資料-11

参考資料

（4）物理探査結果

Result of Geophysical Survey and Drilling Points Siting

1. Introduction

Two dimensional resistivity survey method would be applied as geophysical survey. Comparing to one dimensional survey, namely VES Vertical Electrical Sounding) and HEP (horizontal Electrical Profiling), two dimensional survey can detect more complex structure of geology. If the geology is sedimentary rock area, layered structure can be expected. However, most of the geology in the target area is igneous rock or metamorphic rock consisted granite and gneiss, it is called Gneiss-Granulitic Complex. In such area, the geological structure is complicated, there are not only vertical changes but also horizontally changes. Additionally, high yield boreholes are required for the piped water supply schemes which will be constructed in this project. For the purpose, recharge system for groundwater should be considered. Target structure is deep weathered zone and fracture zone lying under the thick weathered zone. Because two dimensional resistivity survey can be obtained an image of resistivity cross section, it can be grasped variation of geological structure.

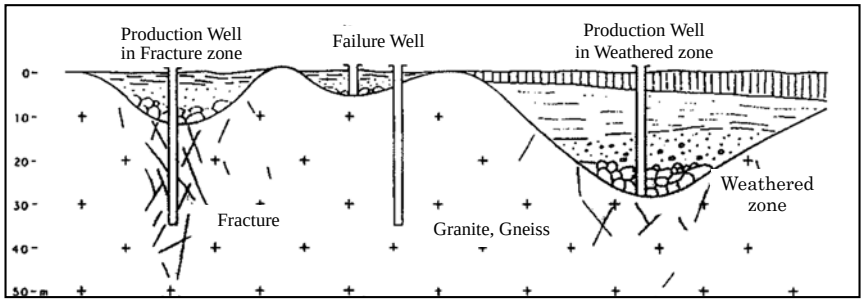


Figure 1 Image of Aquifer and Production Well in Gneiss-Granulite Complex

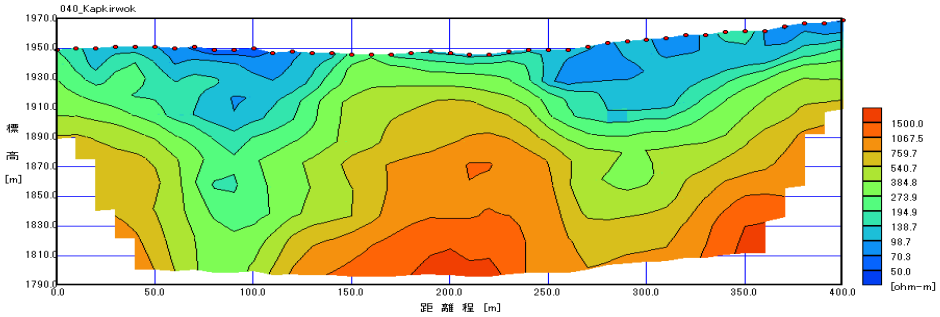


Figure 2 Example of Analyzed Image of 2-dimensional resistivity survey

2. Methodology

Figure 3 shows the schematic diagram of the field measurement of two-dimensional resistivity survey. This configuration is called “pole-pole array”. The procedure of the measurement is the following.

(i) Setting remote electrodes

Current electrode (C2) and potential electrode (P2) were set as remote electrodes at the two points located very far from the measuring line (ten times by exploration depth or more). These electrodes are called “remote electrode”. Then, these electrodes connect to resistivity survey equipment with cable.

(ii) Setting and connecting the electrodes along measuring line

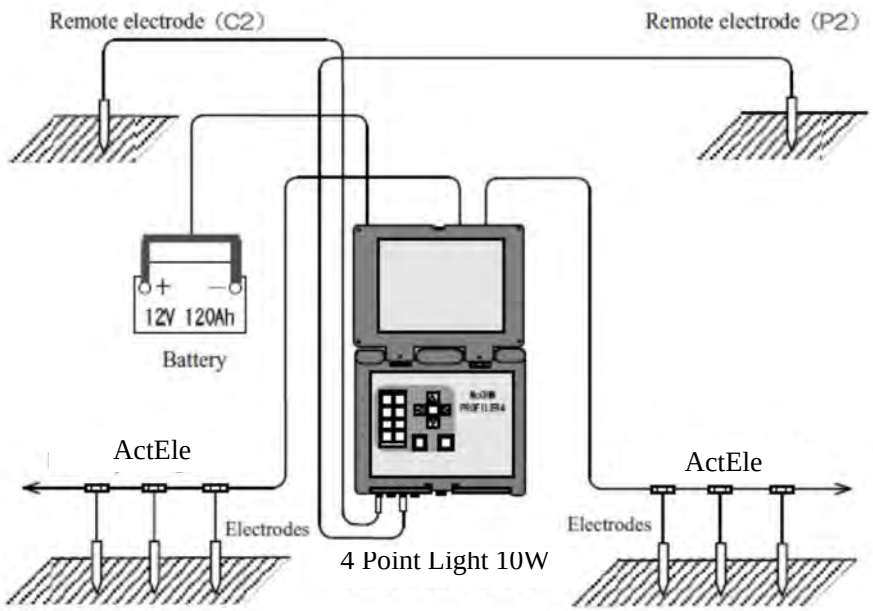


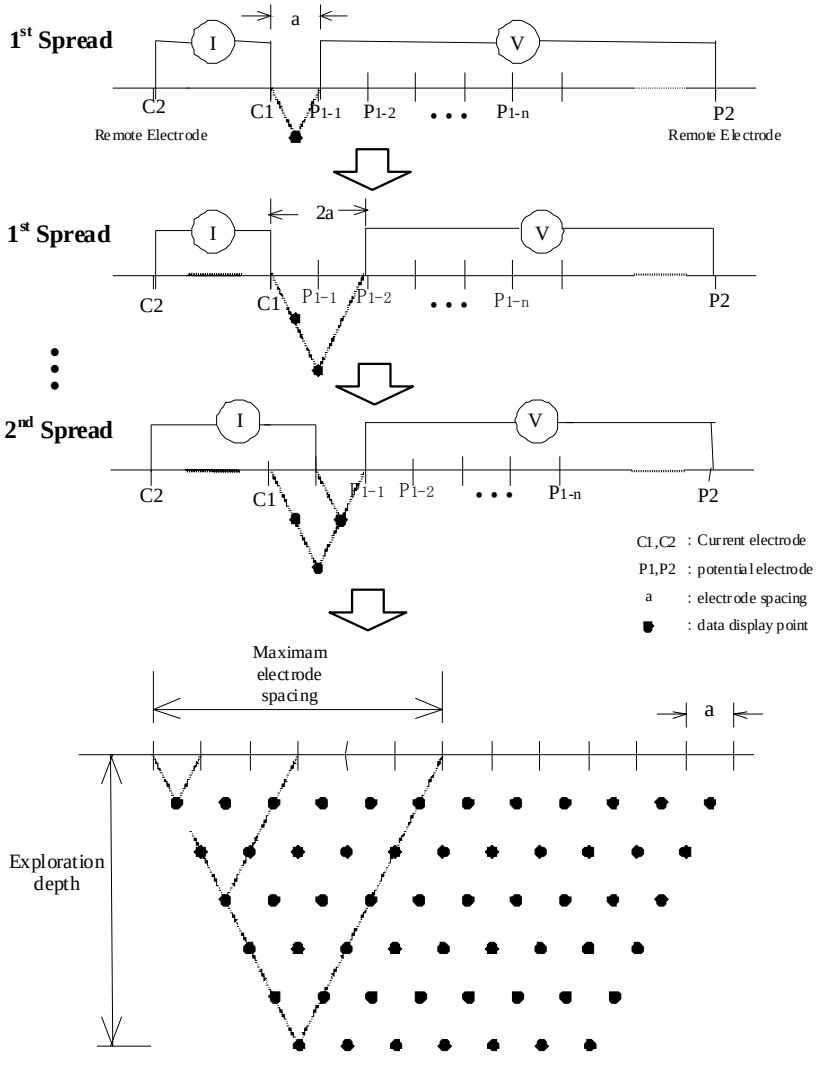
Figure 3　Schematic Diagram of 2-Dimensional Resistivity Survey

Electrodes are set with 5m spacing along measuring line. These electrodes are called “movable electrode”. These electrodes connect to resistivity survey equipment with takeout cable through scanner. The positions of each electrode are measured by using measuring tape and hand level.

(iii) Measurement of voltage

Figure 4 shows the procedure of measurement. Current electrode (C1) is fixed, and electric current is injected between C1 and C2. Electrical potential difference is measured between potential electrodes (from P1-1 to P1-n) and remote electrode (P2), respectively. If maximum electrode spacing was 100m, measurement was repeated from P1-1 to P1-10 (1st Spread).

Next, current electrode (C1) and potential electrode (P1-1 to



Exploration depth equals maximum electrode spacing, approximately.

Figure 4　Procedure of 2-Dimensional Resistivity Survey

P1-n) were moved 10m each. Then, measurement is repeated as same as the first Spread (2nd Spread).

Two-dimensional survey analysis becomes possible by acquiring many data in the section-shaped.

Analysis Method

An apparent resistivity is calculated from the measured data by following equation.

$$\rho_a = 2\pi a \frac{V}{I},$$

where, "*a*" is the electrode spacing from the current electrode to the potential electrode.

Apparent resistivity pseudo-section is drawn by plotting the apparent resistivity calculated by the above equation on the data display point (see **Figure 4**).

Theoretical potential data is calculated by FEM (Finite Element Method) from the initial model made from apparent resistivity pseudo-section. After theoretical potential data are calculated, the model of resistivity structure is modified to reduce the residuals between the theoretical data and the measured data, automatically. To find the model giving the minimum residuals, the non-linear least squares technique is applied. This modification process is iterated until the residuals become sufficiently small or subsequent changes to the model no longer improve the fitting. This procedure is called "inversion". At this point, the inversion program is considered to have converged. The final resistivity model is displayed as a color profile that clearly shows the resistivity structure.

An analysis program called "ElecImager/2D" developed by OYO Corporation in Japan was used for this study.

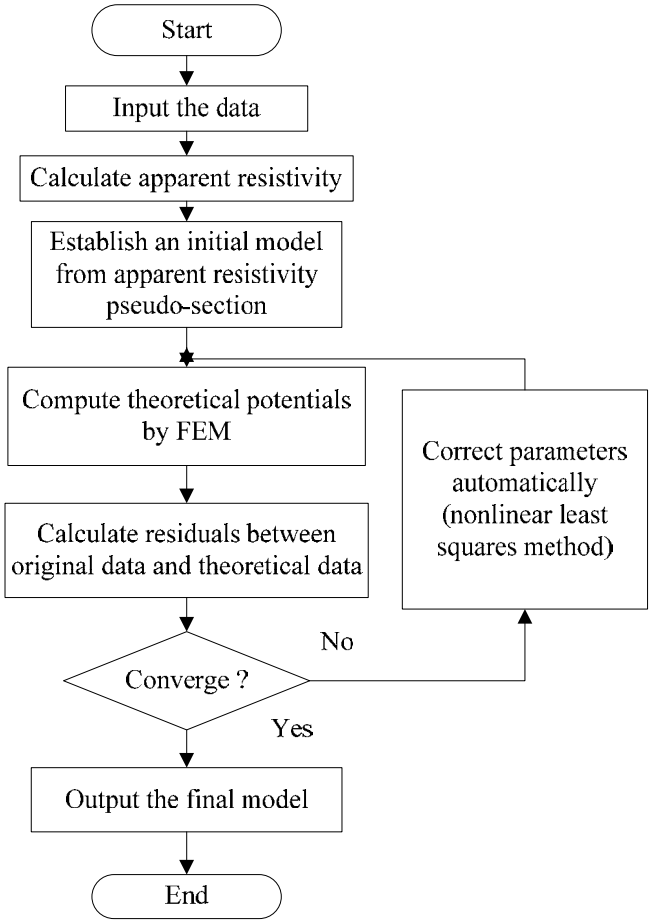


Figure 5 Flow Chart of 2-D Automatic Analysis.

Equipment and materials used in this survey are shown in Table 1.

Table 1 Specification of Equipment and Materials for the Survey

Name	Specification	Quantity	Manufacturer
Resistivity Meter	**4 Point light 10W** Output voltage: 380Vp-p Output current: 1μA ---100mA (Constant current) Frequency: 0.26 Hz --- 30 Hz Resolution Receiver: 100nV A/D resolution: 24 bits Display: 4x20 digit LCD Accuracy: 0.2% Weight: 750g Size: 250mm(W)×120mm(D)×50mm(H)	1 no	LIPPMANN Geophysical Instruments (Germany)
Electrode System	**ActEle - Active Electrodes** 10m interval Chain is extendable up to 255 electrodes Input Impedance: 1 GΩ at 1Hz Low power comsumption: 2mW/electrode	40 nos	LIPPMANN Geophysical Instruments (Germany)
Single Core Cable	**VSF 0.5sq** (Black & Red) Voltage:300Vmax, Current:5Amax 36.7 /km	2000m	Misawa (Japan)
Measuring Tape	Million Rope 100m (**MSR100**) Fiberglass measuring tape Width: 6.2mm, Thickness: 2mm	2 nos	Yamayo Measuring Tools Co., Ltd. (Japan)
Analysis Software	**ElecImager/2D** Electrical Potential simulation by Finite Element Method Function: Data Quality Control, Topographic correction, Remote electrode correction Maximum electrode number for analysis：200	1 no	OYO Corporation (Japan)

3. Measurement Plan

The quantities of geophysical survey are expected in the Table 2 tentatively.

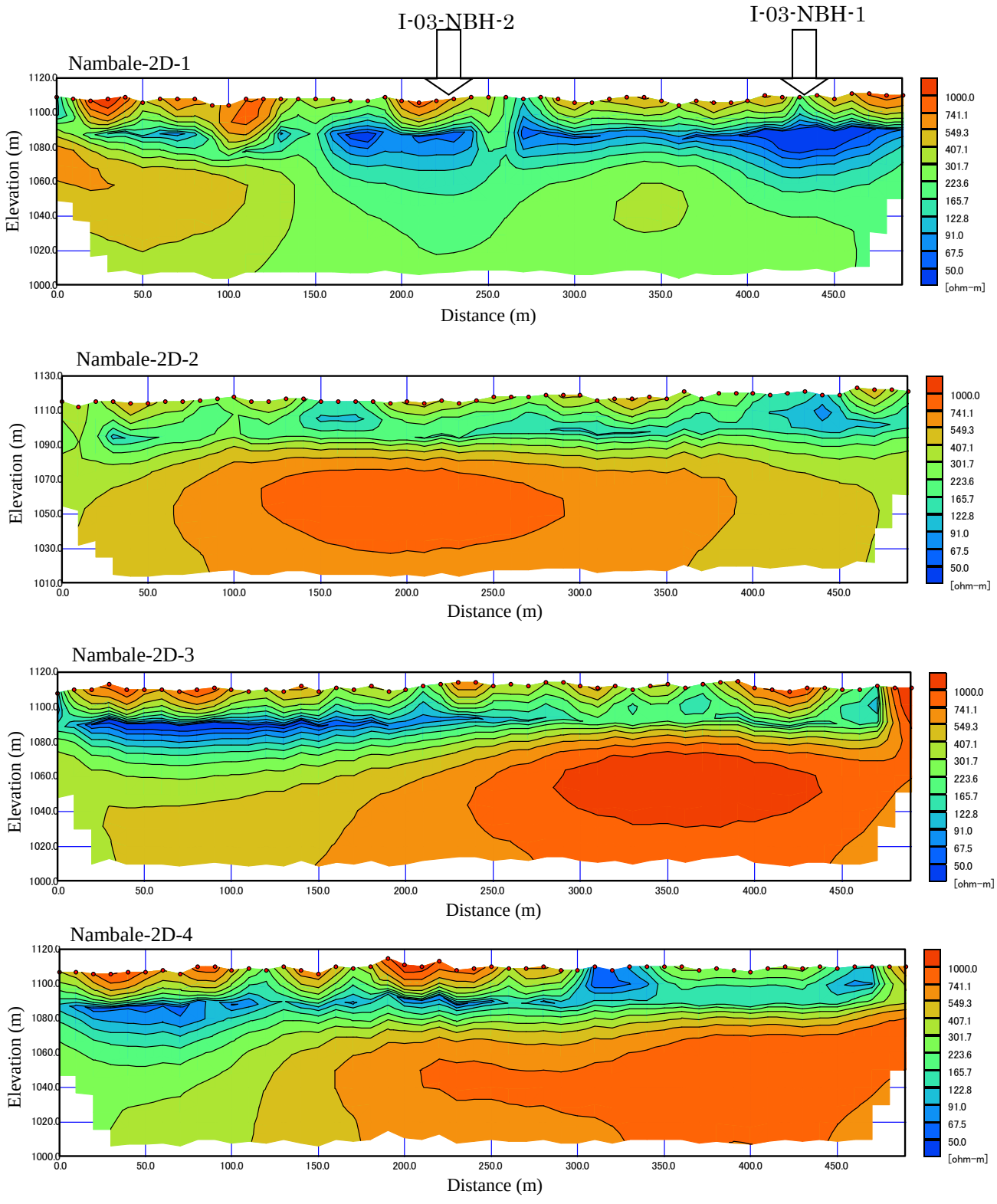
Table 2 Planned Quantities of Measurement of 2-D resistivity Survey

No.	Code.	RGC Name	District	County	Sub-county	Line Length	Exploration Depth	Measurement Lines
1	I-3	Nambale	Iganga	Kigulu	Nambale	500	100	4
2	I-6	Lambala	Luuka	Luuka	Irongo	500	100	4
3	I-9	Kyanvuma	Luuka	Luuka	Irongo	300	100	2
4	I-11	Nondwe	Iganga	Bugweri	Makuulu	500	100	4
5	P-2	Kasassira	Kibuku	Kibuku	Kasasira	500	100	4
6	P-4	Kapala	Pallisa	Pallisa	Gogonyo	300	100	2
7	P-5	Buseta	Kibuku	Kibuku	Buseta	300	100	2
Not specified, but some sites of the above						500	100	8
							Total	30

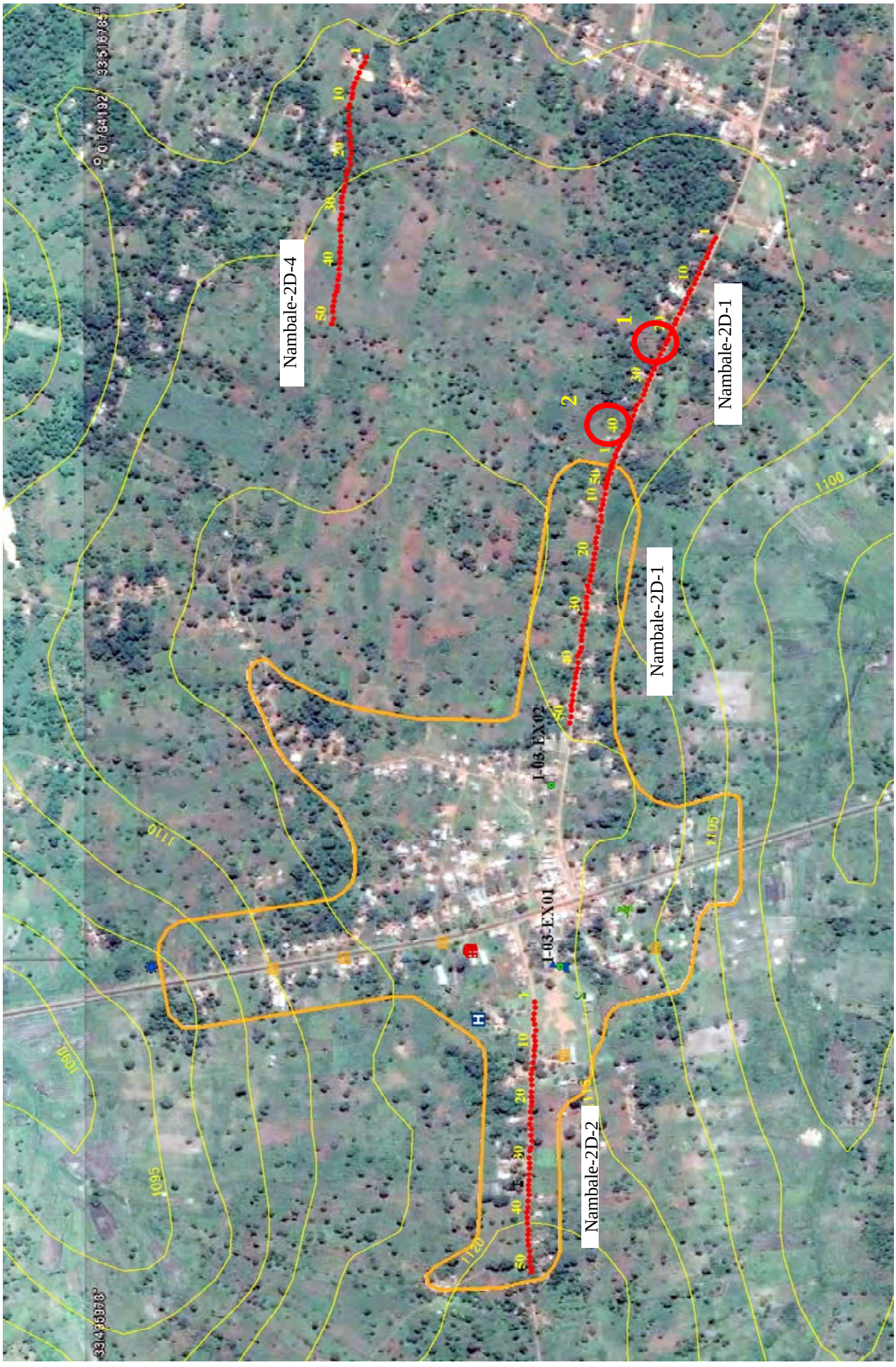
The geophysical survey will be conducted in two stages. The geophysical survey from Code I-3 to P-5 in the above table will be conducted in the first stage. After test borehole drilling for sited points from the result of the geophysical survey in the first stage, geophysical survey in the second stage will be conducted according to the result of the test drilling. Expected number of additional survey line is eight (8).

4. Result of 2-Dimensional Resistivity Survey

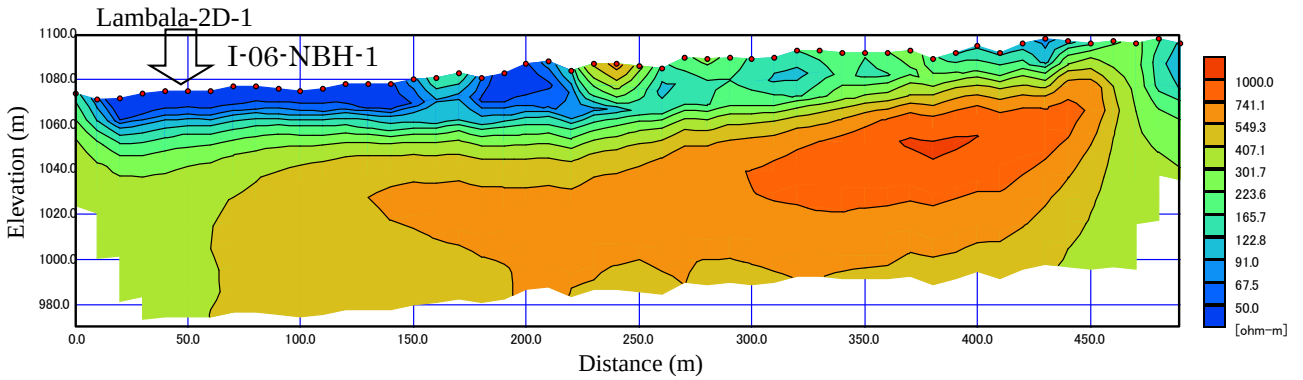
(1) 2-Dimentional Resistivity Survey Result in I-03 Nambale

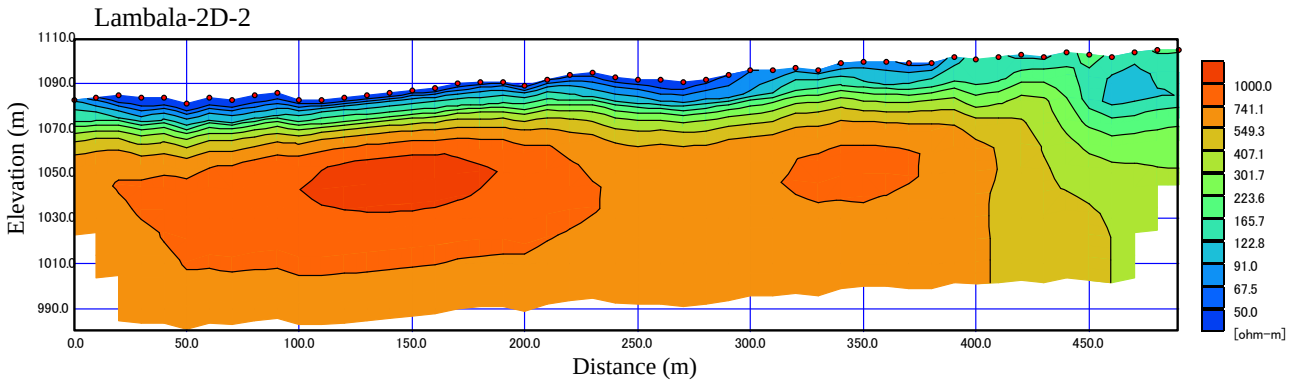


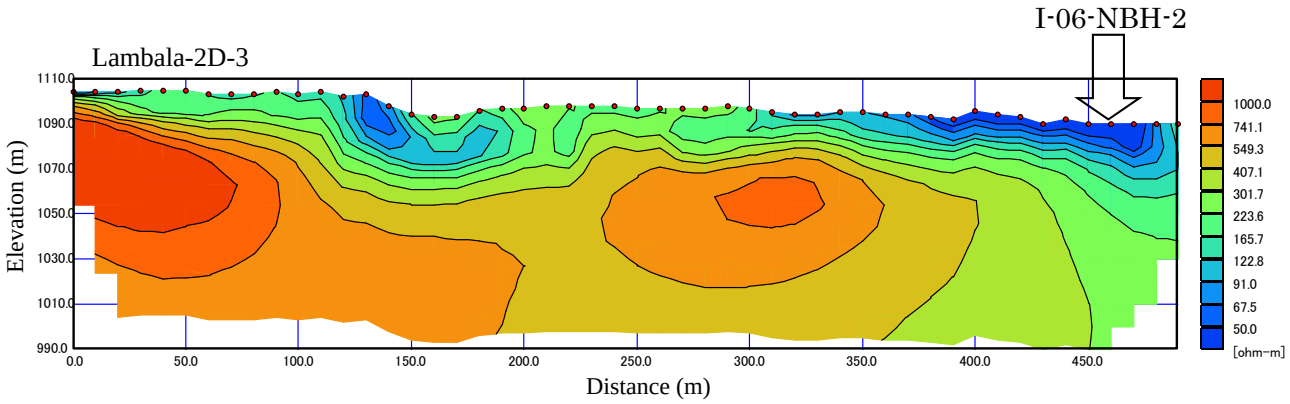
Distribution of 2-Dimentional Resistivity Survey Measurement Line in I-03 Nambale

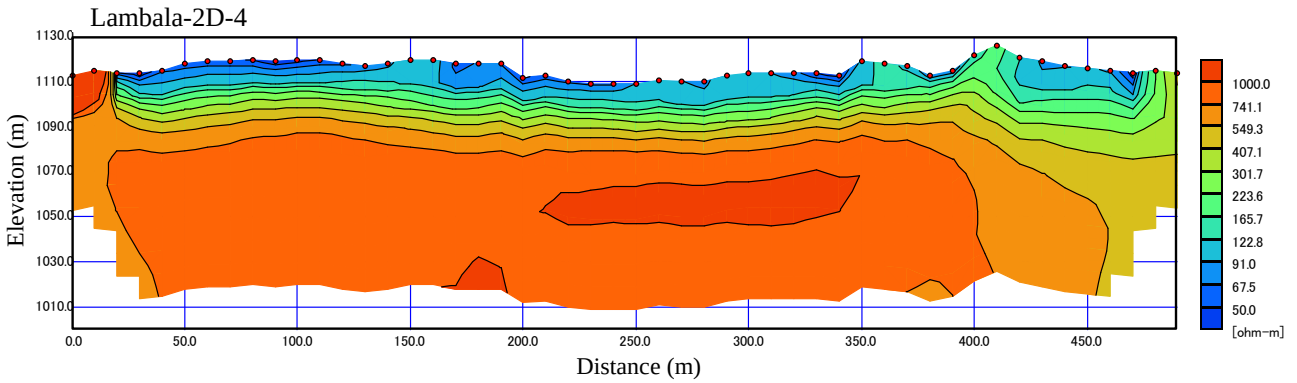


(2) 2-Dimentional Resistivity Survey Result in I-06 Lambala

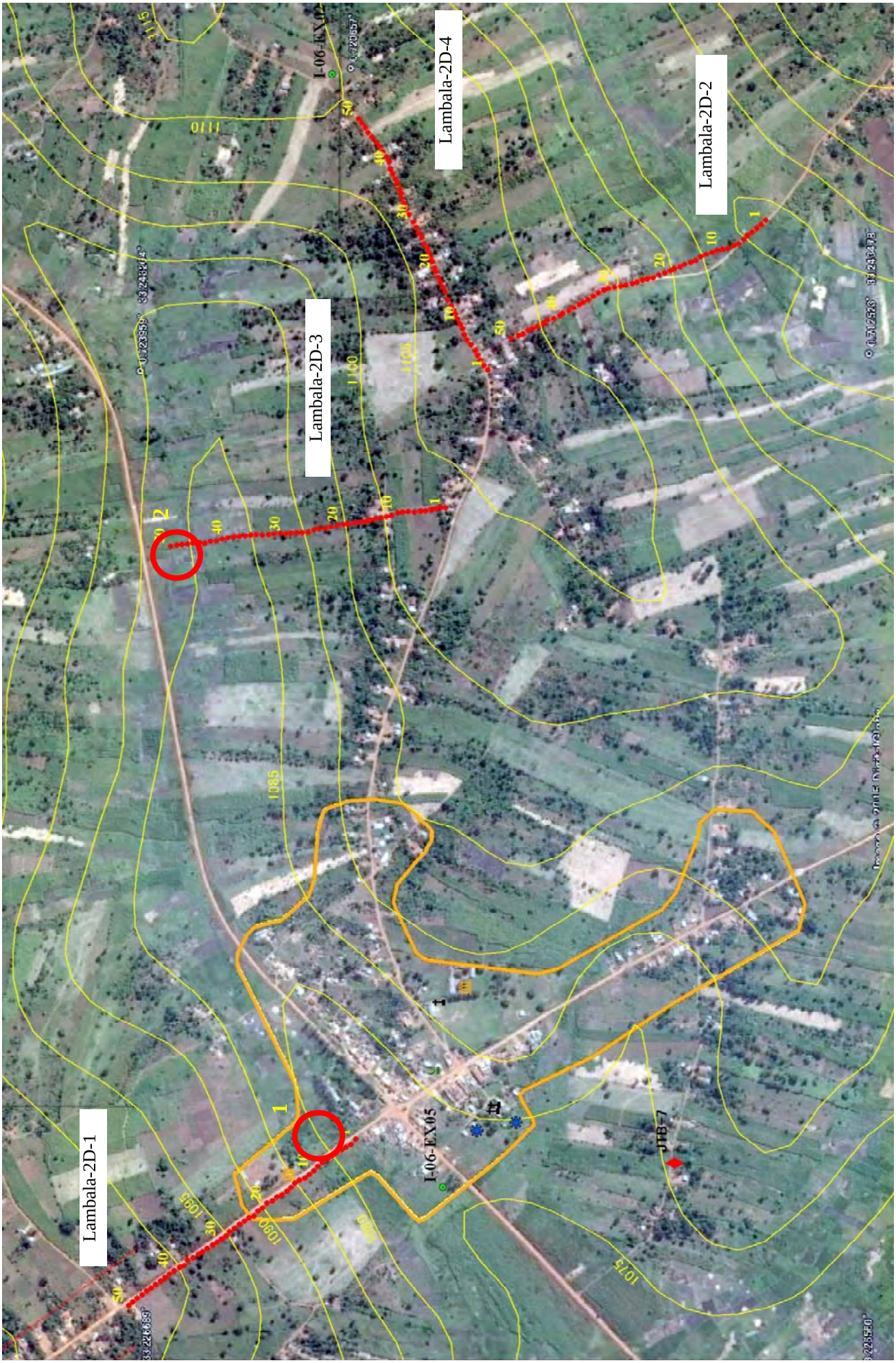




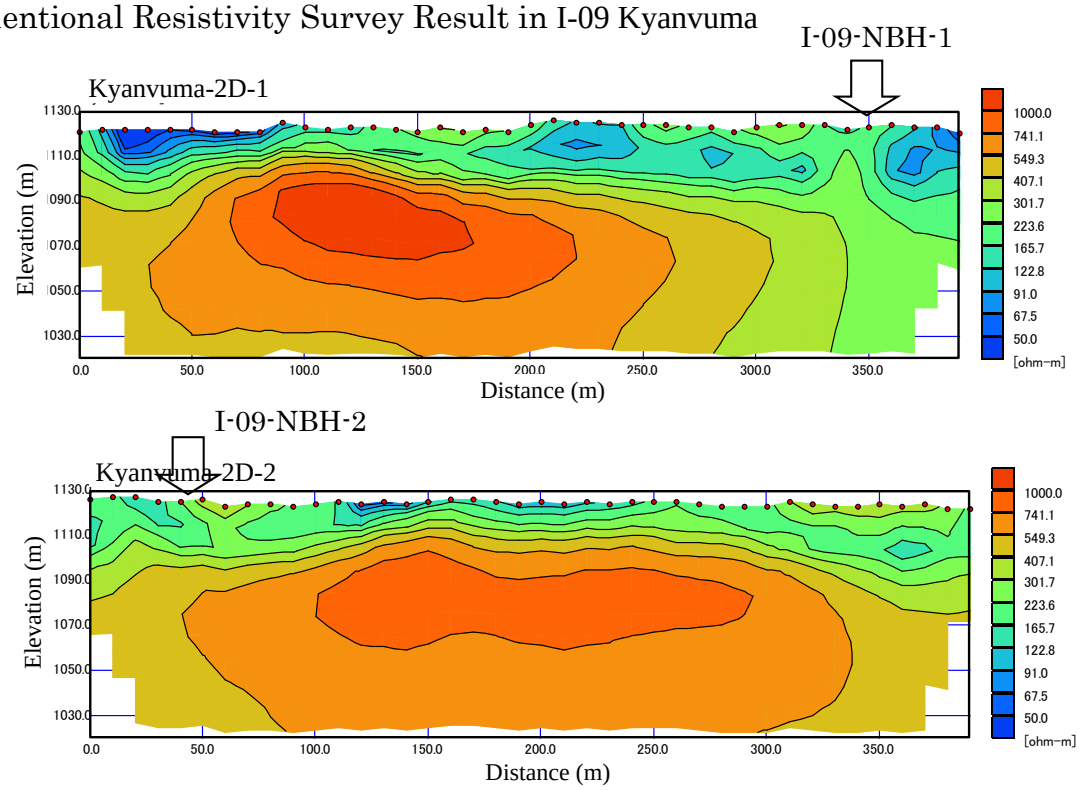




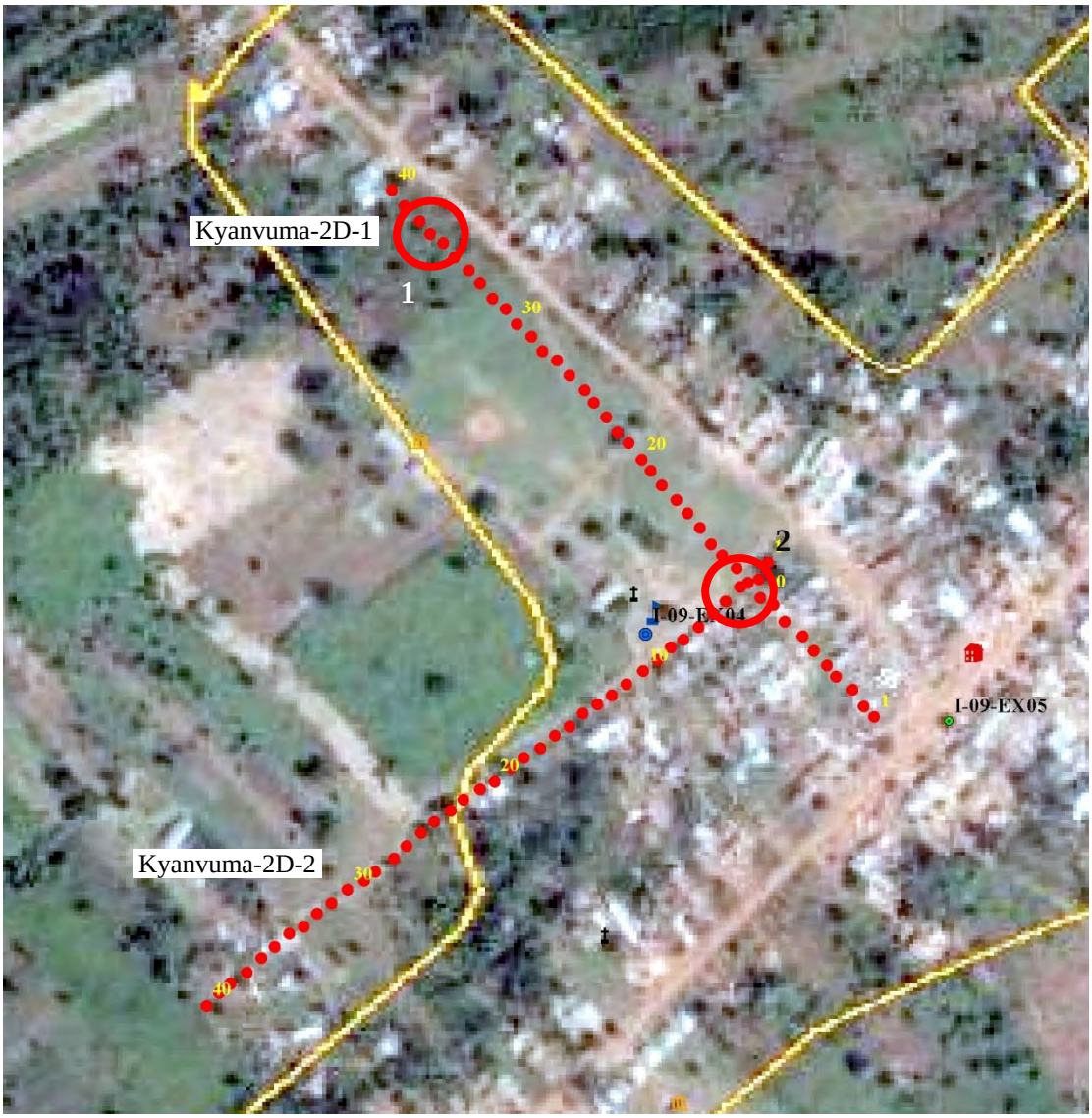
Distribution of 2-Dimentional Resistivity Survey Measurement Line in I-06 Lambala



