068.595		106	528.235	4068.922
18	528.168	4068.650		107	528.520	4069.180
19	527.306	4068.700		108	529.293	4070.102
20	527.931	4068.550		109	528.755	4069.464
21	527.731	4068.550		110	526.850	4069.115
22	527.531	4068.550		111	527.219	4068.967
23	528.131	4068.550		112	529.660	4068.760
24	528.331	4068.550		113	526.840	4068.330
25	528.531	4068.550		114	527.649	4069.521
26	527.911	4068.740		115	528.000	4069.690
27	527.711	4068.740		116	529.143	4069.201

Table 1. Sounding number and x-y coordinates in km based on UTM zone 11, 1927 North American Datum.

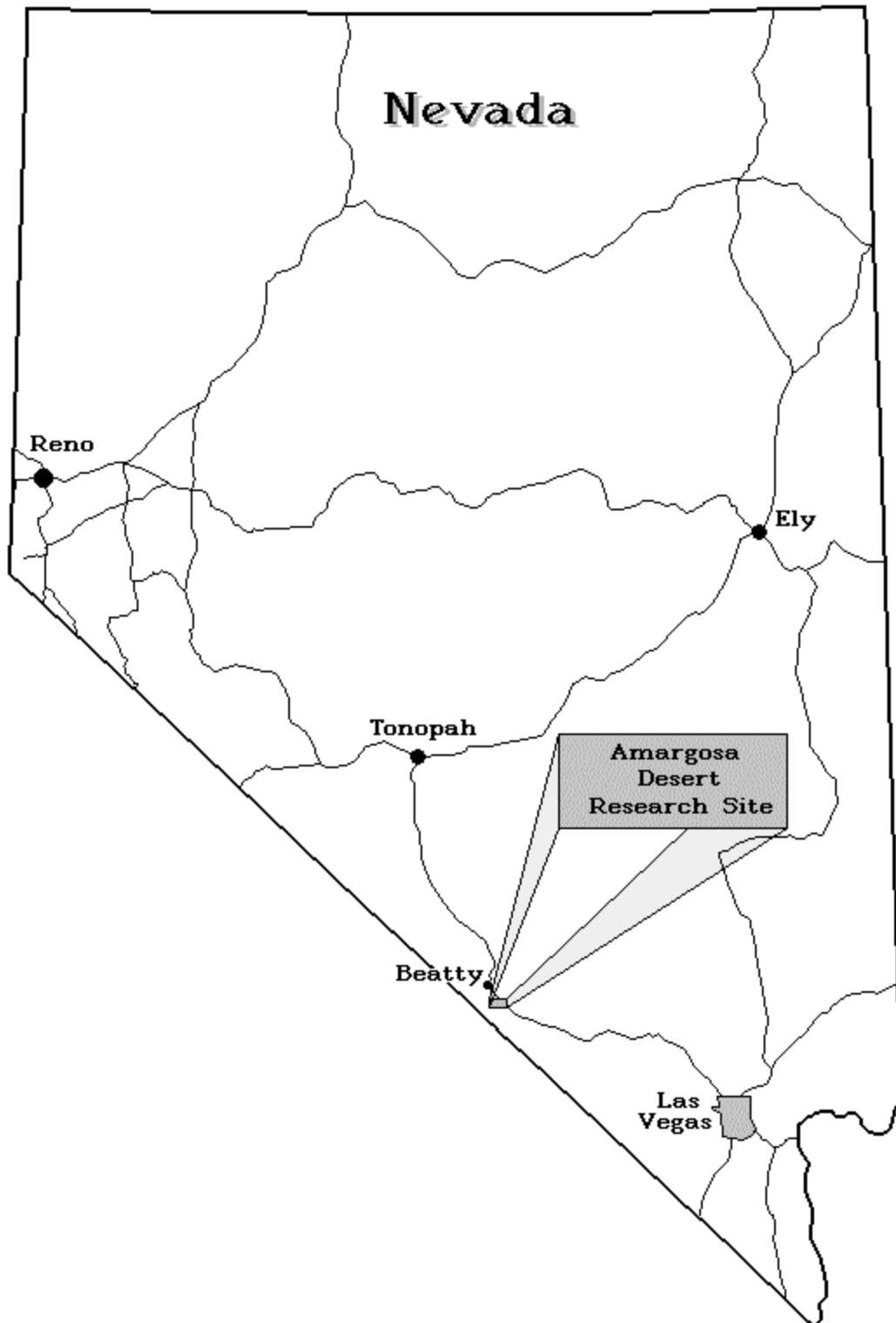


Figure 1. Location of the Amargosa Desert Research Site.

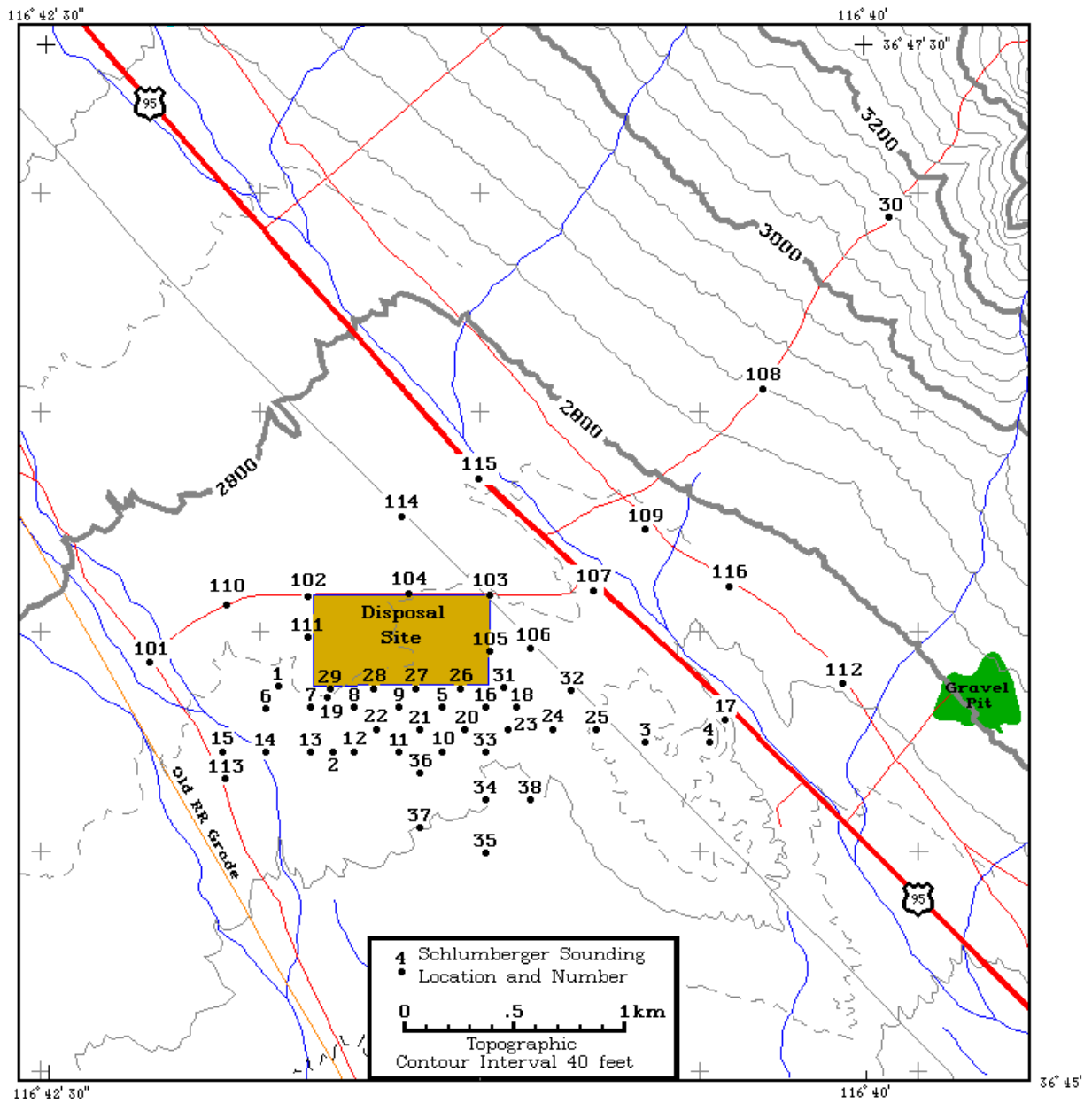


Figure 2. Map showing the number and location of the Schlumberger soundings.

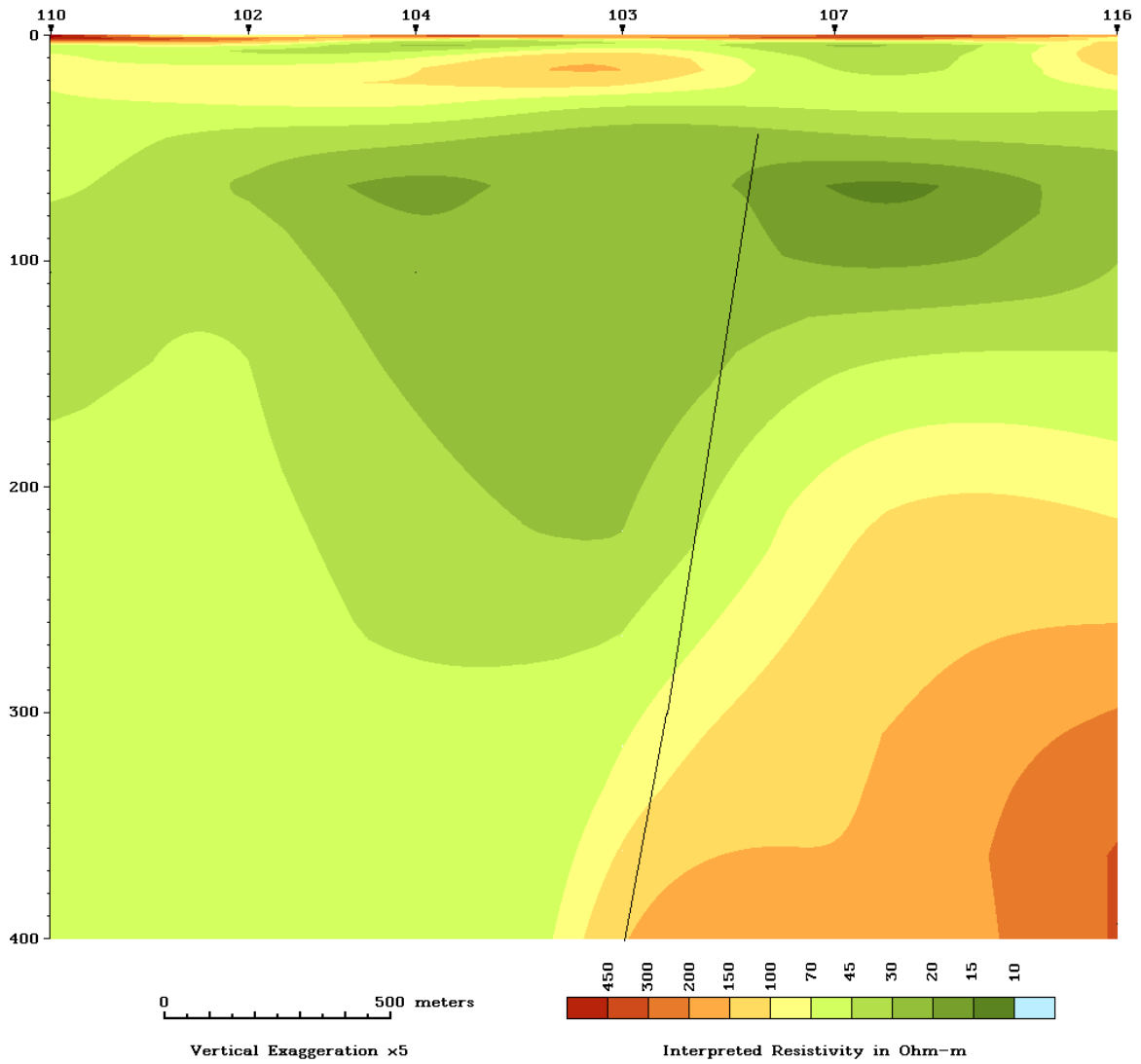


Figure 3. Cross section of interpreted resistivity. Triangles represent Schlumberger sounding locations. Colors represent interpreted resistivity values.

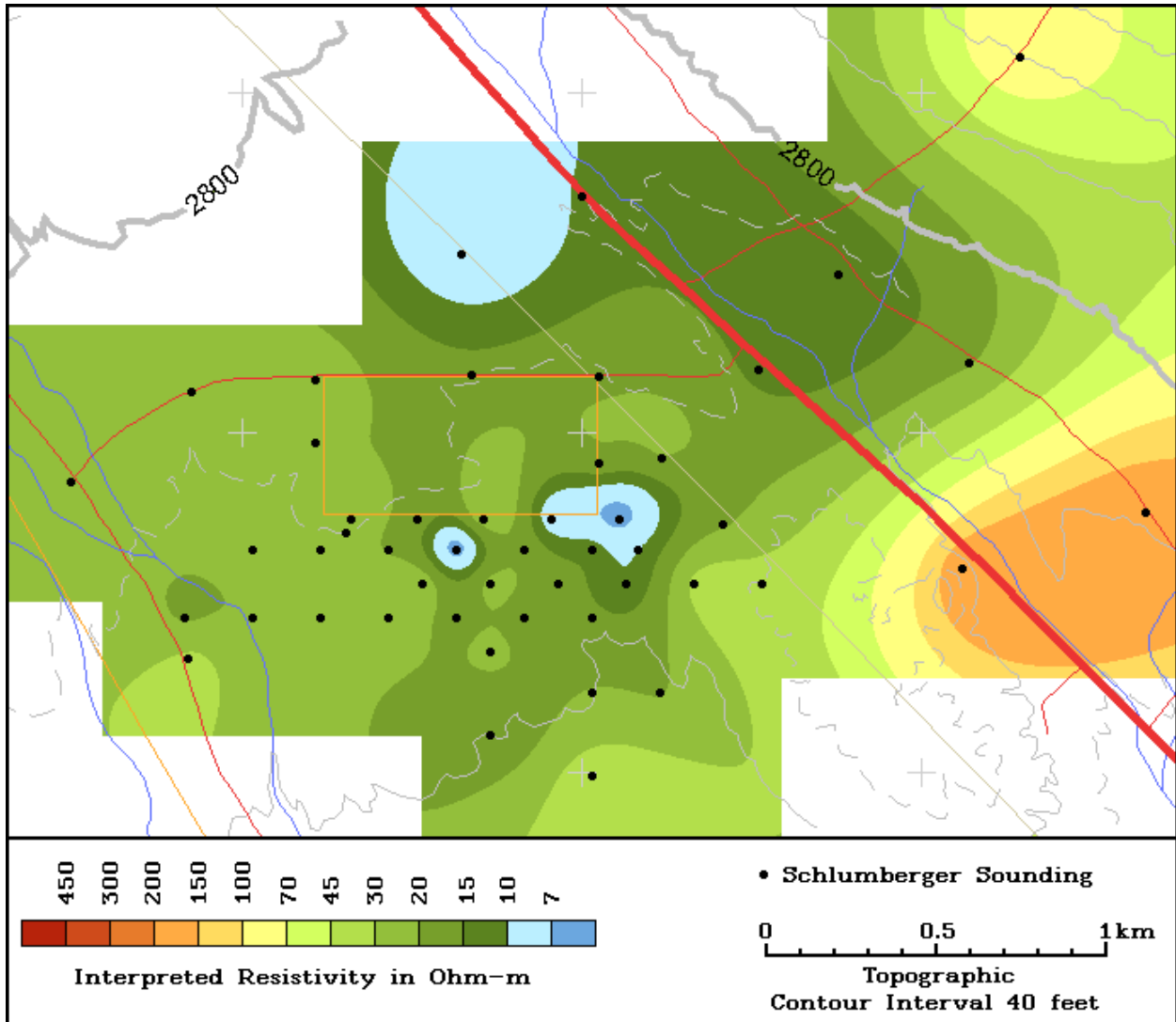
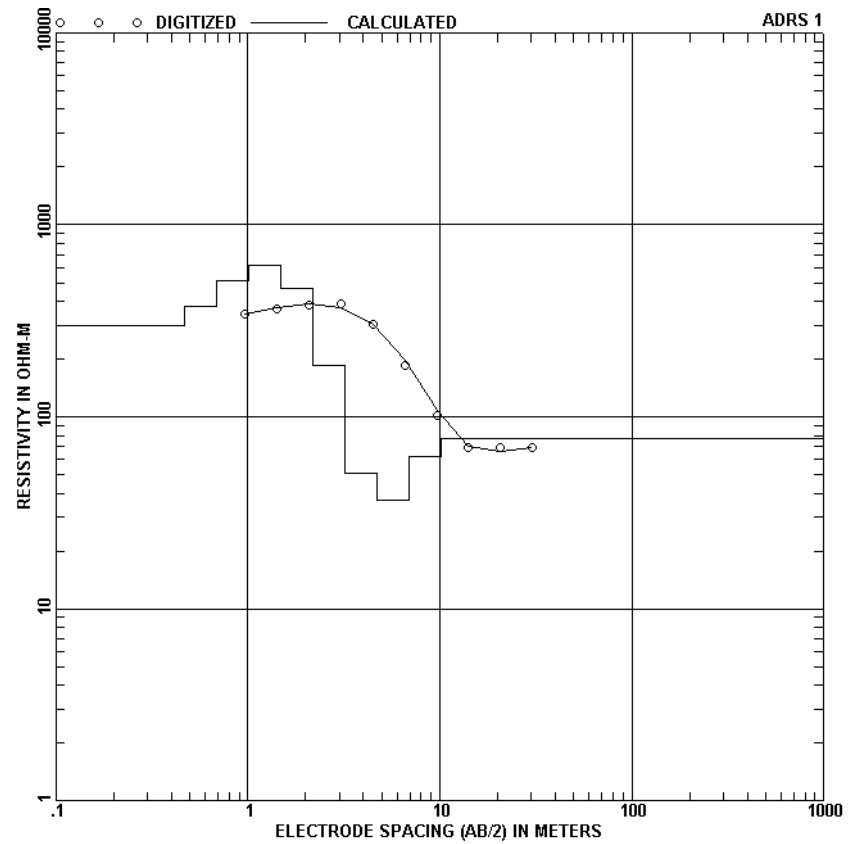
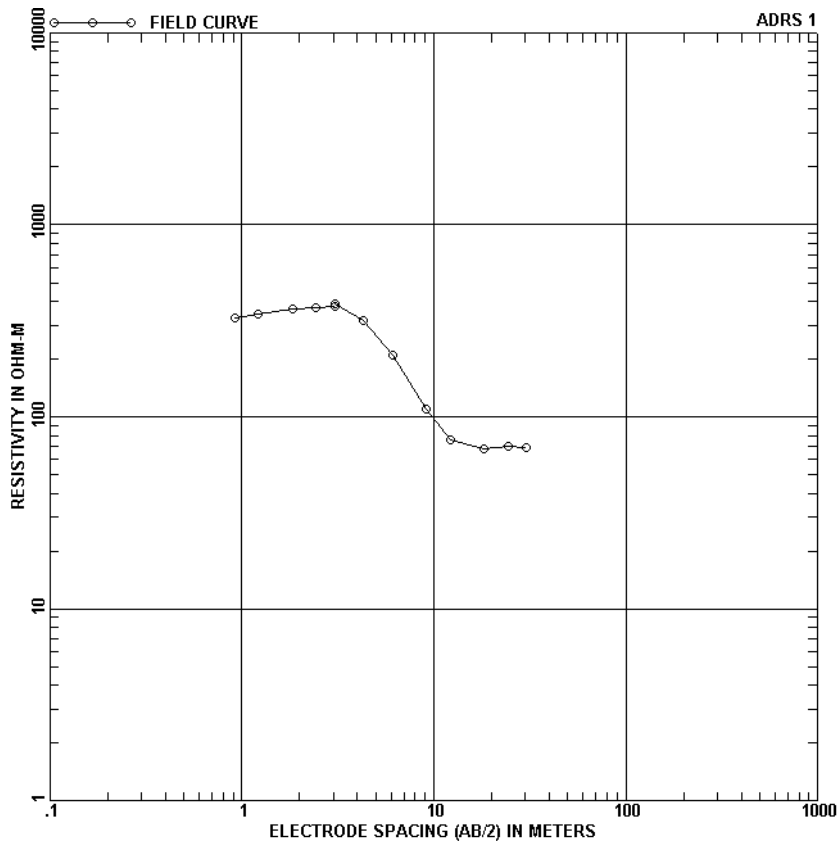


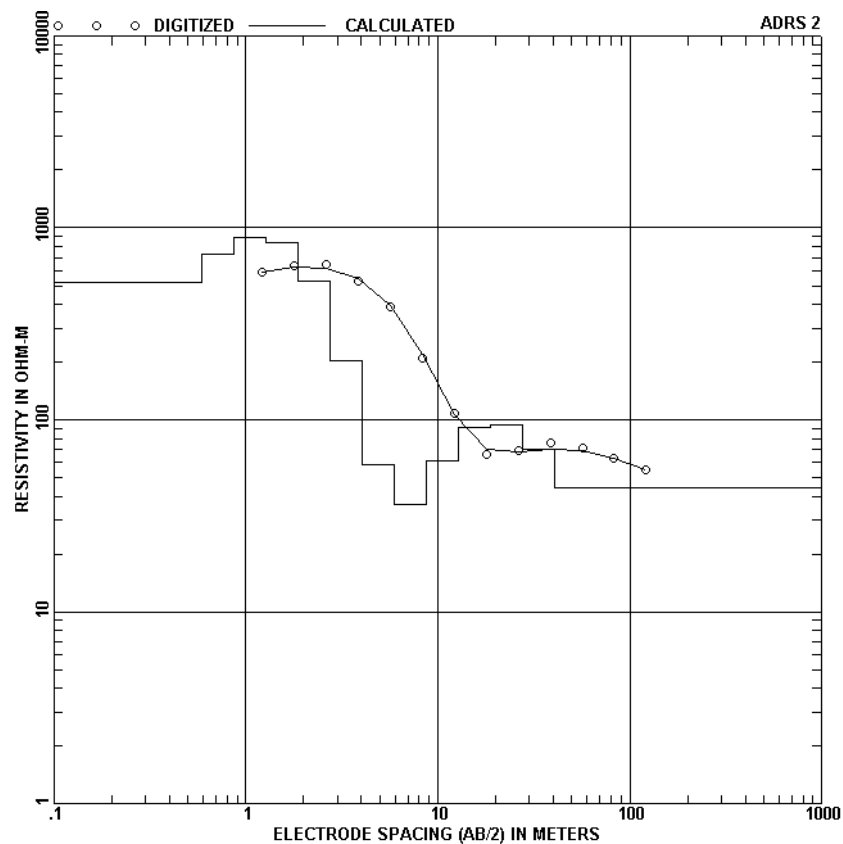
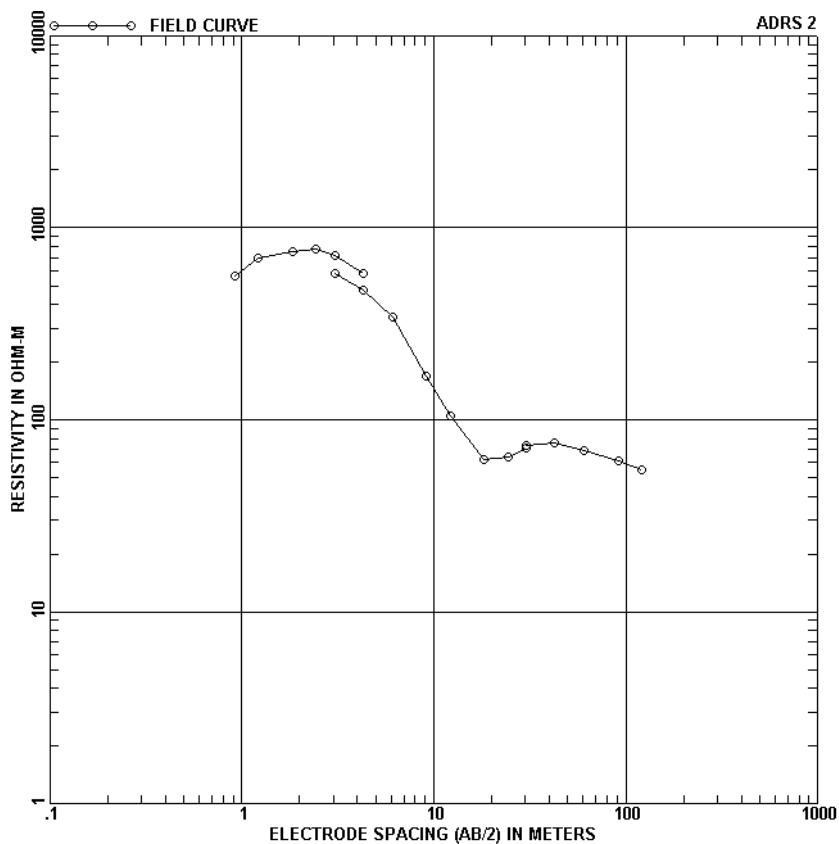
Figure 4. Map showing contours of interpreted resistivity at a depth of 97 m overlying topographic contours.

APPENDIX



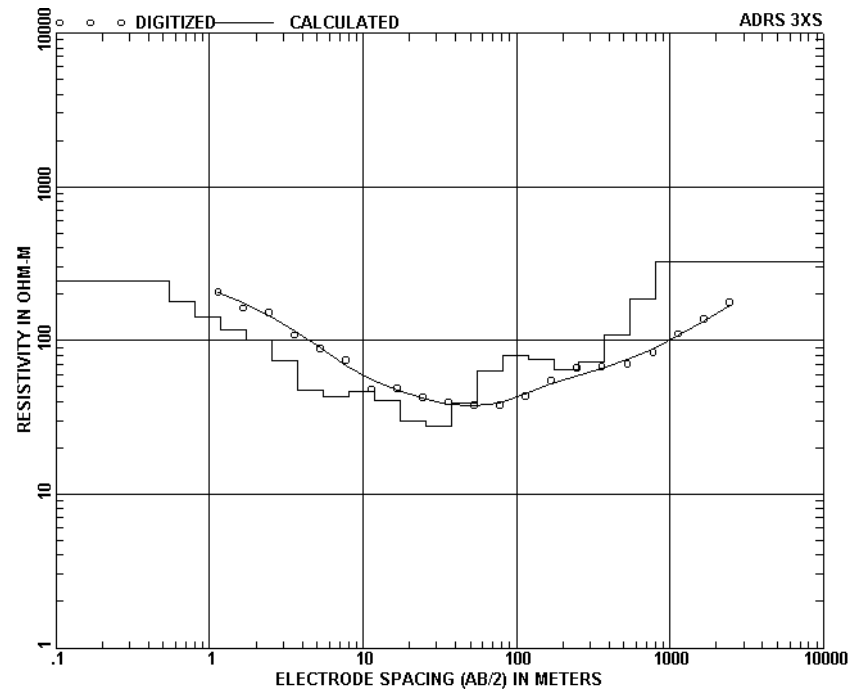
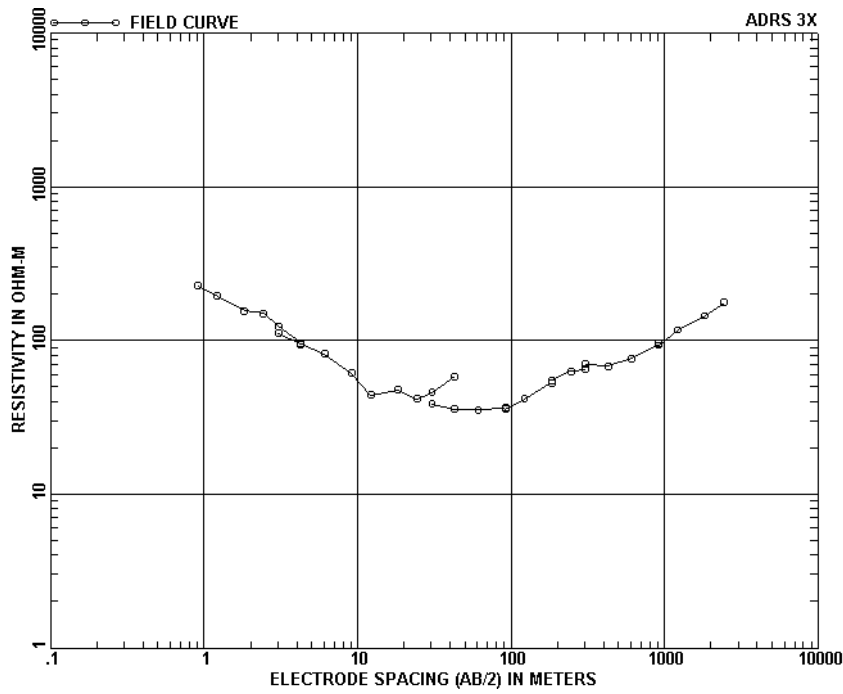
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	329.00	4.27 (14.00)	317.00
1.22 (4.00)	344.00	6.10 (20.00)	208.00
1.83 (6.00)	367.00	9.14 (30.00)	110.00
2.44 (8.00)	371.00	12.19 (40.00)	75.90
3.05 (10.00)	375.00	18.29 (60.00)	68.40
3.05 (10.00)	389.00	24.38 (80.00)	70.70
		30.48 (100.00)	69.10

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.47 (1.54)	300.55	3.19 (10.47)	184.39
0.69 (2.26)	373.28	4.68 (15.37)	50.72
1.01 (3.31)	514.87	6.88 (22.56)	36.88
1.48 (4.86)	617.03	10.09 (33.11)	61.97
2.17 (7.13)	467.72	99999.00 (99999.00)	77.56



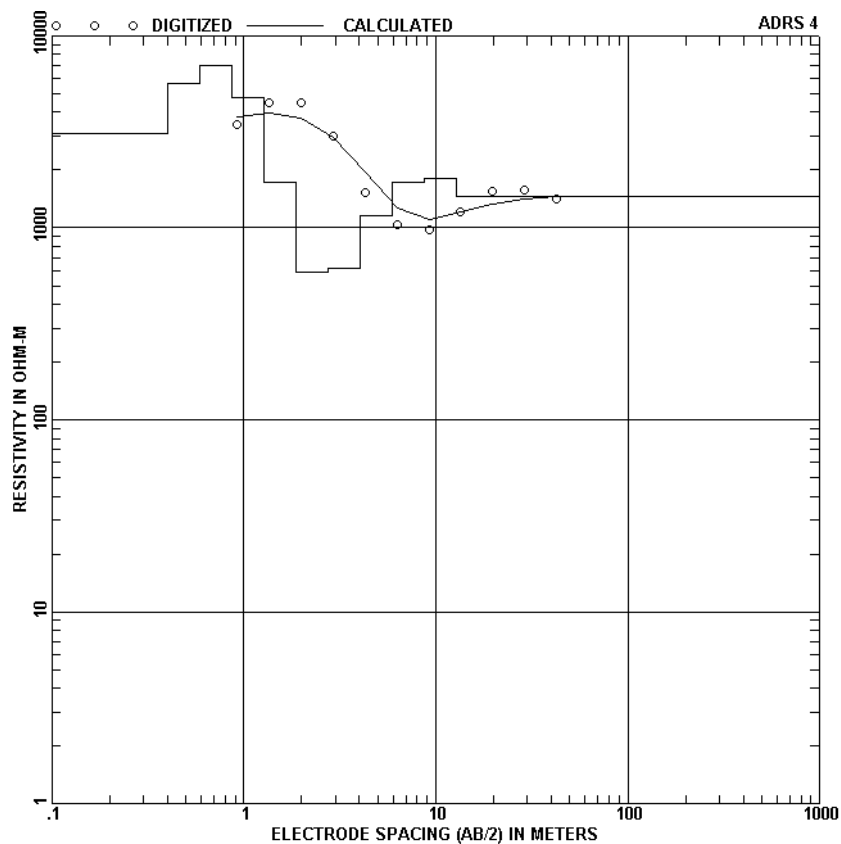
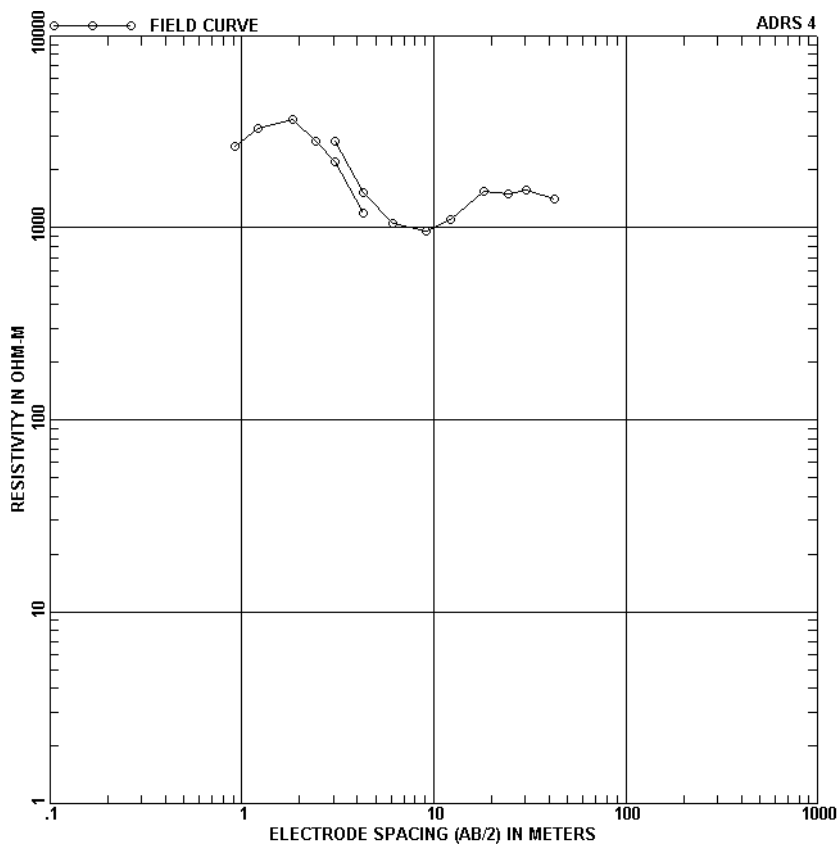
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1.22 (4.00)	691.00	12.19 (40.00)	105.00
1.83 (6.00)	747.00	18.29 (60.00)	62.50
2.44 (8.00)	770.00	24.38 (80.00)	63.90
3.05 (10.00)	719.00	30.48 (100.00)	71.00
4.27 (14.00)	583.00	30.48 (100.00)	73.60
3.05 (10.00)	580.00	42.67 (140.00)	75.40
4.27 (14.00)	476.00	60.96 (200.00)	69.30
6.10 (20.00)	341.00	91.44 (300.00)	61.00
		121.92 (400.00)	54.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.59 (1.94)	517.15	5.93 (19.44)	58.43
0.87 (2.85)	730.40	8.70 (28.53)	36.49
1.28 (4.19)	896.30	12.77 (41.88)	60.98
1.87 (6.15)	832.20	18.74 (61.47)	91.39
2.75 (9.02)	524.13	27.50 (90.23)	93.76
4.04 (13.24)	203.44	40.37 (132.44)	69.75
		99999.00 (99999.00)	44.25



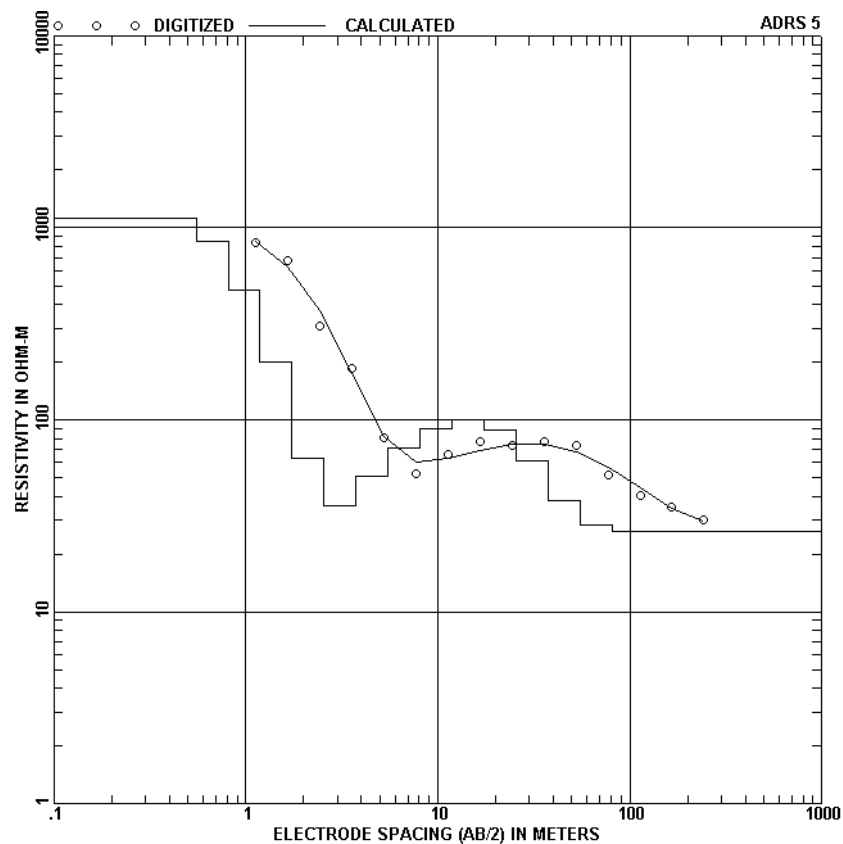
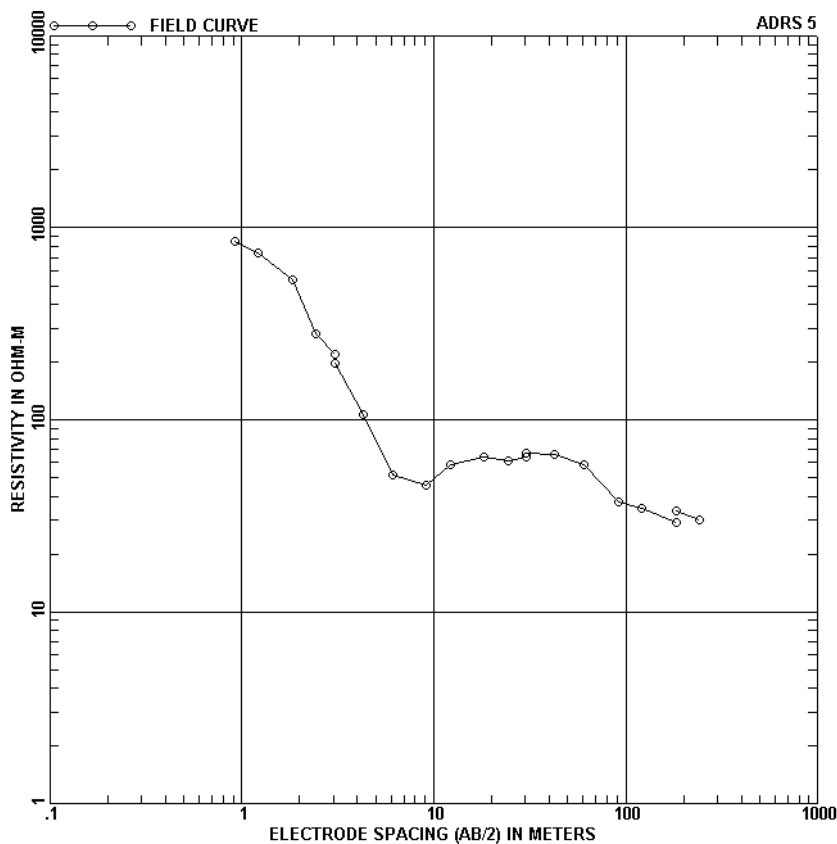
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0.91 (3.00)	227.00	42.67 (140.00)	35.70
1.22 (4.00)	195.00	60.96 (200.00)	35.30
1.83 (6.00)	156.00	91.44 (300.00)	36.50
2.44 (8.00)	150.00	91.44 (300.00)	35.60
3.05 (10.00)	123.00	121.92 (400.00)	41.60
4.27 (14.00)	96.00	182.88 (600.00)	52.70
3.05 (10.00)	111.00	182.88 (600.00)	55.00
4.27 (14.00)	94.00	243.84 (800.00)	63.00
6.10 (20.00)	81.70	304.80 (1000.00)	65.00
9.14 (30.00)	61.40	304.80 (1000.00)	70.00
12.19 (40.00)	44.20	426.72 (1400.00)	68.00
18.29 (60.00)	47.80	609.60 (2000.00)	76.00
24.38 (80.00)	41.60	914.40 (3000.00)	95.00
30.48 (100.00)	46.00	914.40 (3000.00)	93.00
42.67 (140.00)	58.40	1219.20 (4000.00)	117.00
30.48 (100.00)	38.50	1828.80 (6000.00)	145.00
		2438.40 (8000.00)	177.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	245.39	25.53 (83.76)	29.85
0.81 (2.65)	179.54	37.47 (122.95)	27.50
1.19 (3.89)	142.80	55.01 (180.47)	39.27
1.74 (5.71)	116.74	80.74 (264.89)	63.25
2.55 (8.38)	101.03	118.51 (388.80)	80.41
3.75 (12.29)	74.23	173.94 (570.68)	75.13
5.50 (18.05)	47.50	255.31 (837.64)	64.74
8.07 (26.49)	43.35	374.75 (1229.49)	71.71
11.85 (38.88)	46.72	550.06 (1804.65)	108.44
17.39 (57.07)	40.64	807.37 (2648.86)	186.24
		99999.00 (99999.00)	322.05



