

APPENDIX F

Geological and Hydro-geological Conditions

F-1: Geological Log	APP F-2
F-2: Geological Cross Sections and Profiles.....	APP F-39
F-3: Data of AWLR Measurement.....	APP F-55

Appendix F-1: Geological Log

Geological Log of Initial Geological Investigation Boring

Legend on Geological Log

B-1

B-2

B-3

B-4

B-5

B-6

B-7

B-8

B-9

B-10

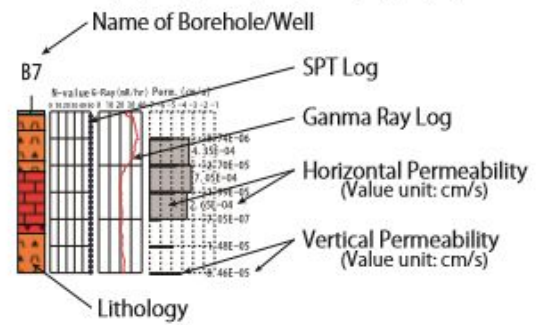
Legend on Geological Log

< Geological Formations > (Reclassified by JICA)

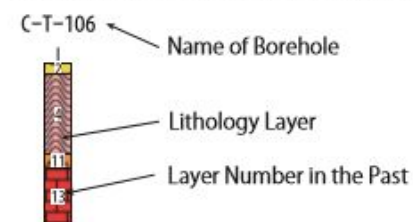
	B - Embankment
	1 - Sandy Loam and Loamy Sand
	2 - Surface Gravel
	3 - Moraine Deposit (gravel)
	4 - Welded Tuff
	5 - Basaltic Andesite Lava
	6 - Loamy Sand and Loam
	7 - Sand and Loamy Sand
	9 - Lithoidal Pumice
	10 - Welded tuff
	11 - Scoria tuff
	12 - Pyroclastic Flow
	13 - Basaltic Andesite Lava

< Log Drawins >

Borehole (B-, SB-)/Well (W-)/Testpit (TP-) by JICA



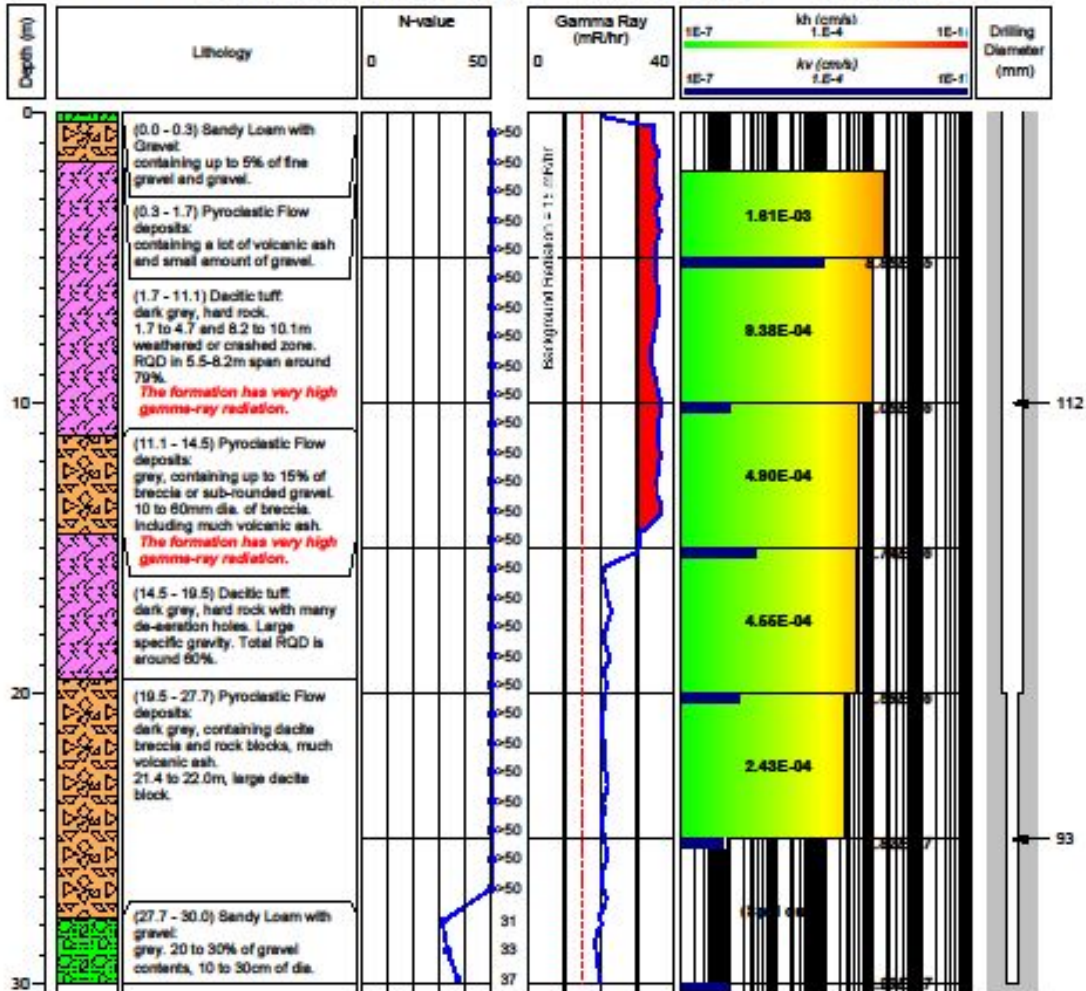
Borehole (C-, C-T-) by Past Investigation



Geological Log of B-1

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

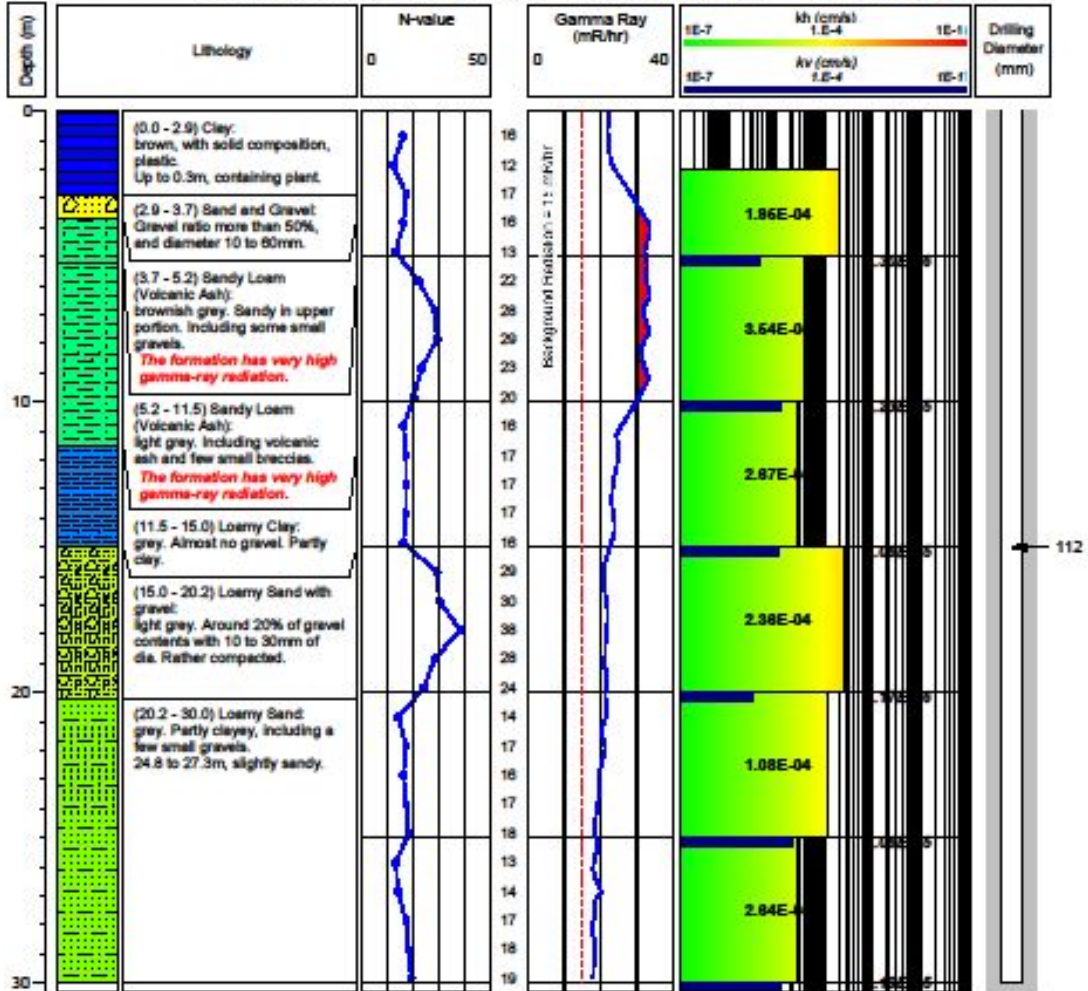
Borehole No.: B1	Location: Yeghvard	Elevation (m): 1283.2	Water Level: No water
UTM Coordinates: 450819.9 E (WGS84, Zone 38)	Longitude (deg.): 44.42122 E	Depth (m): 30	
4462339.1 N	Latitude (deg.): 40.31012 N	Commenced: 19.08.2015	Completed: 27.08.2015



Geological Log of B-2

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

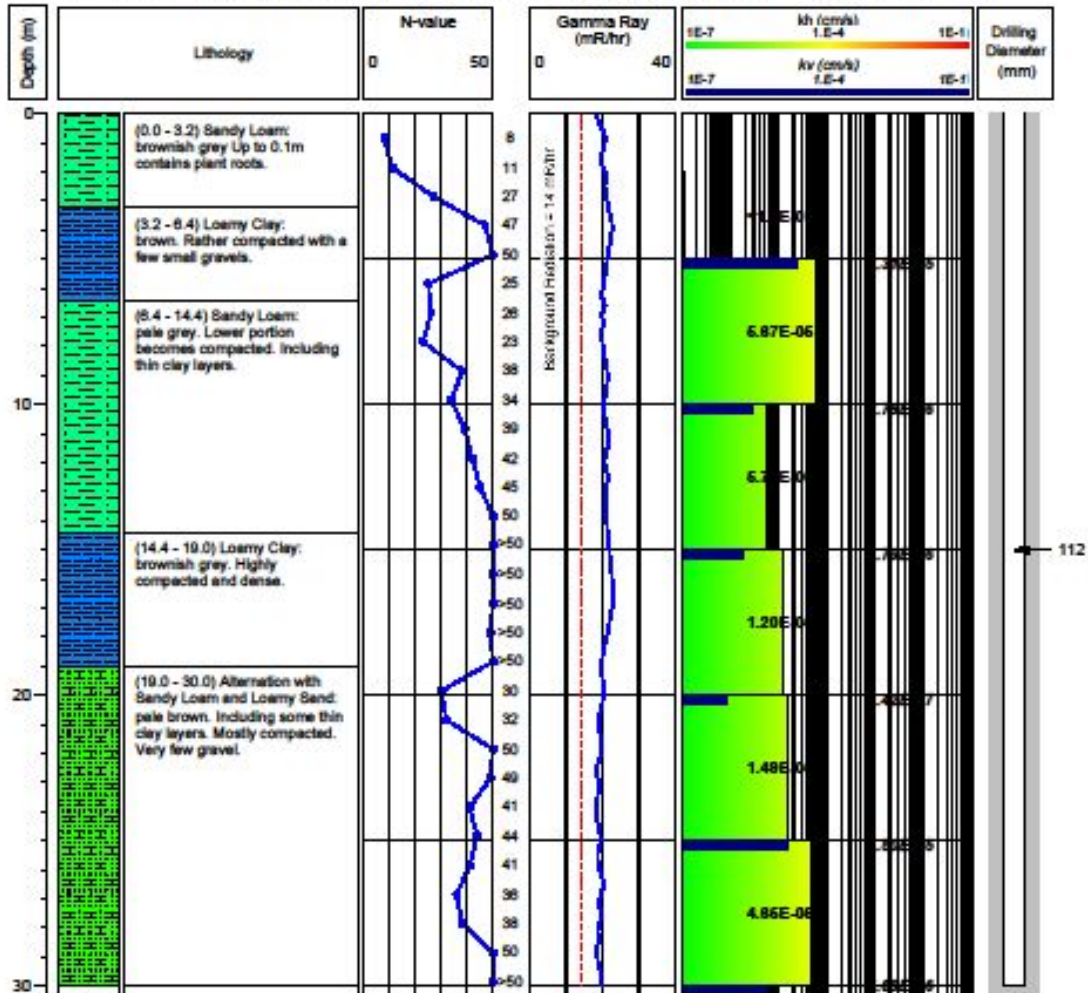
Borehole No.: B2 Location: Yeghvard Water Level: No water
 UTM Coordinates: 451759.5 E Longitude (deg.): 44.43204 E Elevation (m): 1288.0 Depth (m): 30
 (WGS84, Zone 38) 4462848.6 N Latitude (deg.): 40.31477 N Commenced: 17.08.2015 Completed: 21.08.2015



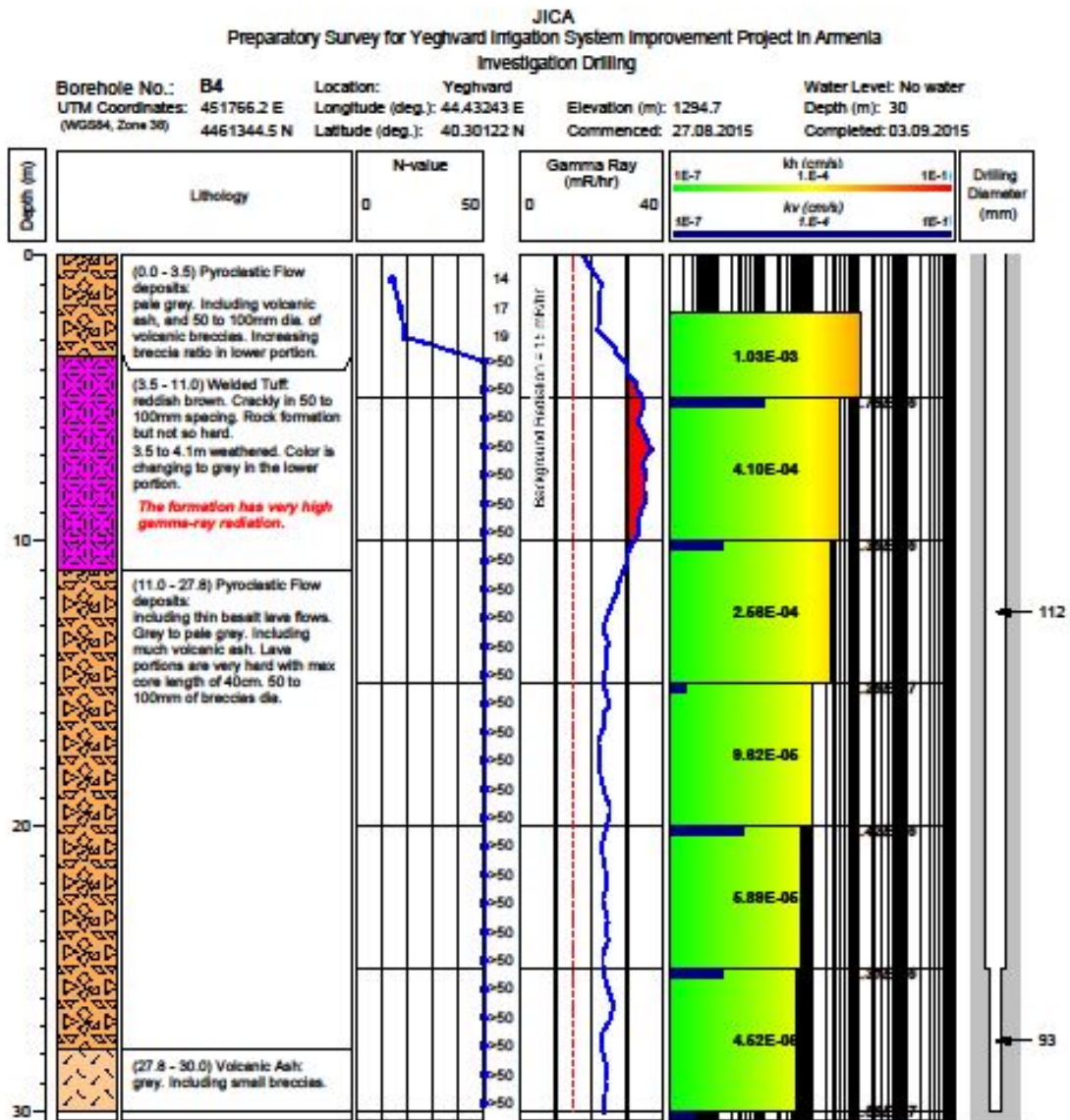
Geological Log of B-3

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia
Investigation Drilling

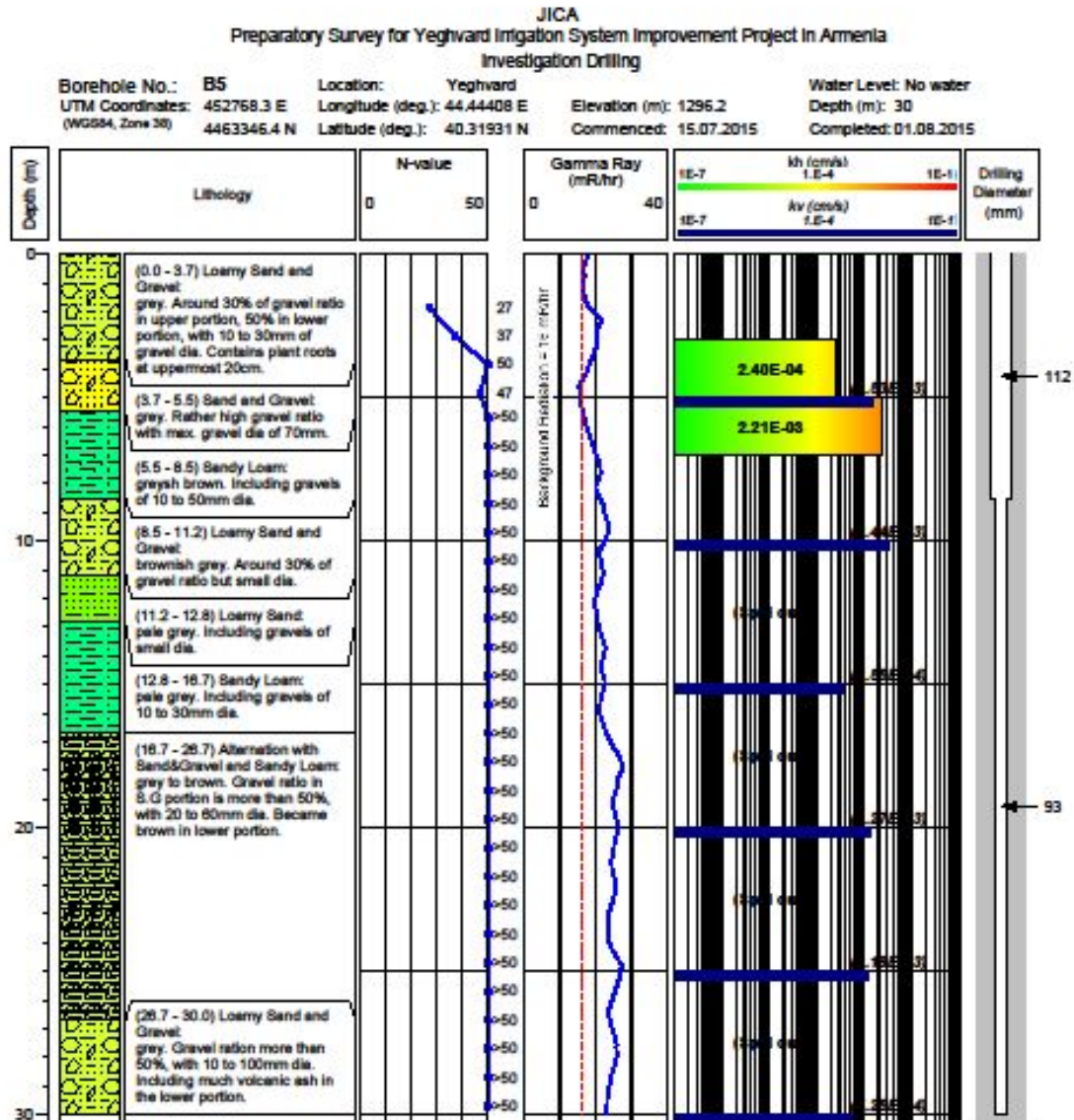
Borehole No.: B3	Location: Yeghvard	Elevation (m): 1287.4	Water Level: No water
UTM Coordinates: 451764.0 E (WGS84, Zone 38)	Longitude (deg.): 44.43233 E	Commenced: 12.08.2015	Depth (m): 30
4462348.6 N	Latitude (deg.): 40.31026 N	Completed: 15.08.2015	



Geological Log of B-4



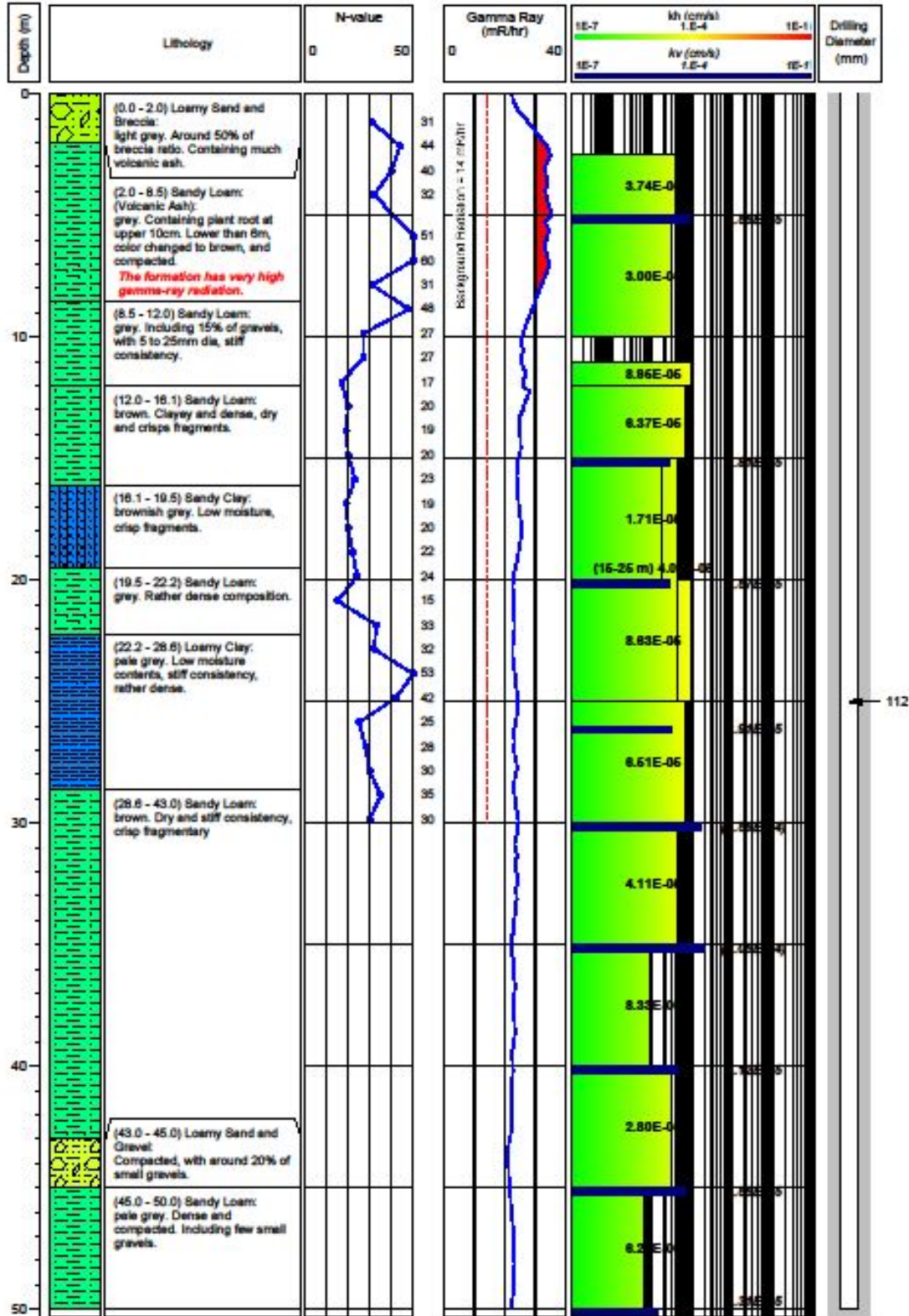
Geological Log of B-5



Geological Log of B-6

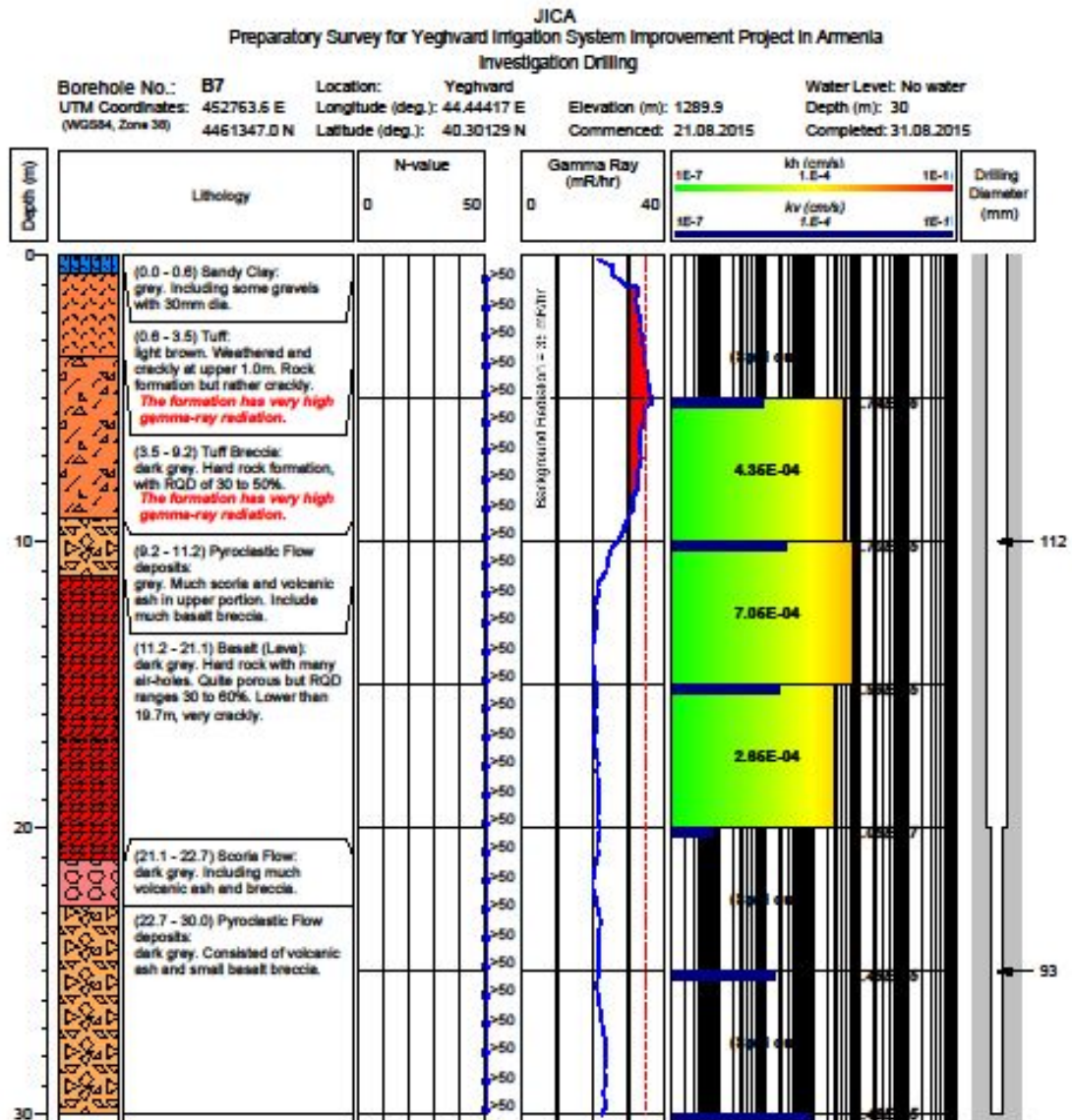
JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia
Investigation Drilling