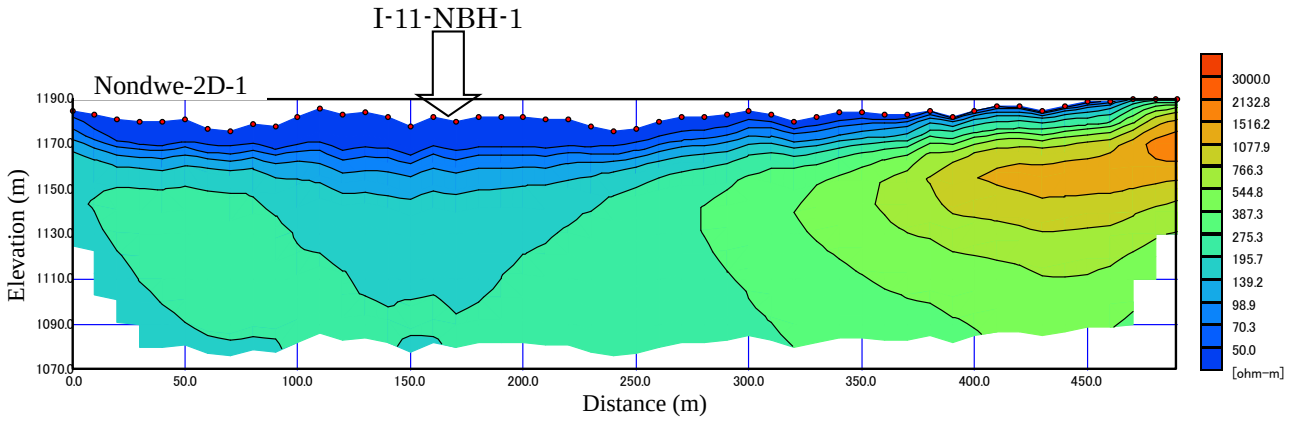
(3) 2-Dimentional Resistivity Survey Result in I-09 Kyanvuma

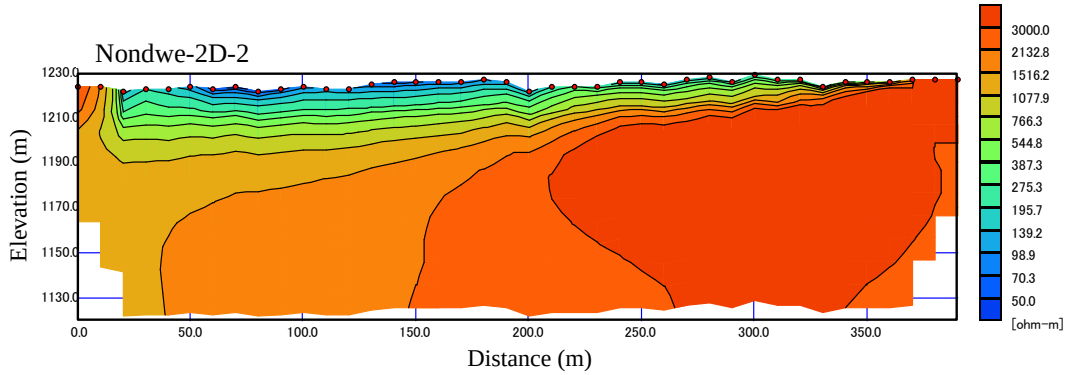


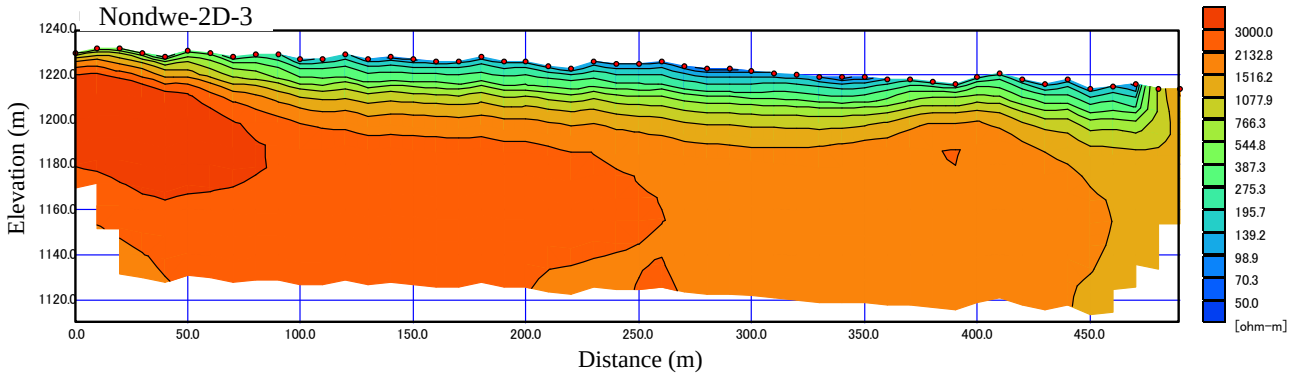
Distribution of 2-Dimentional Resistivity Survey Measurement Line in I-09 Kyanvuma

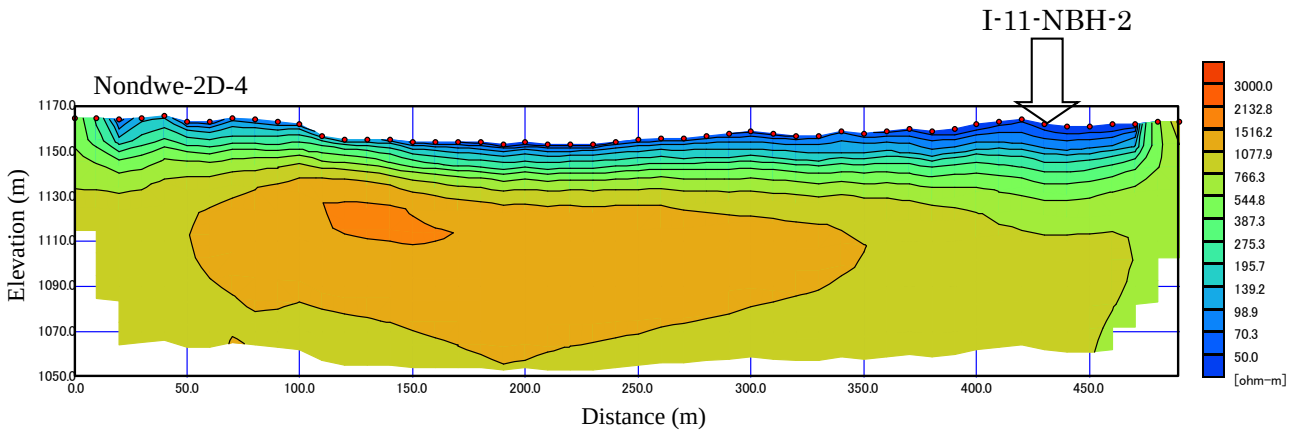


(4) 2-Dimentional Resistivity Survey Result in I-11 Nondwe

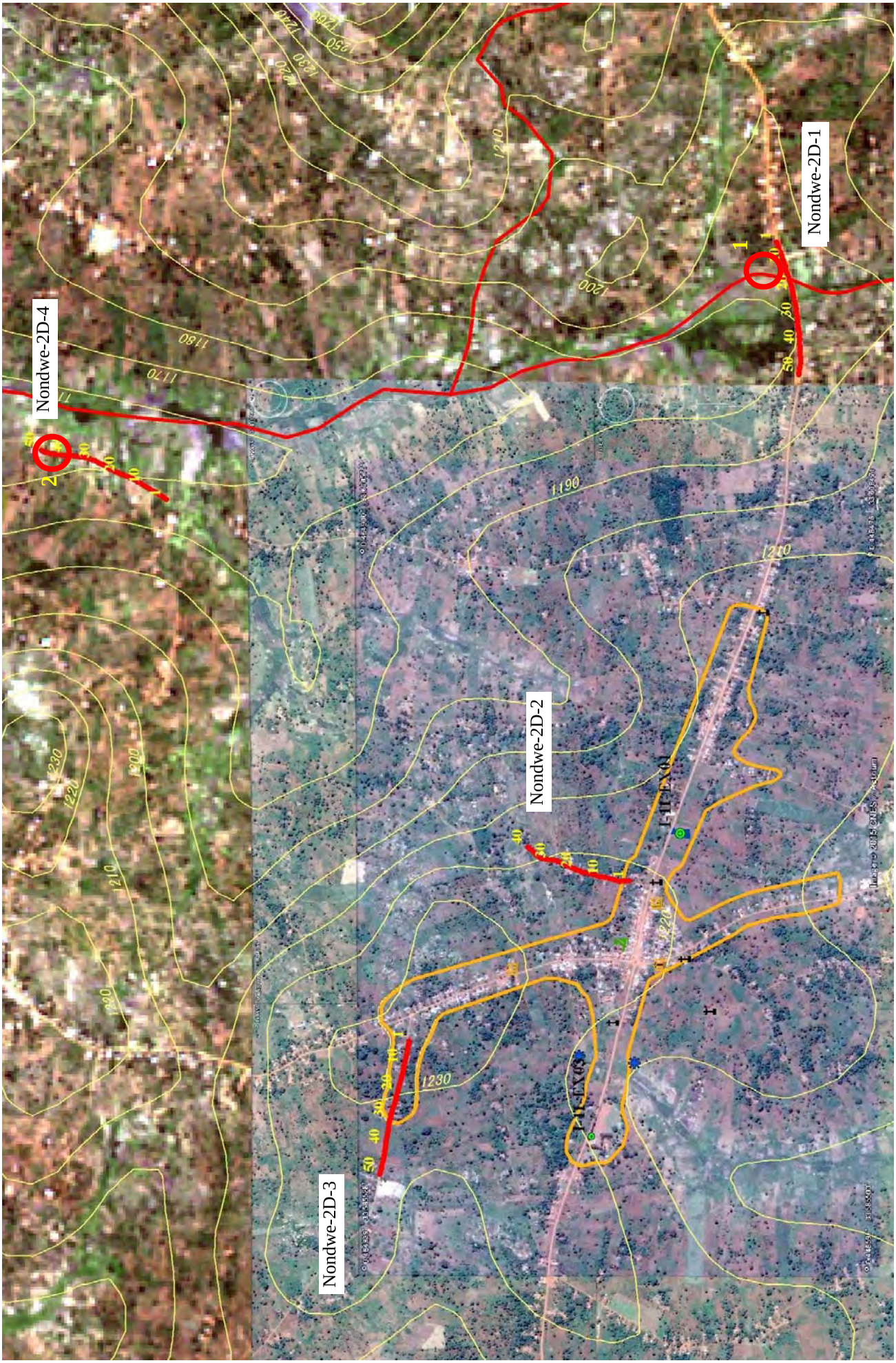




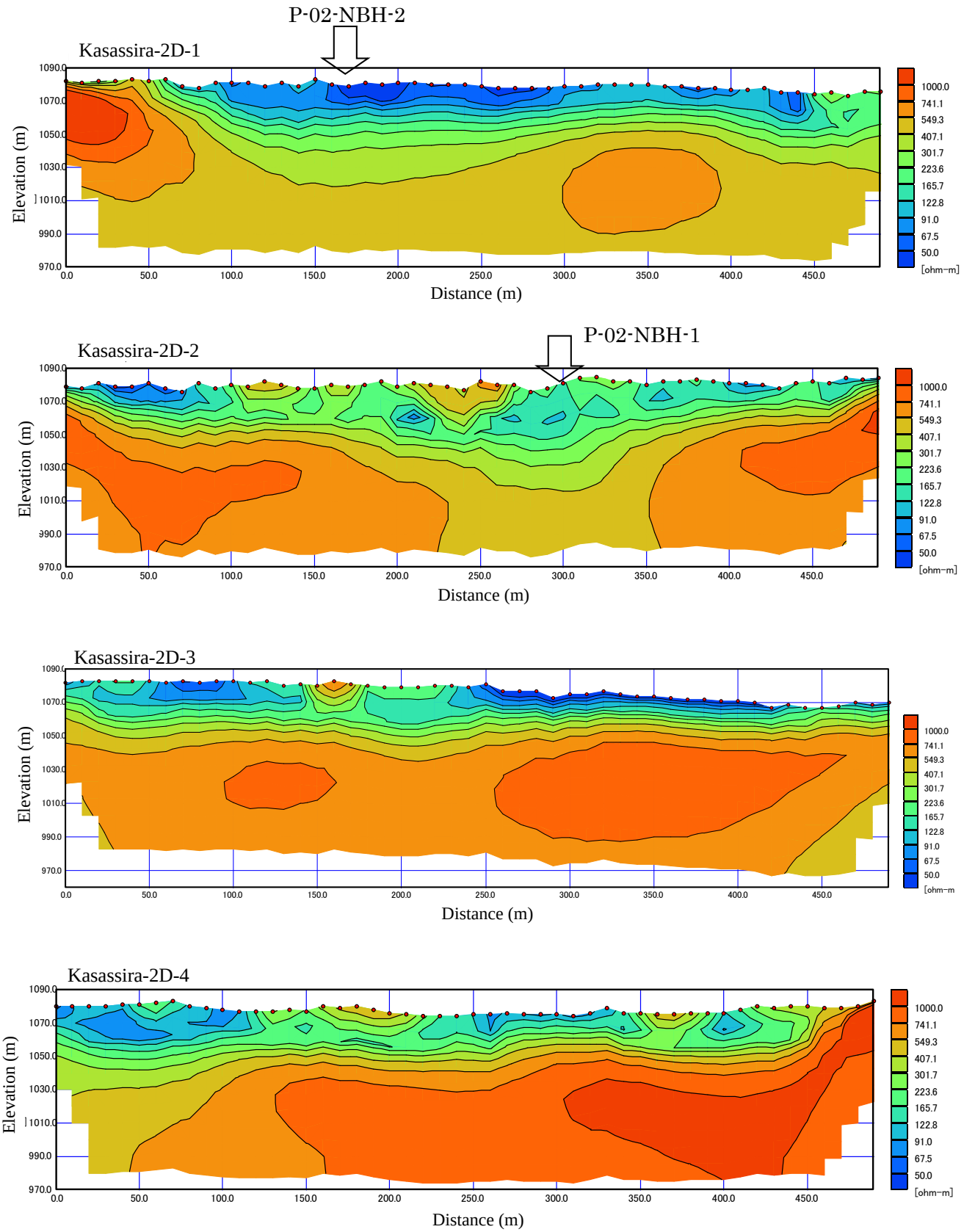




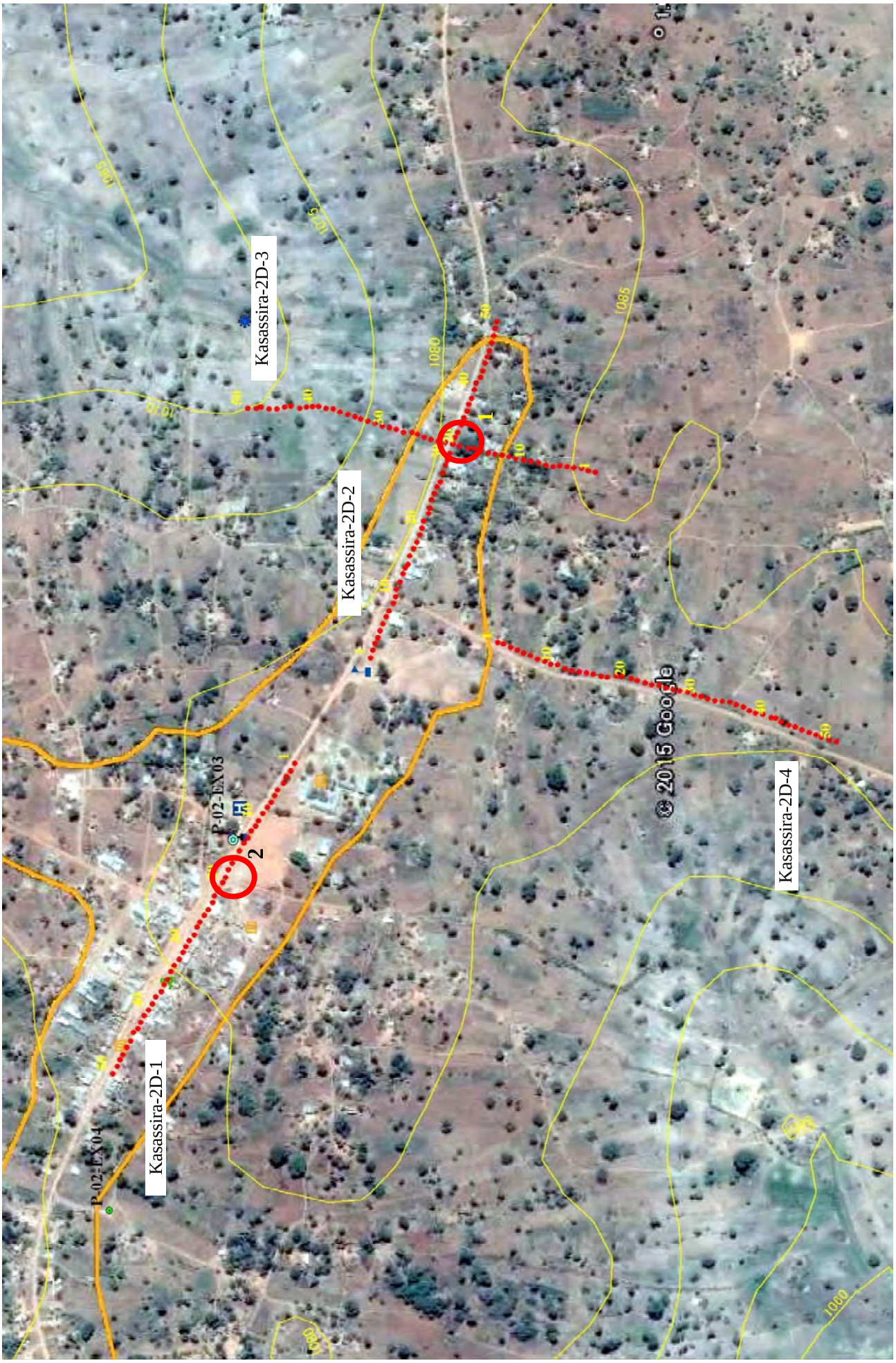
Distribution of 2-Dimentional Resistivity Survey Measurement Line in I-11 Nondwe



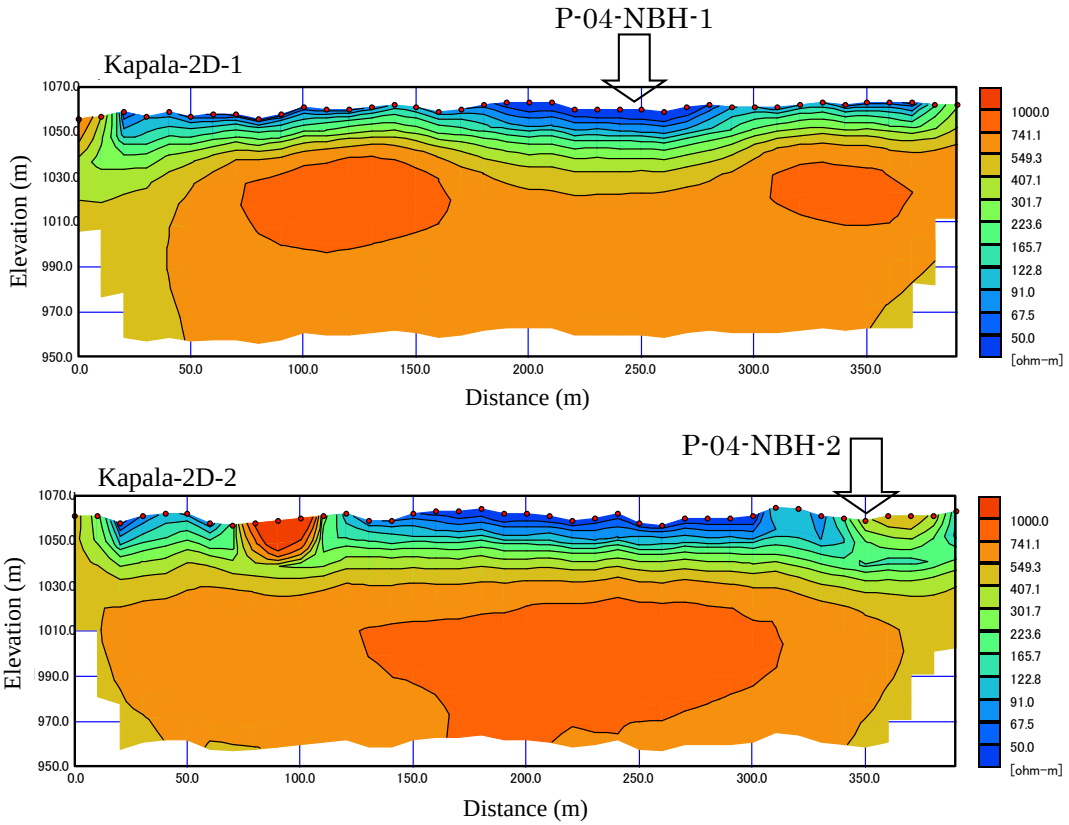
(5) 2-Dimentional Resistivity Survey Result in P-02 Kasassira



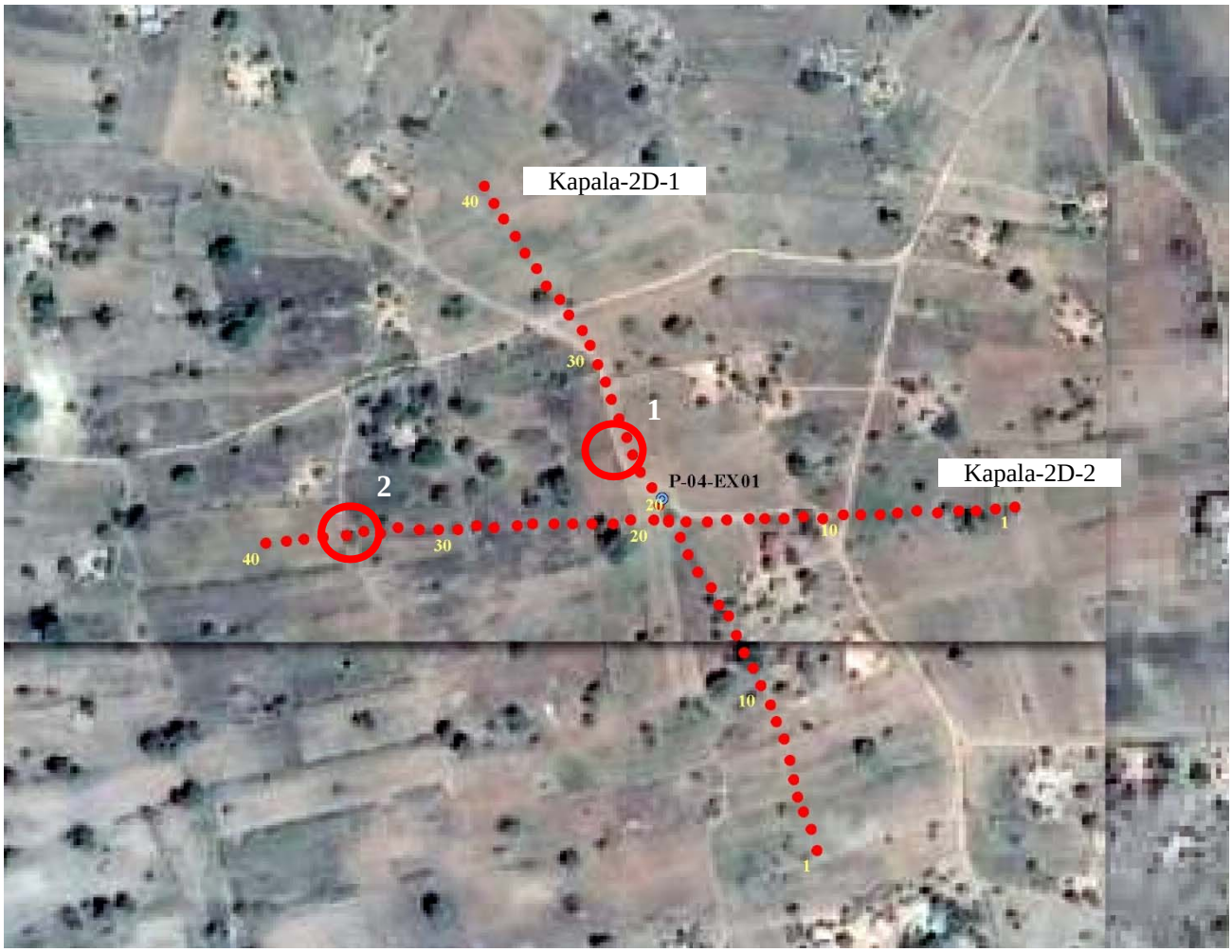
Distribution of 2-Dimentional Resistivity Survey Measurement Line in P-02 Kasassira



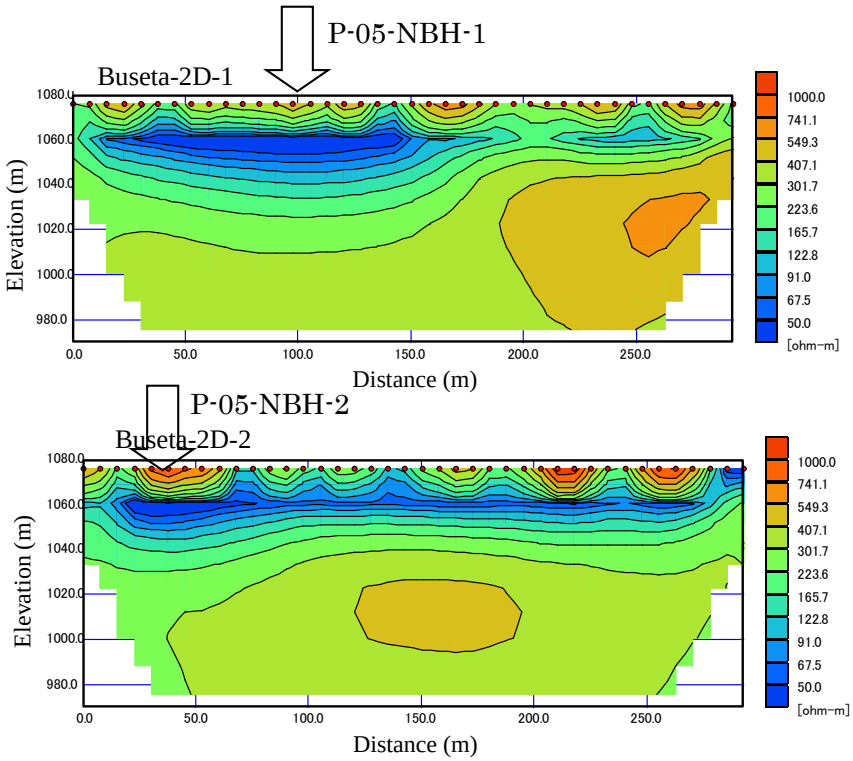
(6) 2-Dimentional Resistivity Survey Result in P-04 Kapala



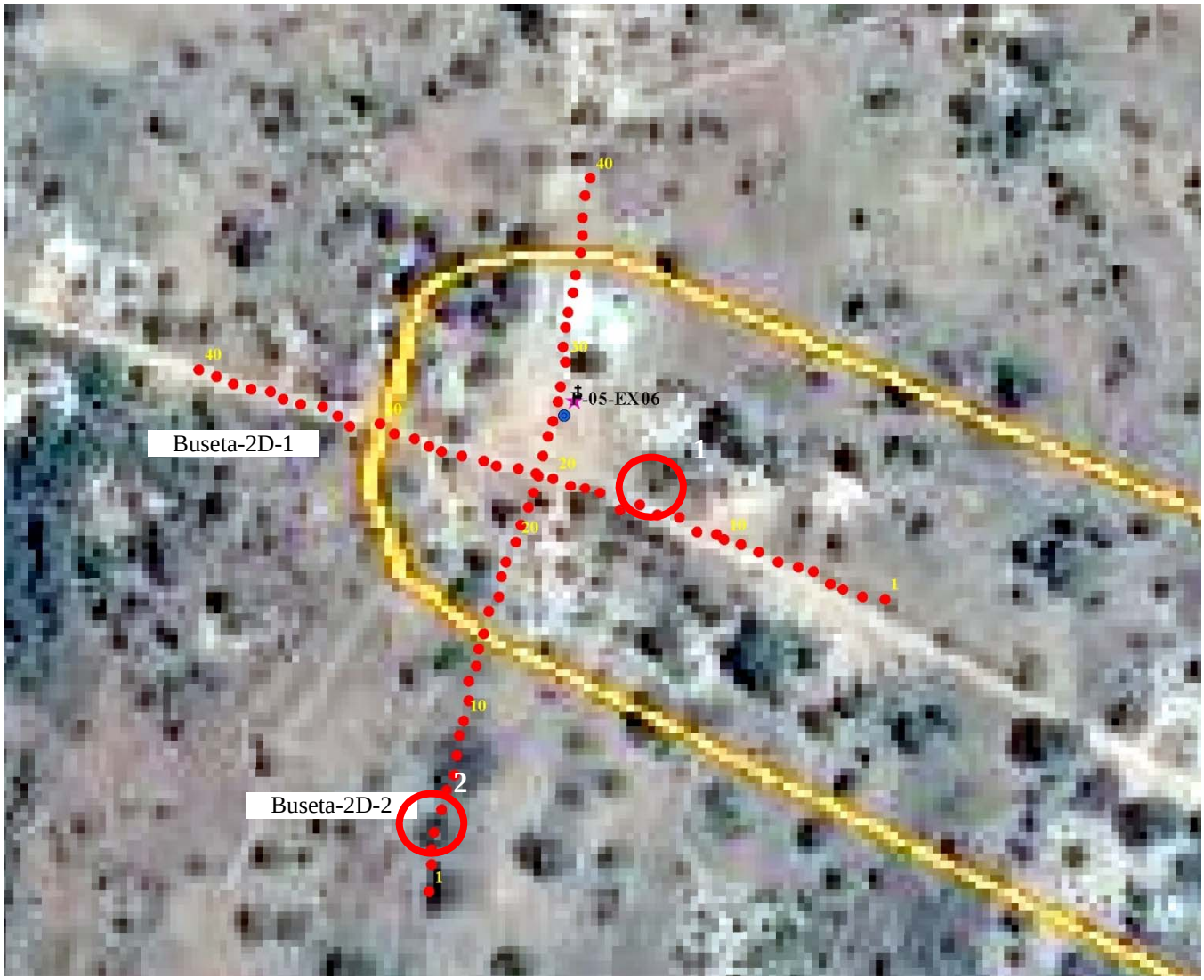
(6) Distribution of 2-Dimentional Resistivity Survey Measurement Line in P-04 Kapala



(7) 2-Dimentional Resistivity Survey Result in P-05 Buseta



Distribution of 2-Dimentional Resistivity Survey Measurement Line in P-05 Buseta



5. Position of first Drilling Point

Drilling points were decided based on the result of 2 dimensional resistivity survey. The points were confirmed at the site with Landowner, LCIII Chairperson, Sub-county Chief, Parish Chief and LCI Chairperson.

Table 3　Decided Drilling Points where were agreed by Landowner

Code	RGC	Priority	BH No.	UTM (E)	UTM (N)	Elevation	Agreement
I-03	Nambale	1	I-03-NBH-1	557077	85941	1107	2015/12/2
		2	I-03-NBH-2	556878	86027	1105	2015/12/2
I-06	Lambala	1	I-06-NBH-1	525640	80002	1074	2015/12/3
		2	I-06-NBH-2	526675	80288	1084	2015/12/3
I-09	Kyanvuma	1	I-09-NBH-1	530037	84475	1123	2015/12/10
		2	I-09-NBH-2	530220	84292	1119	2015/12/10
I-11	Nondwe	1	I-11-NBH-1	568597	50179	1185	2015/12/2
		2	I-11-NBH-2	567999	52794	1157	2015/12/2
P-02	Kasassira	1	P-02-NBH-1	579005	120630	1077	2015/12/1
		2	P-02-NBH-2	578426	120888	1079	2015/12/1
P-04	Kapala	1	P-04-NBH-1	566851	137939	1056	2015/11/30
		2	P-04-NBH-2	566711	137809	1052	2015/12/14
P-05	Buseta	1	P-05-NBH-1	582972	120041	1076	2015/12/1
		2	P-05-NBH-2	582892	119923	1077	2015/12/1

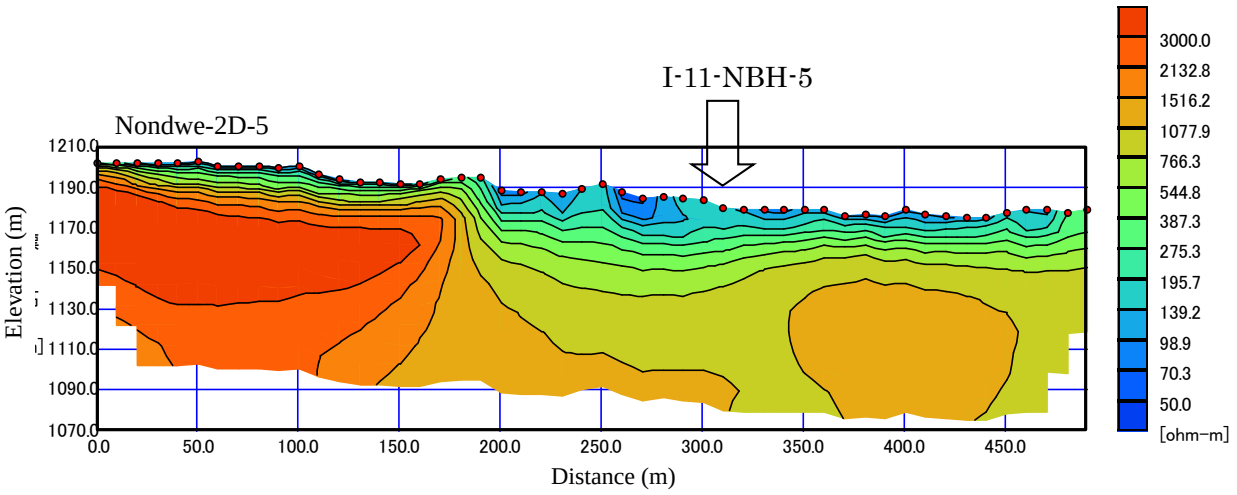
6.　Second Geophysical Survey

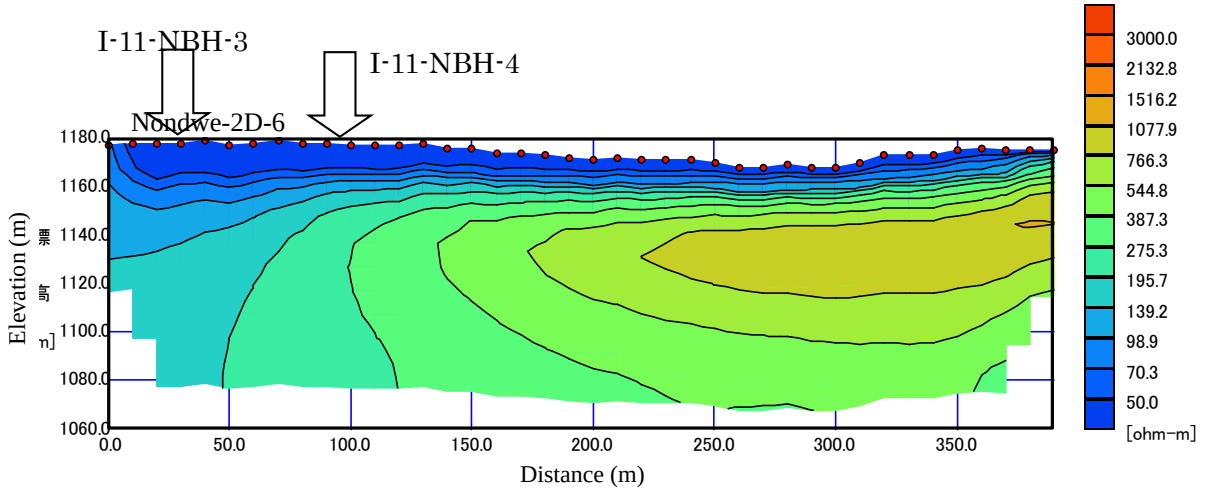
After drilling of 14 boreholes mentioned above, 3 drillings were distributed to Nondwe RGC and Kasassira RGC respectively. For the 3 drillings, 4 measurement lines of 2-dimensional resistivity survey were conducted in Nondwe RGC, and 3 measurement lines of 2-dimensional resistivity survey and 11 vertical electrical soundings were conducted in Kasassira RGC. Additionally, 1 measurement line of 2-dimensional resistivity survey was conducted in Naigobya RGC.