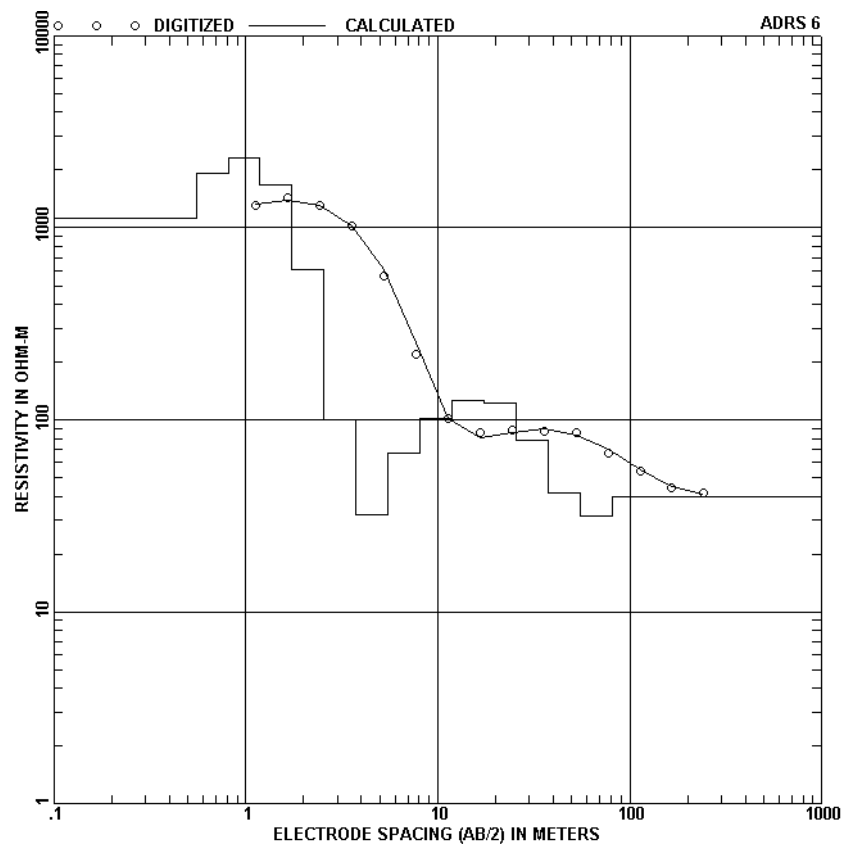
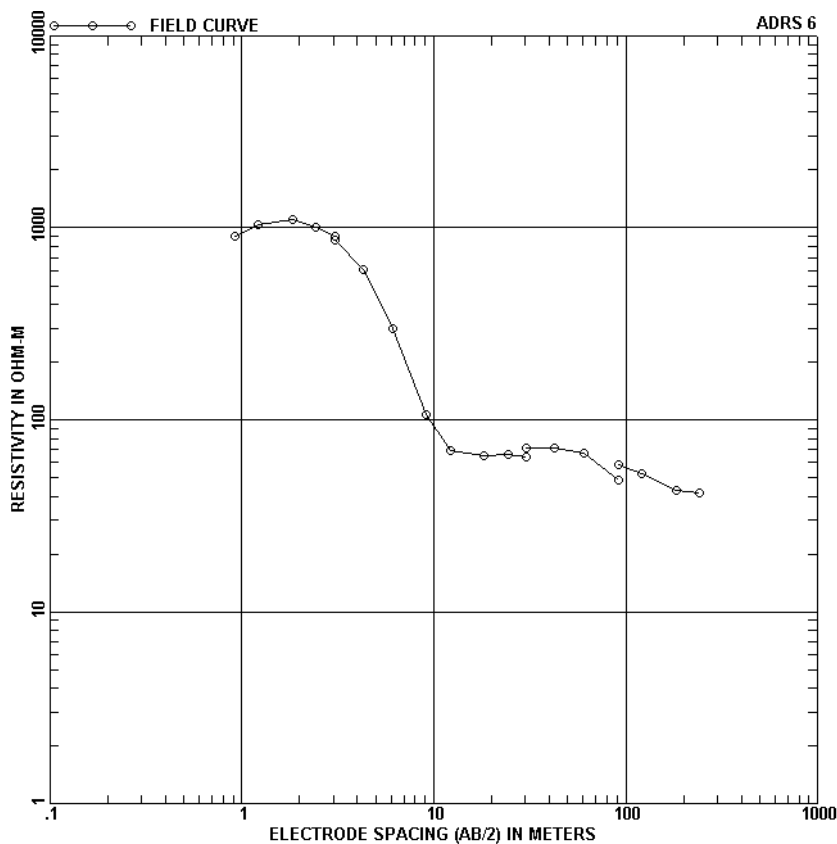
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
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1.22 (4.00)	3289.00	6.10 (20.00)	1060.00
1.83 (6.00)	3689.00	9.14 (30.00)	969.00
2.44 (8.00)	2814.00	12.19 (40.00)	1104.00
3.05 (10.00)	2210.00	18.29 (60.00)	1539.00
4.27 (14.00)	1189.00	24.38 (80.00)	1492.00
3.05 (10.00)	2833.00	30.48 (100.00)	1586.00
		42.67 (140.00)	1416.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.40 (1.32)	3076.99	2.74 (8.99)	591.05
0.59 (1.94)	5680.30	4.02 (13.19)	617.39
0.87 (2.84)	6983.81	5.90 (19.36)	1152.72
1.27 (4.17)	4788.29	8.66 (28.42)	1714.99
1.87 (6.12)	1720.84	12.72 (41.72)	1797.17
		99999.00 (99999.00)	1452.69



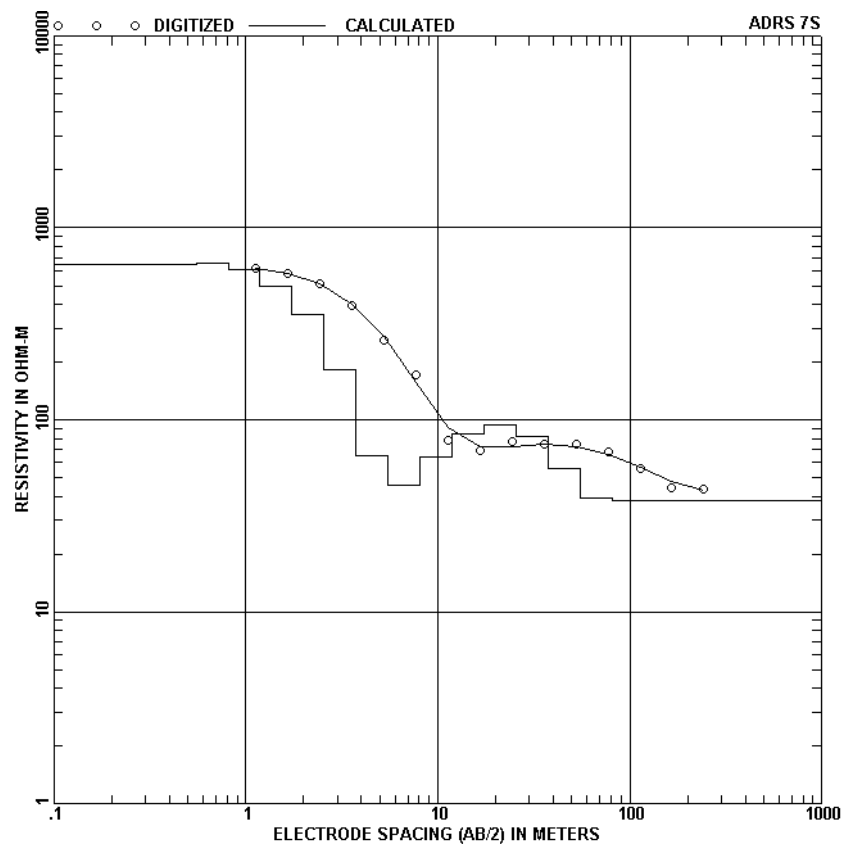
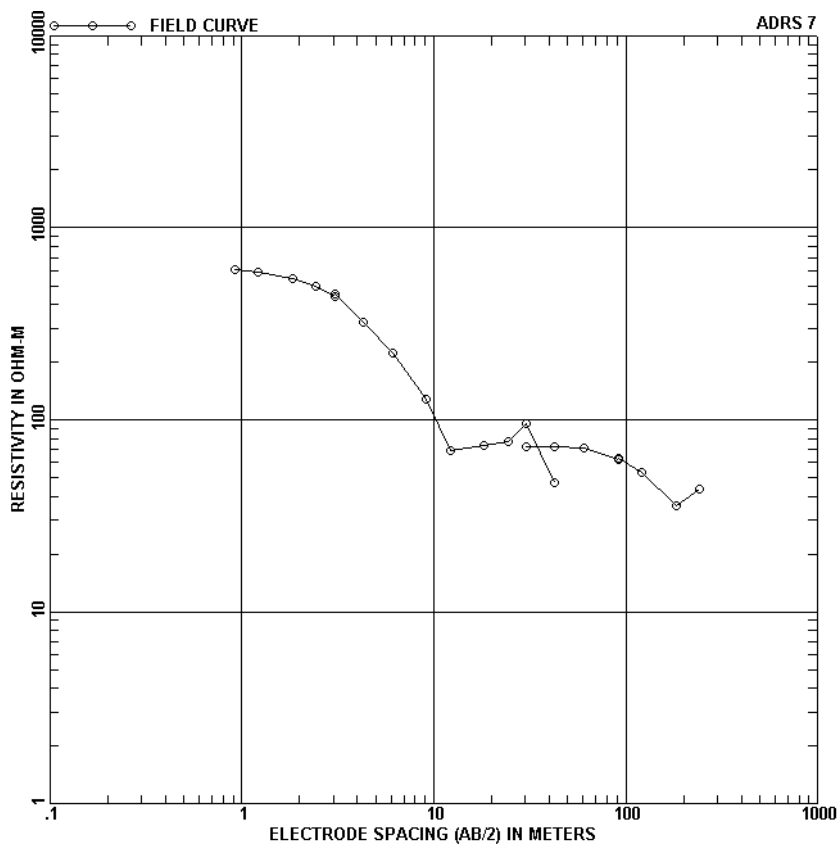
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1.22 (4.00)	739.00	24.38 (80.00)	60.90
1.83 (6.00)	534.00	30.48 (100.00)	63.80
2.44 (8.00)	281.00	30.48 (100.00)	66.70
3.05 (10.00)	218.00	42.67 (140.00)	65.80
3.05 (10.00)	198.00	60.96 (200.00)	58.80
4.27 (14.00)	107.00	91.44 (300.00)	37.50
6.10 (20.00)	52.00	121.92 (400.00)	34.80
9.14 (30.00)	45.60	182.88 (600.00)	29.00
12.19 (40.00)	58.50	182.88 (600.00)	33.40
		243.84 (800.00)	29.90

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	1121.78	8.07 (26.49)	71.77
0.81 (2.65)	845.50	11.85 (38.88)	89.96
1.19 (3.89)	471.77	17.39 (57.07)	99.83
1.74 (5.71)	201.04	25.53 (83.76)	88.93
2.55 (8.38)	63.05	37.47 (122.95)	60.82
3.75 (12.29)	35.46	55.01 (180.47)	37.92
5.50 (18.05)	50.50	80.74 (264.89)	28.37
		99999.00 (99999.00)	26.08



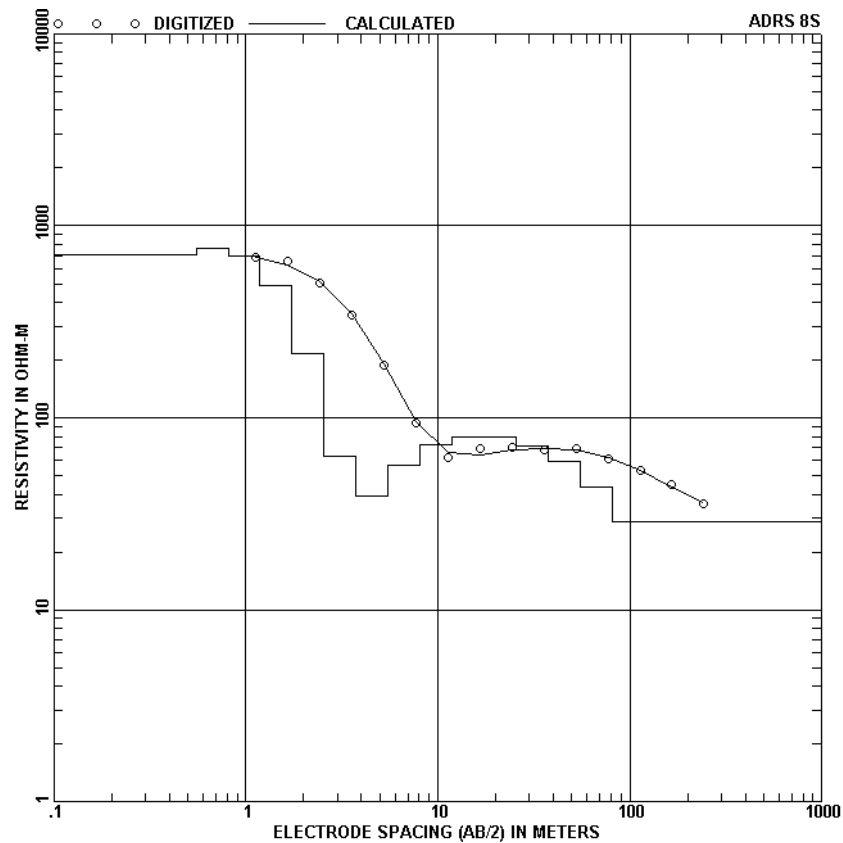
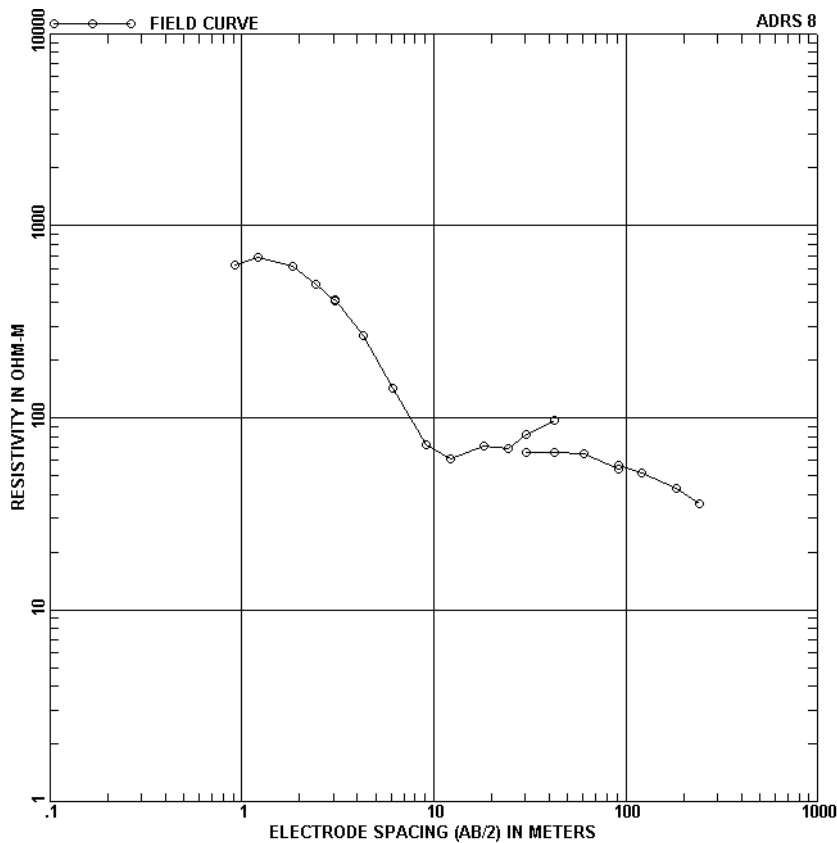
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	907.00	18.29 (60.00)	64.60
1.22 (4.00)	1045.00	24.38 (80.00)	65.80
1.83 (6.00)	1102.00	30.48 (100.00)	64.20
2.44 (8.00)	1014.00	30.48 (100.00)	71.30
3.05 (10.00)	898.00	42.67 (140.00)	71.70
3.05 (10.00)	858.00	60.96 (200.00)	67.00
4.27 (14.00)	607.00	91.44 (300.00)	48.20
6.10 (20.00)	297.00	91.44 (300.00)	58.70
9.14 (30.00)	107.00	121.92 (400.00)	52.30
12.19 (40.00)	69.30	182.88 (600.00)	42.80
		243.84 (800.00)	41.60

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	1129.27	8.07 (26.49)	66.81
0.81 (2.65)	1934.75	11.85 (38.88)	102.26
1.19 (3.89)	2302.09	17.39 (57.07)	125.95
1.74 (5.71)	1674.72	25.53 (83.76)	121.54
2.55 (8.38)	603.86	37.47 (122.95)	78.09
3.75 (12.29)	99.42	55.01 (180.47)	41.58
5.50 (18.05)	31.98	80.74 (264.89)	31.49
		99999.00 (99999.00)	39.43



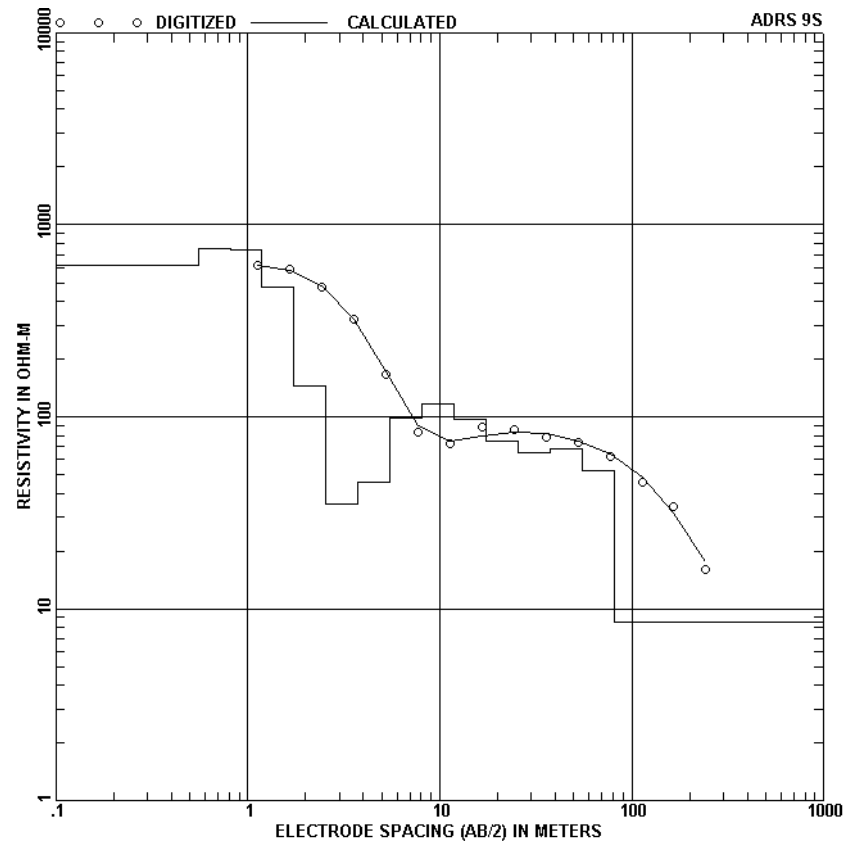
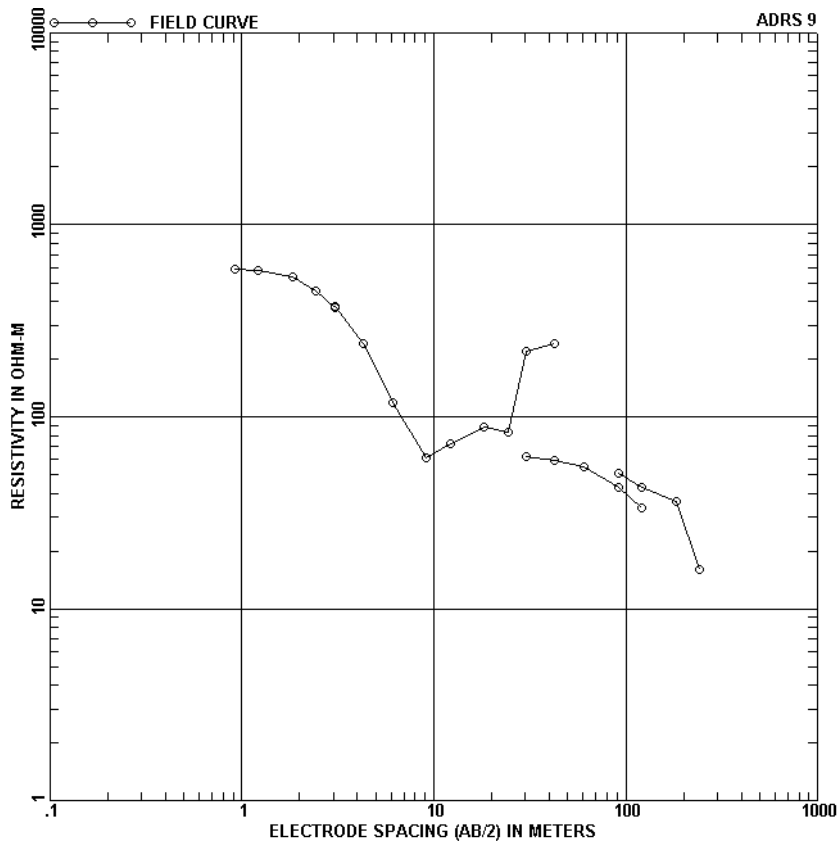
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	608.00	24.38 (80.00)	76.50
1.22 (4.00)	590.00	30.48 (100.00)	94.90
1.83 (6.00)	546.00	42.67 (140.00)	46.80
2.44 (8.00)	495.00	30.48 (100.00)	72.50
3.05 (10.00)	436.00	42.67 (140.00)	72.80
3.05 (10.00)	450.00	60.96 (200.00)	70.90
4.27 (14.00)	324.00	91.44 (300.00)	61.80
6.10 (20.00)	222.00	91.44 (300.00)	63.40
9.14 (30.00)	128.00	121.92 (400.00)	53.10
12.19 (40.00)	69.00	182.88 (600.00)	35.80
18.29 (60.00)	73.40	243.84 (800.00)	43.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	639.98	8.07 (26.49)	45.76
0.81 (2.65)	657.29	11.85 (38.88)	63.73
1.19 (3.89)	607.20	17.39 (57.07)	84.52
1.74 (5.71)	494.27	25.53 (83.76)	94.60
2.55 (8.38)	354.49	37.47 (122.95)	82.32
3.75 (12.29)	183.12	55.01 (180.47)	56.02
5.50 (18.05)	64.93	80.74 (264.89)	39.32
		99999.00 (99999.00)	38.11



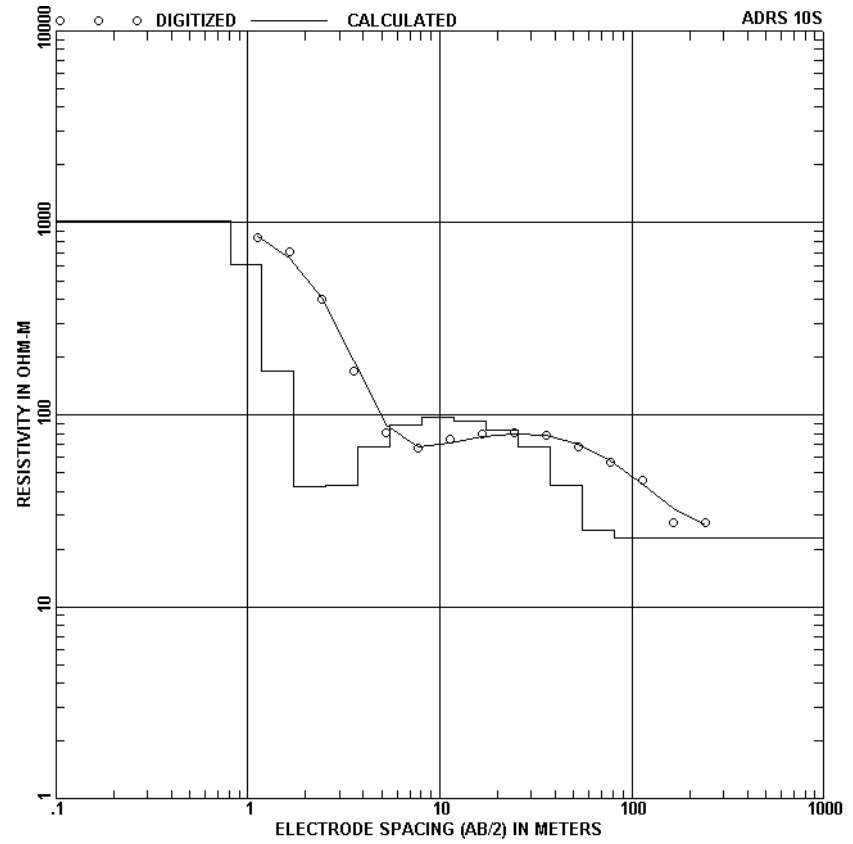
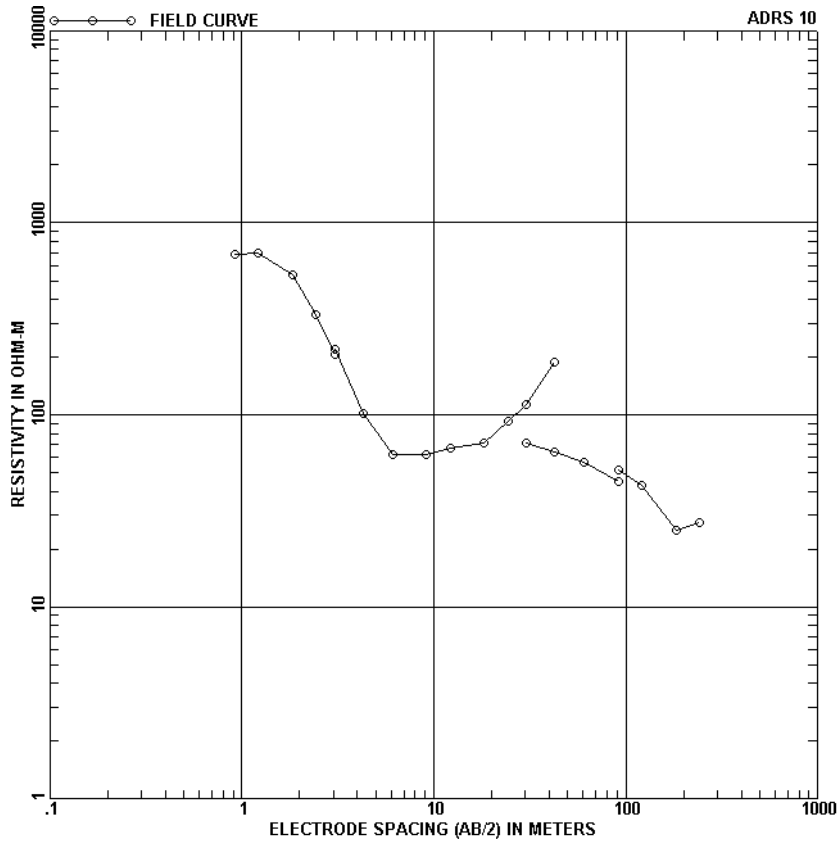
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	627.00	24.38 (80.00)	69.40
1.22 (4.00)	684.00	30.48 (100.00)	82.00
1.83 (6.00)	611.00	42.67 (140.00)	97.10
2.44 (8.00)	496.00	30.48 (100.00)	66.00
3.05 (10.00)	409.00	42.67 (140.00)	65.80
3.05 (10.00)	411.00	60.96 (200.00)	65.10
4.27 (14.00)	266.00	91.44 (300.00)	54.40
6.10 (20.00)	143.00	91.44 (300.00)	56.50
9.14 (30.00)	72.30	121.92 (400.00)	51.80
12.19 (40.00)	60.80	182.88 (600.00)	42.60
18.29 (60.00)	70.90	243.84 (800.00)	35.70

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	710.48	8.07 (26.49)	56.22
0.81 (2.65)	766.90	11.85 (38.88)	72.55
1.19 (3.89)	698.00	17.39 (57.07)	79.96
1.74 (5.71)	487.68	25.53 (83.76)	79.16
2.55 (8.38)	216.52	37.47 (122.95)	71.52
3.75 (12.29)	62.59	55.01 (180.47)	59.50
5.50 (18.05)	38.92	80.74 (264.89)	43.49
		99999.00 (99999.00)	28.66



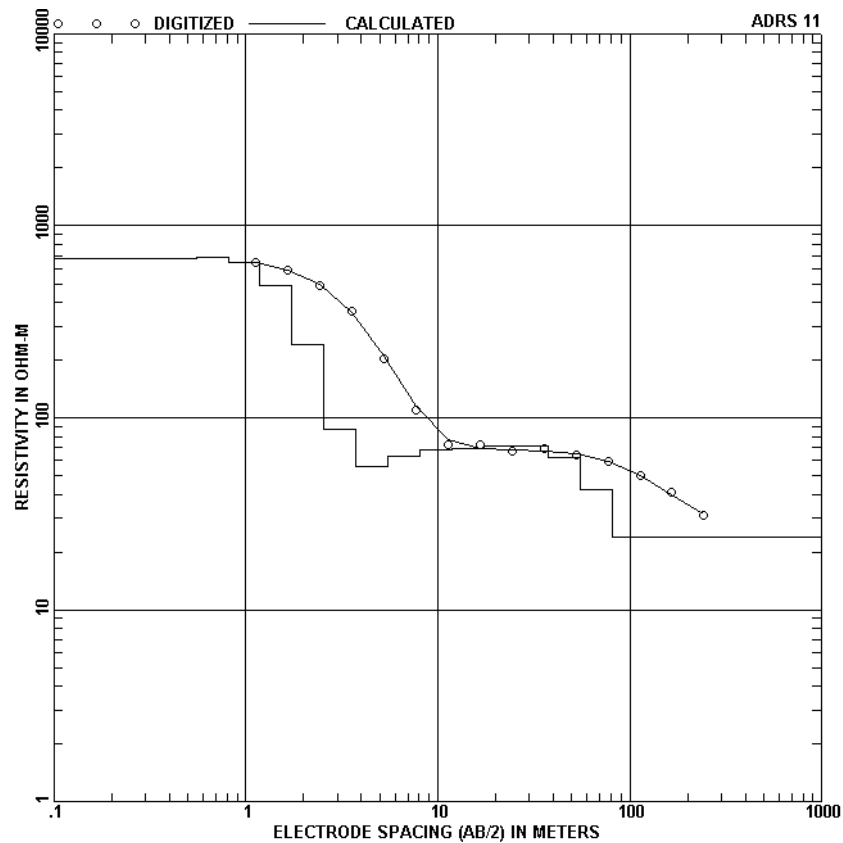
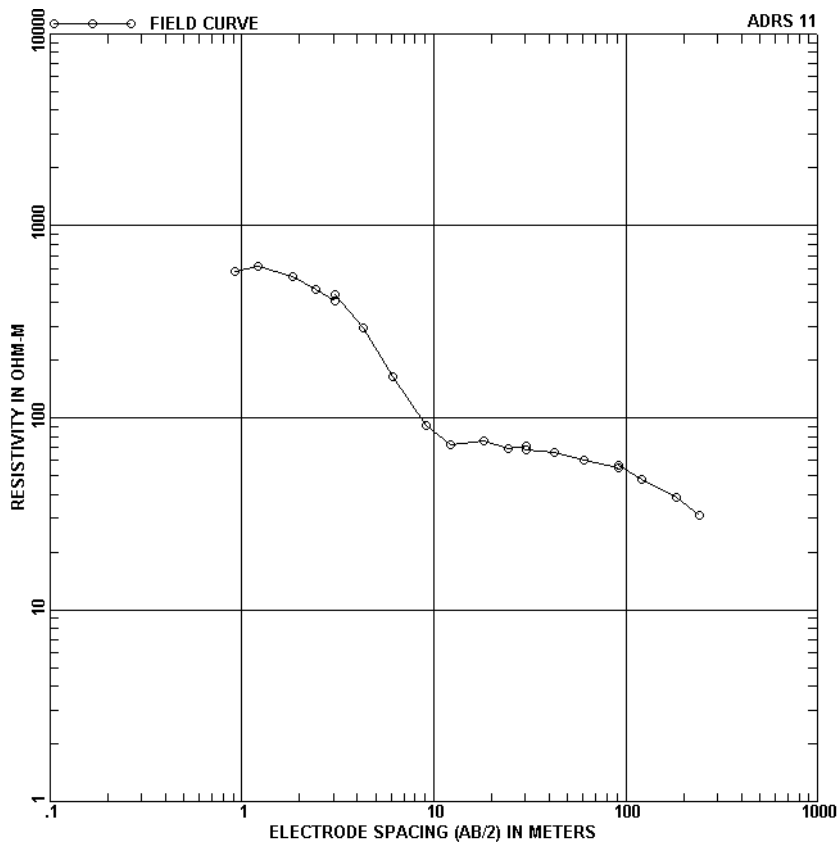
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	586.00	24.38 (80.00)	83.20
1.22 (4.00)	581.00	30.48 (100.00)	218.00
1.83 (6.00)	540.00	42.67 (140.00)	242.00
2.44 (8.00)	453.00	30.48 (100.00)	62.50
3.05 (10.00)	370.00	42.67 (140.00)	59.30
3.05 (10.00)	377.00	60.96 (200.00)	54.50
4.27 (14.00)	241.00	91.44 (300.00)	43.00
6.10 (20.00)	119.00	121.92 (400.00)	33.50
9.14 (30.00)	61.00	91.44 (300.00)	51.20
12.19 (40.00)	72.20	121.92 (400.00)	43.10
18.29 (60.00)	88.10	182.88 (600.00)	36.10
		243.84 (800.00)	16.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	619.56	8.07 (26.49)	97.83
0.81 (2.65)	749.02	11.85 (38.88)	117.38
1.19 (3.89)	737.69	17.39 (57.07)	96.60
1.74 (5.71)	473.60	25.53 (83.76)	74.32
2.55 (8.38)	144.64	37.47 (122.95)	65.33
3.75 (12.29)	35.12	55.01 (180.47)	67.67
5.50 (18.05)	45.75	80.74 (264.89)	52.66
		99999.00 (99999.00)	8.52



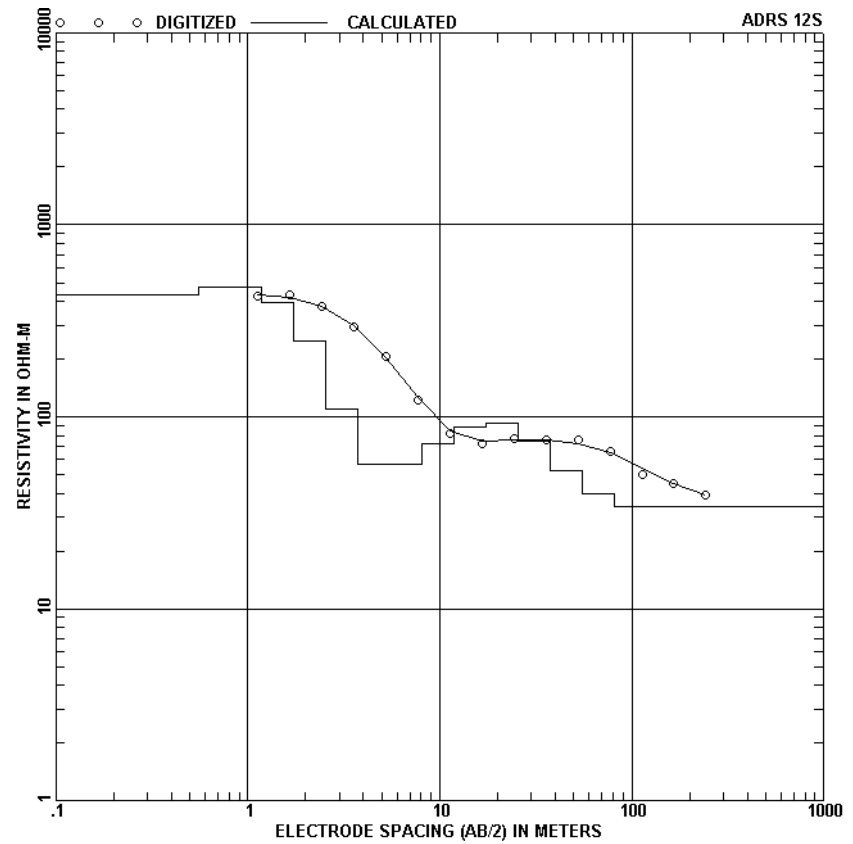
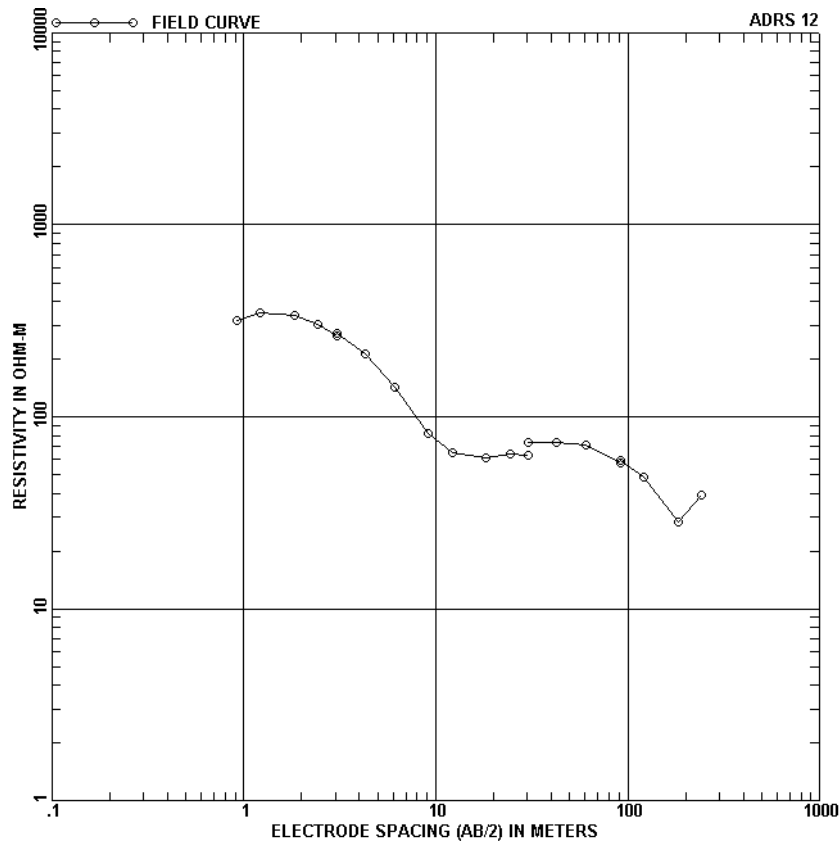
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	690.00	24.38 (80.00)	92.00
1.22 (4.00)	699.00	30.48 (100.00)	114.00
1.83 (6.00)	538.00	42.67 (140.00)	187.00
2.44 (8.00)	335.00	30.48 (100.00)	71.00
3.05 (10.00)	207.00	42.67 (140.00)	63.70
3.05 (10.00)	218.00	60.96 (200.00)	56.50
4.27 (14.00)	101.00	91.44 (300.00)	45.20
6.10 (20.00)	61.70	91.44 (300.00)	51.60
9.14 (30.00)	62.50	121.92 (400.00)	42.80
12.19 (40.00)	67.30	182.88 (600.00)	25.20
18.29 (60.00)	71.00	243.84 (800.00)	27.40