Borehole No.: B6	Location: Yeghvard	Elevation (m): 1288.2	Water Level: No water
UTM Coordinates: 452791.9 E (WGS84, Zone 38)	Longitude (deg.): 44.44443 E	Commenced: 10.07.2015	Depth (m): 50
4462345.0 N	Latitude (deg.): 40.31029 N	Completed: 29.07.2015	



Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

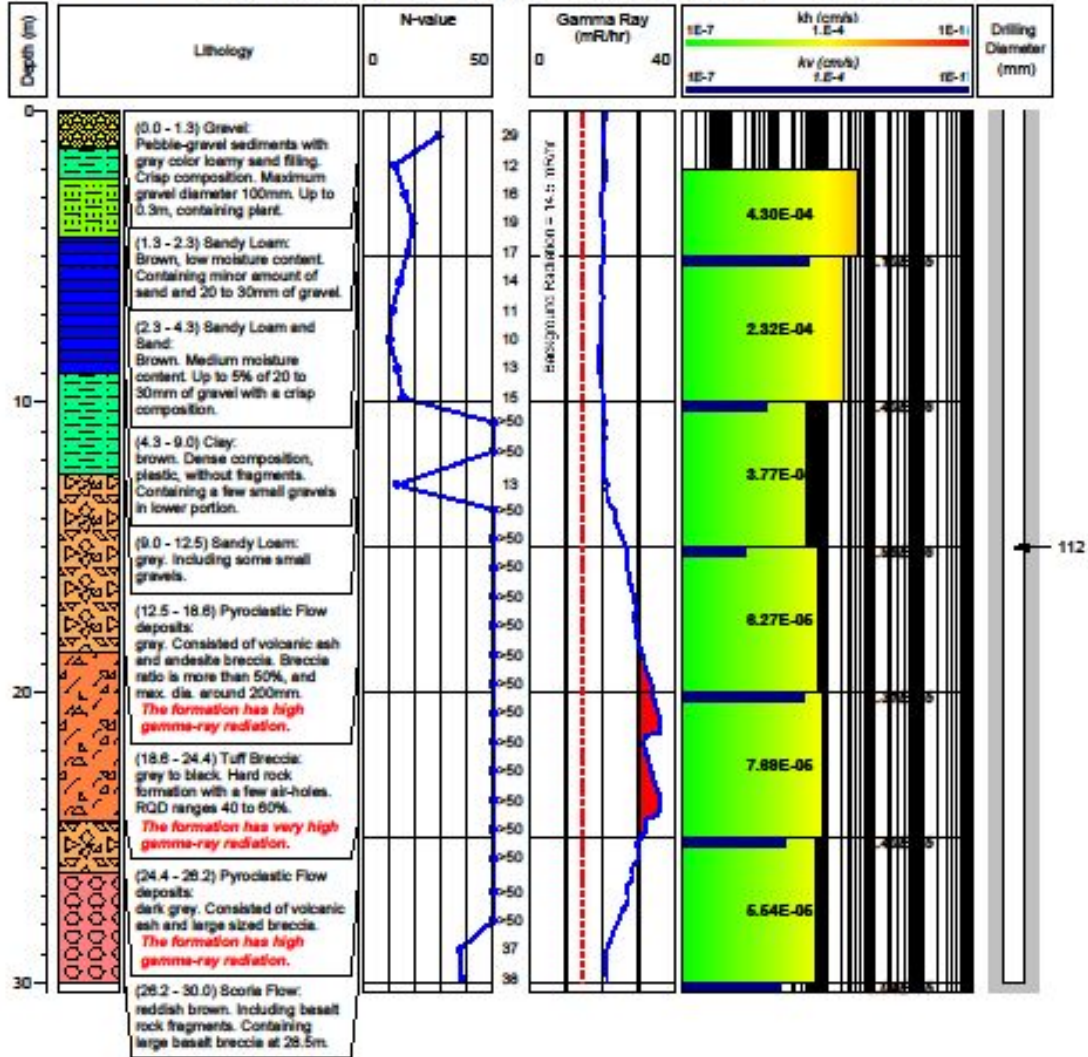
Geological Log of B-7



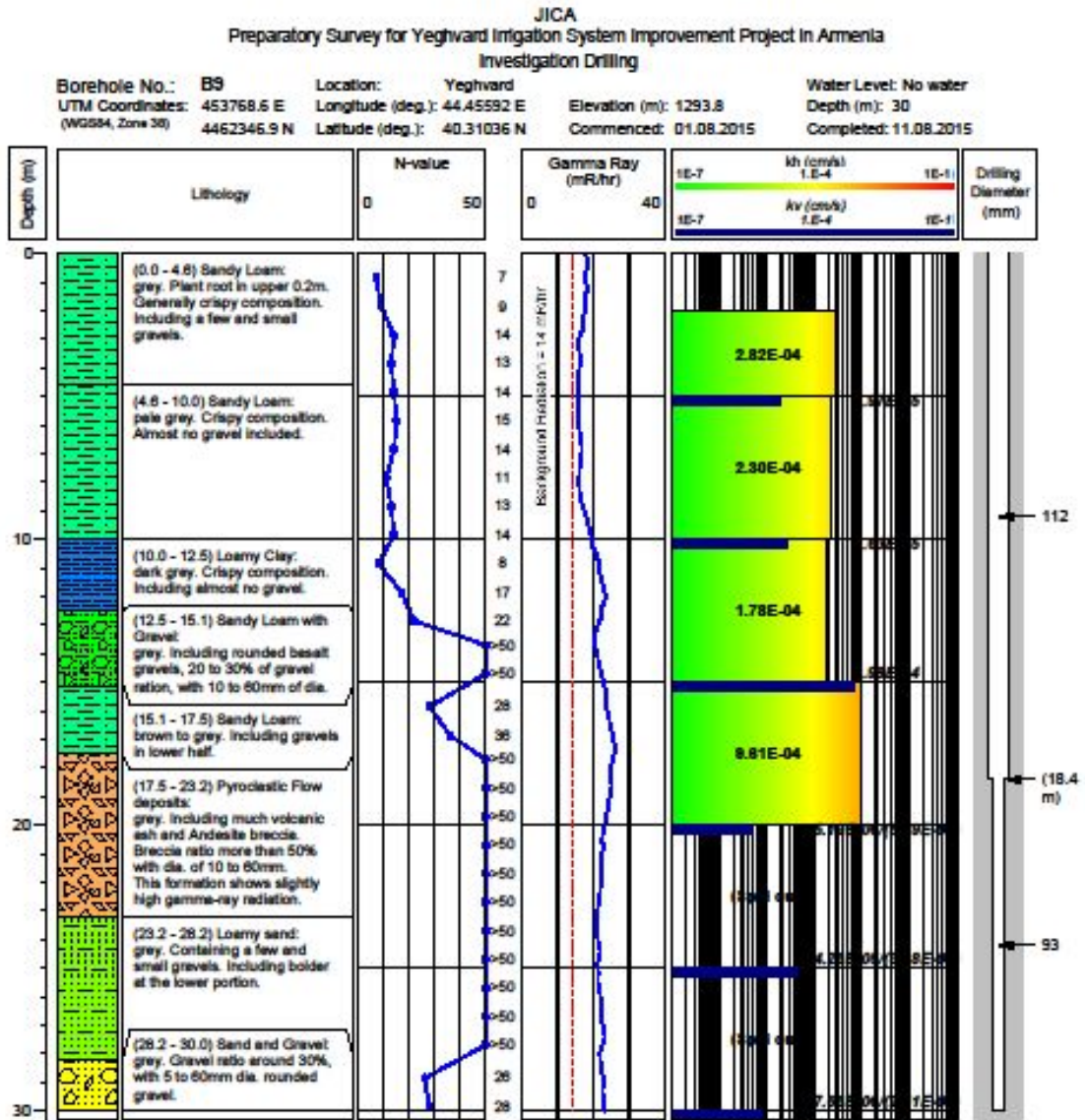
Geological Log of B-8

JICA Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia Investigation Drilling

Borehole No.: **B8** Location: **Yeghvard** Water Level: No data
 UTM Coordinates: **453788.7 E** Longitude (deg.): **44.45609 E** Elevation (m): **1299.7** Depth (m): **30**
 (WGS84, Zone 38) **4463319.3 N** Latitude (deg.): **40.31912 N** Commenced: **30.07.2015** Completed: **06.09.2015**



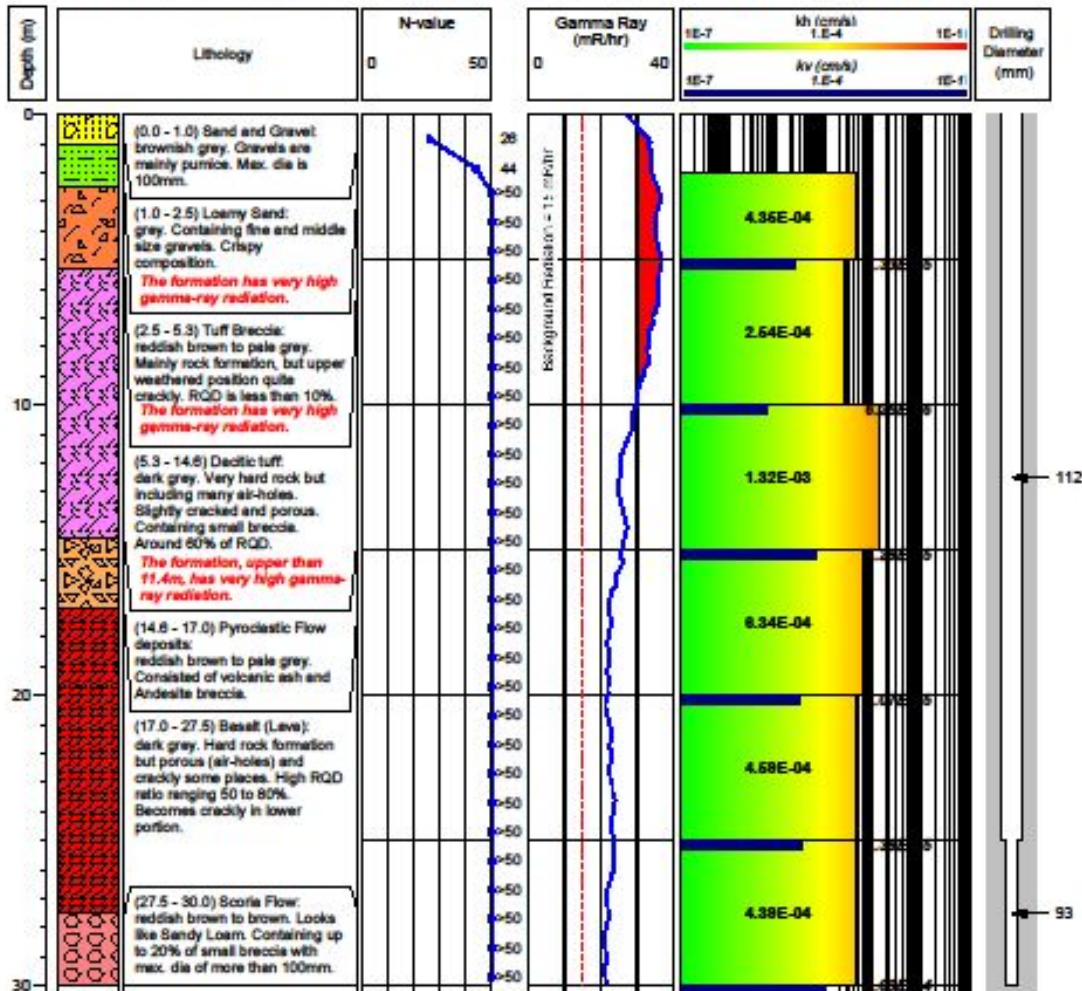
Geological Log of B-9



Geological Log of B-10

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Investigation Drilling

Borehole No.: **B10** Location: **Yeghvard** Water Level: **No water**
 UTM Coordinates: **453766.7 E** Longitude (deg.): **44.45597 E** Elevation (m): **1300.1** Depth (m): **30**
 (WGS84, Zone 38) 4461347.1 N Latitude (deg.): **40.30135 N** Commenced: **07.08.2015** Completed: **16.08.2015**



Geological Log of Initial Soil Investigation Boring

SB-1

SB-2

SB-3

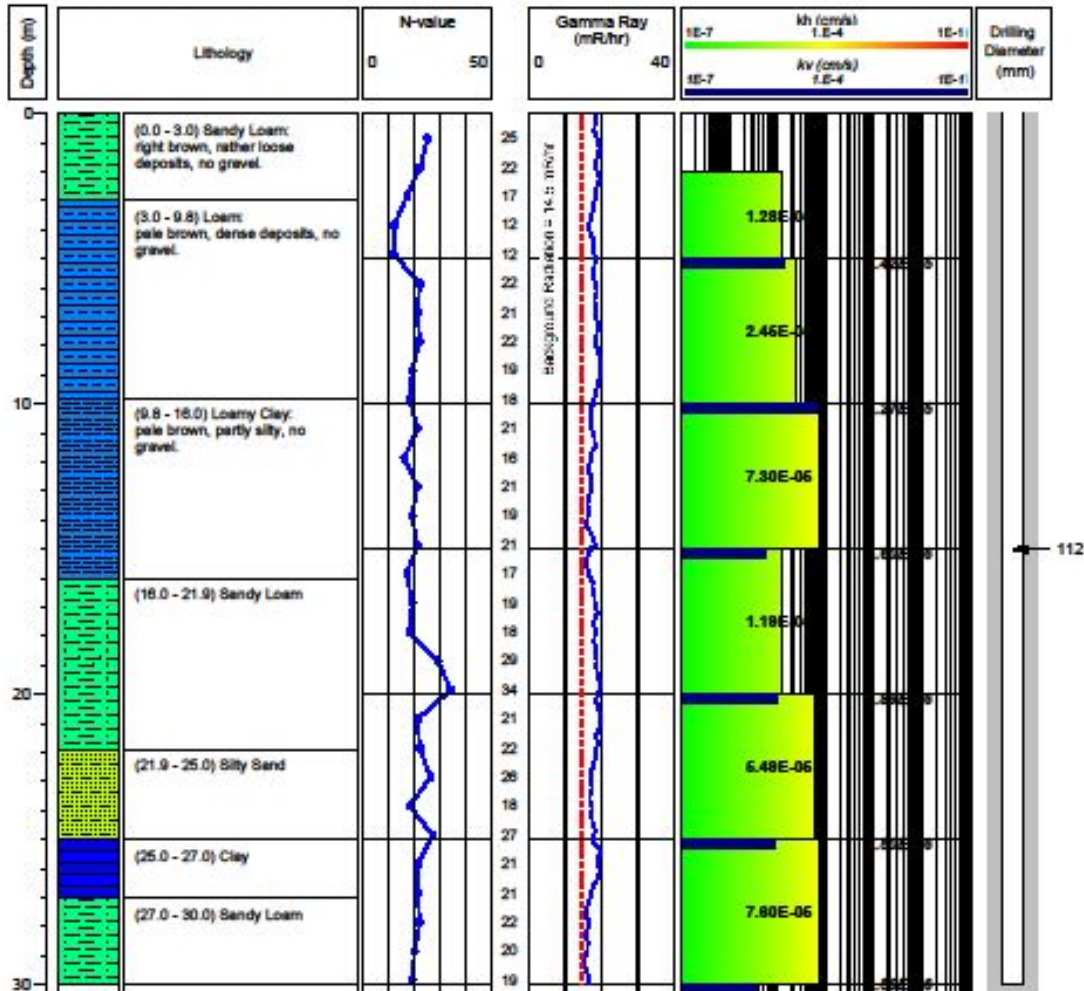
SB-4

SB-5

Geological Log of SB-1

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Soil Investigation Boring

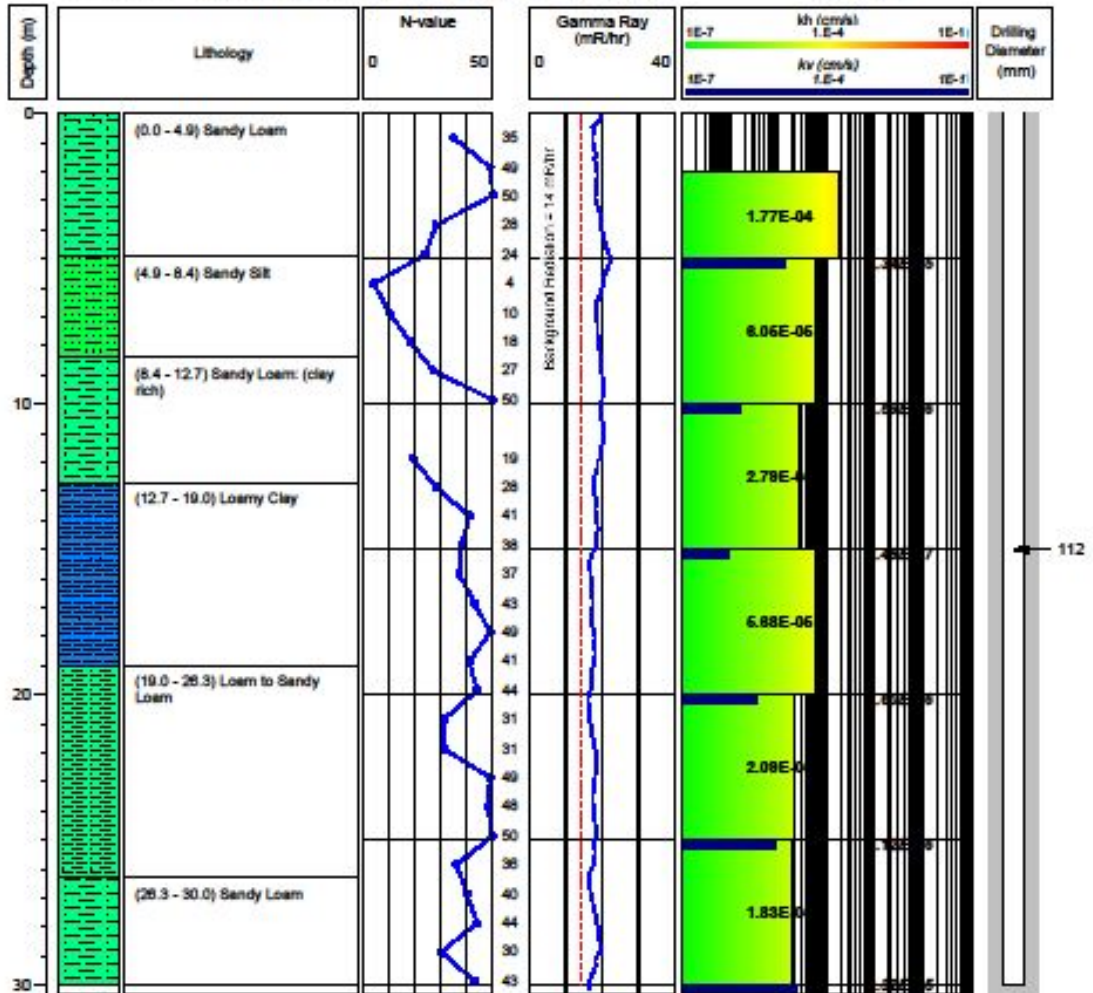
Borehole No.: **SB-1** Location: **Yeghvard** Water Level: **No water**
 UTM Coordinates: **452255.5 E** Longitude (deg.): **44.43820 E** Elevation (m): **1288.1** Depth (m): **30.0**
 (WGS84, Zone 38) **4462845.5 N** Latitude (deg.): **44.43820 N** Commented: Completed:



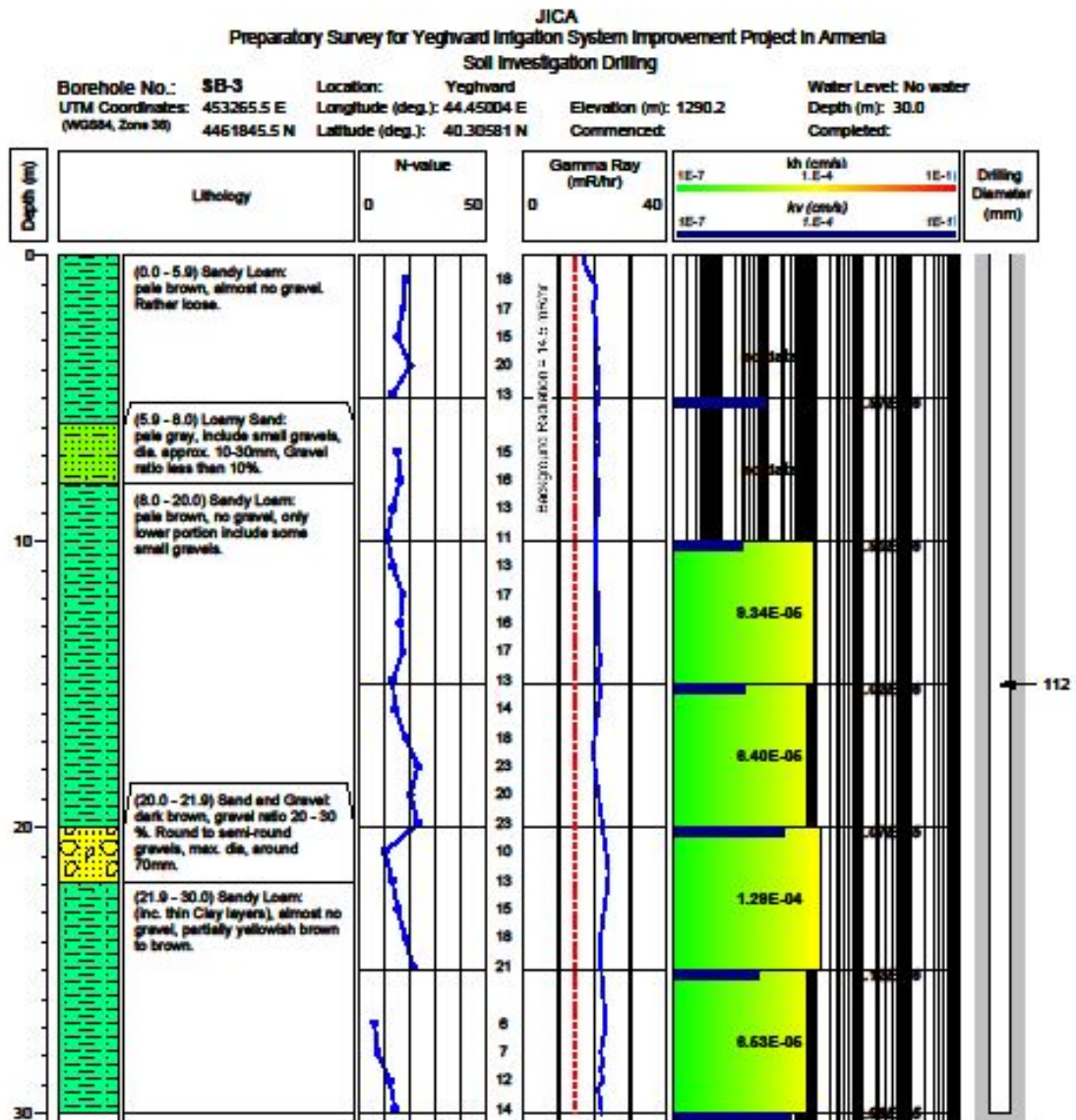
Geological Log of SB-2

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia
Soil Investigation Drilling

Borehole No.: **SB-2** Location: **Yeghvard** Water Level: **No water**
 UTM Coordinates: **452265.5 E** Longitude (deg.): **44.43827 E** Elevation (m): **1287.5** Depth (m): **30.0**
 (WGS84, Zone 38) **4461845.5 N** Latitude (deg.): **40.30576 N** Commenced: Completed:



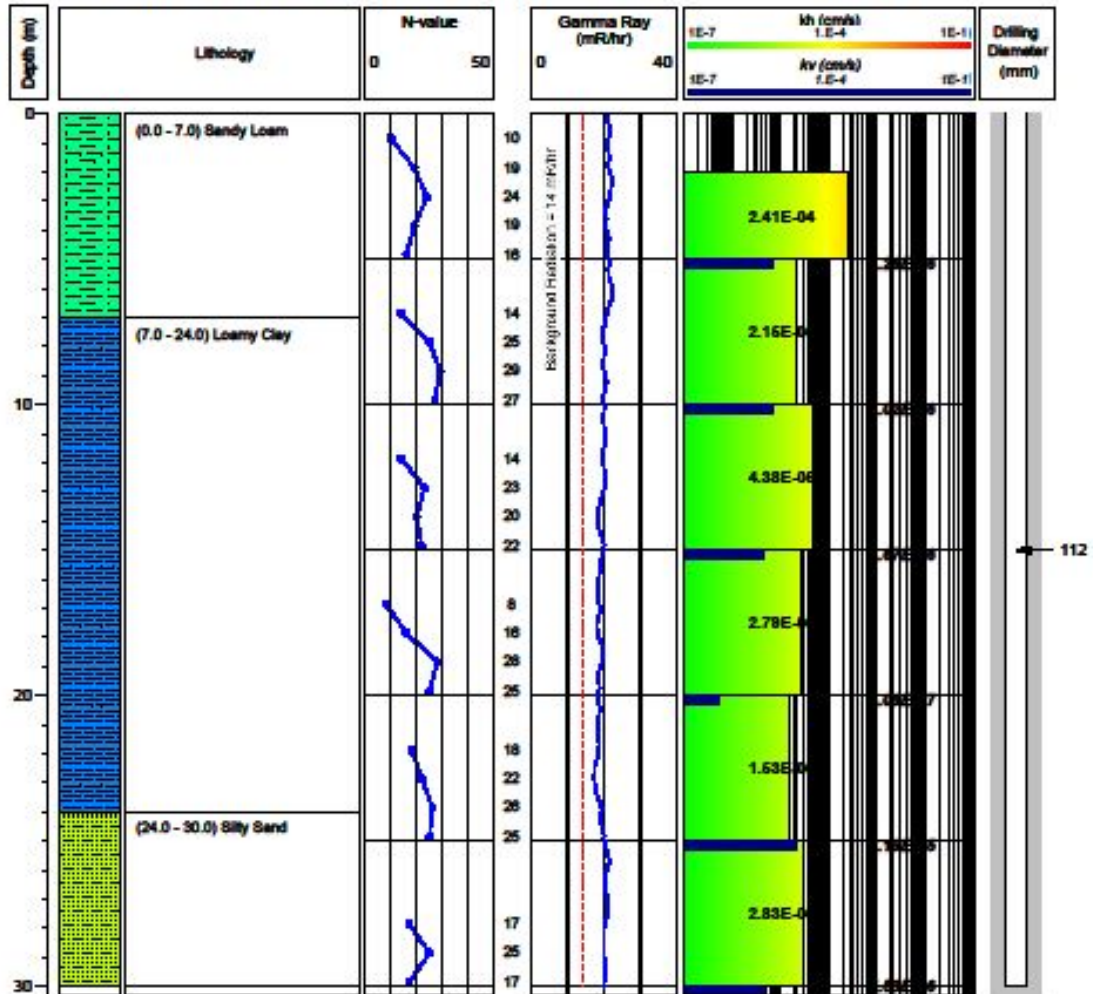
Geological Log of SB-3



Geological Log of SB-4

JICA Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia Soil Investigation Drilling

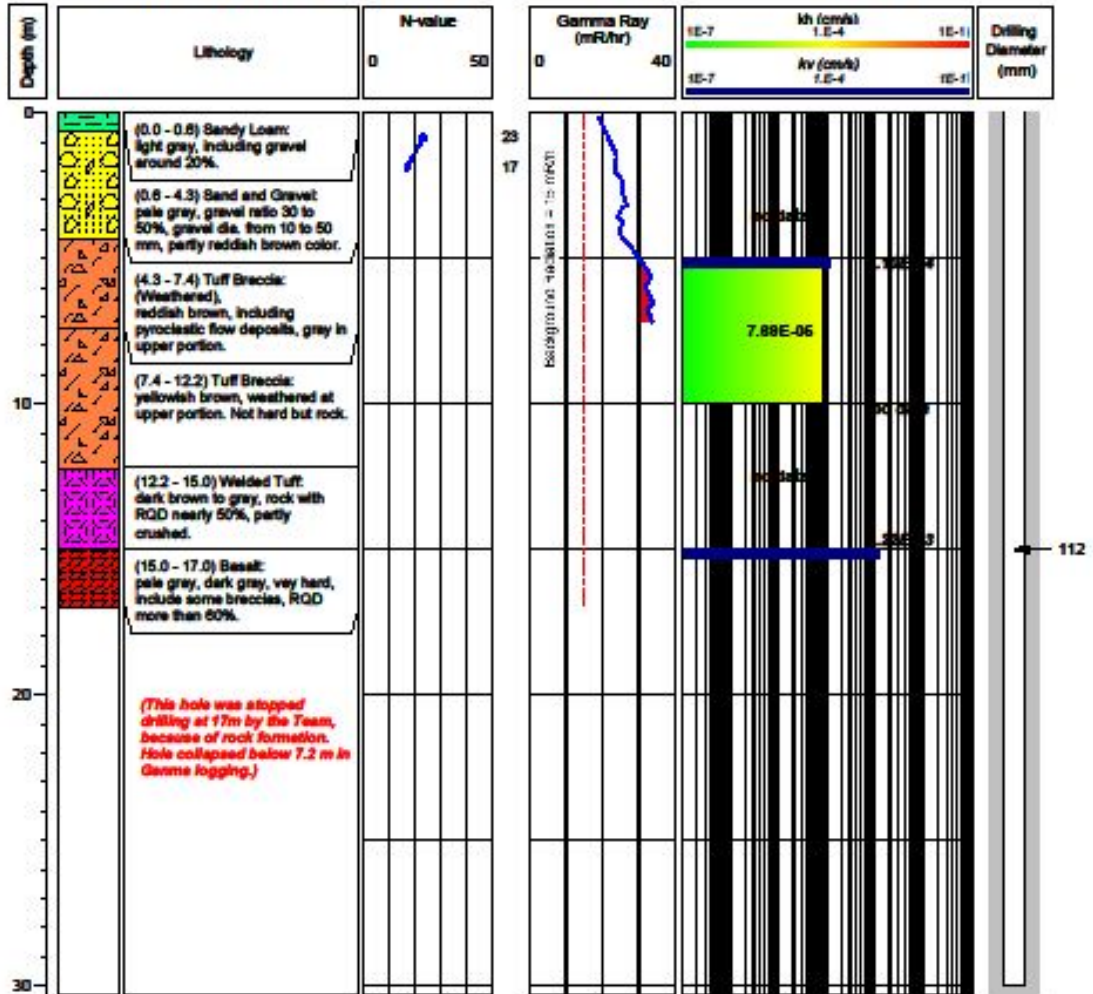
Borehole No.: **SB-4** Location: **Yeghvard** Water Level: **No water**
 UTM Coordinates: **453265.5 E** Longitude (deg.): **44.44997 E** Elevation (m): **1290.6** Depth (m): **30.0**
 (WGS84, Zone 38) **4462845.5 N** Latitude (deg.): **40.31482 N** Commenced: Completed:



Geological Log of SB-5

JICA Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia Soil Investigation Drilling

Borehole No.: **SB-5** Location: **Yeghvard** Water Level: **No water**
 UTM Coordinates: **453765.5** Longitude (deg.): **44.45592** Elevation (m): **1293.5** Depth (m): **17.0**
 (WGS84, Zone 38) 4461845.5 Latitude (deg.): **40.30584** Commenced: Completed:



Monitoring Well Log

W1

W2

W3

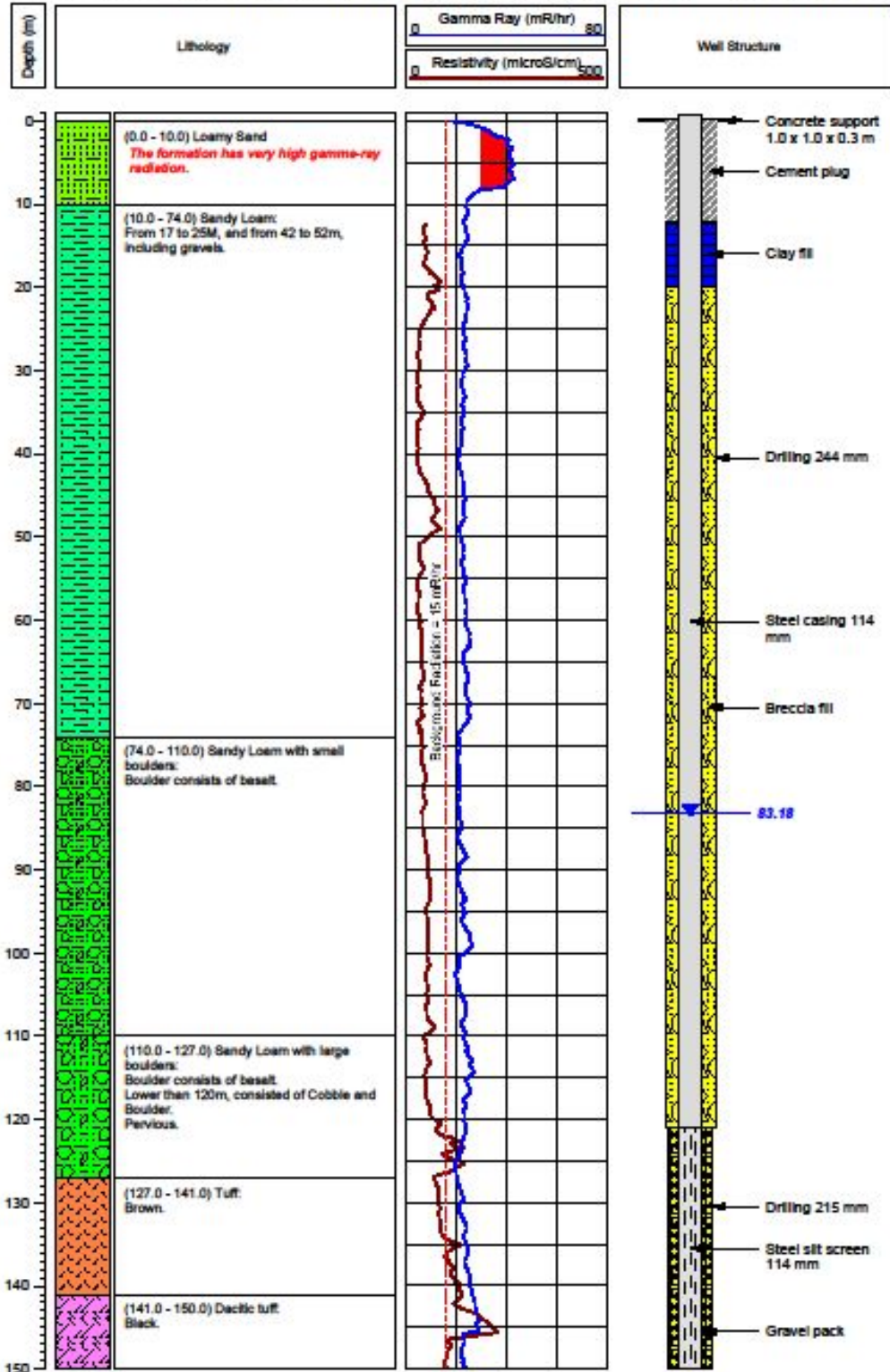
W4

W5

Well Log of W1

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Observation Well

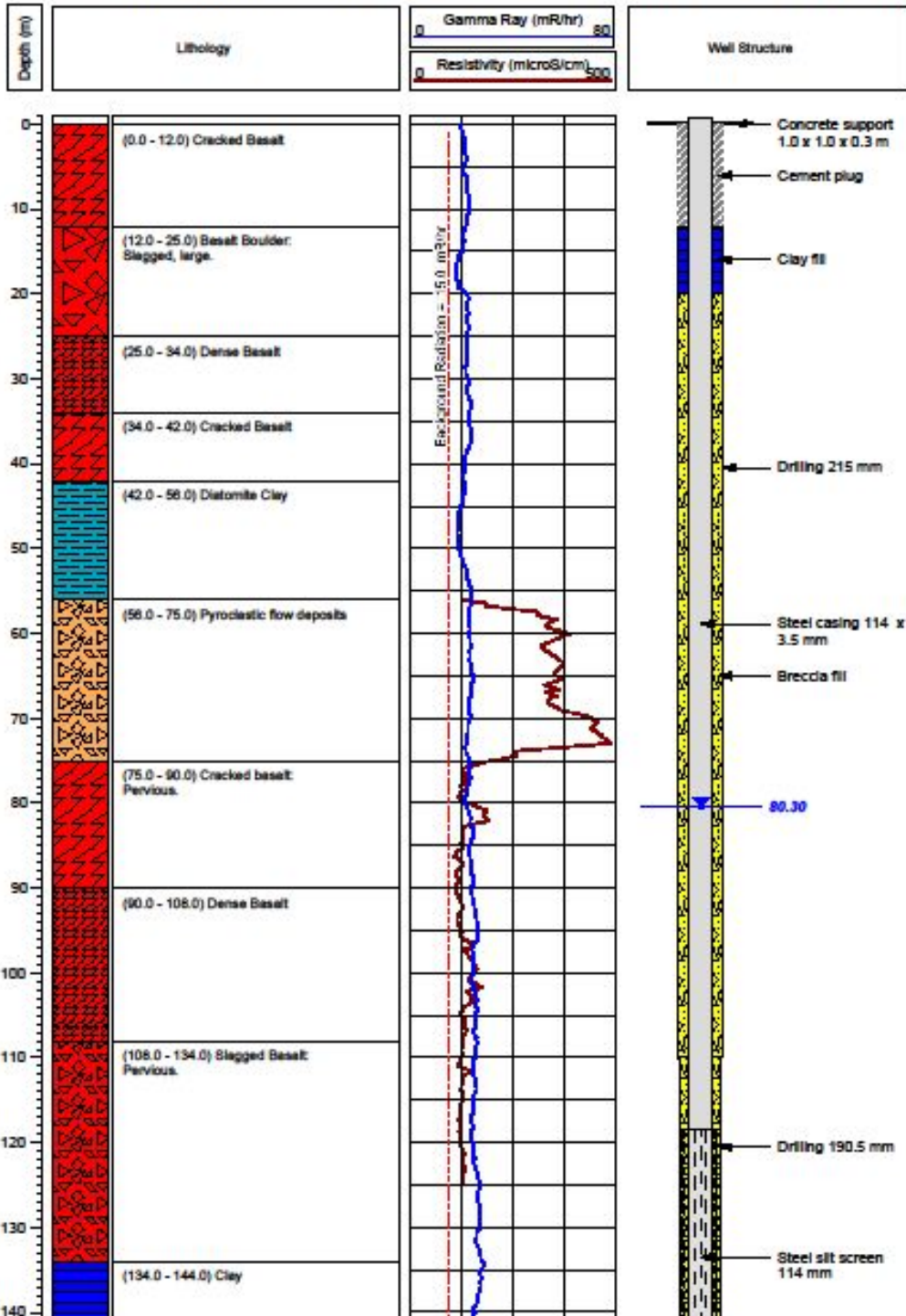
Borehole No.: W1	Location: Yeghvard	Water Level (m): 83.18
UTM Coordinates: 452851.2 E (WGS84, Zone 38)	Longitude (deg.): 44.44513 E	Elevation (m): 1288.97
4462294.7 N	Latitude (deg.): 40.30984 N	Depth (m): 150
	Commenced: 07.07.2015	Completed: 16.07.2015



Well Log of W2

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia
Observation Well

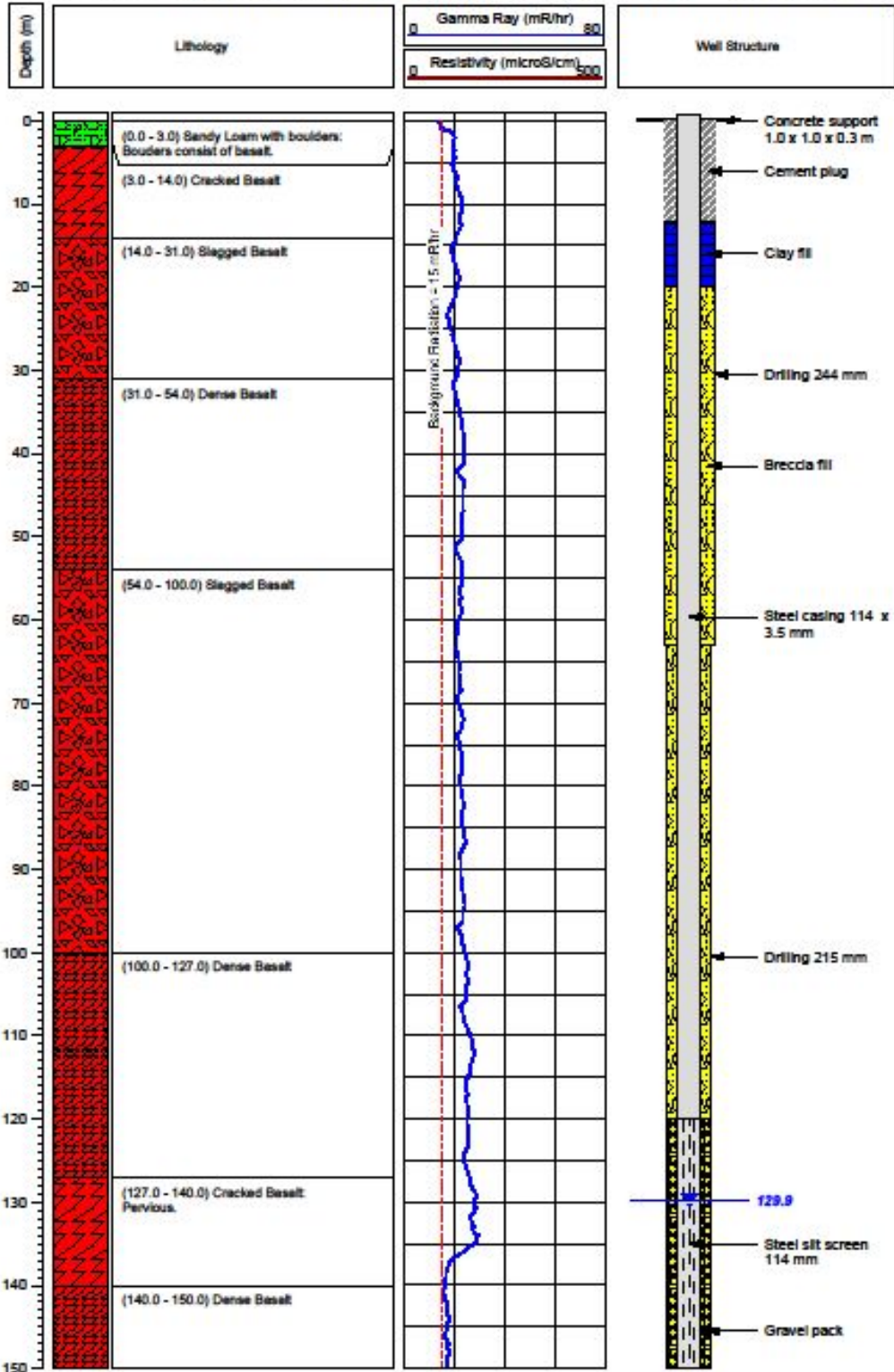
Borehole No.:	W2	Location:	Yeghvard	Water Level (m):	80.30
UTM Coordinates:	450142.1 E	Longitude (deg.):	44.41325 E	Elevation (m):	1275.58
(WGS84, Zone 38)	4462292.6 N	Latitude (deg.):	40.30966 N	Commenced:	29.07.2015
				Depth (m):	148.5
				Completed:	10.08.2015



Well Log of W3

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia
Observation Well

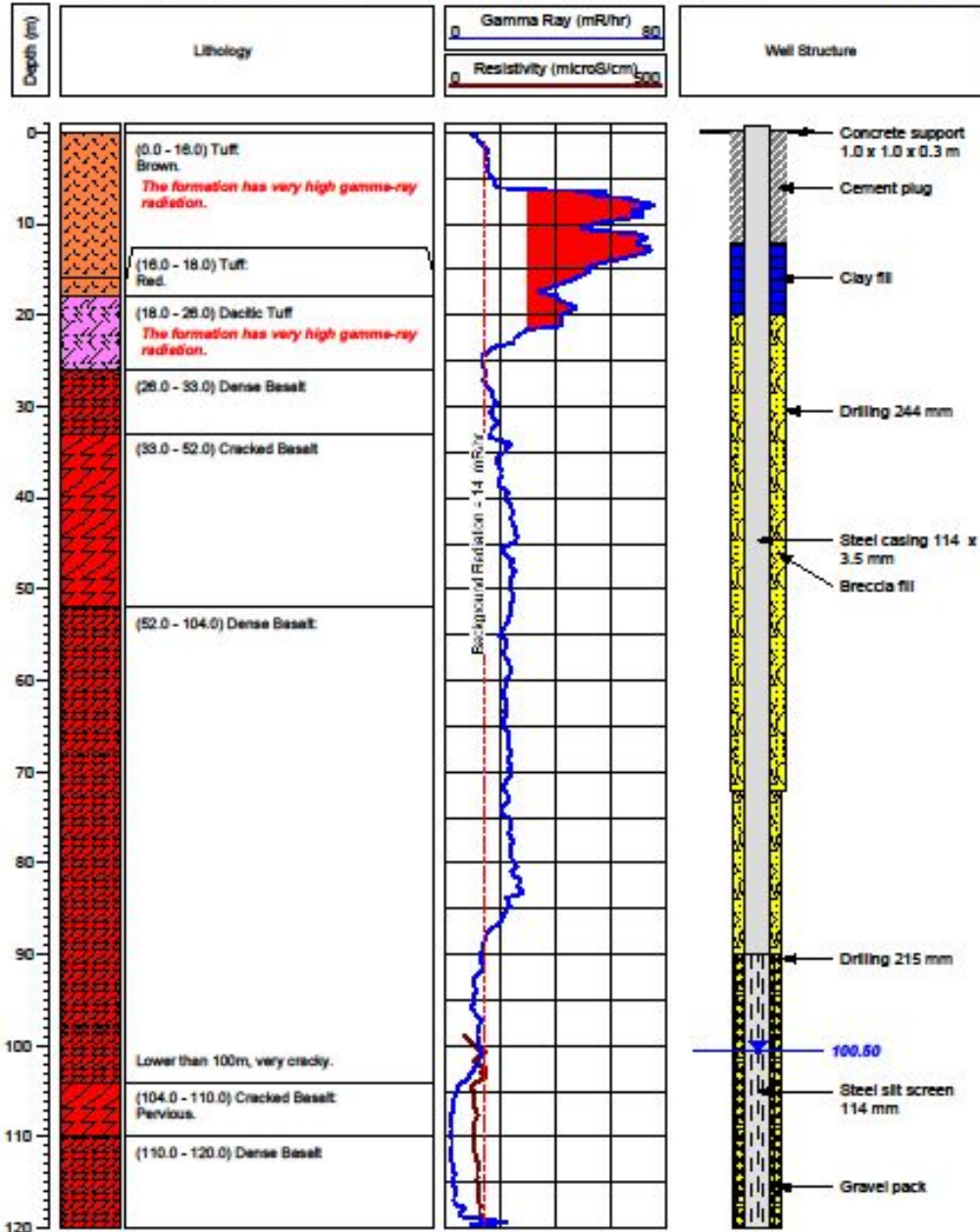
Borehole No.: W3	Location: Yeghvard	Water Level (m): 129.90	
UTM Coordinates: 452756.3 E (WGS84, Zone 38)	Longitude (deg.): 44.44415 E	Elevation (m): 1322.77	Depth (m): 150.0
4460429.5 N	Latitude (deg.): 40.29303 N	Commenced: 29.07.2015	Completed: 04.08.2015



Well Log of W4

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Observation Well

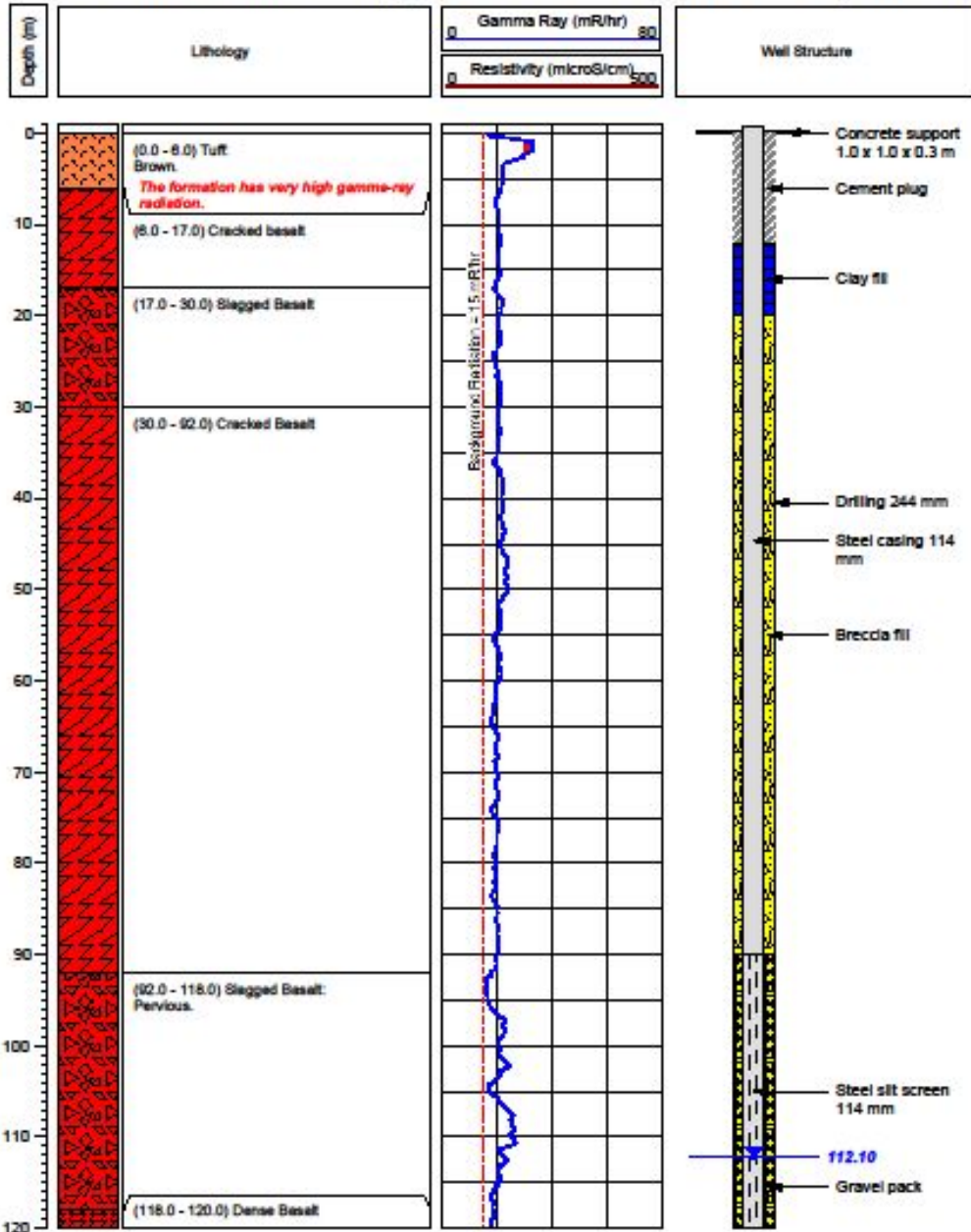
Borehole No.: W4	Location: Yeghvard	Elevation (m): 1305.97	Water Level (m): 100.50
UTM Coordinates: 454529.4 E (WGS84, Zone 38)	Longitude (deg.): 44.46485 E	Latitude (deg.): 40.31440 N	Depth (m): 120
		Commenced: 08.07.2015	Completed: 19.07.2015