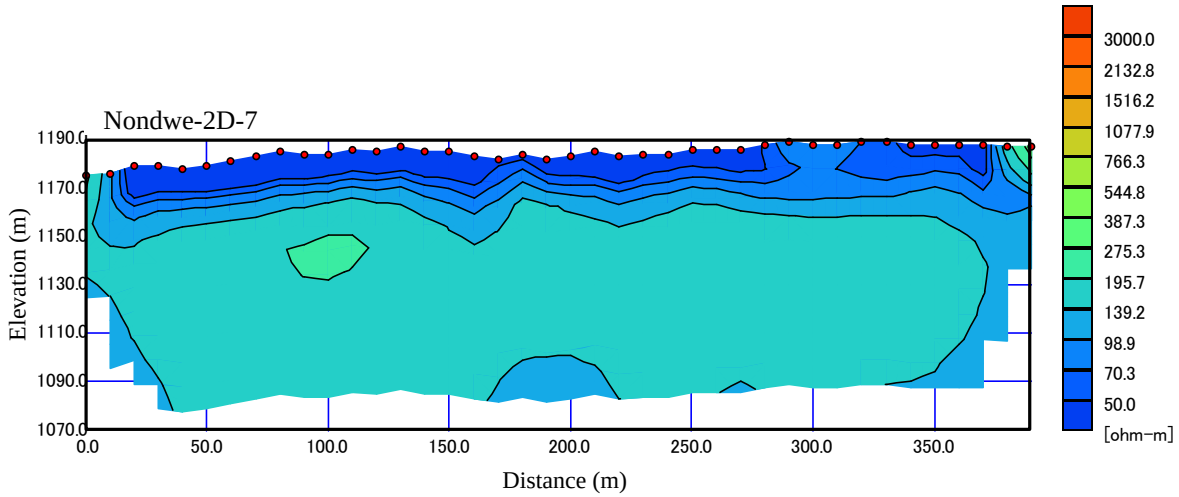
Table 3　Decided Drilling Points where were agreed by Landowner

No.	Code	RGC Name	District	County	Sub-county	Line Length	Exploration Depth	Measurement Lines
8	I-11	Nondwe	Iganga	Bugweri	Makuulu	500	100	3
9	P-02	Kasassira	Kibuku	Kibuku	Kasasira	500	100	4
10	I-07	Naigobya	Luuka	Luuka	Bukooma	500	100	1
2 Dimensional Survey Total								30
11	P-02	Kasassira	Kibuku	Kibuku	Kasasira	VES	120	11
12	I-07	Naigobya	Luuka	Luuka	Bukooma	VES	120	2

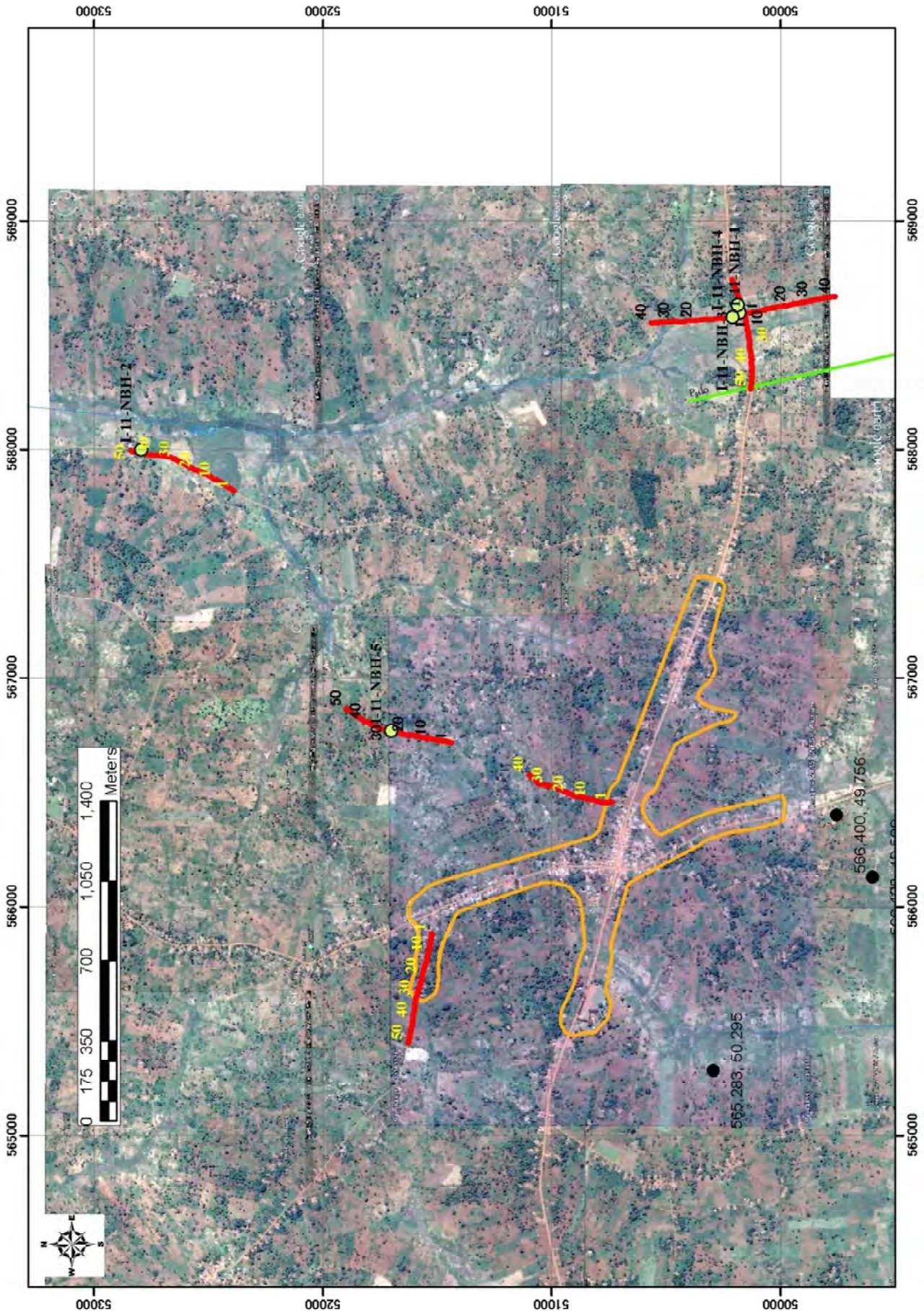
(1) 2-Dimentional Resistivity Survey Result in I-11 Nondwe



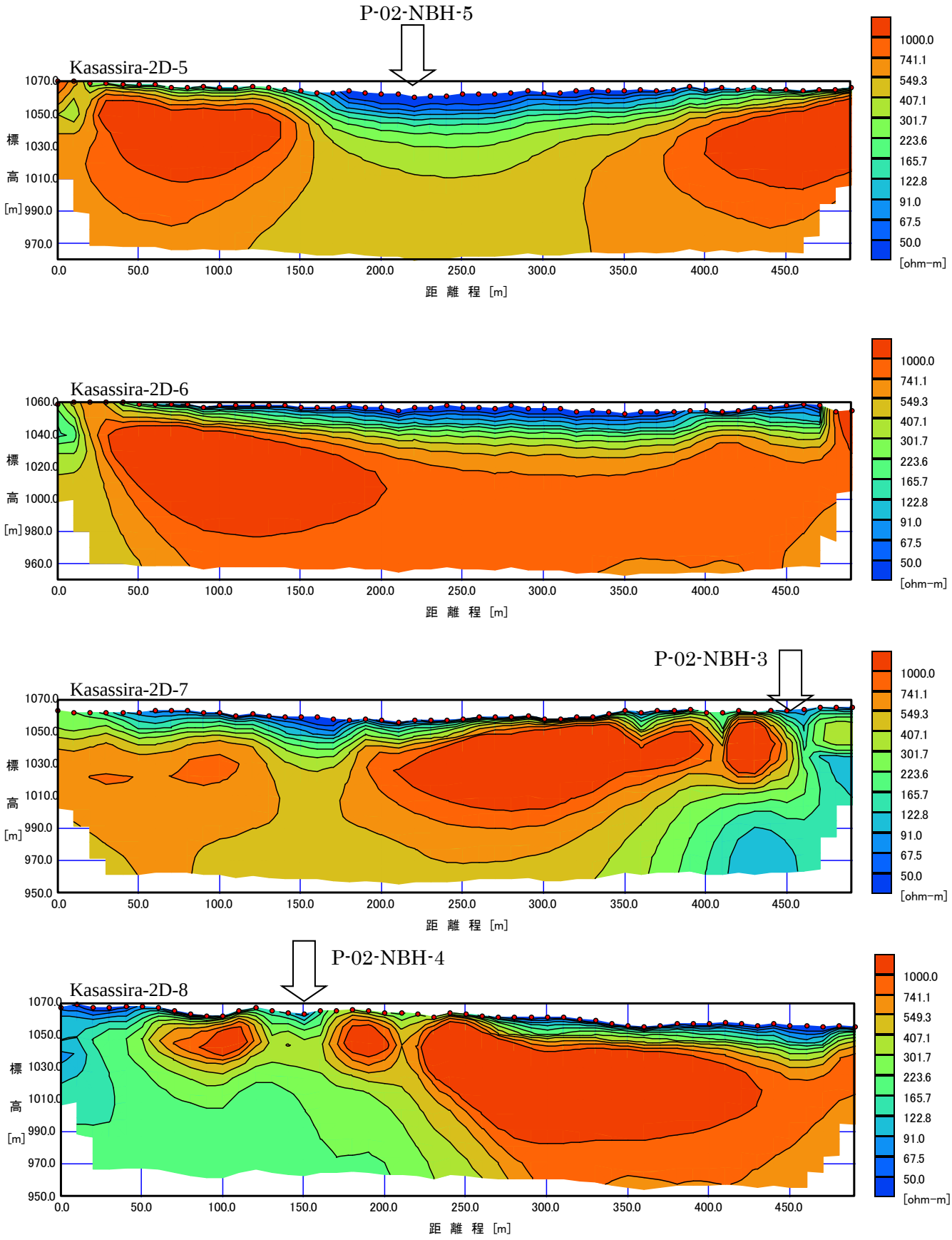




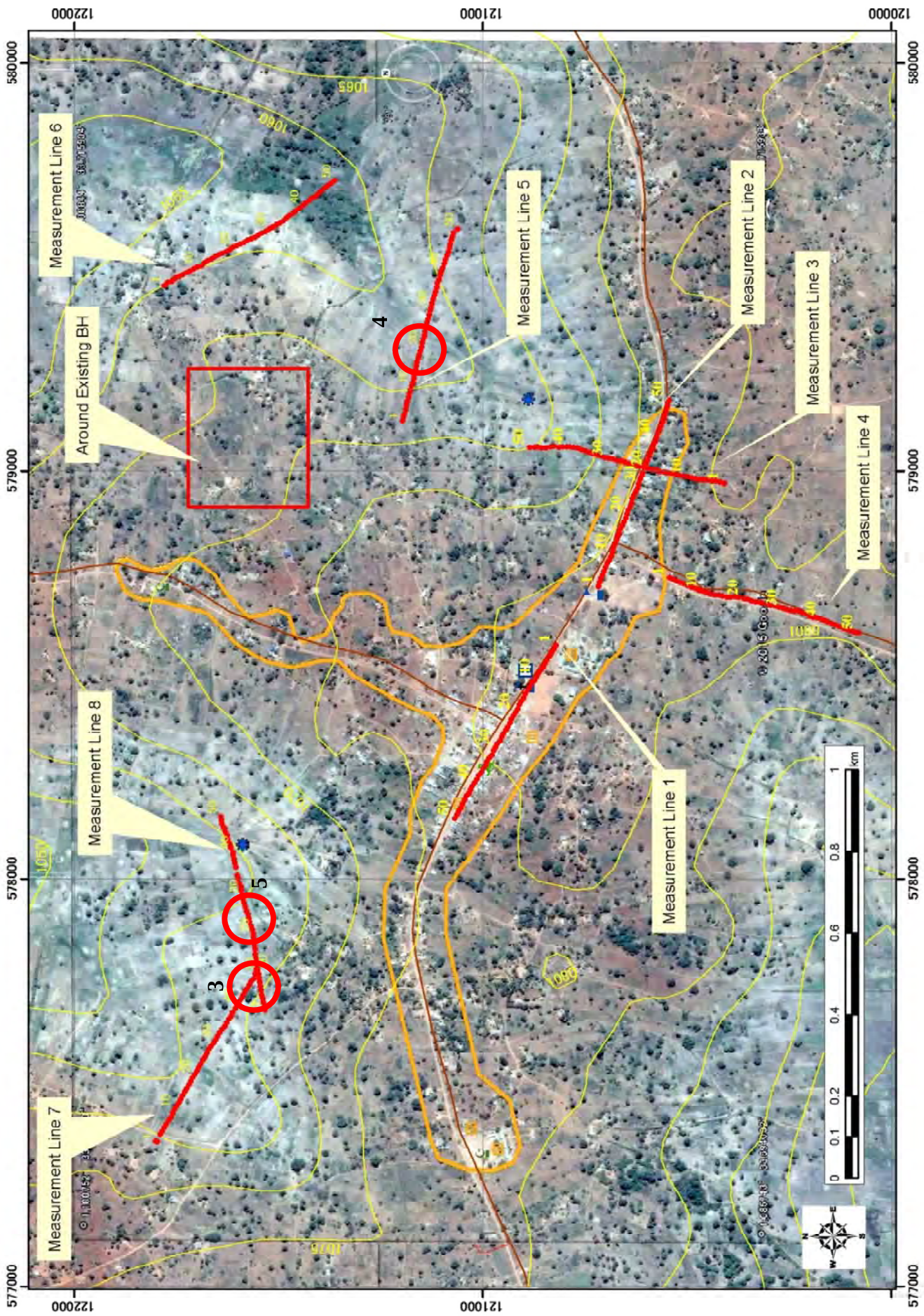
Distribution of 2-Dimentional Resistivity Survey Measurement Line in P-05 Buseta



(2) 2-Dimentional Resistivity Survey Result in P-02 Kasassira

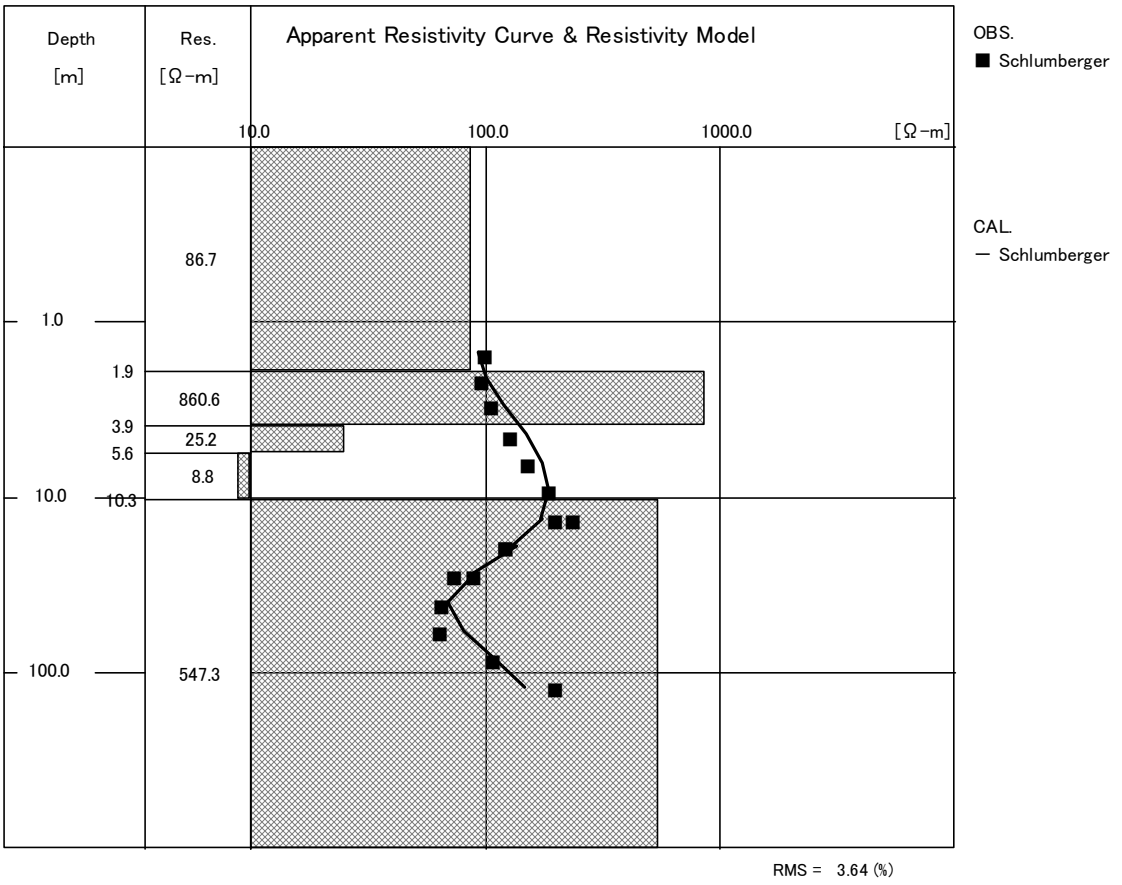


Distribution of 2-Dimentional Resistivity Survey Measurement Line in P-02 Kasassira

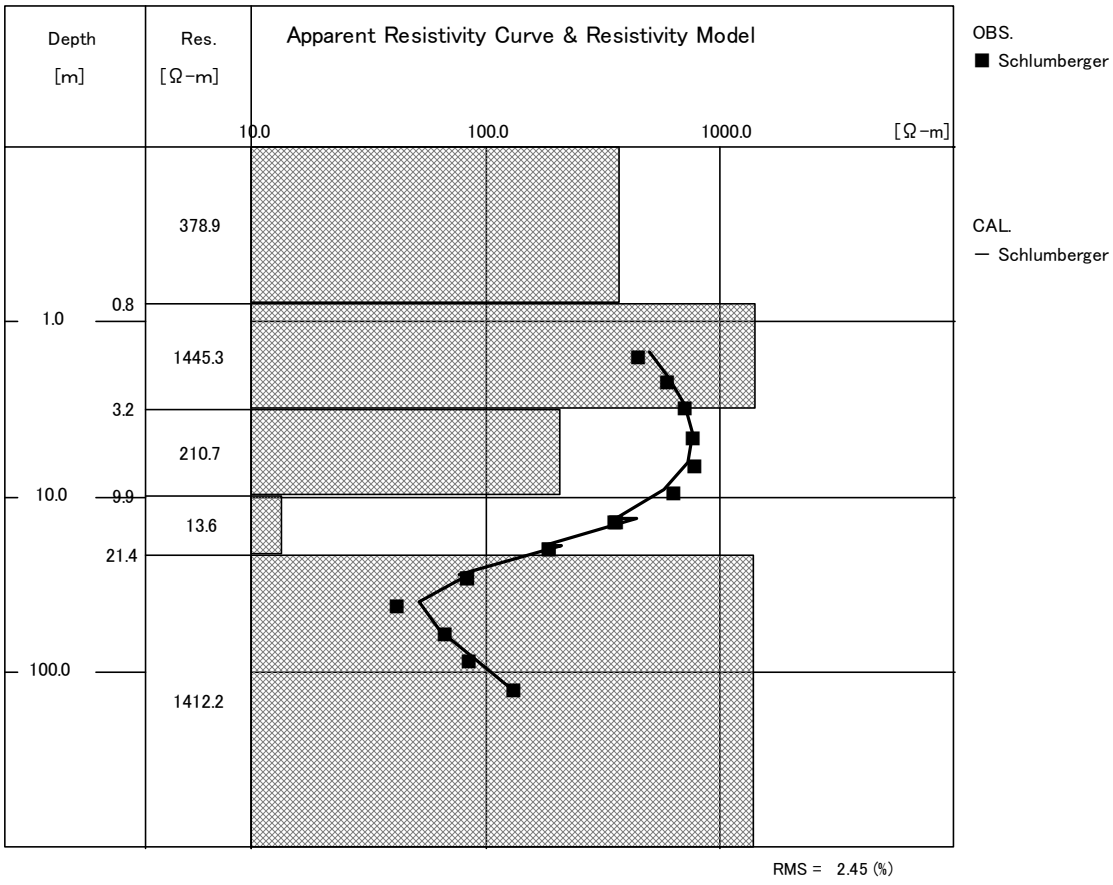


(3) Vertical Electrical Sounding Result in P-02 Kasassira

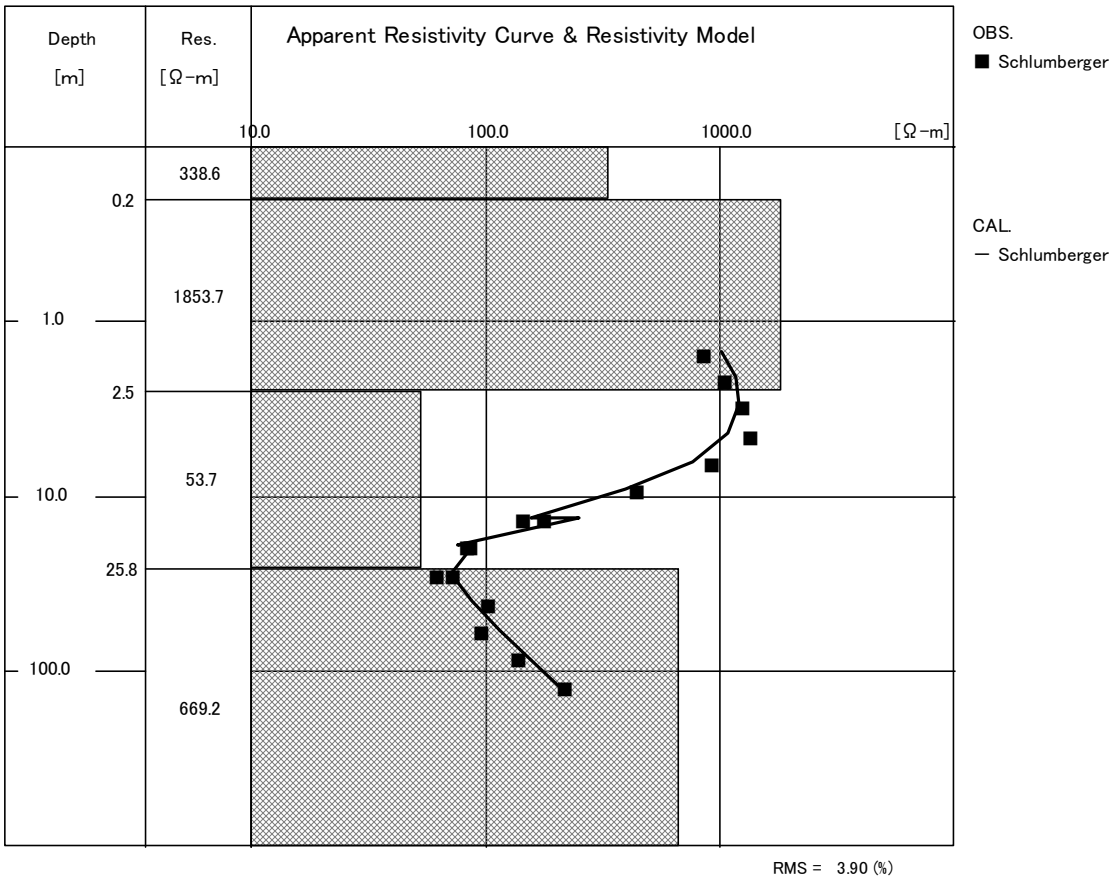
Line Name : P-02-VES-Cal



Line Name : P-02-VES-1



Line Name : P-02-VES-2



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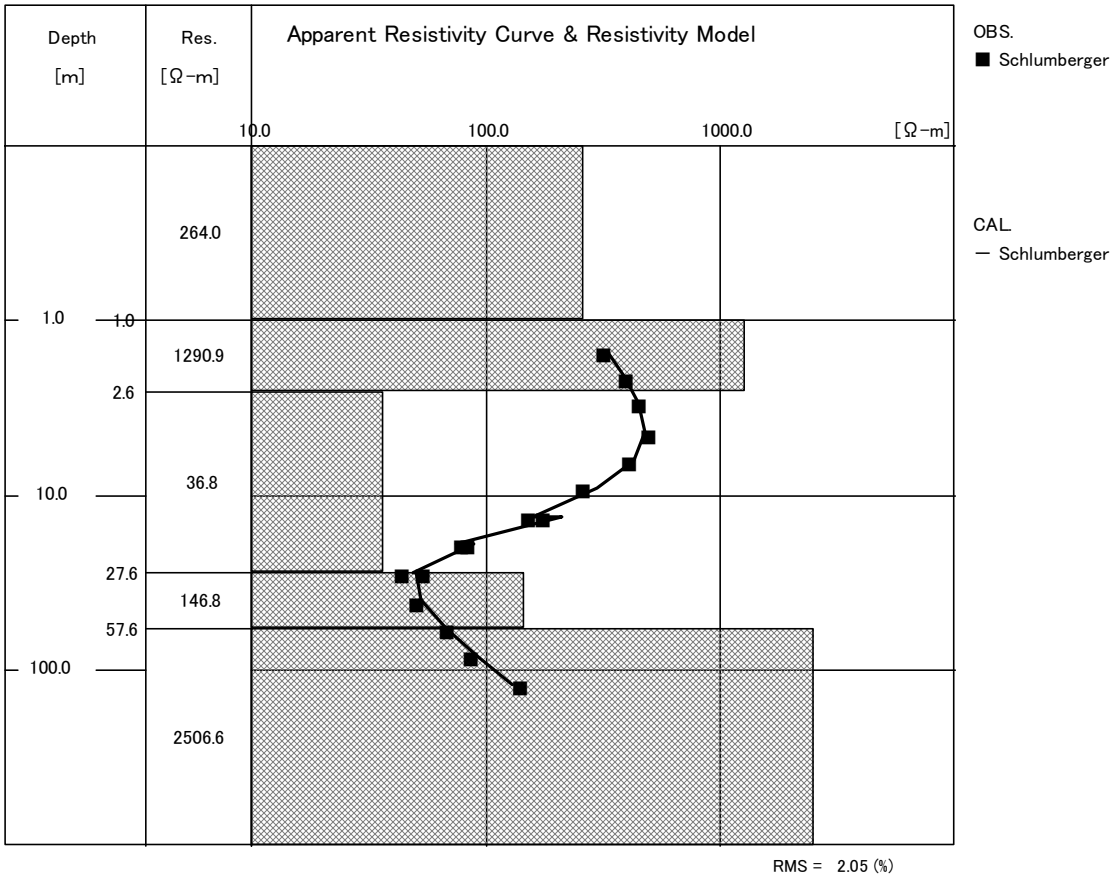

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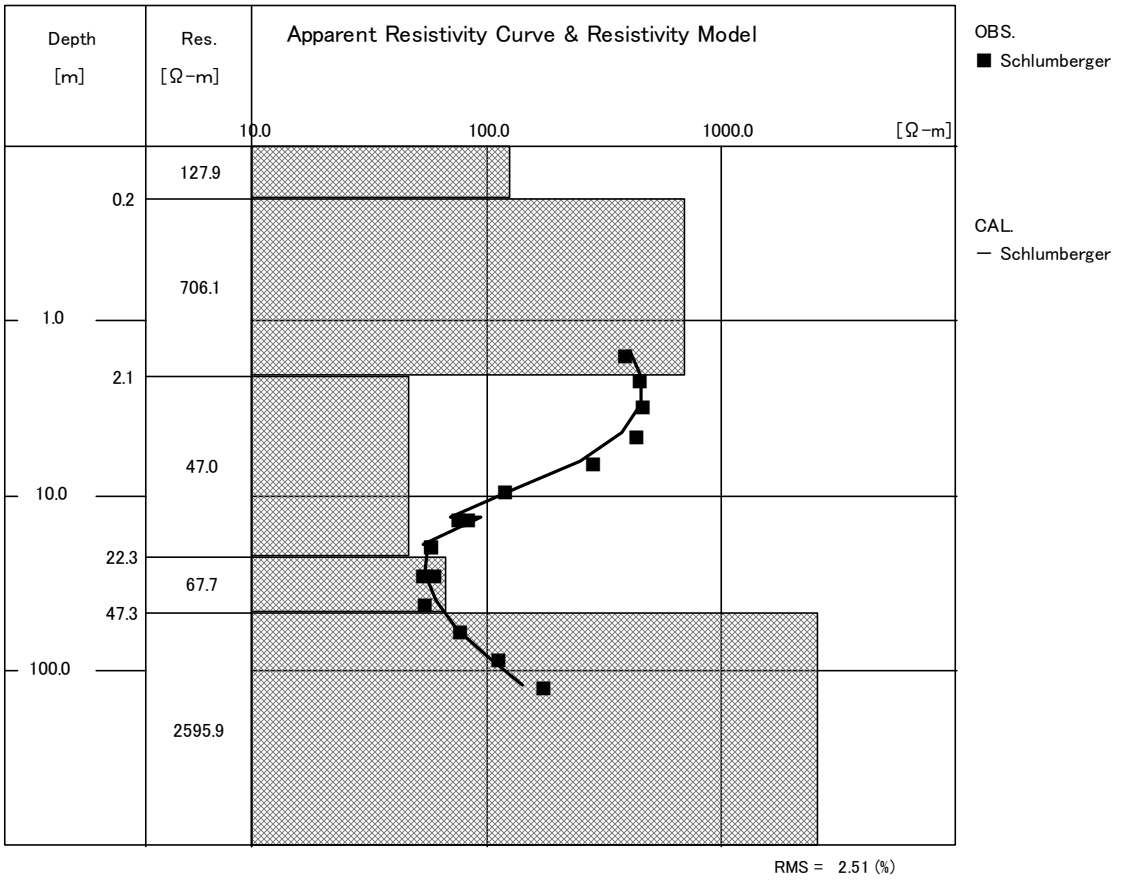

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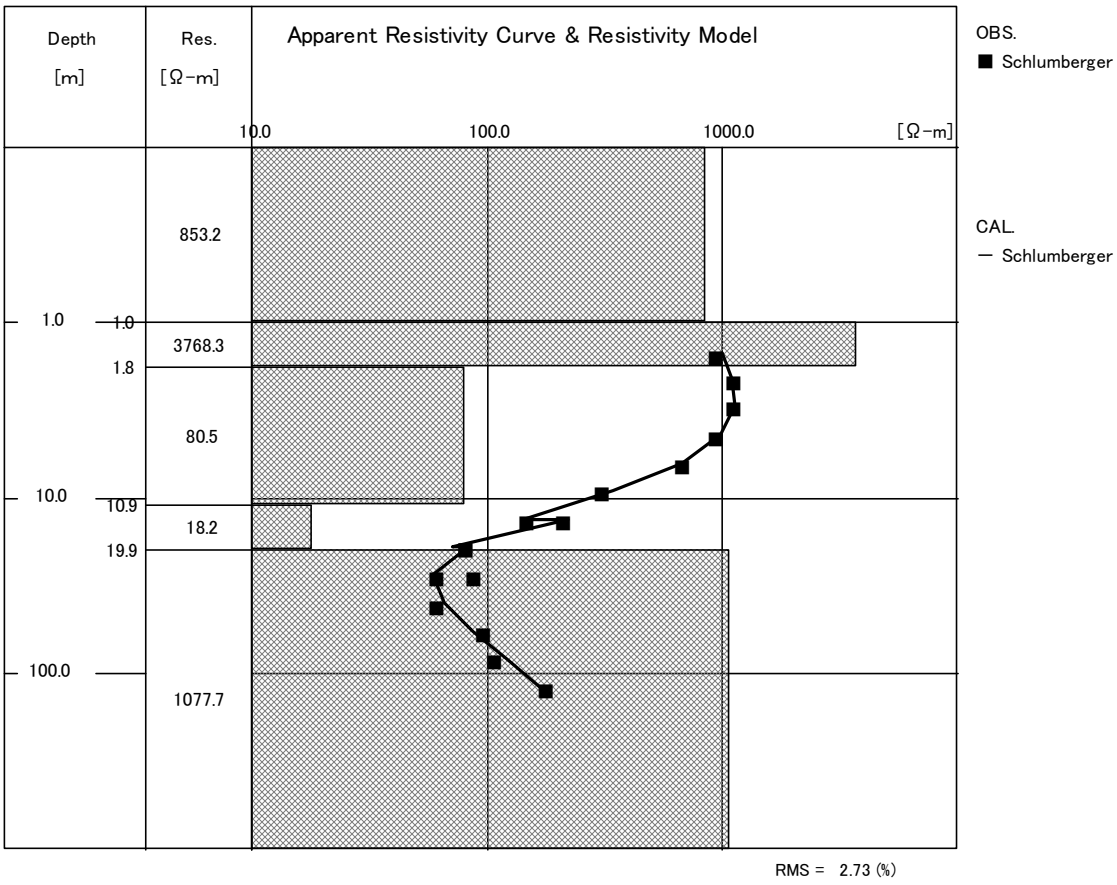
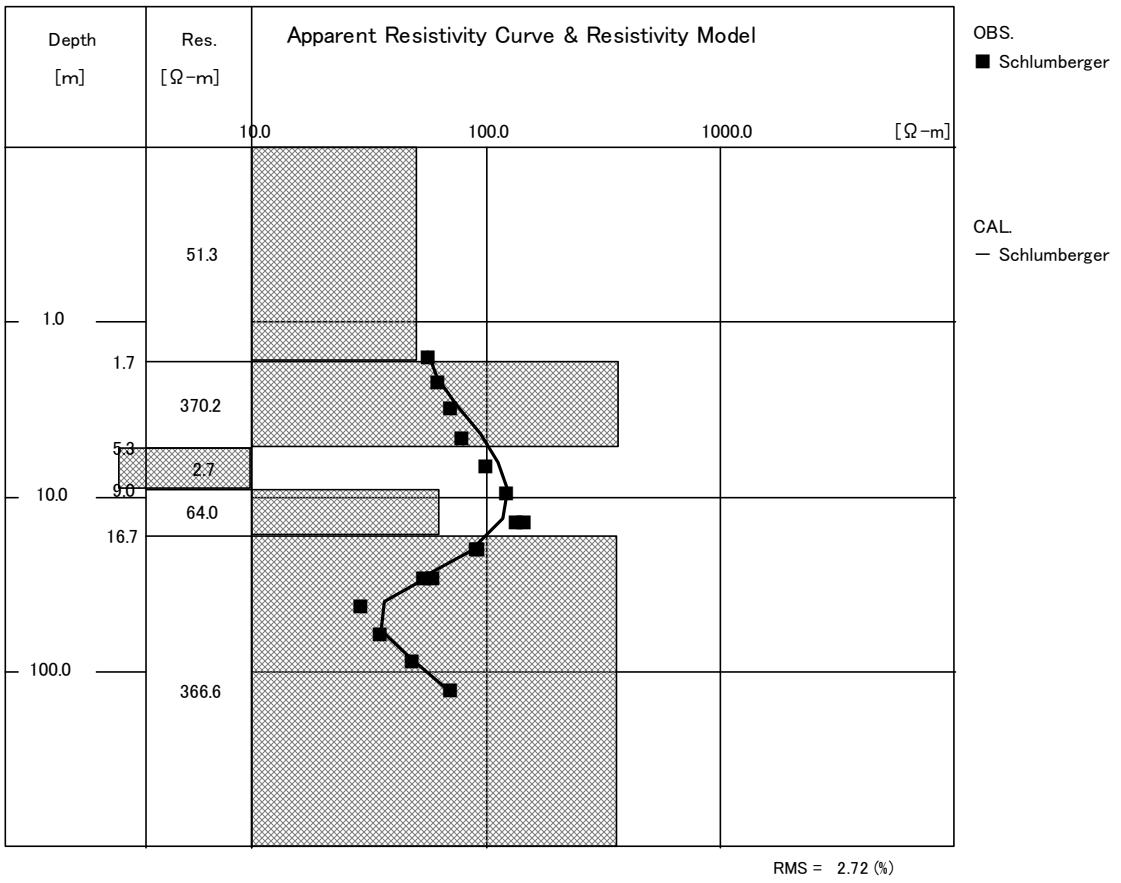
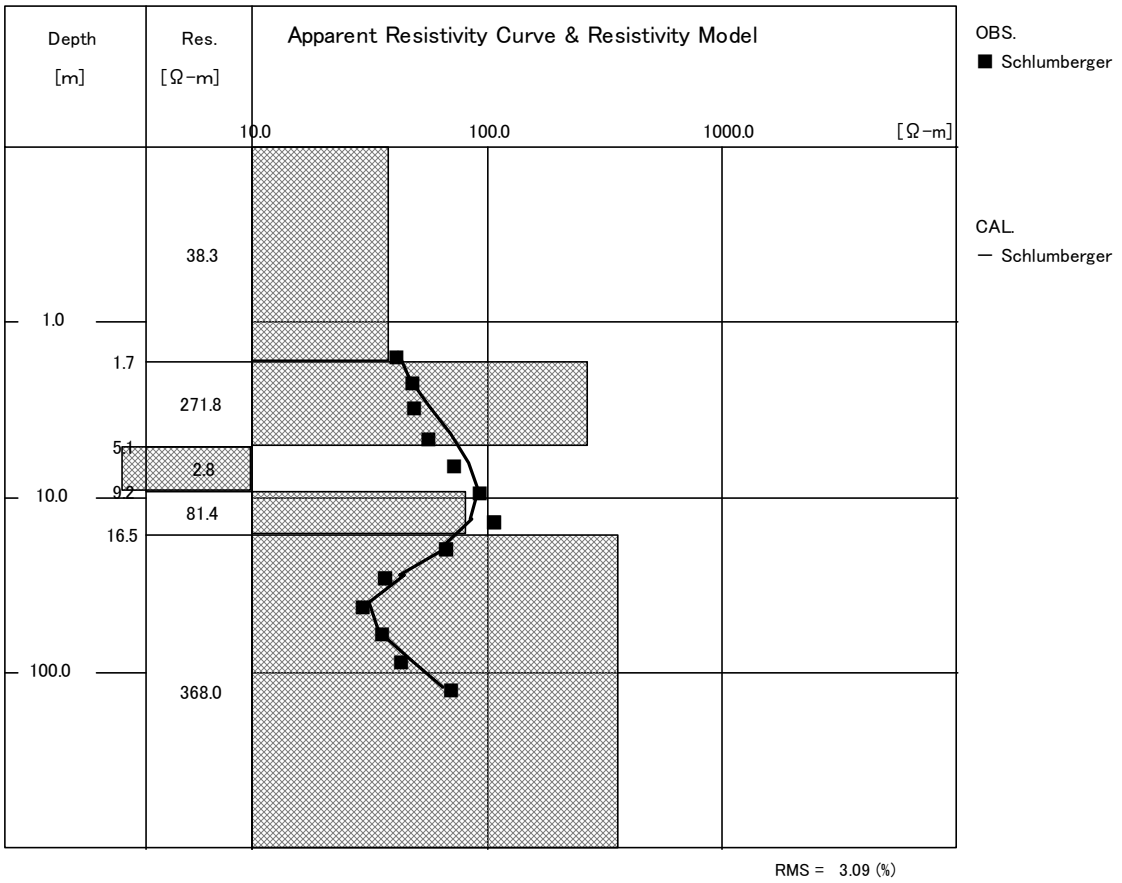