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	1015.95	8.07 (26.49)	88.20
0.81 (2.65)	1020.61	11.85 (38.88)	96.36
1.19 (3.89)	601.78	17.39 (57.07)	93.18
1.74 (5.71)	168.41	25.53 (83.76)	83.65
2.55 (8.38)	42.01	37.47 (122.95)	67.94
3.75 (12.29)	42.76	55.01 (180.47)	43.19
5.50 (18.05)	67.91	80.74 (264.89)	24.92
		99999.00 (99999.00)	22.98



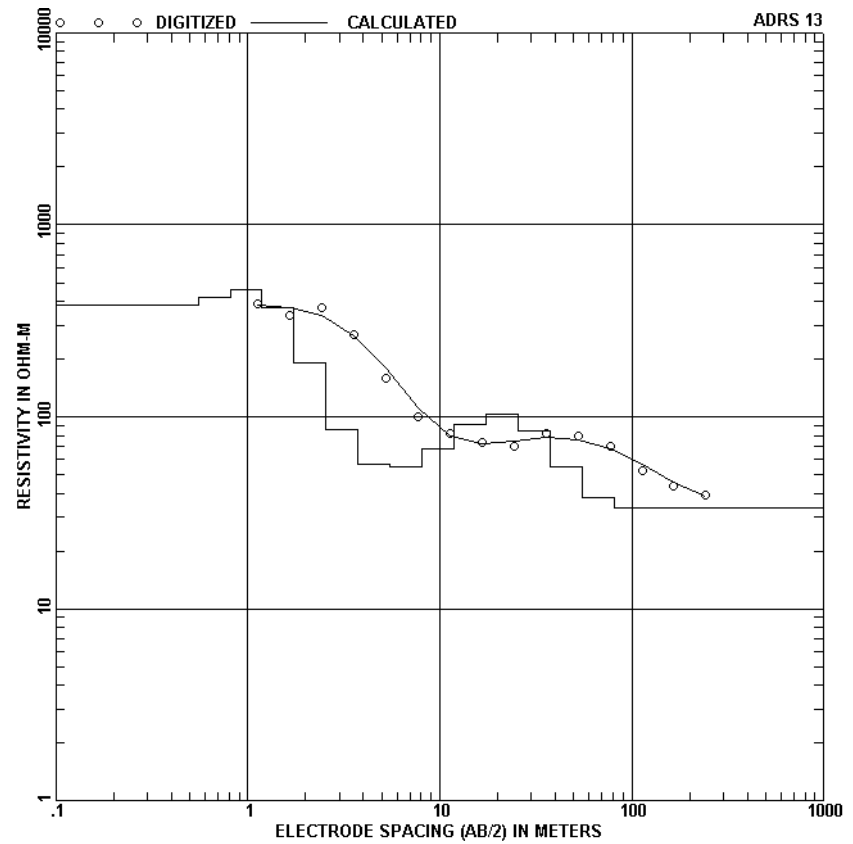
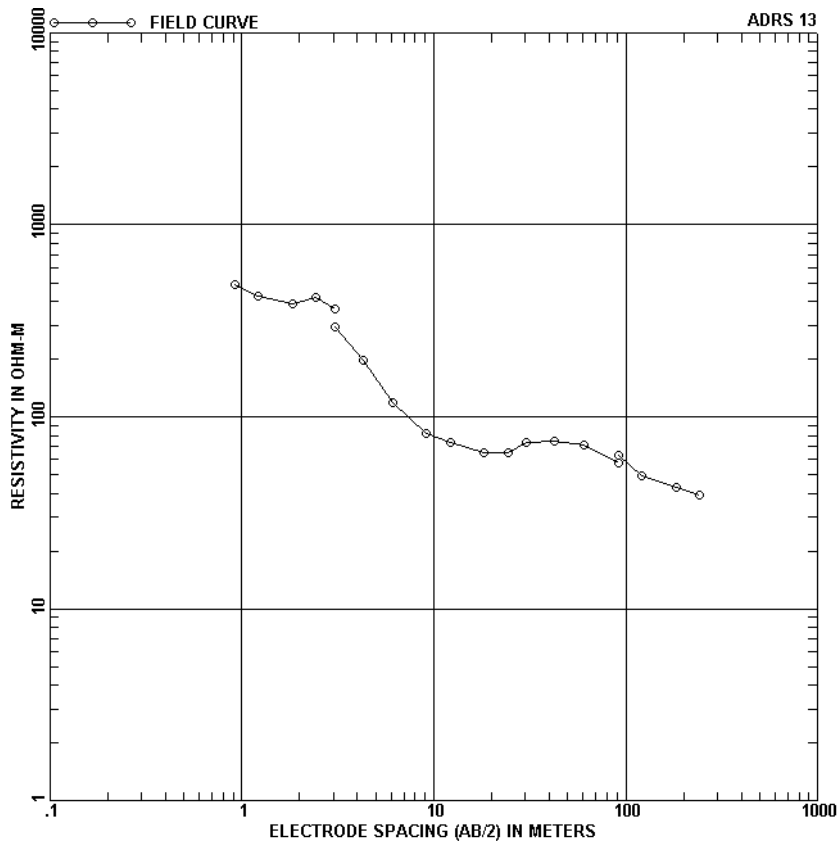
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	578.00	18.29 (60.00)	75.70
1.22 (4.00)	620.00	24.38 (80.00)	69.30
1.83 (6.00)	541.00	30.48 (100.00)	71.70
2.44 (8.00)	469.00	30.48 (100.00)	67.90
3.05 (10.00)	409.00	42.67 (140.00)	66.00
3.05 (10.00)	441.00	60.96 (200.00)	60.60
4.27 (14.00)	292.00	91.44 (300.00)	55.20
6.10 (20.00)	164.00	91.44 (300.00)	56.20
9.14 (30.00)	90.90	121.92 (400.00)	48.00
12.19 (40.00)	72.80	182.88 (600.00)	38.50
		243.84 (800.00)	31.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	678.23	8.07 (26.49)	62.90
0.81 (2.65)	685.34	11.85 (38.88)	67.77
1.19 (3.89)	645.88	17.39 (57.07)	69.31
1.74 (5.71)	487.54	25.53 (83.76)	71.21
2.55 (8.38)	240.74	37.47 (122.95)	71.20
3.75 (12.29)	87.28	55.01 (180.47)	61.78
5.50 (18.05)	55.45	80.74 (264.89)	42.01
		99999.00 (99999.00)	24.07



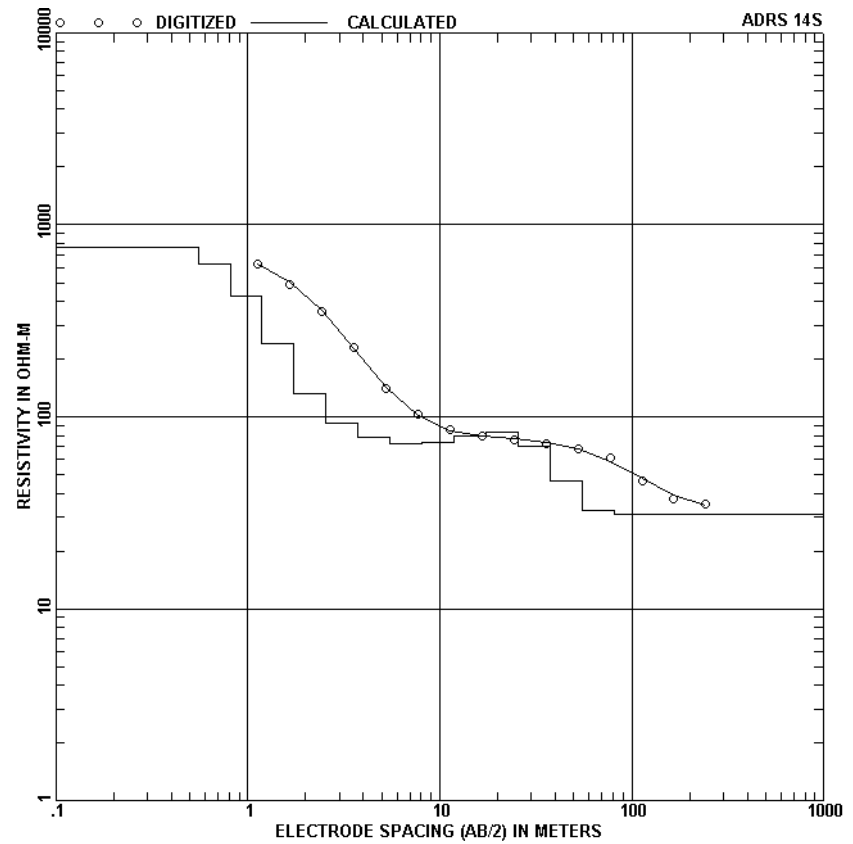
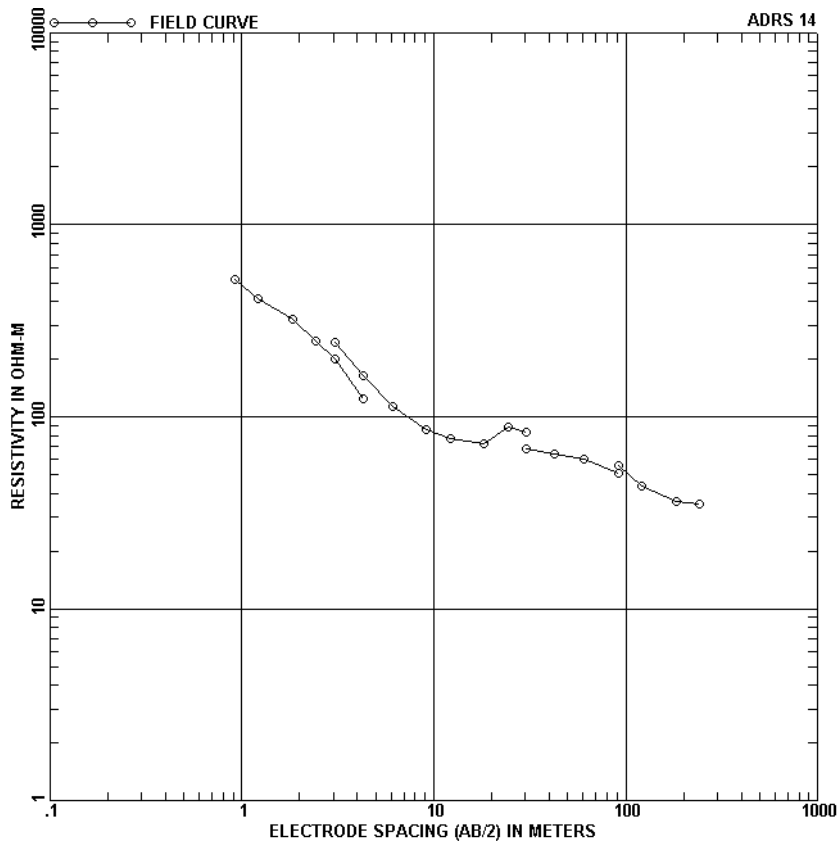
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	316.00	18.29 (60.00)	60.80
1.22 (4.00)	350.00	24.38 (80.00)	64.30
1.83 (6.00)	337.00	30.48 (100.00)	62.90
2.44 (8.00)	302.00	30.48 (100.00)	73.40
3.05 (10.00)	264.00	42.67 (140.00)	74.10
3.05 (10.00)	273.00	60.96 (200.00)	71.10
4.27 (14.00)	213.00	91.44 (300.00)	57.20
6.10 (20.00)	142.00	91.44 (300.00)	59.00
9.14 (30.00)	82.20	121.92 (400.00)	48.20
12.19 (40.00)	65.50	182.88 (600.00)	28.40
		243.84 (800.00)	39.30

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	433.81	8.07 (26.49)	56.43
0.81 (2.65)	471.29	11.85 (38.88)	72.58
1.19 (3.89)	471.28	17.39 (57.07)	89.00
1.74 (5.71)	396.90	25.53 (83.76)	92.64
2.55 (8.38)	246.86	37.47 (122.95)	75.26
3.75 (12.29)	109.89	55.01 (180.47)	52.53
5.50 (18.05)	56.97	80.74 (264.89)	39.60
		99999.00 (99999.00)	34.22



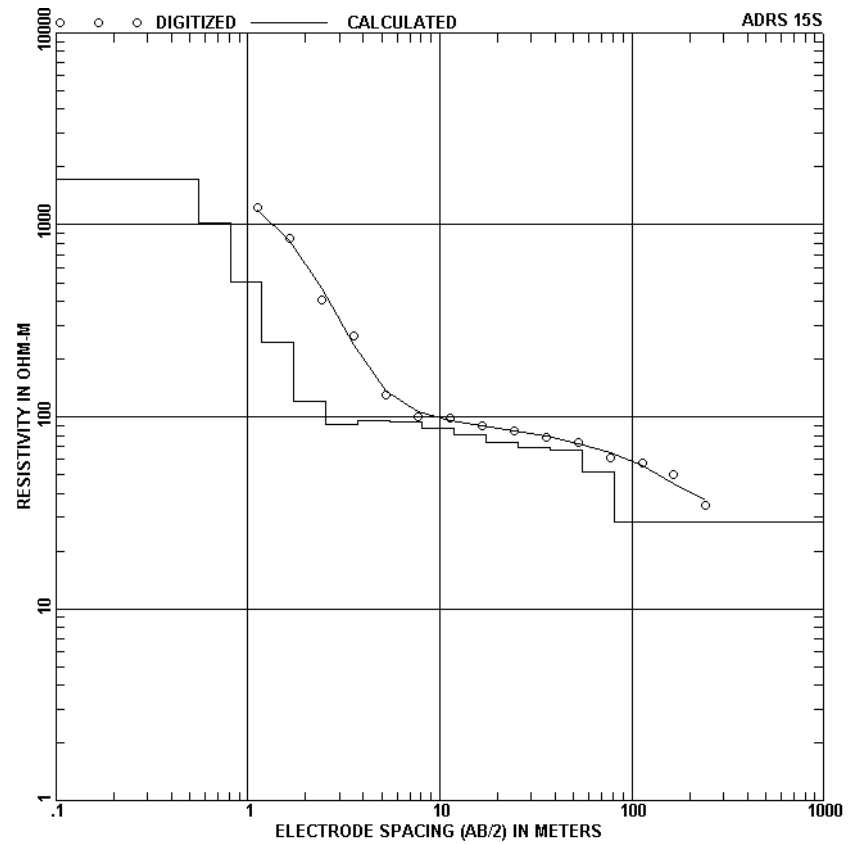
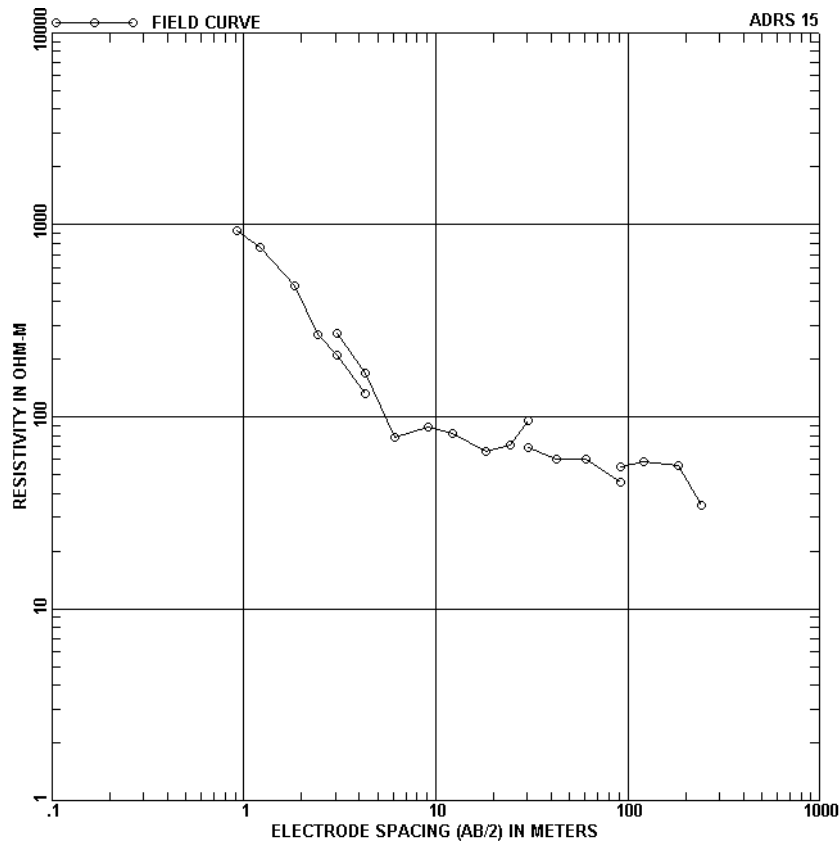
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	489.00	18.29 (60.00)	65.20
1.22 (4.00)	424.00	24.38 (80.00)	64.70
1.83 (6.00)	389.00	30.48 (100.00)	73.10
2.44 (8.00)	422.00	30.48 (100.00)	73.40
3.05 (10.00)	363.00	42.67 (140.00)	75.20
3.05 (10.00)	292.00	60.96 (200.00)	71.40
4.27 (14.00)	198.00	91.44 (300.00)	57.80
6.10 (20.00)	119.00	91.44 (300.00)	62.70
9.14 (30.00)	82.00	121.92 (400.00)	49.50
12.19 (40.00)	74.10	182.88 (600.00)	42.70
		243.84 (800.00)	39.20

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	380.67	8.07 (26.49)	55.04
0.81 (2.65)	416.17	11.85 (38.88)	68.54
1.19 (3.89)	456.31	17.39 (57.07)	91.85
1.74 (5.71)	368.39	25.53 (83.76)	102.52
2.55 (8.38)	191.12	37.47 (122.95)	84.40
3.75 (12.29)	85.67	55.01 (180.47)	54.99
5.50 (18.05)	56.85	80.74 (264.89)	37.70
		99999.00 (99999.00)	33.38



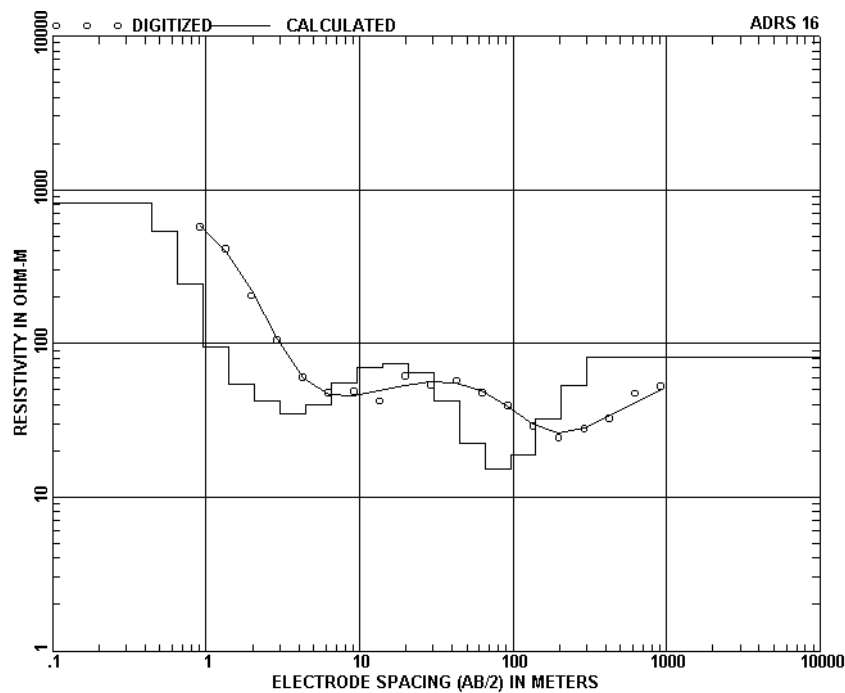
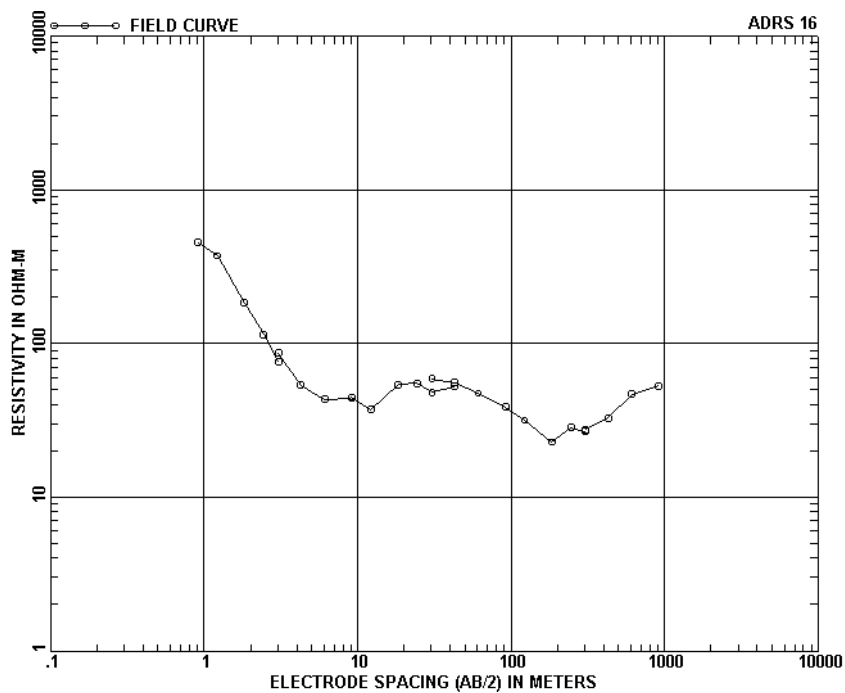
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	516.00	18.29 (60.00)	72.70
1.22 (4.00)	414.00	24.38 (80.00)	88.00
1.83 (6.00)	323.00	30.48 (100.00)	83.20
2.44 (8.00)	249.00	30.48 (100.00)	67.90
3.05 (10.00)	200.00	42.67 (140.00)	64.50
4.27 (14.00)	124.00	60.96 (200.00)	60.60
3.05 (10.00)	245.00	91.44 (300.00)	51.10
4.27 (14.00)	163.00	91.44 (300.00)	55.50
6.10 (20.00)	113.00	121.92 (400.00)	43.90
9.14 (30.00)	86.40	182.88 (600.00)	36.10
12.19 (40.00)	76.80	243.84 (800.00)	35.10

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	765.68	8.07 (26.49)	72.58
0.81 (2.65)	622.75	11.85 (38.88)	73.29
1.19 (3.89)	423.58	17.39 (57.07)	79.46
1.74 (5.71)	239.99	25.53 (83.76)	83.41
2.55 (8.38)	132.88	37.47 (122.95)	70.71
3.75 (12.29)	92.59	55.01 (180.47)	46.67
5.50 (18.05)	78.31	80.74 (264.89)	32.32
		99999.00 (99999.00)	30.88



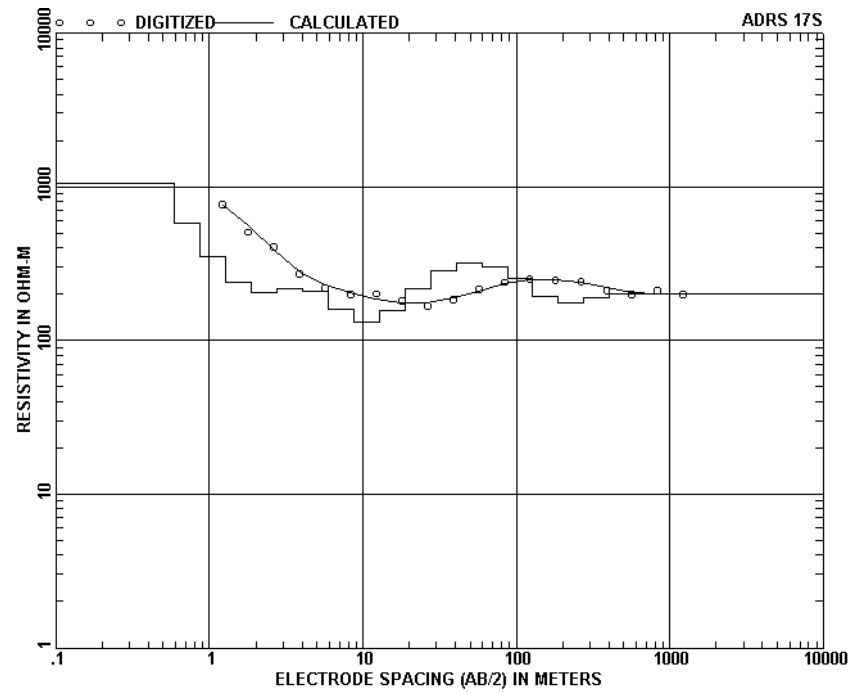
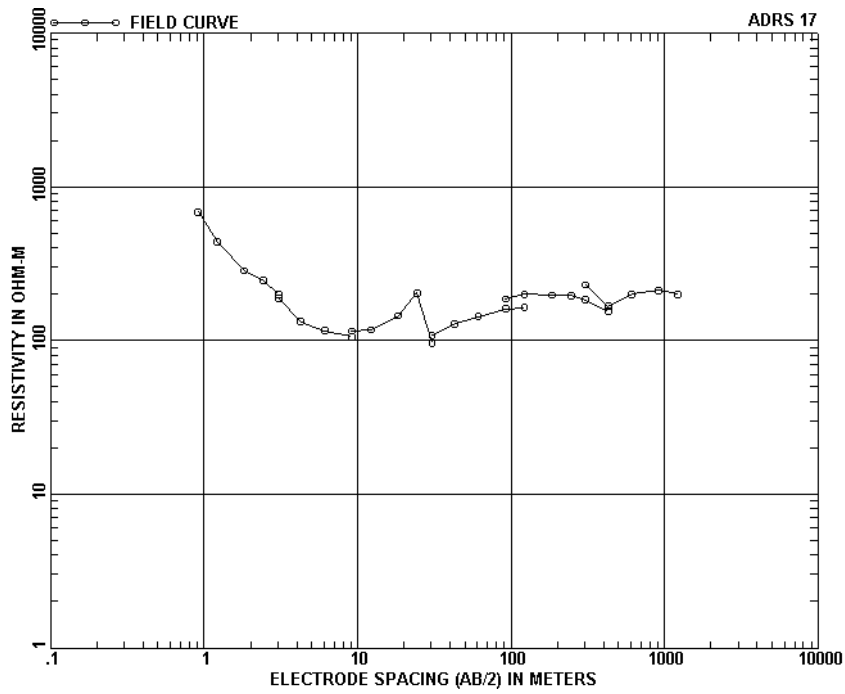
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	940.00	18.29 (60.00)	65.80
1.22 (4.00)	766.00	24.38 (80.00)	71.30
1.83 (6.00)	479.00	30.48 (100.00)	95.60
2.44 (8.00)	270.00	30.48 (100.00)	68.80
3.05 (10.00)	211.00	42.67 (140.00)	60.60
4.27 (14.00)	132.00	60.96 (200.00)	59.90
3.05 (10.00)	272.00	91.44 (300.00)	45.80
4.27 (14.00)	168.00	91.44 (300.00)	55.30
6.10 (20.00)	78.80	121.92 (400.00)	58.20
9.14 (30.00)	88.20	182.88 (600.00)	55.70
12.19 (40.00)	81.30	243.84 (800.00)	34.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	1730.67	8.07 (26.49)	93.79
0.81 (2.65)	1029.10	11.85 (38.88)	87.67
1.19 (3.89)	507.58	17.39 (57.07)	80.71
1.74 (5.71)	242.92	25.53 (83.76)	73.39
2.55 (8.38)	121.20	37.47 (122.95)	69.42
3.75 (12.29)	91.67	55.01 (180.47)	66.70
5.50 (18.05)	95.09	80.74 (264.89)	51.37
		999.99 (9999.00)	28.42



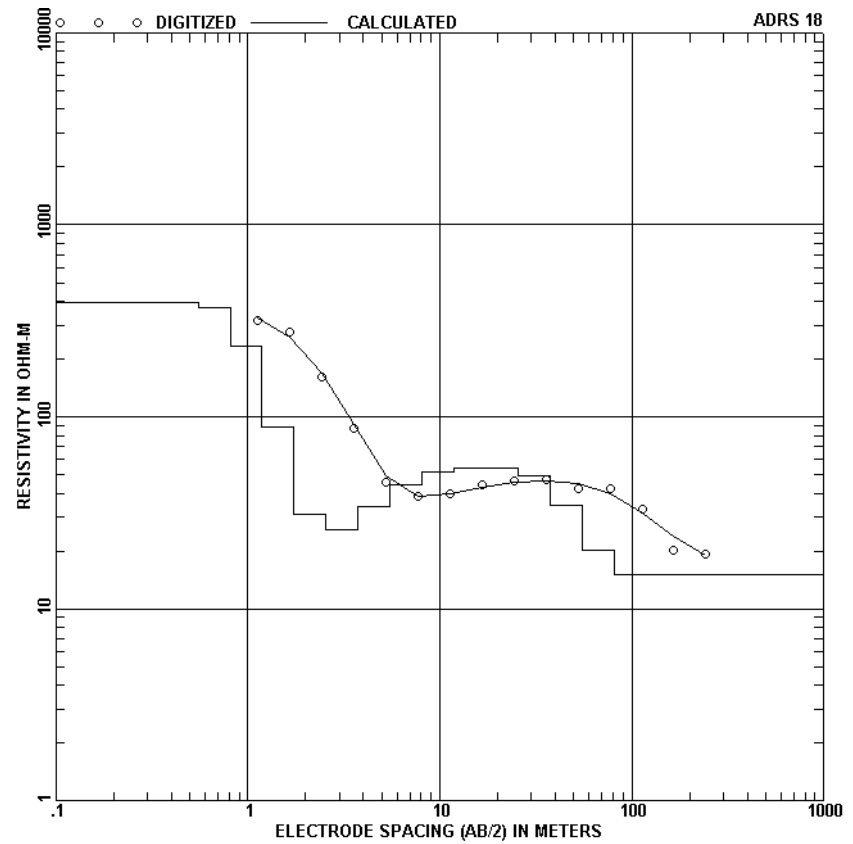
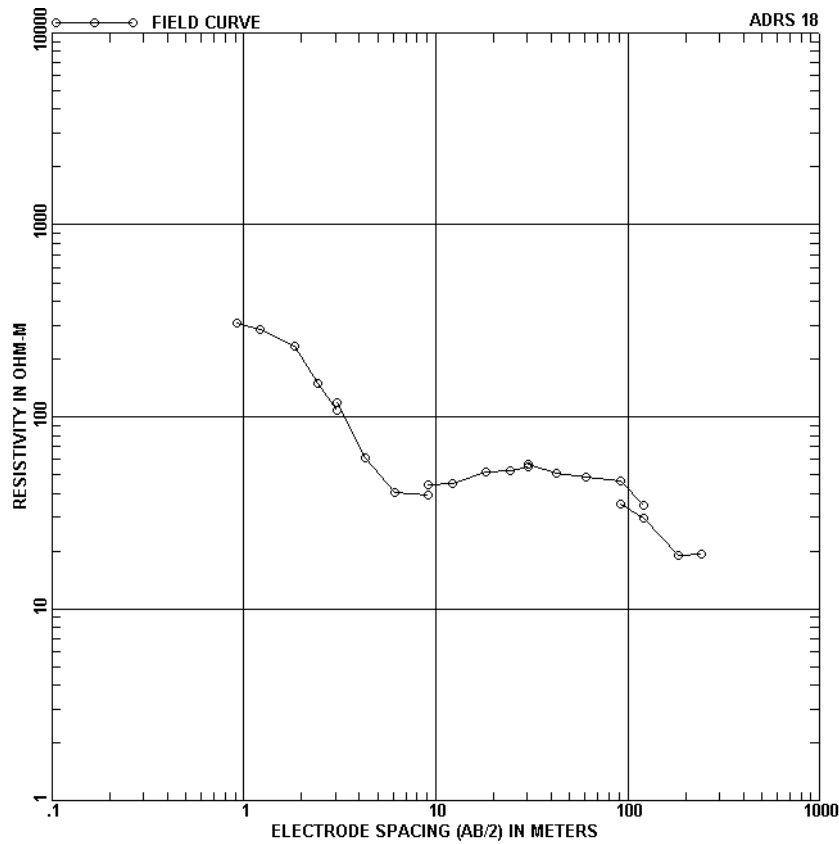
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	453.00	42.67 (140.00)	52.40
1.22 (4.00)	372.00	30.48 (100.00)	58.90
1.83 (6.00)	183.00	42.67 (140.00)	55.80
2.44 (8.00)	114.00	60.96 (200.00)	47.40
3.05 (10.00)	75.90	91.44 (300.00)	38.60
3.05 (10.00)	86.70	91.44 (300.00)	38.60
4.27 (14.00)	53.70	121.92 (400.00)	31.60
6.10 (20.00)	43.30	182.88 (600.00)	22.80
9.14 (30.00)	44.30	243.84 (800.00)	28.30
9.14 (30.00)	44.80	304.80 (1000.00)	26.70
12.19 (40.00)	37.10	304.80 (1000.00)	27.50
18.29 (60.00)	54.00	426.72 (1400.00)	32.70
24.38 (80.00)	55.00	609.60 (2000.00)	46.70
30.48 (100.00)	48.00	914.40 (3000.00)	52.90

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.44 (1.46)	823.40	14.05 (46.11)	69.59
0.65 (2.14)	534.27	20.63 (67.67)	74.39
0.96 (3.14)	242.29	30.28 (99.33)	64.66
1.41 (4.61)	95.28	44.44 (145.80)	42.45
2.06 (6.77)	54.03	65.23 (214.01)	22.36
3.03 (9.93)	41.87	95.74 (314.12)	15.13
4.44 (14.58)	35.00	140.53 (461.06)	18.98
6.52 (21.40)	40.13	206.27 (676.74)	32.09
9.57 (31.41)	55.44	302.77 (993.32)	53.41
		99999.00 (99999.00)	81.02



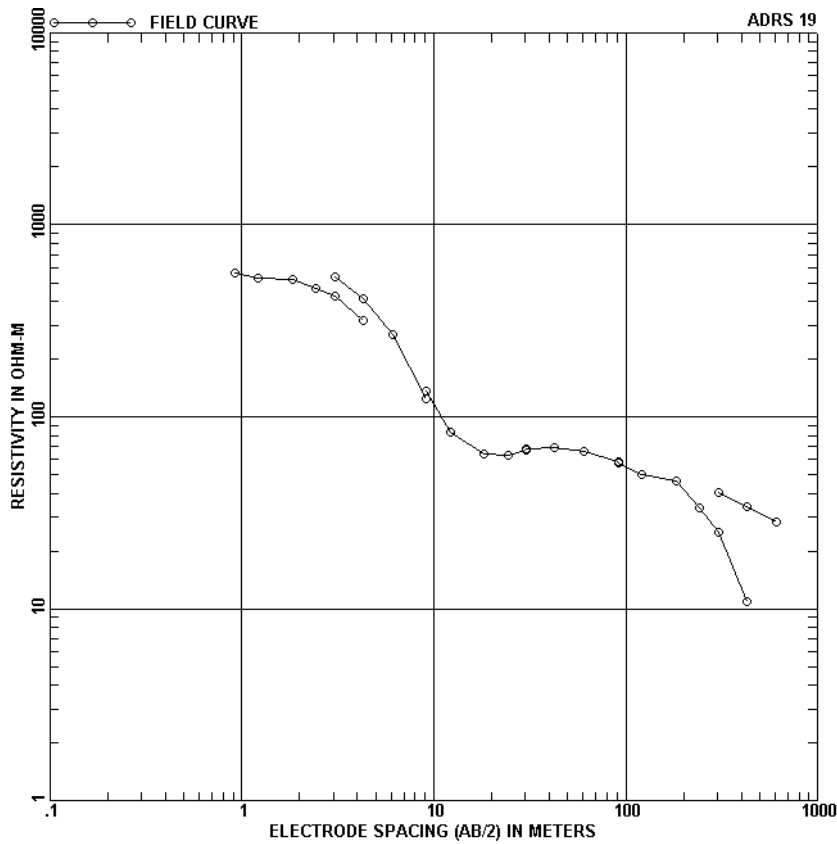
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	682.00	42.67 (140.00)	128.00
1.22 (4.00)	437.00	60.96 (200.00)	143.00
1.83 (6.00)	284.00	91.44 (300.00)	160.00
2.44 (8.00)	245.00	121.92 (400.00)	164.00
3.05 (10.00)	200.00	91.44 (300.00)	186.00
3.05 (10.00)	188.00	121.92 (400.00)	200.00
4.27 (14.00)	132.00	182.88 (600.00)	197.00
6.10 (20.00)	116.00	243.84 (800.00)	196.00
9.14 (30.00)	106.00	304.80 (1000.00)	184.00
9.14 (30.00)	115.00	426.72 (1400.00)	154.00
12.19 (40.00)	117.00	304.80 (1000.00)	230.00
18.29 (60.00)	145.00	426.72 (1400.00)	167.00
24.38 (80.00)	203.00	609.60 (2000.00)	199.00
30.48 (100.00)	95.80	914.40 (3000.00)	212.00
30.48 (100.00)	108.00	1219.20 (4000.00)	200.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.59 (1.94)	1052.67	18.74 (61.47)	155.58
0.87 (2.85)	576.82	27.50 (90.23)	216.59
1.28 (4.19)	349.45	40.37 (132.44)	281.55
1.87 (6.15)	237.41	59.25 (194.40)	315.72
2.75 (9.02)	202.82	86.97 (285.34)	303.47
4.04 (13.24)	217.88	127.66 (418.82)	250.52
5.93 (19.44)	207.57	187.37 (614.75)	194.40
8.70 (28.53)	158.57	275.03 (902.33)	175.19
12.77 (41.88)	132.73	403.69 (1324.43)	189.49
		99999.00 (99999.00)	202.23

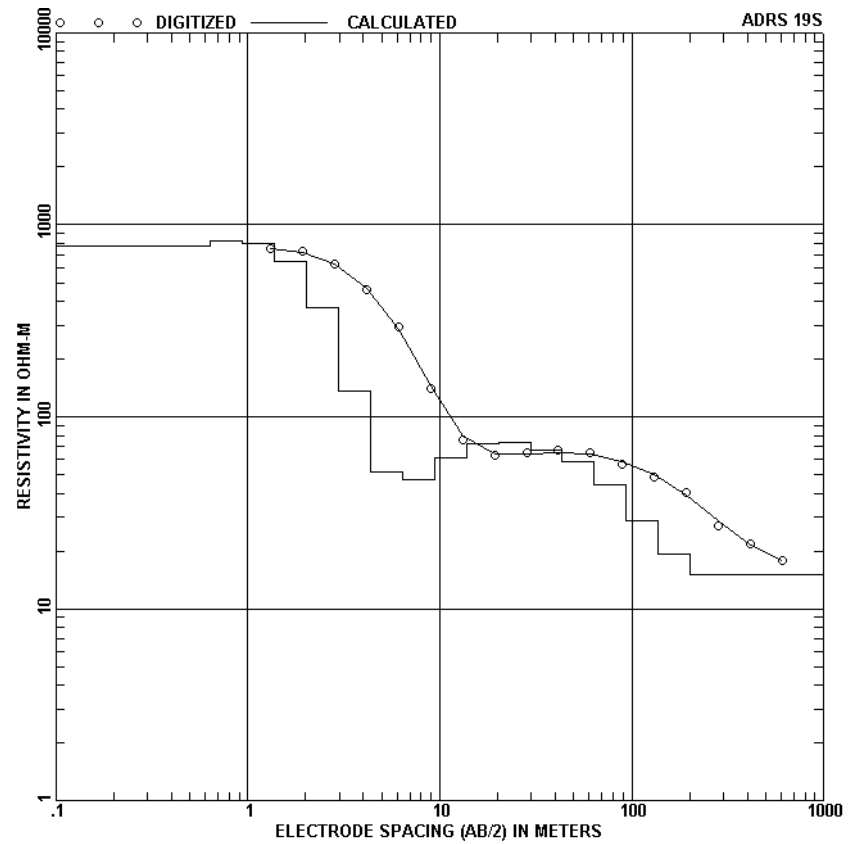


AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	308.00	18.29 (60.00)	51.40
1.22 (4.00)	284.00	24.38 (80.00)	52.40
1.83 (6.00)	232.00	30.48 (100.00)	55.00
2.44 (8.00)	149.00	30.48 (100.00)	56.40
3.05 (10.00)	108.00	42.67 (140.00)	51.10
3.05 (10.00)	118.00	60.96 (200.00)	48.20
4.27 (14.00)	61.40	91.44 (300.00)	46.40
6.10 (20.00)	40.30	121.92 (400.00)	34.50
9.14 (30.00)	39.40	91.44 (300.00)	35.30
9.14 (30.00)	44.40	121.92 (400.00)	29.80
12.19 (40.00)	45.20	182.88 (600.00)	19.00
		243.84 (800.00)	19.30