Well Log of W5

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia
Observation Well

Borehole No.: W5	Location: Yeghvard	Water Level (m): 112.10
UTM Coordinates: 452784.0 E <small>(WGS84, Zone 38)</small>	Longitude (deg.): 44.44421 E	Depth (m): 120
4464132.1 N	Latitude (deg.): 40.32639 N	Commenced: 05.08.2015
		Completed: 17.09.2015



Geological Log of Additional Investigation Boring

AB-1

AB-2

AB-3

AB-4

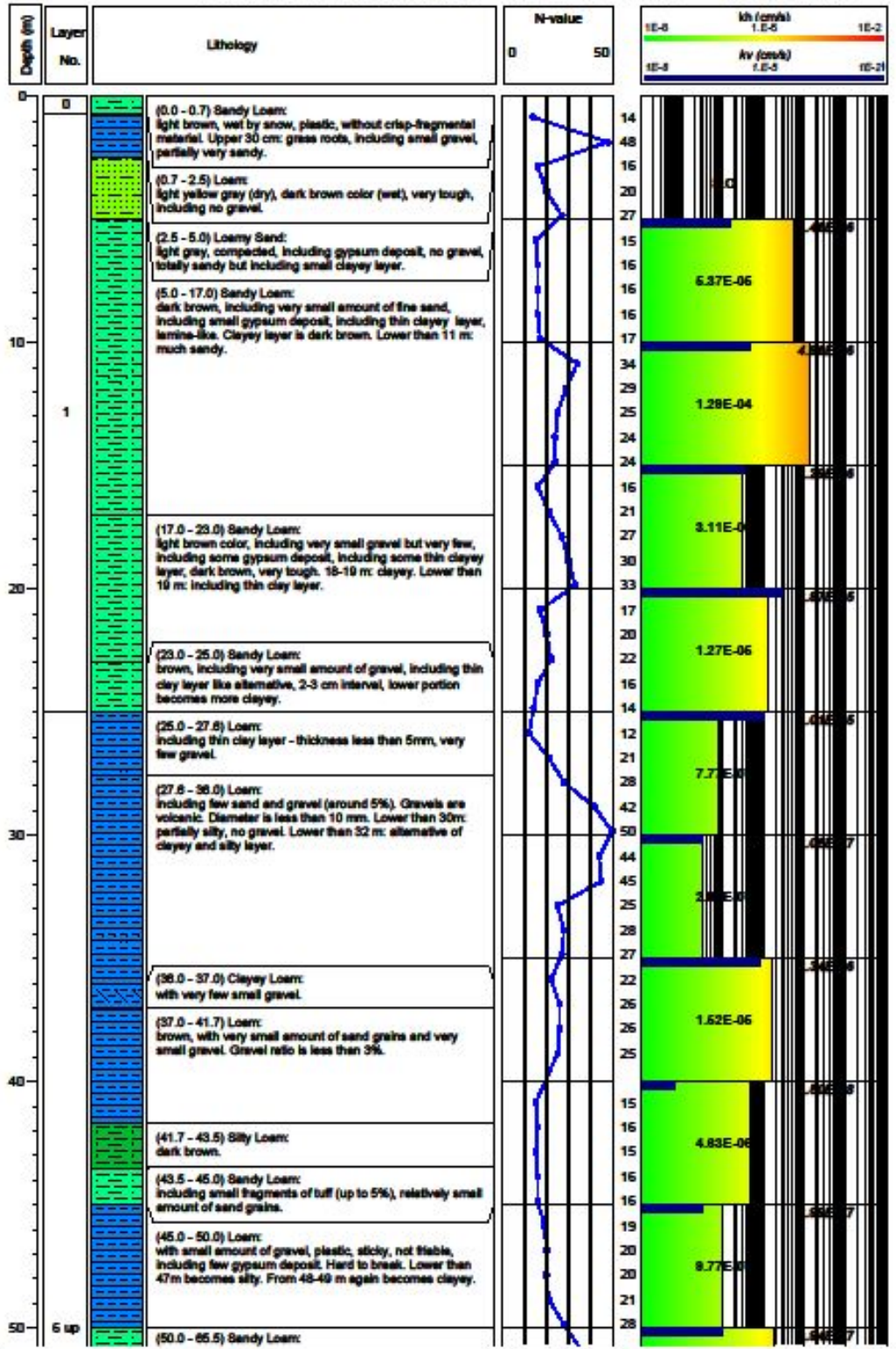
AB-5

AB-6

Geological Log of AB-1 (1)

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

Borehole No.: **AB-1** Location: **Yeghvard** Water Level: -
 UTM Coordinates: 452259.7 E Longitude (deg.): 44.43817 E Elevation (m): 1287.4 Depth (m): 100.0
 (WGS84, Zone 38) 4462342.6 N Latitude (deg.): 40.31023 N Commenced: 03.03.2016 Completed: 26.03.016

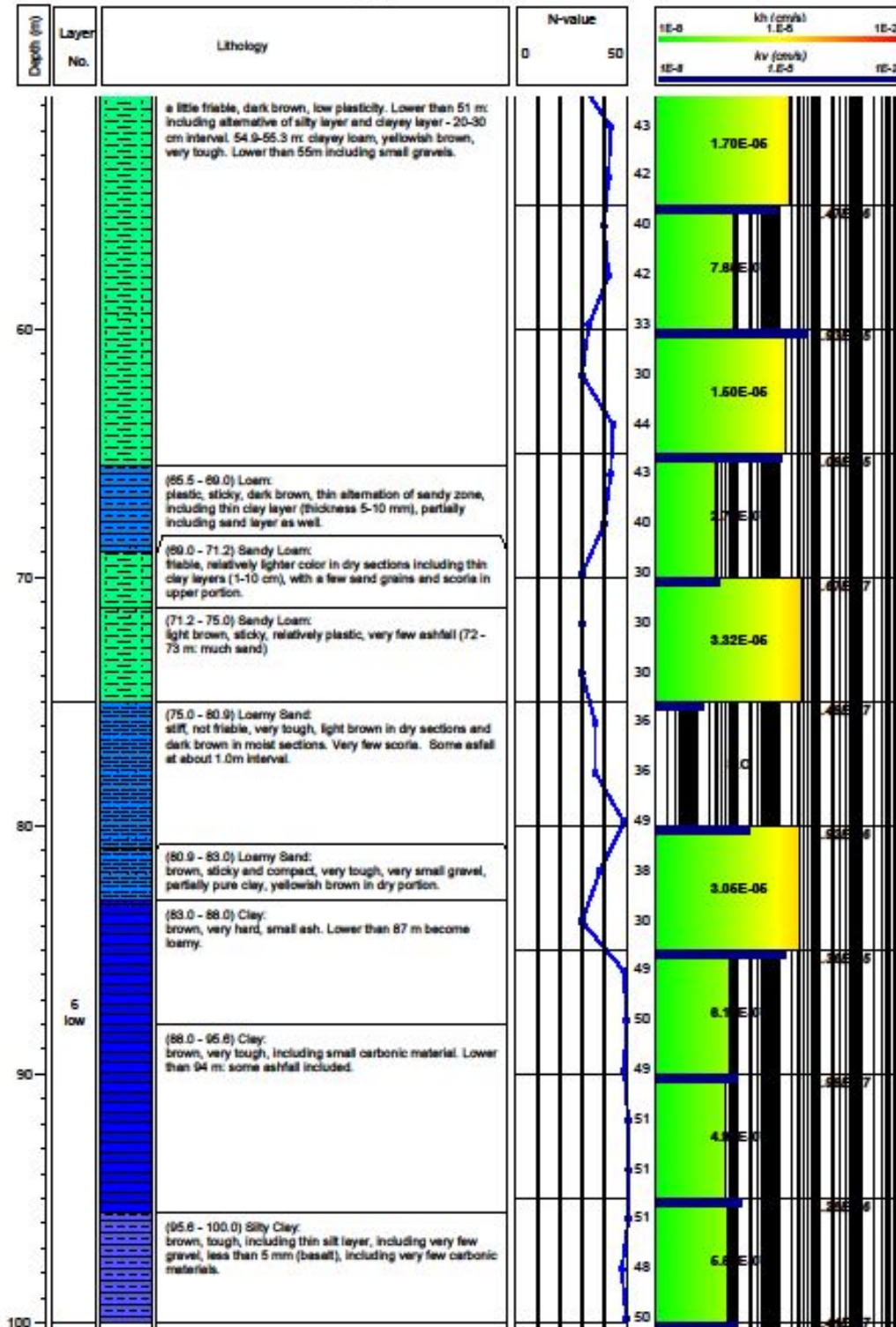


Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

Geological Log of AB-1 (2)

JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

Borehole No.: AB-1 Location: Yeghvard Water Level: -
 UTM Coordinates: 452259.7 E Longitude (deg.): 44.43817 E Depth (m): 100.0
 (WGS84, Zone 38) 4452342.6 N Latitude (deg.): 40.31023 N Commenced: 03.03.2016 Completed: 26.03.016

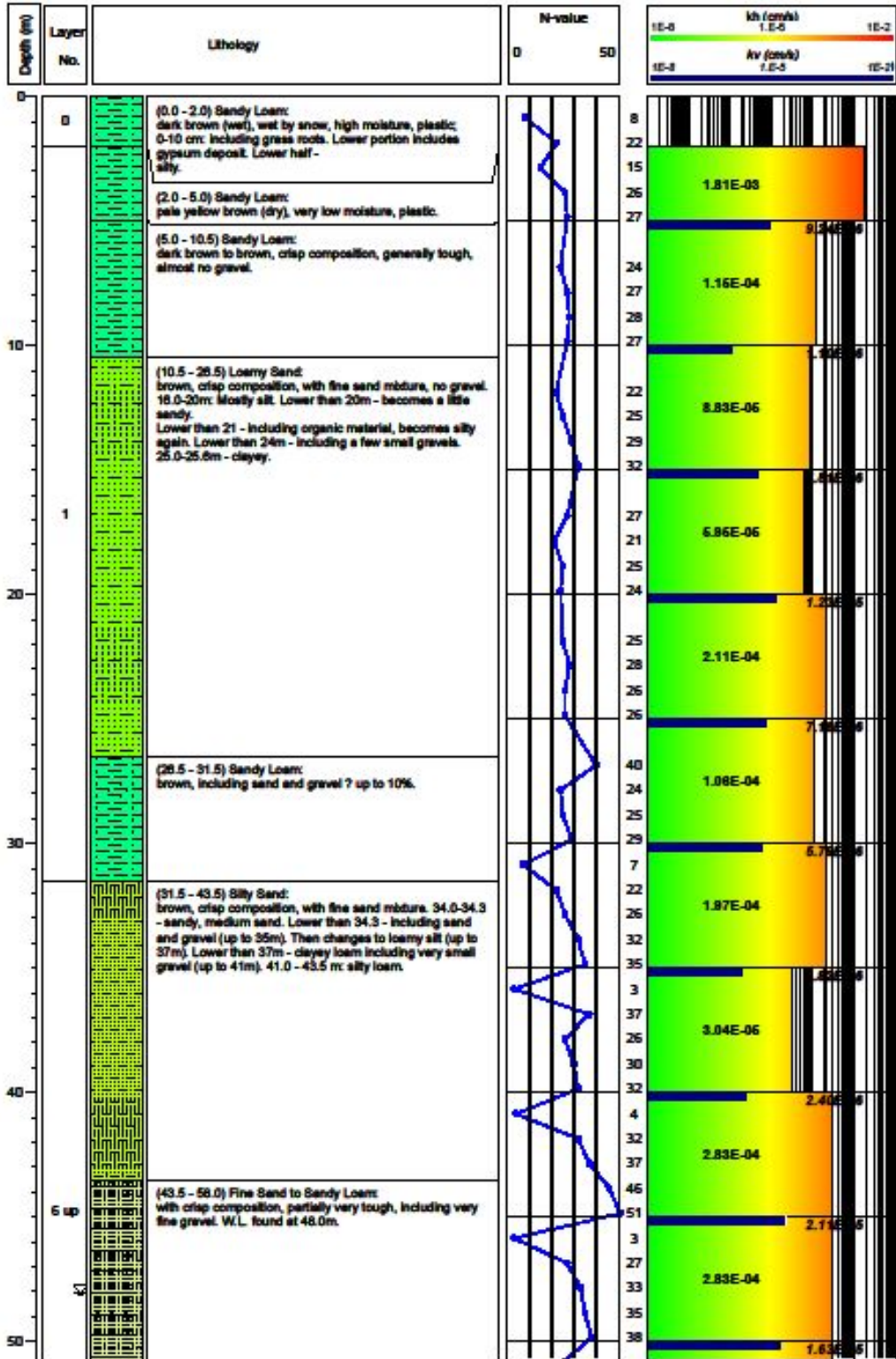


Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

Geological Log of AB-2 (1)

JICA
Preparatory Survey for Yeghward Irrigation System Improvement Project in Armenia
Investigation Drilling

Borehole No.: AB-2	Location: Yeghward	Elevation (m): 1290.45	Water Level: 83.3 (48.0)
UTM Coordinates: 453261.1 E (WGS84, Zone 38)	Longitude (deg.): 44.44995 E	Commenced: 03.03.2016	Depth (m): 100.0
4462347.8 N	Latitude (deg.): 40.31034 N	Completed: 28.03.2016	

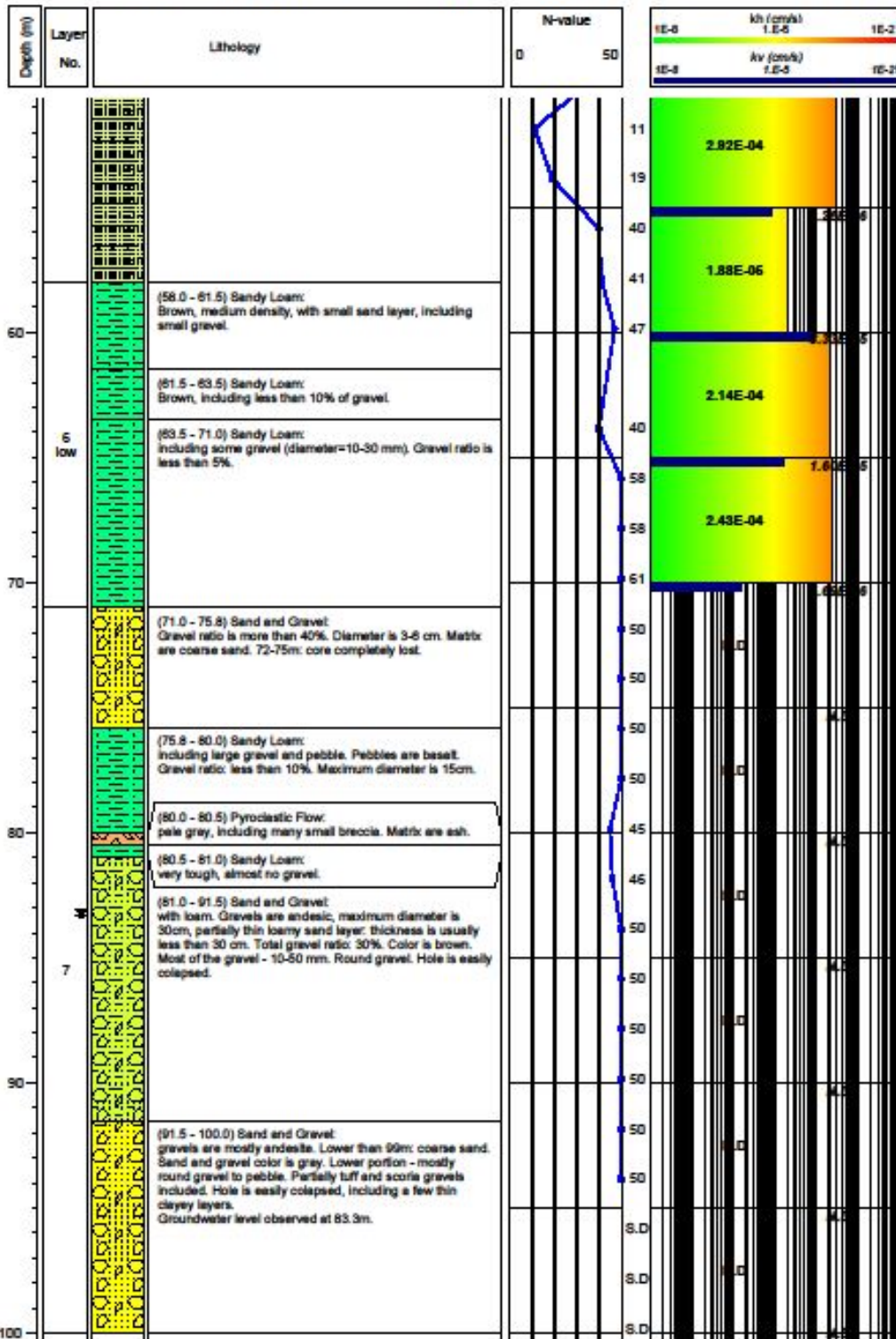


Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

Geological Log of AB-2 (2)

JICA
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Investigation Drilling

Borehole No.: AB-2 Location: Yeghvard Water Level: 83.3 (48.0)
 UTM Coordinates: 453261.1 E Longitude (deg.): 44.44995 E Elevation (m): 1290.45 Depth (m): 100.0
 (WGS84, Zone 38) 4462347.8 N Latitude (deg.): 40.31034 N Commenced: 03.03.2016 Completed: 28.03.2016

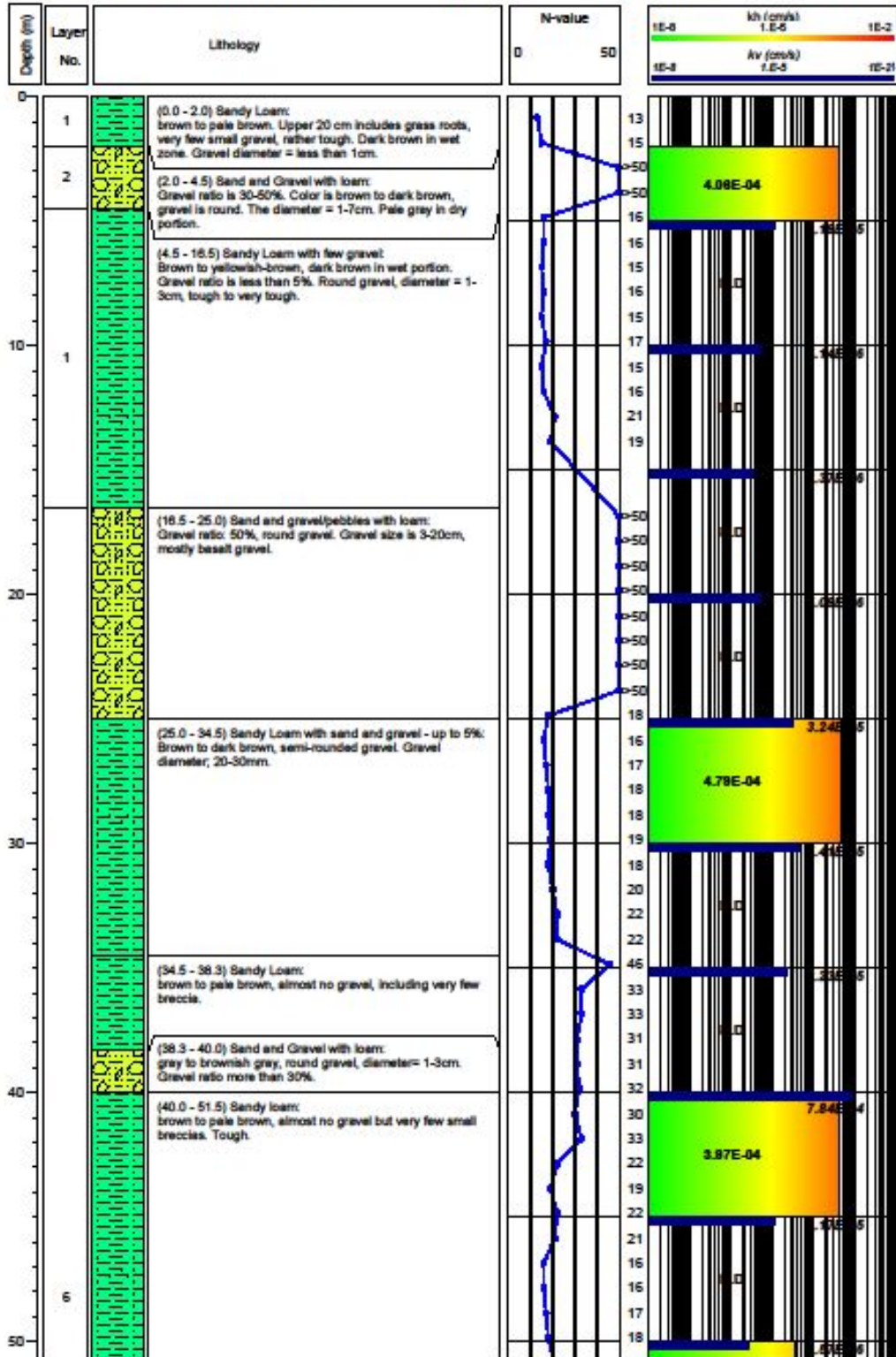


Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

Geological Log of AB-3 (1)

JICA
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Investigation Drilling

Borehole No.: AB-3 Location: Yeghvard Elevation (m): 1291.0 Water Level: -
 UTM Coordinates: 452265.9 E Longitude (deg.): 44.43818 E Depth (m): 80.0
 (WGS84, Zone 38) 4453094.4 N Latitude (deg.): 40.31701 N Commenced: 27.03.2016 Completed: 12.04.2016

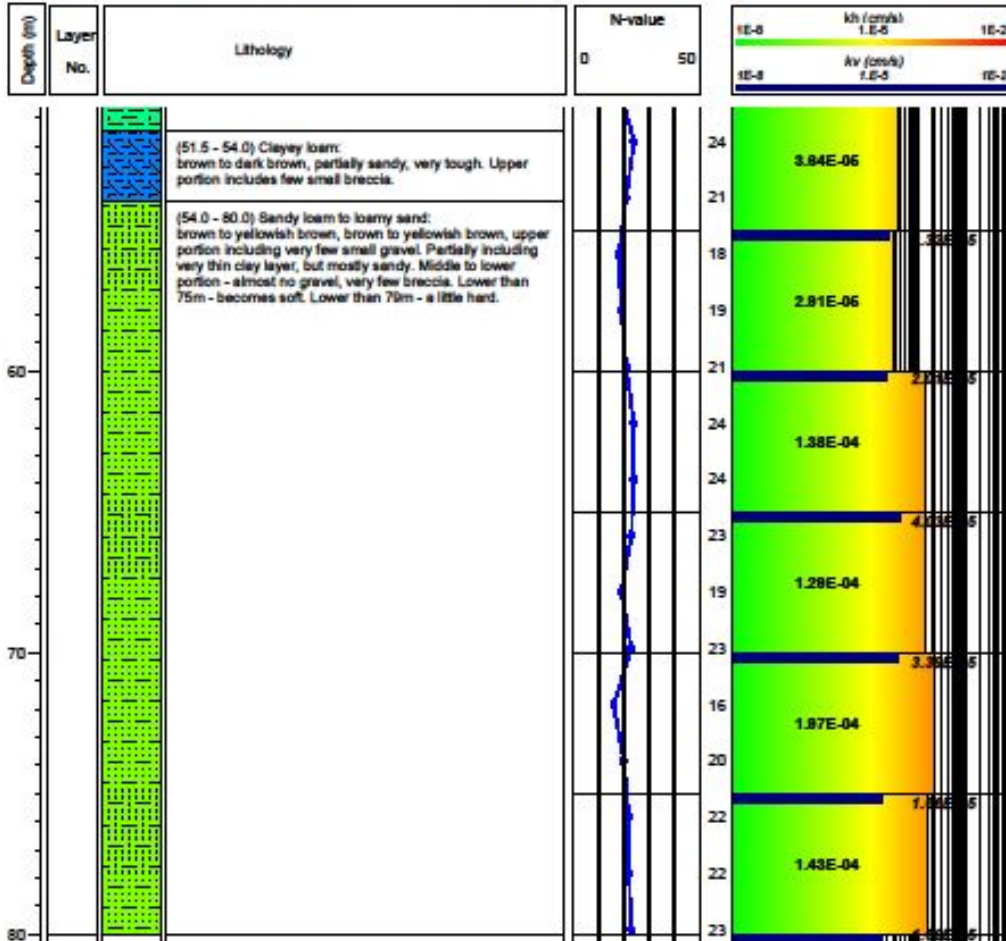


Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

Geological Log of AB-3 (2)

**JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling**

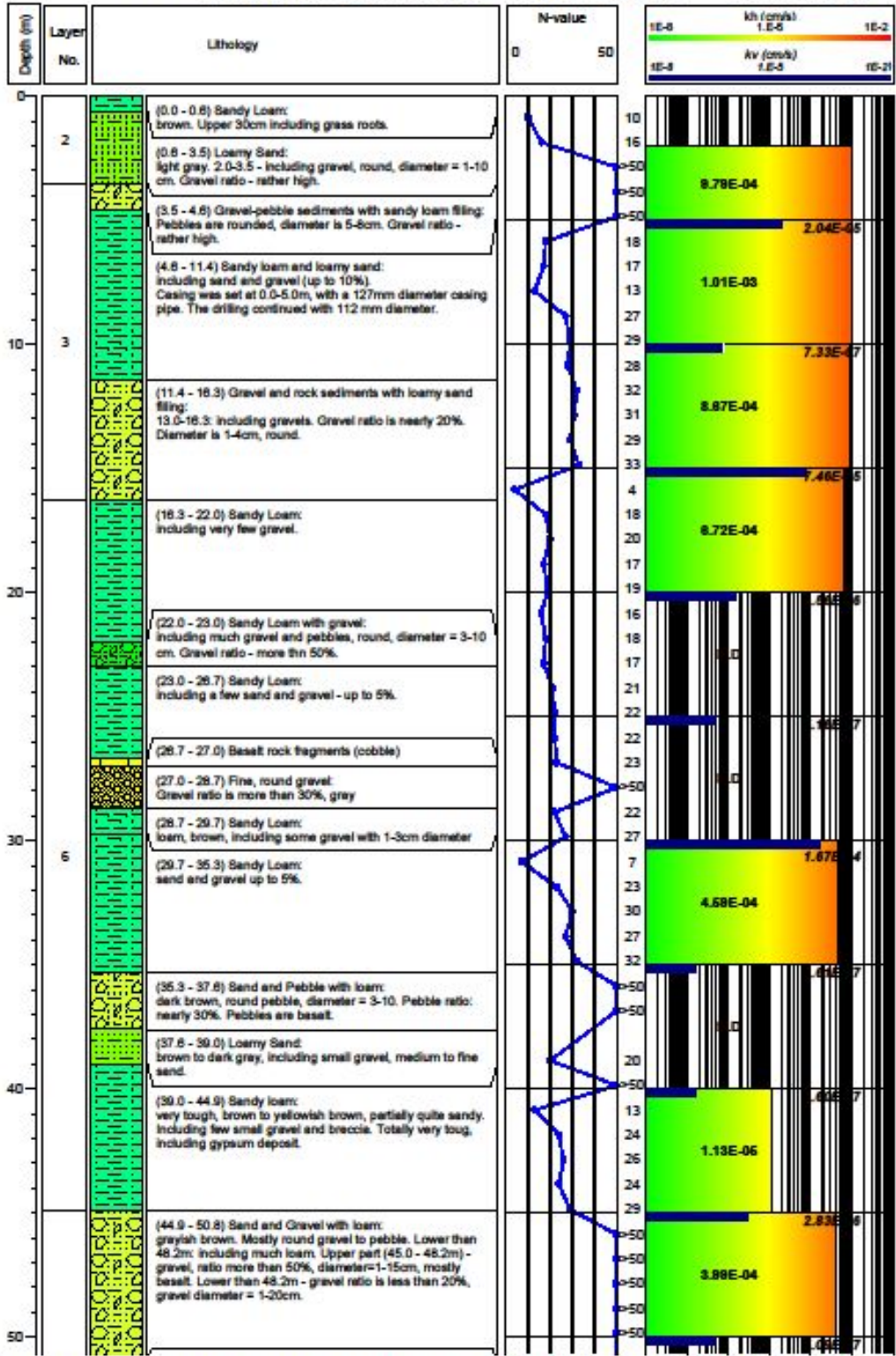
Borehole No.: AB-3	Location: Yeghvard	Elevation (m): 1291.0	Water Level: -
UTM Coordinates: 452265.9 E (WGS84, Zone 38)	Longitude (deg.): 44.43818 E	Depth (m): 80.0	
4463094.4 N	Latitude (deg.): 40.31701 N	Commenced: 27.03.2016	Completed: 12.04.2016



Geological Log of AB-4 (1)

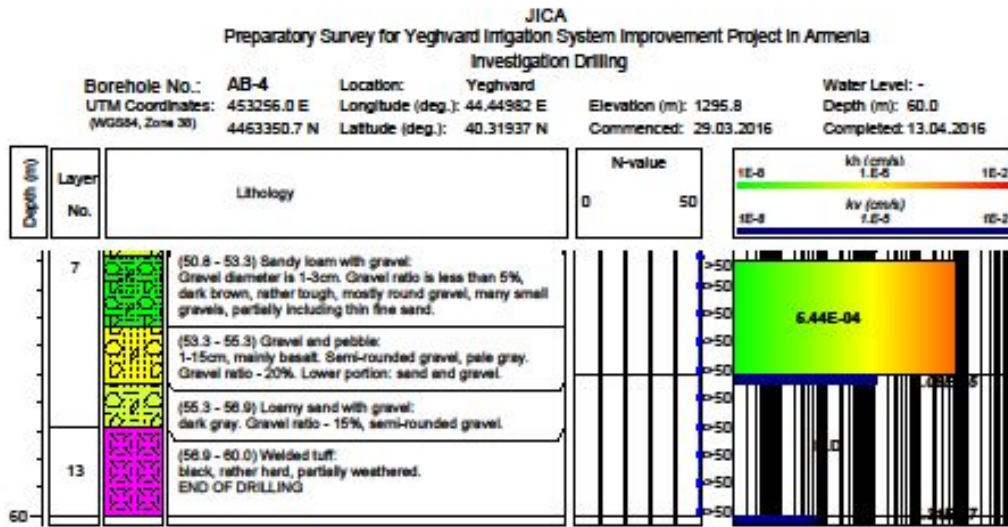
JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

Borehole No.: **AB-4** Location: **Yeghvard** Water Level: -
 UTM Coordinates: **453256.0 E** Longitude (deg.): **44.44982 E** Elevation (m): **1295.8** Depth (m): **60.0**
 (WGS84, Zone 38) **4463350.7 N** Latitude (deg.): **40.31937 N** Commenced: **29.03.2016** Completed: **13.04.2016**



Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

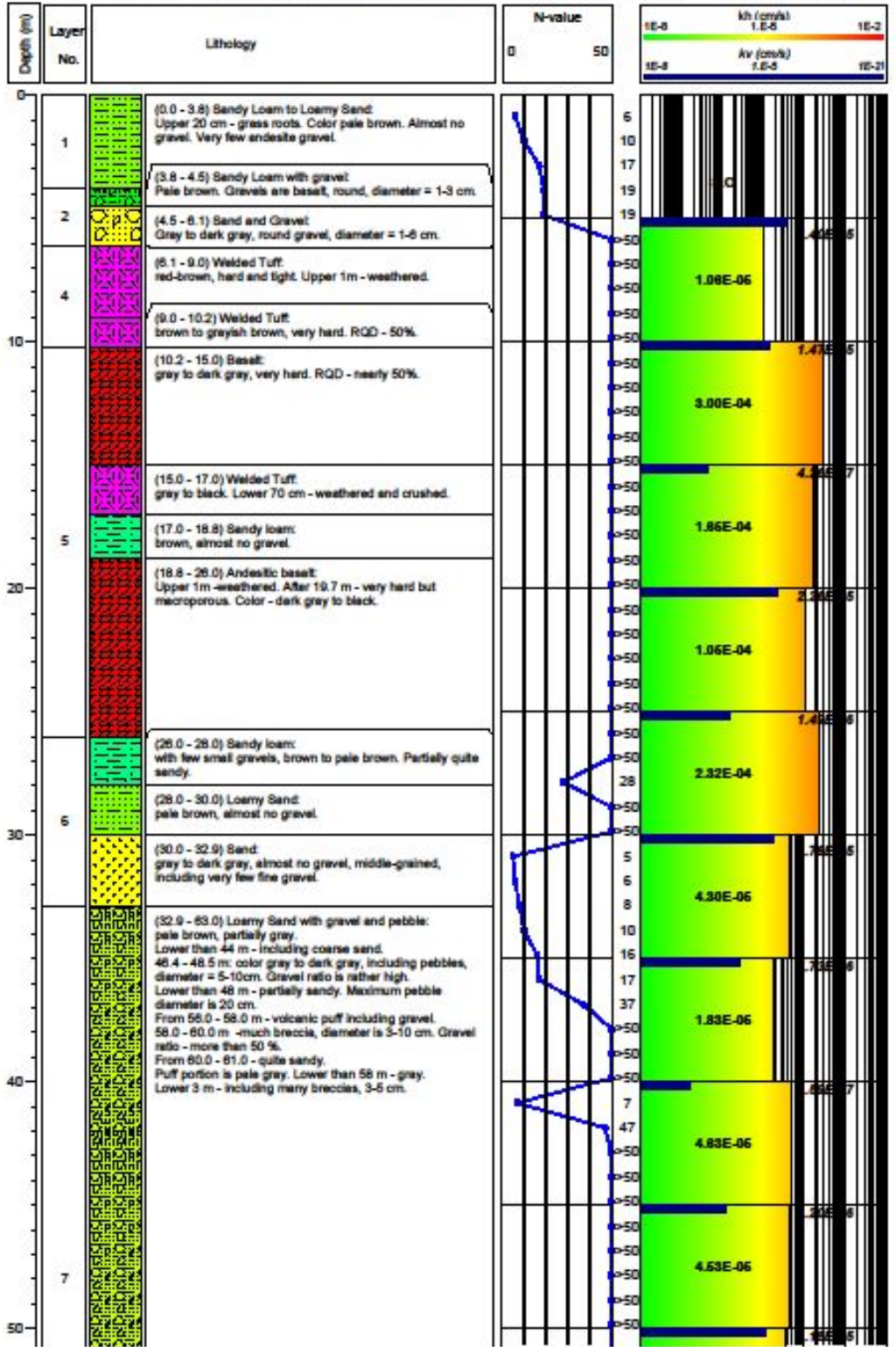
Geological Log of AB-4 (2)



Geological Log of AB-5 (1)

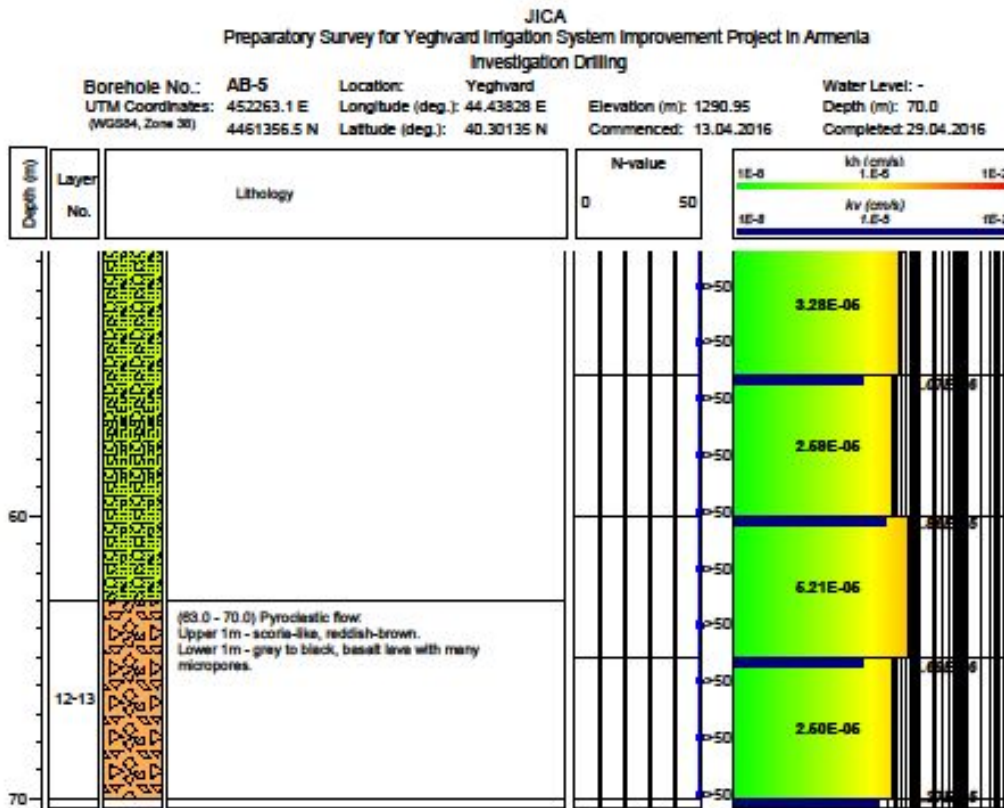
JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

Borehole No.: AB-5 Location: Yeghvard Water Level: -
UTM Coordinates: 452263.1 E Longitude (deg.): 44.43828 E Depth (m): 70.0
(WGS84, Zone 38) 4461356.5 N Latitude (deg.): 40.30135 N Elevation (m): 1290.95 Commenced: 13.04.2016 Completed: 29.04.2016



Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

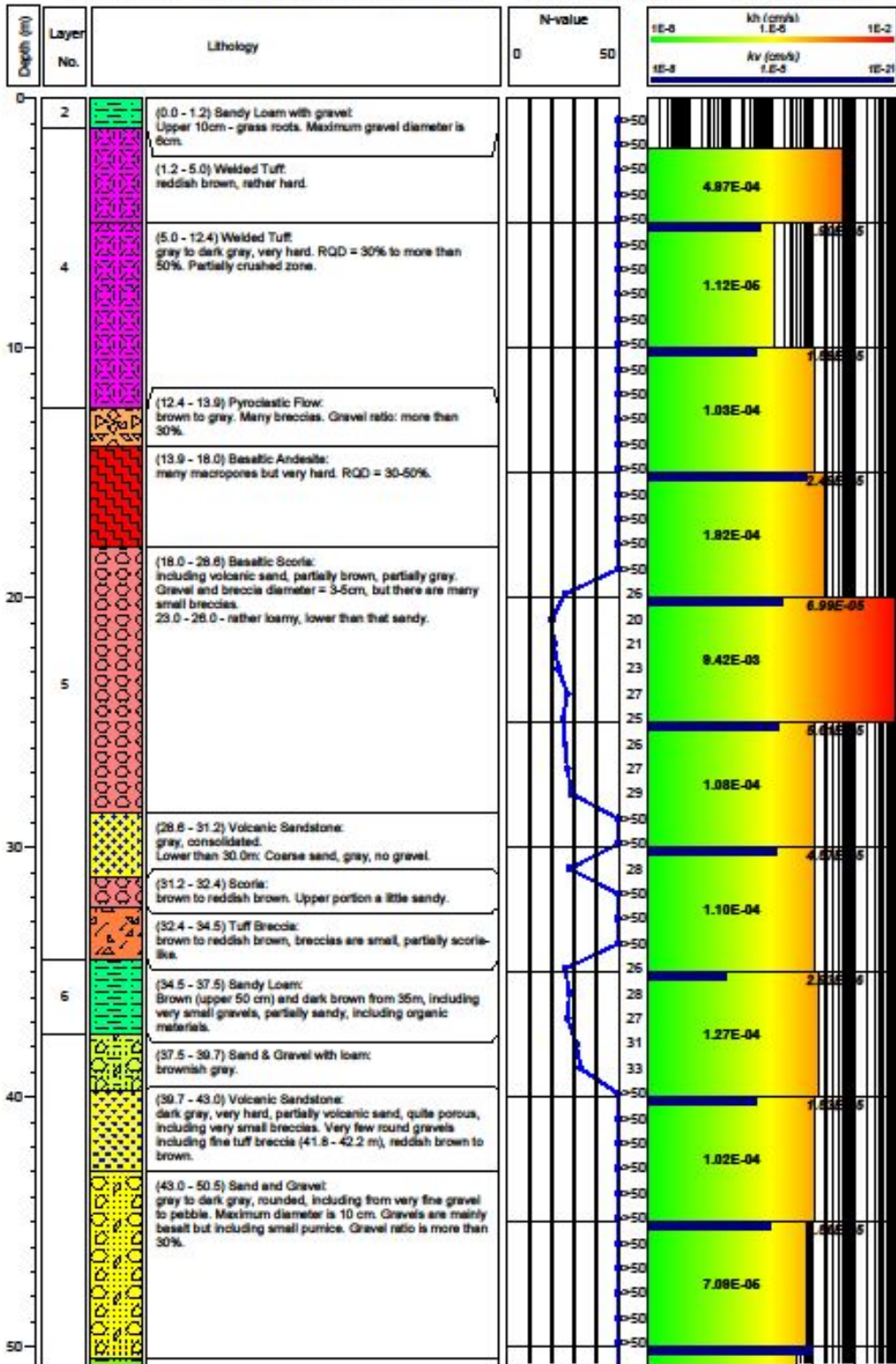
Geological Log of AB-5 (2)



Geological Log of AB-6 (1)

JICA Preparatory Survey for Yeghvard Irrigation System Improvement Project In Armenia Investigation Drilling

Borehole No.: AB-6 Location: Yeghvard
 UTM Coordinates: 453267.7 E Longitude (deg.): 44.45010 E Elevation (m): 1292.85 Water Level: -
 (WGS84, Zone 38) 4461345.5 N Latitude (deg.): 40.30131 N Commenced: 12.04.2016 Depth (m): 70.0
 Completed: 26.04.2016

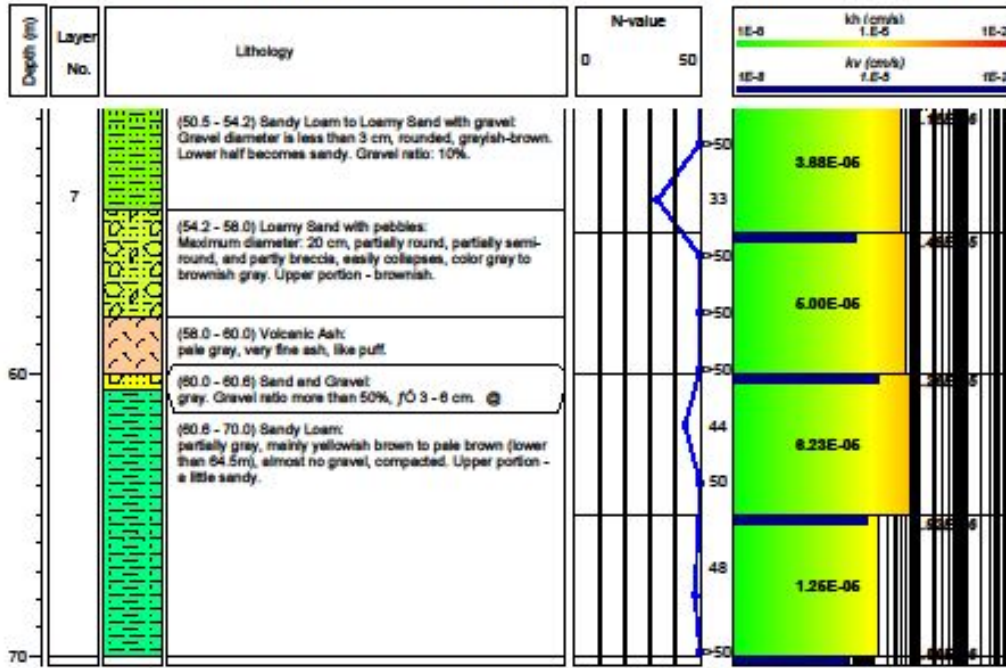


Note - kh: Horizontal permeability, kv: Vertical permeability by test with constant head (value not bracketed) or transient (falling) head (in brackets)

Geological Log of AB-6 (2)

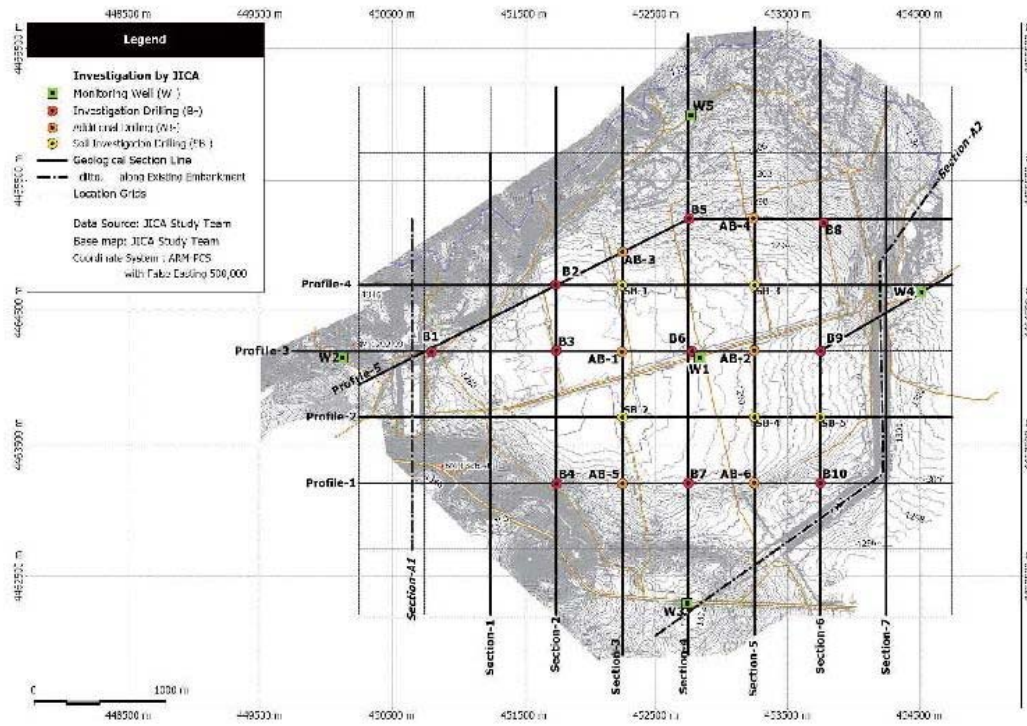
JICA
Preparatory Survey for Yeghvard Irrigation System Improvement Project in Armenia
Investigation Drilling

Borehole No.:	AB-6	Location:	Yeghvard	Water Level: -
UTM Coordinates:	453267.7 E	Longitude (deg.):	44.45010 E	Depth (m): 70.0
(WGS84, Zone 38)	4461345.5 N	Latitude (deg.):	40.30131 N	Commenced: 12.04.2016
				Completed: 26.04.2016



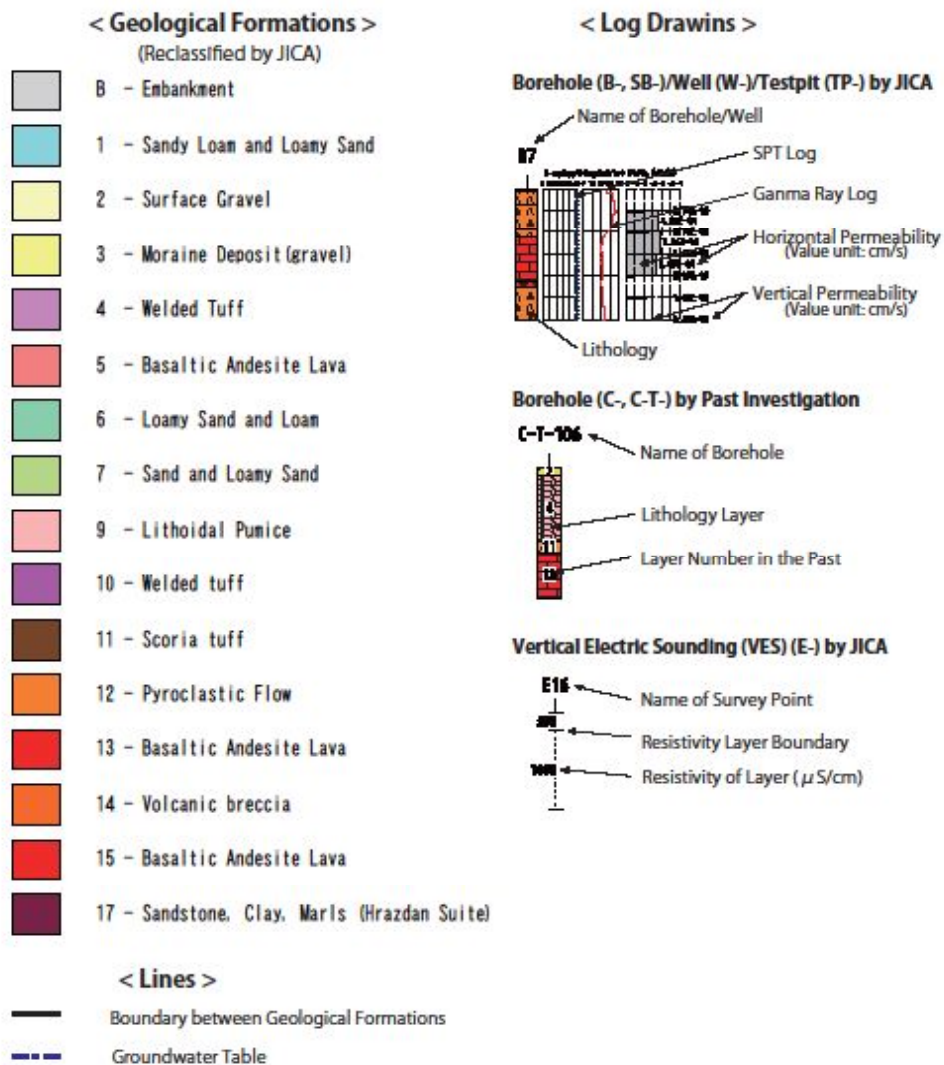
Appendix F-2: Geological Cross Sections and Profiles