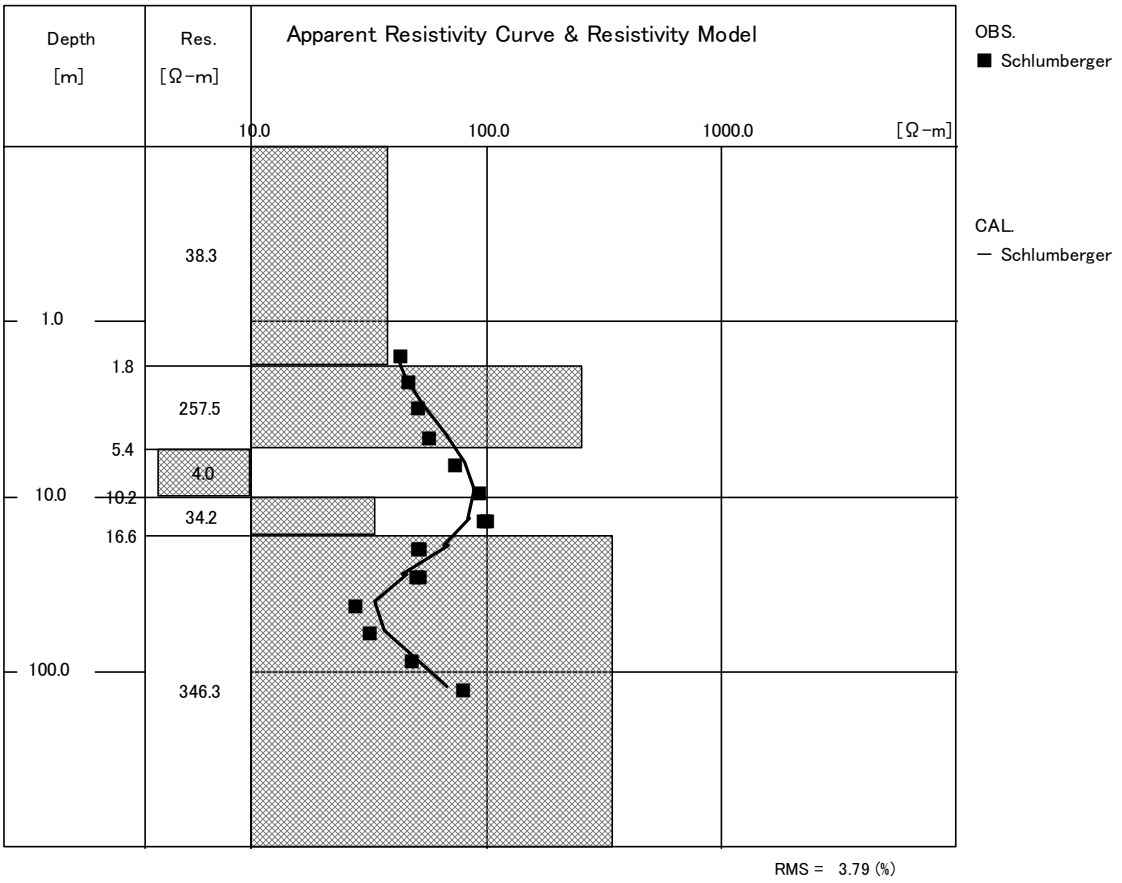
Line Name : P-02-VES2-C1



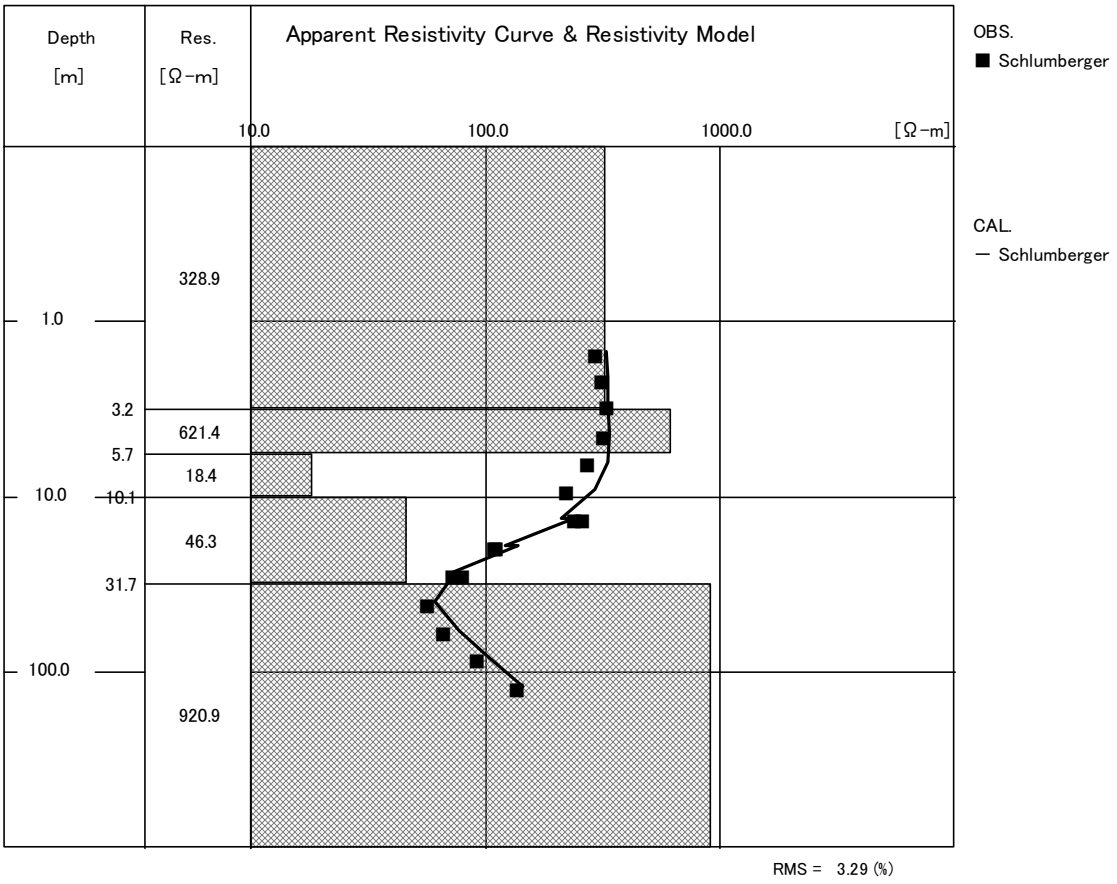
Line Name : P-02-VES2-C45



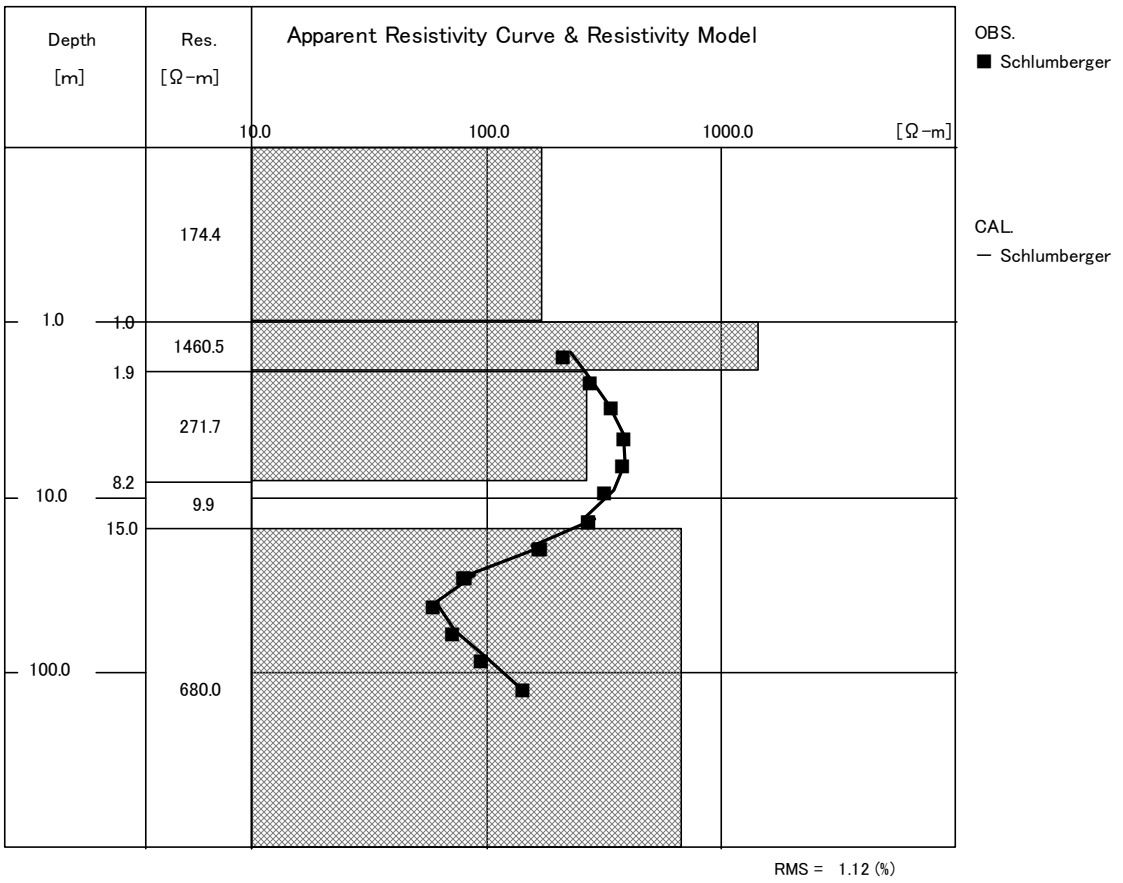
Line Name : P-02-VES2-C-NS



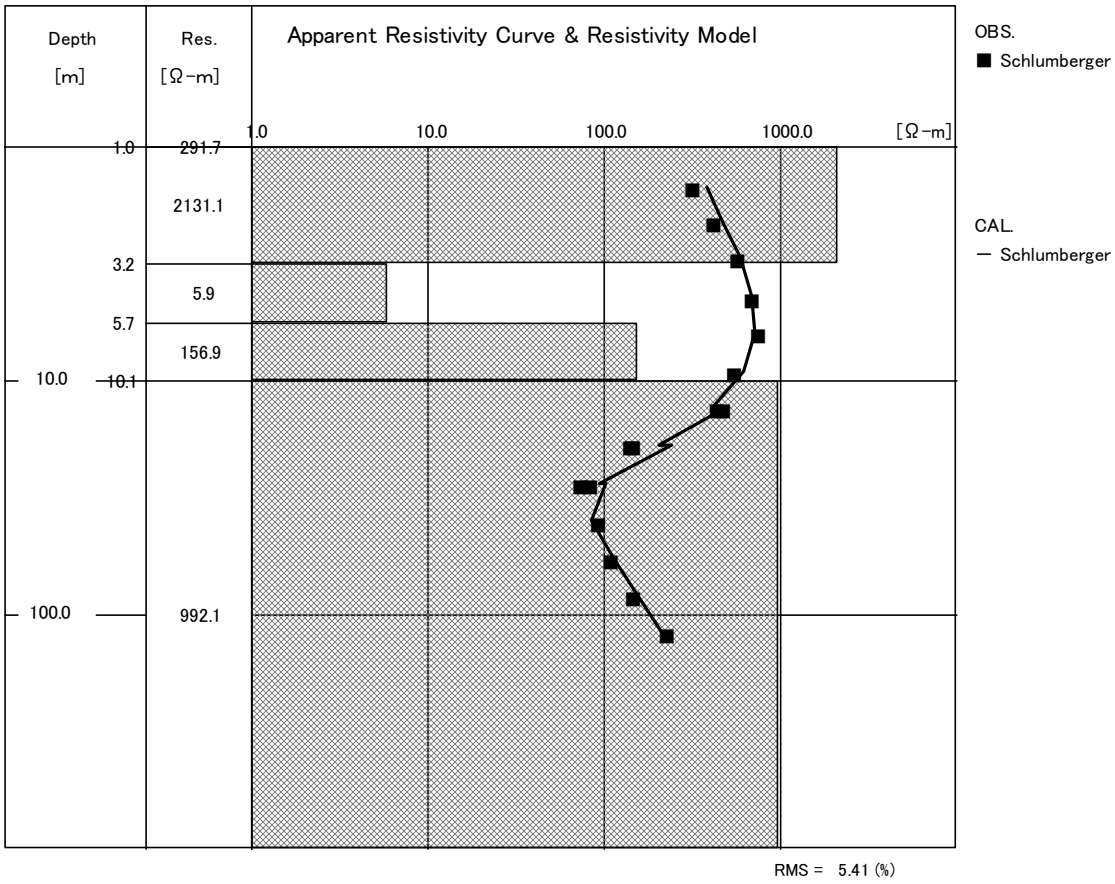
Line Name : P-02-VES2-1



Line Name : P-02-VES2-2



Line Name : P-02-VES2-3



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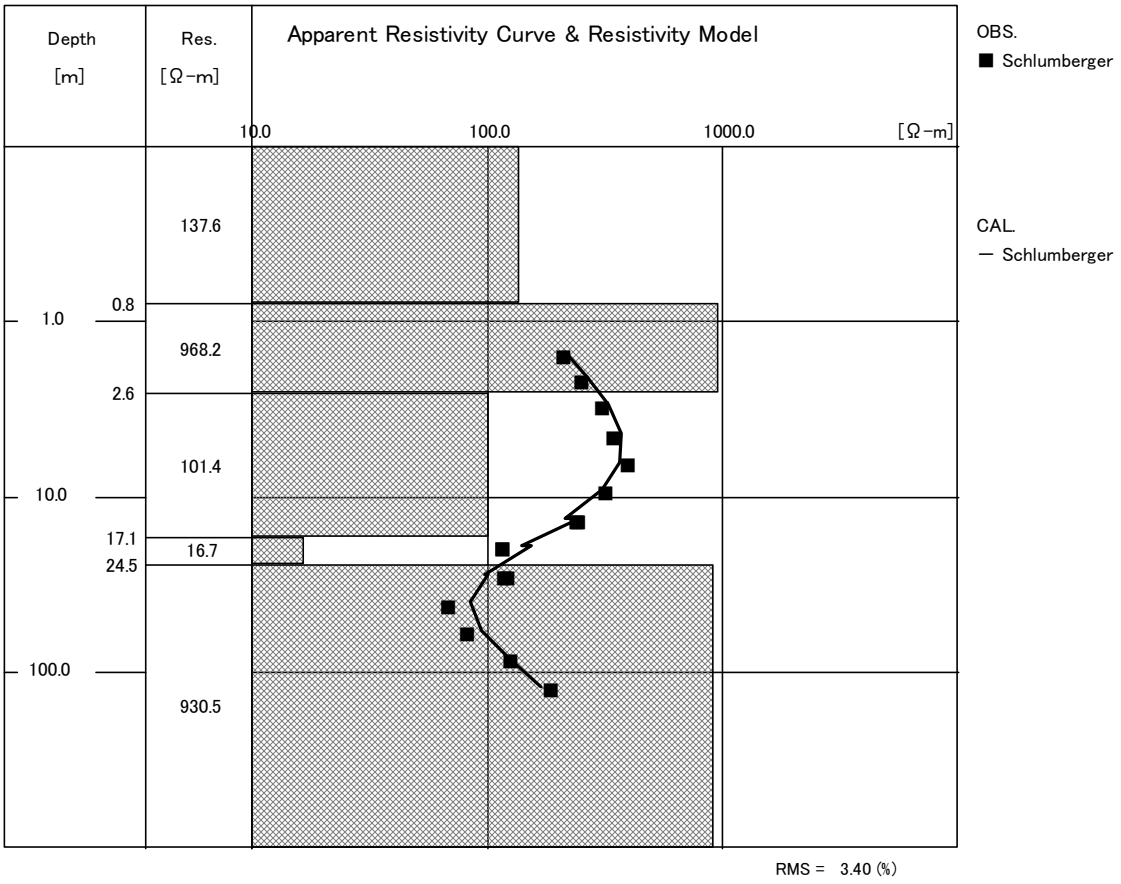
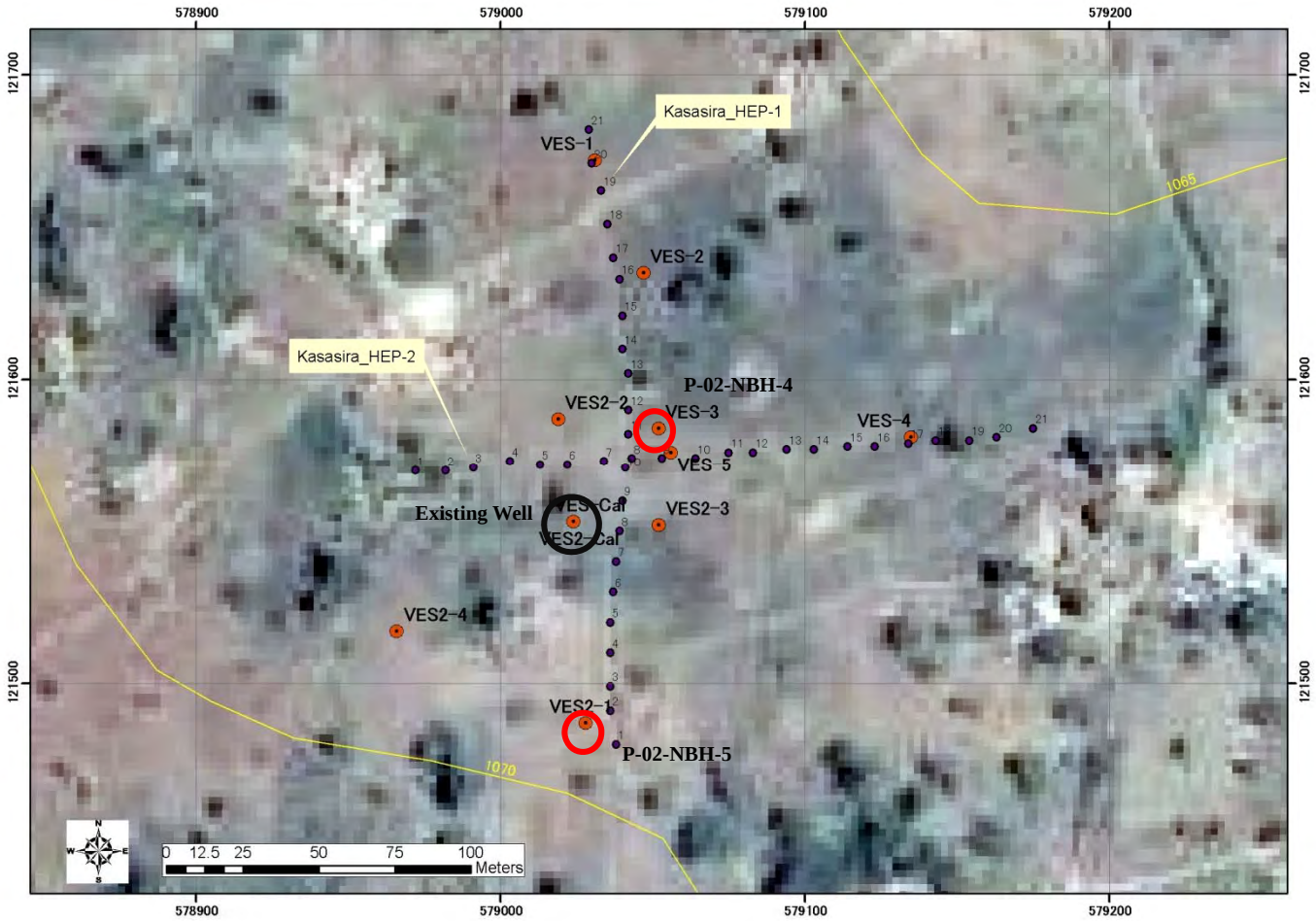


Distribution of Vertical Electrical Sounding in P-02 Kasassira



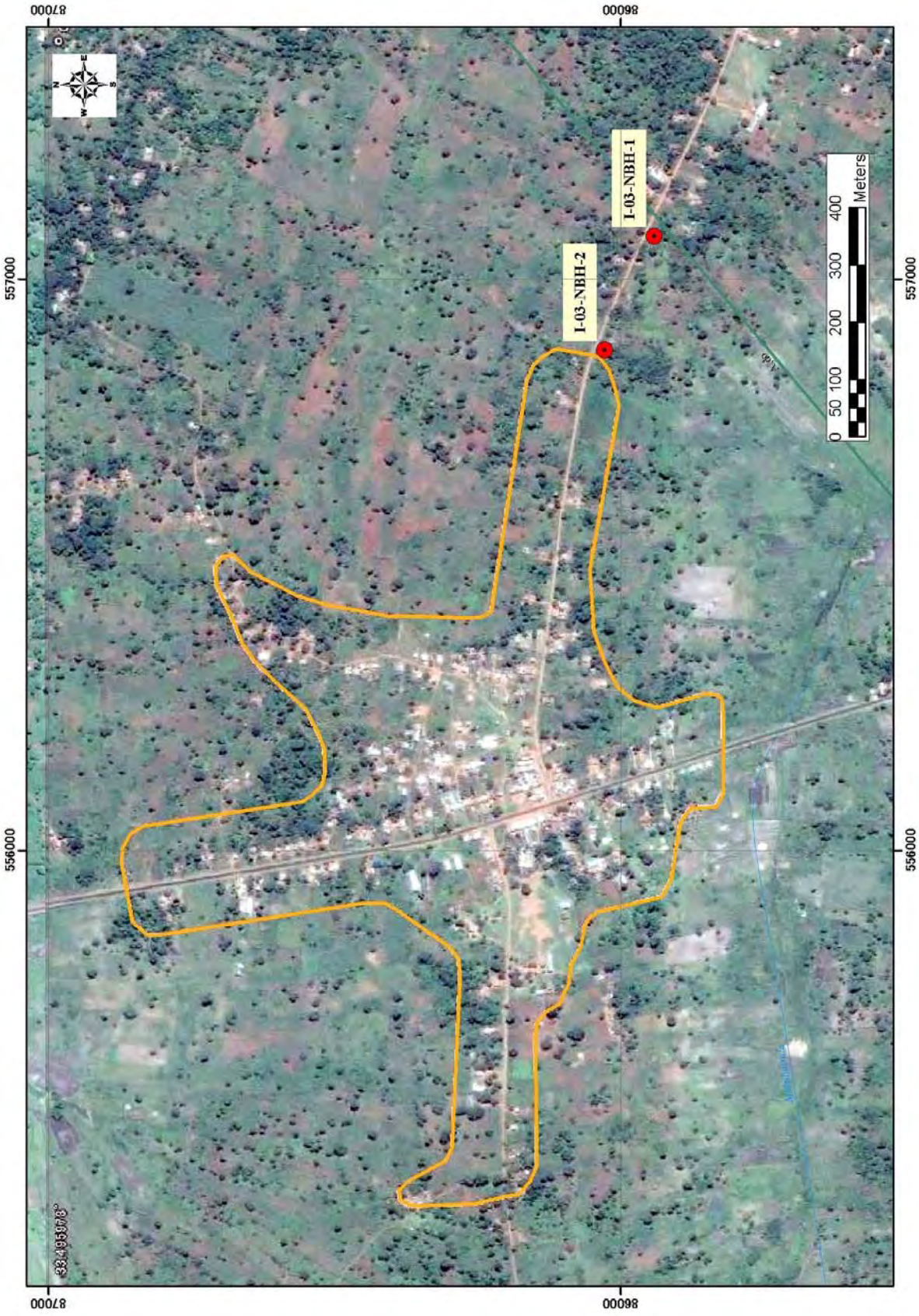
資料-11

参考資料

（5）試掘調査結果

(1) Nambale RGC

Distribution of Drilling Sites

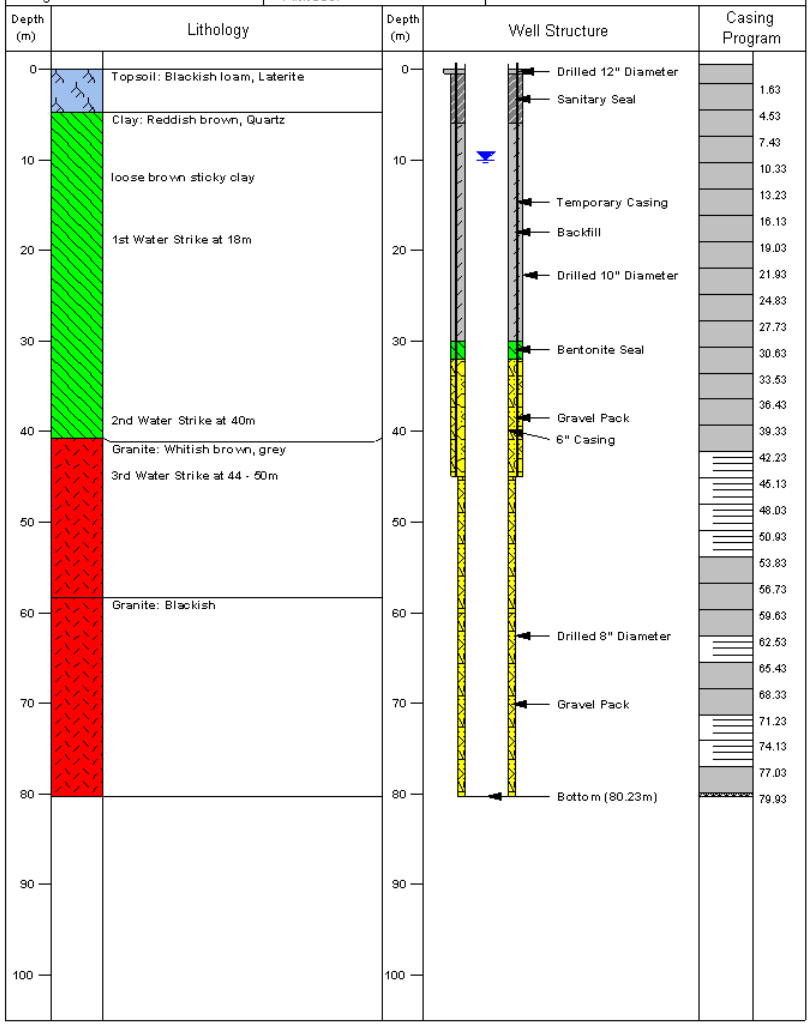


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: I-03-NBH-1 Site Name: Nambale-1 Start Date: 2016/1/12 End Date: 2016/1/17

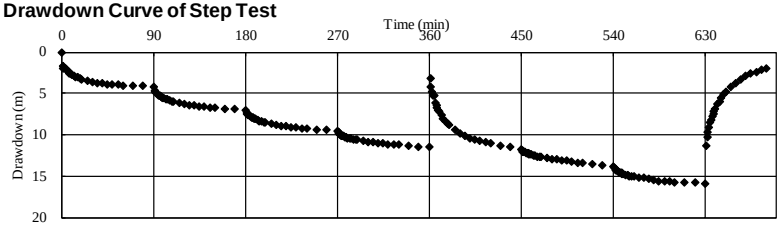
		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	Iganga	UTM Zone:	36N	Drillied Depth:	80.23 m
County:	Kigulu	Easting (X):	557077 m	Static Water Level:	12.17 m
Subcounty:	Nambale	Northing(Y):	85941 m	Safe Yield:	15.0 m3/hr
Parish:	Nambale	Altitude:	1107 m	Dynamic Water Level:	31.10 m
Village:	Nambale				



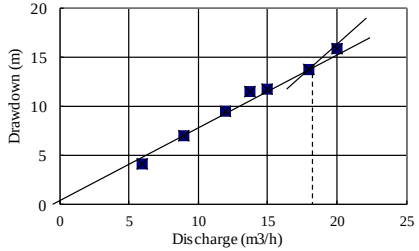
OYO International Corporation in association with TEC International Co., Ltd.

Pumping Test Analysis for Nambale-1 (I-03-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

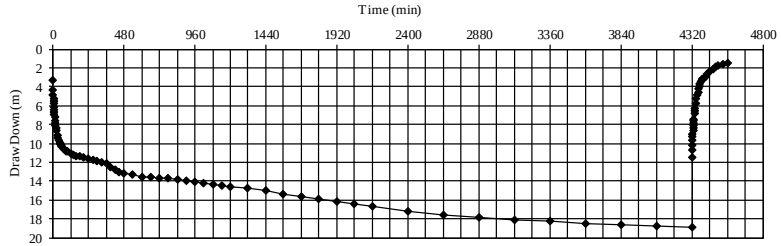


Step	Q(m3/hr)	sw(m)
1	6	4.19
2	9	7.01
3	12	9.53
4	15	11.72
5	18	13.79
6	20	15.9

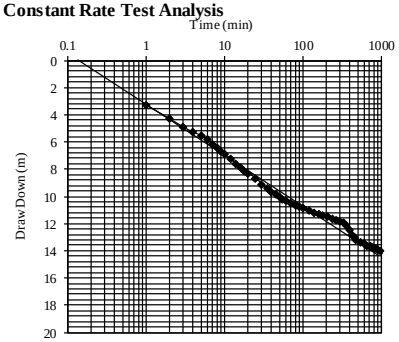
Critical Yield 18.8 m^3/h

Safe Yield 15.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 15 m^3/h

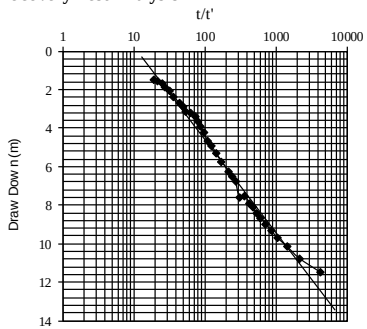
Δs 3.7 m

t0 0.15 min

Transmissivity = 0.75 m^2/h

Storage Coefficient = 0.42

Recovery Test Analysis



Q: 15 m^3/h

Δs 4.8 m

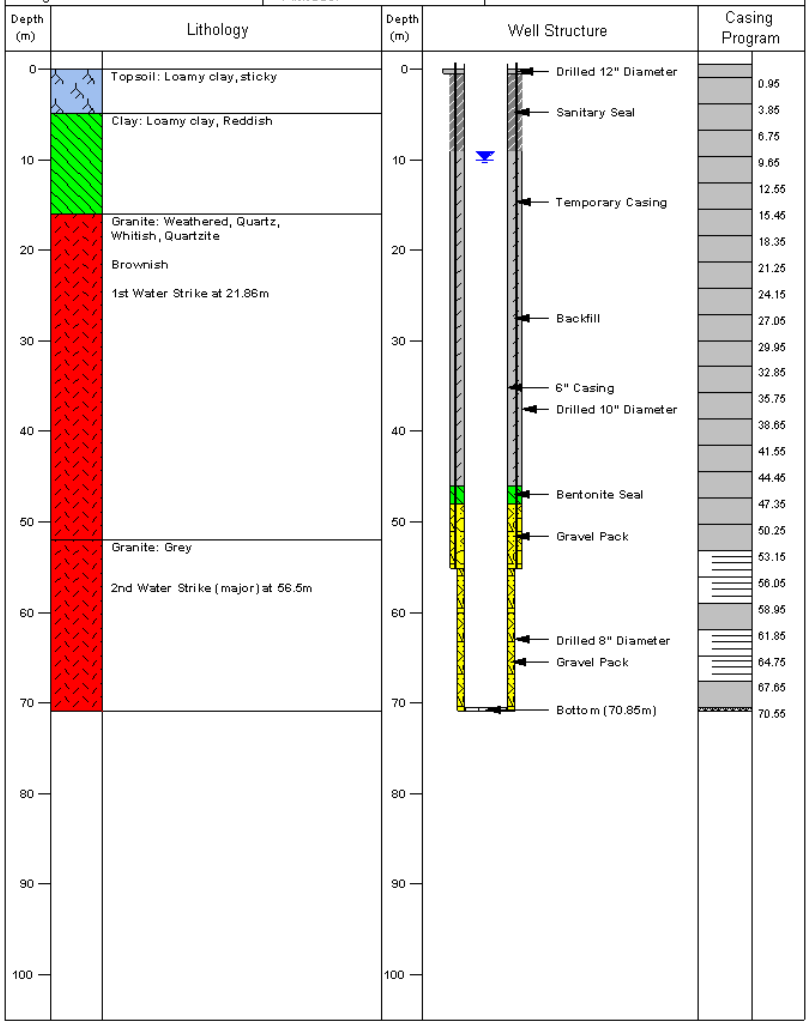
Transmissivity = 0.58 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-03-NBH-2** Site Name: **Nambale-2** Start Date: 2016/1/17 End Date: 2016/1/25

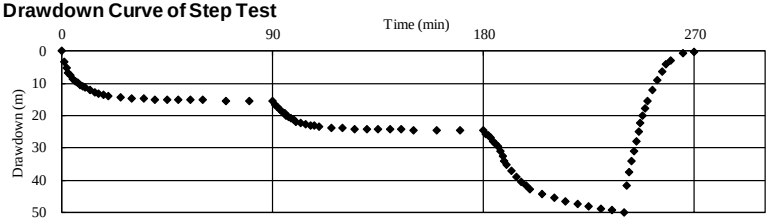
		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Iganga**	UTM Zone:	**36N**	Drillied Depth:	**70.85** m
County:	**Kigulu**	Easting (X):	**556878** m	Static Water Level:	**10.00** m
Subcounty:	**Nambale**	Northing(Y):	**86027** m	Safe Yield:	**2.6** m3/hr
Parish:	**Nambale**	Altitude:	**1107** m	Dynamic Water Level:	**19.06** m
Village:	**Nambale**				



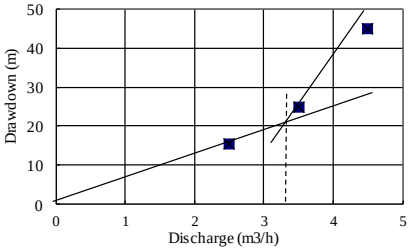
OYO International Corporation in association with TEC International Co., Ltd.