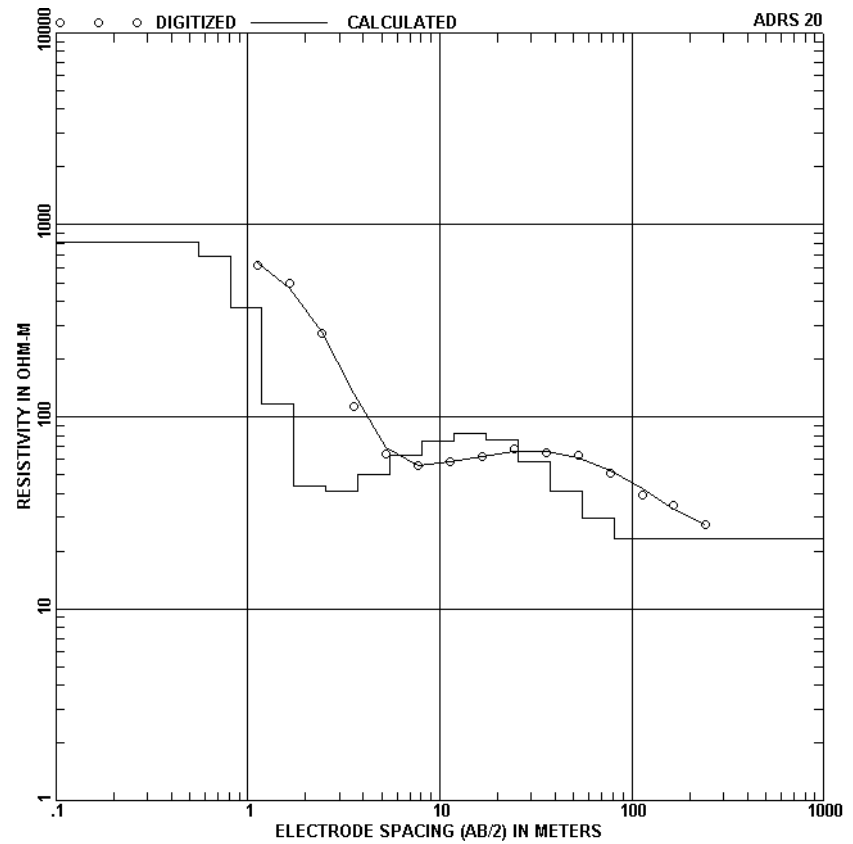
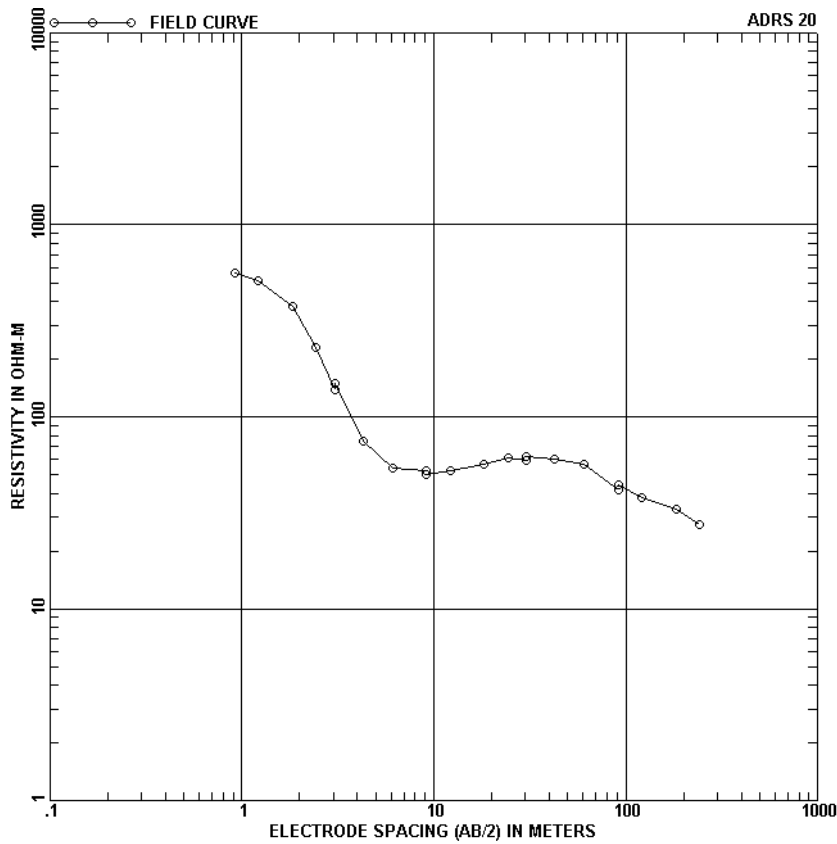
DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	391.05	8.07 (26.49)	44.53
0.81 (2.65)	369.58	11.85 (38.88)	51.31
1.19 (3.89)	234.21	17.39 (57.07)	53.69
1.74 (5.71)	89.01	25.53 (83.76)	54.07
2.55 (8.38)	31.15	37.47 (122.95)	49.57
3.75 (12.29)	25.72	55.01 (180.47)	34.77
5.50 (18.05)	34.28	80.74 (264.89)	20.09
		99999.00 (99999.00)	15.17



AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	564.00	30.48 (100.00)	66.80
1.22 (4.00)	531.00	30.48 (100.00)	67.90
1.83 (6.00)	520.00	42.67 (140.00)	68.70
2.44 (8.00)	465.00	60.96 (200.00)	66.30
3.05 (10.00)	425.00	91.44 (300.00)	58.20
4.27 (14.00)	318.00	91.44 (300.00)	57.10
3.05 (10.00)	540.00	121.92 (400.00)	49.90
4.27 (14.00)	415.00	182.88 (600.00)	46.20
6.10 (20.00)	270.00	243.84 (800.00)	33.50
9.14 (30.00)	125.00	304.80 (1000.00)	25.00
9.14 (30.00)	136.00	426.72 (1400.00)	10.90
12.19 (40.00)	83.50	304.80 (1000.00)	40.10
18.29 (60.00)	64.20	426.72 (1400.00)	34.20
24.38 (80.00)	63.30	609.60 (2000.00)	28.50

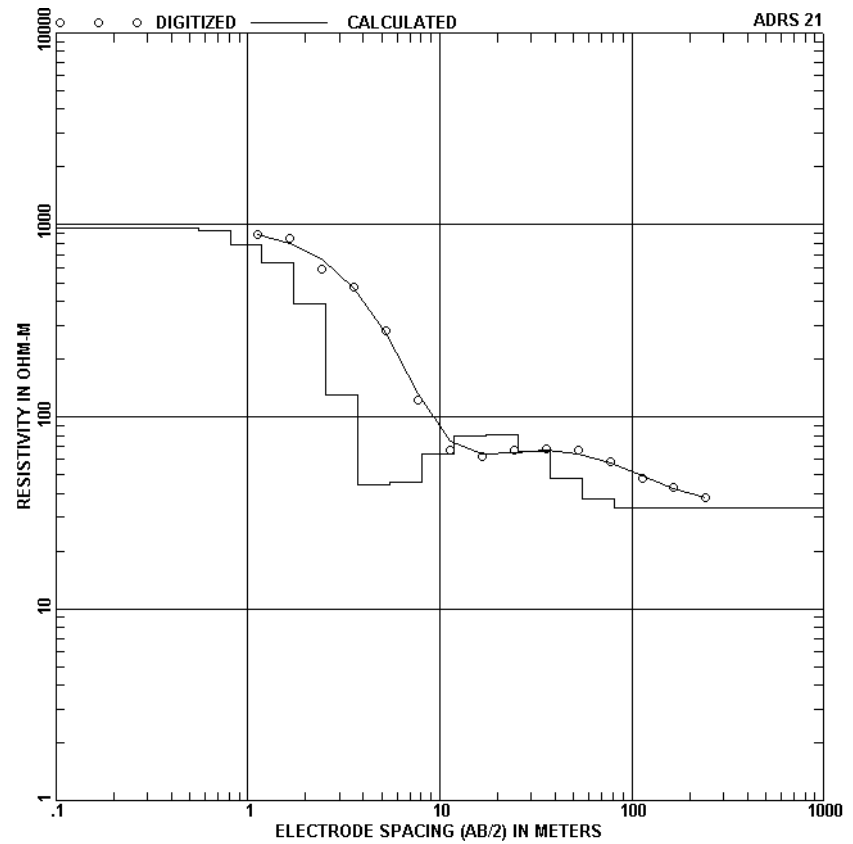
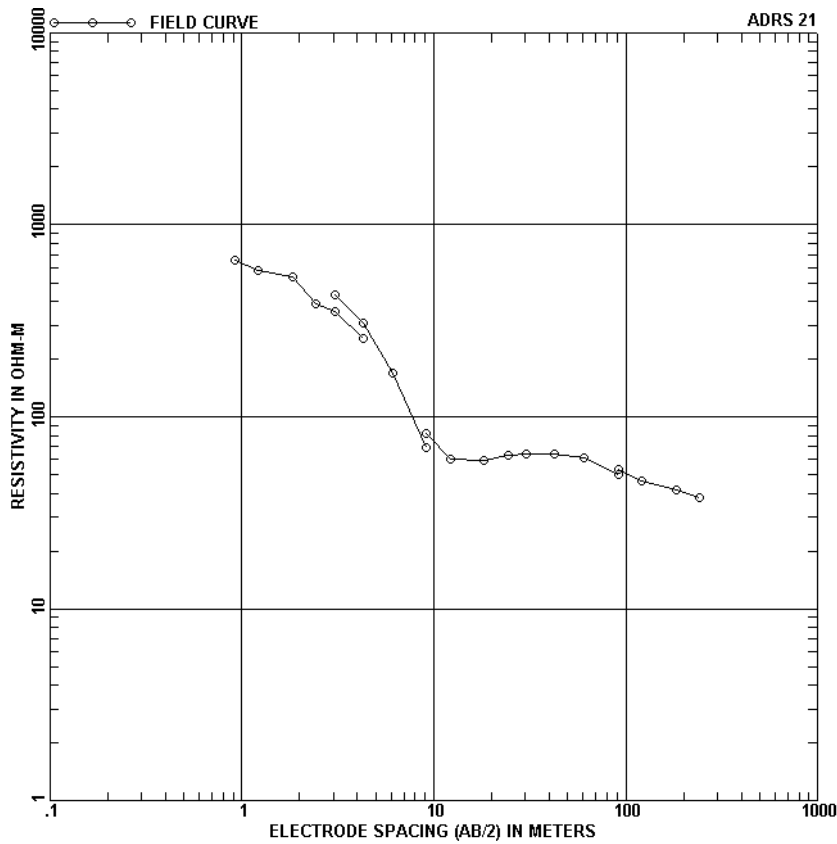


DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.64 (2.09)	772.14	13.75 (45.12)	61.19
0.94 (3.07)	828.66	20.18 (66.22)	72.53
1.38 (4.51)	802.56	29.63 (97.20)	73.71
2.02 (6.62)	643.98	43.49 (142.67)	67.44
2.96 (9.72)	371.31	63.83 (209.41)	58.09
4.35 (14.27)	135.86	93.69 (307.37)	44.13
6.38 (20.94)	51.43	137.51 (451.16)	28.83
9.37 (30.74)	46.96	201.84 (662.22)	19.33
		9999.00 (9999.00)	15.07



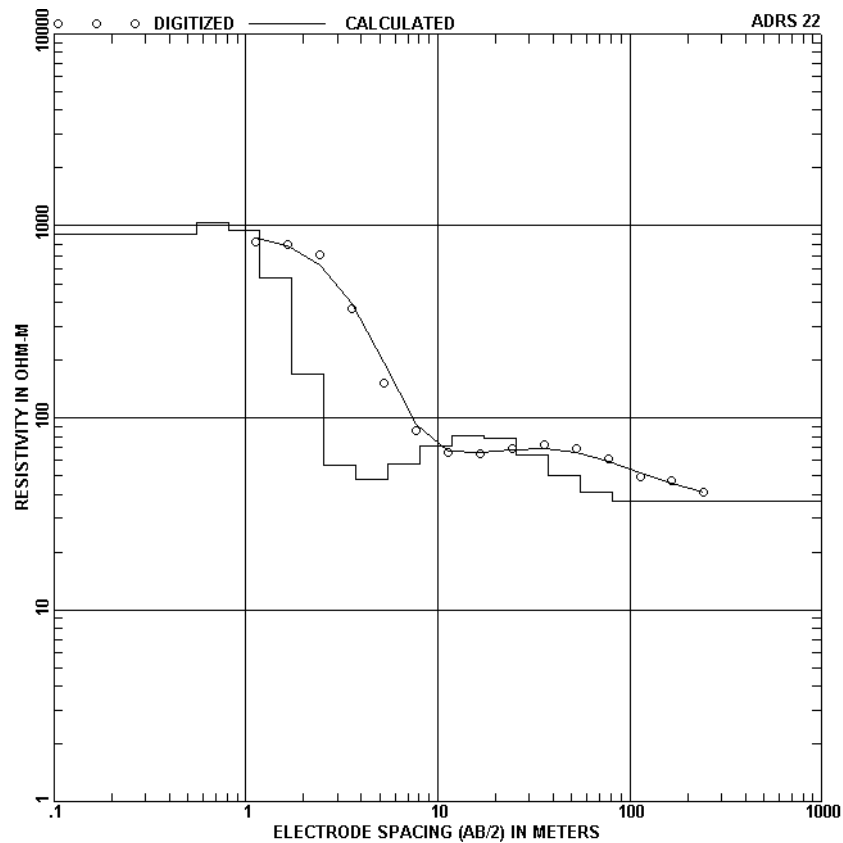
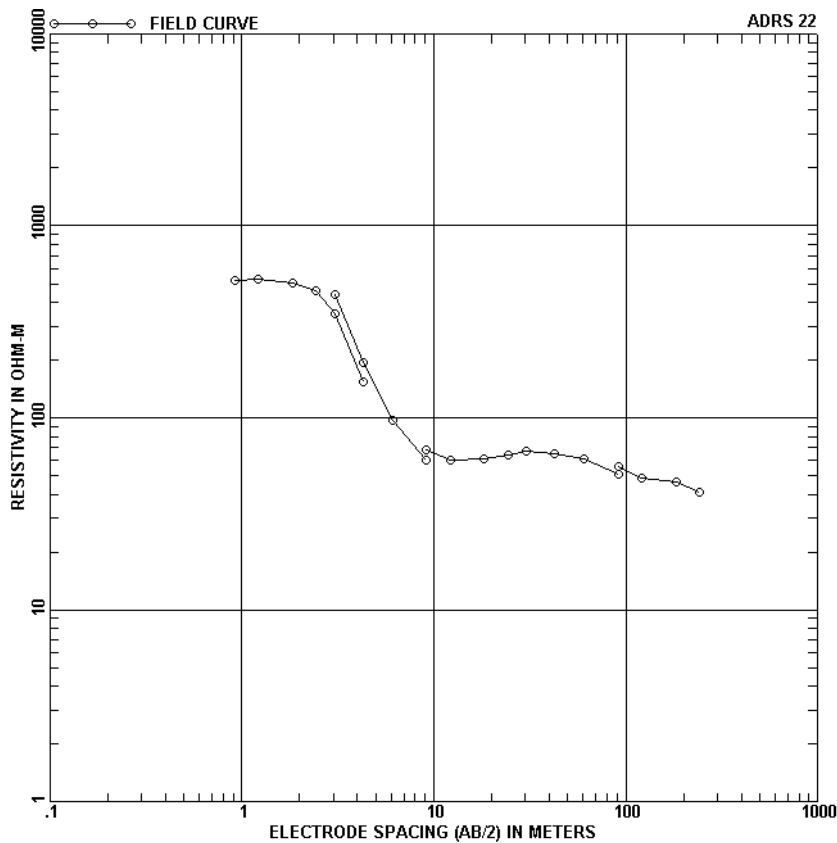
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	562.00	18.29 (60.00)	56.70
1.22 (4.00)	513.00	24.38 (80.00)	61.00
1.83 (6.00)	377.00	30.48 (100.00)	59.10
2.44 (8.00)	231.00	30.48 (100.00)	62.10
3.05 (10.00)	138.00	42.67 (140.00)	60.60
3.05 (10.00)	150.00	60.96 (200.00)	56.30
4.27 (14.00)	75.20	91.44 (300.00)	41.50
6.10 (20.00)	53.90	91.44 (300.00)	44.30
9.14 (30.00)	52.20	121.92 (400.00)	37.80
9.14 (30.00)	50.30	182.88 (600.00)	33.10
12.19 (40.00)	52.60	243.84 (800.00)	27.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	809.31	8.07 (26.49)	62.60
0.81 (2.65)	687.48	11.85 (38.88)	74.97
1.19 (3.89)	370.81	17.39 (57.07)	81.39
1.74 (5.71)	116.71	25.53 (83.76)	75.32
2.55 (8.38)	43.30	37.47 (122.95)	58.16
3.75 (12.29)	40.78	55.01 (180.47)	40.89
5.50 (18.05)	50.25	80.74 (264.89)	29.69
		99999.00 (99999.00)	23.18



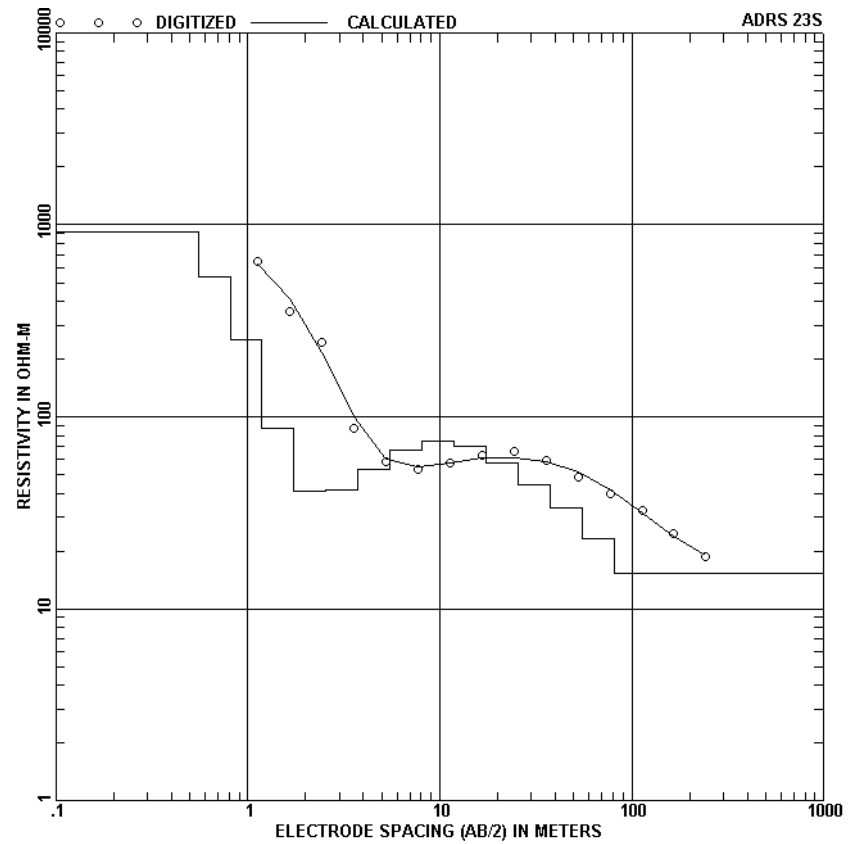
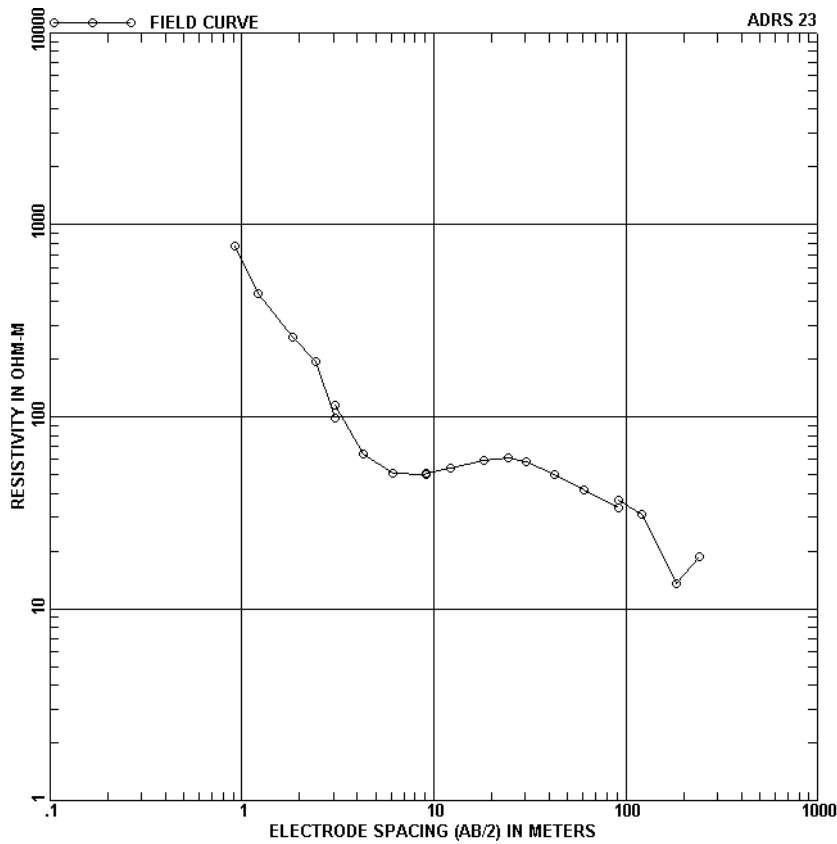
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	659.00	12.19 (40.00)	60.10
1.22 (4.00)	579.00	18.29 (60.00)	59.60
1.83 (6.00)	532.00	24.38 (80.00)	63.30
2.44 (8.00)	388.00	30.48 (100.00)	64.10
3.05 (10.00)	352.00	30.48 (100.00)	64.00
4.27 (14.00)	256.00	42.67 (140.00)	63.70
3.05 (10.00)	431.00	60.96 (200.00)	60.70
4.27 (14.00)	309.00	91.44 (300.00)	50.10
6.10 (20.00)	170.00	91.44 (300.00)	53.40
9.14 (30.00)	69.30	121.92 (400.00)	46.60
9.14 (30.00)	81.30	182.88 (600.00)	41.60
		243.84 (800.00)	38.10

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	964.98	8.07 (26.49)	45.61
0.81 (2.65)	929.65	11.85 (38.88)	64.46
1.19 (3.89)	790.15	17.39 (57.07)	79.50
1.74 (5.71)	633.56	25.53 (83.76)	80.28
2.55 (8.38)	389.16	37.47 (122.95)	65.64
3.75 (12.29)	130.76	55.01 (180.47)	47.84
5.50 (18.05)	44.40	80.74 (264.89)	37.22
		99999.00 (99999.00)	33.66



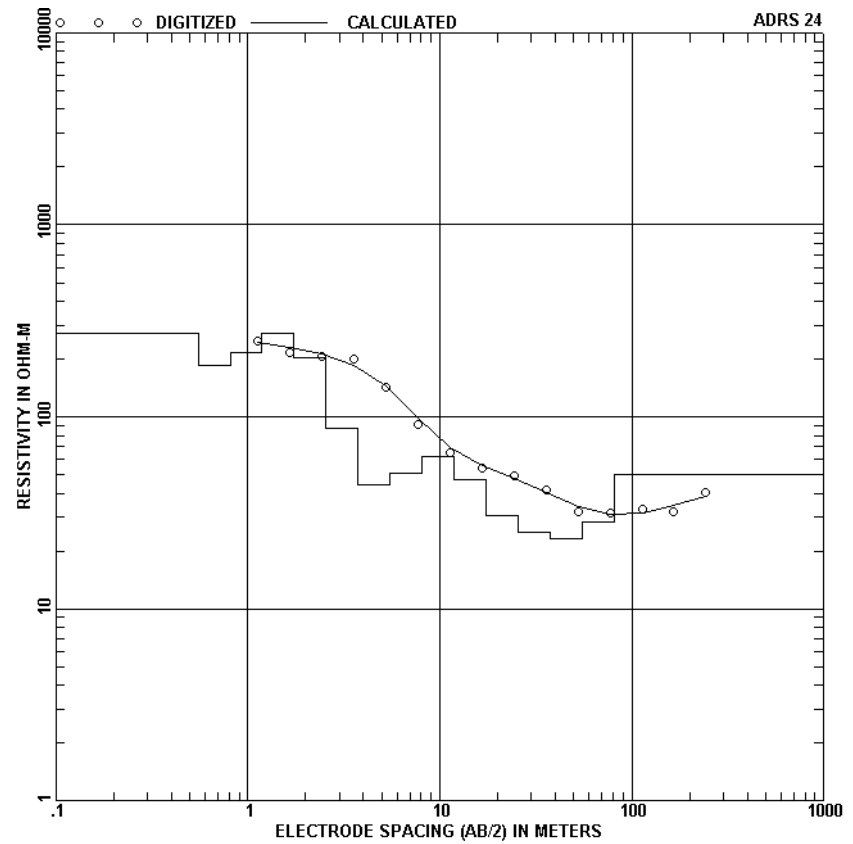
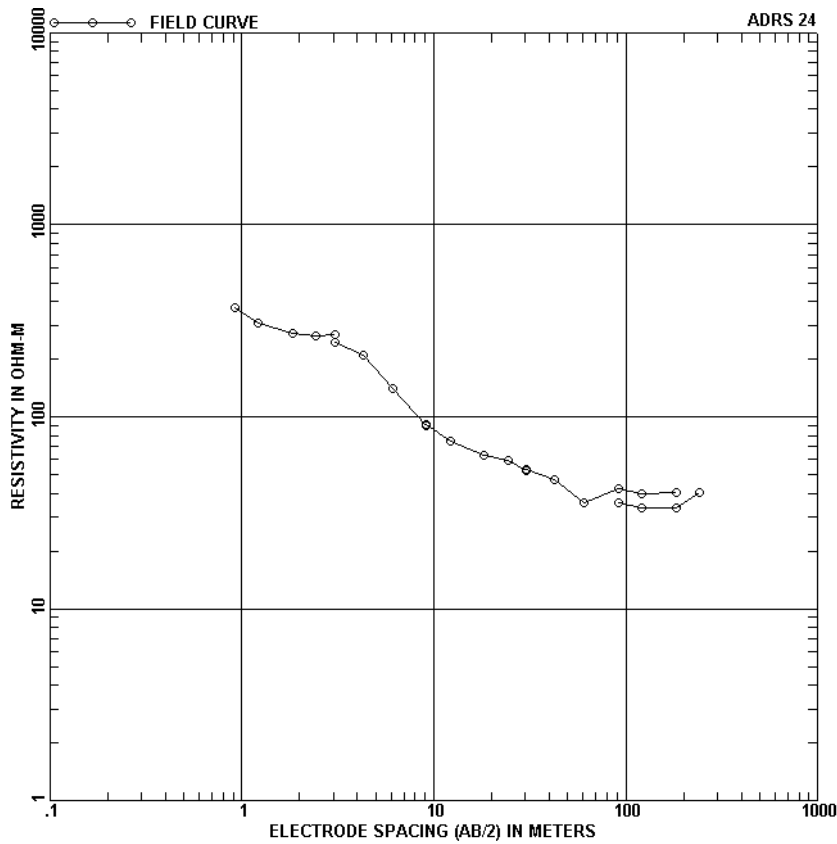
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	521.00	12.19 (40.00)	60.00
1.22 (4.00)	531.00	18.29 (60.00)	61.10
1.83 (6.00)	505.00	24.38 (80.00)	64.30
2.44 (8.00)	458.00	30.48 (100.00)	67.20
3.05 (10.00)	347.00	30.48 (100.00)	66.90
4.27 (14.00)	153.00	42.67 (140.00)	65.20
3.05 (10.00)	438.00	60.96 (200.00)	61.50
4.27 (14.00)	194.00	91.44 (300.00)	51.10
6.10 (20.00)	96.40	91.44 (300.00)	55.40
9.14 (30.00)	60.10	121.92 (400.00)	48.20
9.14 (30.00)	68.10	182.88 (600.00)	46.50
		243.84 (800.00)	41.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	900.89	8.07 (26.49)	57.82
0.81 (2.65)	1040.08	11.85 (38.88)	71.49
1.19 (3.89)	952.64	17.39 (57.07)	80.84
1.74 (5.71)	532.79	25.53 (83.76)	77.86
2.55 (8.38)	168.98	37.47 (122.95)	63.95
3.75 (12.29)	56.98	55.01 (180.47)	49.76
5.50 (18.05)	47.70	80.74 (264.89)	41.26
		99999.00 (99999.00)	37.06



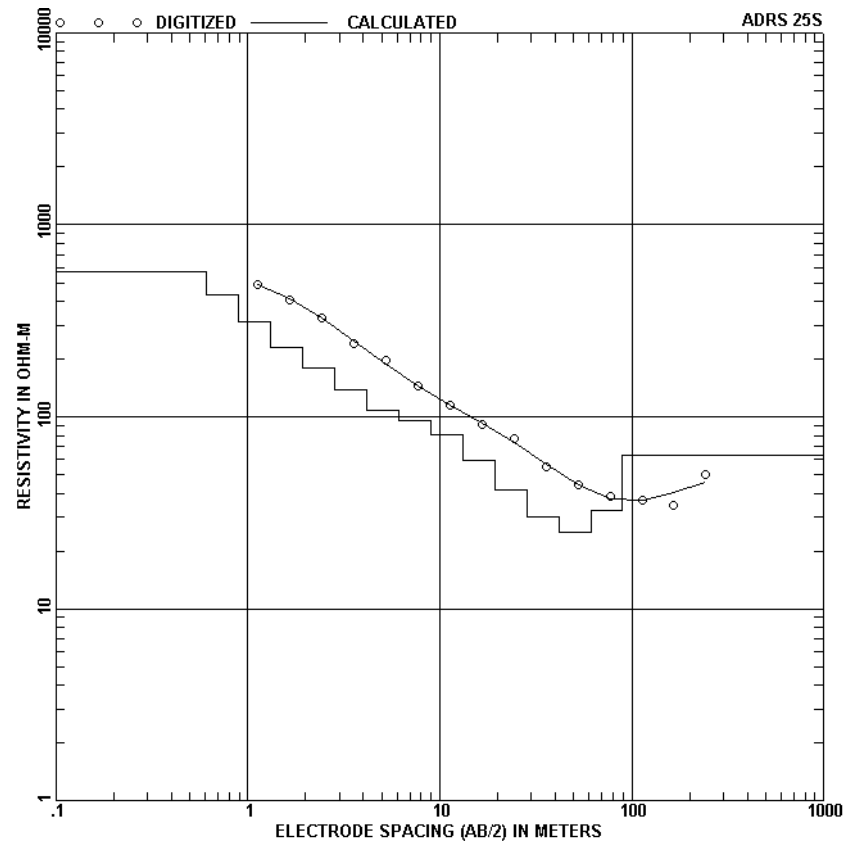
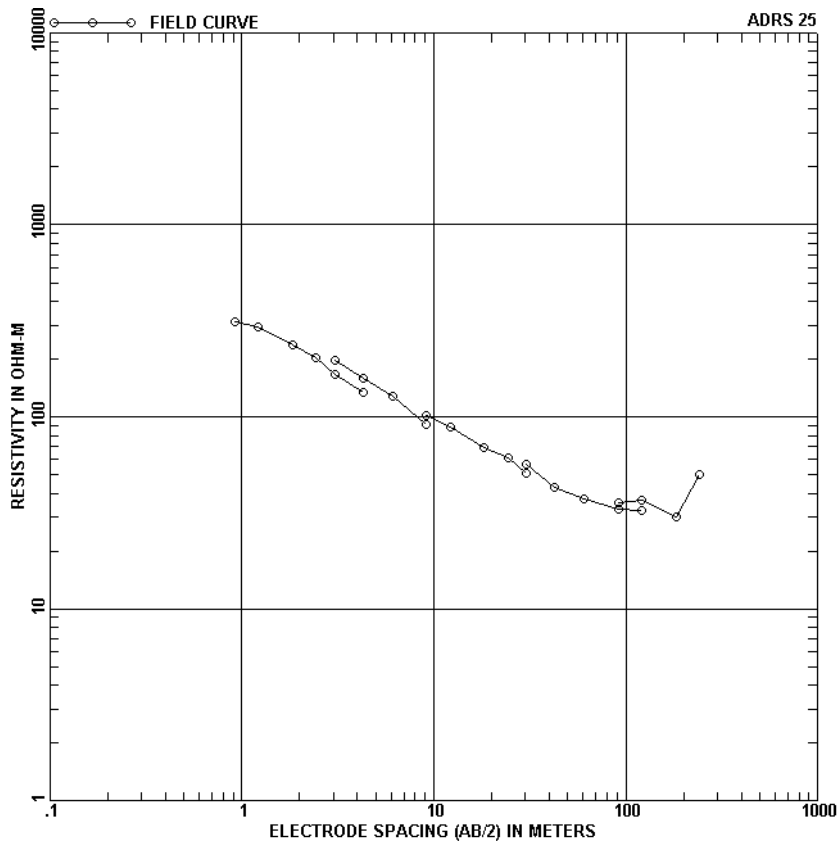
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	773.00	18.29 (60.00)	59.40
1.22 (4.00)	442.00	24.38 (80.00)	61.10
1.83 (6.00)	259.00	30.48 (100.00)	58.40
2.44 (8.00)	194.00	30.48 (100.00)	58.00
3.05 (10.00)	98.60	42.67 (140.00)	50.10
3.05 (10.00)	115.00	60.96 (200.00)	41.60
4.27 (14.00)	63.70	91.44 (300.00)	33.70
6.10 (20.00)	50.70	91.44 (300.00)	36.50
9.14 (30.00)	50.10	121.92 (400.00)	31.00
9.14 (30.00)	50.50	182.88 (600.00)	13.50
12.19 (40.00)	54.20	243.84 (800.00)	18.60

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	924.25	8.07 (26.49)	66.64
0.81 (2.65)	538.83	11.85 (38.88)	74.22
1.19 (3.89)	250.90	17.39 (57.07)	70.08
1.74 (5.71)	87.32	25.53 (83.76)	57.51
2.55 (8.38)	41.03	37.47 (122.95)	44.37
3.75 (12.29)	41.75	55.01 (180.47)	33.42
5.50 (18.05)	53.25	80.74 (264.89)	23.22
		99999.00 (99999.00)	15.33



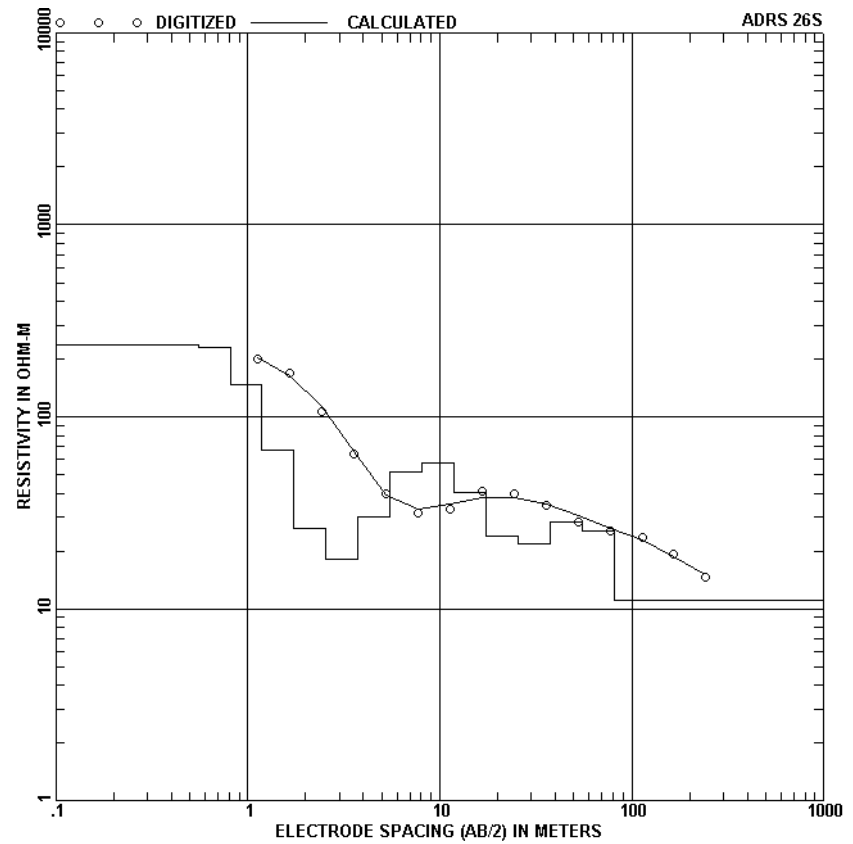
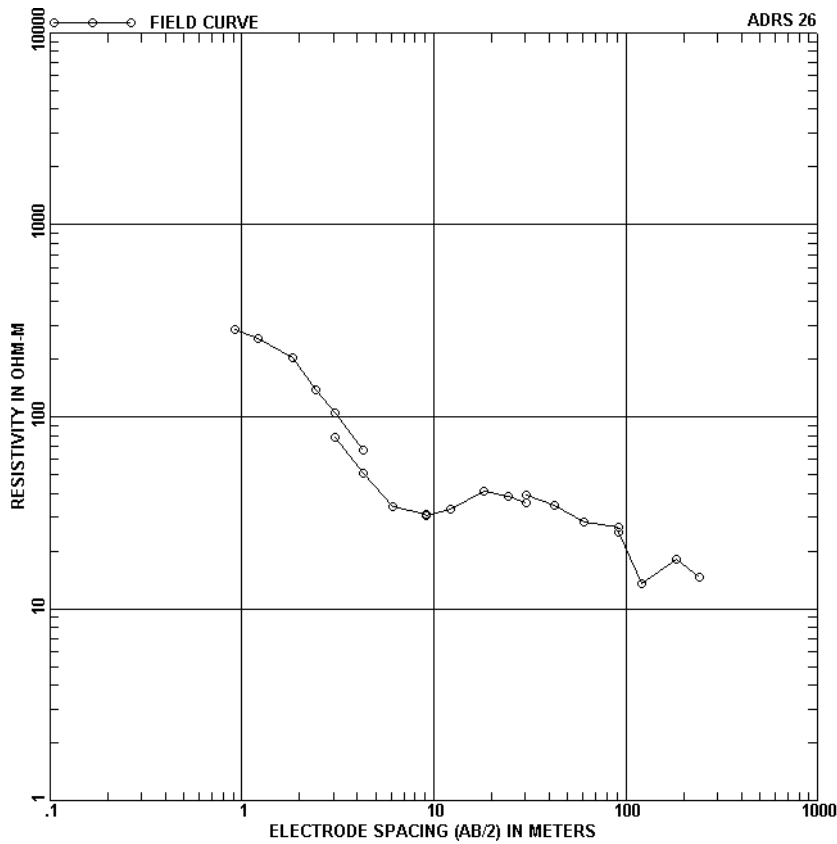
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	371.00	24.38 (80.00)	59.20
1.22 (4.00)	307.00	30.48 (100.00)	52.50
1.83 (6.00)	273.00	30.48 (100.00)	53.60
2.44 (8.00)	264.00	42.67 (140.00)	47.10
3.05 (10.00)	267.00	60.96 (200.00)	35.70
3.05 (10.00)	245.00	91.44 (300.00)	42.00
4.27 (14.00)	210.00	121.92 (400.00)	39.50
6.10 (20.00)	141.00	182.88 (600.00)	40.60
9.14 (30.00)	90.30	91.44 (300.00)	35.80
9.14 (30.00)	91.30	121.92 (400.00)	33.50
12.19 (40.00)	74.60	182.88 (600.00)	33.30
18.29 (60.00)	63.30	243.84 (800.00)	40.40