Guide Map of Cross Sections and Profiles



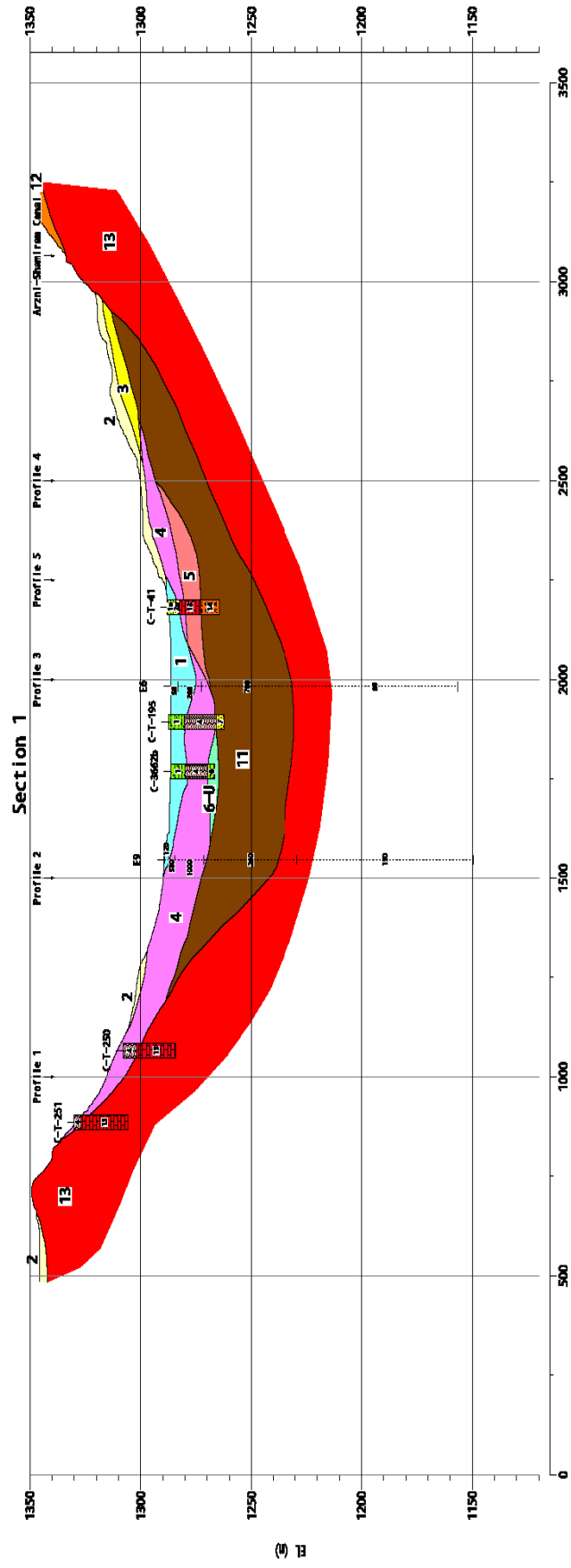
Legends on Cross Sections and Profiles

LEGEND OF GEOLOGICAL SECTION

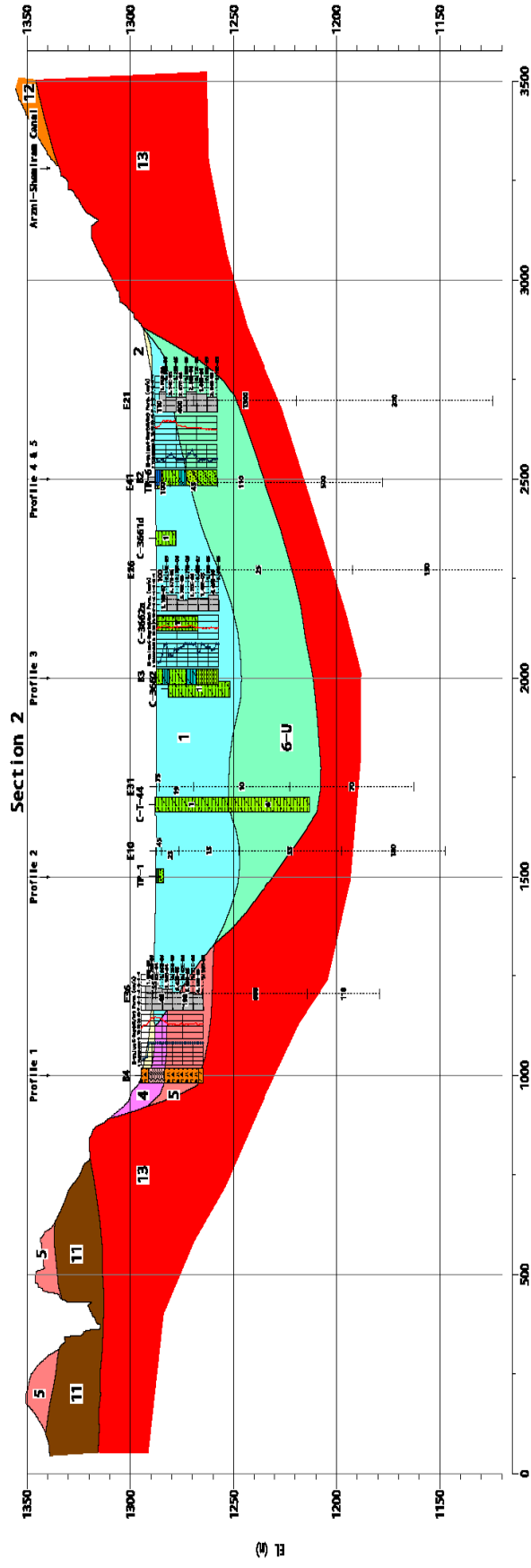


Cross Section

(1) Cross Section-1

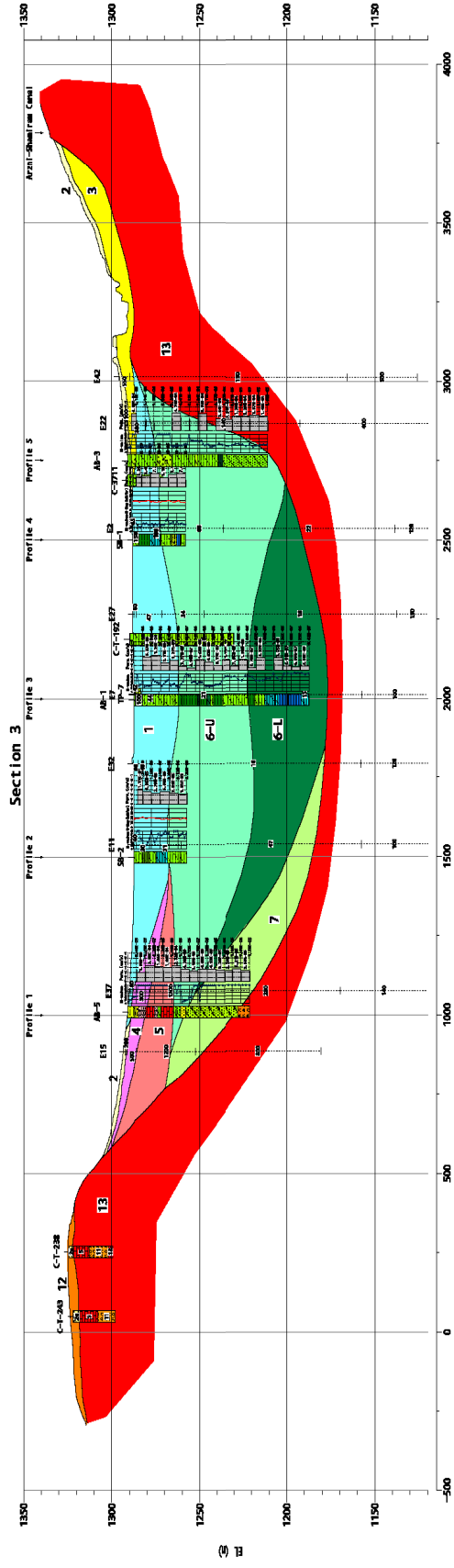


(2) Cross Section-2

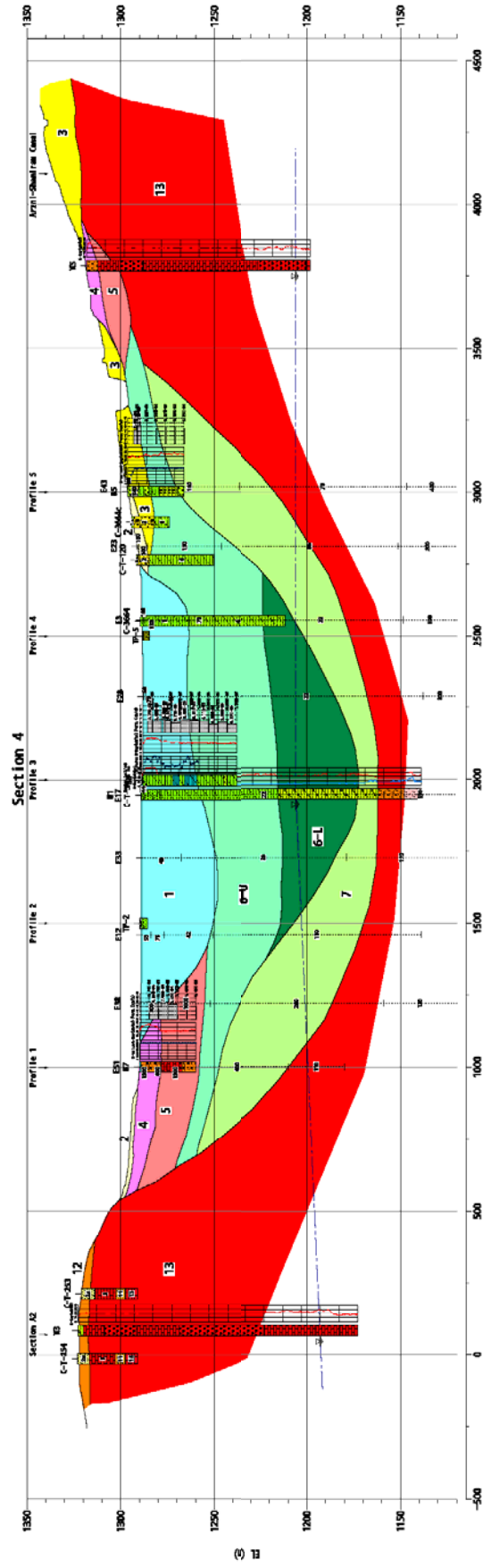


ES
(S)

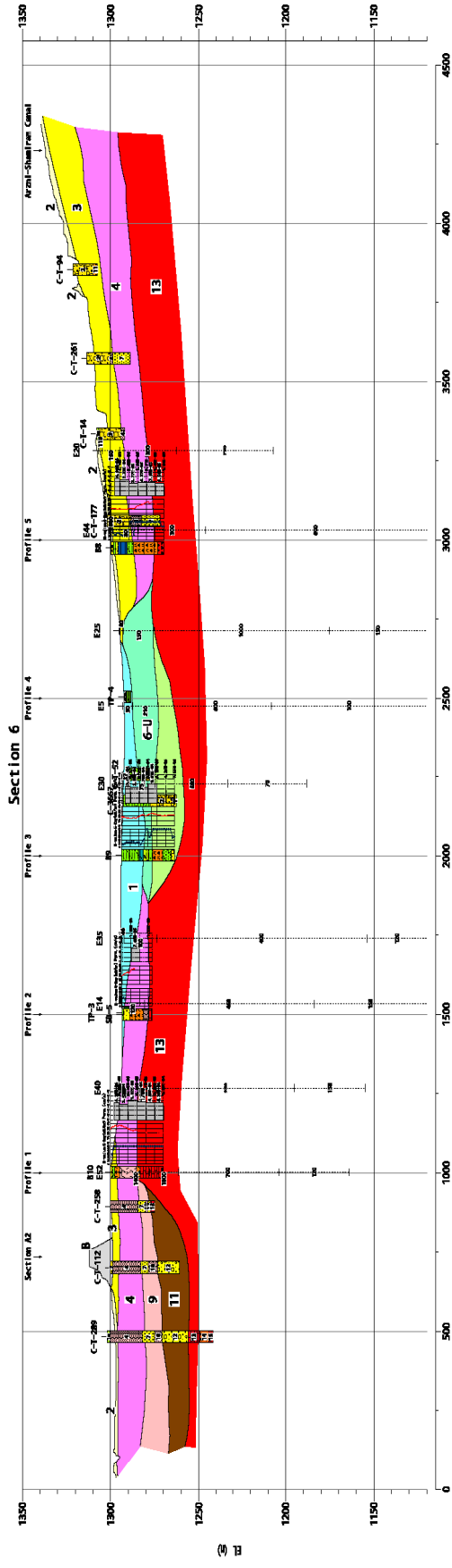
(3) Cross Section-3



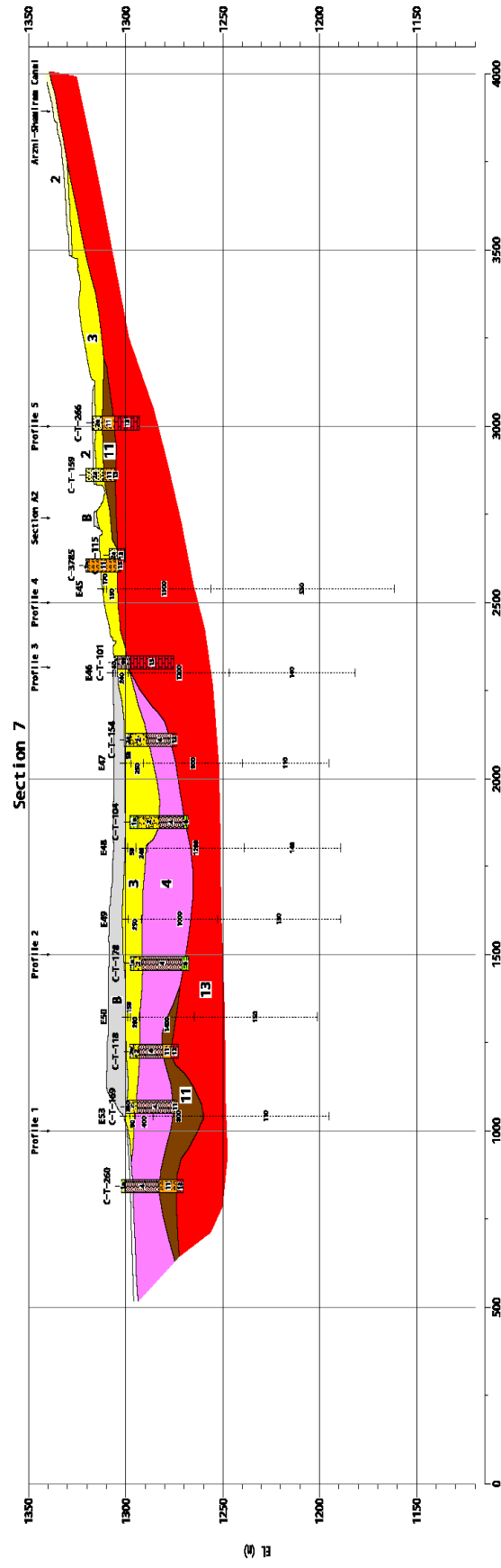
(4) Cross Section-4



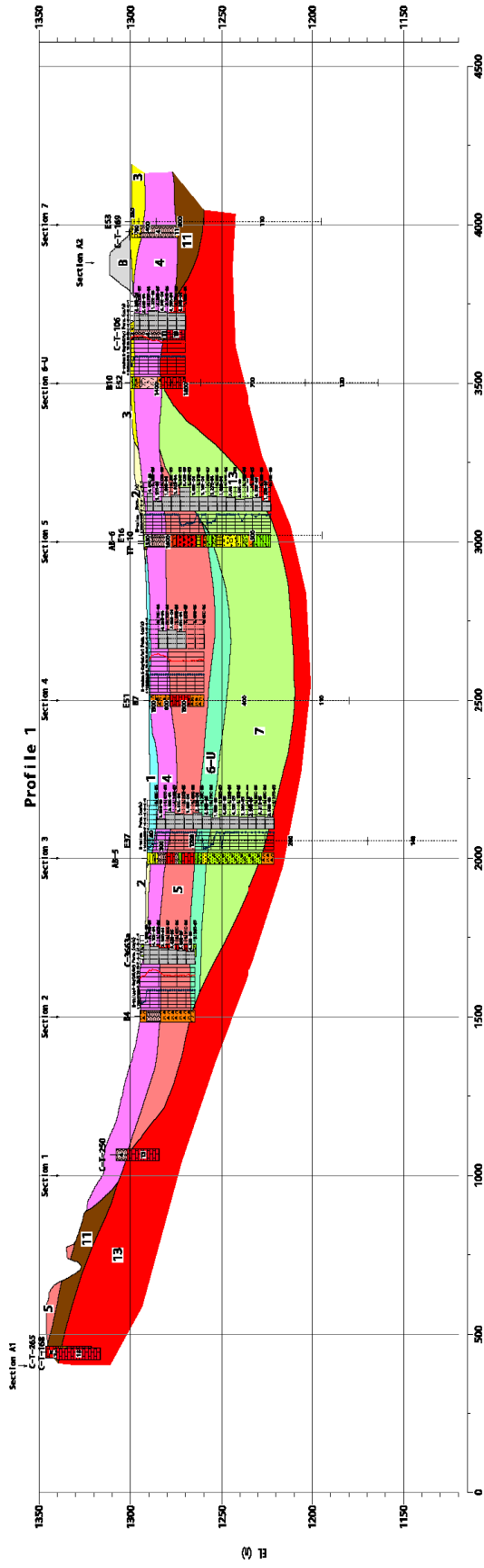
(6) Cross Section-6



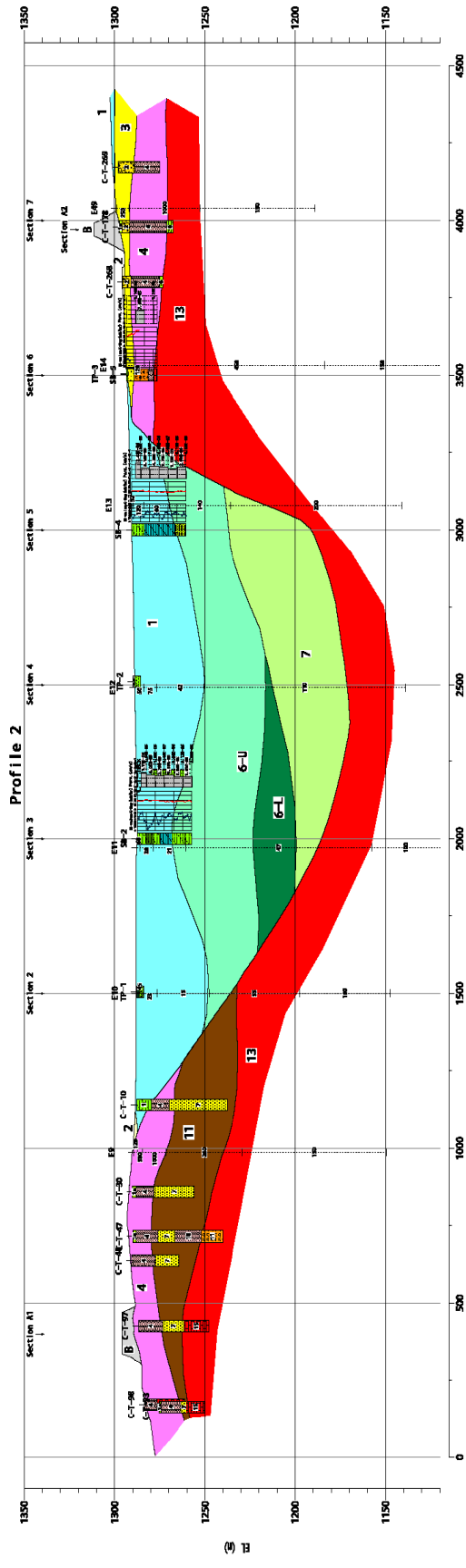
(7) Cross Section-7



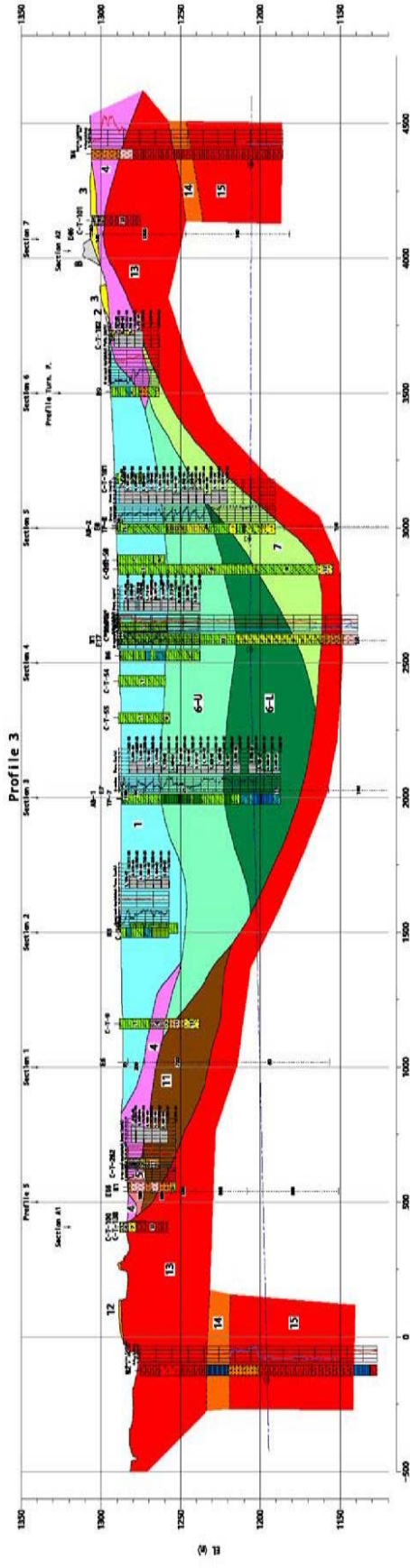
Profile
 (1) Profile-1



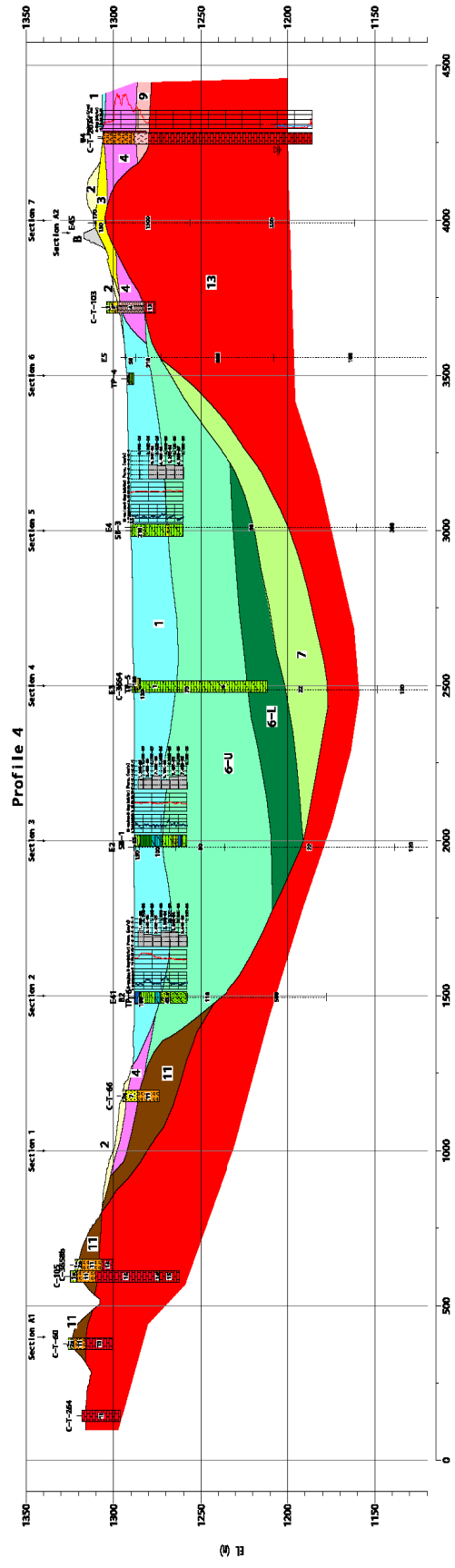
(2) Profile-2



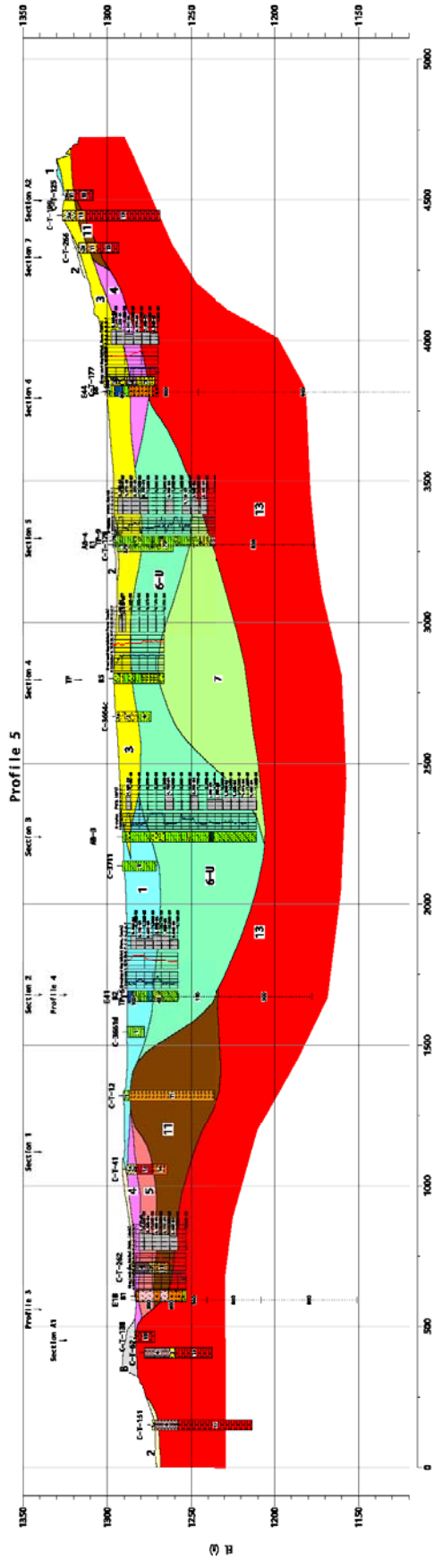
(3) Profile-3



(4) Profile-4

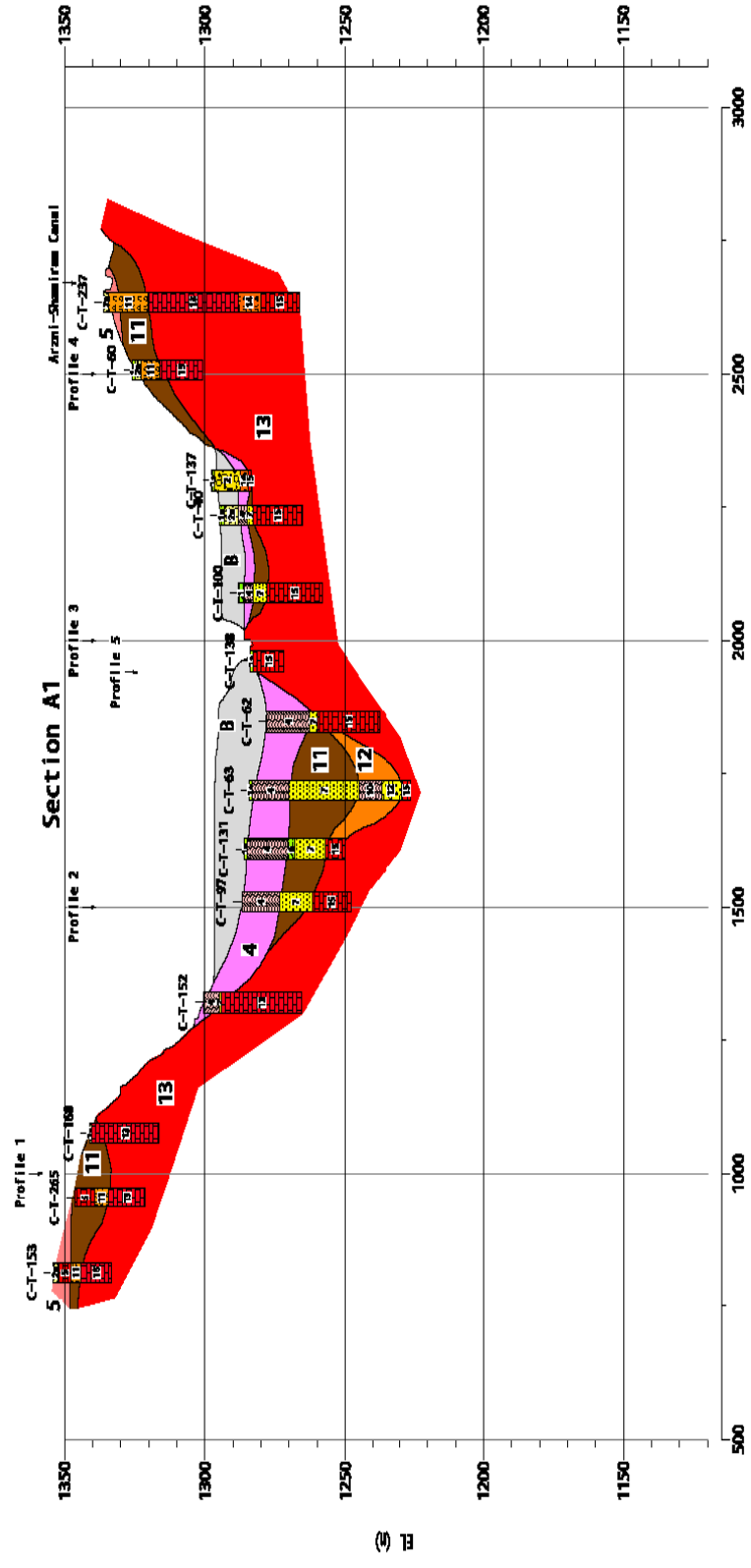


(5) Profile-5

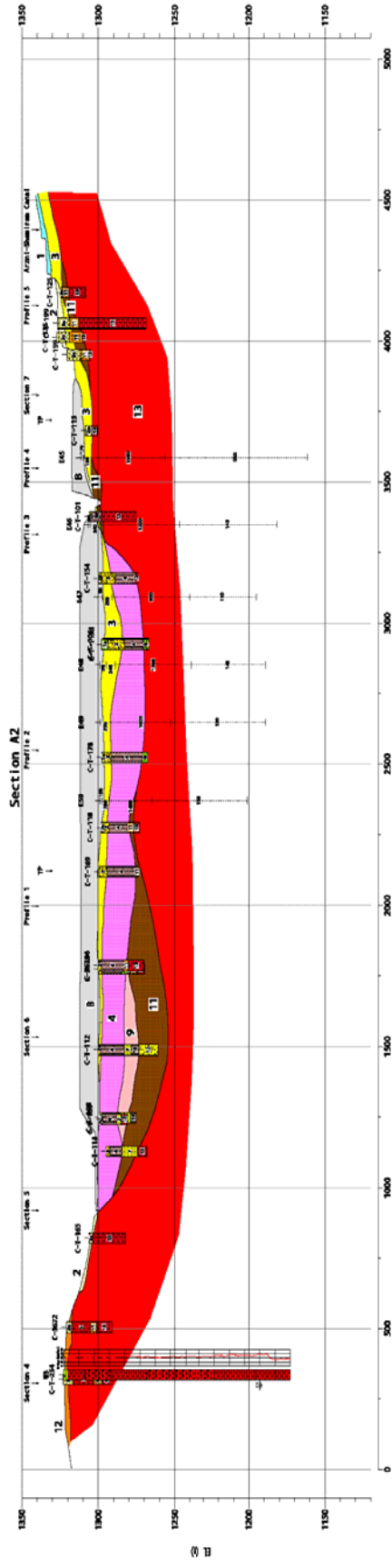


Geological Cross Sections on Dam-Axes

(1) Dam No.1



(2) Dam No.2



Appendix F-3: Data of AWLR Measurement

GROUNDWATER LEVEL MEASUREMENT BY AWLR (i: Daily Groundwater Depth)