Pumping Test Analysis for Nambale-2 (I-03-NBH-2) Borehole

Drawdown Curve of Step Test



Step Test Analysis

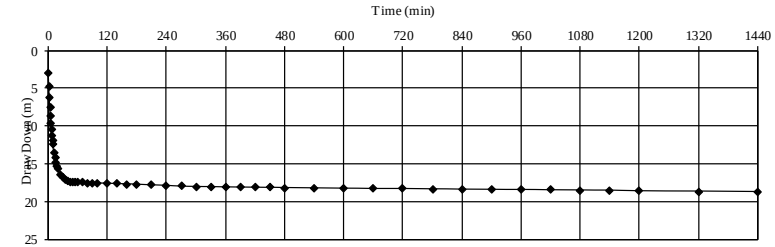


Step	Q(m3/hr)	sw(m)
1	2.5	15.48
2	3.5	24.71
3	4.5	45
4		
5		

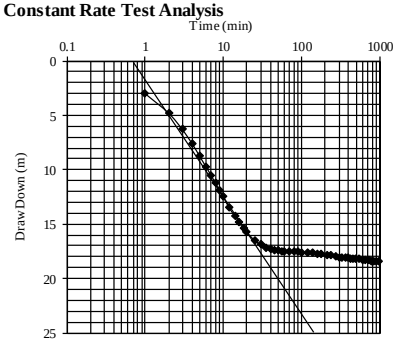
Critical Yield 3.3 m^3/h

Safe Yield 2.64 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.6 m^3/h

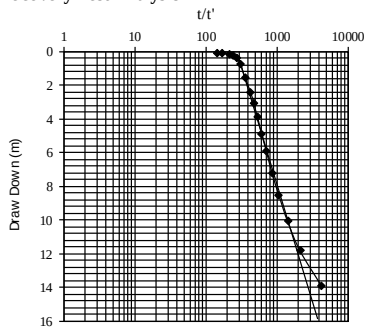
Δs 11.2 m

t0 0.8 min

Transmissivity = 0.04 m^2/h

Storage Coefficient = 0.13

Recovery Test Analysis



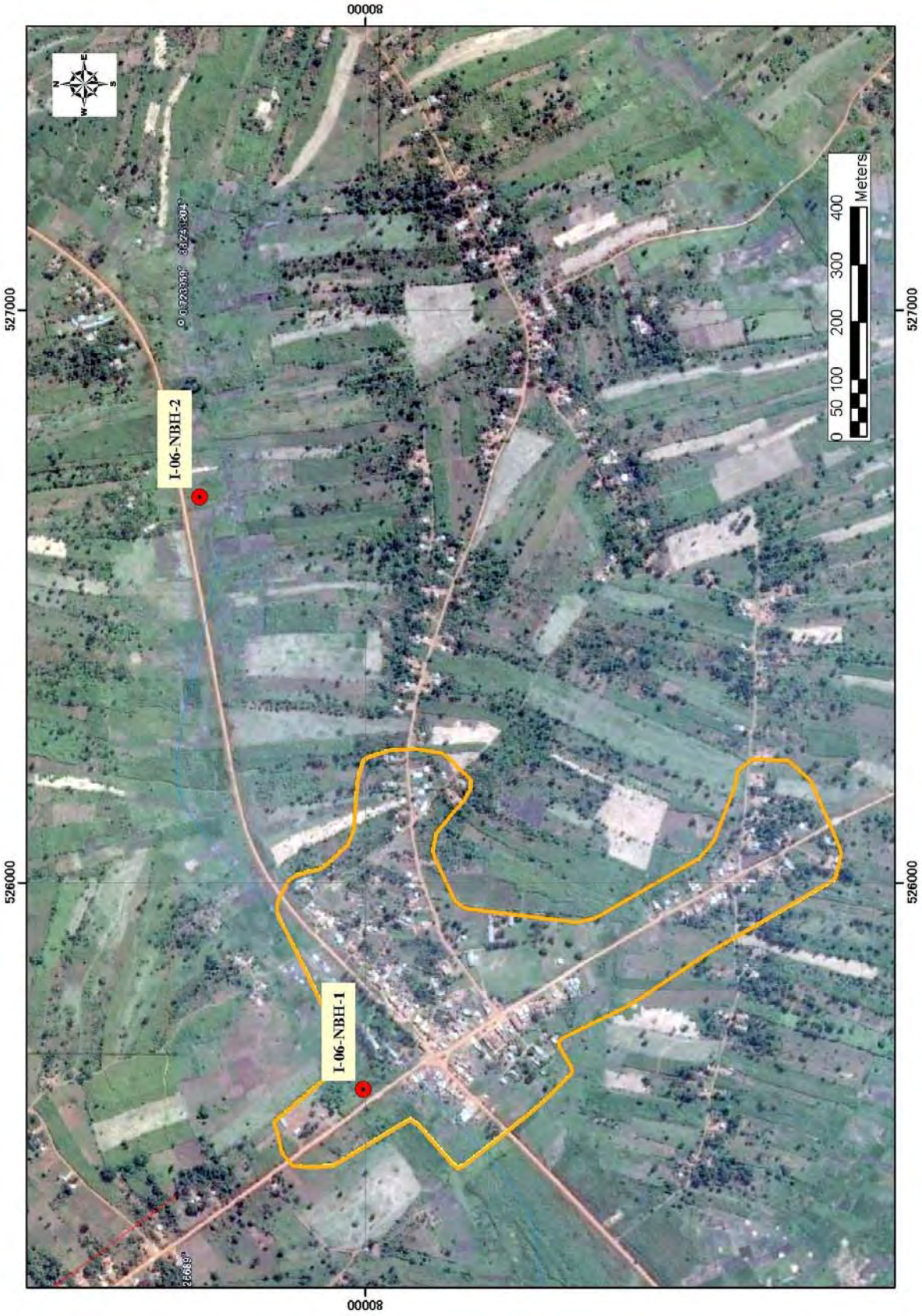
Q: 2.6 m^3/h

Δs 14.0 m

Transmissivity = 0.03 m^2/h

(2) Lambala RGC

Distribution of Drilling Sites

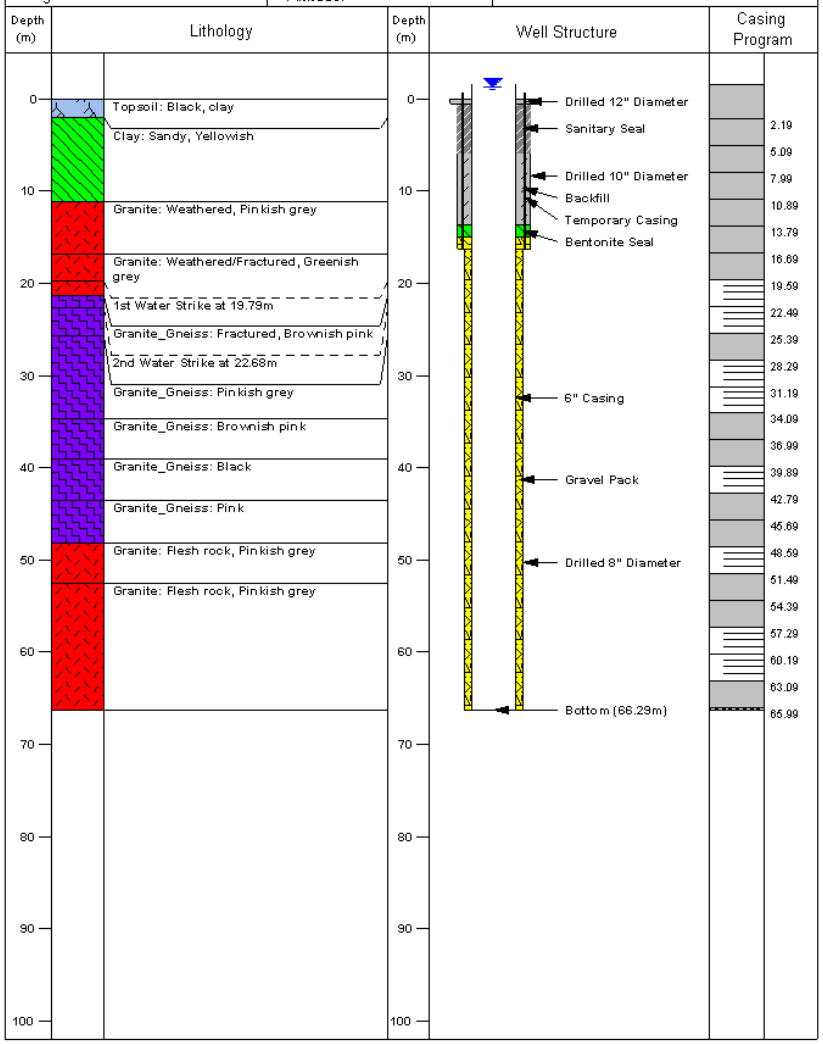


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-06-NBH-1** Site Name: **Lambala-1** Start Date: 2016/2/17 End Date: 2016/2/20

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Luuka**	UTM Zone:	**36N**	Drillied Depth:	**66.29** m
County:	**Luuka**	Easting (X):	**525640** m	Static Water Level:	**-1.3** m
Subcounty:	**Irongo**	Northing(Y):	**80002** m	Safe Yield:	**28.0** m3/hr
Parish:	**Lambala**	Altitude:	**1074** m	Dynamic Water Level:	**25.14** m
Village:	**Lambala**				



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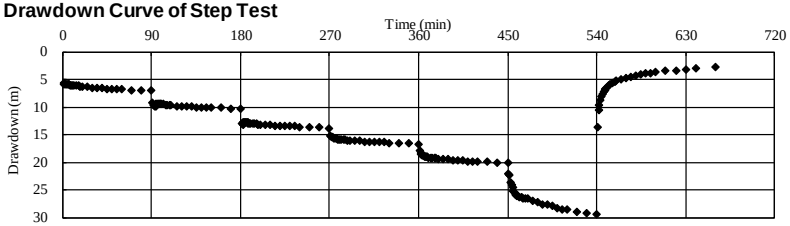
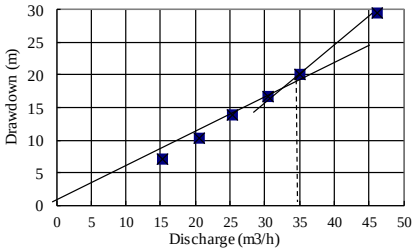
Pumping Test Analysis for Lambala-1 (I-06-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

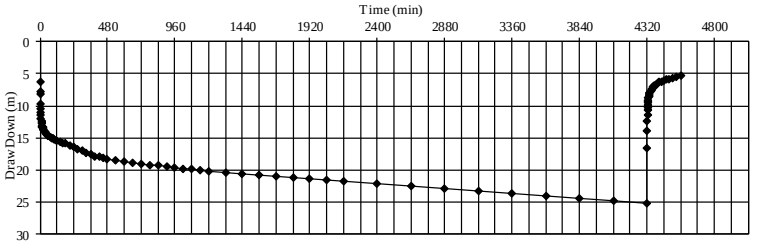


Step	Q(m3/hr)	sw(m)
1	15.2	7.03
2	20.6	10.3
3	25.4	13.82
4	30.5	16.75
5	35	20.17
6	46.2	29.46

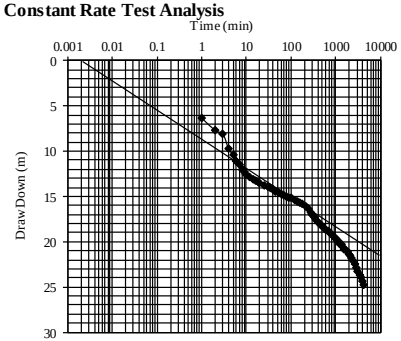
Critical Yield 35.0 m^3/h

Safe Yield 28.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 28.4 m^3/h

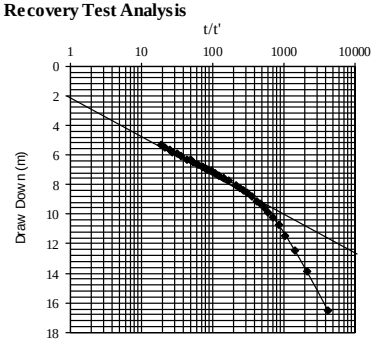
Δs 3.0 m

t0 0.003 min

Transmissivity = 1.73 m^2/h

Storage Coefficient = 0.02

Recovery Test Analysis



Q: 28.4 m^3/h

Δs 2.8 m

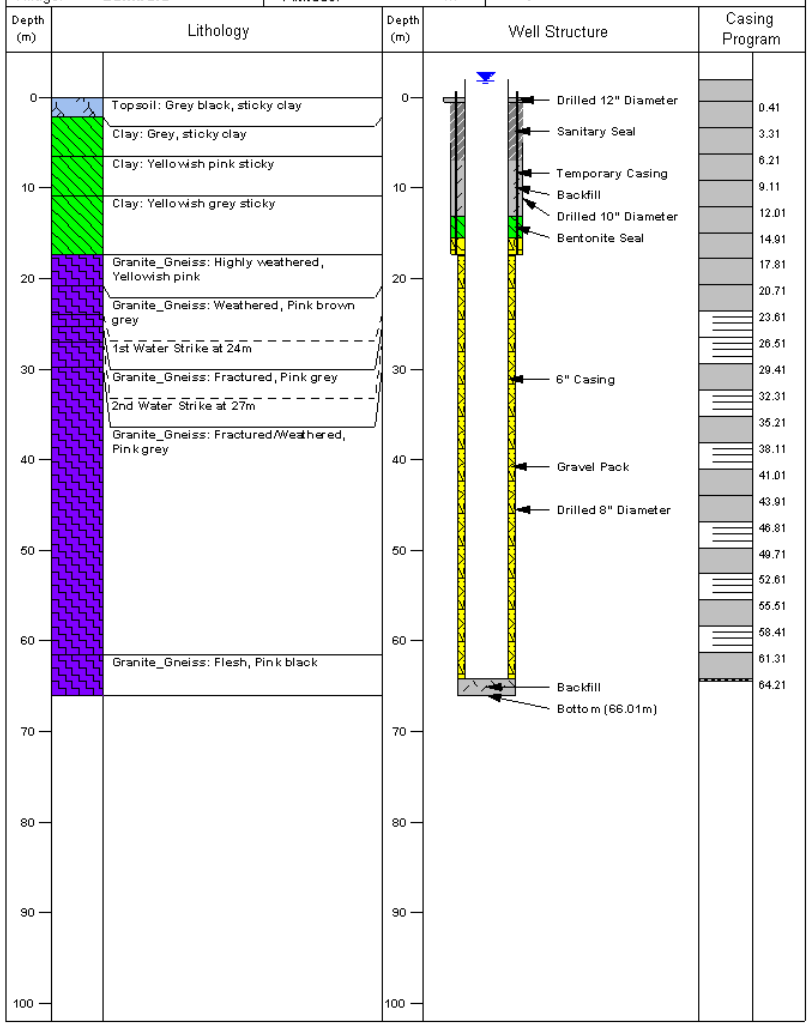
Transmissivity = 1.86 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-06-NBH-2** Site Name: **Lambala-2** Start Date: 2016/2/21 End Date: 2016/2/23

		Coordinate (Datum: Arc60)		Charactoristics of Borehole		
District:	**Luuka**	UTM Zone:	**36N**	Drillied Depth:	**66.01**	m
County:	**Luuka**	Easting (X):	**526675**	m Static Water Level:	**-1.82**	m
Subcounty:	**Irongo**	Northing(Y):	**80288**	m Safe Yield:	**40.0**	m3/hr
Parish:	**Lambala**	Altitude:	**1084**	m Dynamic Water Level:	**38.94**	m
Village:	**Lambala**					



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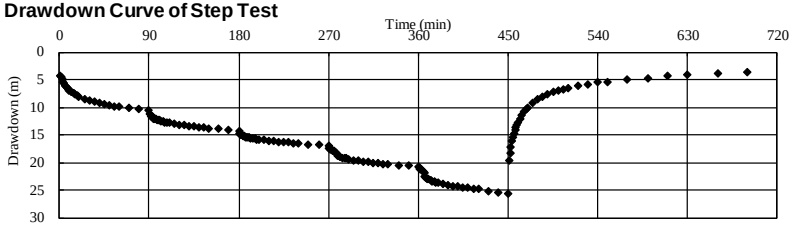
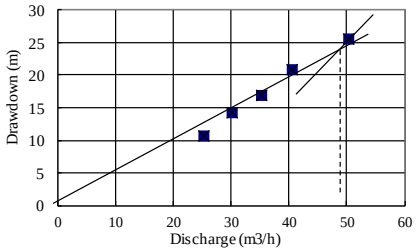
Pumping Test Analysis for Lambala-2 (I-06-NBH-2) Borehole

Drawdown Curve of Step Test



Step Test Analysis

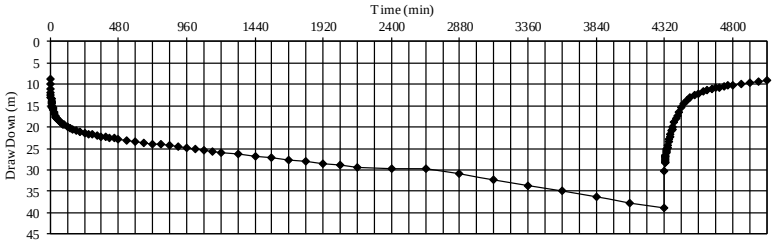


Step	Q(m3/hr)	sw(m)
1	25.4	10.64
2	30.3	14.24
3	35.2	16.9
4	40.5	20.78
5	50.3	25.59

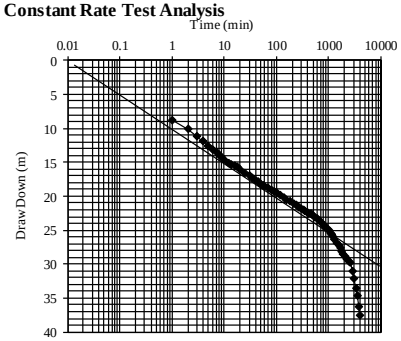
Critical Yield 50.0 m^3/h

Safe Yield 40.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 30.19 m^3/h

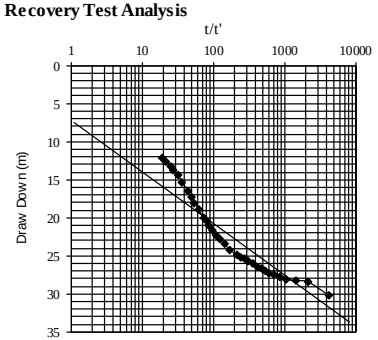
Δs 5.0 m

t0 0.015 min

Transmissivity = 1.11 m^2/h

Storage Coefficient = 0.06

Recovery Test Analysis



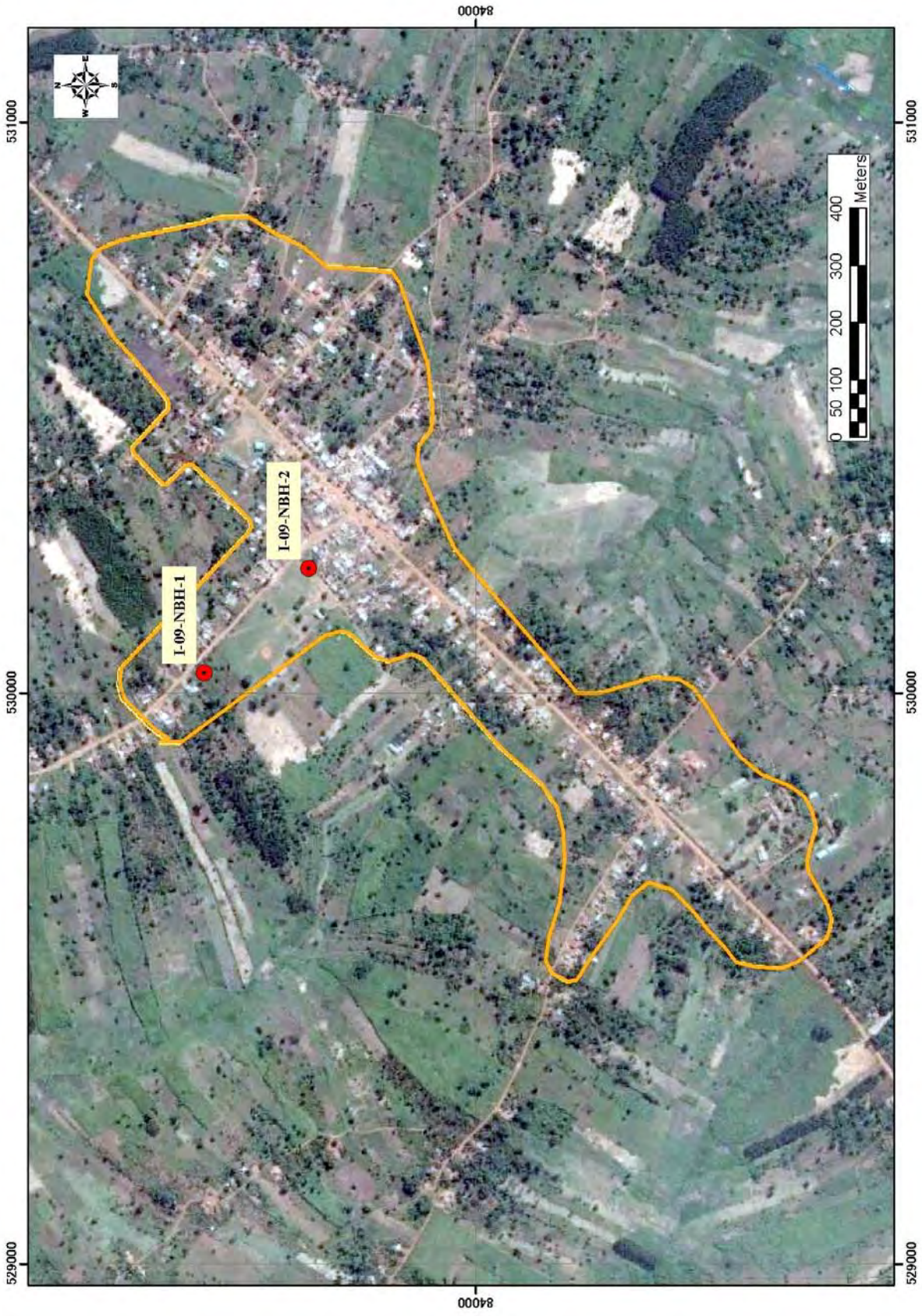
Q: 30.19 m^3/h

Δs 9.0 m

Transmissivity = 0.61 m^2/h

(3) Kyanvuma RGC

Distribution of Drilling Sites

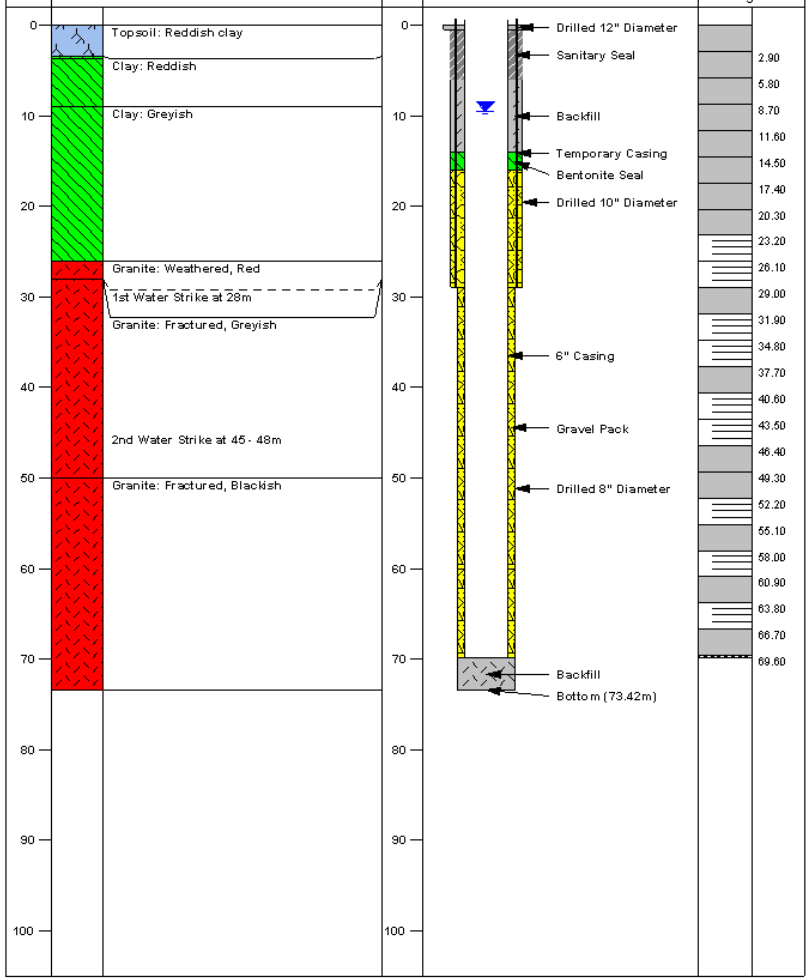


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: I-09-NBH-1 Site Name: Kyanvuma-1 Start Date: 2016/2/19 End Date: 2016/2/22

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	Luuka	UTM Zone:	36N	Drillied Depth:	73.42 m
County:	Luuka	Easting (X):	530037 m	Static Water Level:	9.45 m
Subcounty:	Irongo	Northing(Y):	84475 m	Safe Yield:	2.0 m3/hr
Parish:	Kyanvuma	Altitude:	1123 m	Dynamic Water Level:	49.58 m
Village:	Kyanvuma				



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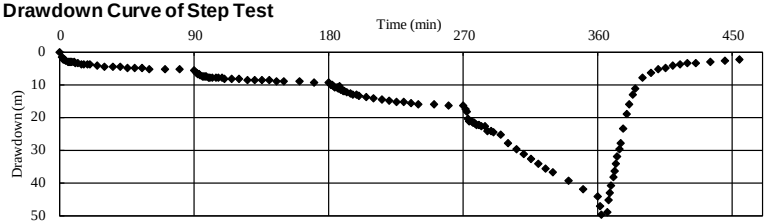
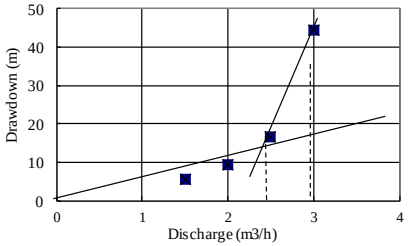
Pumping Test Analysis for Kyanvuma-1 (I-09-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

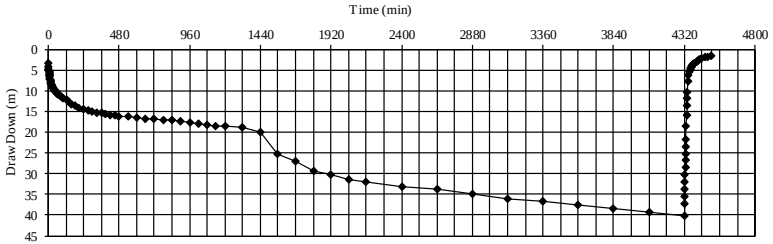


Step	Q(m3/hr)	sw(m)
1	1.5	5.75
2	2	9.5
3	2.5	16.54
4	3	44.27
5		

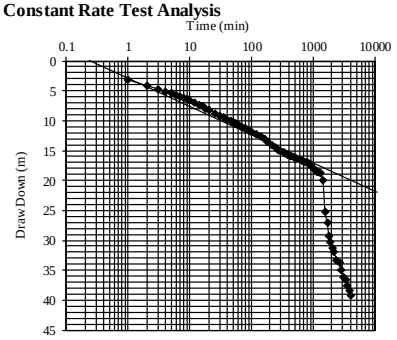
Critical Yield 2.5 m^3/h

Safe Yield 2.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.0 m^3/h

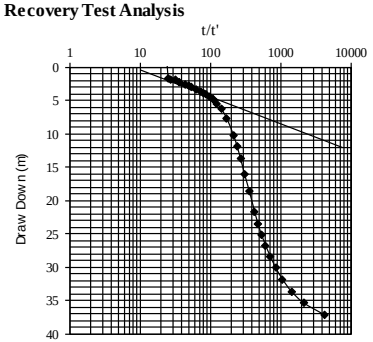
Δs 5.0 m

t0 0.3 min

Transmissivity = 0.07 m^2/h

Storage Coefficient = 0.08

Recovery Test Analysis



Q: 2.0 m^3/h

Δs 4.5 m

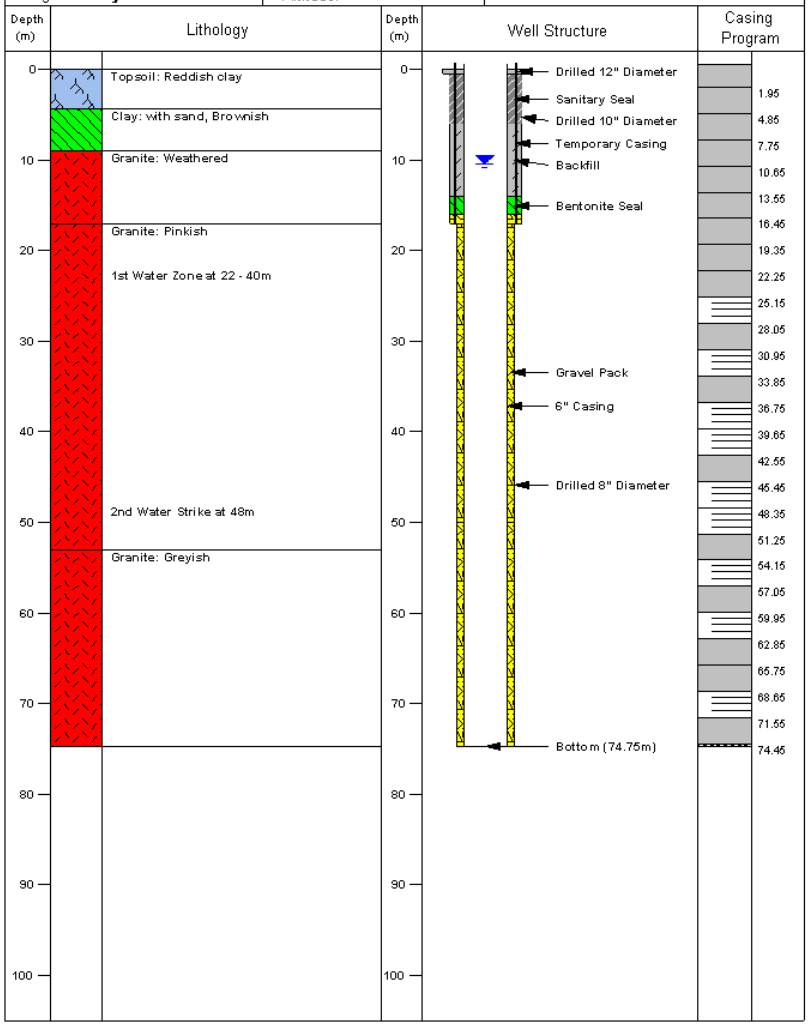
Transmissivity = 0.08 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-09-NBH-2** Site Name: **Kyanvuma-2** Start Date: 2016/2/23 End Date: 2016/2/26

		Coordinate (Datum: Arc60)		Charactoristics of Borehole		
District:	**Luuka**	UTM Zone:	**36N**	Drillied Depth:	**74.75**	m
County:	**Luuka**	Easting (X):	**530220** m	Static Water Level:	**10.5**	m
Subcounty:	**Irongo**	Northing(Y):	**84292** m	Safe Yield:	**0.5**	m3/hr
Parish:	**Kyanvuma**	Altitude:	**1119** m	Dynamic Water Level:	**23.17**	m
Village:	**Kyanvuma**					



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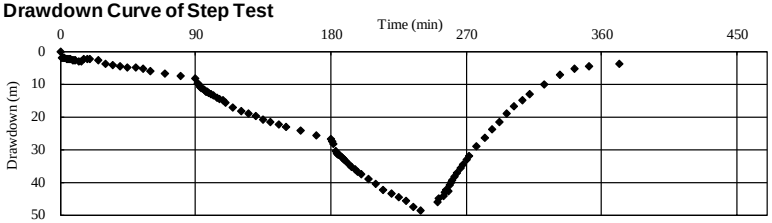
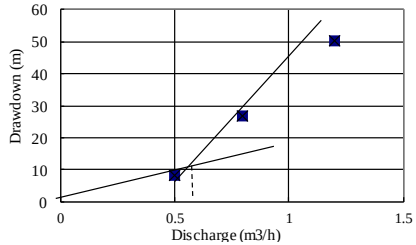
Pumping Test Analysis for Kyanvuma-2 (I-09-NBH-2) Borehole

Drawdown Curve of Step Test



Step Test Analysis

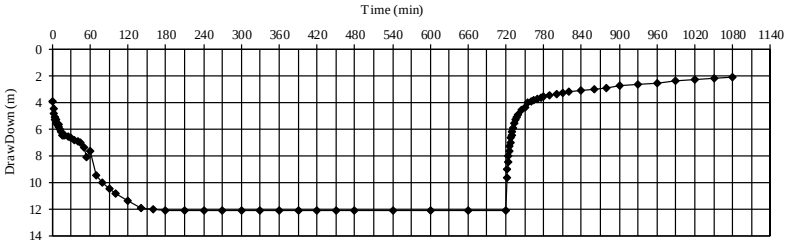


Step	Q(m3/hr)	sw(m)
1	0.5	8.31
2	0.8	26.78
3	1.2	50.3
4		
5		

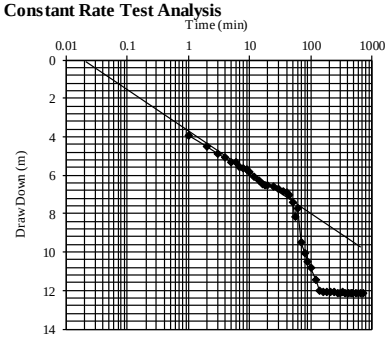
Critical Yield 0.6 m^3/h

Safe Yield 0.5 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 0.57 m^3/h

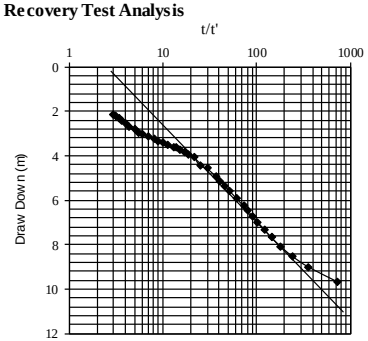
Δs 2.2 m

t0 0.02 min

Transmissivity = 0.05 m^2/h

Storage Coefficient = 0.004

Recovery Test Analysis



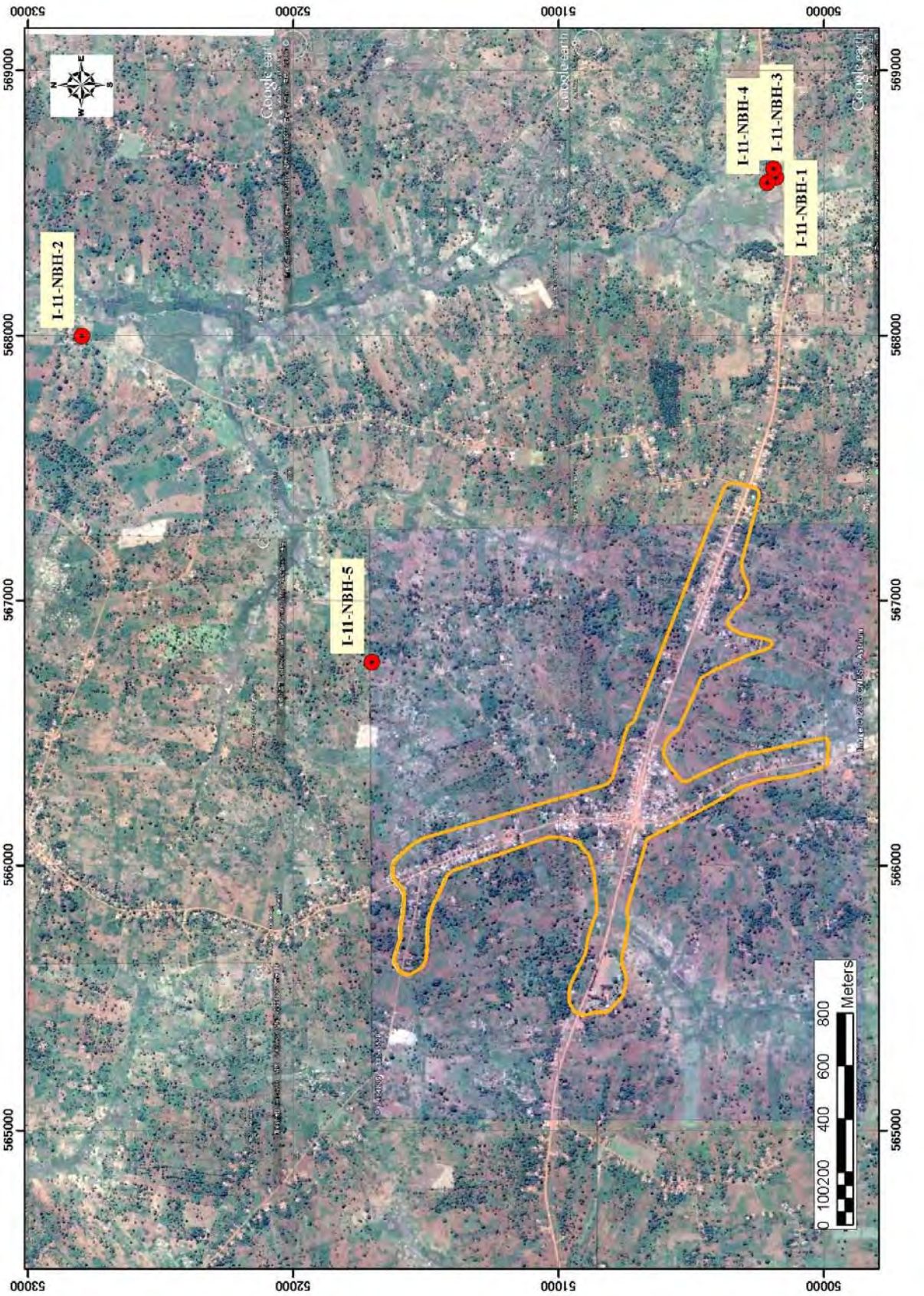
Q: 0.57 m^3/h

Δs 4.4 m

Transmissivity = 0.02 m^2/h

(4) Nondwe RGC

Distribution of Drilling Sites

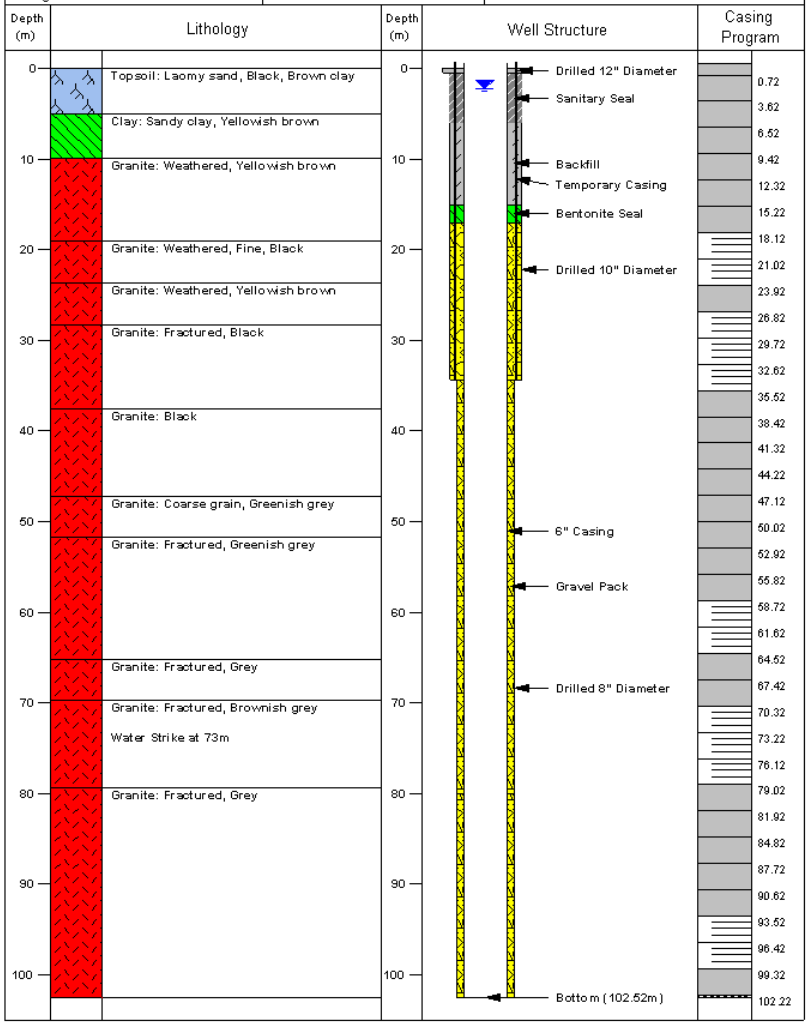


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: I-11-NBH-1 Site Name: Nondwe-1 Start Date: 2016/2/14 End Date: 2016/2/21

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	Mayuge	UTM Zone:	36N	Drillied Depth:	102.52 m
County:	Bunya	Easting (X):	568597 m	Static Water Level:	2.2 m
Subcounty:	Kigandalo	Northing(Y):	50179 m	Safe Yield:	3.1 m3/hr
Parish:	Isenda	Altitude:	1185 m	Dynamic Water Level:	8.18 m
Village:	Nanvnano				



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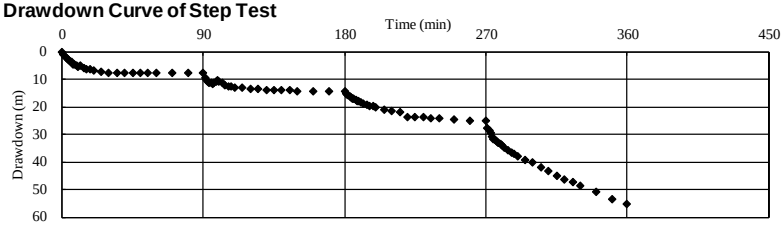
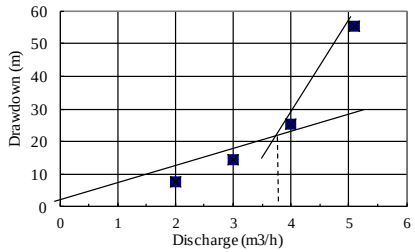
Pumping Test Analysis for Nondwe-1 (I-11-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