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	273.74	8.07 (26.49)	50.95
0.81 (2.65)	186.41	11.85 (38.88)	62.22
1.19 (3.89)	215.12	17.39 (57.07)	47.28
1.74 (5.71)	271.03	25.53 (83.76)	30.61
2.55 (8.38)	204.50	37.47 (122.95)	25.02
3.75 (12.29)	86.94	55.01 (180.47)	23.21
5.50 (18.05)	44.20	80.74 (264.89)	28.17
		99999.00 (99999.00)	49.95



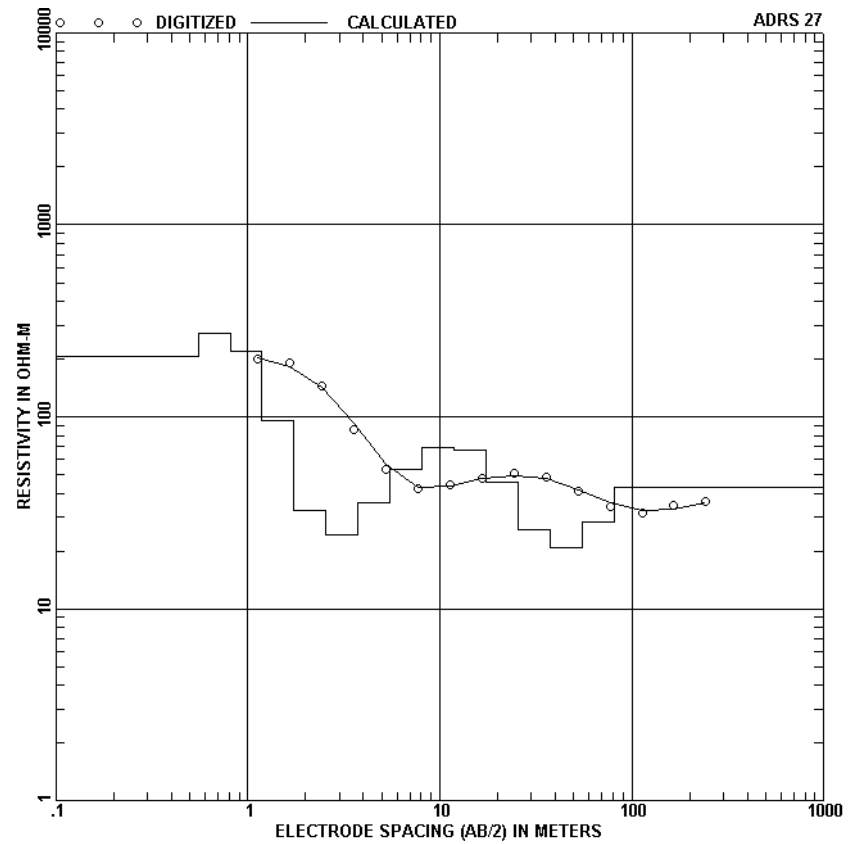
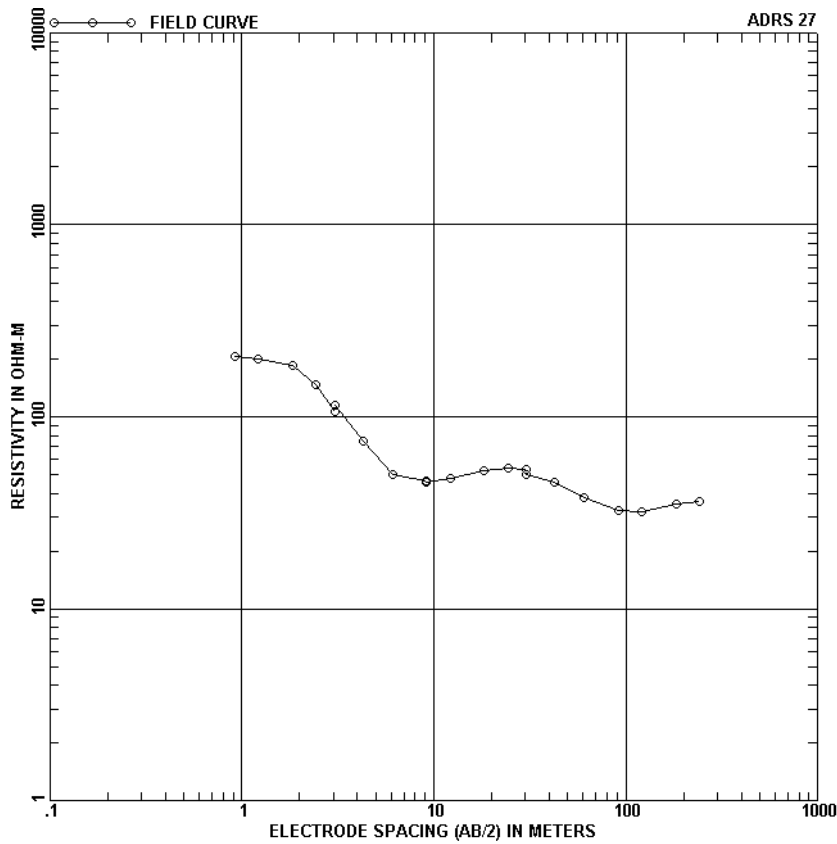
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	315.00	18.29 (60.00)	68.70
1.22 (4.00)	295.00	24.38 (80.00)	61.10
1.83 (6.00)	238.00	30.48 (100.00)	50.90
2.44 (8.00)	203.00	30.48 (100.00)	56.80
3.05 (10.00)	166.00	42.67 (140.00)	43.10
4.27 (14.00)	135.00	60.96 (200.00)	37.60
3.05 (10.00)	196.00	91.44 (300.00)	32.80
4.27 (14.00)	159.00	121.92 (400.00)	32.50
6.10 (20.00)	128.00	91.44 (300.00)	35.80
9.14 (30.00)	91.80	121.92 (400.00)	36.50
9.14 (30.00)	101.00	182.88 (600.00)	30.00
12.19 (40.00)	89.00	243.84 (800.00)	50.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.61 (2.01)	567.22	8.97 (29.43)	95.33
0.90 (2.94)	434.46	13.17 (43.20)	80.95
1.32 (4.32)	311.32	19.33 (63.41)	59.08
1.93 (6.34)	229.38	28.37 (93.07)	41.44
2.84 (9.31)	179.76	41.64 (136.61)	30.21
4.16 (13.66)	137.90	61.12 (200.52)	25.20
6.11 (20.05)	108.86	89.71 (294.32)	32.65
		99999.00 (99999.00)	62.87



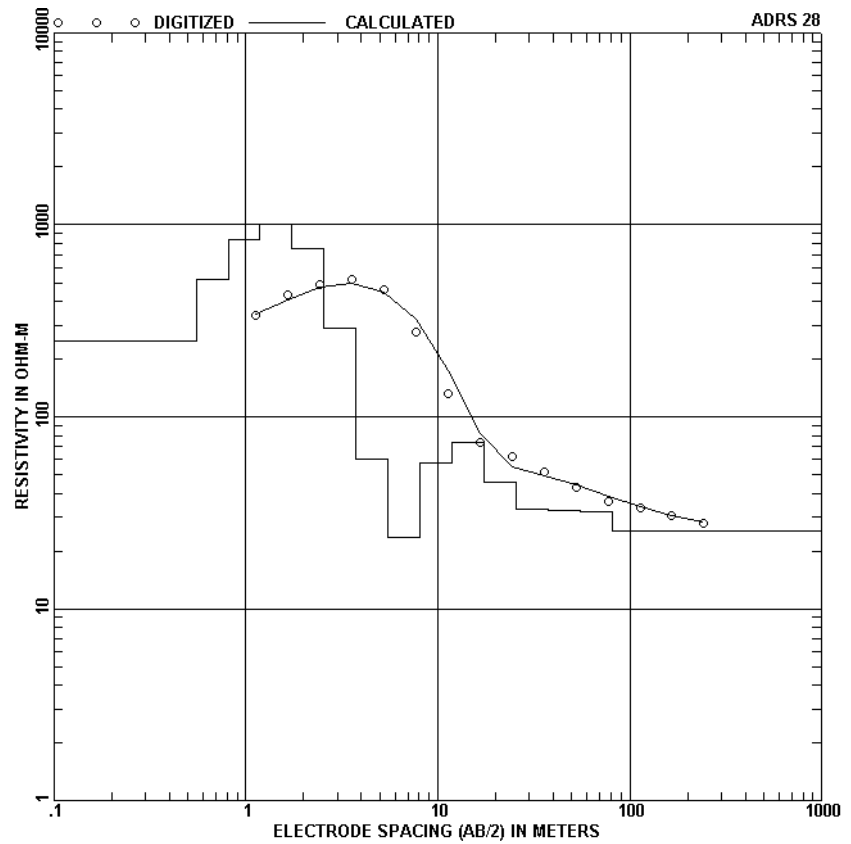
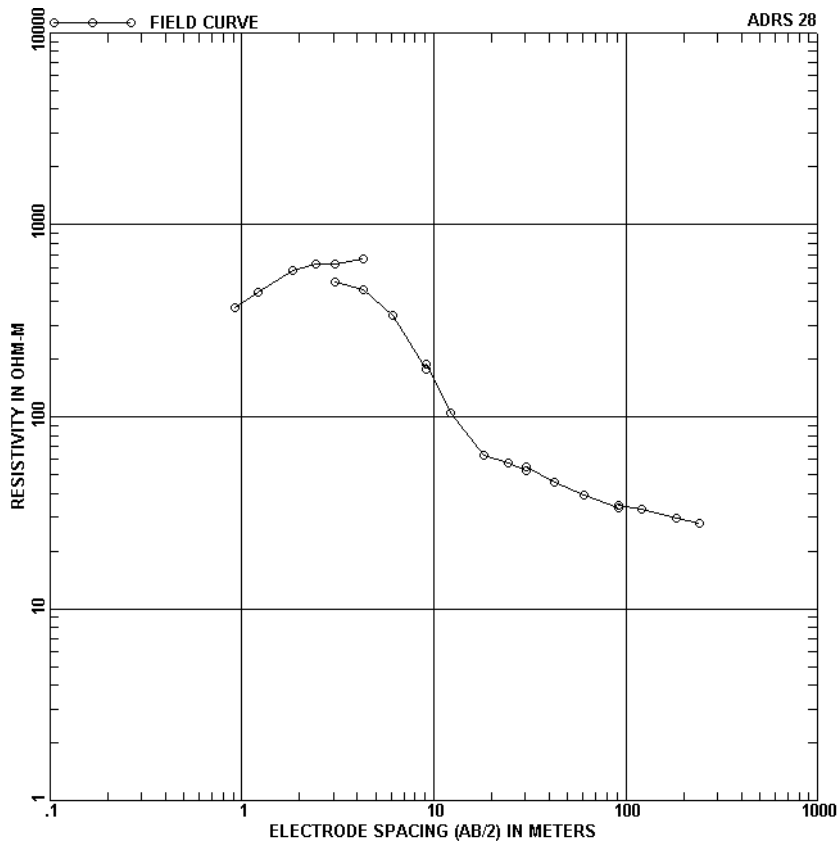
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	285.00	12.19 (40.00)	33.10
1.22 (4.00)	256.00	18.29 (60.00)	40.80
1.83 (6.00)	204.00	24.38 (80.00)	38.30
2.44 (8.00)	139.00	30.48 (100.00)	35.40
3.05 (10.00)	104.00	30.48 (100.00)	39.40
4.27 (14.00)	67.50	42.67 (140.00)	34.50
3.05 (10.00)	77.70	60.96 (200.00)	28.40
4.27 (14.00)	50.50	91.44 (300.00)	26.80
6.10 (20.00)	34.20	91.44 (300.00)	24.90
9.14 (30.00)	31.20	121.92 (400.00)	13.60
9.14 (30.00)	30.70	182.88 (600.00)	18.10
		243.84 (800.00)	14.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	238.33	8.07 (26.49)	51.67
0.81 (2.65)	231.35	11.85 (38.88)	57.53
1.19 (3.89)	148.14	17.39 (57.07)	40.05
1.74 (5.71)	66.57	25.53 (83.76)	23.93
2.55 (8.38)	26.28	37.47 (122.95)	21.67
3.75 (12.29)	18.17	55.01 (180.47)	28.29
5.50 (18.05)	29.98	80.74 (264.89)	25.29
		99999.00 (99999.00)	10.99



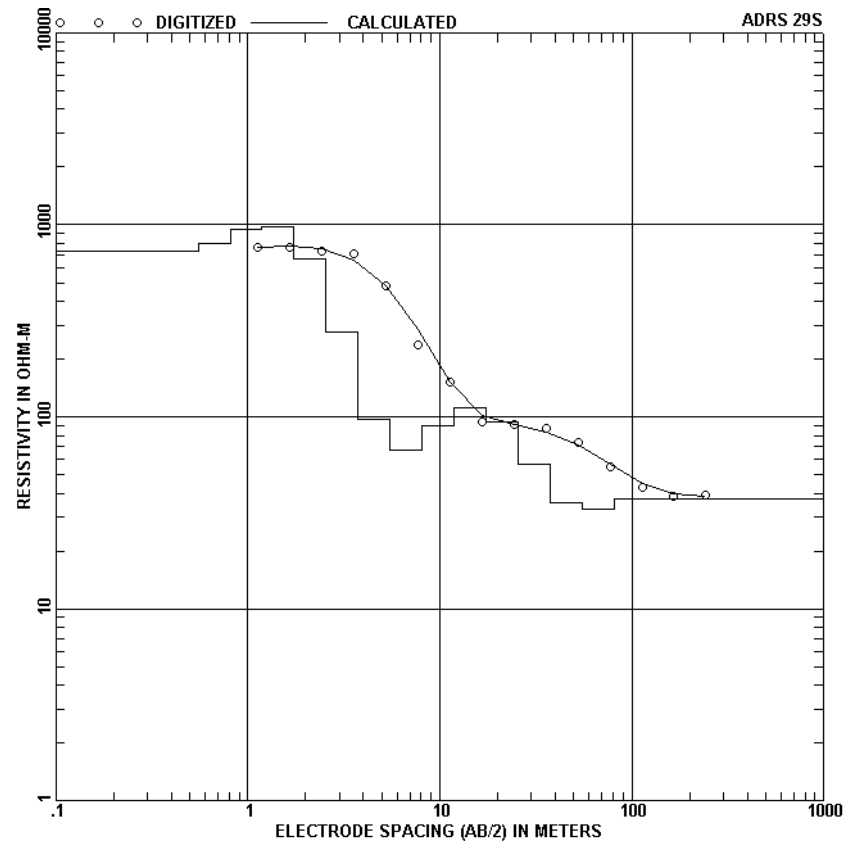
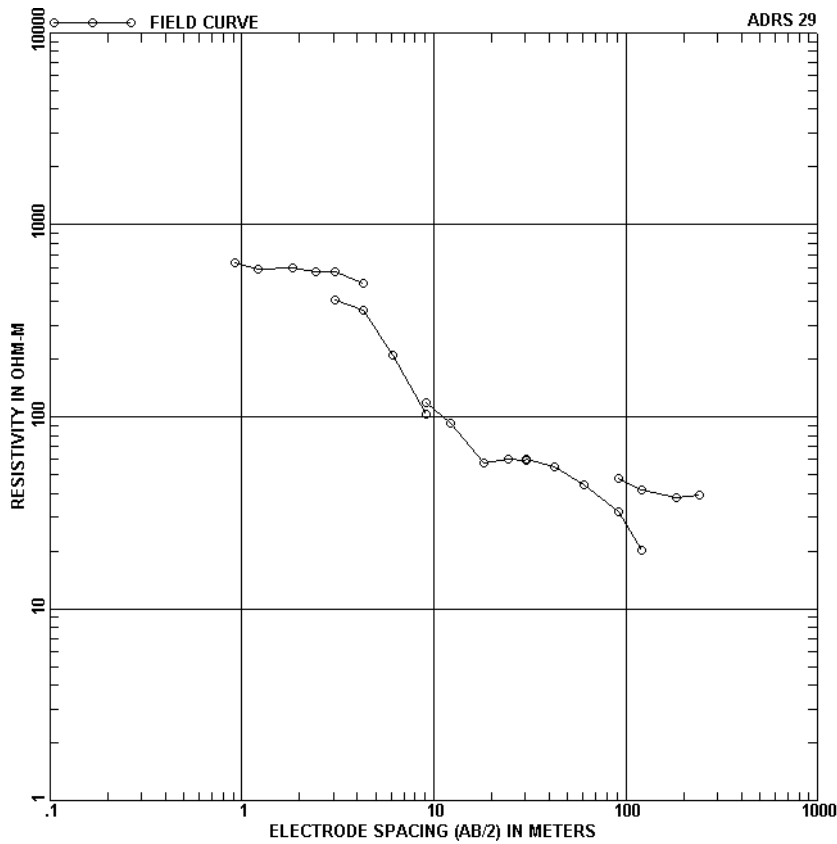
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	207.00	18.29 (60.00)	52.10
1.22 (4.00)	200.00	24.38 (80.00)	54.00
1.83 (6.00)	185.00	30.48 (100.00)	53.50
2.44 (8.00)	146.00	30.48 (100.00)	49.90
3.05 (10.00)	107.00	42.67 (140.00)	45.40
3.05 (10.00)	115.00	60.96 (200.00)	37.80
4.27 (14.00)	75.00	91.44 (300.00)	32.50
6.10 (20.00)	50.20	91.44 (300.00)	32.60
9.14 (30.00)	46.00	121.92 (400.00)	31.80
9.14 (30.00)	45.30	182.88 (600.00)	35.20
12.19 (40.00)	48.00	243.84 (800.00)	36.40

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	206.07	8.07 (26.49)	53.59
0.81 (2.65)	271.30	11.85 (38.88)	69.07
1.19 (3.89)	220.19	17.39 (57.07)	67.05
1.74 (5.71)	95.66	25.53 (83.76)	45.30
2.55 (8.38)	32.55	37.47 (122.95)	25.82
3.75 (12.29)	24.44	55.01 (180.47)	20.97
5.50 (18.05)	35.88	80.74 (264.89)	28.25
		99999.00 (99999.00)	43.09



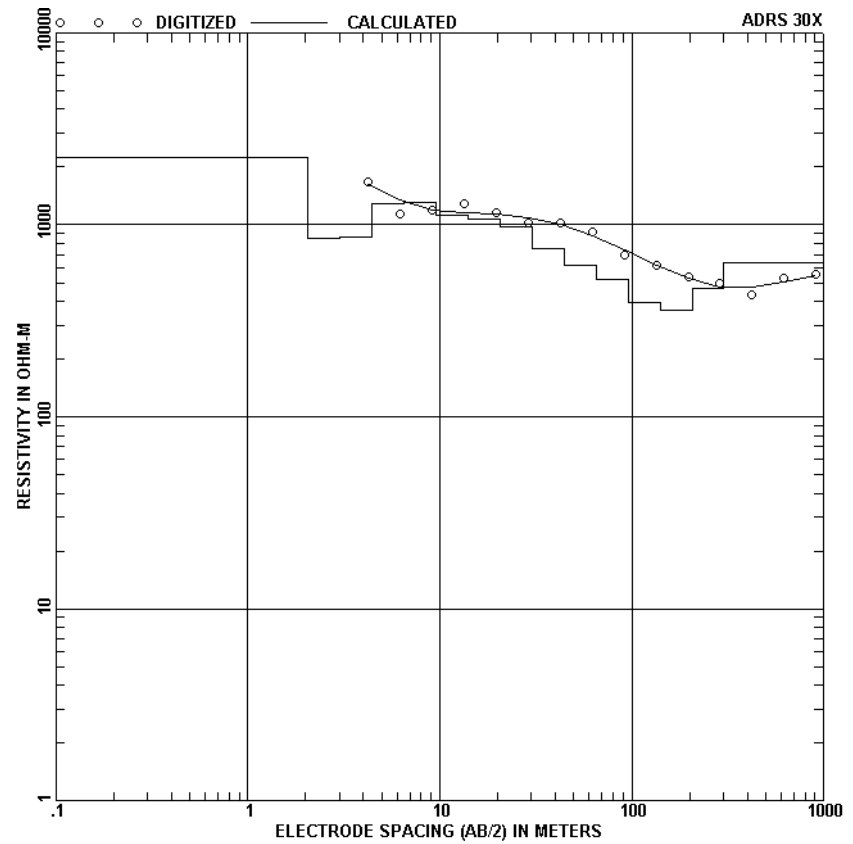
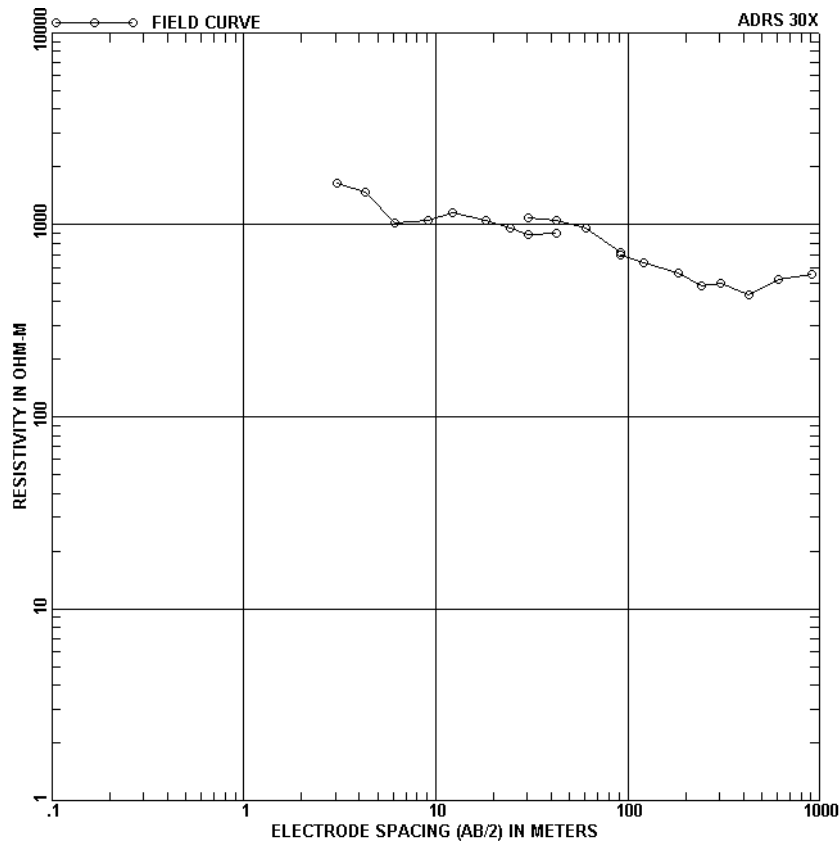
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	369.00	12.19 (40.00)	105.00
1.22 (4.00)	445.00	18.29 (60.00)	63.30
1.83 (6.00)	576.00	24.38 (80.00)	57.80
2.44 (8.00)	621.00	30.48 (100.00)	52.20
3.05 (10.00)	629.00	30.48 (100.00)	54.50
4.27 (14.00)	665.00	42.67 (140.00)	45.70
3.05 (10.00)	504.00	60.96 (200.00)	39.10
4.27 (14.00)	460.00	91.44 (300.00)	33.40
6.10 (20.00)	339.00	91.44 (300.00)	34.50
9.14 (30.00)	178.00	121.92 (400.00)	32.90
9.14 (30.00)	189.00	182.88 (600.00)	29.60
		243.84 (800.00)	27.90

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	248.61	8.07 (26.49)	23.60
0.81 (2.65)	516.57	11.85 (38.88)	57.29
1.19 (3.89)	839.63	17.39 (57.07)	73.03
1.74 (5.71)	1002.71	25.53 (83.76)	45.78
2.55 (8.38)	753.23	37.47 (122.95)	32.91
3.75 (12.29)	290.52	55.01 (180.47)	32.67
5.50 (18.05)	60.38	80.74 (264.89)	31.92
		99999.00 (99999.00)	25.27



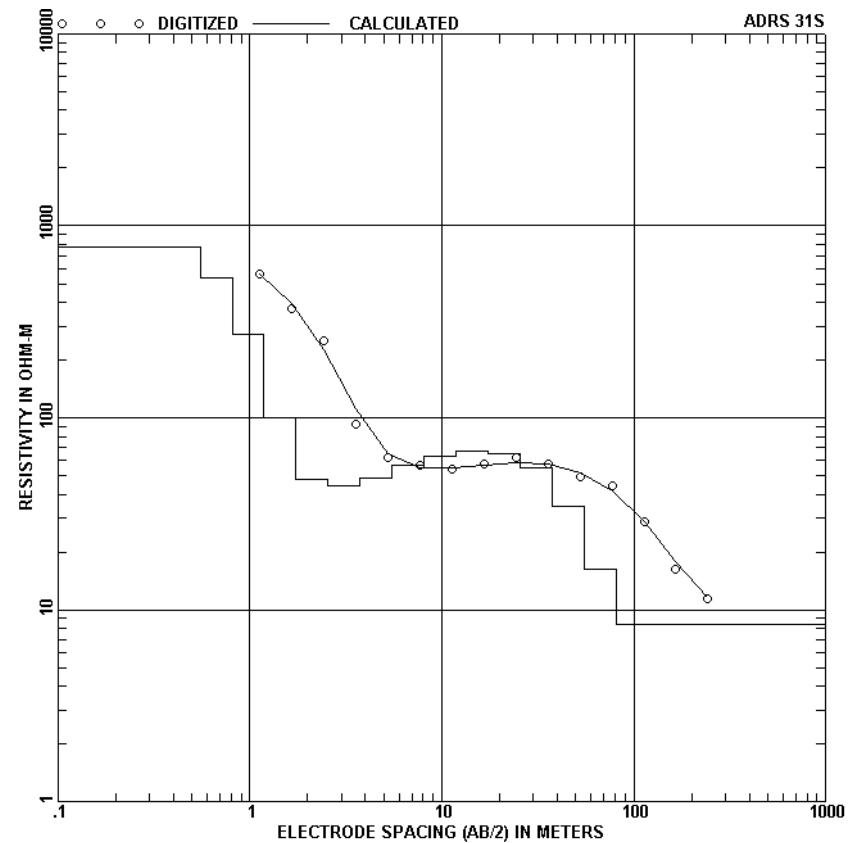
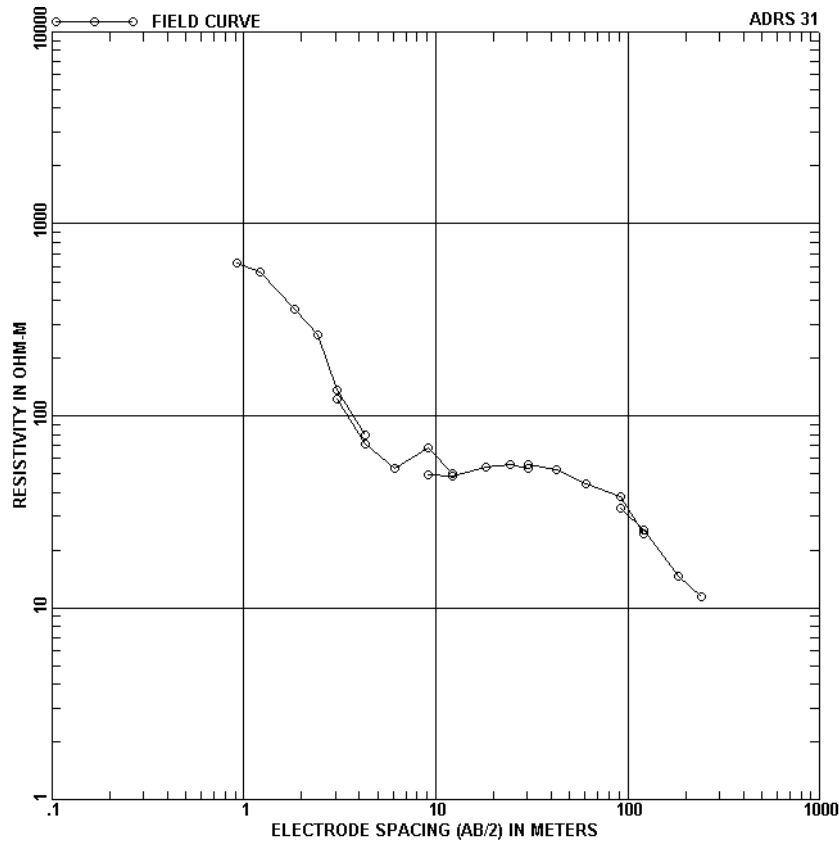
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	632.00	18.29 (60.00)	57.10
1.22 (4.00)	586.00	24.38 (80.00)	60.00
1.83 (6.00)	596.00	30.48 (100.00)	59.50
2.44 (8.00)	567.00	30.48 (100.00)	60.50
3.05 (10.00)	569.00	42.67 (140.00)	54.80
4.27 (14.00)	494.00	60.96 (200.00)	44.20
3.05 (10.00)	408.00	91.44 (300.00)	32.00
4.27 (14.00)	359.00	121.92 (400.00)	20.20
6.10 (20.00)	211.00	91.44 (300.00)	48.10
9.14 (30.00)	103.00	121.92 (400.00)	41.50
9.14 (30.00)	119.00	182.88 (600.00)	38.20
12.19 (40.00)	93.10	243.84 (800.00)	38.90

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	725.68	8.07 (26.49)	66.81
0.81 (2.65)	799.65	11.85 (38.88)	89.67
1.19 (3.89)	946.52	17.39 (57.07)	111.46
1.74 (5.71)	977.51	25.53 (83.76)	94.08
2.55 (8.38)	668.64	37.47 (122.95)	57.02
3.75 (12.29)	274.54	55.01 (180.47)	35.91
5.50 (18.05)	96.49	80.74 (264.89)	32.83
		99999.00 (99999.00)	37.62



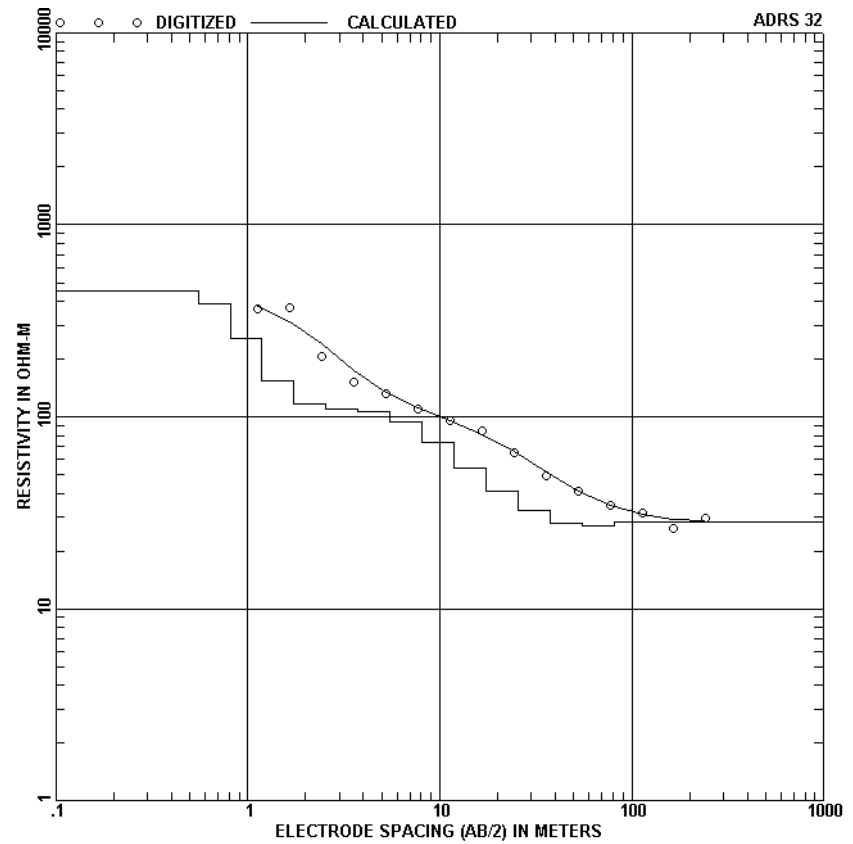
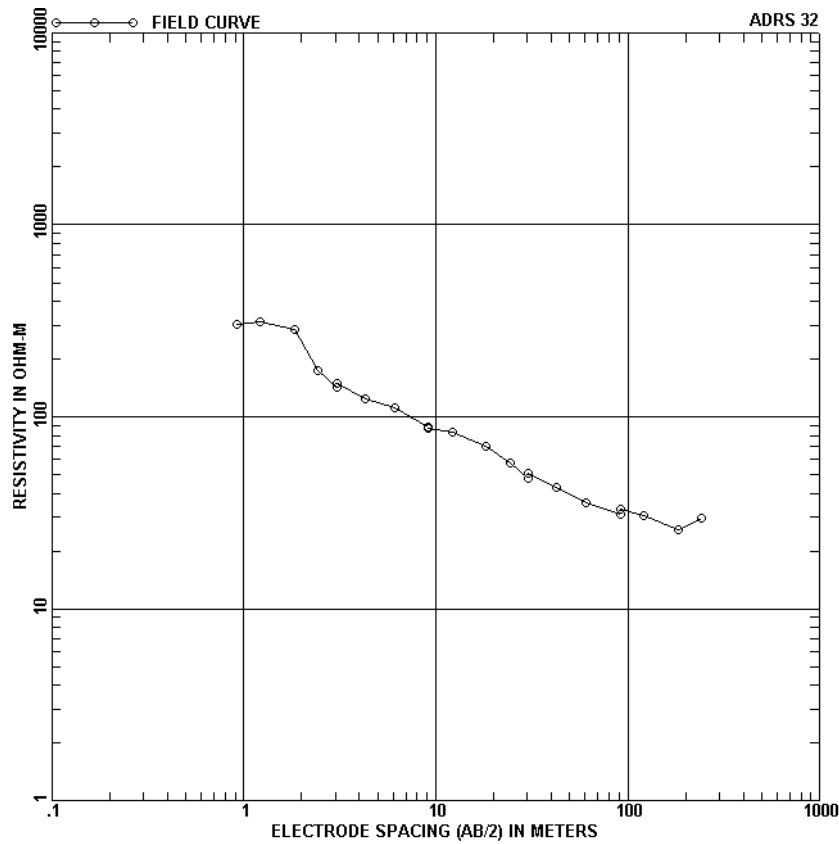
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
3.05 (10.00)	1650.00	60.96 (200.00)	960.00
4.27 (14.00)	1470.00	91.44 (300.00)	720.00
6.10 (20.00)	1025.00	91.44 (300.00)	700.00
9.14 (30.00)	1060.00	121.92 (400.00)	630.00
12.19 (40.00)	1150.00	182.88 (600.00)	560.00
18.29 (60.00)	1050.00	243.84 (800.00)	480.00
24.38 (80.00)	960.00	304.80 (1000.00)	500.00
30.48 (100.00)	890.00	304.80 (1000.00)	500.00
42.67 (140.00)	910.00	426.72 (1400.00)	430.00
30.48 (100.00)	1080.00	609.60 (2000.00)	520.00
42.67 (140.00)	1060.00	914.40 (3000.00)	550.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
2.06 (6.77)	2255.45	30.28 (99.33)	975.80
3.03 (9.93)	847.23	44.44 (145.80)	756.34
4.44 (14.58)	859.46	65.23 (214.01)	611.74
6.52 (21.40)	1278.99	95.74 (314.12)	515.78
9.57 (31.41)	1306.32	140.53 (461.06)	391.62
14.05 (46.11)	1130.57	206.27 (676.74)	360.73
20.63 (67.67)	1079.34	302.77 (993.32)	468.79
		99999.00 (99999.00)	631.29



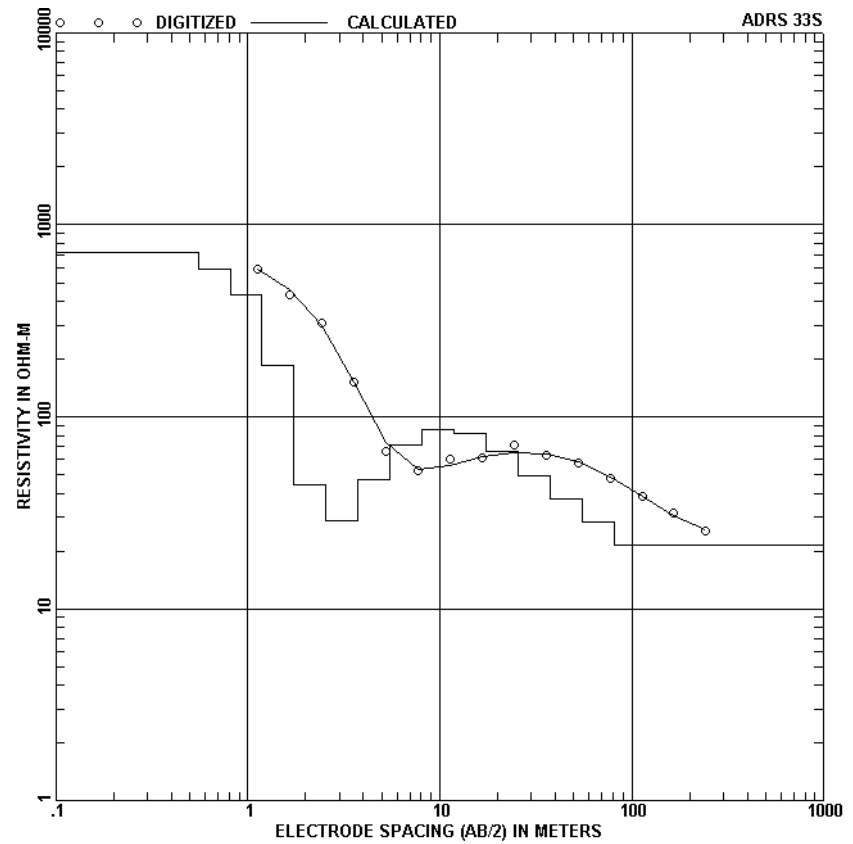
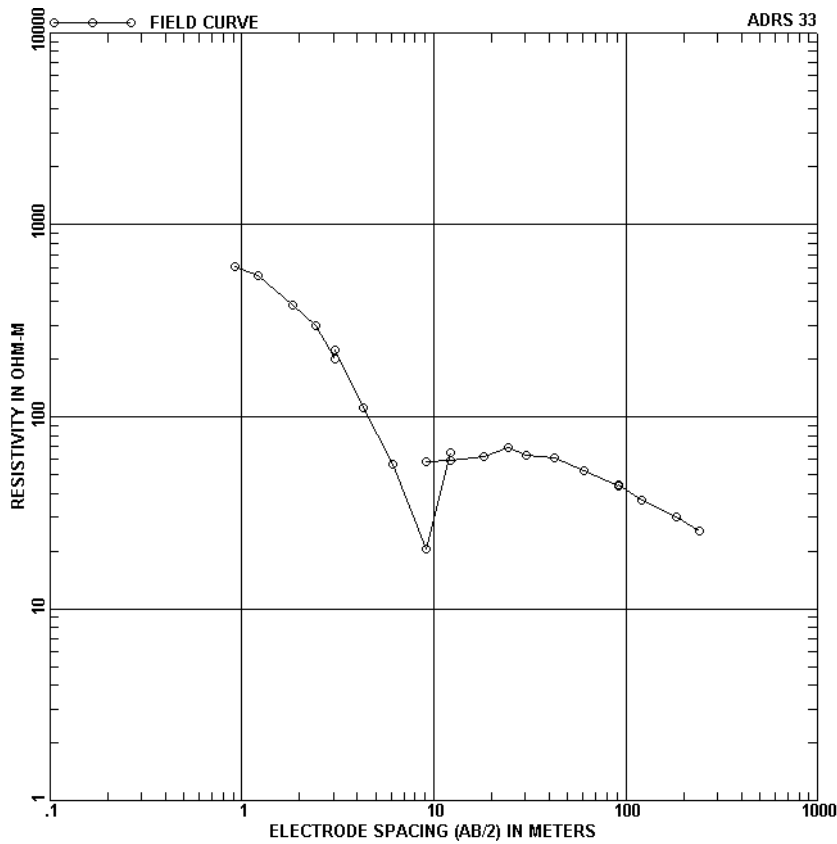
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	623.00	12.19 (40.00)	48.40
1.22 (4.00)	557.00	18.29 (60.00)	53.80
1.83 (6.00)	357.00	24.38 (80.00)	56.10
2.44 (8.00)	265.00	30.48 (100.00)	53.40
3.05 (10.00)	136.00	30.48 (100.00)	56.10
4.27 (14.00)	79.70	42.67 (140.00)	52.10
3.05 (10.00)	122.00	60.96 (200.00)	44.20
4.27 (14.00)	71.00	91.44 (300.00)	37.80
6.10 (20.00)	53.40	121.92 (400.00)	24.30
9.14 (30.00)	68.50	91.44 (300.00)	33.10
12.19 (40.00)	49.90	121.92 (400.00)	25.50
9.14 (30.00)	49.00	182.88 (600.00)	14.70
		243.84 (800.00)	11.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	774.33	8.07 (26.49)	56.33
0.81 (2.65)	534.72	11.85 (38.88)	63.49
1.19 (3.89)	273.30	17.39 (57.07)	66.78
1.74 (5.71)	100.15	25.53 (83.76)	65.33
2.55 (8.38)	48.04	37.47 (122.95)	55.10
3.75 (12.29)	43.91	55.01 (180.47)	34.68
5.50 (18.05)	48.52	80.74 (264.89)	16.28
		99999.00 (99999.00)	8.41