W1-revised		W2-revised		W3-revised		W4-revised		W5-revised		(daily data at 00:00)				
Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL			
2015/9/9	83.151	4.18	2015/9/9	80.27	5.518	2015/9/9	130.594	2.863	2015/9/9	101.19	5.248	2015/9/21	114.887	2.839
2015/9/10	83.145	4.174	2015/9/10	80.282	5.53	2015/9/10	130.552	2.821	2015/9/10	101.196	5.254	2015/9/22	114.798	2.75
2015/9/11	83.069	4.088	2015/9/11	80.314	5.462	2015/9/11	130.451	2.72	2015/9/11	101.225	5.183	2015/9/23	114.799	2.751
2015/9/12	83.162	4.191	2015/9/12	80.326	5.574	2015/9/12	130.5	2.769	2015/9/12	101.219	5.277	2015/9/24	114.813	2.765
2015/9/13	83.147	4.176	2015/9/13	80.301	5.589	2015/9/13	130.467	2.736	2015/9/13	101.216	5.274	2015/9/25	114.816	2.768
2015/9/14	83.158	4.187	2015/9/14	80.293	5.621	2015/9/14	130.451	2.72	2015/9/14	101.224	5.282	2015/9/26	114.815	2.767
2015/9/15	83.159	4.188	2015/9/15	80.294	5.649	2015/9/15	130.437	2.706	2015/9/15	101.237	5.285	2015/9/27	114.807	2.759
2015/9/16	83.159	4.188	2015/9/16	80.292	5.667	2015/9/16	130.401	2.67	2015/9/16	101.246	5.304	2015/9/28	114.81	2.762
2015/9/17	83.159	4.188	2015/9/17	80.316	5.691	2015/9/17	130.368	2.637	2015/9/17	101.243	5.301	2015/9/29	114.821	2.773
2015/9/18	83.143	4.172	2015/9/18	80.33	5.705	2015/9/18	130.343	2.612	2015/9/18	101.242	5.3	2015/9/30	114.823	2.775
2015/9/19	83.122	4.151	2015/9/19	80.327	5.555	2015/9/19	130.316	2.585	2015/9/19	101.236	5.294	2015/10/1	114.82	2.772
2015/9/20	83.137	4.166	2015/9/20	80.328	5.576	2015/9/20	130.313	2.582	2015/9/20	101.248	5.306	2015/10/2	114.816	2.768
2015/9/21	83.175	4.204	2015/9/21	80.324	5.602	2015/9/21	130.3	2.569	2015/9/21	101.262	5.32	2015/10/3	114.81	2.762
2015/9/22	83.185	4.214	2015/9/22	80.326	5.624	2015/9/22	130.341	2.564	2015/9/22	101.272	5.33	2015/10/4	114.821	2.773
2015/9/23	83.155	3.96	2015/9/23	80.339	-0.177	2015/9/23	130.366	2.544	2015/9/23	101.228	5.286	2015/10/5	114.835	2.787
2015/9/24	83.171	3.944	2015/9/24	80.344	-0.172	2015/9/24	130.365	2.498	2015/9/24	101.23	5.288	2015/10/6	114.83	2.782
2015/9/25	83.168	3.947	2015/9/25	80.341	-0.175	2015/9/25	130.395	2.483	2015/9/25	101.233	5.291	2015/10/7	114.834	2.786
2015/9/26	83.154	3.961	2015/9/26	80.34	-0.176	2015/9/26	130.406	2.449	2015/9/26	101.235	5.293	2015/10/8	114.835	2.787
2015/9/27	83.165	3.95	2015/9/27	80.338	-0.178	2015/9/27	130.425	2.423	2015/9/27	101.23	5.288	2015/10/9	114.823	2.775
2015/9/28	83.174	3.941	2015/9/28	80.335	-0.181	2015/9/28	130.446	2.399	2015/9/28	101.233	5.291	2015/10/10	114.825	2.777
2015/9/29	83.163	3.952	2015/9/29	80.34	-0.176	2015/9/29	130.472	2.38	2015/9/29	101.241	5.299	2015/10/11	114.82	2.772
2015/9/30	83.149	3.966	2015/9/30	80.339	-0.177	2015/9/30	130.492	2.355	2015/9/30	101.246	5.304	2015/10/12	114.822	2.787
2015/10/1	83.17	3.945	2015/10/1	80.339	-0.177	2015/10/1	130.51	2.328	2015/10/1	101.24	5.298	2015/10/13	114.825	2.793
2015/10/2	83.174	3.941	2015/10/2	80.338	-0.178	2015/10/2	130.527	2.3	2015/10/2	101.236	5.294	2015/10/14	114.819	2.787
2015/10/3	83.198	3.917	2015/10/3	80.332	-0.184	2015/10/3	130.545	2.273	2015/10/3	101.227	5.285	2015/10/15	114.813	2.781
2015/10/4	83.16	3.955	2015/10/4	80.334	-0.182	2015/10/4	130.571	2.254	2015/10/4	101.238	5.296	2015/10/16	114.825	2.793
2015/10/5	83.125	3.99	2015/10/5	80.351	-0.165	2015/10/5	130.606	2.244	2015/10/5	101.252	5.31	2015/10/17	114.816	2.784
2015/10/6	83.13	3.985	2015/10/6	80.334	-0.182	2015/10/6	130.616	2.209	2015/10/6	101.256	5.314	2015/10/18	114.808	2.776
2015/10/7	83.132	3.983	2015/10/7	80.332	-0.184	2015/10/7	130.635	2.183	2015/10/7	101.263	5.321	2015/10/19	114.823	2.791
2015/10/8	83.122	3.993	2015/10/8	80.333	-0.183	2015/10/8	130.657	2.16	2015/10/8	101.27	5.328	2015/10/20	114.829	2.797
2015/10/9	83.191	3.924	2015/10/9	80.33	-0.186	2015/10/9	130.672	2.13	2015/10/9	101.255	5.313	2015/10/21	114.829	2.799
2015/10/10	83.165	3.95	2015/10/10	80.329	-0.187	2015/10/10	130.689	2.102	2015/10/10	101.257	5.315	2015/10/22	114.831	2.799
2015/10/11	83.185	3.93	2015/10/11	80.33	-0.186	2015/10/11	130.708	2.076	2015/10/11	101.249	5.307	2015/10/23	114.826	2.794
2015/10/12	83.164	3.951	2015/10/12	80.333	-0.183	2015/10/12	130.735	2.058	2015/10/12	101.261	5.319	2015/10/24	114.831	2.799
2015/10/13	83.173	3.955	2015/10/13	80.345	-0.171	2015/10/13	130.8047	2.097	2015/10/13	101.261	4.389	2015/10/25	114.838	2.806
2015/10/14	83.155	2.775	2015/10/14	80.339	-0.177	2015/10/14	130.8173	2.079	2015/10/14	101.255	4.383	2015/10/26	114.841	2.809
2015/10/15	83.149	2.769	2015/10/15	80.333	-0.183	2015/10/15	130.821	2.052	2015/10/15	101.249	4.377	2015/10/27	114.84	2.808
2015/10/16	83.161	2.781	2015/10/16	80.339	-0.177	2015/10/16	130.8397	2.04	2015/10/16	101.261	4.389	2015/10/28	114.833	2.801
2015/10/17	83.152	2.772	2015/10/17	80.339	-0.177	2015/10/17	130.8434	2.013	2015/10/17	101.252	4.38	2015/10/29	114.834	2.802
2015/10/18	83.123	2.743	2015/10/18	80.337	-0.179	2015/10/18	130.848	1.987	2015/10/18	101.241	4.369	2015/10/30	114.829	2.797
2015/10/19	83.162	2.782	2015/10/19	80.337	-0.179	2015/10/19	130.8607	1.969	2015/10/19	101.253	4.381	2015/10/31	114.832	2.8
2015/10/20	83.174	2.794	2015/10/20	80.34	-0.176	2015/10/20	130.8704	1.948	2015/10/20	101.262	4.39	2015/11/1	114.824	2.792
2015/10/21	83.171	2.791	2015/10/21	80.34	-0.176	2015/10/21	130.877	1.924	2015/10/21	101.265	4.393	2015/11/2	114.822	2.79
2015/10/22	83.17	2.79	2015/10/22	80.342	-0.174	2015/10/22	130.8857	1.902	2015/10/22	101.267	4.395	2015/11/3	114.83	2.798
2015/10/23	83.162	2.782	2015/10/23	80.337	-0.179	2015/10/23	130.8934	1.879	2015/10/23	101.259	4.387	2015/11/4	114.834	2.802
2015/10/24	83.152	2.772	2015/10/24	80.342	-0.174	2015/10/24	130.9051	1.86	2015/10/24	101.264	4.392	2015/11/5	114.833	2.801
2015/10/25	83.168	2.788	2015/10/25	80.343	-0.173	2015/10/25	130.9187	1.843	2015/10/25	101.274	4.402	2015/11/6	114.841	2.809
2015/10/26	83.168	2.788	2015/10/26	80.343	-0.173	2015/10/26	130.9284	1.822	2015/10/26	101.277	4.405	2015/11/7	114.837	2.805
2015/10/27	83.179	2.799	2015/10/27	80.342	-0.174	2015/10/27	130.9341	1.797	2015/10/27	101.276	4.404	2015/11/8	114.836	2.804
2015/10/28	83.169	2.789	2015/10/28	80.335	-0.181	2015/10/28	130.9367	1.769	2015/10/28	101.272	4.4	2015/11/9	114.85	2.818
2015/10/29	83.155	2.775	2015/10/29	80.336	-0.18	2015/10/29	130.9474	1.749	2015/10/29	101.27	4.398	2015/11/10	114.856	2.824
2015/10/30	83.147	2.767	2015/10/30	80.337	-0.179	2015/10/30	130.9551	1.726	2015/10/30	101.262	4.39	2015/11/11	114.849	2.817
2015/10/31	83.153	2.773	2015/10/31	80.334	-0.182	2015/10/31	130.9648	1.705	2015/10/31	101.262	4.39	2015/11/12	114.85	2.818

W1-revised Date	(daily data at 00:00)		W2-revised Date	(daily data at 00:00)		W3-revised Date	(daily data at 00:00)		W4-revised Date	(daily data at 00:00)		W5-revised Date	(daily data at 00:00)	
	Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL
2015/11/1	83.139	2.759	2015/11/1	80.332	-0.184	2015/11/1	130.9724	1.682	2015/11/1	101.251	4.379	2015/11/13	114.813	2.781
2015/11/2	83.134	2.754	2015/11/2	80.333	-0.183	2015/11/2	130.9801	1.659	2015/11/2	101.246	4.374	2015/11/14	114.844	2.812
2015/11/3	83.163	2.783	2015/11/3	80.332	-0.184	2015/11/3	130.9888	1.637	2015/11/3	101.251	4.379	2015/11/15	114.839	2.807
2015/11/4	83.179	2.799	2015/11/4	80.333	-0.183	2015/11/4	130.9994	1.617	2015/11/4	101.258	4.386	2015/11/16	114.859	2.827
2015/11/5	83.169	2.789	2015/11/5	80.338	-0.178	2015/11/5	131.0111	1.598	2015/11/5	101.257	4.385	2015/11/17	114.865	2.833
2015/11/6	83.18	2.8	2015/11/6	80.337	-0.179	2015/11/6	131.0228	1.579	2015/11/6	101.268	4.396	2015/11/18	114.842	2.81
2015/11/7	83.17	2.79	2015/11/7	80.339	-0.177	2015/11/7	131.0315	1.557	2015/11/7	101.264	4.392	2015/11/19	114.835	2.803
2015/11/8	83.16	2.78	2015/11/8	80.338	-0.178	2015/11/8	131.0311	1.526	2015/11/8	101.266	4.394	2015/11/20	114.835	2.803
2015/11/9	83.189	2.809	2015/11/9	80.337	-0.179	2015/11/9	131.0428	1.507	2015/11/9	101.28	4.408	2015/11/21	114.838	2.806
2015/11/10	83.204	2.824	2015/11/10	80.334	-0.182	2015/11/10	131.0555	1.489	2015/11/10	101.289	4.417	2015/11/22	114.834	2.802
2015/11/11	83.182	2.802	2015/11/11	80.336	-0.18	2015/11/11	131.0611	1.464	2015/11/11	101.285	4.413	2015/11/23	114.826	2.794
2015/11/12	83.192	2.812	2015/11/12	80.331	-0.185	2015/11/12	131.0628	1.435	2015/11/12	101.286	4.414	2015/11/24	114.822	2.79
2015/11/13	83.11	2.73	2015/11/13	80.336	-0.18	2015/11/13	131.0505	1.392	2015/11/13	101.246	4.374	2015/11/25	114.828	2.796
2015/11/14	83.168	2.788	2015/11/14	80.328	-0.188	2015/11/14	131.0792	1.39	2015/11/14	101.274	4.402	2015/11/26	114.83	2.798
2015/11/15	83.145	2.765	2015/11/15	80.332	-0.184	2015/11/15	131.0928	1.373	2015/11/15	101.263	4.391	2015/11/27	114.824	2.792
2015/11/16	83.207	2.827	2015/11/16	80.334	-0.182	2015/11/16	131.1105	1.36	2015/11/16	101.283	4.411	2015/11/28	114.827	2.795
2015/11/17	83.195	2.815	2015/11/17	80.337	-0.179	2015/11/17	131.1262	1.345	2015/11/17	101.292	4.42	2015/11/29	114.832	2.8
2015/11/18	83.163	2.783	2015/11/18	80.332	-0.184	2015/11/18	131.1308	1.319	2015/11/18	101.272	4.4	2015/11/30	114.824	2.792
2015/11/19	83.147	2.767	2015/11/19	80.331	-0.185	2015/11/19	131.1395	1.297	2015/11/19	101.262	4.39	2015/12/1	114.834	2.802
2015/11/20	83.15	2.77	2015/11/20	80.331	-0.185	2015/11/20	131.1522	1.279	2015/11/20	101.262	4.39	2015/12/2	114.824	2.792
2015/11/21	83.156	2.776	2015/11/21	80.334	-0.182	2015/11/21	131.1709	1.267	2015/11/21	101.259	4.387	2015/12/3	114.833	2.801
2015/11/22	83.161	2.781	2015/11/22	80.333	-0.183	2015/11/22	131.1855	1.251	2015/11/22	101.255	4.383	2015/12/4	114.806	2.774
2015/11/23	83.141	2.761	2015/11/23	80.331	-0.185	2015/11/23	131.1962	1.231	2015/11/23	101.244	4.372	2015/12/5	114.788	2.756
2015/11/24	83.14	2.76	2015/11/24	80.333	-0.183	2015/11/24	131.2109	1.215	2015/11/24	101.24	4.368	2015/12/6	114.795	2.763
2015/11/25	83.158	2.778	2015/11/25	80.333	-0.183	2015/11/25	131.2295	1.203	2015/11/25	101.243	4.371	2015/12/7	114.789	2.757
2015/11/26	83.184	2.804	2015/11/26	80.335	-0.181	2015/11/26	131.2412	1.184	2015/11/26	101.248	4.376	2015/12/8	114.792	2.76
2015/11/27	83.172	2.792	2015/11/27	80.329	-0.187	2015/11/27	131.2539	1.166	2015/11/27	101.245	4.373	2015/12/9	114.794	2.762
2015/11/28	83.172	2.792	2015/11/28	80.335	-0.181	2015/11/28	131.2726	1.154	2015/11/28	101.245	4.373	2015/12/10	114.776	2.744
2015/11/29	83.177	2.797	2015/11/29	80.337	-0.179	2015/11/29	131.2902	1.141	2015/11/29	101.256	4.384	2015/12/11	114.787	2.755
2015/11/30	83.181	2.801	2015/11/30	80.335	-0.181	2015/11/30	131.3009	1.121	2015/11/30	101.245	4.373	2015/12/12	114.785	2.753
2015/12/1	83.173	2.793	2015/12/1	80.339	-0.177	2015/12/1	131.3236	1.113	2015/12/1	101.258	4.386	2015/12/13	114.778	2.746
2015/12/2	83.172	2.792	2015/12/2	80.332	-0.184	2015/12/2	131.3322	1.091	2015/12/2	101.248	4.376	2015/12/14	114.769	2.737
2015/12/3	83.187	2.807	2015/12/3	80.335	-0.181	2015/12/3	131.3509	1.079	2015/12/3	101.26	4.388	2015/12/15	114.778	2.746
2015/12/4	83.169	2.789	2015/12/4	80.329	-0.187	2015/12/4	131.3516	1.049	2015/12/4	101.236	4.364	2015/12/16	114.765	2.733
2015/12/5	83.1	2.72	2015/12/5	80.326	-0.19	2015/12/5	131.3673	1.034	2015/12/5	101.212	4.34	2015/12/17	114.763	2.731
2015/12/6	83.11	2.73	2015/12/6	80.327	-0.189	2015/12/6	131.3869	1.023	2015/12/6	101.21	4.338	2015/12/18	114.762	2.73
2015/12/7	83.149	2.769	2015/12/7	80.327	-0.189	2015/12/7	131.3966	1.002	2015/12/7	101.204	4.332	2015/12/19	114.752	2.72
2015/12/8	83.134	2.754	2015/12/8	80.327	-0.189	2015/12/8	131.4153	0.99	2015/12/8	101.204	4.332	2015/12/20	114.747	2.715
2015/12/9	83.163	2.783	2015/12/9	80.329	-0.187	2015/12/9	131.4299	0.974	2015/12/9	101.206	4.334	2015/12/21	114.743	2.711
2015/12/10	83.124	2.744	2015/12/10	80.329	-0.187	2015/12/10	131.4426	0.956	2015/12/10	101.185	4.313	2015/12/22	114.737	2.705
2015/12/11	83.147	2.767	2015/12/11	80.328	-0.188	2015/12/11	131.4603	0.943	2015/12/11	101.196	4.324	2015/12/23	114.746	2.714
2015/12/12	83.166	2.786	2015/12/12	80.325	-0.191	2015/12/12	131.474	0.926	2015/12/12	101.194	4.322	2015/12/24	114.733	2.701
2015/12/13	83.156	2.776	2015/12/13	80.325	-0.191	2015/12/13	131.4886	0.91	2015/12/13	101.19	4.318	2015/12/25	114.738	2.706
2015/12/14	83.144	2.764	2015/12/14	80.328	-0.188	2015/12/14	131.5043	0.895	2015/12/14	101.178	4.306	2015/12/26	114.727	2.695
2015/12/15	83.162	2.782	2015/12/15	80.325	-0.191	2015/12/15	131.523	0.883	2015/12/15	101.19	4.318	2015/12/27	114.718	2.686
2015/12/16	83.137	2.757	2015/12/16	80.327	-0.189	2015/12/16	131.5406	0.87	2015/12/16	101.18	4.308	2015/12/28	114.717	2.685
2015/12/17	83.138	2.758	2015/12/17	80.328	-0.188	2015/12/17	131.5573	0.856	2015/12/17	101.175	4.303	2015/12/29	114.717	2.685
2015/12/18	83.131	2.751	2015/12/18	80.327	-0.189	2015/12/18	131.572	0.84	2015/12/18	101.171	4.299	2015/12/30	114.731	2.699
2015/12/19	83.13	2.75	2015/12/19	80.326	-0.19	2015/12/19	131.5867	0.824	2015/12/19	101.161	4.289	2015/12/31	114.736	2.704
2015/12/20	83.116	2.736	2015/12/20	80.324	-0.192	2015/12/20	131.6063	0.813	2015/12/20	101.153	4.281	2016/1/1	114.724	2.692
2015/12/21	83.145	2.765	2015/12/21	80.323	-0.193	2015/12/21	131.618	0.794	2015/12/21	101.149	4.277	2016/1/2	114.719	2.687
2015/12/22	83.124	2.744	2015/12/22	80.326	-0.19	2015/12/22	131.6337	0.779	2015/12/22	101.143	4.271	2016/1/3	114.693	2.661
2015/12/23	83.124	2.744	2015/12/23	80.329	-0.187	2015/12/23	131.6583	0.773	2015/12/23	101.149	4.277	2016/1/4	114.683	2.651
2015/12/24	83.144	2.764	2015/12/24	80.328	-0.188	2015/12/24	131.667	0.751	2015/12/24	101.139	4.267	2016/1/5	114.701	2.669