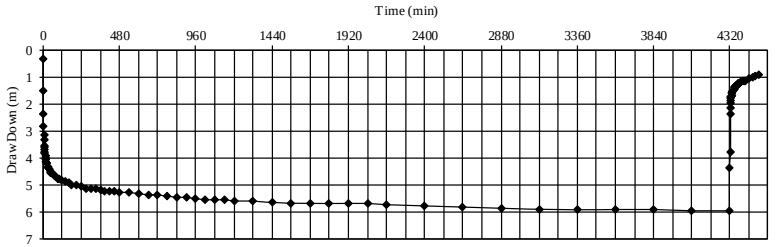


Step	Q(m3/hr)	sw(m)
1	2	7.81
2	3	14.34
3	4	25.24
4	5.1	55.32
5		

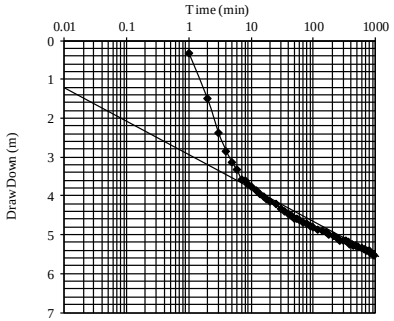
Critical Yield 3.9 m^3/h

Safe Yield 3.1 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.5 m^3/h

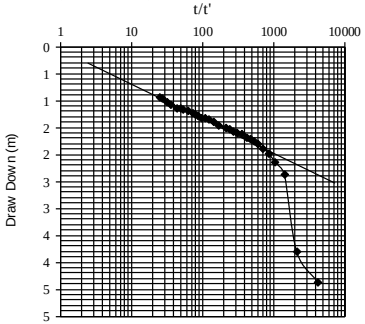
Δs 0.8 m

t0 0.0002 min

Transmissivity = 0.55 m^2/h

Storage Coefficient = 0.0004

Recovery Test Analysis



Q: 2.5 m^3/h

Δs 0.6 m

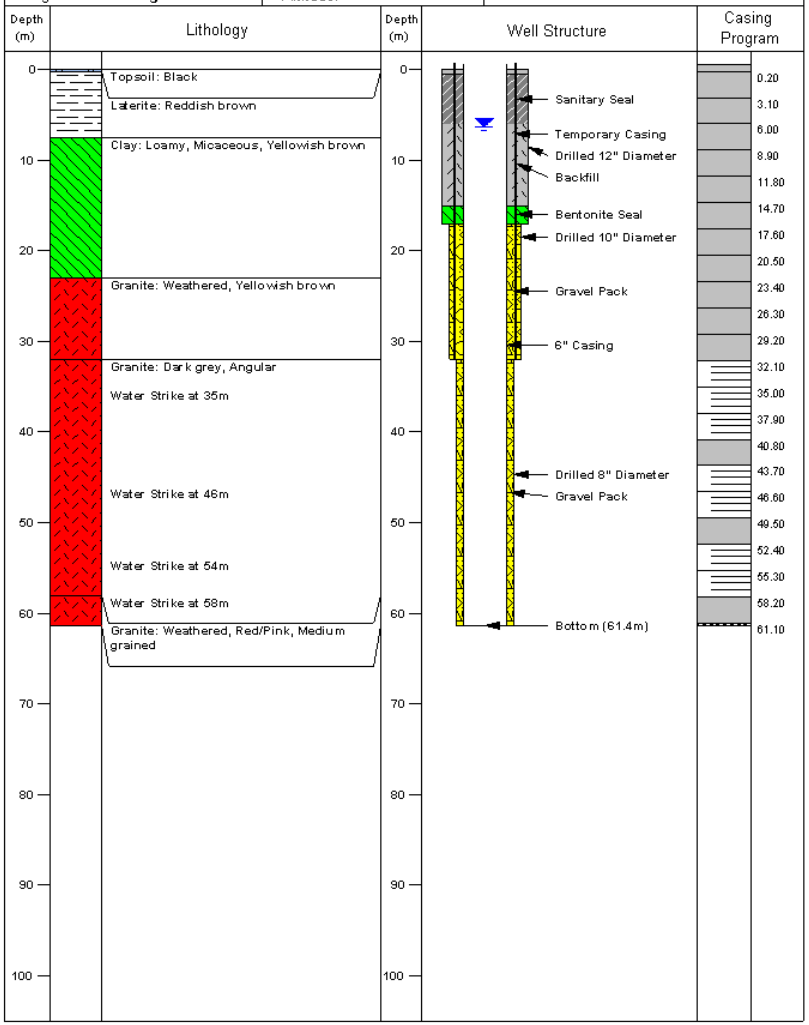
Transmissivity = 0.72 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-11-NBH-2** Site Name: **Nondwe-2** Start Date: 2016/3/29 End Date: 2016/4/6

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Iganga**	UTM Zone:	**36N**	Drillied Depth:	**61.40** m
County:	**Bugweri**	Easting (X):	**567999** m	Static Water Level:	**6.4** m
Subcounty:	**Makuutu**	Northing(Y):	**52794** m	Safe Yield:	**1.0** m3/hr
Parish:	**Kasozi**	Altitude:	**1157** m	Dynamic Water Level:	**17.30** m
Village:	**Buzongoli**				



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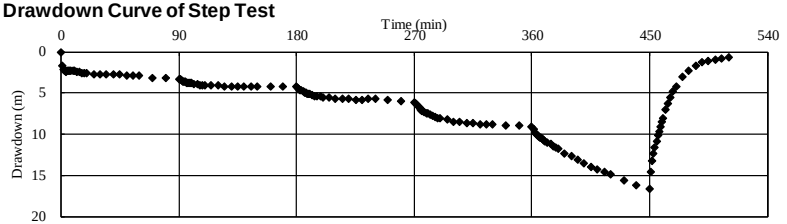
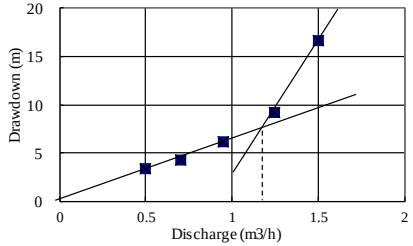
Pumping Test Analysis for Nondwe-2 (I-11-NBH-2) Borehole

Drawdown Curve of Step Test



Step Test Analysis

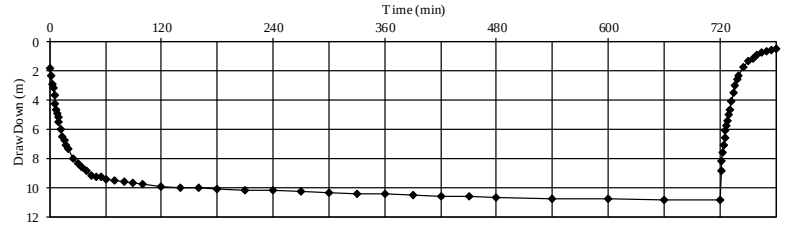


Step	Q(m3/hr)	sw(m)
1	0.5	3.38
2	0.7	4.28
3	0.95	6.1
4	1.25	9.12
5	1.5	16.6

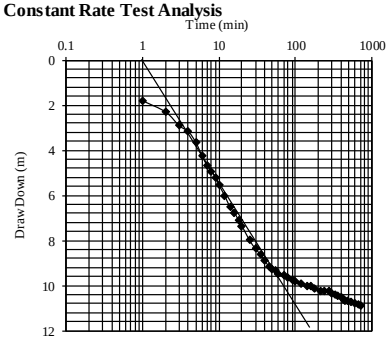
Critical Yield 1.2 m^3/h

Safe Yield 0.96 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 1 m^3/h

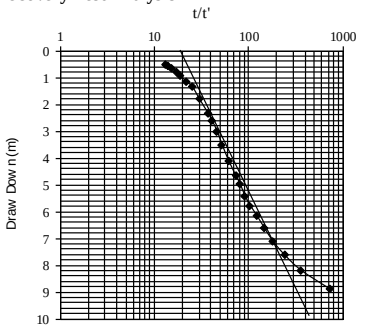
Δs 5.6 m

t0 1 min

Transmissivity = 0.0327 m^2/h

Storage Coefficient = 0.123

Recovery Test Analysis



Q: 1 m^3/h

Δs 7.2 m

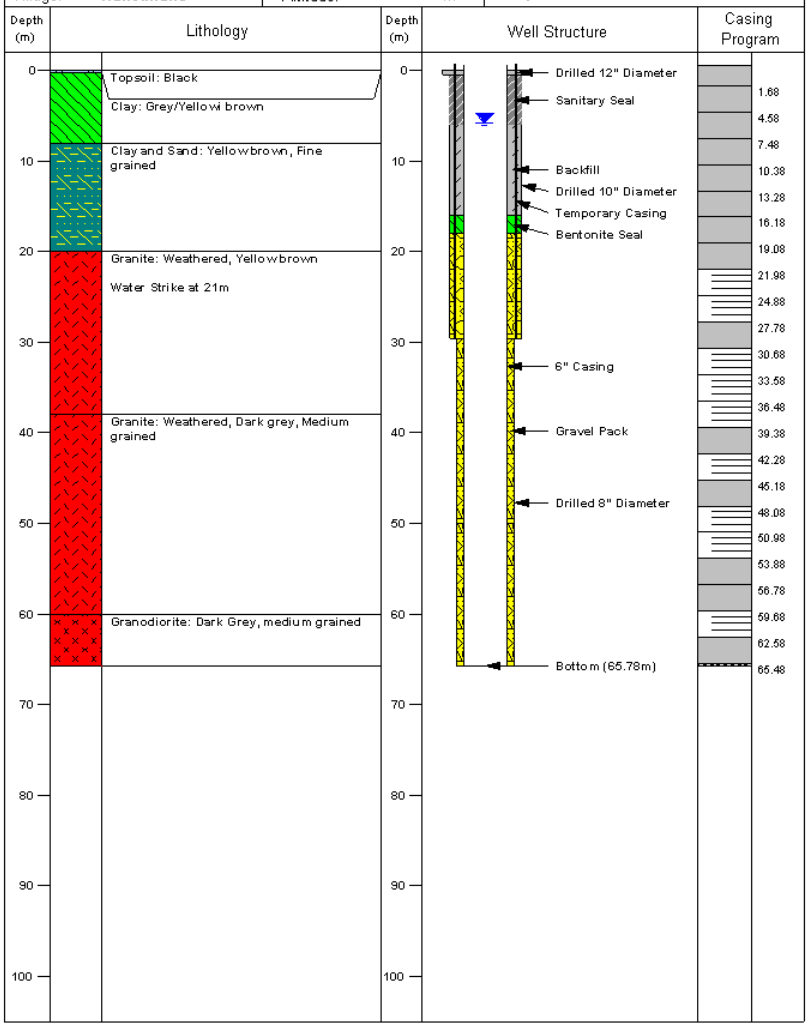
Transmissivity = 0.0254 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-11-NBH-3** Site Name: **Nondwe-3** Start Date: 2016/3/18 End Date: 2016/3/20

		Coordinate (Datum: Arc60)			Charactoristics of Borehole		
District:	**Mayuge**	UTM Zone:	**36N**		Drillied Depth:	**65.78**	m
County:	**Bunya**	Easting (X):	**578631**	m	Static Water Level:	**5.75**	m
Subcounty:	**Kigandalo**	Northing(Y):	**50187**	m	Safe Yield:	**3.0**	m3/hr
Parish:	**Isenda**	Altitude:	**1178**	m	Dynamic Water Level:	**17.83**	m
Village:	**Nanvunano**						



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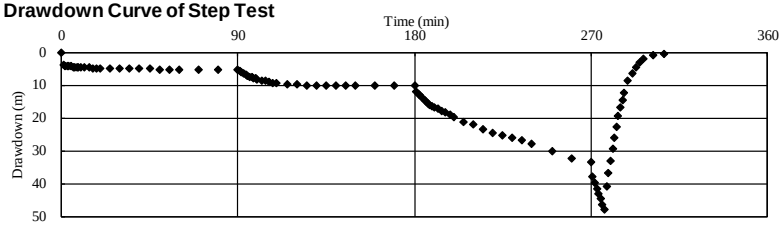
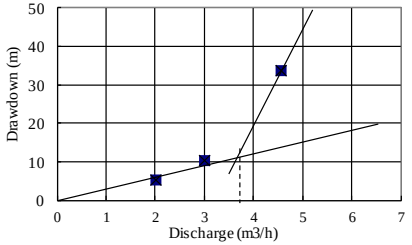
Pumping Test Analysis for Nondwe-3 (I-11-NBH-3) Borehole

Drawdown Curve of Step Test



Step Test Analysis

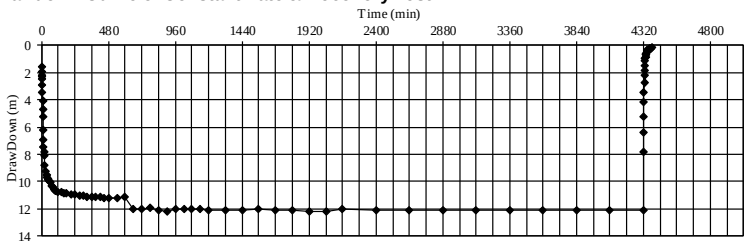


Step	Q(m3/hr)	sw(m)
1	2.01	5.28
2	3	10.36
3	4.56	33.69
4	6.2	47.95
5		

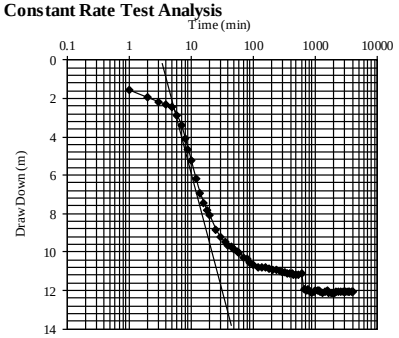
Critical Yield 3.8 m^3/h

Safe Yield 3.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 3.1 m^3/h

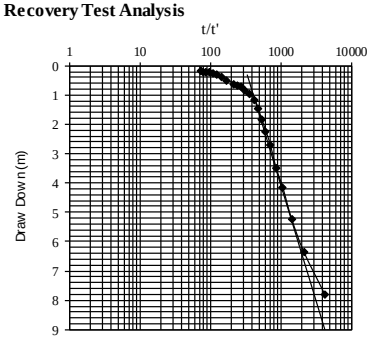
Δs 12.0 m

t0 4 min

Transmissivity = 0.05 m^2/h

Storage Coefficient = 0.71

Recovery Test Analysis



Q: 3.1 m^3/h

Δs 7.2 m

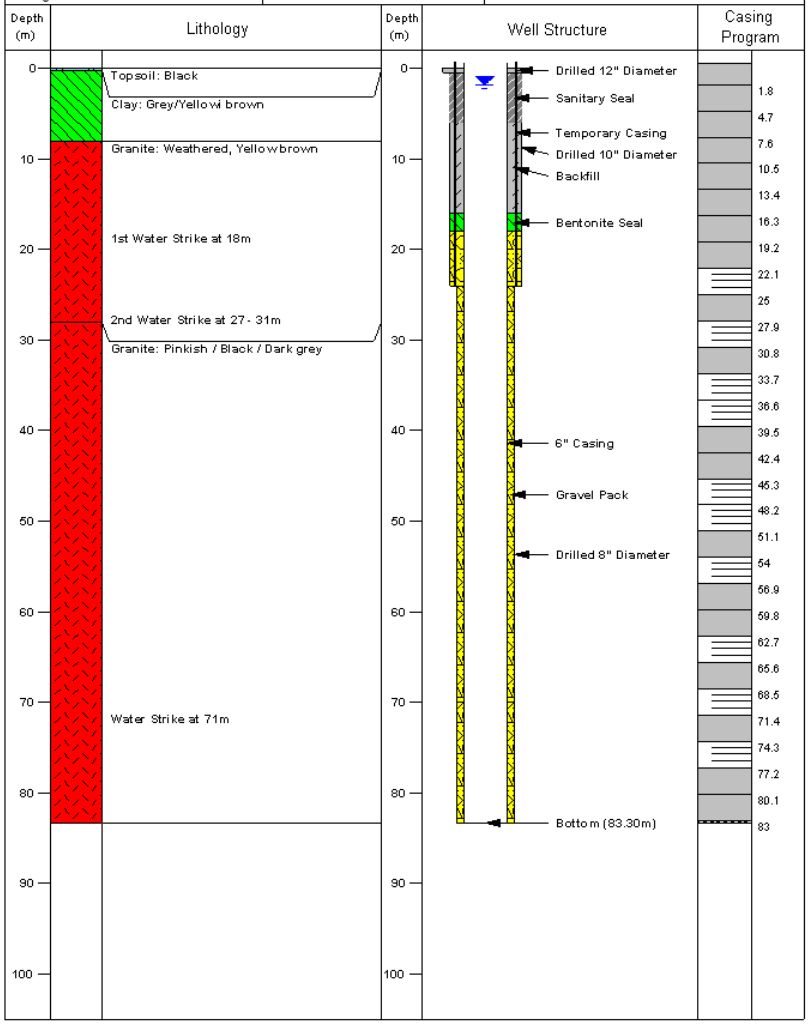
Transmissivity = 0.08 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: I-11-NBH-4 Site Name: Nondwe-4 Start Date: 2016/3/15 End Date: 2016/3/17

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	Mayuge	UTM Zone:	36N	Drillied Depth:	83.3 m
County:	Bunya	Easting (X):	578579 m	Static Water Level:	1.9 m
Subcounty:	Kigandalo	Northing(Y):	50211 m	Safe Yield:	9.0 m3/hr
Parish:	Isenda	Altitude:	1176 m	Dynamic Water Level:	22.8 m
Village:	Nanvunado				



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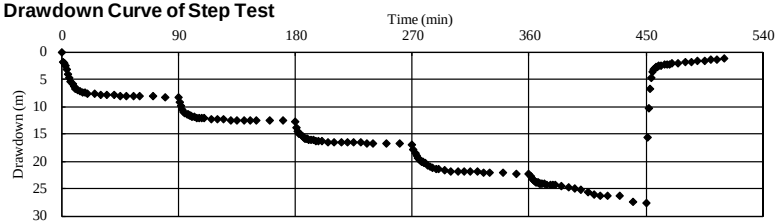
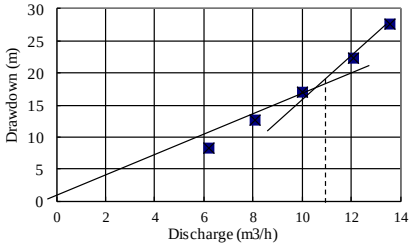
Pumping Test Analysis for Nondwe-4 (I-11-NBH-4) Borehole

Drawdown Curve of Step Test



Step Test Analysis

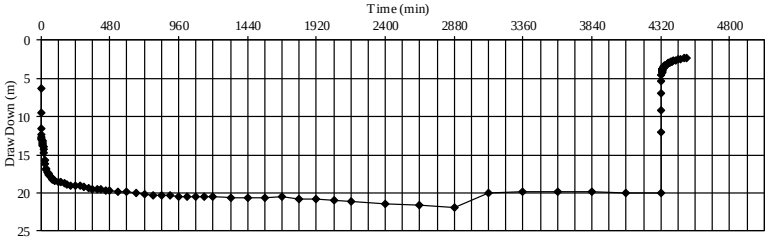


Step	Q(m3/hr)	sw(m)
1	6.2	8.31
2	8.1	12.67
3	10	16.91
4	12.1	22.28
5	13.6	27.62

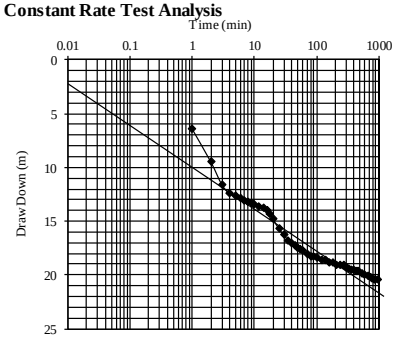
Critical Yield 11.3 m^3/h

Safe Yield 9.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 9.0 m^3/h

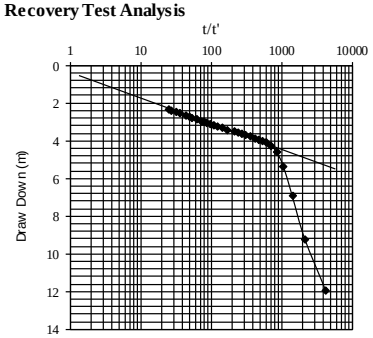
Δs 3.7 m

t0 0.0015 min

Transmissivity = 0.45 m^2/h

Storage Coefficient = 0.0025

Recovery Test Analysis



Q: 9.0 m^3/h

Δs 1.3 m

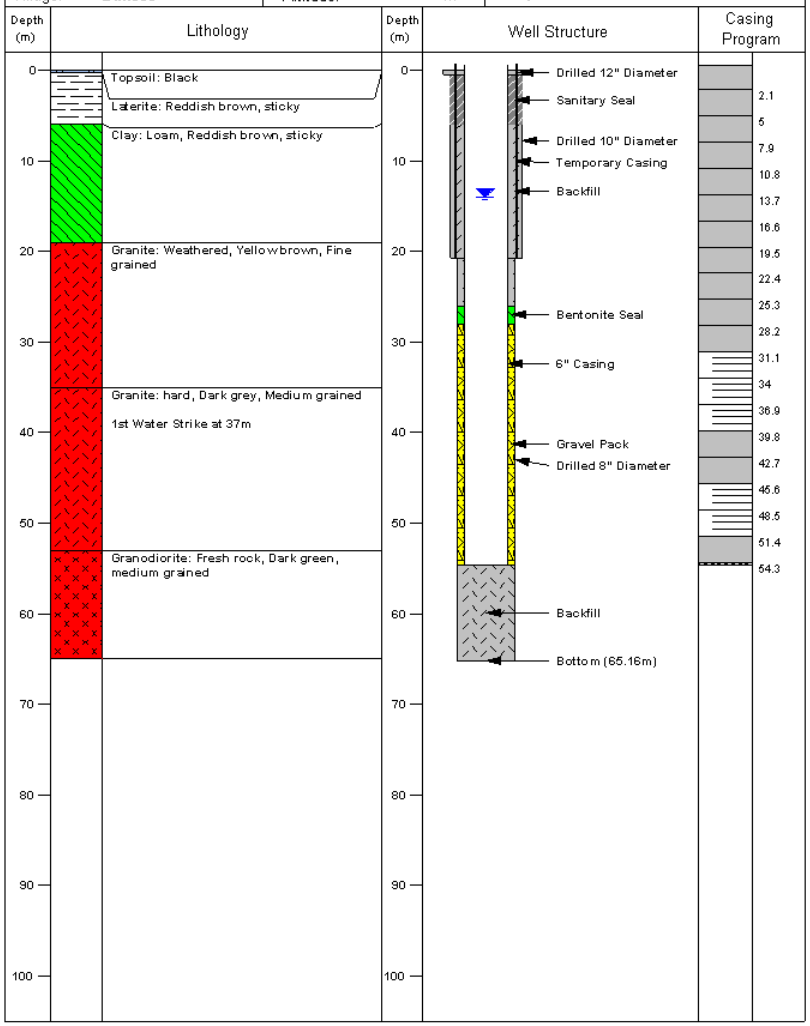
Transmissivity = 1.24 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **I-11-NBH-5** Site Name: **Nondwe-5** Start Date: 2016/3/21 End Date: 2016/3/23

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Iganga**	UTM Zone:	**36N**	Drillied Depth:	**65.16** m
County:	**Bugweri**	Easting (X):	**566769** m	Static Water Level:	**14.02** m
Subcounty:	**Makuutu**	Northing(Y):	**51702** m	Safe Yield:	**0.52** m3/hr
Parish:	**Kasozi**	Altitude:	**1185** m	Dynamic Water Level:	**32.91** m
Village:	**Bukose**				



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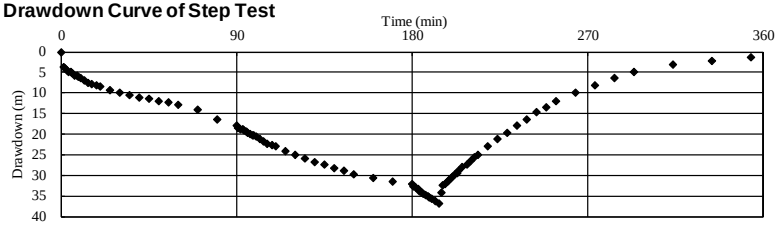
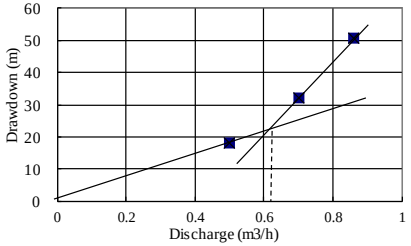
Pumping Test Analysis for Nondwe-5 (I-11-NBH-5) Borehole

Drawdown Curve of Step Test



Step Test Analysis

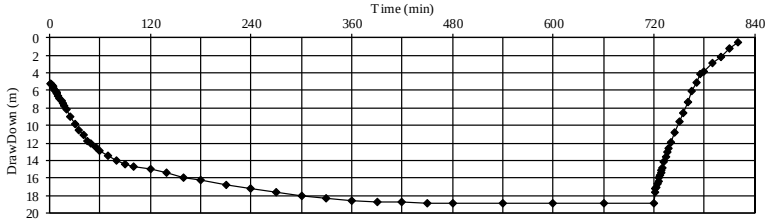


Step	Q(m3/hr)	sw(m)
1	0.5	17.98
2	0.7	32.27
3	0.86	50.79
4		
5		

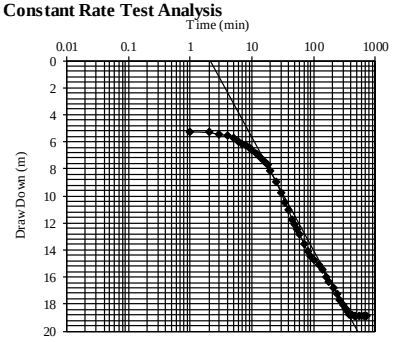
Critical Yield 0.65 m^3/h

Safe Yield 0.52 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 0.4 m^3/h

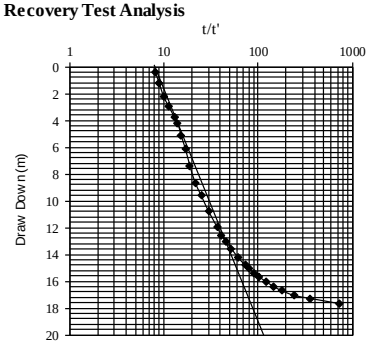
Δs 8.4 m

t0 2 min

Transmissivity = 0.0087 m^2/h

Storage Coefficient = 0.065

Recovery Test Analysis



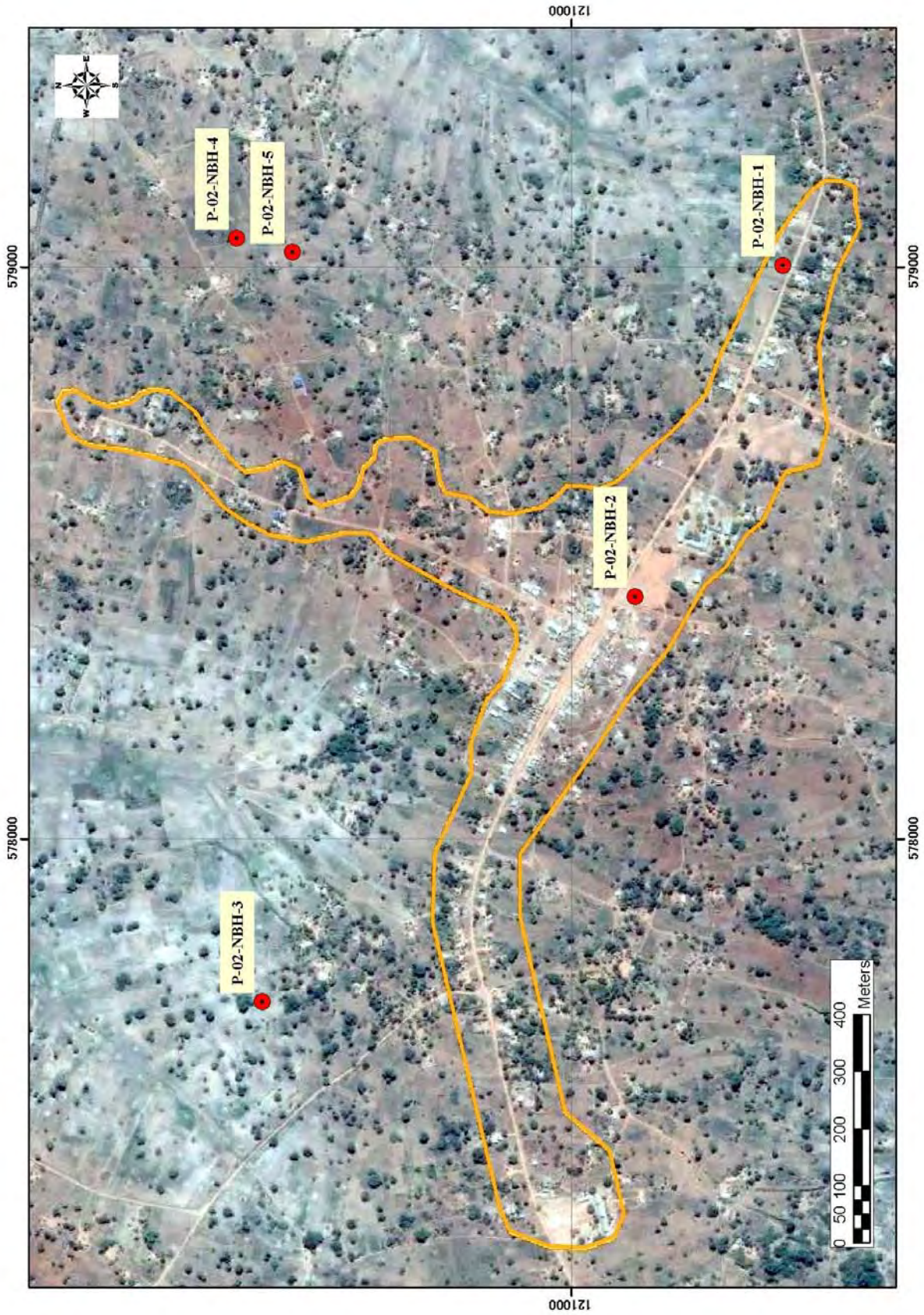
Q: 0.4 m^3/h

Δs 16.8 m

Transmissivity = 0.0044 m^2/h

(5) Kasassira RGC

Distribution of Drilling Sites

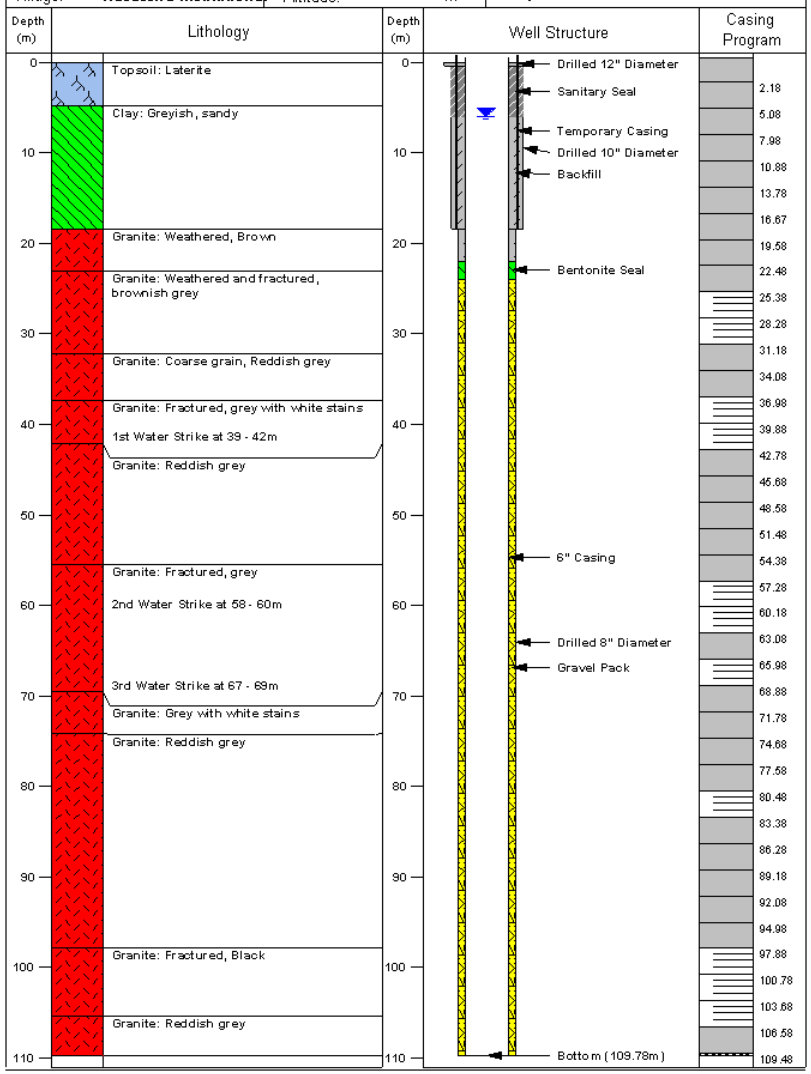


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-02-NBH-1** Site Name: **Kasassira-1** Start Date: 2016/1/29 End Date: 2016/2/2

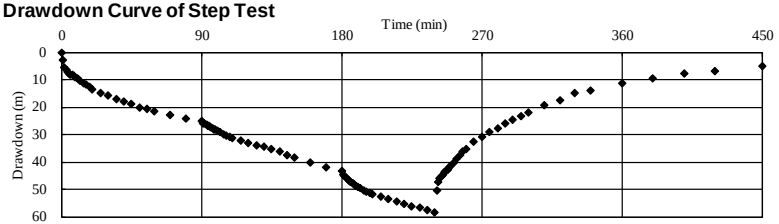
		Coordinate (Datum: Arc60)		Charactoristics of Borehole		
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**109.78**	m
County:	**Kibuku**	Easting (X):	**579005** m	Static Water Level:	**6.0**	m
Subcounty:	**Kasassira**	Northing(Y):	**120630** m	Safe Yield:	**0.8**	m3/hr
Parish:	**Kasassira**	Altitude:	**1077** m	Dynamic Water Level:	**43.83**	m
Village:	**Kasassira Institutional**					



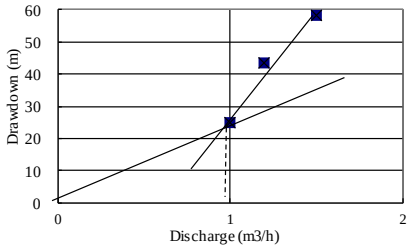
OYO International Corporation in association with TEC International Co., Ltd.