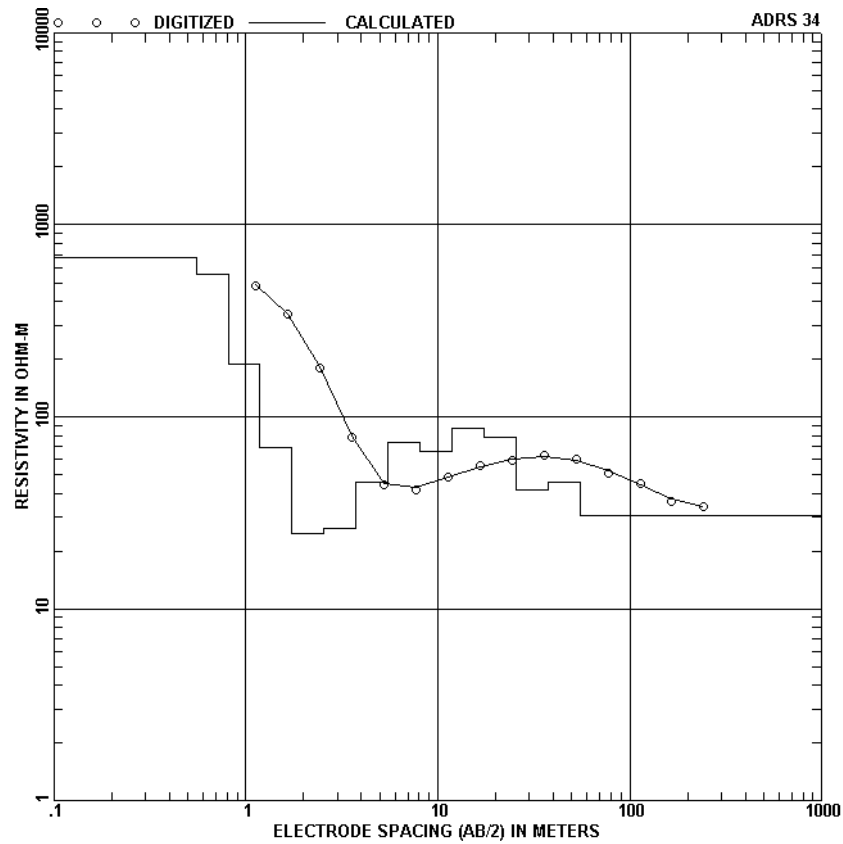
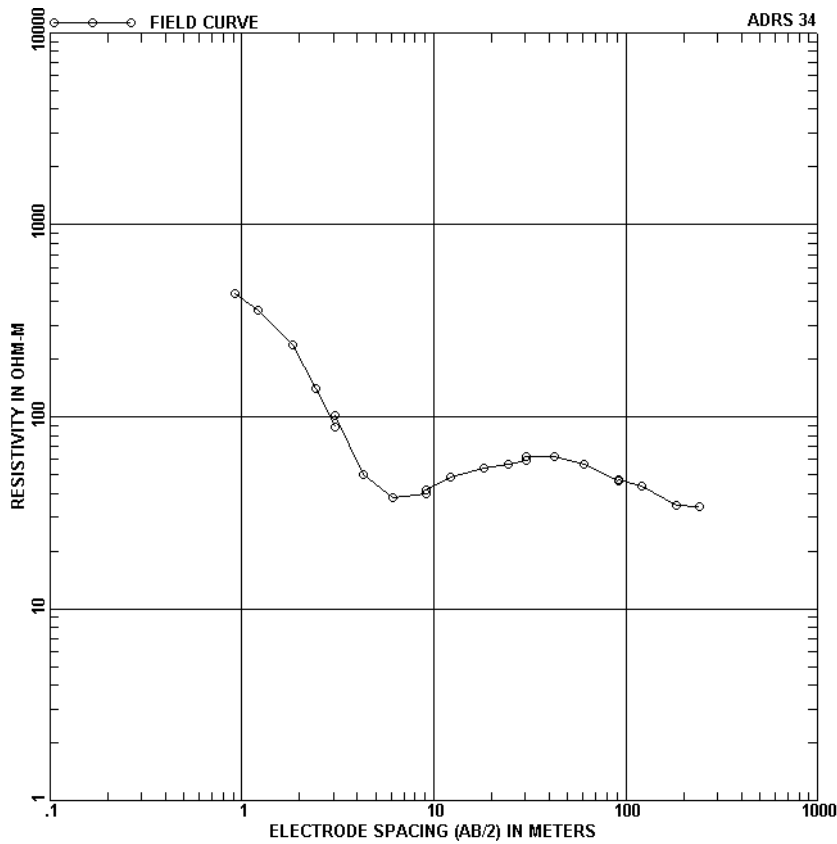
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	301.00	18.29 (60.00)	70.70
1.22 (4.00)	311.00	24.38 (80.00)	57.20
1.83 (6.00)	285.00	30.48 (100.00)	47.70
2.44 (8.00)	173.00	30.48 (100.00)	51.00
3.05 (10.00)	142.00	42.67 (140.00)	43.00
3.05 (10.00)	150.00	60.96 (200.00)	35.50
4.27 (14.00)	124.00	91.44 (300.00)	30.90
6.10 (20.00)	112.00	91.44 (300.00)	32.90
9.14 (30.00)	88.40	121.92 (400.00)	30.80
9.14 (30.00)	87.50	182.88 (600.00)	26.00
12.19 (40.00)	82.90	243.84 (800.00)	29.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	450.43	8.07 (26.49)	93.74
0.81 (2.65)	388.56	11.85 (38.88)	73.44
1.19 (3.89)	256.06	17.39 (57.07)	54.16
1.74 (5.71)	154.59	25.53 (83.76)	40.94
2.55 (8.38)	117.02	37.47 (122.95)	32.64
3.75 (12.29)	109.65	55.01 (180.47)	27.97
5.50 (18.05)	105.69	80.74 (264.89)	26.90
		99999.00 (99999.00)	28.46



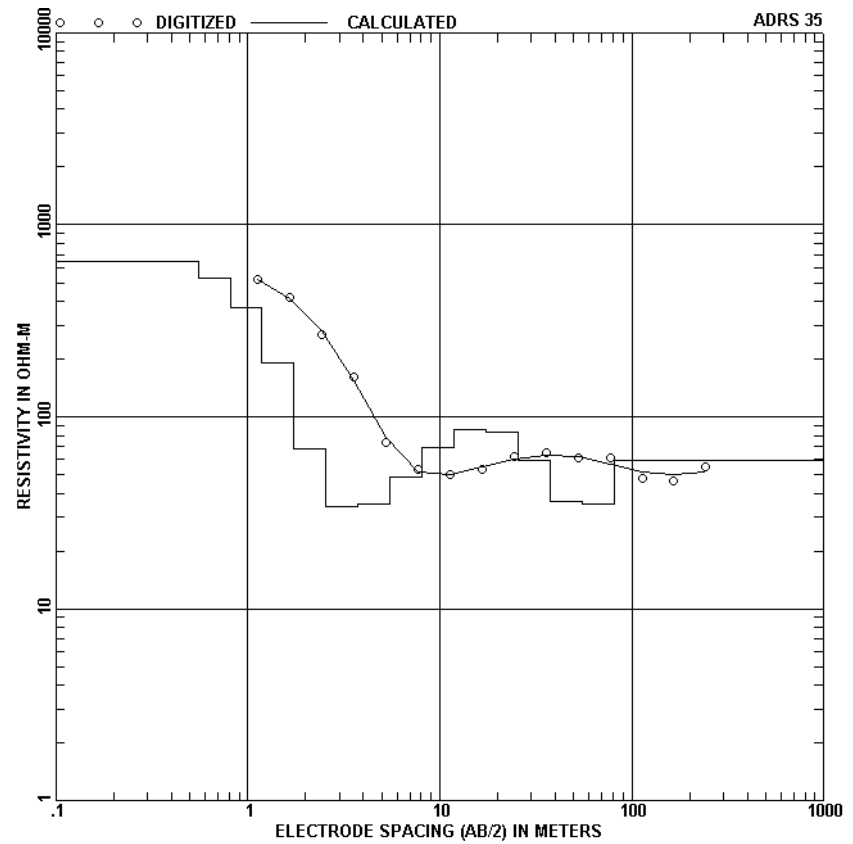
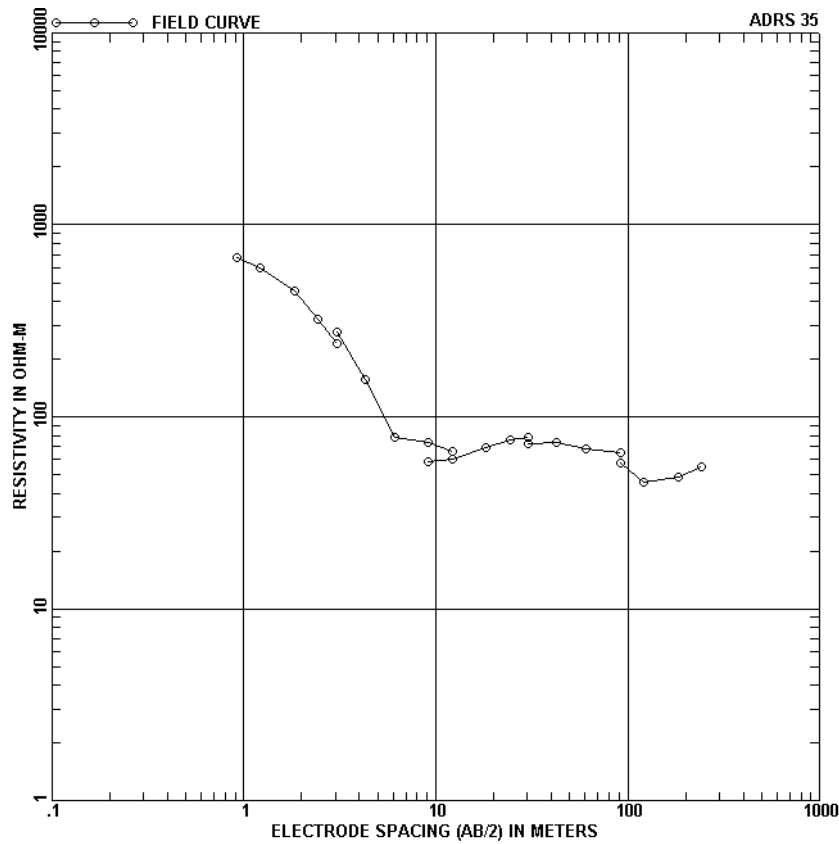
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	606.00	12.19 (40.00)	58.90
1.22 (4.00)	548.00	18.29 (60.00)	61.90
1.83 (6.00)	383.00	24.38 (80.00)	69.40
2.44 (8.00)	300.00	30.48 (100.00)	62.80
3.05 (10.00)	201.00	30.48 (100.00)	63.20
3.05 (10.00)	224.00	42.67 (140.00)	61.50
4.27 (14.00)	112.00	60.96 (200.00)	52.30
6.10 (20.00)	56.90	91.44 (300.00)	43.40
9.14 (30.00)	20.60	91.44 (300.00)	44.00
12.19 (40.00)	64.80	121.92 (400.00)	36.60
9.14 (30.00)	58.70	182.88 (600.00)	30.20
		243.84 (800.00)	25.60

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	719.65	8.07 (26.49)	70.98
0.81 (2.65)	590.04	11.85 (38.88)	85.77
1.19 (3.89)	431.46	17.39 (57.07)	82.12
1.74 (5.71)	186.55	25.53 (83.76)	66.15
2.55 (8.38)	44.59	37.47 (122.95)	49.55
3.75 (12.29)	28.70	55.01 (180.47)	37.44
5.50 (18.05)	47.18	80.74 (264.89)	28.41
		99999.00 (99999.00)	21.58



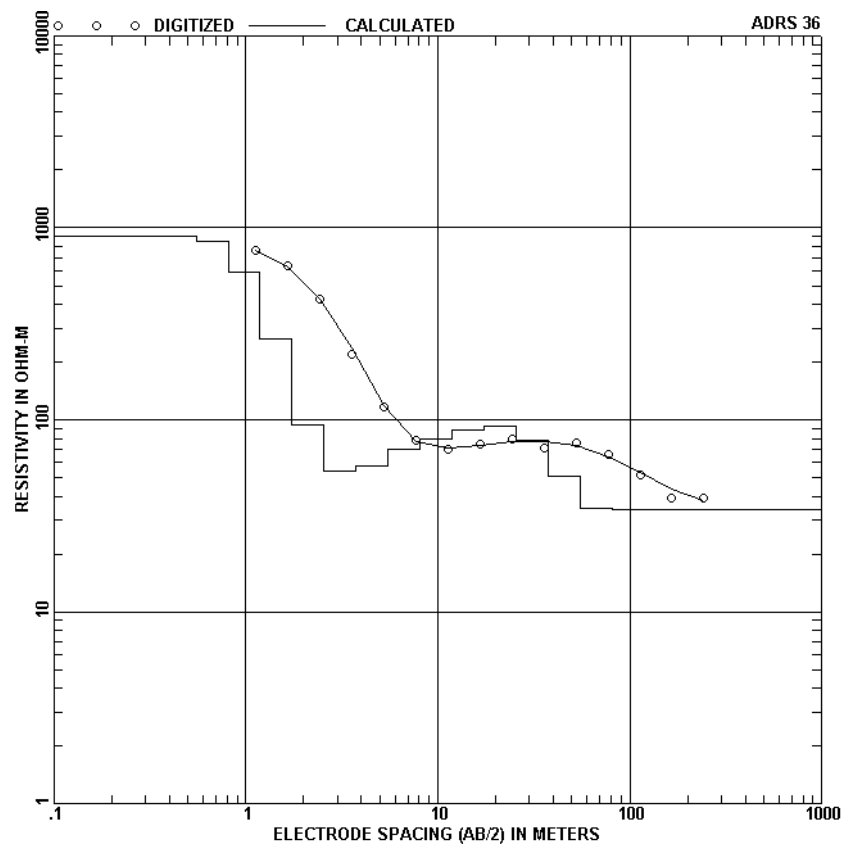
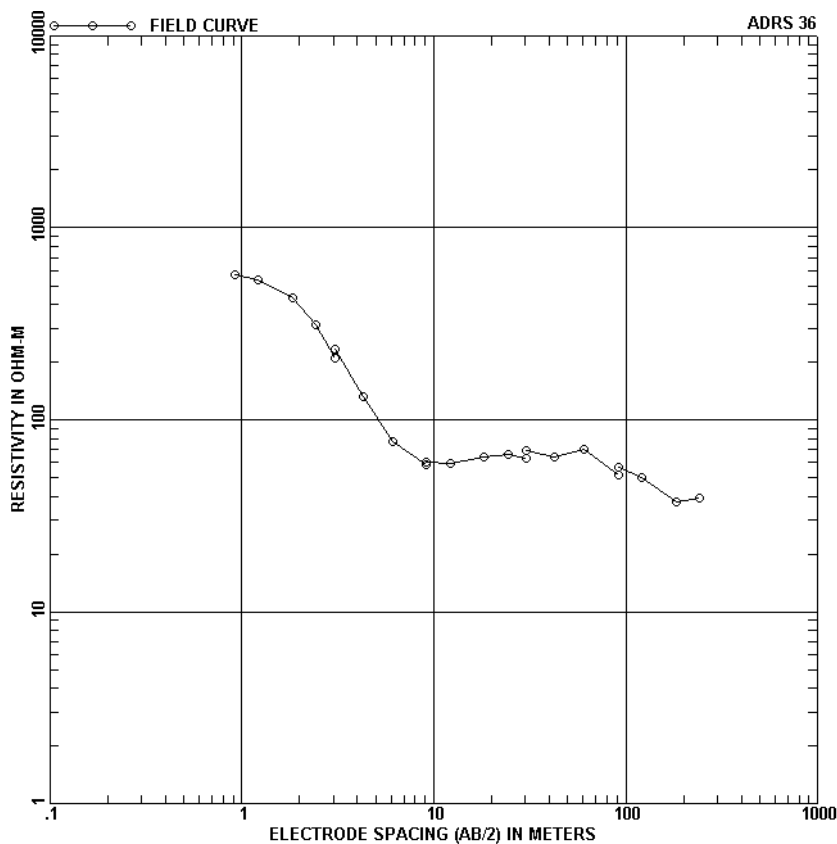
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	438.00	18.29 (60.00)	53.80
1.22 (4.00)	360.00	24.38 (80.00)	56.70
1.83 (6.00)	236.00	30.48 (100.00)	59.50
2.44 (8.00)	140.00	30.48 (100.00)	61.90
3.05 (10.00)	88.20	42.67 (140.00)	62.00
3.05 (10.00)	102.00	60.96 (200.00)	56.80
4.27 (14.00)	50.40	91.44 (300.00)	46.40
6.10 (20.00)	37.80	91.44 (300.00)	46.80
9.14 (30.00)	39.90	121.92 (400.00)	43.90
9.14 (30.00)	41.90	182.88 (600.00)	34.50
12.19 (40.00)	48.20	243.84 (800.00)	34.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	671.98	8.07 (26.49)	73.58
0.81 (2.65)	555.22	11.85 (38.88)	66.18
1.19 (3.89)	189.23	17.39 (57.07)	87.68
1.74 (5.71)	68.81	25.53 (83.76)	77.76
2.55 (8.38)	24.70	37.47 (122.95)	41.69
3.75 (12.29)	26.28	55.01 (180.47)	45.80
5.50 (18.05)	45.68	80.74 (264.89)	30.53
		99999.00 (99999.00)	30.65



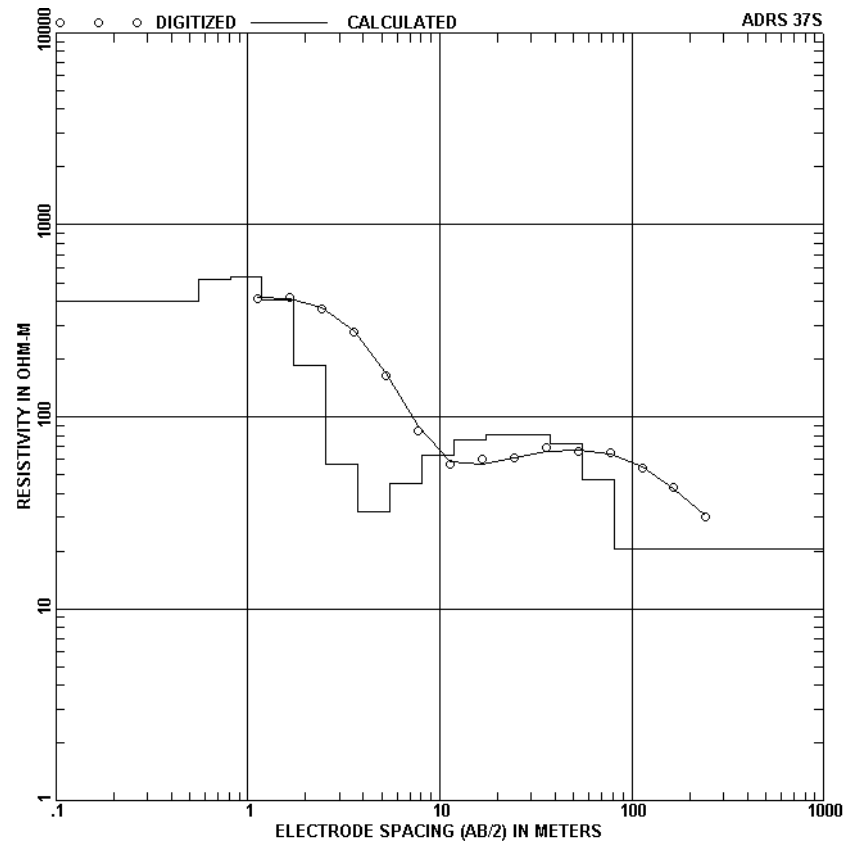
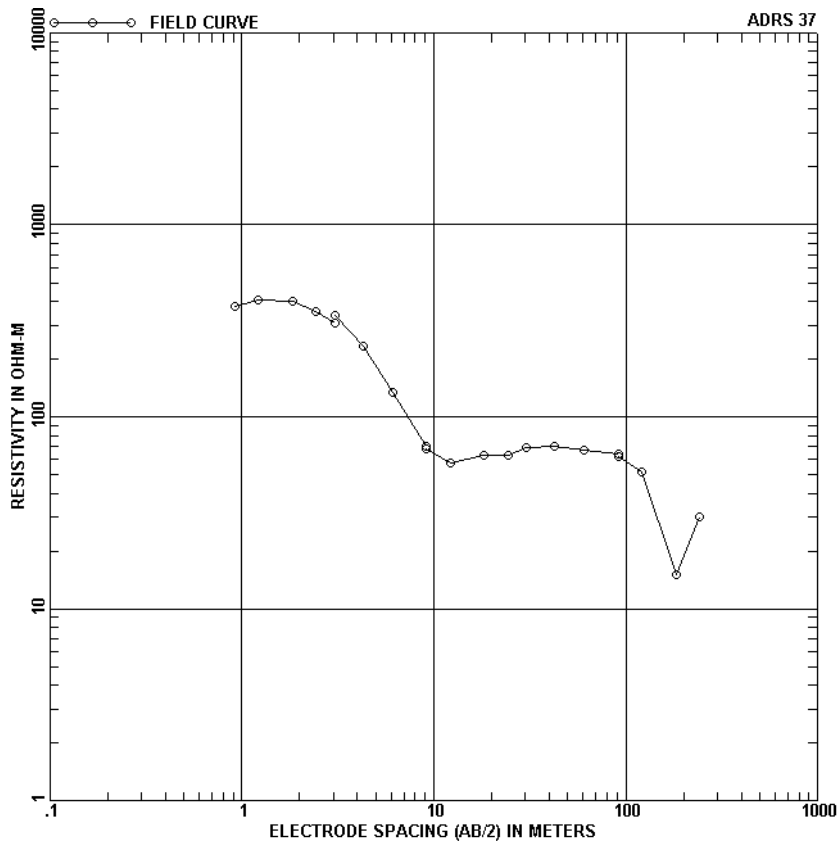
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	671.00	12.19 (40.00)	59.80
1.22 (4.00)	595.00	18.29 (60.00)	68.70
1.83 (6.00)	455.00	24.38 (80.00)	75.60
2.44 (8.00)	320.00	30.48 (100.00)	78.70
3.05 (10.00)	242.00	30.48 (100.00)	72.70
3.05 (10.00)	275.00	42.67 (140.00)	73.10
4.27 (14.00)	156.00	60.96 (200.00)	67.90
6.10 (20.00)	78.00	91.44 (300.00)	65.40
9.14 (30.00)	73.00	91.44 (300.00)	57.90
12.19 (40.00)	66.00	121.92 (400.00)	45.60
9.14 (30.00)	58.00	182.88 (600.00)	48.50
		243.84 (800.00)	54.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	641.84	8.07 (26.49)	48.56
0.81 (2.65)	526.42	11.85 (38.88)	69.03
1.19 (3.89)	368.19	17.39 (57.07)	85.37
1.74 (5.71)	190.09	25.53 (83.76)	83.28
2.55 (8.38)	67.65	37.47 (122.95)	58.86
3.75 (12.29)	34.24	55.01 (180.47)	36.33
5.50 (18.05)	35.13	80.74 (264.89)	35.06
		99999.00 (99999.00)	59.58



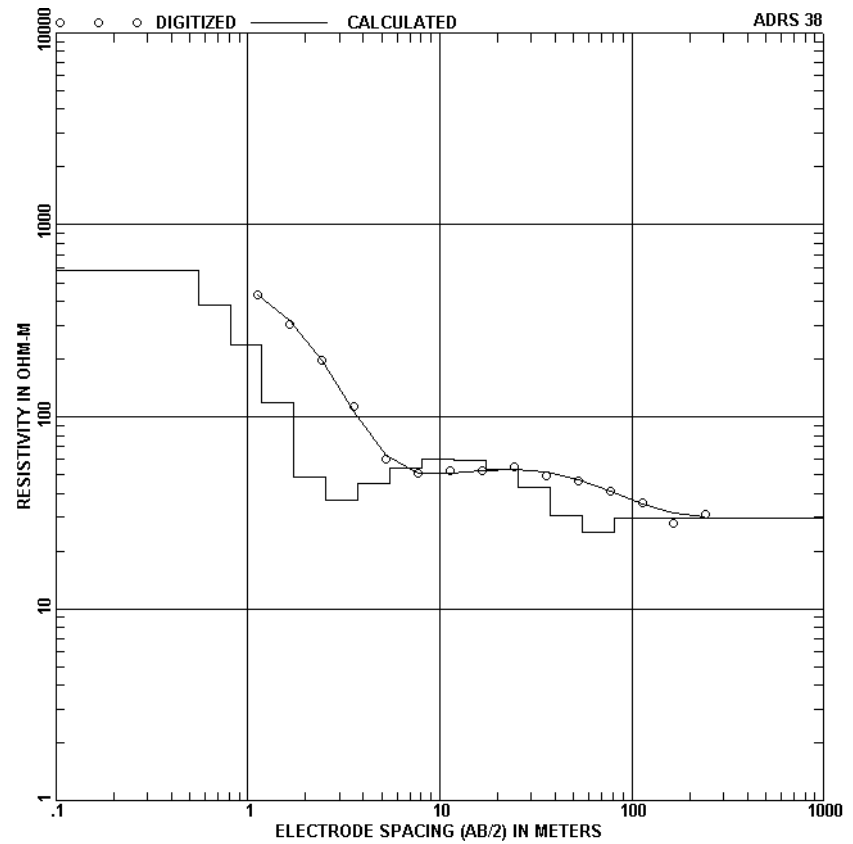
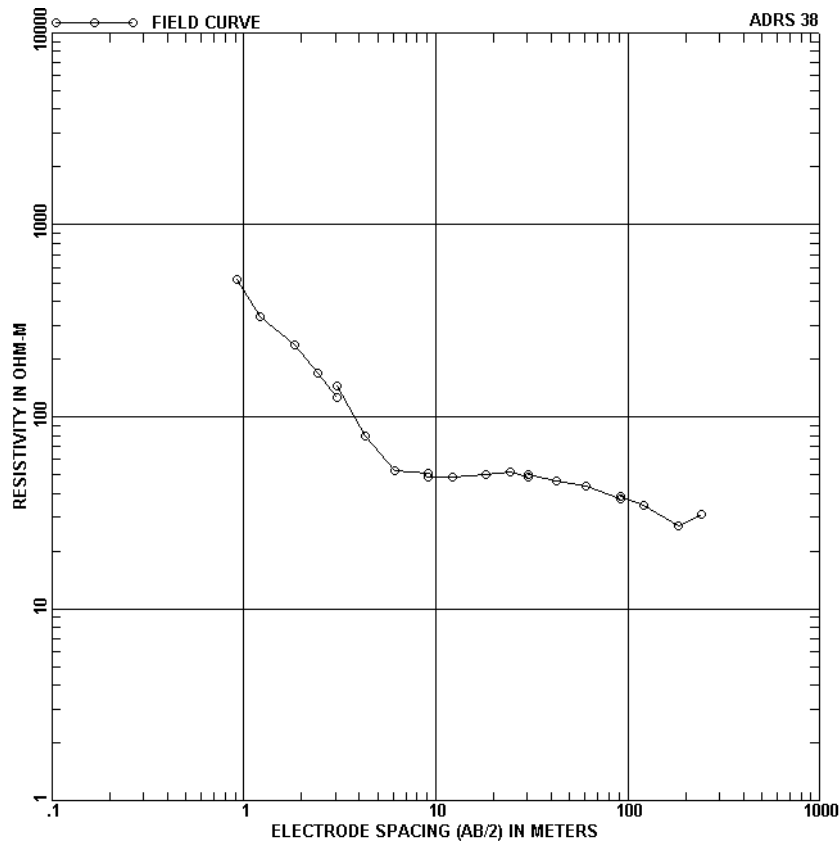
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	574.00	18.29 (60.00)	63.90
1.22 (4.00)	539.00	24.38 (80.00)	66.40
1.83 (6.00)	429.00	30.48 (100.00)	63.00
2.44 (8.00)	311.00	30.48 (100.00)	69.00
3.05 (10.00)	211.00	42.67 (140.00)	64.20
3.05 (10.00)	234.00	60.96 (200.00)	70.40
4.27 (14.00)	132.00	91.44 (300.00)	52.00
6.10 (20.00)	76.90	91.44 (300.00)	57.00
9.14 (30.00)	58.20	121.92 (400.00)	50.00
9.14 (30.00)	60.20	182.88 (600.00)	37.10
12.19 (40.00)	59.00	243.84 (800.00)	38.90

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	899.93	8.07 (26.49)	69.83
0.81 (2.65)	856.46	11.85 (38.88)	79.41
1.19 (3.89)	587.29	17.39 (57.07)	88.31
1.74 (5.71)	262.51	25.53 (83.76)	92.66
2.55 (8.38)	94.63	37.47 (122.95)	77.82
3.75 (12.29)	54.25	55.01 (180.47)	50.50
5.50 (18.05)	57.55	80.74 (264.89)	34.42
		99999.00 (99999.00)	33.84



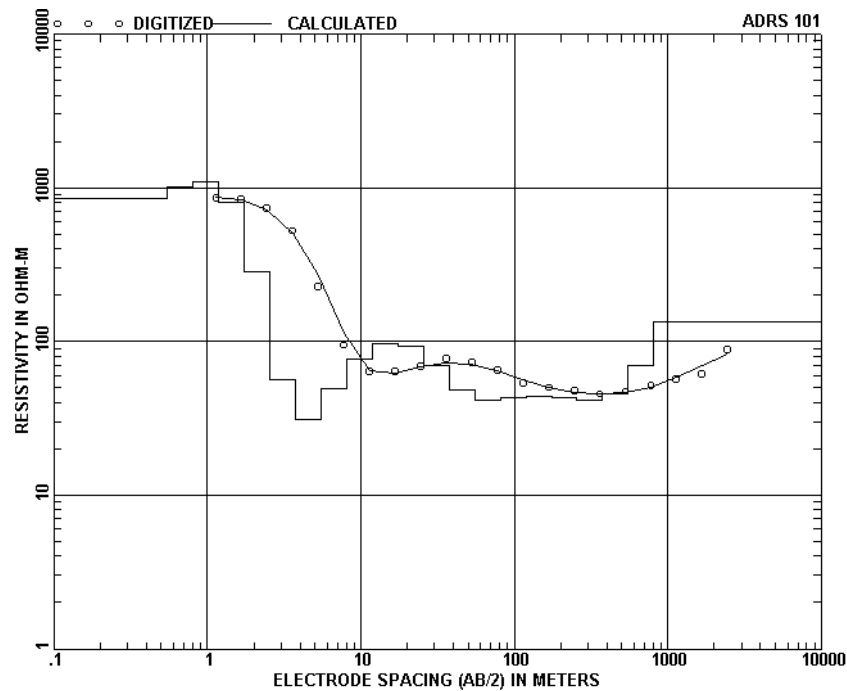
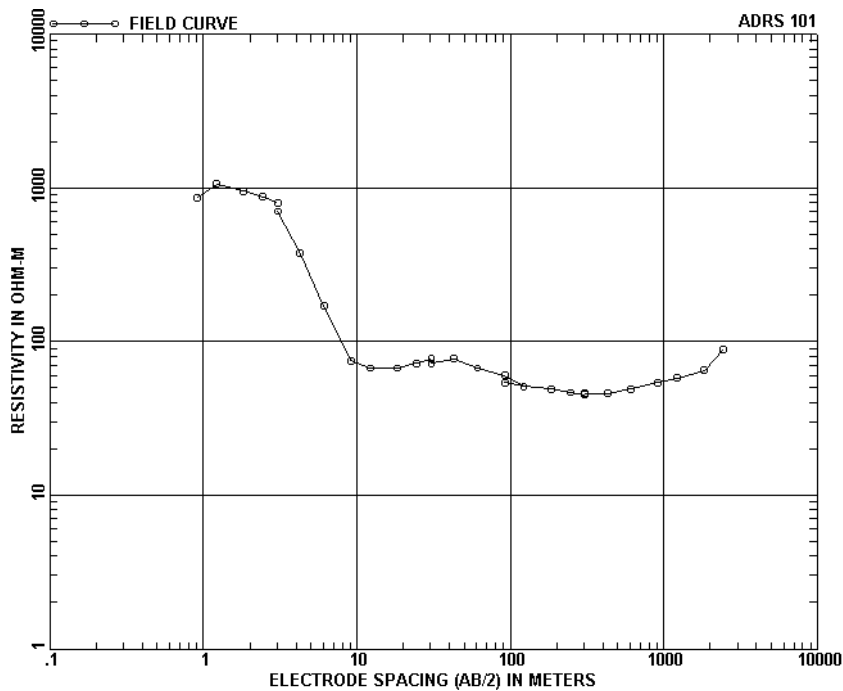
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	378.00	18.29 (60.00)	62.80
1.22 (4.00)	405.00	24.38 (80.00)	62.60
1.83 (6.00)	398.00	30.48 (100.00)	68.80
2.44 (8.00)	352.00	30.48 (100.00)	69.50
3.05 (10.00)	308.00	42.67 (140.00)	70.70
3.05 (10.00)	336.00	60.96 (200.00)	67.30
4.27 (14.00)	235.00	91.44 (300.00)	64.40
6.10 (20.00)	135.00	91.44 (300.00)	62.00
9.14 (30.00)	69.80	121.92 (400.00)	51.30
9.14 (30.00)	68.30	182.88 (600.00)	15.00
12.19 (40.00)	57.60	243.84 (800.00)	30.10

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	399.66	8.07 (26.49)	44.82
0.81 (2.65)	516.77	11.85 (38.88)	62.89
1.19 (3.89)	538.59	17.39 (57.07)	75.72
1.74 (5.71)	404.40	25.53 (83.76)	81.03
2.55 (8.38)	186.08	37.47 (122.95)	80.92
3.75 (12.29)	56.24	55.01 (180.47)	71.86
5.50 (18.05)	32.02	80.74 (264.89)	47.18
		99999.00 (99999.00)	20.35



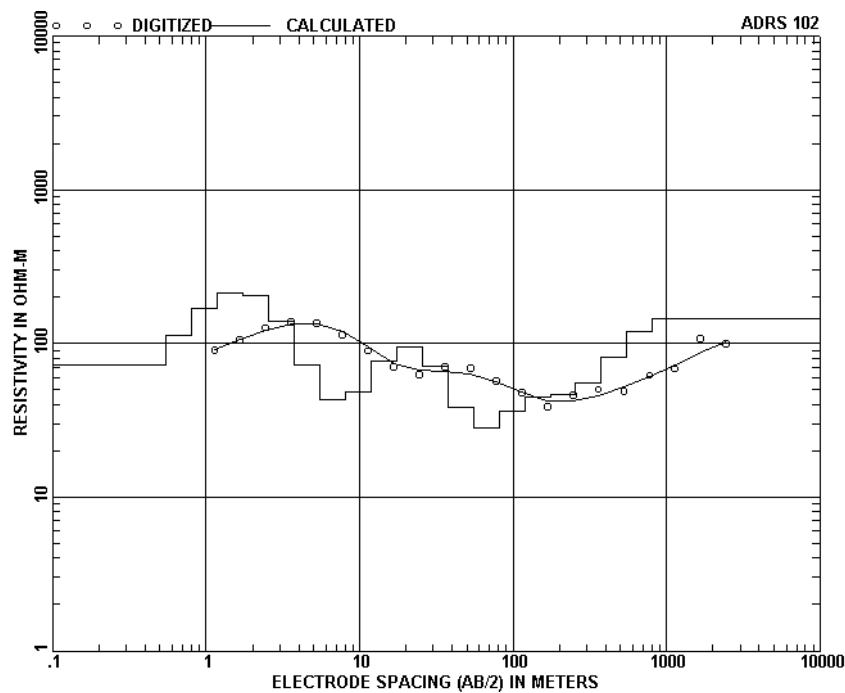
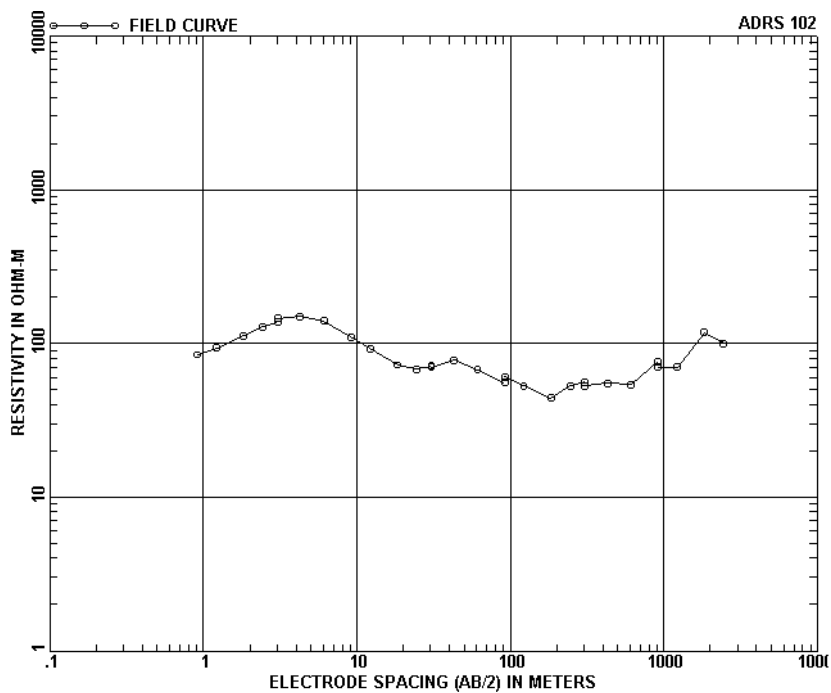
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	520.00	18.29 (60.00)	49.90
1.22 (4.00)	334.00	24.38 (80.00)	51.50
1.83 (6.00)	238.00	30.48 (100.00)	48.30
2.44 (8.00)	168.00	30.48 (100.00)	50.10
3.05 (10.00)	127.00	42.67 (140.00)	46.60
3.05 (10.00)	145.00	60.96 (200.00)	43.40
4.27 (14.00)	79.40	91.44 (300.00)	37.20
6.10 (20.00)	52.40	91.44 (300.00)	38.30
9.14 (30.00)	50.50	121.92 (400.00)	34.50
9.14 (30.00)	48.40	182.88 (600.00)	27.00
12.19 (40.00)	48.90	243.84 (800.00)	30.90

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	581.84	8.07 (26.49)	54.37
0.81 (2.65)	379.32	11.85 (38.88)	59.75
1.19 (3.89)	236.06	17.39 (57.07)	59.12
1.74 (5.71)	118.76	25.53 (83.76)	53.60
2.55 (8.38)	48.78	37.47 (122.95)	42.89
3.75 (12.29)	36.70	55.01 (180.47)	30.49
5.50 (18.05)	44.73	80.74 (264.89)	25.17
		99999.00 (99999.00)	29.43