W1-revised			W2-revised			W3-revised			W4-revised			W5-revised		
(daily data at 00:00)			(daily data at 00:00)			(daily data at 00:00)			(daily data at 00:00)			(daily data at 00:00)		
Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL	Date	Depth (m)	LEVEL
2015/12/25	83.137	2.757	2015/12/25	80.327	-0.189	2015/12/25	131.6877	0.741	2015/12/25	101.141	4.269	2016/1/6	114.709	2.677
2015/12/26	83.132	2.752	2015/12/26	80.328	-0.188	2015/12/26	131.6983	0.721	2015/12/26	101.133	4.261	2016/1/7	114.701	2.669
2015/12/27	83.12	2.74	2015/12/27	80.328	-0.188	2015/12/27	131.714	0.706	2015/12/27	101.124	4.252	2016/1/8	114.717	2.685
2015/12/28	83.119	2.739	2015/12/28	80.327	-0.189	2015/12/28	131.7317	0.693	2015/12/28	101.117	4.245	2016/1/9	114.706	2.674
2015/12/29	83.131	2.751	2015/12/29	80.327	-0.189	2015/12/29	131.7504	0.681	2015/12/29	101.117	4.245	2016/1/10	114.68	2.648
2015/12/30	83.172	2.792	2015/12/30	80.326	-0.19	2015/12/30	131.765	0.665	2015/12/30	101.137	4.265	2016/1/11	114.675	2.643
2015/12/31	83.169	2.839	2015/12/31	80.328	-0.188	2015/12/31	131.7857	0.655	2015/12/31	101.148	4.276	2016/1/12	114.682	2.65
2016/1/1	83.153	2.773	2016/1/1	80.325	-0.191	2016/1/1	131.8044	0.643	2016/1/1	101.139	4.267	2016/1/13	114.682	2.65
2016/1/2	83.148	2.768	2016/1/2	80.314	-0.202	2016/1/2	131.818	0.626	2016/1/2	101.14	4.268	2016/1/14	114.686	2.654
2016/1/3	83.083	2.703	2016/1/3	80.321	-0.195	2016/1/3	131.8377	0.615	2016/1/3	101.108	4.236	2016/1/15	114.68	2.648
2016/1/4	83.088	2.708	2016/1/4	80.32	-0.196	2016/1/4	131.8524	0.599	2016/1/4	101.095	4.223	2016/1/16	114.651	2.619
2016/1/5	83.121	2.741	2016/1/5	80.323	-0.193	2016/1/5	131.8801	0.596	2016/1/5	101.11	4.238	2016/1/17	114.651	2.619
2016/1/6	83.147	2.767	2016/1/6	80.328	-0.188	2016/1/6	131.8977	0.583	2016/1/6	101.11	4.249	2016/1/18	114.661	2.629
2016/1/7	83.115	2.735	2016/1/7	80.332	-0.184	2016/1/7	131.9234	0.578	2016/1/7	101.11	4.238	2016/1/19	114.673	2.641
2016/1/8	83.14	2.76	2016/1/8	80.33	-0.186	2016/1/8	131.9431	0.567	2016/1/8	101.126	4.254	2016/1/20	114.653	2.621
2016/1/9	83.168	2.788	2016/1/9	80.334	-0.182	2016/1/9	131.9567	0.55	2016/1/9	101.118	4.246	2016/1/21	114.632	2.6
2016/1/10	83.097	2.717	2016/1/10	80.329	-0.187	2016/1/10	131.9674	0.53	2016/1/10	101.092	4.22	2016/1/22	114.636	2.604
2016/1/11	83.068	2.688	2016/1/11	80.33	-0.186	2016/1/11	131.9871	0.519	2016/1/11	101.078	4.206	2016/1/23	114.634	2.602
2016/1/12	83.114	2.734	2016/1/12	80.328	-0.188	2016/1/12	132.0038	0.505	2016/1/12	101.082	4.21	2016/1/24	114.64	2.608
2016/1/13	83.117	2.737	2016/1/13	80.331	-0.185	2016/1/13	132.0314	0.502	2016/1/13	101.082	4.21	2016/1/25	114.641	2.609
2016/1/14	83.136	2.756	2016/1/14	80.332	-0.184	2016/1/14	132.0421	0.482	2016/1/14	101.086	4.214	2016/1/26	114.615	2.583
2016/1/15	83.154	2.774	2016/1/15	80.332	-0.184	2016/1/15	132.0608	0.47	2016/1/15	101.083	4.211	2016/1/27	114.597	2.565
2016/1/16	83.062	2.682	2016/1/16	80.33	-0.186	2016/1/16	132.0744	0.453	2016/1/16	101.048	4.176	2016/1/28	114.588	2.556
2016/1/17	83.08	2.7	2016/1/17	80.33	-0.186	2016/1/17	132.0931	0.441	2016/1/17	101.045	4.173	2016/1/29	114.586	2.554
2016/1/18	83.123	2.743	2016/1/18	80.328	-0.188	2016/1/18	132.1188	0.436	2016/1/18	101.055	4.183	2016/1/30	114.583	2.551
2016/1/19	83.168	2.788	2016/1/19	80.328	-0.188	2016/1/19	132.1315	0.418	2016/1/19	101.073	4.201	2016/1/31	114.58	2.548
2016/1/20	83.127	2.747	2016/1/20	80.335	-0.181	2016/1/20	132.1511	0.407	2016/1/20	101.053	4.181	2016/2/1	114.583	2.551
2016/1/21	83.052	2.672	2016/1/21	80.332	-0.184	2016/1/21	132.1638	0.389	2016/1/21	101.026	4.154	2016/2/2	114.585	2.553
2016/1/22	83.08	2.7	2016/1/22	80.33	-0.186	2016/1/22	132.1895	0.384	2016/1/22	101.027	4.155	2016/2/3	114.559	2.527
2016/1/23	83.114	2.734	2016/1/23	80.331	-0.185	2016/1/23	132.2031	0.367	2016/1/23	101.025	4.153	2016/2/4	114.56	2.528
2016/1/24	83.135	2.755	2016/1/24	80.331	-0.185	2016/1/24	132.2188	0.352	2016/1/24	101.031	4.159	2016/2/5	114.558	2.526
2016/1/25	83.142	2.762	2016/1/25	80.329	-0.187	2016/1/25	132.2415	0.344	2016/1/25	101.038	4.166	2016/2/6	114.571	2.539
2016/1/26	83.101	2.721	2016/1/26	80.324	-0.192	2016/1/26	132.2522	0.324	2016/1/26	101.012	4.14	2016/2/7	114.565	2.533
2016/1/27	83.053	2.673	2016/1/27	80.324	-0.192	2016/1/27	132.2678	0.309	2016/1/27	100.991	4.119	2016/2/8	114.549	2.517
2016/1/28	83.047	2.667	2016/1/28	80.321	-0.195	2016/1/28	132.2835	0.294	2016/1/28	100.979	4.107	2016/2/9	114.525	2.493
2016/1/29	83.075	2.695	2016/1/29	80.319	-0.197	2016/1/29	132.3002	0.28	2016/1/29	100.971	4.099	2016/2/10	114.535	2.503
2016/1/30	83.066	2.686	2016/1/30	80.325	-0.191	2016/1/30	132.3248	0.274	2016/1/30	100.968	4.096	2016/2/11	114.537	2.505
2016/1/31	83.075	2.695	2016/1/31	80.325	-0.191	2016/1/31	132.3435	0.262	2016/1/31	100.965	4.093	2016/2/12	114.525	2.493
2016/2/1	83.093	2.713	2016/2/1	80.328	-0.188	2016/2/1	132.3652	0.253	2016/2/1	100.962	4.09	2016/2/13	114.516	2.484
2016/2/2	83.119	2.739	2016/2/2	80.33	-0.186	2016/2/2	132.3889	0.246	2016/2/2	100.97	4.098	2016/2/14	114.524	2.492
2016/2/3	83.078	2.698	2016/2/3	80.328	-0.188	2016/2/3	132.3965	0.223	2016/2/3	100.941	4.069	2016/2/15	114.509	2.477
2016/2/4	83.055	2.675	2016/2/4	80.326	-0.19	2016/2/4	132.4162	0.212	2016/2/4	100.939	4.067	2016/2/16	114.501	2.469
2016/2/5	83.08	2.7	2016/2/5	80.327	-0.189	2016/2/5	132.4359	0.201	2016/2/5	100.934	4.062	2016/2/17	114.5	2.468
2016/2/6	83.126	2.746	2016/2/6	80.328	-0.188	2016/2/6	132.4585	0.193	2016/2/6	100.953	4.081	2016/2/18	114.516	2.484
2016/2/7	83.141	2.761	2016/2/7	80.328	-0.188	2016/2/7	132.4832	0.187	2016/2/7	100.953	4.081	2016/2/19	114.519	2.487
2016/2/8	83.104	2.724	2016/2/8	80.333	-0.183	2016/2/8	132.5039	0.177	2016/2/8	100.94	4.068	2016/2/20	114.517	2.485
2016/2/9	83.029	2.649	2016/2/9	80.327	-0.189	2016/2/9	132.5166	0.159	2016/2/9	100.907	4.035	2016/2/21	114.48	2.448
2016/2/10	83.057	2.677	2016/2/10	80.328	-0.188	2016/2/10	132.5362	0.148	2016/2/10	100.914	4.042	2016/2/22	114.498	2.466
2016/2/11	83.092	2.712	2016/2/11	80.327	-0.189	2016/2/11	132.5569	0.138	2016/2/11	100.916	4.044	2016/2/23	114.467	2.435
2016/2/12	83.083	2.703	2016/2/12	80.327	-0.189	2016/2/12	132.5756	0.126	2016/2/12	100.904	4.032	2016/2/24	114.491	2.459
2016/2/13	83.062	2.682	2016/2/13	80.327	-0.189	2016/2/13	132.5942	0.114	2016/2/13	100.895	4.023	2016/2/25	114.475	2.443
2016/2/14	83.088	2.708	2016/2/14	80.329	-0.187	2016/2/14	132.6209	0.11	2016/2/14	100.9	4.028	2016/2/26	114.459	2.427
2016/2/15	83.076	2.696	2016/2/15	80.329	-0.187	2016/2/15	132.6336	0.092	2016/2/15	100.888	4.016	2016/2/27	114.459	2.427
2016/2/16	83.044	2.664	2016/2/16	80.333	-0.183	2016/2/16	132.6563	0.084	2016/2/16	100.877	4.005	2016/2/28	114.465	2.433

W1-revised Date	(daily data at 00:00)		W2-revised Date	(daily data at 00:00)		W3-revised Date	(daily data at 00:00)		W4-revised Date	(daily data at 00:00)		W5-revised Date	(daily data at 00:00)	
	Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL
2016/2/17	83052	2.672	2016/2/17	80335	-0.181	2016/2/17	132.6769	0.074	2016/2/17	100.873	4.001	2016/2/29	114.434	2.402
2016/2/18	83095	2.715	2016/2/18	80339	-0.177	2016/2/18	132.7026	0.069	2016/2/18	100.889	4.017	2016/3/1	114.438	2.406
2016/2/19	83143	2.763	2016/2/19	80336	-0.18	2016/2/19	132.7183	0.054	2016/2/19	100.895	4.023	2016/3/2	114.44	2.408
2016/2/20	83129	2.749	2016/2/20	80337	-0.179	2016/2/20	132.7379	0.043	2016/2/20	100.899	4.027	2016/3/3	114.442	2.41
2016/2/21	83068	2.688	2016/2/21	80333	-0.183	2016/2/21	132.7496	0.024	2016/2/21	100.862	3.99	2016/3/4	114.467	2.435
2016/2/22	83071	2.691	2016/2/22	80339	-0.177	2016/2/22	132.7773	0.021	2016/2/22	100.88	4.008	2016/3/5	114.459	2.427
2016/2/23	83043	2.663	2016/2/23	80341	-0.175	2016/2/23	132.792	0.005	2016/2/23	100.849	3.977	2016/3/6	114.454	2.422
2016/2/24	83076	2.696	2016/2/24	80338	-0.178	2016/2/24	132.8166	-0.001	2016/2/24	100.87	3.998	2016/3/7	114.424	2.392
2016/2/25	83081	2.701	2016/2/25	80337	-0.179	2016/2/25	132.8313	-0.017	2016/2/25	100.854	3.982	2016/3/8	114.434	2.402
2016/2/26	83047	2.667	2016/2/26	80336	-0.18	2016/2/26	132.849	-0.03	2016/2/26	100.835	3.963	2016/3/9	114.432	2.4
2016/2/27	83041	2.661	2016/2/27	80339	-0.177	2016/2/27	132.8706	-0.039	2016/2/27	100.835	3.963	2016/3/10	114.426	2.394
2016/2/28	83071	2.691	2016/2/28	80339	-0.177	2016/2/28	132.8923	-0.048	2016/2/28	100.838	3.966	2016/3/11	114.424	2.392
2016/2/29	83031	2.651	2016/2/29	80335	-0.181	2016/2/29	132.907	-0.07	2016/2/29	100.807	3.935	2016/3/12	114.411	2.379
2016/3/1	83029	2.649	2016/3/1	80339	-0.177	2016/3/1	132.9267	-0.075	2016/3/1	100.805	3.933	2016/3/13	114.4	2.368
2016/3/2	83076	2.696	2016/3/2	80338	-0.178	2016/3/2	132.9443	-0.088	2016/3/2	100.81	3.938	2016/3/14	114.393	2.378
2016/3/3	83099	2.719	2016/3/3	8034	-0.176	2016/3/3	132.953	-0.11	2016/3/3	100.812	3.94	2016/3/15	114.395	2.621
2016/3/4	83049	3.941	2016/3/4	80339	5.753	2016/3/4	132.879	-0.184	2016/3/4	100.812	4.301	2016/3/16	114.352	2.578
2016/3/5	83023	3.915	2016/3/5	80334	5.748	2016/3/5	133.069	0.006	2016/3/5	100.804	4.293	2016/3/17	114.339	2.565
2016/3/6	83012	3.904	2016/3/6	80329	5.743	2016/3/6	133.01	-0.053	2016/3/6	100.802	4.291	2016/3/18	114.331	2.557
2016/3/7	82973	3.865	2016/3/7	80323	5.737	2016/3/7	132.956	-0.107	2016/3/7	100.772	4.261	2016/3/19	114.331	3.683
2016/3/8	82971	3.863	2016/3/8	80321	5.735	2016/3/8	132.891	-0.172	2016/3/8	100.776	4.265	2016/3/20	114.391	3.743
2016/3/9	83008	3.9	2016/3/9	80319	5.733	2016/3/9	132.805	-0.258	2016/3/9	100.777	4.266	2016/3/21	114.367	3.719
2016/3/10	83002	3.894	2016/3/10	80316	5.73	2016/3/10	133	-0.063	2016/3/10	100.771	4.26	2016/3/22	114.381	3.733
2016/3/11	82997	3.889	2016/3/11	80314	5.728	2016/3/11	132.911	-0.152	2016/3/11	100.766	4.255	2016/3/23	114.374	3.726
2016/3/12	82978	3.87	2016/3/12	80307	5.721	2016/3/12	132.853	-0.21	2016/3/12	100.753	4.242	2016/3/24	114.371	3.723
2016/3/13	82973	3.865	2016/3/13	80302	5.716	2016/3/13	132.881	-0.182	2016/3/13	100.739	4.228	2016/3/25	114.376	3.728
2016/3/14	82998	3.89	2016/3/14	803	5.714	2016/3/14	132.885	-0.178	2016/3/14	100.749	4.238	2016/3/26	114.369	3.721
2016/3/15	83081	4.193	2016/3/15	80298	3.2	2016/3/15	133.104	0.041	2016/3/15	100.749	4.487	2016/3/27	114.371	3.723
2016/3/16	82966	4.078	2016/3/16	80306	3.208	2016/3/16	133.1	0.037	2016/3/16	100.706	4.444	2016/3/28	114.363	3.715
2016/3/17	82947	4.059	2016/3/17	80305	3.207	2016/3/17	133.099	0.036	2016/3/17	100.683	4.431	2016/3/29	114.367	3.719
2016/3/18	82954	4.066	2016/3/18	80318	3.22	2016/3/18	133.097	0.034	2016/3/18	100.682	4.42	2016/3/30	114.345	3.697
2016/3/19	8295	3.677	2016/3/19	80316	3.218	2016/3/19	133.065	0.002	2016/3/19	100.682	3.458	2016/3/31	114.341	3.693
2016/3/20	82936	3.728	2016/3/20	80313	3.215	2016/3/20	133.068	0.005	2016/3/20	100.686	3.512	2016/4/1	114.33	3.682
2016/3/21	82942	3.734	2016/3/21	80307	3.209	2016/3/21	133.056	-0.007	2016/3/21	100.683	3.509	2016/4/2	114.335	3.687
2016/3/22	82929	3.721	2016/3/22	80307	3.556	2016/3/22	133.094	0.031	2016/3/22	100.697	3.523	2016/4/3	114.347	3.699
2016/3/23	82952	3.744	2016/3/23	80309	3.558	2016/3/23	133.096	0.033	2016/3/23	100.702	3.528	2016/4/4	114.322	3.674
2016/3/24	82946	3.738	2016/3/24	80306	3.555	2016/3/24	133.096	0.033	2016/3/24	100.702	3.528	2016/4/5	114.329	3.681
2016/3/25	82951	3.743	2016/3/25	80305	3.554	2016/3/25	133.104	0.041	2016/3/25	100.716	3.542	2016/4/6	114.32	3.672
2016/3/26	82998	3.79	2016/3/26	80301	3.55	2016/3/26	133.097	0.034	2016/3/26	100.715	3.541	2016/4/7	114.316	3.668
2016/3/27	82994	3.786	2016/3/27	803	3.549	2016/3/27	133.102	0.039	2016/3/27	100.723	3.549	2016/4/8	114.308	3.66
2016/3/28	82986	3.778	2016/3/28	80295	3.544	2016/3/28	133.1	0.037	2016/3/28	100.721	3.547	2016/4/9	114.313	3.665
2016/3/29	83014	3.806	2016/3/29	80293	3.542	2016/3/29	133.101	0.038	2016/3/29	100.731	3.557	2016/4/10	114.31	3.662
2016/3/30	82947	3.739	2016/3/30	80286	3.535	2016/3/30	133.097	0.034	2016/3/30	100.709	3.535	2016/4/11	114.304	3.656
2016/3/31	82943	3.735	2016/3/31	80282	3.531	2016/3/31	133.099	0.036	2016/3/31	100.702	3.528	2016/4/12	114.309	3.661
2016/4/1	82956	3.748	2016/4/1	80283	3.532	2016/4/1	133.097	0.034	2016/4/1	100.694	3.52	2016/4/13	114.293	3.645
2016/4/2	82961	3.753	2016/4/2	80276	3.525	2016/4/2	133.096	0.033	2016/4/2	100.693	3.519	2016/4/14	114.292	3.644
2016/4/3	83012	3.804	2016/4/3	80272	3.525	2016/4/3	133.102	0.039	2016/4/3	100.711	3.537	2016/4/15	114.32	3.631
2016/4/4	82981	3.773	2016/4/4	80272	3.521	2016/4/4	133.095	0.032	2016/4/4	100.689	3.515			
2016/4/5	82988	3.78	2016/4/5	8027	3.519	2016/4/5	133.099	0.036	2016/4/5	100.696	3.522			
2016/4/6	82997	3.789	2016/4/6	80264	3.513	2016/4/6	133.096	0.033	2016/4/6	100.693	3.519			
2016/4/7	82987	3.779	2016/4/7	80263	3.512	2016/4/7	133.098	0.035	2016/4/7	100.692	3.518			
2016/4/8	82967	3.759	2016/4/8	80261	3.51	2016/4/8	133.099	0.036	2016/4/8	100.681	3.507			
2016/4/9	82984	3.776	2016/4/9	8026	3.509	2016/4/9	133.101	0.038	2016/4/9	100.686	3.512			
2016/4/10	82996	3.788	2016/4/10	80257	3.506	2016/4/10	133.101	0.038	2016/4/10	100.686	3.512			
2016/4/11	82993	3.785	2016/4/11	80257	3.506	2016/4/11	133.101	0.038	2016/4/11	100.683	3.509			
2016/4/12	83013	3.805	2016/4/12	80253	3.502	2016/4/12	133.103	0.04	2016/4/12	100.691	3.517			
2016/4/13	83003	3.795	2016/4/13	80249	3.498	2016/4/13	133.099	0.036	2016/4/13	100.681	3.507			

W1-revised Date	(daily data at 00:00)		W2-revised Date	(daily data at 00:00)		W3-revised Date	(daily data at 00:00)		W4-revised Date	(daily data at 00:00)		W5-revised Date	(daily data at 00:00)	
	Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL		Depth (m)	LEVEL
2016/4/14	82.993	3.785	2016/4/14	80.248	3.497	2016/4/14	133.101	0.038	2016/4/14	100.68	3.506	2016/4/14	100.68	3.506
2016/4/15	82.971	3.763	2016/4/15	80.244	3.493	2016/4/15	133.1	0.037	2016/4/15	100.67	3.496	2016/4/15	100.67	3.496

Air Pressure Measurement by AWLR
(1: Daily Air Pressure)

Serial number:	Date		Time	LEVEL	TEMP.	Date	Time	LEVEL	TEMP.	Date	Time	LEVEL	TEMP.
4825874	2015/10/24	00:00:00	1.077	22.5	2015/12/20	00:00:00	1.164	19.4	2016/2/15	00:00:00	1.093	20.3	
Yeghvard (Air Pressure)	2015/10/25	00:00:00	1.064	22.4	2015/12/21	00:00:00	1.135	19.3	2016/2/16	00:00:00	1.149	22.7	
Location:	2015/10/26	00:00:00	1.058	22.8	2015/12/22	00:00:00	1.153	22.9	2016/2/17	00:00:00	1.174	23.4	
Armenia	2015/10/27	00:00:00	1.041	22.9	2015/12/23	00:00:00	1.153	20.6	2016/2/18	00:00:00	1.125	23.9	
LEVEL	2015/10/28	00:00:00	1.036	22.6	2015/12/24	00:00:00	1.136	22.5	2016/2/19	00:00:00	1.02	23.3	
UNIT: m	2015/10/29	00:00:00	1.053	22.1	2015/12/25	00:00:00	1.131	22.5	2016/2/20	00:00:00	0.968	22.7	
Offset: 0.000000 m	2015/10/30	00:00:00	1.082	21.7	2015/12/26	00:00:00	1.133	21.5	2016/2/21	00:00:00	1.014	21.9	
Altitude: 1250.000000 m	2015/10/31	00:00:00	1.088	22.4	2015/12/27	00:00:00	1.157	19.6	2016/2/22	00:00:00	1.066	22.3	
TEMPERATURE	2015/11/1	00:00:00	1.126	22.6	2015/12/28	00:00:00	1.117	18.1	2016/2/23	00:00:00	1.066	22.7	
UNIT: -C	2015/11/2	00:00:00	1.158	22.5	2015/12/29	00:00:00	1.155	17.1	2016/2/24	00:00:00	1.03	23.3	
	2015/11/3	00:00:00	1.132	22	2015/12/30	00:00:00	1.069	16.4	2016/2/25	00:00:00	1.016	24.5	
	2015/11/4	00:00:00	1.101	22.1	2015/12/31	00:00:00	0.944	17	2016/2/26	00:00:00	1.062	23.6	
	2015/11/5	00:00:00	1.105	22.9	2016/1/1	00:00:00	0.968	18.3	2016/2/27	00:00:00	1.095	23.4	
	2015/11/6	00:00:00	1.073	22.6	2016/1/2	00:00:00	0.949	18.6	2016/2/28	00:00:00	1.068	22	
	2015/11/7	00:00:00	1.077	22.5	2016/1/3	00:00:00	1.05	18.7	2016/2/29	00:00:00	1.129	20.6	
	2015/11/8	00:00:00	1.09	21.6	2016/1/4	00:00:00	1.087	18.7	2016/3/1	00:00:00	1.167	22.5	
	2015/11/9	00:00:00	1.04	20.5	2016/1/5	00:00:00	1.051	18.4	2016/3/2	00:00:00	1.12	23.5	
	2015/11/10	00:00:00	0.986	22.1	2016/1/6	00:00:00	1.007	18.2	2016/3/3	00:00:00	1.055	22.7	
	2015/11/11	00:00:00	0.987	22.6	2016/1/7	00:00:00	1.039	18.5	2016/3/4	00:00:00	0.997	23.6	
	2015/11/12	00:00:00	0.965	22.5	2016/1/8	00:00:00	0.993	18.8	2016/3/5	00:00:00	0.993	23.5	
	2015/11/13	00:00:00	1.077	21.8	2016/1/9	00:00:00	0.947	19.1	2016/3/6	00:00:00	0.98	22.3	
	2015/11/14	00:00:00	1.049	21.1	2016/1/10	00:00:00	1.021	19.4	2016/3/7	00:00:00	1.028	21.3	
	2015/11/15	00:00:00	1.096	20.2	2016/1/11	00:00:00	1.095	19.8	2016/3/8	00:00:00	1.048	20.9	
	2015/11/16	00:00:00	1.102	19.6	2016/1/12	00:00:00	1.073	19.8	2016/3/9	00:00:00	1.02	19.9	
	2015/11/17	00:00:00	1.058	20.5	2016/1/13	00:00:00	1.067	20.1	2016/3/10	00:00:00	1.017	21.3	
	2015/11/18	00:00:00	1.033	21	2016/1/14	00:00:00	1.03	20.3	2016/3/11	00:00:00	1.016	21.3	
	2015/11/19	00:00:00	1.067	21.4	2016/1/15	00:00:00	0.982	20.4	2016/3/12	00:00:00	1.038	22	
	2015/11/20	00:00:00	1.082	21.4	2016/1/16	00:00:00	1.098	20.6	2016/3/13	00:00:00	1.061	22.2	
	2015/11/21	00:00:00	1.091	20.9	2016/1/17	00:00:00	1.116	20.7	2016/3/14	00:00:00	1.03	21.1	
	2015/11/22	00:00:00	1.095	19.6	2016/1/18	00:00:00	1.067	20.6	2016/3/15	00:00:00	0.649	5.8	
	2015/11/23	00:00:00	1.136	18.8	2016/1/19	00:00:00	0.968	20.5	2016/3/16	00:00:00	0.743	1.4	
	2015/11/24	00:00:00	1.161	20	2016/1/20	00:00:00	0.988	19.3	2016/3/17	00:00:00	0.786	-2.1	
	2015/11/25	00:00:00	1.146	20.9	2016/1/21	00:00:00	1.096	21.5	2016/3/18	00:00:00	0.809	-4.6	
	2015/11/26	00:00:00	1.102	21.1	2016/1/22	00:00:00	1.11	20.4	2016/3/19	00:00:00	0.796	0.4	
	2015/11/27	00:00:00	1.093	20.8	2016/1/23	00:00:00	1.079	20.8	2016/3/20	00:00:00	0.769	3.6	
	2015/11/28	00:00:00	1.081	22	2016/1/24	00:00:00	1.022	20.1	2016/3/21	00:00:00	0.793	-2.9	
	2015/11/29	00:00:00	1.061	21.3	2016/1/25	00:00:00	0.964	17.8	2016/3/22	00:00:00	0.809	-2.8	
	2015/11/30	00:00:00	1.048	21	2016/1/26	00:00:00	0.993	17.8	2016/3/23	00:00:00	0.801	-3.6	
	2015/12/1	00:00:00	1.041	21.9	2016/1/27	00:00:00	1.068	19.8	2016/3/24	00:00:00	0.828	0.8	
	2015/12/2	00:00:00	1.033	22.4	2016/1/28	00:00:00	1.116	20.1	2016/3/25	00:00:00	0.829	4.8	
	2015/12/3	00:00:00	0.997	22.4	2016/1/29	00:00:00	1.112	20	2016/3/26	00:00:00	0.829	4.8	
	2015/12/4	00:00:00	1.012	22	2016/1/30	00:00:00	1.136	20.5	2016/3/27	00:00:00	0.768	5.2	
	2015/12/5	00:00:00	1.126	22.2	2016/1/31	00:00:00	1.145	19.6	2016/3/28	00:00:00	0.758	4.6	
	2015/12/6	00:00:00	1.164	21.6	2016/2/1	00:00:00	1.127	19.6	2016/3/29	00:00:00	0.706	5.4	
	2015/12/7	00:00:00	1.146	20.1	2016/2/2	00:00:00	1.077	20.6	2016/3/30	00:00:00	0.788	-0.3	
	2015/12/8	00:00:00	1.164	20.9	2016/2/3	00:00:00	1.112	20.9	2016/3/31	00:00:00	0.834	0.2	
	2015/12/9	00:00:00	1.129	21.3	2016/2/4	00:00:00	1.159	20.9	2016/4/1	00:00:00	0.86	1	
	2015/12/10	00:00:00	1.183	21.4	2016/2/5	00:00:00	1.155	21.4	2016/4/2	00:00:00	0.873	-2.8	
	2015/12/11	00:00:00	1.16	20.8	2016/2/6	00:00:00	1.073	22.9	2016/4/3	00:00:00	0.807	3.2	
	2015/12/12	00:00:00	1.126	20.7	2016/2/7	00:00:00	1.004	22.8	2016/4/4	00:00:00	0.832	1.1	
	2015/12/13	00:00:00	1.126	17.8	2016/2/8	00:00:00	1.017	20.7	2016/4/5	00:00:00	0.801	-1	
	2015/12/14	00:00:00	1.124	16.4	2016/2/9	00:00:00	1.122	21.5	2016/4/6	00:00:00	0.801	0.5	
	2015/12/15	00:00:00	1.082	19.9	2016/2/10	00:00:00	1.133	22.2	2016/4/7	00:00:00	0.802	3.6	
	2015/12/16	00:00:00	1.107	20.8	2016/2/11	00:00:00	1.095	22.9	2016/4/8	00:00:00	0.837	5.8	
	2015/12/17	00:00:00	1.115	20.4	2016/2/12	00:00:00	1.092	22.9	2016/4/9	00:00:00	0.829	3.6	
	2015/12/18	00:00:00	1.125	20.4	2016/2/13	00:00:00	1.116	24	2016/4/10	00:00:00	0.811	7.2	
	2015/12/19	00:00:00	1.141	20.2	2016/2/14	00:00:00	1.087	21.7	2016/4/11	00:00:00	0.805	8.2	

Date	Time	LEVEL	TEMP.
2016/4/12	0:00:00	0.767	10.6
2016/4/13	0:00:00	0.759	7.5
2016/4/14	0:00:00	0.76	9
2016/4/15	0:00:00	0.785	6.8