Pumping Test Analysis for Kasassira-1 (P-02-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

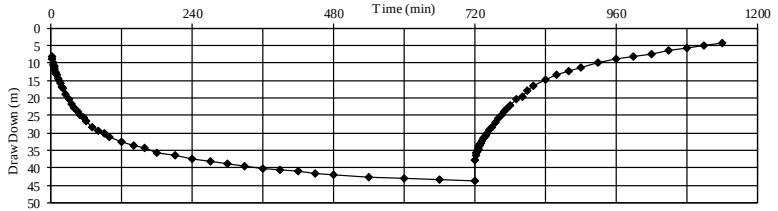


Step	Q(m3/hr)	sw(m)
1	1	25.05
2	1.2	43.5
3	1.5	58.3
4		
5		

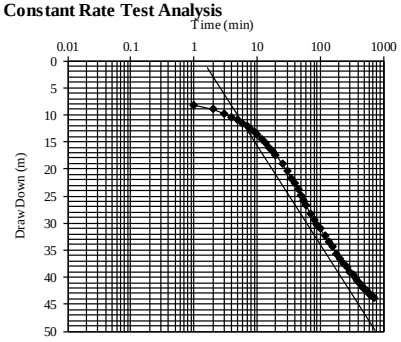
Critical Yield 1.0 m^3/h

Safe Yield 0.8 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 1 m^3/h

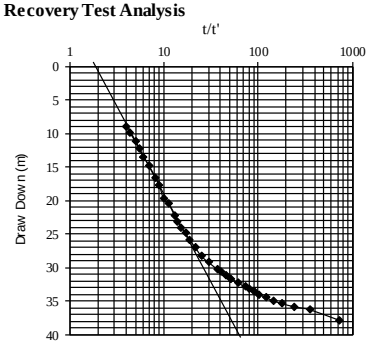
Δs 18.5 m

t0 1.8 min

Transmissivity = 0.0099 m^2/h

Storage Coefficient = 0.067

Recovery Test Analysis



Q: 1 m^3/h

Δs 27.0 m

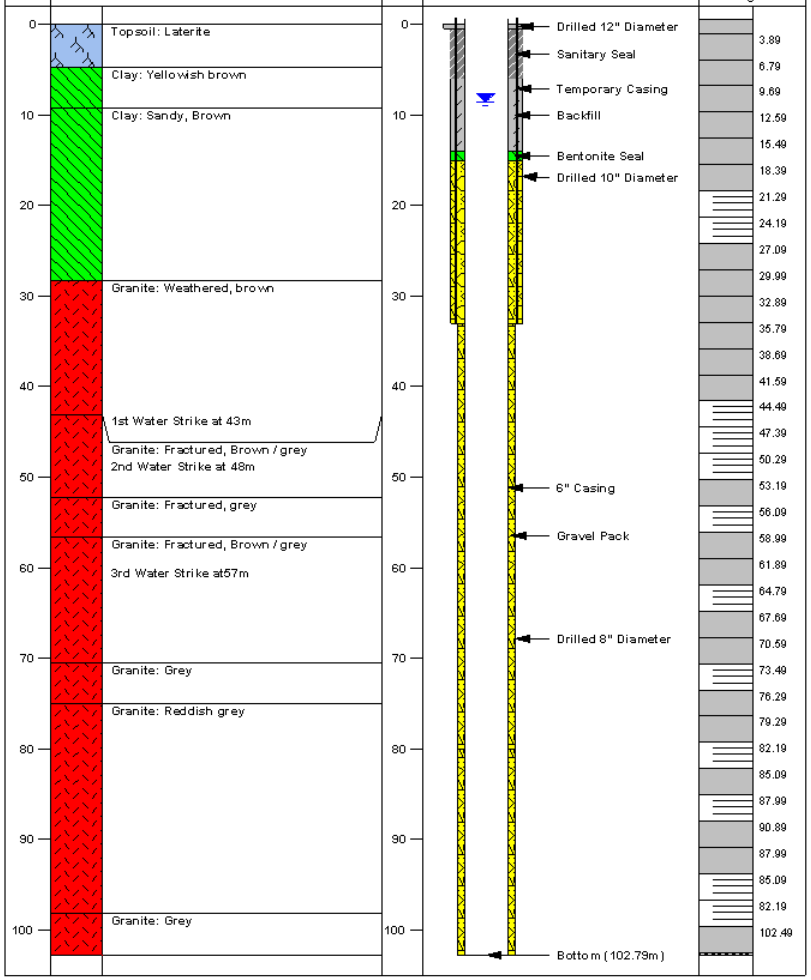
Transmissivity = 0.0068 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-02-NBH-2** Site Name: **Kasassira-2** Start Date: 2016/2/3 End Date: 2016/2/7

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**102.79** m
County:	**Kibuku**	Easting (X):	**578426** m	Static Water Level:	**8.6** m
Subcounty:	**Kasassira**	Northing(Y):	**120888** m	Safe Yield:	**2.6** m3/hr
Parish:	**Kasassira**	Altitude:	**1079** m	Dynamic Water Level:	**39.66** m
Village:	**Kasasira Institutional**				



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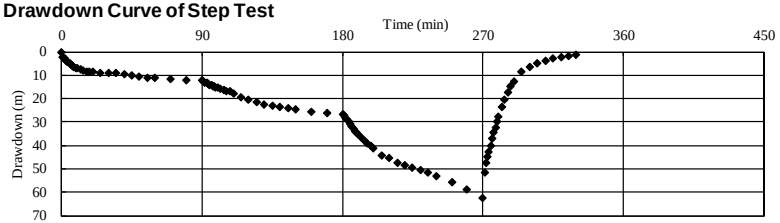
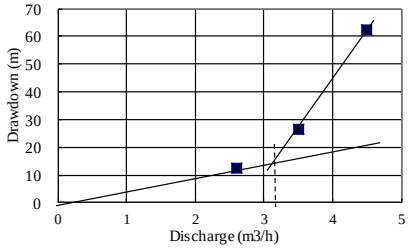
Pumping Test Analysis for Kasassira-2 (P-02-NBH-2) Borehole

Drawdown Curve of Step Test



Step Test Analysis

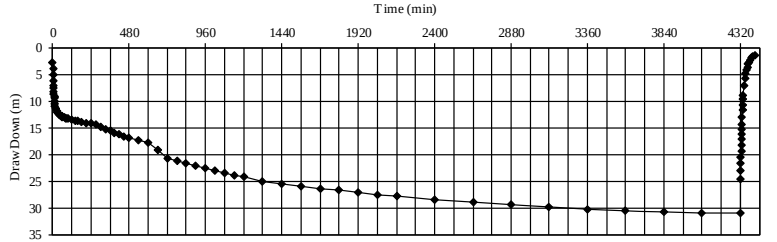


Step	Q(m3/hr)	sw(m)
1	2.6	12.26
2	3.5	26.5
3	4.5	62.37
4		
5		

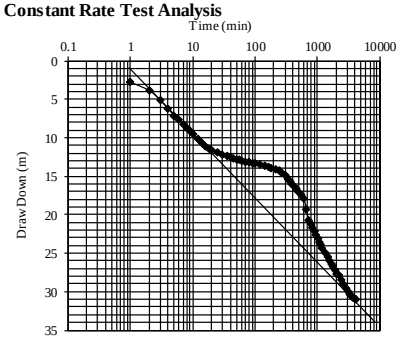
Critical Yield 3.2 m^3/h

Safe Yield 2.6 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.6 m^3/h

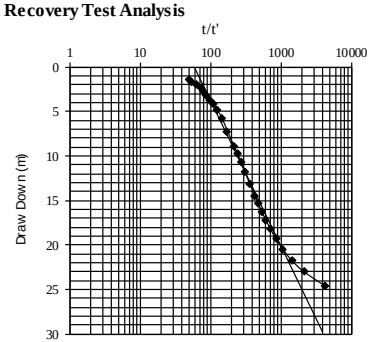
Δs 8.3 m

t0 0.7 min

Transmissivity = 0.06 m^2/h

Storage Coefficient = 0.15

Recovery Test Analysis



Q: 2.6 m^3/h

Δs 18.0 m

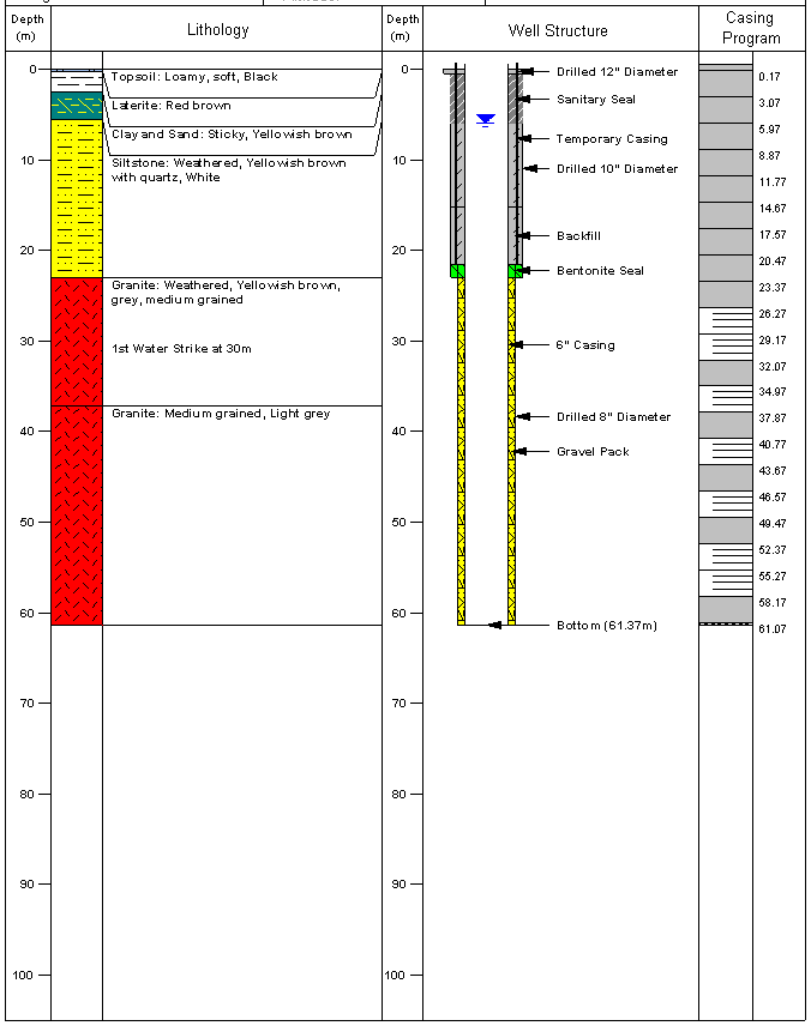
Transmissivity = 0.03 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-02-NBH-3** Site Name: **Kasassira-3** Start Date: 2016/3/8 End Date: 2016/3/12

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**61.37** m
County:	**Kibuku**	Easting (X):	**577717** m	Static Water Level:	**6.00** m
Subcounty:	**Kasassira**	Northing(Y):	**121540** m	Safe Yield:	**0.5** m3/hr
Parish:	**Kasassira**	Altitude:	**1068** m	Dynamic Water Level:	**36.97** m
Village:	**Kasassira West**				



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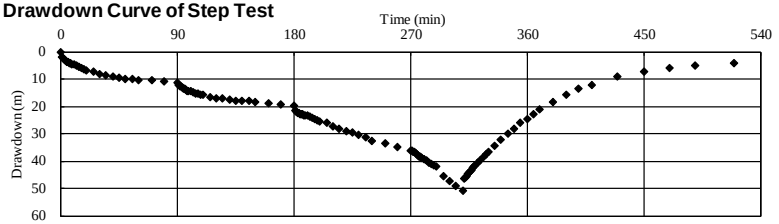
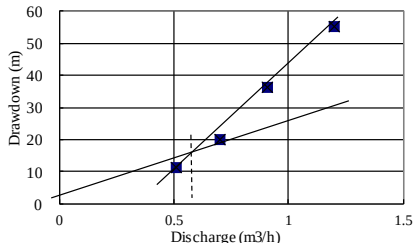
Pumping Test Analysis for Kasassira-3 (P-02-NBH-3) Borehole

Drawdown Curve of Step Test



Step Test Analysis

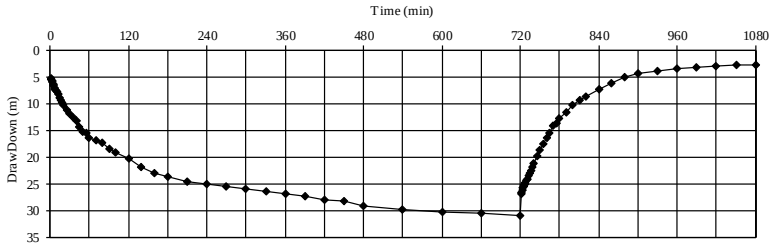


Step	Q(m3/hr)	sw(m)
1	0.51	11.12
2	0.7	19.93
3	0.91	36.08
4	1.2	55
5		

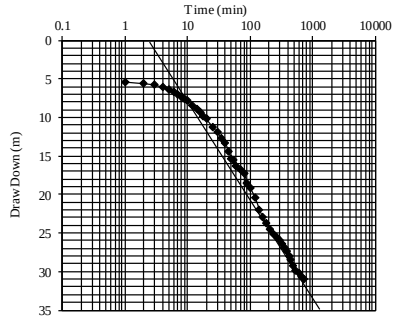
Critical Yield 0.6 m^3/h

Safe Yield 0.5 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 0.5 m^3/h

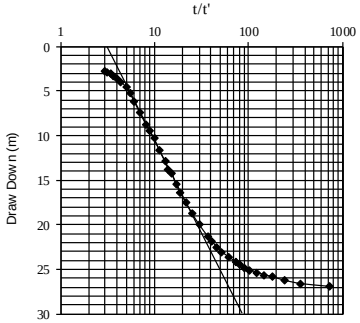
Δs 12.8 m

t0 3 min

Transmissivity = 0.007 m^2/h

Storage Coefficient = 0.08

Recovery Test Analysis



Q: 0.5 m^3/h

Δs 21.0 m

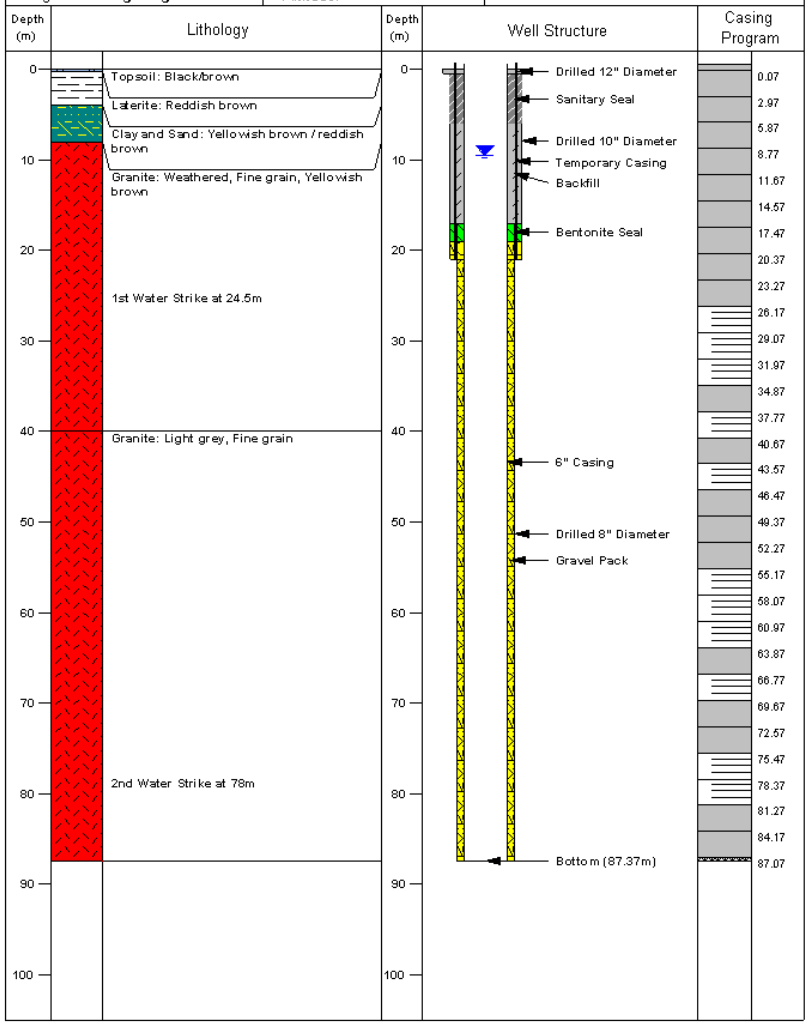
Transmissivity = 0.004 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-02-NBH-4** Site Name: **Kasassira-4** Start Date: 2016/3/24 End Date: 2016/3/27

		Coordinate (Datum: Arc60)		Charactoristics of Borehole		
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**87.47**	m
County:	**Kibuku**	Easting (X):	**579052** m	Static Water Level:	**9.45**	m
Subcounty:	**Kasassira**	Northing(Y):	**121584** m	Safe Yield:	**2.1**	m3/hr
Parish:	**Kasassira**	Altitude:	**1061** m	Dynamic Water Level:	**27.40**	m
Village:	**Nagohnga**					



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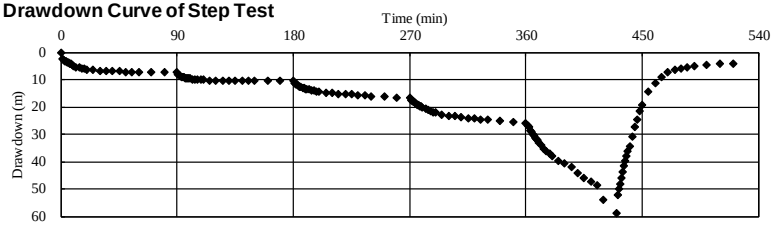
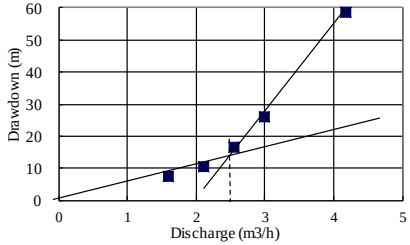
Pumping Test Analysis for Kasassira-4 (P-02-NBH-4) Borehole

Drawdown Curve of Step Test



Step Test Analysis

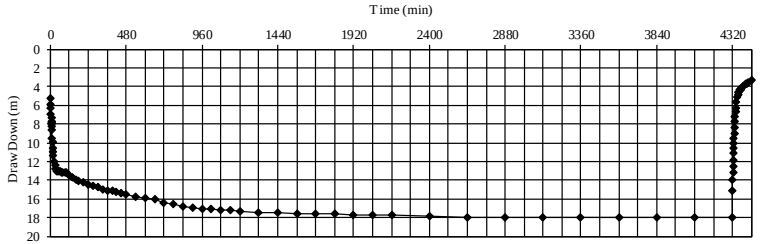


Step	Q(m3/hr)	sw(m)
1	1.6	7.4
2	2.12	10.55
3	2.55	16.75
4	3	25.95
5	4.18	58.67

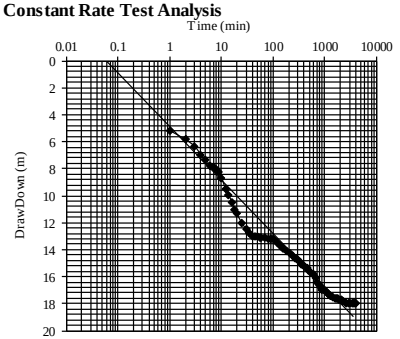
Critical Yield 2.6 m^3/h

Safe Yield 2.1 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.0 m^3/h

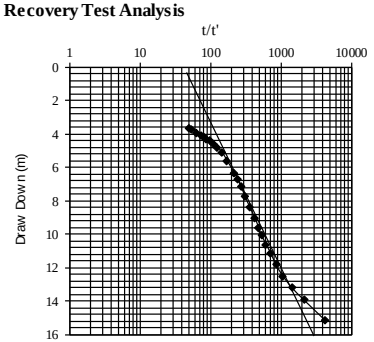
Δs 4.0 m

t0 0.07 min

Transmissivity = 0.09 m^2/h

Storage Coefficient = 0.02

Recovery Test Analysis



Q: 2.0 m^3/h

Δs 8.8 m

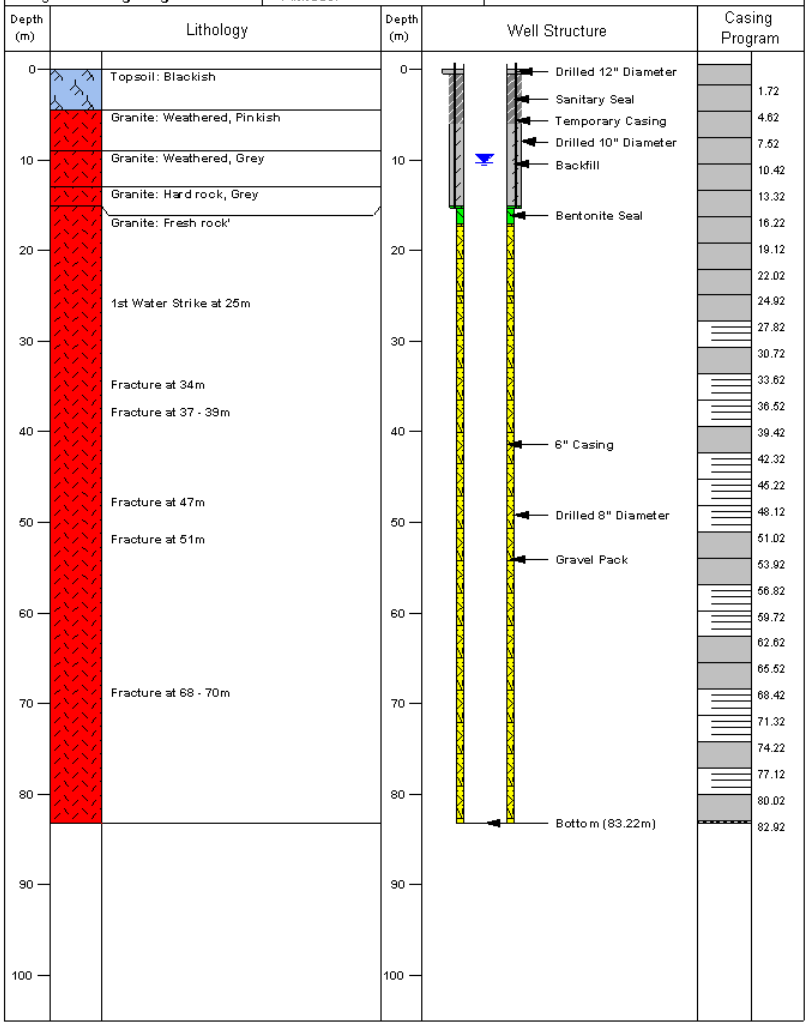
Transmissivity = 0.04 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-02-NBH-5** Site Name: **Kasassira-5** Start Date: 2016/4/7 End Date: 2016/4/11

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**83.22** m
County:	**Kibuku**	Easting (X):	**579028** m	Static Water Level:	**10.3** m
Subcounty:	**Kasassira**	Northing(Y):	**121487** m	Safe Yield:	**2.0** m3/hr
Parish:	**Kasassira**	Altitude:	**1065** m	Dynamic Water Level:	**20.85** m
Village:	**Nagohnga**				



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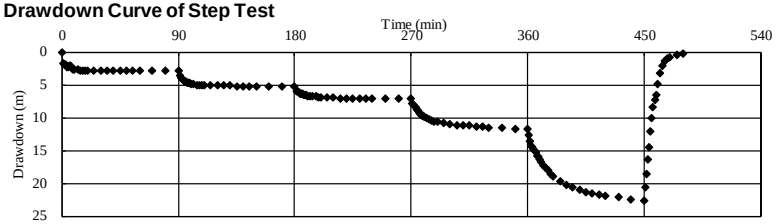
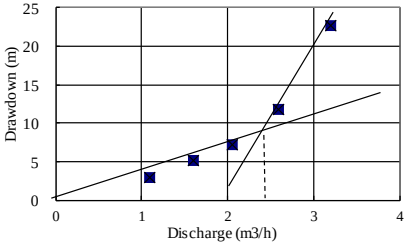
Pumping Test Analysis for Kasassira-5 (P-02-NBH-5) Borehole

Drawdown Curve of Step Test



Step Test Analysis

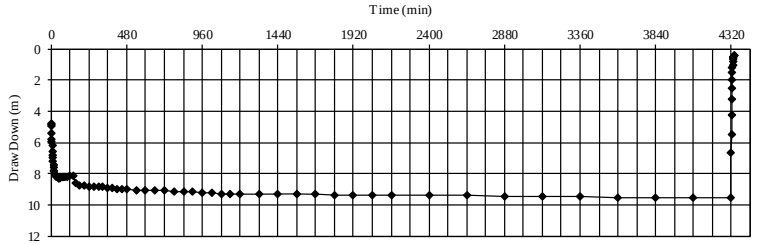


Step	Q(m3/hr)	sw(m)
1	1.09	2.9
2	1.6	5.22
3	2.05	7.17
4	2.6	11.8
5	3.2	22.67

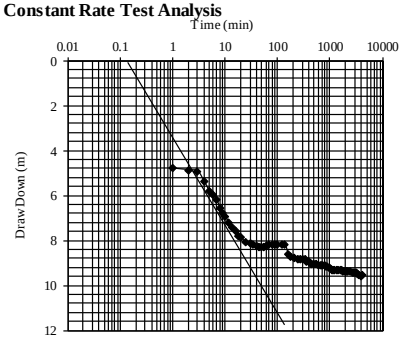
Critical Yield 2.5 m^3/h

Safe Yield 2.0 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.1 m^3/h

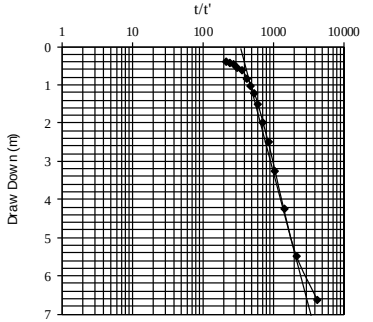
Δs 4.0 m

t0 0.2 min

Transmissivity = 0.10 m^2/h

Storage Coefficient = 0.07

Recovery Test Analysis



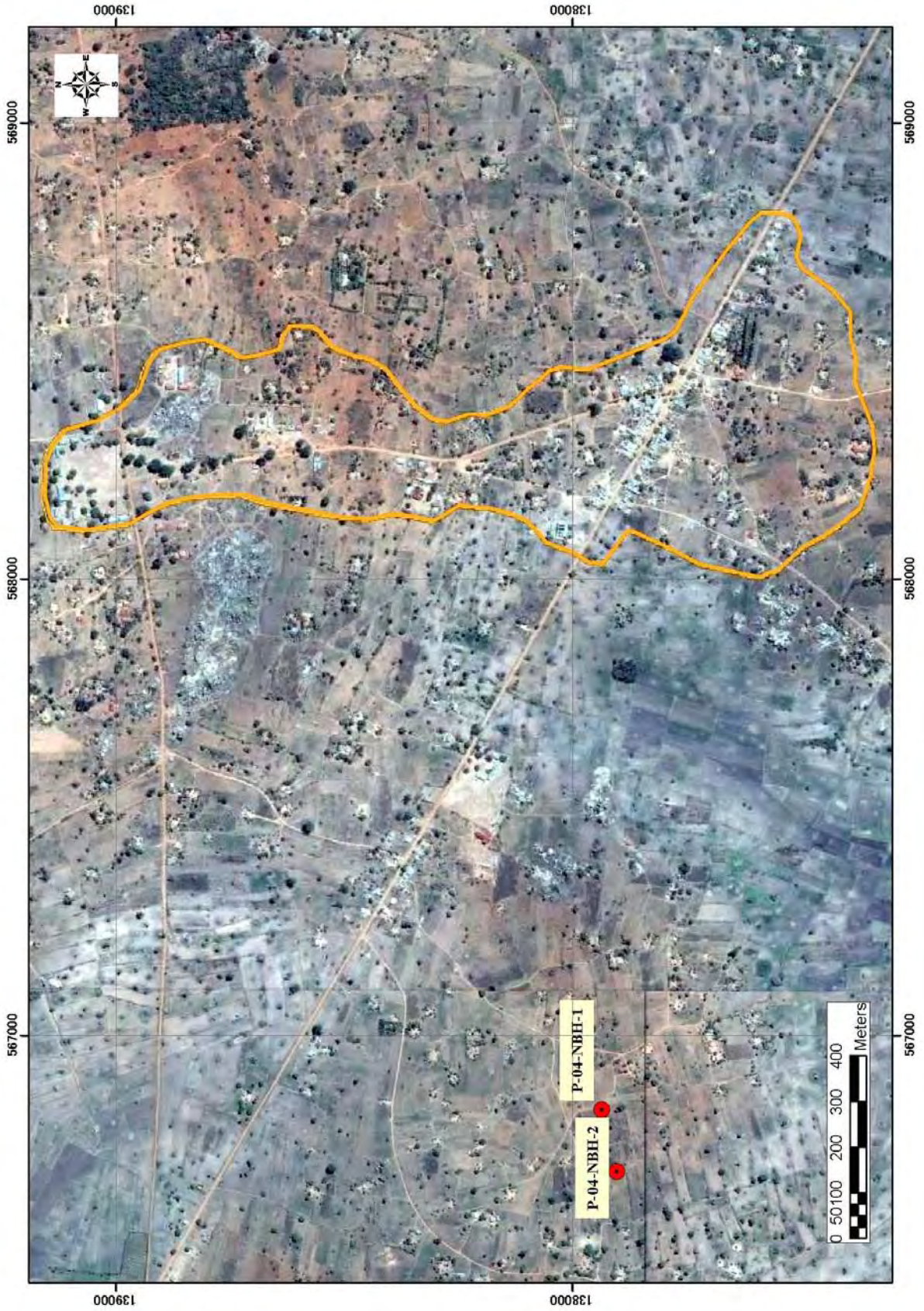
Q: 2.1 m^3/h

Δs 7.0 m

Transmissivity = 0.05 m^2/h

(6) Kapala RGC

Distribution of Drilling Sites

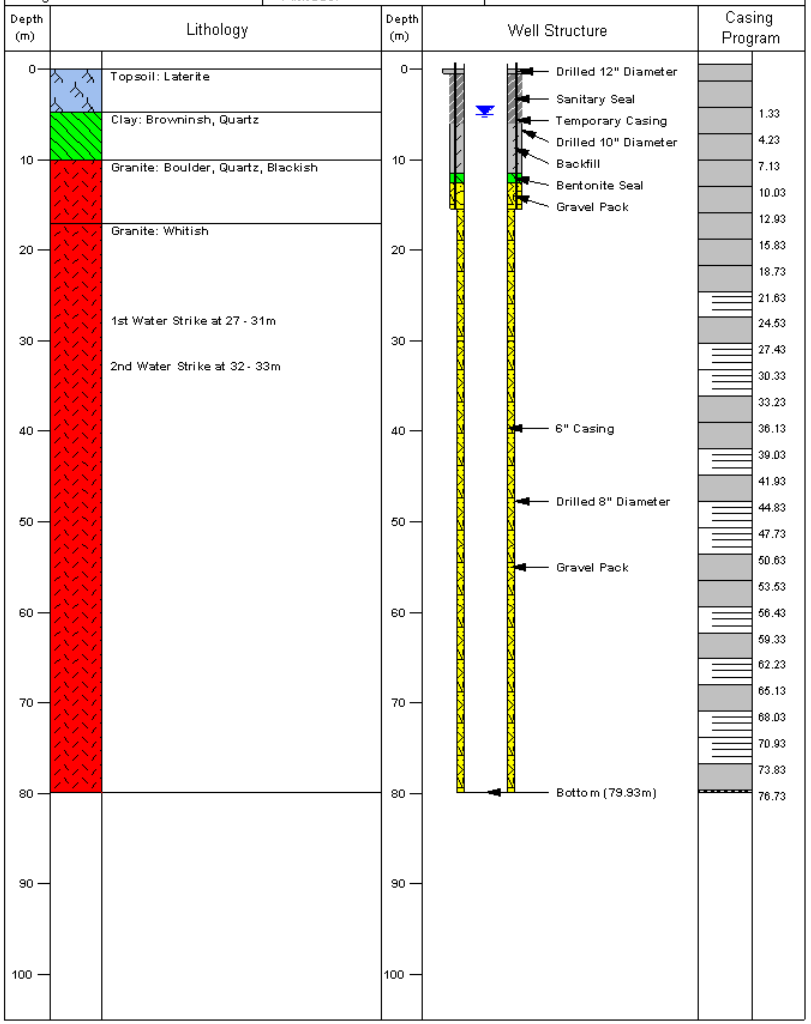


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-04-NBH-1** Site Name: **Kapala-1** Start Date: 2016/1/27 End Date: 2016/2/3

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Pallisa**	UTM Zone:	**36N**	Drillied Depth:	**79.93** m
County:	**Agule**	Easting (X):	**566839** m	Static Water Level:	**7.05** m
Subcounty:	**Gogonyo**	Northing(Y):	**137935** m	Safe Yield:	**8.0** m3/hr
Parish:	**Kapala**	Altitude:	**1056** m	Dynamic Water Level:	**23.55** m



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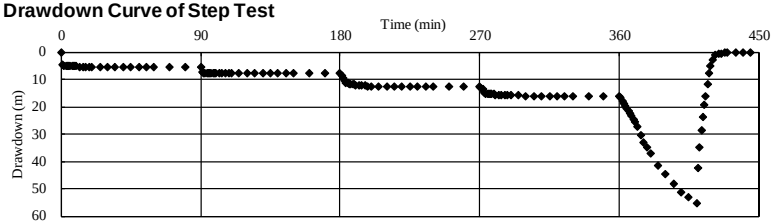
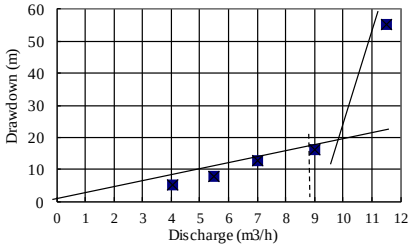
Pumping Test Analysis for Kapala-1 (P-04-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

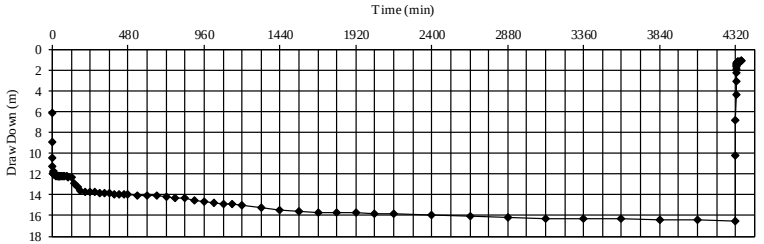


Step	Q(m3/hr)	sw(m)
1	4.05	5.4
2	5.49	7.81
3	7	12.88
4	9	16.25
5	11.5	55.12

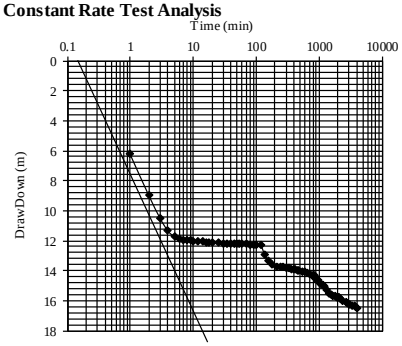
Critical Yield 10.0 m^3/h

Safe Yield 8.00 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 8.0 m^3/h

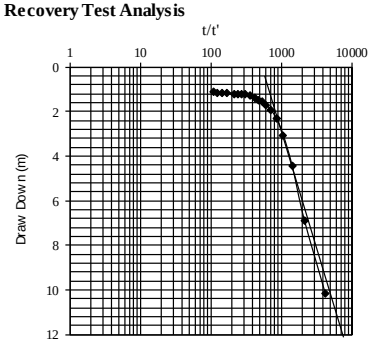
Δs 8.0 m

t0 0.15 min

Transmissivity = 0.18 m^2/h

Storage Coefficient = 0.10

Recovery Test Analysis



Q: 8.0 m^3/h

Δs 10.8 m

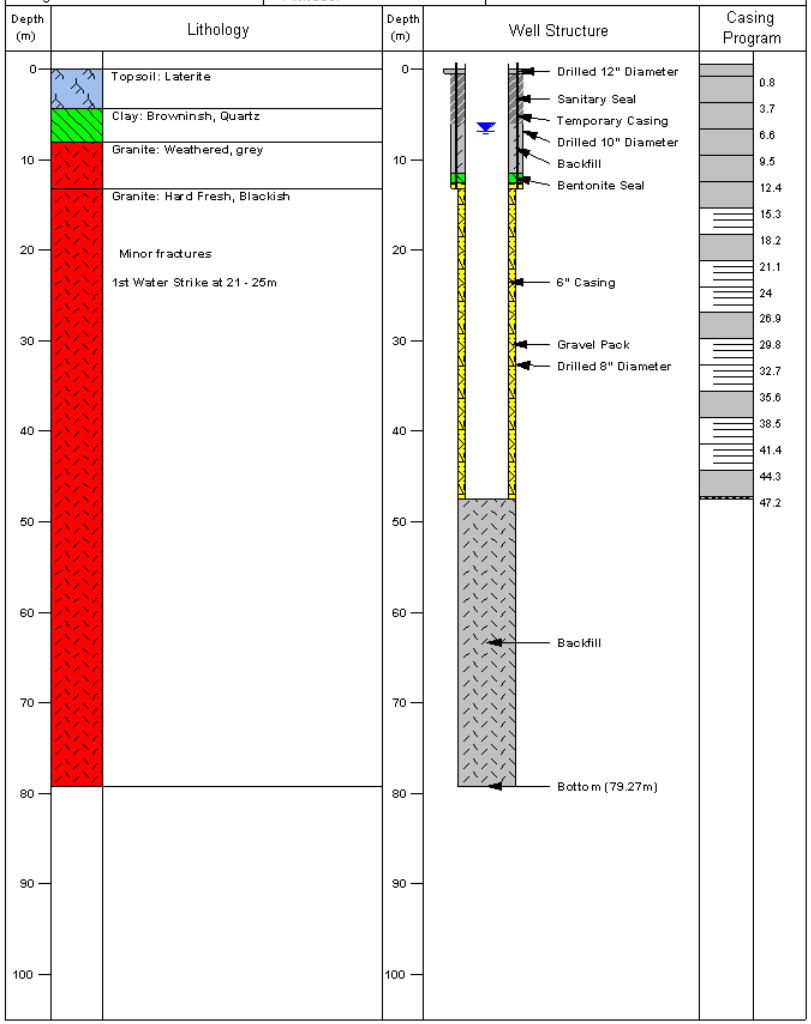
Transmissivity = 0.14 m^2/h

The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-04-NBH-2** Site Name: **Kapala-2** Start Date: 2016/2/4 End Date: 2016/2/9

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Pallisa**	UTM Zone:	**36N**	Drillied Depth:	**79.27** m
County:	**Agule**	Easting (X):	**566703** m	Static Water Level:	**6.85** m
Subcounty:	**Gogonyo**	Northing(Y):	**137901** m	Safe Yield:	**2.8** m3/hr
Parish:	**Kapala**	Altitude:	**1052** m	Dynamic Water Level:	**19.90** m
Village:	**Okwii**				



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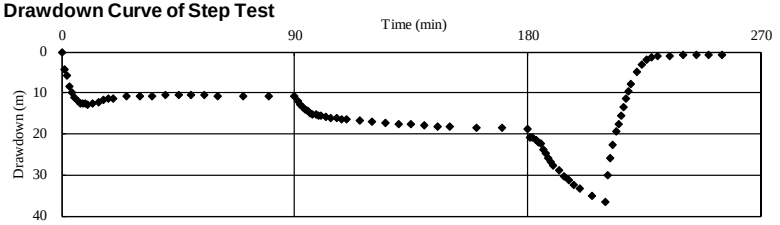
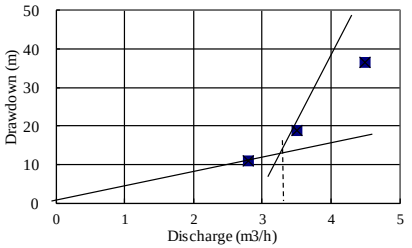
Pumping Test Analysis for Kapala-2 (P-04-NBH-2) Borehole