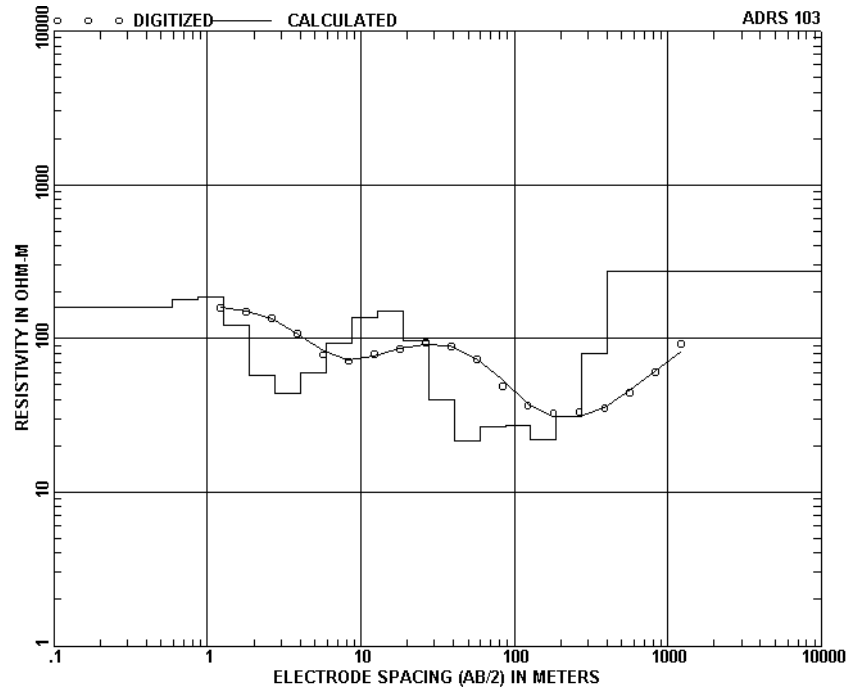
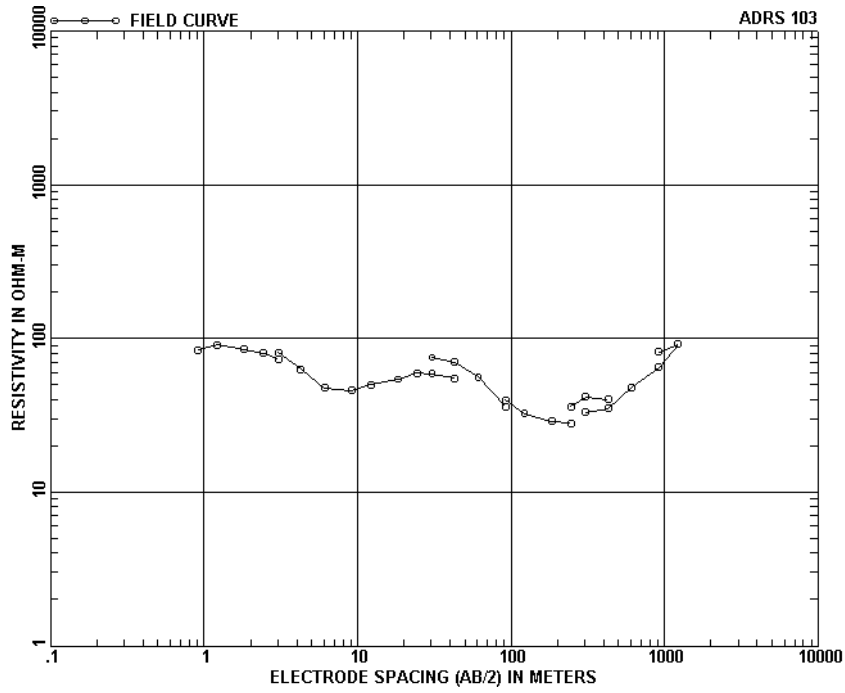
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	860.00	60.96 (200.00)	67.00
1.22 (4.00)	1060.00	91.44 (300.00)	60.00
1.83 (6.00)	950.00	121.92 (400.00)	51.00
2.44 (8.00)	870.00	91.44 (300.00)	54.00
3.05 (10.00)	798.00	121.92 (400.00)	51.00
3.05 (10.00)	702.00	182.88 (600.00)	49.00
4.27 (14.00)	375.00	243.84 (800.00)	46.50
6.10 (20.00)	170.00	304.80 (1000.00)	45.00
9.14 (30.00)	75.00	304.80 (1000.00)	46.00
12.19 (40.00)	67.00	426.72 (1400.00)	46.00
18.29 (60.00)	67.00	609.60 (2000.00)	49.00
24.38 (80.00)	72.00	914.40 (3000.00)	54.00
30.48 (100.00)	77.00	914.40 (3000.00)	54.00
30.48 (100.00)	72.00	1219.20 (4000.00)	58.00
42.67 (140.00)	77.00	1828.80 (6000.00)	65.00
		2438.40 (8000.00)	89.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	855.23	25.53 (83.76)	93.61
0.81 (2.65)	1003.53	37.47 (122.95)	69.03
1.19 (3.89)	1094.85	55.01 (180.47)	48.29
1.74 (5.71)	801.78	80.74 (264.89)	41.64
2.55 (8.38)	284.04	118.51 (388.80)	42.76
3.75 (12.29)	56.56	173.94 (570.68)	43.65
5.50 (18.05)	31.15	255.31 (837.64)	42.70
8.07 (26.49)	49.42	374.75 (1229.49)	41.32
11.85 (38.88)	76.29	550.06 (1804.65)	45.90
17.39 (57.07)	97.51	807.37 (2648.86)	69.77
		99999.00 (99999.00)	134.64



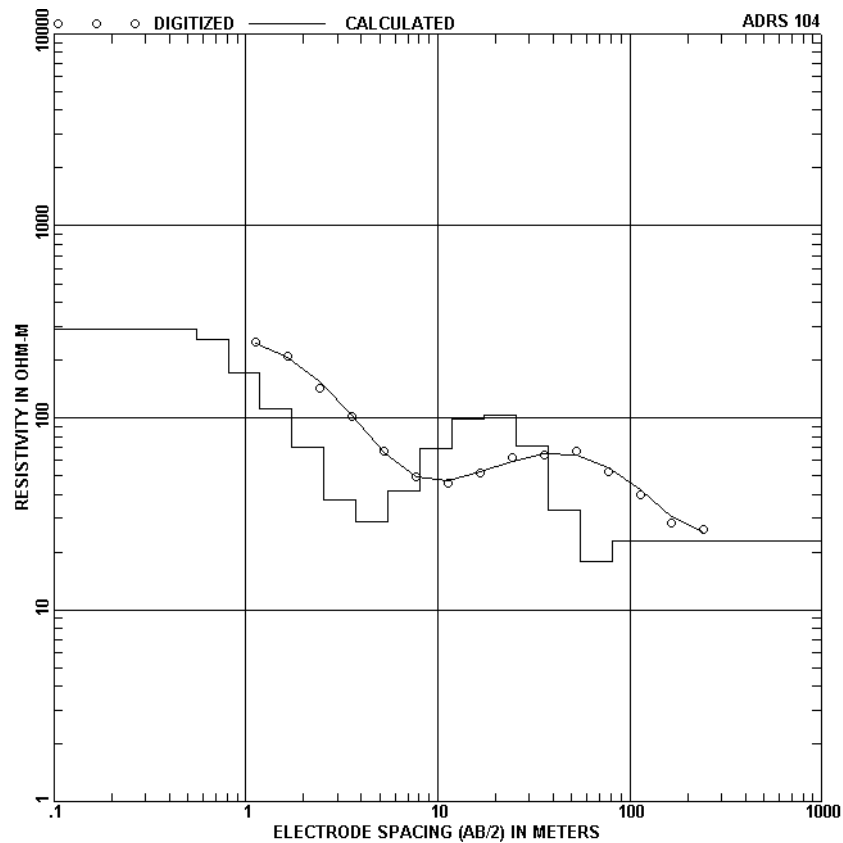
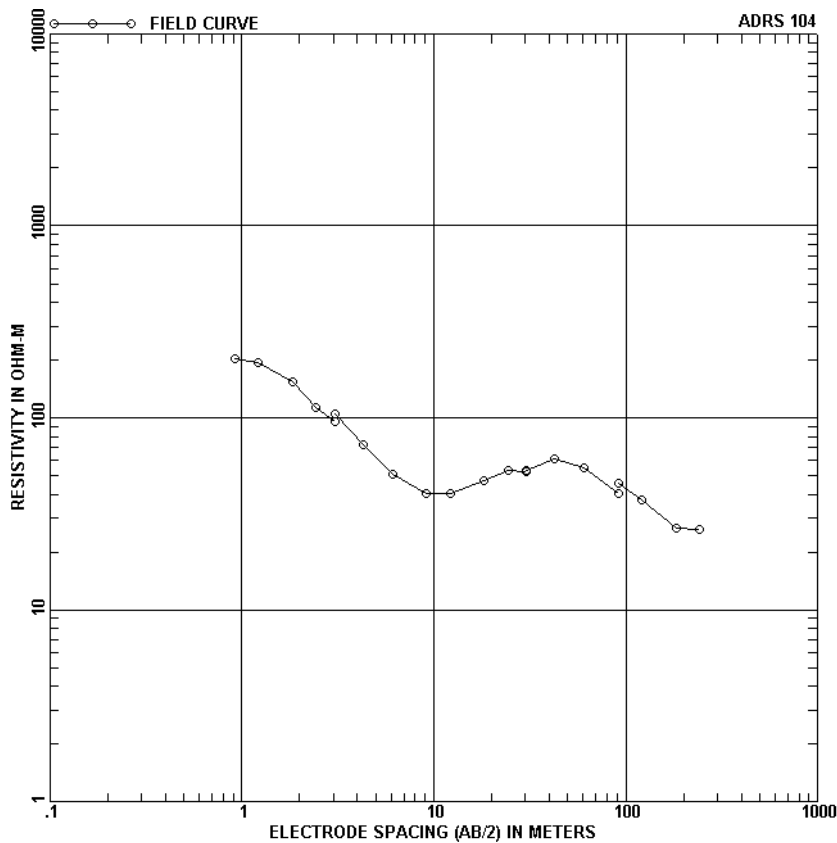
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	84.50	60.96 (200.00)	67.30
1.22 (4.00)	93.20	91.44 (300.00)	55.60
1.83 (6.00)	112.00	91.44 (300.00)	60.40
2.44 (8.00)	128.00	121.92 (400.00)	52.90
3.05 (10.00)	137.00	182.88 (600.00)	44.20
3.05 (10.00)	146.00	243.84 (800.00)	53.00
4.27 (14.00)	150.00	304.80 (1000.00)	56.00
6.10 (20.00)	140.00	304.80 (1000.00)	53.00
9.14 (30.00)	110.00	426.72 (1400.00)	55.00
12.19 (40.00)	92.10	609.60 (2000.00)	54.00
18.29 (60.00)	72.30	914.40 (3000.00)	76.00
24.38 (80.00)	67.80	914.40 (3000.00)	70.00
30.48 (100.00)	71.30	1219.20 (4000.00)	70.00
30.48 (100.00)	69.90	1828.80 (6000.00)	118.00
42.67 (140.00)	77.80	2438.40 (8000.00)	100.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	72.64	25.53 (83.76)	93.98
0.81 (2.65)	113.33	37.47 (122.95)	70.64
1.19 (3.89)	168.22	55.01 (180.47)	38.43
1.74 (5.71)	211.66	80.74 (264.89)	28.09
2.55 (8.38)	203.83	118.51 (388.80)	36.33
3.75 (12.29)	140.04	173.94 (570.68)	44.91
5.50 (18.05)	72.98	255.31 (837.64)	46.41
8.07 (26.49)	42.97	374.75 (1229.49)	55.04
11.85 (38.88)	48.23	550.06 (1804.65)	81.27
17.39 (57.07)	77.30	807.37 (2648.86)	120.39
		99999.00 (99999.00)	145.01



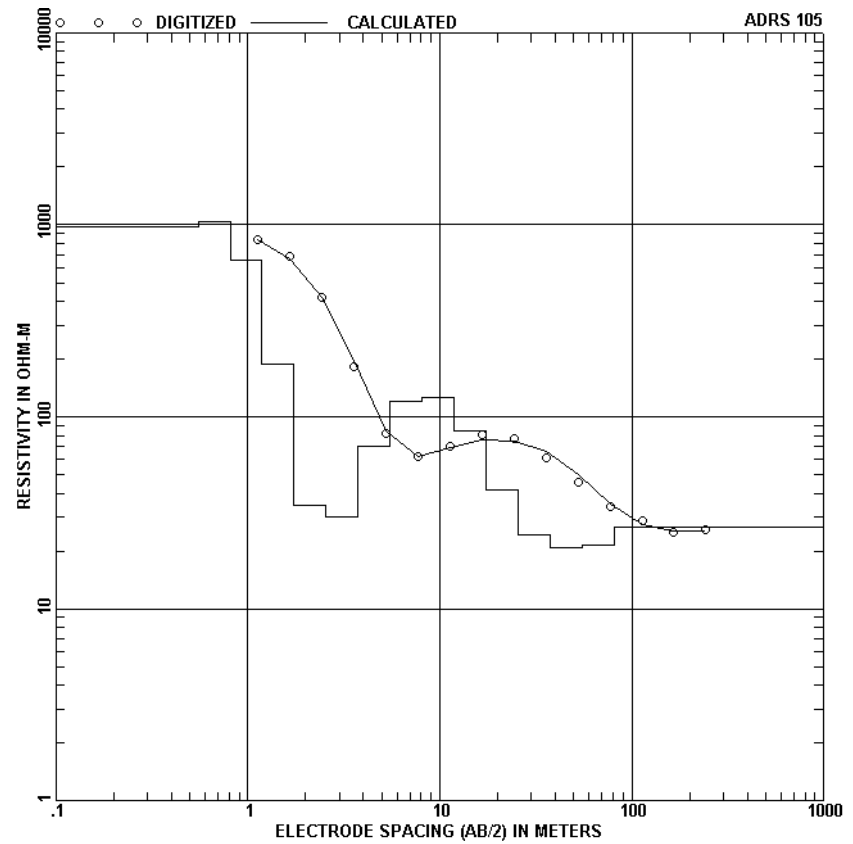
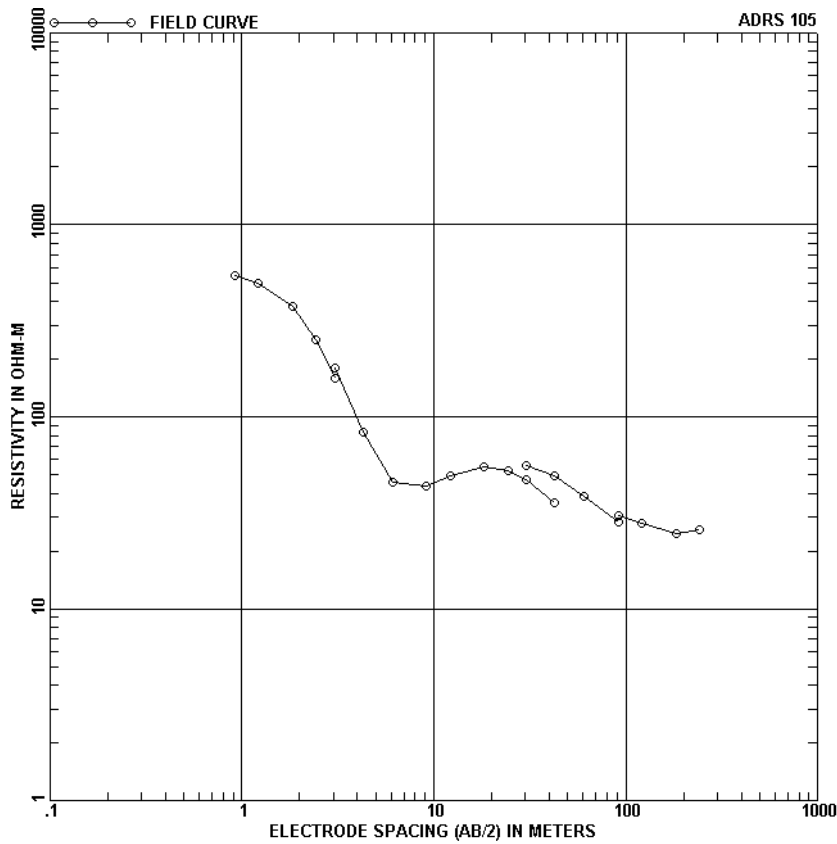
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	84.00	60.96 (200.00)	56.00
1.22 (4.00)	91.00	91.44 (300.00)	36.00
1.83 (6.00)	85.20	91.44 (300.00)	39.50
2.44 (8.00)	80.00	121.92 (400.00)	32.40
3.05 (10.00)	73.10	182.88 (600.00)	28.80
3.05 (10.00)	81.00	243.84 (800.00)	28.10
4.27 (14.00)	62.80	243.84 (800.00)	36.00
6.10 (20.00)	47.60	304.80 (1000.00)	41.80
9.14 (30.00)	46.00	426.72 (1400.00)	40.00
12.19 (40.00)	50.00	304.80 (1000.00)	33.00
18.29 (60.00)	54.30	426.72 (1400.00)	35.00
24.38 (80.00)	59.40	609.60 (2000.00)	48.00
30.48 (100.00)	58.80	914.40 (3000.00)	65.00
42.67 (140.00)	54.90	1219.20 (4000.00)	92.00
30.48 (100.00)	75.20	914.40 (3000.00)	82.00
42.67 (140.00)	70.20	1219.20 (4000.00)	92.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.59 (1.94)	158.34	18.74 (61.47)	149.61
0.87 (2.85)	180.04	27.50 (90.23)	96.77
1.28 (4.19)	186.80	40.37 (132.44)	39.55
1.87 (6.15)	122.75	59.25 (194.40)	21.47
2.75 (9.02)	57.75	86.97 (285.34)	26.71
4.04 (13.24)	43.91	127.66 (418.82)	27.32
5.93 (19.44)	59.73	187.37 (614.75)	21.91
8.70 (28.53)	93.42	275.03 (902.33)	31.02
12.77 (41.88)	137.66	403.69 (1324.43)	80.35
		99999.00 (99999.00)	275.09



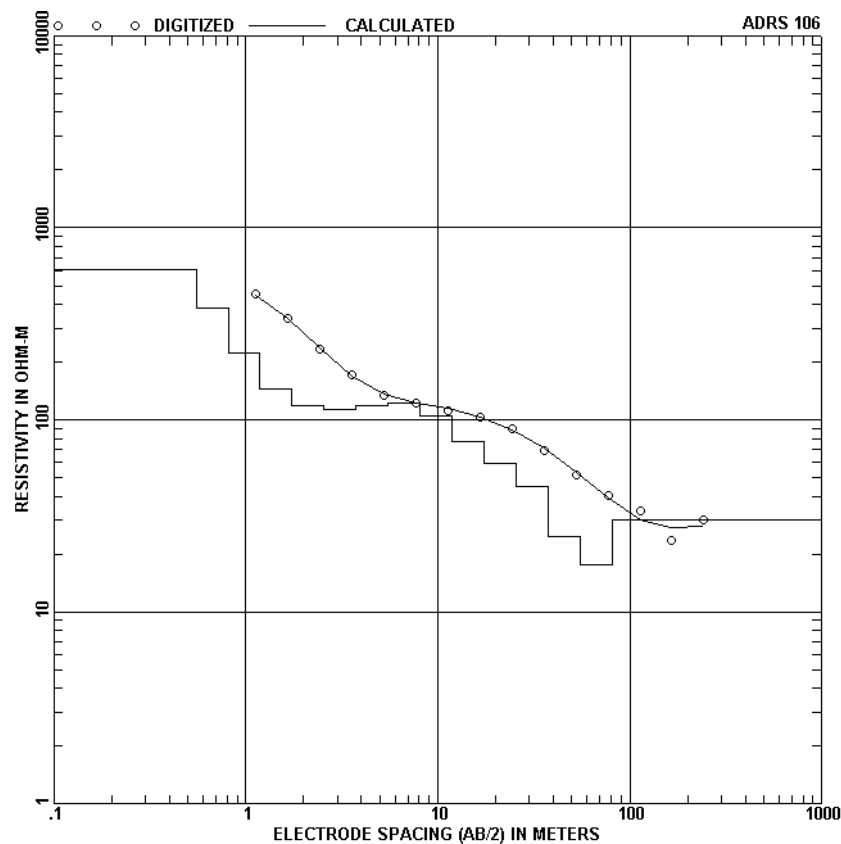
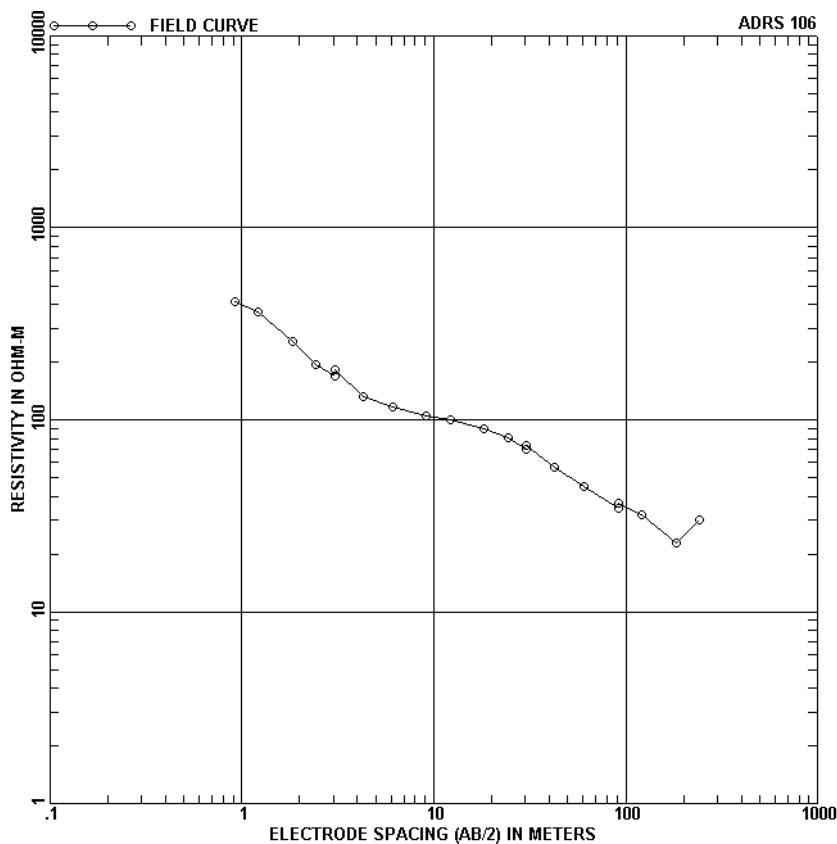
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	204.00	18.29 (60.00)	47.40
1.22 (4.00)	193.00	24.38 (80.00)	53.60
1.83 (6.00)	154.00	30.48 (100.00)	52.80
2.44 (8.00)	113.00	30.48 (100.00)	53.60
3.05 (10.00)	95.40	42.67 (140.00)	60.80
3.05 (10.00)	104.00	60.96 (200.00)	54.60
4.27 (14.00)	71.90	91.44 (300.00)	40.30
6.10 (20.00)	50.80	91.44 (300.00)	45.80
9.14 (30.00)	40.10	121.92 (400.00)	37.60
12.19 (40.00)	40.20	182.88 (600.00)	26.60
		243.84 (800.00)	26.20

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	288.29	8.07 (26.49)	41.45
0.81 (2.65)	256.70	11.85 (38.88)	68.67
1.19 (3.89)	172.34	17.39 (57.07)	98.05
1.74 (5.71)	110.93	25.53 (83.76)	103.56
2.55 (8.38)	70.69	37.47 (122.95)	71.13
3.75 (12.29)	37.33	55.01 (180.47)	33.12
5.50 (18.05)	28.66	80.74 (264.89)	17.94
		99999.00 (99999.00)	22.78



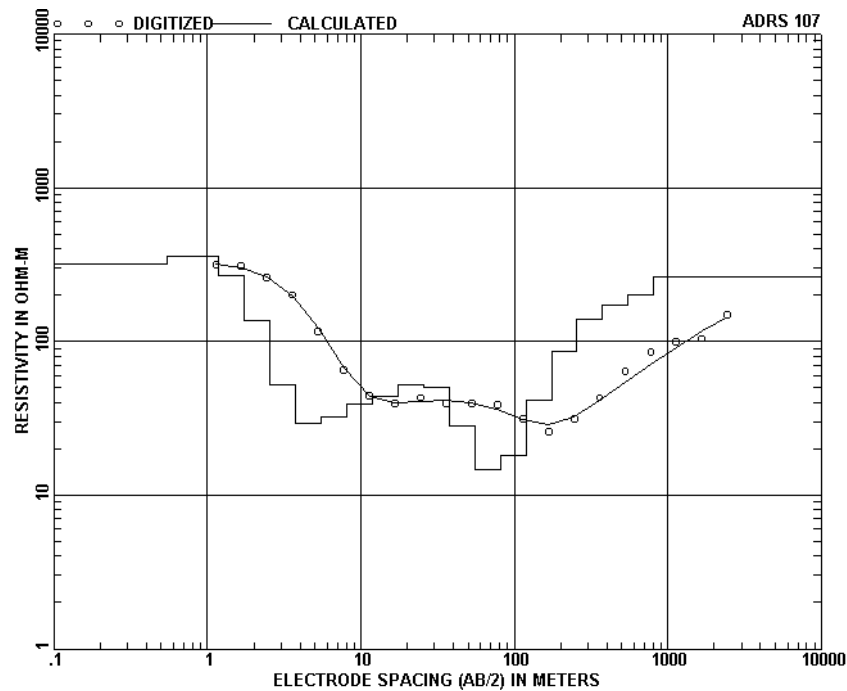
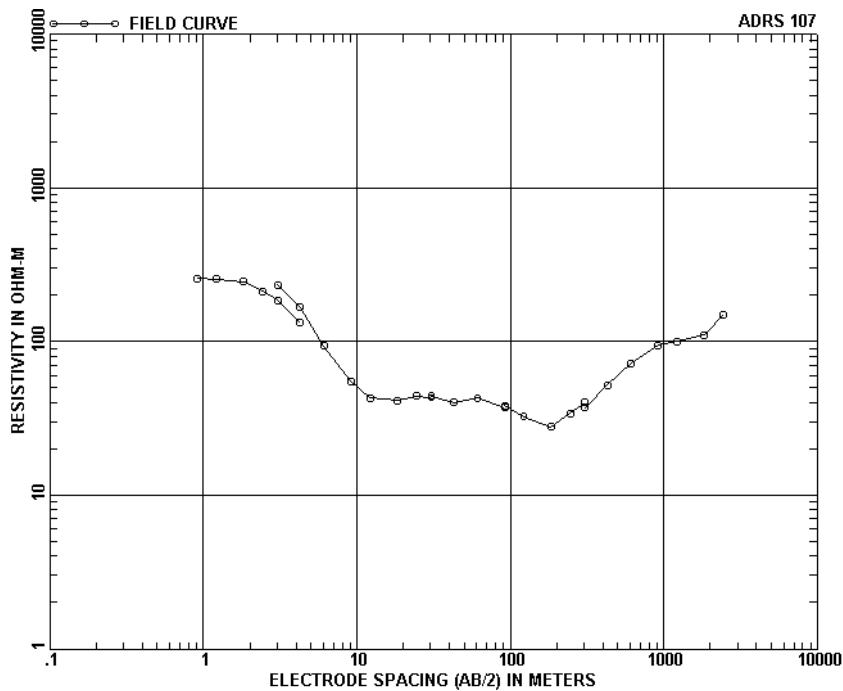
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	542.00	24.38 (80.00)	52.20
1.22 (4.00)	495.00	30.48 (100.00)	47.10
1.83 (6.00)	377.00	42.67 (140.00)	35.50
2.44 (8.00)	252.00	30.48 (100.00)	56.10
3.05 (10.00)	160.00	42.67 (140.00)	49.10
3.05 (10.00)	179.00	60.96 (200.00)	38.30
4.27 (14.00)	83.00	91.44 (300.00)	28.40
6.10 (20.00)	45.90	91.44 (300.00)	30.40
9.14 (30.00)	43.40	121.92 (400.00)	28.00
12.19 (40.00)	49.10	182.88 (600.00)	24.50
18.29 (60.00)	54.90	243.84 (800.00)	25.80

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	983.55	8.07 (26.49)	120.02
0.81 (2.65)	1033.81	11.85 (38.88)	126.94
1.19 (3.89)	652.68	17.39 (57.07)	83.92
1.74 (5.71)	187.22	25.53 (83.76)	41.83
2.55 (8.38)	34.36	37.47 (122.95)	24.30
3.75 (12.29)	30.05	55.01 (180.47)	20.66
5.50 (18.05)	69.86	80.74 (264.89)	21.43
		99999.00 (99999.00)	26.51



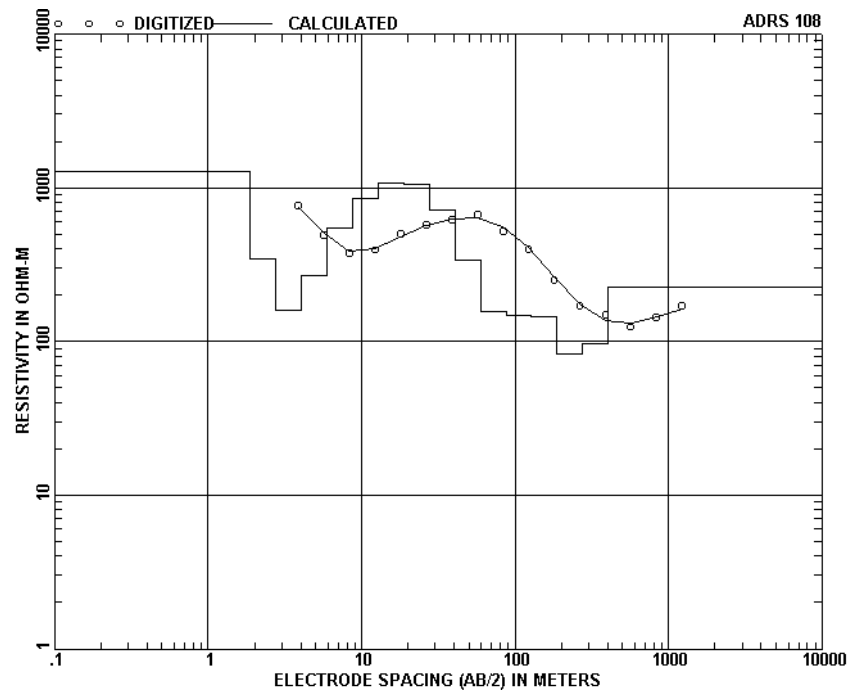
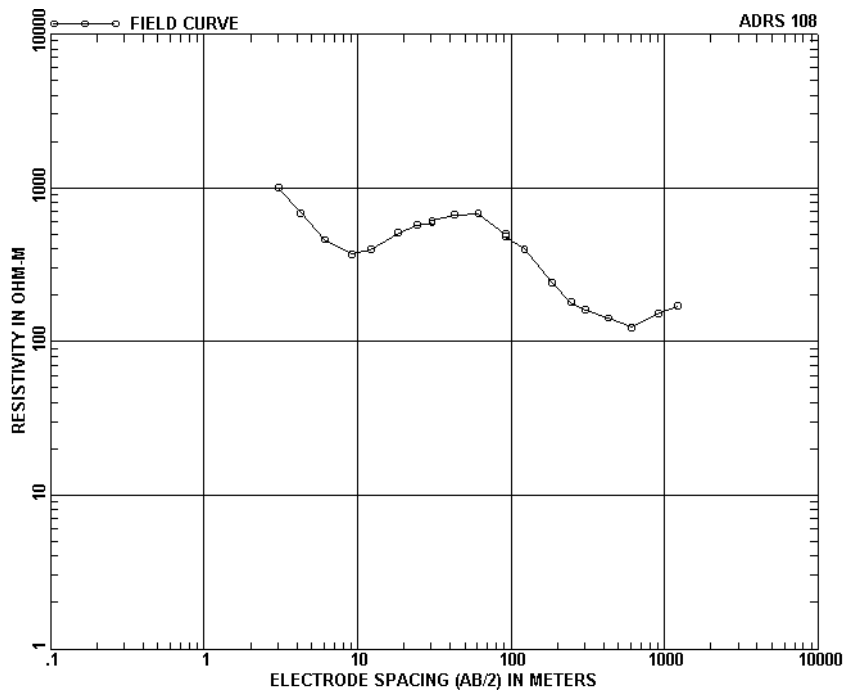
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	415.00	18.29 (60.00)	90.10
1.22 (4.00)	362.00	24.38 (80.00)	81.10
1.83 (6.00)	254.00	30.48 (100.00)	70.50
2.44 (8.00)	194.00	30.48 (100.00)	74.10
3.05 (10.00)	168.00	42.67 (140.00)	56.30
3.05 (10.00)	181.00	60.96 (200.00)	44.60
4.27 (14.00)	131.00	91.44 (300.00)	34.50
6.10 (20.00)	116.00	91.44 (300.00)	36.60
9.14 (30.00)	105.00	121.92 (400.00)	31.90
12.19 (40.00)	99.30	182.88 (600.00)	22.80
		243.84 (800.00)	30.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	605.34	8.07 (26.49)	122.50
0.81 (2.65)	381.86	11.85 (38.88)	105.14
1.19 (3.89)	222.86	17.39 (57.07)	77.51
1.74 (5.71)	145.32	25.53 (83.76)	59.30
2.55 (8.38)	117.84	37.47 (122.95)	45.07
3.75 (12.29)	113.23	55.01 (180.47)	24.81
5.50 (18.05)	119.23	80.74 (264.89)	17.49
		99999.00 (99999.00)	30.29



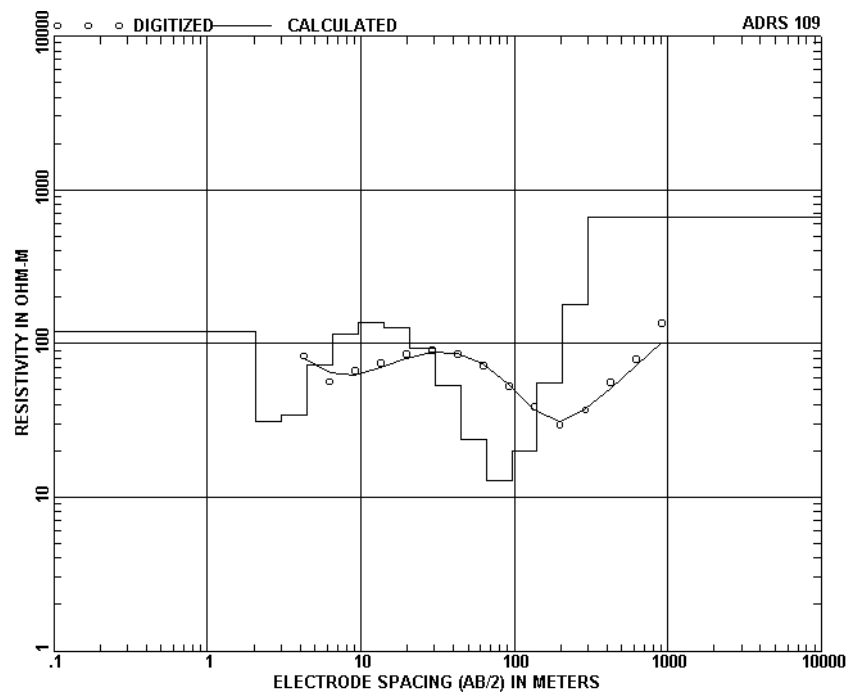
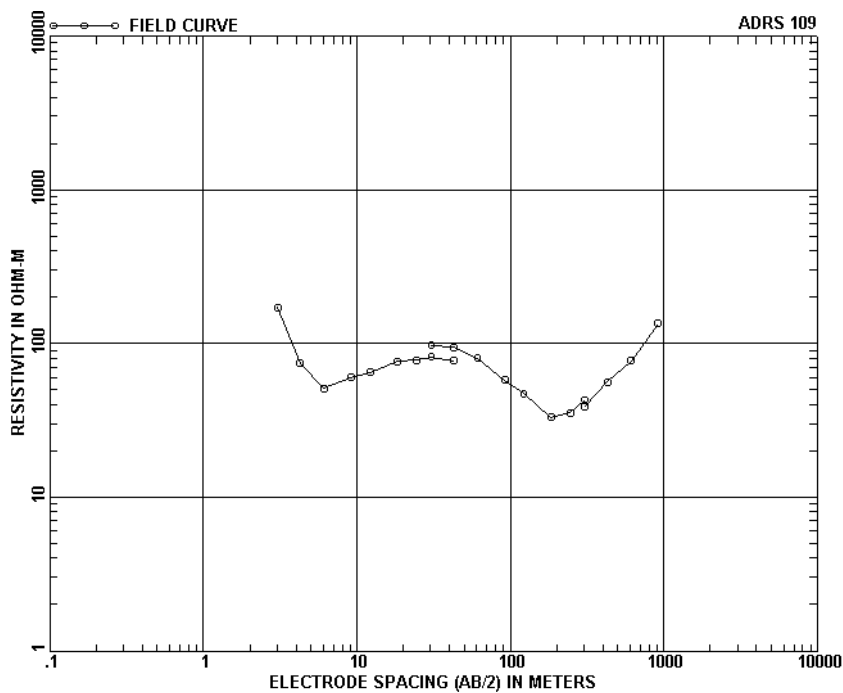
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	256.00	42.67 (140.00)	40.10
1.22 (4.00)	255.00	60.96 (200.00)	42.70
1.83 (6.00)	245.00	91.44 (300.00)	37.20
2.44 (8.00)	211.00	91.44 (300.00)	38.20
3.05 (10.00)	185.00	121.92 (400.00)	32.50
4.27 (14.00)	132.00	182.88 (600.00)	27.90
3.05 (10.00)	233.00	243.84 (800.00)	34.00
4.27 (14.00)	167.00	304.80 (1000.00)	40.00
6.10 (20.00)	93.20	304.80 (1000.00)	37.00
9.14 (30.00)	55.00	426.72 (1400.00)	52.00
12.19 (40.00)	42.90	609.60 (2000.00)	72.00
18.29 (60.00)	41.10	914.40 (3000.00)	94.00
24.38 (80.00)	44.10	914.40 (3000.00)	94.00
30.48 (100.00)	43.00	1219.20 (4000.00)	100.00
30.48 (100.00)	44.20	1828.80 (6000.00)	110.00
		2438.40 (8000.00)	150.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	320.06	25.53 (83.76)	51.90
0.81 (2.65)	355.46	37.47 (122.95)	49.77
1.19 (3.89)	354.82	55.01 (180.47)	28.23
1.74 (5.71)	270.42	80.74 (264.89)	14.69
2.55 (8.38)	136.74	118.51 (388.80)	18.21
3.75 (12.29)	52.38	173.94 (570.68)	41.17
5.50 (18.05)	29.17	255.31 (837.64)	86.63
8.07 (26.49)	32.35	374.75 (1229.49)	138.13
11.85 (38.88)	39.00	550.06 (1804.65)	172.69
17.39 (57.07)	43.99	807.37 (2648.86)	200.55
		99999.00 (99999.00)	264.34



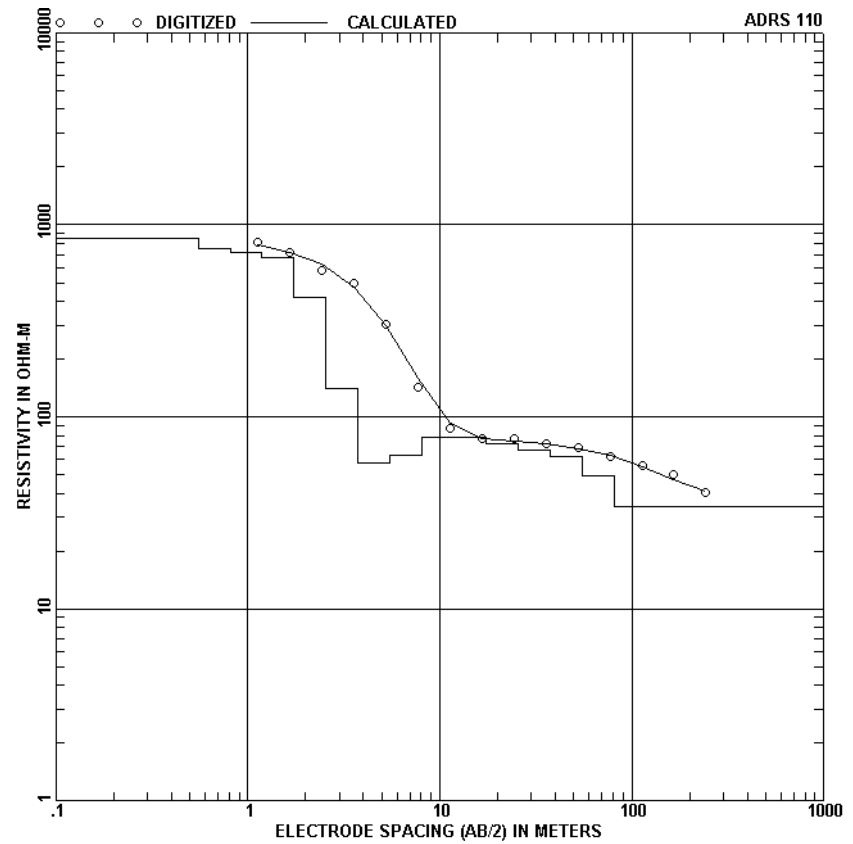
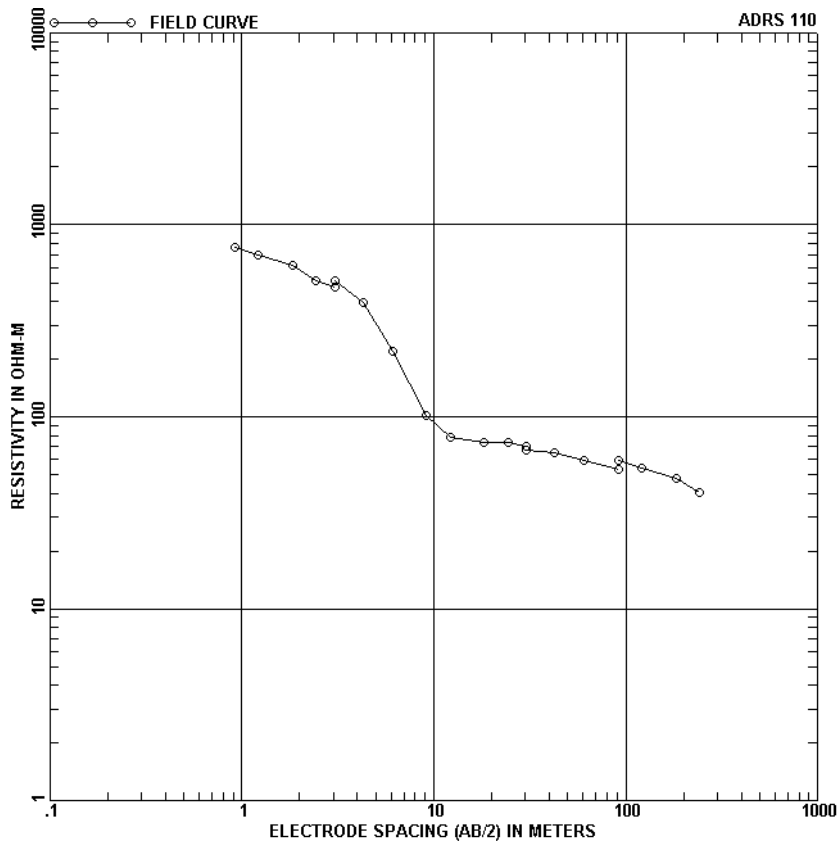
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
3.05 (10.00)	1000.00	91.44 (300.00)	500.00
4.27 (14.00)	683.00	91.44 (300.00)	480.00
6.10 (20.00)	460.00	121.92 (400.00)	400.00
9.14 (30.00)	370.00	182.88 (600.00)	242.00
12.19 (40.00)	397.00	243.84 (800.00)	180.00
18.29 (60.00)	510.00	304.80 (1000.00)	160.00
24.38 (80.00)	570.00	304.80 (1000.00)	160.00
30.48 (100.00)	590.00	426.72 (1400.00)	142.00
30.48 (100.00)	610.00	609.60 (2000.00)	123.00
42.67 (140.00)	665.00	914.40 (3000.00)	152.00
60.96 (200.00)	680.00	1219.20 (4000.00)	170.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
1.87 (6.15)	1268.75	40.37 (132.44)	714.81
2.75 (9.02)	346.23	59.25 (194.40)	337.71
4.04 (13.24)	158.47	86.97 (285.34)	157.32
5.93 (19.44)	267.72	127.66 (418.82)	146.76
8.70 (28.53)	550.29	187.37 (614.75)	143.82
12.77 (41.88)	848.45	275.03 (902.33)	82.77
18.74 (61.47)	1064.11	403.69 (1324.43)	97.39
27.50 (90.23)	1043.64	99999.00 (99999.00)	225.63



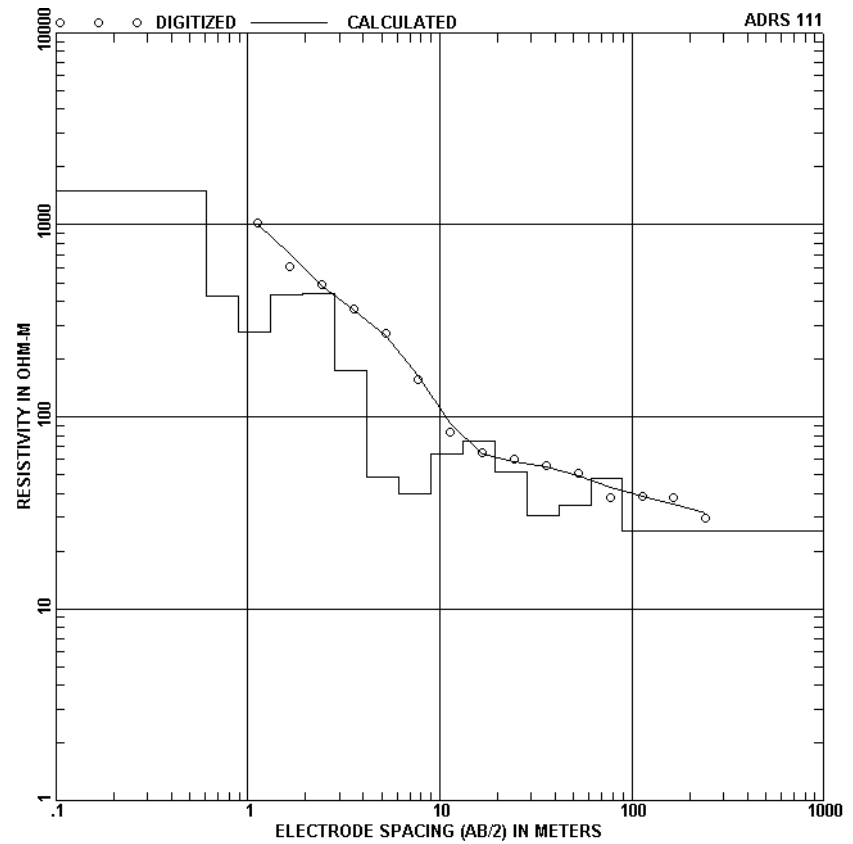
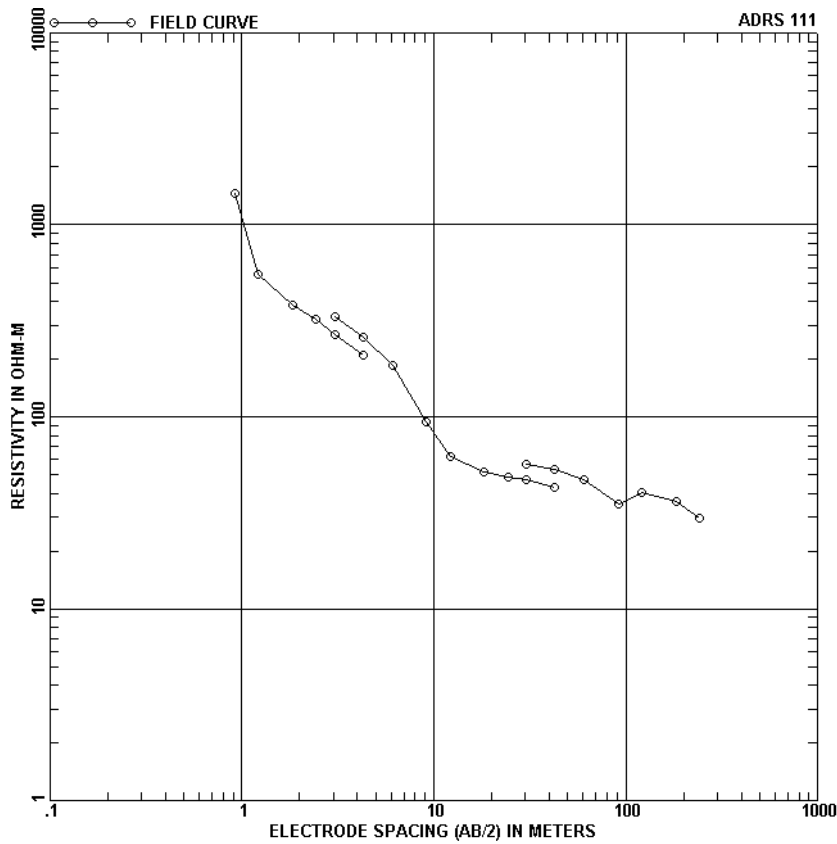
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
3.05 (10.00)	171.00	42.67 (140.00)	94.00
4.27 (14.00)	74.00	60.96 (200.00)	80.00
6.10 (20.00)	51.00	91.44 (300.00)	58.00
9.14 (30.00)	60.00	121.92 (400.00)	47.00
12.19 (40.00)	65.00	182.88 (600.00)	33.00
18.29 (60.00)	76.00	243.84 (800.00)	35.20
24.38 (80.00)	78.00	304.80 (1000.00)	43.00
30.48 (100.00)	82.00	304.80 (1000.00)	39.00
42.67 (140.00)	77.00	426.72 (1400.00)	56.00
30.48 (100.00)	97.00	609.60 (2000.00)	77.00
		914.40 (3000.00)	135.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
2.06 (6.77)	119.59	30.28 (99.33)	92.17
3.03 (9.93)	31.18	44.44 (145.80)	53.12
4.44 (14.58)	34.35	65.23 (214.01)	23.64
6.52 (21.40)	71.71	95.74 (314.12)	12.82
9.57 (31.41)	114.42	140.53 (461.06)	19.98
14.05 (46.11)	136.80	206.27 (676.74)	55.21
20.63 (67.67)	126.84	302.77 (993.32)	177.33
		99999.00 (99999.00)	657.44



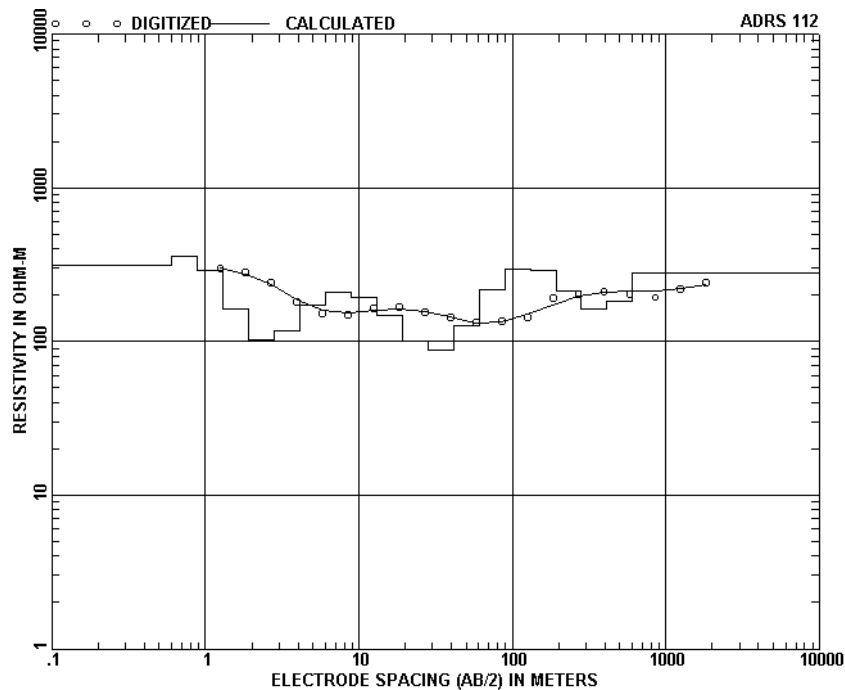
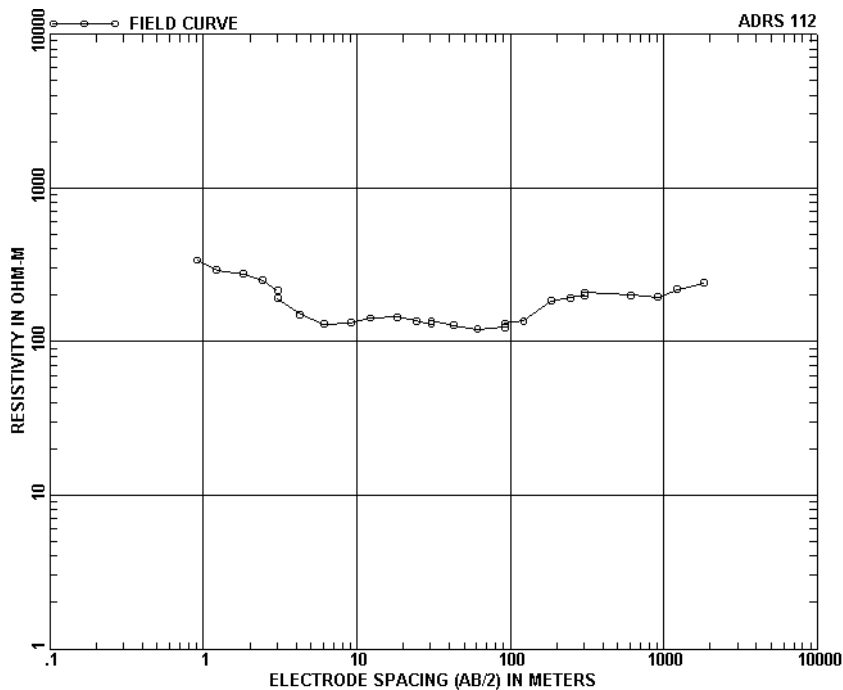
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	765.00	18.29 (60.00)	73.20
1.22 (4.00)	699.00	24.38 (80.00)	73.30
1.83 (6.00)	613.00	30.48 (100.00)	70.30
2.44 (8.00)	515.00	30.48 (100.00)	66.90
3.05 (10.00)	475.00	42.67 (140.00)	64.80
3.05 (10.00)	508.00	60.96 (200.00)	59.60
4.27 (14.00)	396.00	91.44 (300.00)	53.10
6.10 (20.00)	218.00	91.44 (300.00)	58.90
9.14 (30.00)	102.00	121.92 (400.00)	54.40
12.19 (40.00)	78.70	182.88 (600.00)	48.00
		243.84 (800.00)	40.50

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	854.58	8.07 (26.49)	63.24
0.81 (2.65)	752.73	11.85 (38.88)	77.96
1.19 (3.89)	720.28	17.39 (57.07)	78.54
1.74 (5.71)	675.46	25.53 (83.76)	72.04
2.55 (8.38)	420.71	37.47 (122.95)	66.94
3.75 (12.29)	140.34	55.01 (180.47)	61.83
5.50 (18.05)	57.19	80.74 (264.89)	49.60
		99999.00 (99999.00)	34.17



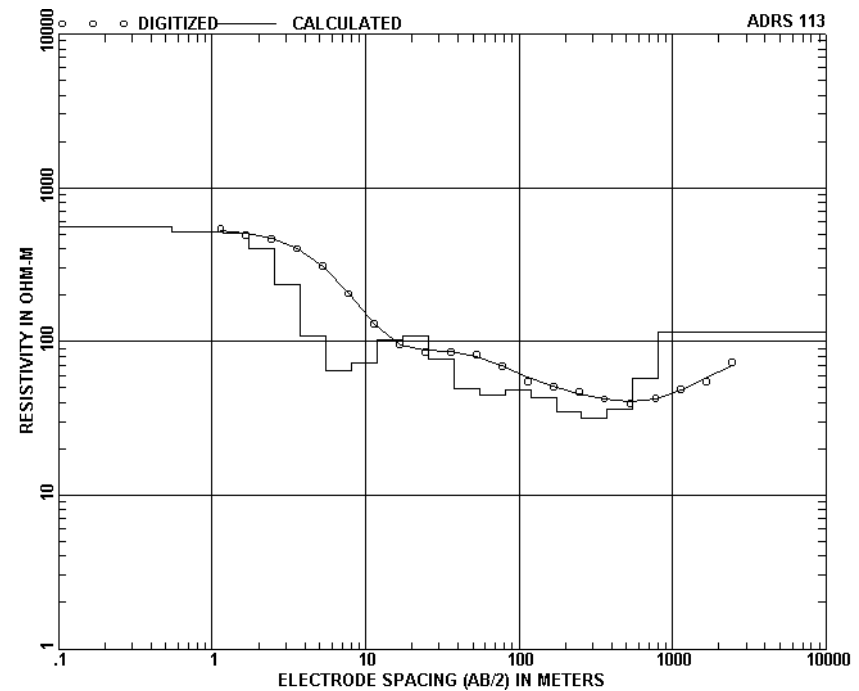
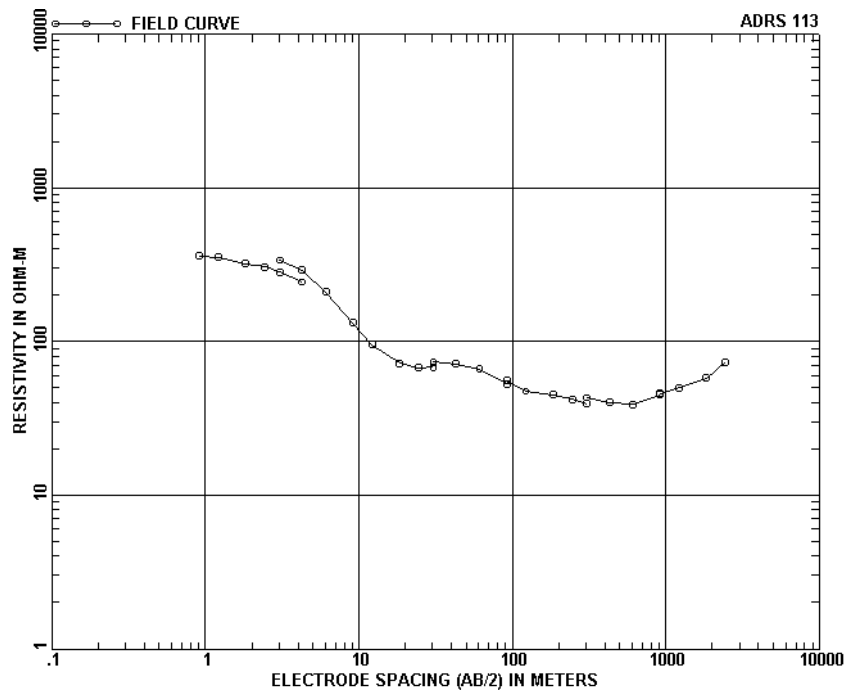
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	1448.00	18.29 (60.00)	51.40
1.22 (4.00)	551.00	24.38 (80.00)	48.80
1.83 (6.00)	381.00	30.48 (100.00)	47.00
2.44 (8.00)	321.00	42.67 (140.00)	43.20
3.05 (10.00)	269.00	30.48 (100.00)	57.00
4.27 (14.00)	208.00	42.67 (140.00)	53.40
3.05 (10.00)	332.00	60.96 (200.00)	46.90
4.27 (14.00)	258.00	91.44 (300.00)	34.90
6.10 (20.00)	186.00	91.44 (300.00)	34.90
9.14 (30.00)	93.50	121.92 (400.00)	40.10
12.19 (40.00)	62.20	182.88 (600.00)	36.10
		243.84 (800.00)	29.80

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.61 (2.01)	1513.99	8.97 (29.43)	39.82
0.90 (2.94)	425.78	13.17 (43.20)	64.48
1.32 (4.32)	275.63	19.33 (63.41)	74.94
1.93 (6.34)	435.20	28.37 (93.07)	51.61
2.84 (9.31)	438.13	41.64 (136.61)	30.60
4.16 (13.66)	174.03	61.12 (200.52)	34.65
6.11 (20.05)	48.76	89.71 (294.32)	47.63
		99999.00 (99999.00)	25.35



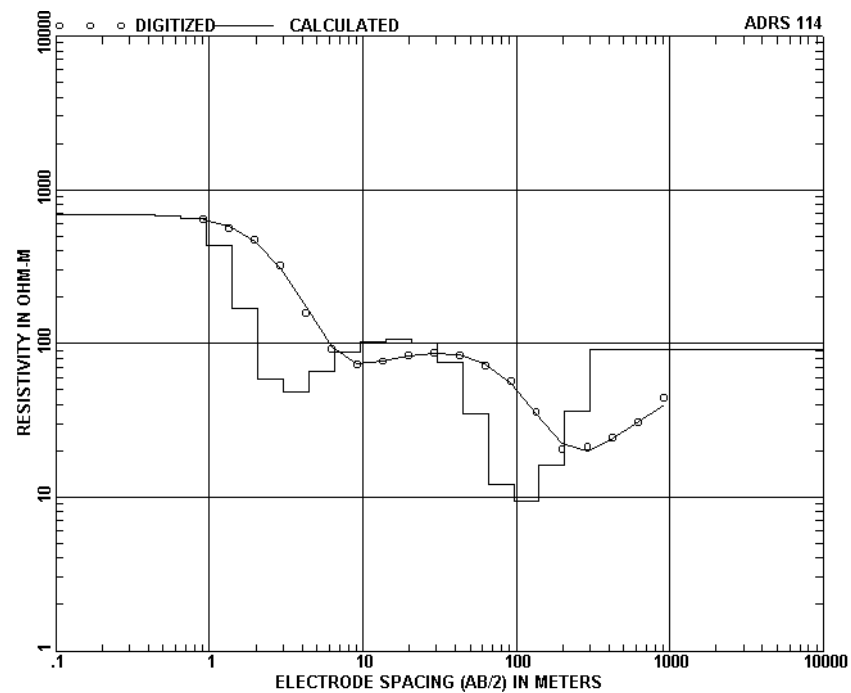
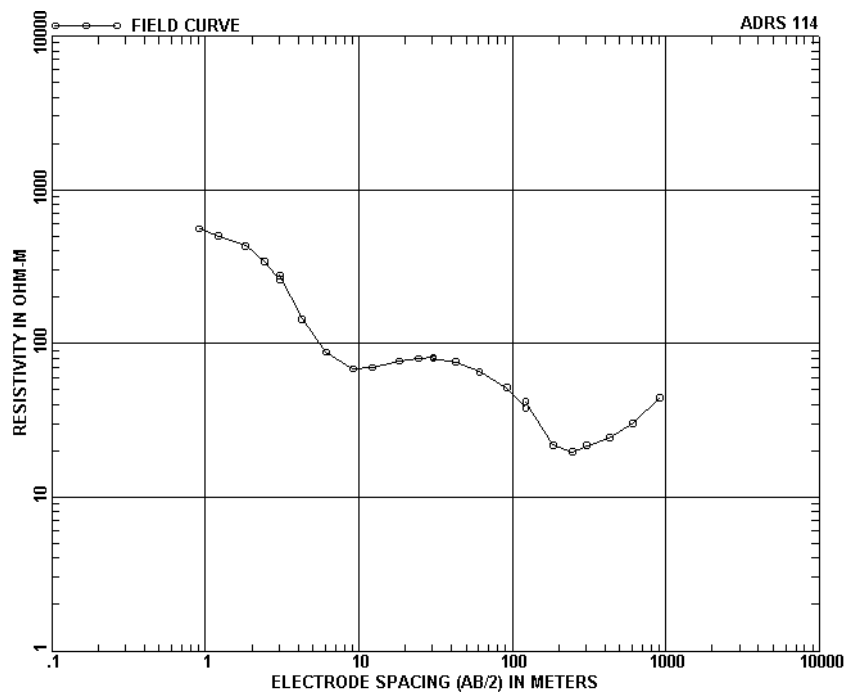
AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	337.00	42.67 (140.00)	127.00
1.22 (4.00)	291.00	60.96 (200.00)	120.00
1.83 (6.00)	275.00	91.44 (300.00)	123.00
2.44 (8.00)	249.00	91.44 (300.00)	131.00
3.05 (10.00)	214.00	121.92 (400.00)	136.00
3.05 (10.00)	190.00	182.88 (600.00)	184.00
4.27 (14.00)	149.00	243.84 (800.00)	192.00
6.10 (20.00)	130.00	304.80 (1000.00)	200.00
9.14 (30.00)	132.00	304.80 (1000.00)	207.00
12.19 (40.00)	142.00	609.60 (2000.00)	200.00
18.29 (60.00)	144.00	914.40 (3000.00)	195.00
24.38 (80.00)	136.00	914.40 (3000.00)	195.00
30.48 (100.00)	130.00	1219.20 (4000.00)	218.00
30.48 (100.00)	136.00	1828.80 (6000.00)	240.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.61 (1.99)	311.93	28.11 (92.21)	100.74
0.89 (2.92)	359.02	41.25 (135.35)	87.17
1.30 (4.28)	291.16	60.55 (198.66)	126.47
1.91 (6.28)	162.74	88.88 (291.60)	217.17
2.81 (9.22)	102.12	130.46 (428.01)	295.51
4.13 (13.53)	117.29	191.49 (628.23)	286.74
6.06 (19.87)	172.42	281.06 (922.12)	212.06
8.89 (29.16)	207.88	412.54 (1353.49)	162.05
13.05 (42.80)	194.84	605.53 (1986.65)	181.96
19.15 (62.82)	148.24	99999.00 (99999.00)	277.91

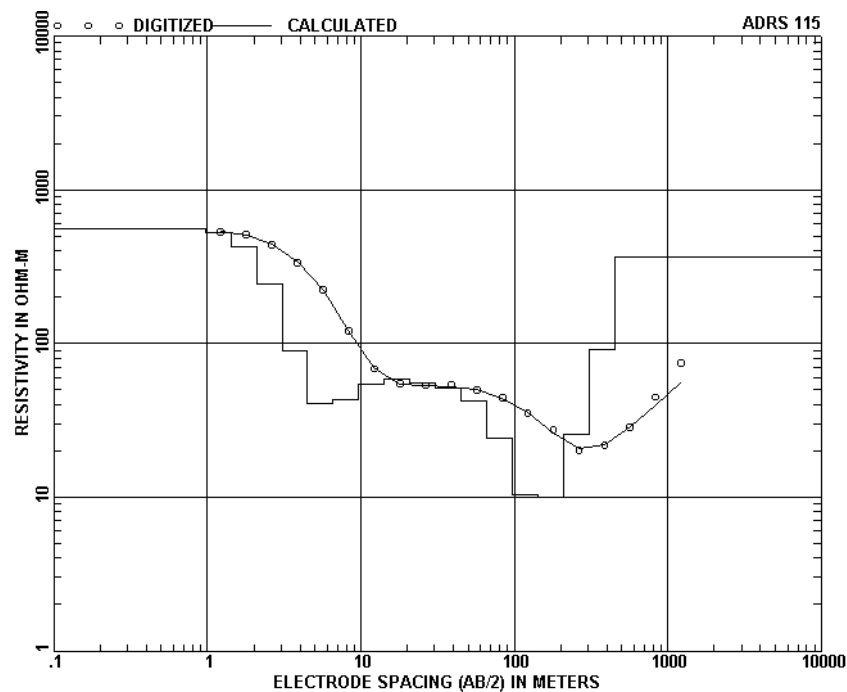
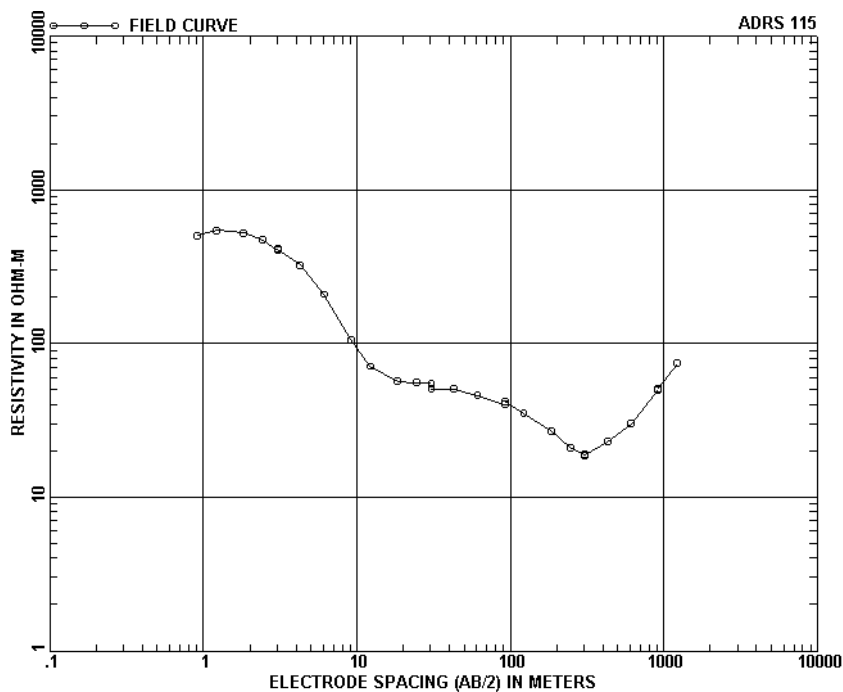


AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	361.00	42.67 (140.00)	71.40
1.22 (4.00)	352.00	60.96 (200.00)	66.10
1.83 (6.00)	321.00	91.44 (300.00)	52.80
2.44 (8.00)	306.00	91.44 (300.00)	55.70
3.05 (10.00)	282.00	121.92 (400.00)	47.40
4.27 (14.00)	243.00	182.88 (600.00)	45.00
3.05 (10.00)	338.00	243.84 (800.00)	42.00
4.27 (14.00)	290.00	304.80 (1000.00)	39.30
6.10 (20.00)	210.00	304.80 (1000.00)	43.00
9.14 (30.00)	132.00	426.72 (1400.00)	40.00
12.19 (40.00)	95.10	609.60 (2000.00)	39.00
18.29 (60.00)	72.20	914.40 (3000.00)	45.00
24.38 (80.00)	67.50	914.40 (3000.00)	46.00
30.48 (100.00)	68.10	1219.20 (4000.00)	50.00
30.48 (100.00)	73.10	1828.80 (6000.00)	58.00
		2438.40 (8000.00)	73.20

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.55 (1.80)	552.10	25.53 (83.76)	107.94
0.81 (2.65)	518.17	37.47 (122.95)	76.67
1.19 (3.89)	514.35	55.01 (180.47)	49.50
1.74 (5.71)	501.75	80.74 (264.89)	44.86
2.55 (8.38)	400.00	118.51 (388.80)	48.43
3.75 (12.29)	232.36	173.94 (570.68)	43.24
5.50 (18.05)	109.37	255.31 (837.64)	34.83
8.07 (26.49)	64.90	374.75 (1229.49)	31.56
11.85 (38.88)	72.27	550.06 (1804.65)	36.15
17.39 (57.07)	101.57	807.37 (2648.86)	57.33
		99999.00 (99999.00)	113.92

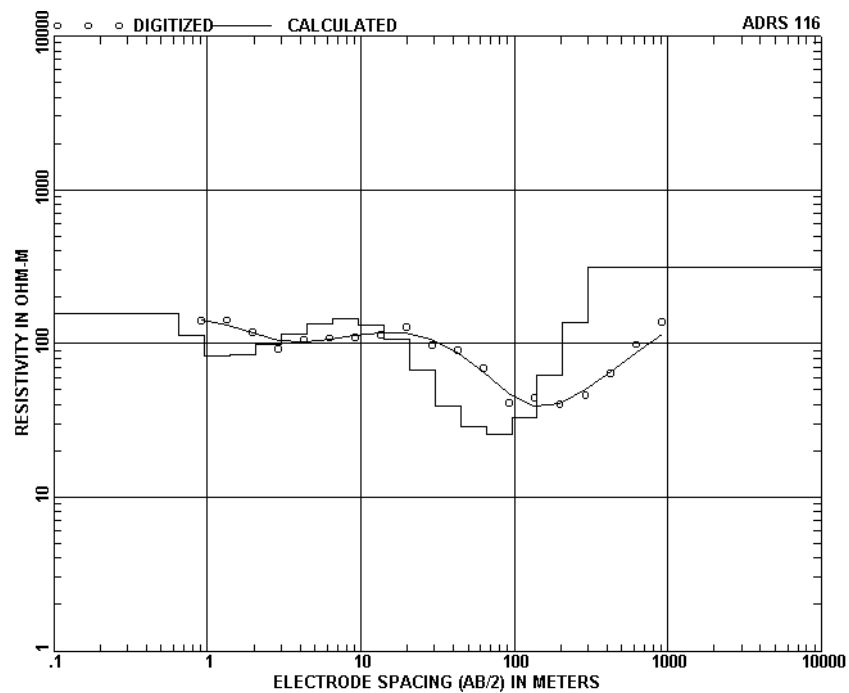
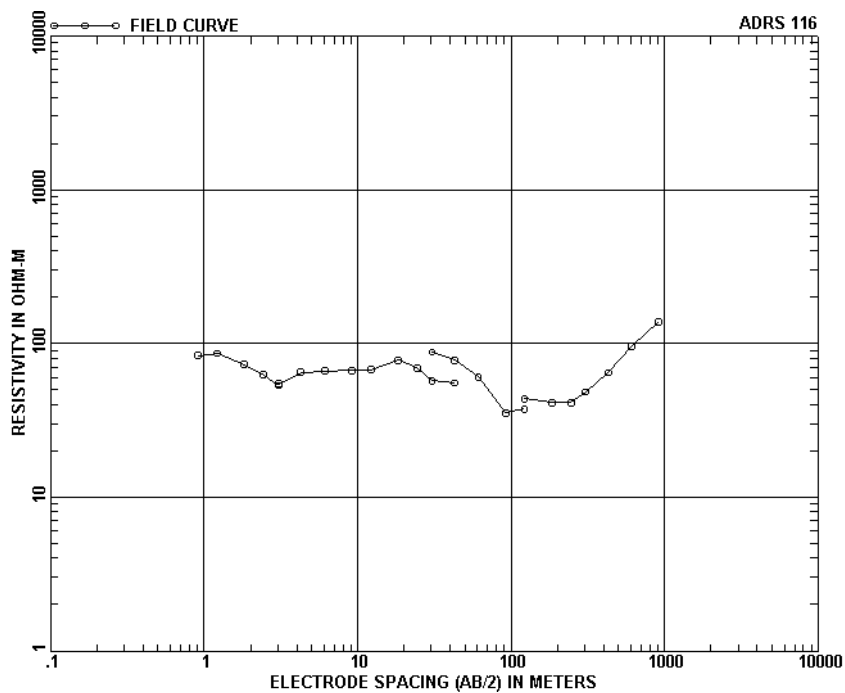


AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.	DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.91 (3.00)	556.00	30.48 (100.00)	81.30	0.44 (1.46)	685.06	14.05 (46.11)	102.76
1.22 (4.00)	498.00	30.48 (100.00)	79.60	0.65 (2.14)	679.46	20.63 (67.67)	106.46
1.83 (6.00)	431.00	42.67 (140.00)	75.50	0.96 (3.14)	645.62	30.28 (99.33)	100.25
2.44 (8.00)	340.00	60.96 (200.00)	65.60	1.41 (4.61)	437.54	44.44 (145.80)	75.85
3.05 (10.00)	259.00	91.44 (300.00)	51.40	2.06 (6.77)	169.78	65.23 (214.01)	35.00
3.05 (10.00)	277.00	121.92 (400.00)	38.00	3.03 (9.93)	58.91	95.74 (314.12)	12.07
4.27 (14.00)	144.00	121.92 (400.00)	41.80	4.44 (14.58)	47.90	140.53 (461.06)	9.46
6.10 (20.00)	87.90	182.88 (600.00)	21.80	6.52 (21.40)	65.44	206.27 (676.74)	16.19
9.14 (30.00)	68.30	243.84 (800.00)	19.70	9.57 (31.41)	87.81	302.77 (993.32)	36.31
12.19 (40.00)	69.60	304.80 (1000.00)	21.70			99999.00 (99999.00)	91.17
18.29 (60.00)	76.70	426.72 (1400.00)	24.30				
24.38 (80.00)	79.60	609.60 (2000.00)	30.30				
		914.40 (3000.00)	44.50				



AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	502.00	42.67 (140.00)	50.60
1.22 (4.00)	544.00	60.96 (200.00)	46.00
1.83 (6.00)	522.00	91.44 (300.00)	40.20
2.44 (8.00)	471.00	91.44 (300.00)	42.00
3.05 (10.00)	405.00	121.92 (400.00)	35.10
3.05 (10.00)	413.00	182.88 (600.00)	27.00
4.27 (14.00)	322.00	243.84 (800.00)	21.00
6.10 (20.00)	209.00	304.80 (1000.00)	19.00
9.14 (30.00)	106.00	304.80 (1000.00)	18.70
12.19 (40.00)	71.00	426.72 (1400.00)	23.00
18.29 (60.00)	56.70	609.60 (2000.00)	30.00
24.38 (80.00)	55.50	914.40 (3000.00)	50.00
30.48 (100.00)	55.00	914.40 (3000.00)	51.00
30.48 (100.00)	50.40	1219.20 (4000.00)	74.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.66 (2.16)	554.22	20.82 (68.31)	58.38
0.97 (3.17)	552.13	30.56 (100.26)	55.66
1.42 (4.65)	523.24	44.85 (147.16)	51.18
2.08 (6.83)	421.63	65.84 (216.00)	42.23
3.06 (10.03)	241.46	96.64 (317.04)	24.22
4.49 (14.72)	89.91	141.84 (465.36)	10.46
6.58 (21.60)	40.64	208.19 (683.05)	9.98
9.66 (31.70)	43.25	305.59 (1002.58)	25.71
14.18 (46.54)	54.54	448.54 (1471.59)	91.02
		99999.00 (99999.00)	366.76



AB/2, m (ft)	App. Res.	AB/2, m (ft)	App. Res.
0.91 (3.00)	83.20	42.67 (140.00)	55.20
1.22 (4.00)	86.00	30.48 (100.00)	87.90
1.83 (6.00)	72.70	42.67 (140.00)	77.70
2.44 (8.00)	62.50	60.96 (200.00)	60.60
3.05 (10.00)	53.30	91.44 (300.00)	35.20
3.05 (10.00)	54.70	121.92 (400.00)	37.50
4.27 (14.00)	65.00	121.92 (400.00)	43.80
6.10 (20.00)	66.00	182.88 (600.00)	41.20
9.14 (30.00)	66.80	243.84 (800.00)	41.30
12.19 (40.00)	67.50	304.80 (1000.00)	48.40
18.29 (60.00)	77.50	426.72 (1400.00)	64.40
24.38 (80.00)	69.20	609.60 (2000.00)	96.10
30.48 (100.00)	57.10	914.40 (3000.00)	138.00

DEPTH, m (ft)	RESIS.	DEPTH, m (ft)	RESIS.
0.44 (1.46)	155.37	14.05 (46.11)	132.12
0.65 (2.14)	155.76	20.63 (67.67)	105.49
0.96 (3.14)	112.64	30.28 (99.33)	67.61
1.41 (4.61)	82.27	44.44 (145.80)	39.28
2.06 (6.77)	84.69	65.23 (214.01)	28.82
3.03 (9.93)	98.96	95.74 (314.12)	25.53
4.44 (14.58)	114.52	140.53 (461.06)	32.72
6.52 (21.40)	134.11	206.27 (676.74)	62.52
9.57 (31.41)	143.48	302.77 (993.32)	137.52
		99999.00 (99999.00)	311.65