Drawdown Curve of Step Test



Step Test Analysis

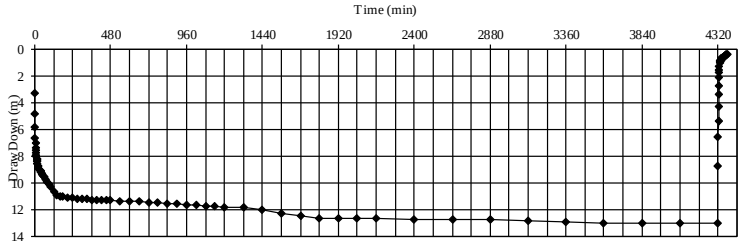


Step	Q(m3/hr)	sw(m)
1	2.6	12.26
2	3.5	26.5
3	4.5	62.37
4		
5		

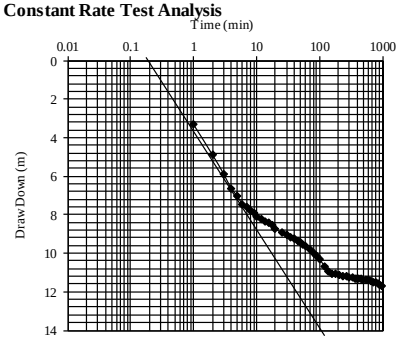
Critical Yield 3.3 m^3/h

Safe Yield 2.64 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 2.8 m^3/h

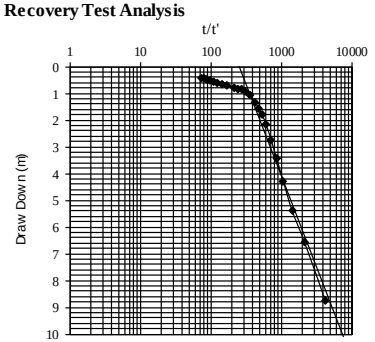
Δs 4.8 m

t0 0.15 min

Transmissivity = 0.11 m^2/h

Storage Coefficient = 0.06

Recovery Test Analysis



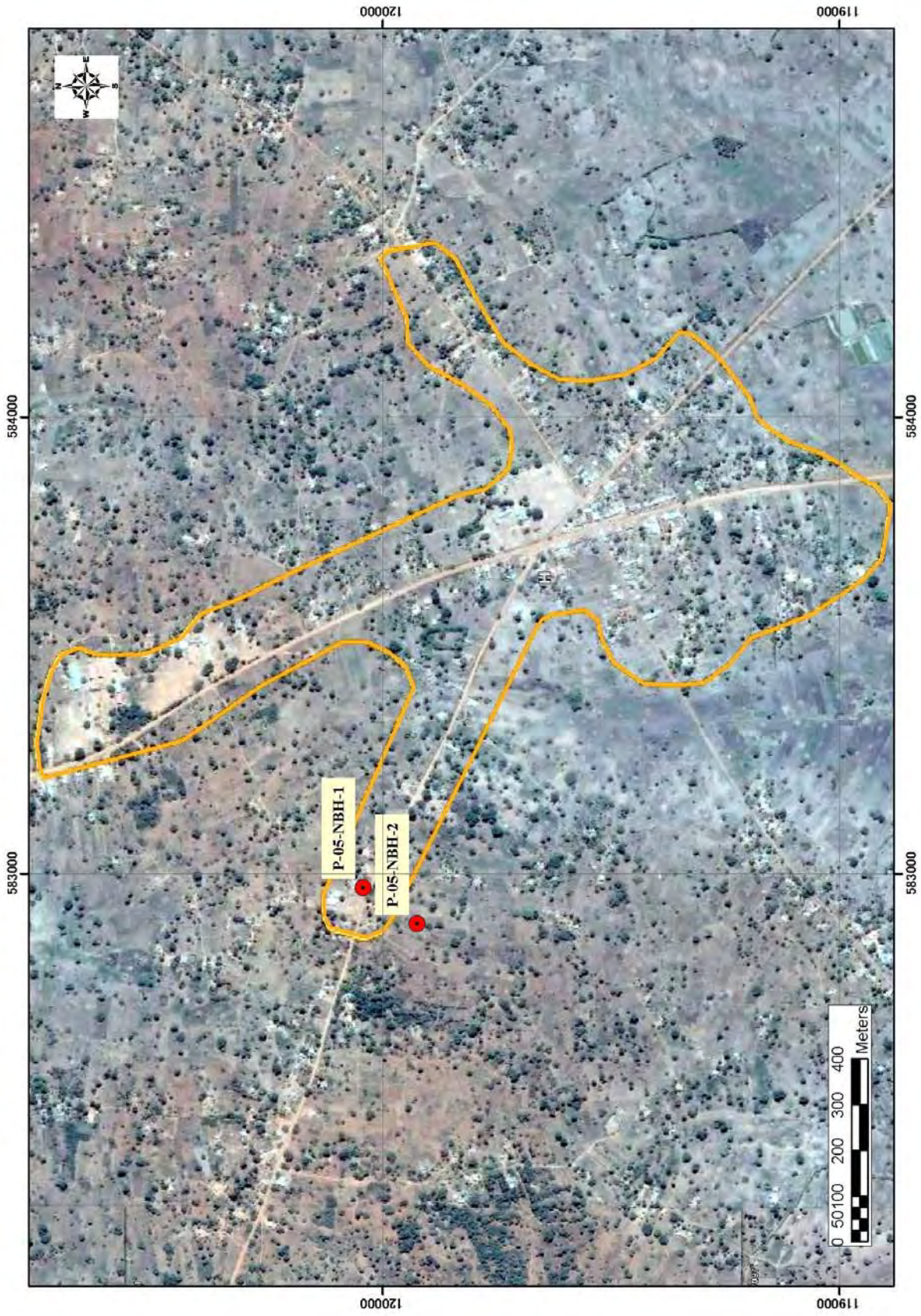
Q: 2.8 m^3/h

Δs 7.3 m

Transmissivity = 0.07 m^2/h

(7) Buseta RGC

Distribution of Drilling Sites

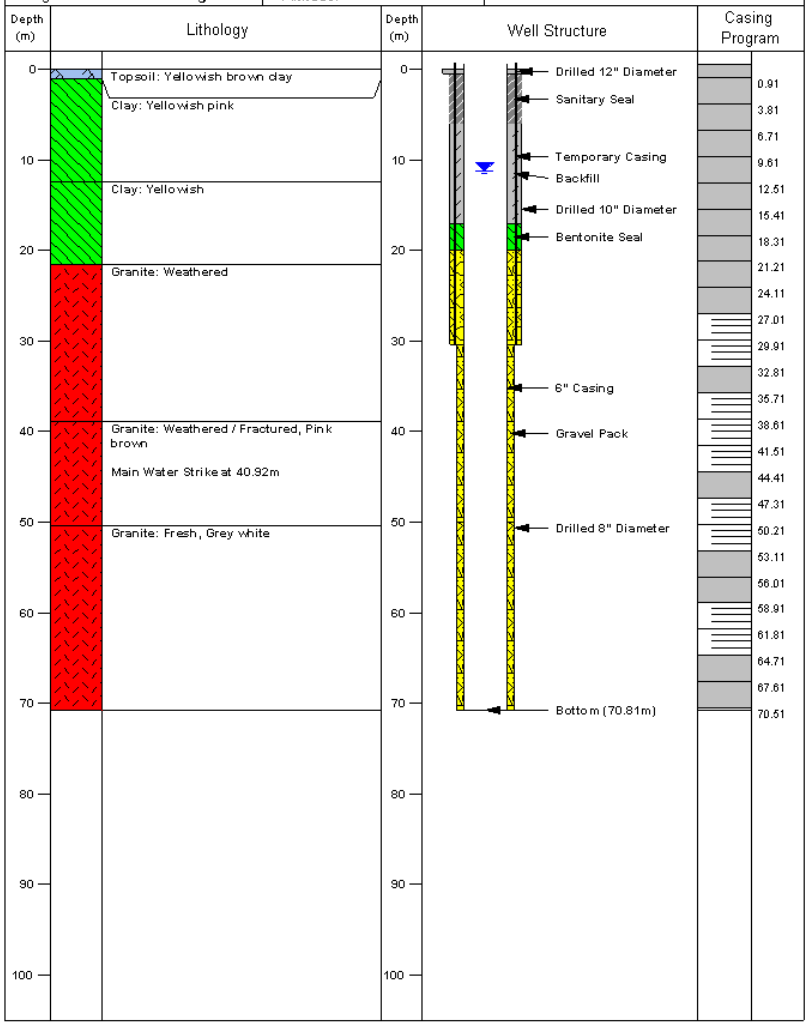


The Preparatory Survey on the Project for Rural Water Supply Phase III in Lake Kyoga Basin, Eastern Uganda in the Republic of Uganda

Borehole Drilling Result

Site No.: **P-05-NBH-1** Site Name: **Buseta-1** Start Date: 2016/2/9 End Date: 2016/2/15

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**70.81** m
County:	**Kibuku**	Easting (X):	**582972** m	Static Water Level:	**11.20** m
Subcounty:	**Buseta**	Northing(Y):	**120041** m	Safe Yield:	**22.7** m3/hr
Parish:	**Buseta**	Altitude:	**1076** m	Dynamic Water Level:	**19.92** m
Village:	**Buseta Triangle**				



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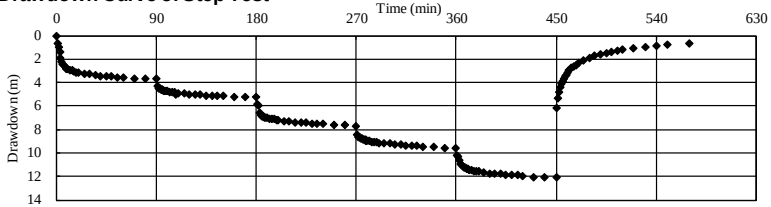
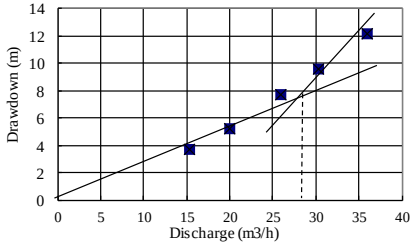
Pumping Test Analysis for Buseta-1 (P-05-NBH-1) Borehole

Drawdown Curve of Step Test



Step Test Analysis

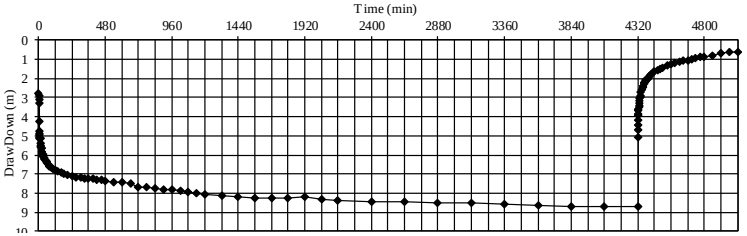


Step	Q(m3/hr)	sw(m)
1	15.3	3.7
2	20	5.26
3	25.9	7.68
4	30.3	9.59
5	36	12.12

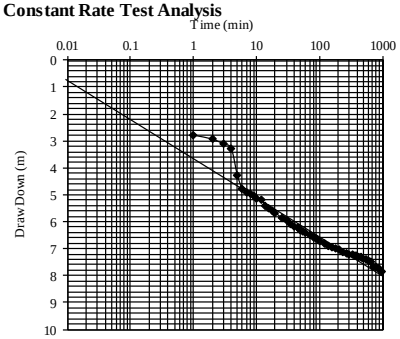
Critical Yield 28.4 m^3/h

Safe Yield 22.7 m^3/h

Drawdown Curve of Constant Rate & Recovery Test



Constant Rate Test Analysis



Q: 23.4 m^3/h

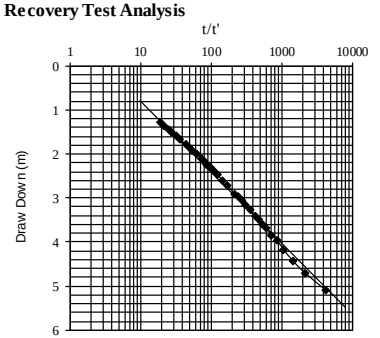
Δs 1.4 m

t0 0.0015 min

Transmissivity = 3.06 m^2/h

Storage Coefficient = 0.02

Recovery Test Analysis



Q: 23.4 m^3/h

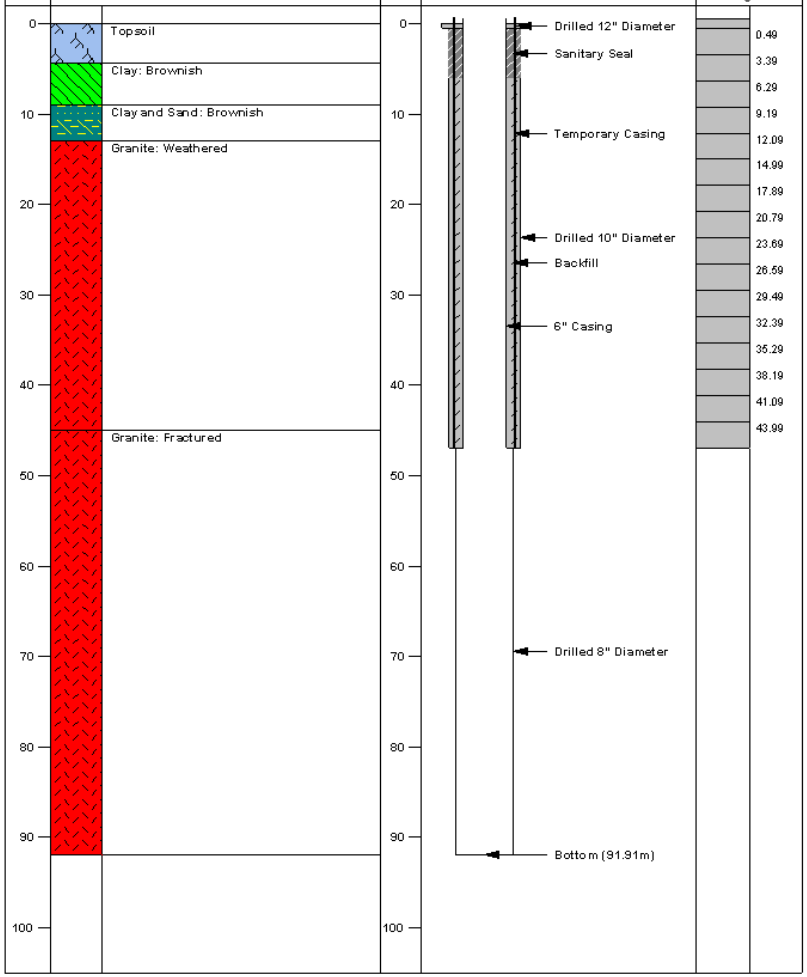
Δs 1.7 m

Transmissivity = 2.57 m^2/h

Borehole Drilling Result

Site No.: **P-05-NBH-2** Site Name: **Buseta-2** Start Date: 2016/2/11 End Date: 2016/2/16

		Coordinate (Datum: Arc60)		Charactoristics of Borehole	
District:	**Kibuku**	UTM Zone:	**36N**	Drillied Depth:	**91.91** m
County:	**Kibuku**	Easting (X):	**582892** m	Static Water Level:	m
Subcounty:	**Buseta**	Northing(Y):	**119923** m	Safe Yield:	m3/hr
Parish:	**Buseta**	Altitude:	**1077** m	Dynamic Water Level:	m
Village:	**Buseta I**				



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資料-11

参考資料

（6）地盤調査結果

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH1**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**13/04/2016**
Location	Nambaale						**Testing Date**	**13/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	556008	**Y**	86260	**Z**	1112
Soil Description								
Borehole/Pit No.	BH1						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	Water
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	10.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	rainfall overnight, hence soaked ground, cloudy weather, hot							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Brown firm sandy silty clay with organic matter
0.5-1.0				0	0	0	0	0	Brown firm sandy gravelly clay
1.0-1.5	12	14	13	27	353.7	176.85	909.009	303.003	Brown firm to stiff sandy gravelly silty clay
2.0-2.5	7	6	5	11	144.1	72.05	370.337	123.4456667	Brown firm gravelly lateritic sandy clays
3.0-3.5	3	3	3	6	78.6	39.3	202.002	67.334	Brown firm gravelly sandy clay
4.0-4.5	3	2	2	4	52.4	26.2	134.668	44.88933333	Reddish brown soft sandy silty clay
5.0-5.5	5	6	7	13	170.3	85.15	437.671	145.8903333	Reddish brown firm fine sandy silty clay
6.0-6.5	6	8	9	17	222.7	111.35	572.339	190.7796667	Pink red brown stiff clay sandy silts
7.0-7.5	5	6	7	13	170.3	85.15	437.671	145.8903333	Pink red brown stiff fine sandy silty clay
8.0-8.5	10	13	14	27	353.7	176.85	909.009	303.003	Pink brown stiff sandy silty ckay
9.0-9.5	11	14	15	29	379.9	189.95	976.343	325.4476667	Yellow pink brown very stiff fine sandy silty clay
10.0-10.5	12	15	17	32	419.2	209.6	1077.344	359.1146667	Yellow pink brown very stiff to fine sandy silty clay

Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

A11-6-1

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH4**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**15/04/2016**
Location	Lambaala (Elevated tank)						**Testing Date**	**15/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	525815	**Y**	79694	**Z**	1080
Soil Description								
Borehole/Pit No.	BH4						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	3.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Hot cloudy weather/rainfall							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Dark brown organic dense clay sandy with grass on top
0.5-1.0				0	0	0	0	0	Brown dense clay sandy lateritic gravel
1.0-1.5	17	20	24	44	576.4	288.2	1481.348	493.7826667	Yellow brown very dense sandy clay lateritic gravel with quartz
2.0-2.5	19	22	26	48	628.8	314.4	1616.016	538.672	Yellow brown white very dense lateritic gravel with quartz
3.0-3.5	16	23	27	50	655	327.5	1683.35	561.1166667	Yellow brown very hard lateritic gravelly weathered material with quartz

Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

資料-11(6)

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH5**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**15/04/2016**
Location	Lambaala (Solar equipment)						**Testing Date**	**15/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	525839	**Y**	79681	**Z**	1079
Soil Description								
Borehole/Pit No.	BH5						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	5.0
Overall Boring Depth	7.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Hot cloudy weather/rainfall							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Dark brown firm fine sandy silty clay
0.5-1.0				0	0	0	0	0	Reddish brown firm gravelly clay sandy silts
1.0-1.5	6	5	6	11	144.1	72.05	370.337	123.4456667	Reddish brown firm gravelly sandy silty clay
2.0-2.5	5	3	3	6	78.6	39.3	202.002	67.334	Yellow brown red firm gravelly sandy silty clay
3.0-3.5	5	6	7	13	170.3	85.15	437.671	145.8903333	Brown yellow stiff gravelly sandy silty clay
4.0-4.5	8	12	14	26	340.6	170.3	875.342	291.7806667	Pink yellow brown stiff sandy silty clay
5.0-5.5	10	15	16	31	406.1	203.05	1043.677	347.8923333	Brown yellow moist stiff clay sand silts
6.0-6.5	10	15	17	32	419.2	209.6	1077.344	359.1146667	Brown pink yellow moist very stiff clay sand silts
7.0-7.5	11	15	16	31	406.1	203.05	1043.677	347.8923333	Yellow grey pink moist very stiff clay silty sand with mica

Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH2**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**14/04/2016**
Location	Naigobya						**Testing Date**	**14/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	540088	**Y**	90336	**Z**	1093
Soil Description								
Borehole/Pit No.	BH2						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	5.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	hot and cloudy weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Dark brown organic fine sandy silty clay
0.5-1.0				0	0	0	0	0	Brown stiff sandy silty clay
1.0-1.5	4	5	9	14	183.4	91.7	471.338	157.1126667	Pink brown gravelly stiff sandy silty clay
2.0-2.5	3	2	3	5	65.5	32.75	168.335	56.11166667	Yellow brown soft gravelly sandy silty clays
3.0-3.5	10	12	14	26	340.6	170.3	875.342	291.7806667	Yellow brown stiff gravelly sandy silty clays
4.0-4.5	12	15	15	30	393	196.5	1010.01	336.67	Yellow stiff-fine gravelly clay sand with quartz
5.0-5.5	15	22	25	47	615.7	307.85	1582.349	527.4496667	Very hard stratum - yellow clay gravelly sand to weathered rock material

Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

A11-6-2

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH3**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**14/04/2016**
Location	Kyanvuma						**Testing Date**	**14/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	529854	**Y**	83567	**Z**	1118
Soil Description								
Borehole/Pit No.	BH3						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	3.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Hot cloudy weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N" (300mm)	N"' (450mm)						
0.0-0.5				0	0	0	0	0	Dark brown stiff sandy clay gravel
0.5-1.0				0	0	0	0	0	Brown yellow stiff sandy silty clay lateritic gravel
1.0-1.5	12	15	17	32	419.2	209.6	1077.344	359.1146667	Yellow brown very stiff sandy clay lateritic gravel
2.0-2.5	15	20	24	44	576.4	288.2	1481.348	493.7826667	Yellow brown crushed very dense clay sandy lateritic gravel
3.0-3.5	20	20	28	48	628.8	314.4	1616.016	538.672	Yellow brown crushed very hard quartz-lateritic gravel material

Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH6**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**16/04/2016**
Location	Nondwe						**Testing Date**	**16/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	565968	**Y**	51926	**Z**	1114
Soil Description								
Borehole/Pit No.	BH6						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	1.0						**Test drive Interval**	1.0
Weather and Environmental Conditions	Hot weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N" (300mm)	N"' (450mm)						
0.0-0.5				0	0	0	0	0	Brown grey dense clay silty sand with organic material
0.5-1.0				0	0	0	0	0	Yellow brown dense clay silty sand
1.0-1.5	30	50	50	100	1310	655	3366.7	1122.233333	Whitish grey very hard rock-granite

Comments	No sample was extracted; For N" & N"', the value of N is assumed >50. Only 1m is drilled.		
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

A11-6-3

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**					**Sample Source**	**BH14**	
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**					**Sampling Date**	**26/04/2016**	
Location	Kasassira					**Testing Date**	**26/04/2016**	
GPS Co-ordinates	**Datum**	ARC 1960	**X**	578416	**Y** 120807	**Z**	1079	
Soil Description								
Borehole/Pit No.	BH14					**Drilling method**	Rotary drilling using augers	
Reduced Ground Level (m)						**Drilling fluid**	Water	
borehole diameter	6"					**Ground Water Level**	Not reached	
Overall Boring Depth	7.5					**Test drive Interval**	1.0	
Weather and Environmental Conditions	Sunny and cloudy							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Brown red loamy sandy clayish material with organic matter
0.5-1.0				0	0	0	0	0	Brown red gravelly lateritic clay
1.0-1.5	12	15	12	27	353.7	176.85	909.009	303.003	Brown red blackish lateritic gravelly clay sand
2.0-2.5	2	2	3	5	65.5	32.75	168.335	56.11166667	Very hard Brown red clay with fine coarse quartz grains with silts sandy clays
3.0-3.5	4	6	7	13	170.3	85.15	437.671	145.8903333	Yellowish brown reddish sandy clay with yellowish quartz grains and mica particles
4.0-4.5	8	12	14	26	340.6	170.3	875.342	291.7806667	Very tough-hard greyish brown yellowish silts sandy clay with mica
5.0-5.5	9	13	15	28	366.8	183.4	942.676	314.2253333	Pink brown grey silts sandy clay with mica
6.0-6.5	7	12	17	29	379.9	189.95	976.343	325.4476667	Brown reddish greyish clayish sandy silts with mica & quartz-yellowish
7.0-7.5	7	14	18	32	419.2	209.6	1077.344	359.1146667	Pink brown grey silts sandy clay to weathered rock stratum

Comments

For laboratory technician 1 — **For the Supervisor**

For laboratory technician 2

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**					**Sample Source**	**BH8**	
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**					**Sampling Date**	**17/04/2016**	
Location	Kameke					**Testing Date**	**17/04/2016**	
GPS Co-ordinates	**Datum**	ARC 1960	**X**	586053	**Y** 140130	**Z**		
Soil Description								
Borehole/Pit No.	BH8					**Drilling method**	Rotary drilling using augers	
Reduced Ground Level (m)						**Drilling fluid**	NIL	
borehole diameter	6"					**Ground Water Level**	Not reached	
Overall Boring Depth	5.5					**Test drive Interval**	1.0	
Weather and Environmental Conditions	Hot & cloudy weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Brown firm sandy silty clay with grass on top
0.5-1.0				0	0	0	0	0	Reddish brown firm sandy silty clay
1.0-1.5	6	10	15	25	327.5	163.75	841.675	280.5583333	Brown yellow stiff clay silty sand
2.0-2.5	7	12	13	25	327.5	163.75	841.675	280.5583333	Brown yellow stiff clay lateritic gravelly sand
3.0-3.5	8	10	12	22	288.2	144.1	740.674	246.8913333	Yellow stiff clay gravelly sand
4.0-4.5	15	28	32	60	786	393	2020.02	673.34	Yellow very stiff sand gravel lateritic material
5.0-5.5	20	35	50	85	1113.5	556.75	2861.695	953.8983333	Whitish yellow very hard sandy lateritic gravel

Comments

For laboratory technician 1 — **For the Supervisor**

For laboratory technician 2

A11-6-4

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH7**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**16/04/2016**
Location	Kapala						**Testing Date**	**16/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	568245	**Y**	138934	**Z**	
Soil Description								
Borehole/Pit No.	BH7						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	3.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Hot & cloudy weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Dark brown organic firm silty sandy clay
0.5-1.0				0	0	0	0	0	Brown firm sandy silty clay
1.0-1.5	5	5	6	11	144.1	72.05	370.337	123.4456667	Brown firm sandy silty clay
2.0-2.5	10	22	30	52	681.2	340.6	1750.684	583.5613333	Reddish brown very stiff clay sand silts
3.0-3.5	32	40	50	90	1179	589.5	3030.03	1010.01	Whitish grey very hard weathered to granite rock (No sample is extracted)

Comments	No sample is extracted for the SPT at 3.0 -3.5m
For laboratory technician 1	
	For the Supervisor
For laboratory technician 2	

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH9**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**17/04/2016**
Location	Buseta						**Testing Date**	**17/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	583377	**Y**	120507	**Z**	1071
Soil Description								
Borehole/Pit No.	BH9						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	3.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Hot & cloudy weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Brown firm sandy silty clay with grass on top
0.5-1.0				0	0	0	0	0	Reddish brown firm sandy silty clay
1.0-1.5	8	10	22	32	419.2	209.6	1077.344	359.1146667	Pinkish brown very stiff clay silty sand
2.0-2.5	20	24	26	50	655	327.5	1683.35	561.1166667	Pinkish brown yellow very stiff clay sandy gravel
3.0-3.5	25	38	50	88	1152.8	576.4	2962.696	987.5653333	Very hard clay sandy lateritic gravel & weathered rock material

Comments	
For laboratory technician 1	
	For the Supervisor
For laboratory technician 2	

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH13**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**20/04/2016**
Location	Kidetok						**Testing Date**	**20/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	546576	**Y**	163963	**Z**	1084
Soil Description								
Borehole/Pit No.	BH13						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	5.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Sunny hot & cloudy weather							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N" (300mm)	N"' (450mm)						
0.0-0.5				0	0	0	0	0	Dark grey organic firm fine sandy silty clay
0.5-1.0				0	0	0	0	0	Brown firm fine sandy silty clay
1.0-1.5	6	5	4	9	117.9	58.95	303.003	101.001	Reddish brown firm fine sandy silty clay
2.0-2.5	3	5	5	10	131	65.5	336.67	112.2233333	Yellow brown firm gravelly sandy silty clay
3.0-3.5	12	18	22	40	524	262	1346.68	448.8933333	Yellow stiff gravelly sandy silty clay
4.0-4.5	17	23	25	48	628.8	314.4	1616.016	538.672	Yellow very stiff gravelly clay sand
5.0-5.5	30	38	50	88	1152.8	576.4	2962.696	987.5653333	Very hard greyish white granite-weathered rock material (No sample is extracted)

Comments	
For laboratory technician 1	
	For the Supervisor
For laboratory technician 2	

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH11**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**19/04/2016**
Location	Tubur						**Testing Date**	**19/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	558056	**Y**	216116	**Z**	1116
Soil Description								
Borehole/Pit No.	BH11						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	6.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Cloudy							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N" (300mm)	N"' (450mm)						
0.0-0.3				0	0	0	0	0	Greyish dark brown firm sandy silty gravelly clay
0.3-1.0				0	0	0	0	0	Brown firm sandy gravelly silty clay
1.0-1.5	13	23	25	48	628.8	314.4	1616.016	538.672	Reddish brown very stiff sandy clay lateritic gravel
2.0-2.5	6	8	11	19	248.9	124.45	639.673	213.2243333	Reddish yellow brown stiff sandy gravelly clay
3.0-3.5	7	10	12	22	288.2	144.1	740.674	246.8913333	Grey brown yellow stiff sandy silty clay with mica
4.0-4.5	6	10	16	26	340.6	170.3	875.342	291.7806667	Yellow grey very stiff clay sandy silts with mica & weathered rock material
5.0-5.5	16	22	25	47	615.7	307.85	1582.349	527.4496667	Yellow grey clay very dense silts & weathered rock material
6.0-6.5	20	32	50	82	1074.2	537.1	2760.694	920.2313333	Yellow grey clay sand silts & very hard weathered rock material

Comments	
For laboratory technician 1	
	For the Supervisor
For laboratory technician 2	

A11-6-9

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH10**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**18/04/2016**
Location	ACUNA						**Testing Date**	**18/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	553049	**Y**	221677	**Z**	1091
Soil Description								
Borehole/Pit No.	BH10						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	8.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Rainfall							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.4				0	0	0	0	0	Greyish dark brown firm sandy silty clay
0.4-1.0				0	0	0	0	0	Brown firm clay silty sandy gravel
1.0-1.5	4	5	6	11	144.1	72.05	370.337	123.4456667	Reddish brown firm clay sandy gravel
2.0-2.5	8	16	17	33	432.3	216.15	1111.011	370.337	Yellow brown stiff clay sandy lateritic gravel
3.0-3.5	6	9	11	20	262	131	673.34	224.4466667	Brown yellow stiff fine sandy silty clay
4.0-4.5	7	10	11	21	275.1	137.55	707.007	235.669	Brown yellow stiff sandy silty clay with gravel
5.0-5.5	5	7	10	17	222.7	111.35	572.339	190.7796667	Brown yellow firm sandy silty clay
6.0-6.5	12	15	16	31	406.1	203.05	1043.677	347.8923333	Grey yellow stiff sandy silty clay
7.0-7.5	13	16	17	33	432.3	216.15	1111.011	370.337	Yellow very stiff sandy clay gravel (moist sample)
8.0-8.5	15	17	19	36	471.6	235.8	1212.012	404.004	Greyish yellow very stiff gravelly clay sand

Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

STANDARD PENETRATION TEST - BS 1377: PART 9: 1990

Client	**JICA**						**Sample Source**	**BH12**
Project	**Geotechnical investigations for rural water supply phase II in the Lake Kyoga basin**						**Sampling Date**	**20/04/2016**
Location	Atiriri Health Centre						**Testing Date**	**20/04/2016**
GPS Co-ordinates	**Datum**	ARC 1960	**X**	551014	**Y**	210528	**Z**	1060
Soil Description								
Borehole/Pit No.	BH12						**Drilling method**	Rotary drilling using augers
Reduced Ground Level (m)							**Drilling fluid**	NIL
borehole diameter	6"						**Ground Water Level**	Not reached
Overall Boring Depth	3.5						**Test drive Interval**	1.0
Weather and Environmental Conditions	Cloudy							

depth of penetration (m)	Field N values over 450mm			Design N value	Unconfined Compressive Strength qu (kPa)	Undrained Cohesion Cu (kPa)	Ultimate Bearing Capacity qall (kPa)	Allowable Bearing Capacity qall) (kPa)	Predominant fraction of the soil
	N' (150mm)	N'' (300mm)	N''' (450mm)						
0.0-0.5				0	0	0	0	0	Greyish brown firm sandy silty clay with grass on top
0.5-1.0				0	0	0	0	0	Brown firm gravelly sandy silty clay
1.0-1.5	6	21	25	46	602.6	301.3	1548.682	516.2273333	Brown very stiff clay sandy lateritic gravel
2.0-2.5	20	24	31	55	720.5	360.25	1851.685	617.2283333	Brown very stiff clay sandy lateritic gravel
3.0-3.5	25	35	50	85	1113.5	556.75	2861.695	953.8983333	Very hard yellow brown clay sandy lateritic gravel & weathered rock material

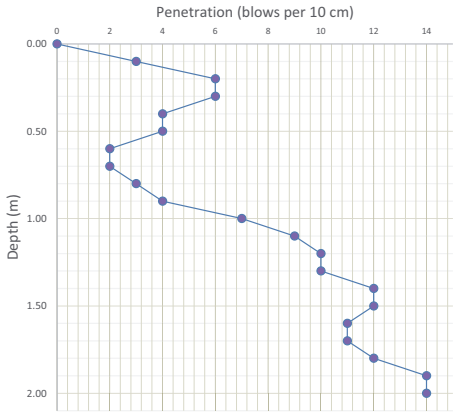
Comments			
For laboratory technician 1			
		For the Supervisor	
For laboratory technician 2			

Manual DPL Results Nambale RGC EP1

Client:	JICA	District:	Iganga	Cone Type	CT1
Date:	16/04/2016	Location:	EP1		
Elevation:	1093	UTM X	556190		
UTM Datum	(ARC 1960)	UTM Y	85841		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3.00
0.20	6.00
0.30	6.00
0.40	4.00
0.50	4.00
0.60	2.00
0.70	2.00
0.80	3.00
0.90	4.00
1.00	7.00
1.10	9.00
1.20	10.00
1.30	10.00
1.40	12.00
1.50	12.00
1.60	11.00
1.70	11.00
1.80	12.00
1.90	14.00
2.00	14.00

Penetration vs Depth

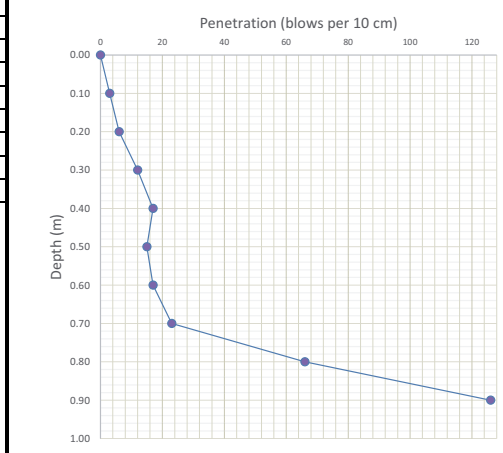


Manual DPL Results Nambale RGC EP2

Client:	JICA	District:	Iganga	Cone Type	CT1
Date:	16/04/2016	Location:	EP2		
Elevation:	1113	UTM X	555450		
UTM Datum	(ARC 1960)	UTM Y	86189		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3.00
0.20	6.00
0.30	12.00
0.40	17.00
0.50	15.00
0.60	17.00
0.70	23.00
0.80	66.00
0.90	126.00

Penetration vs Depth

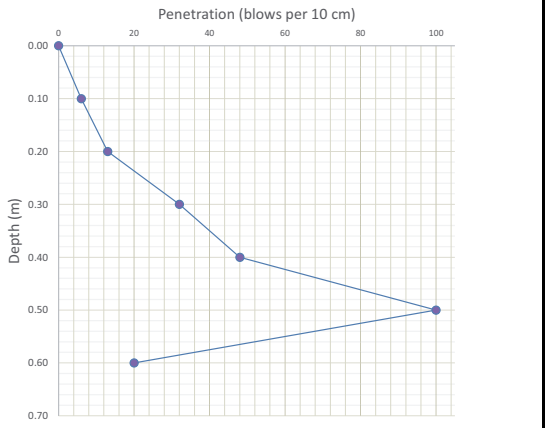


Manual DPL Results Nambale RGC EP3

Client:	0	District:	Iganga	Cone Type	0
Date:	16/04/2016	Location:	EP3		
Elevation:	1080	UTM X	555926		
UTM Datum	(ARC 1960)	UTM Y	86836		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6.00
0.20	13.00
0.30	32.00
0.40	48.00
0.50	100.00
0.60	20.00

Penetration vs Depth

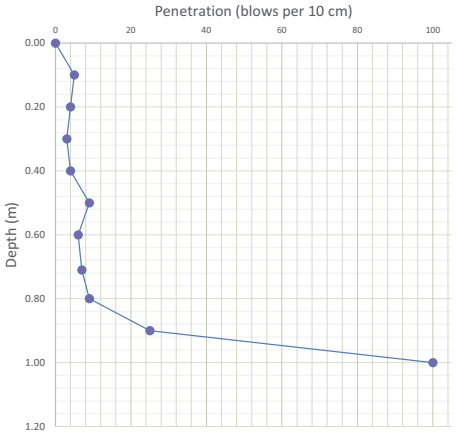


Manual DPL Results Nambale RGC EP4

Client:	0	District:	Iganga	Cone Type	0
Date:	16/04/2016	Location:	EP4		
Elevation:	1108	UTM X	556341		
UTM Datum	(ARC 1960)	UTM Y	86536		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	5.00
0.20	4.00
0.30	3.00
0.40	4.00
0.50	9.00
0.60	6.00
0.71	7.00
0.80	9.00
0.90	25.00
1.00	100.00

Penetration vs Depth

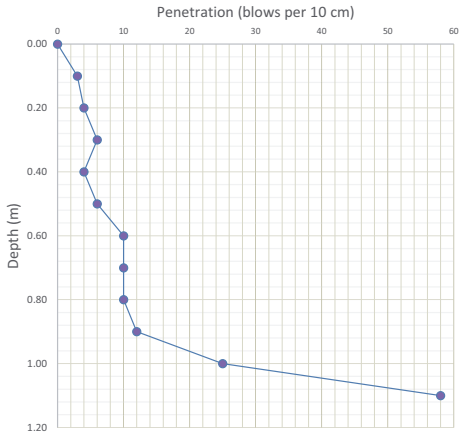


Manual DPL Results Nambale RGC EP5

Client:	0	District:	Iganga	Cone Type	0
Date:	16/04/2016	Location:	EP5		
Elevation:	1101	UTM X	556645		
UTM Datum	(ARC 1960)	UTM Y	86082		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3.00
0.20	4.00
0.30	6.00
0.40	4.00
0.50	6.00
0.60	10.00
0.70	10.00
0.80	10.00
0.90	12.00
1.00	25.00
1.10	58.00

Penetration vs Depth

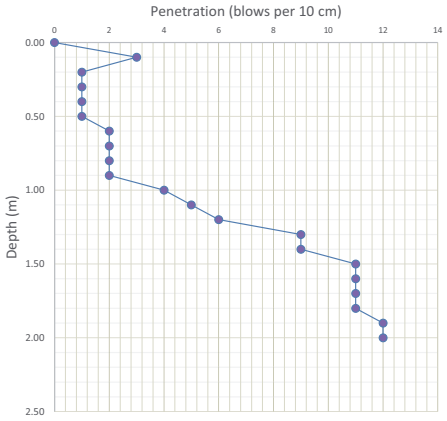


Manual DPL Results Lambaala EP1

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	16/04/2016	Location:	EP1		
Elevation:	1075	UTM X	525941		
UTM Datum	(ARC 1960)	UTM Y	80100		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3
0.20	1
0.30	1
0.40	1
0.50	1
0.60	2
0.70	2
0.80	2
0.90	2
1.00	4
1.10	5
1.20	6
1.30	9
1.40	9
1.50	11
1.60	11
1.70	11
1.80	11
1.90	12
2.00	12

Penetration vs Depth

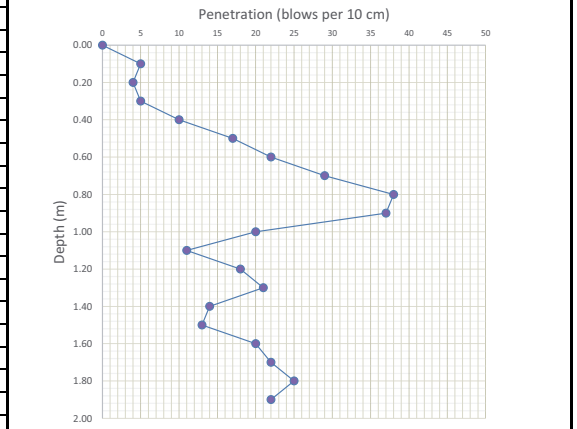


Manual DPL Results Lambaala EP2

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	16/04/2016	Location:	EP2		
Elevation:	1075	UTM X	526036		
UTM Datum	(ARC 1960)	UTM Y	79332		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	5
0.20	4
0.30	5
0.40	10
0.50	17
0.60	22
0.70	29
0.80	38
0.90	37
1.00	20
1.10	11
1.20	18
1.30	21
1.40	14
1.50	13
1.60	20
1.70	22
1.80	25
1.90	22

Penetration vs Depth

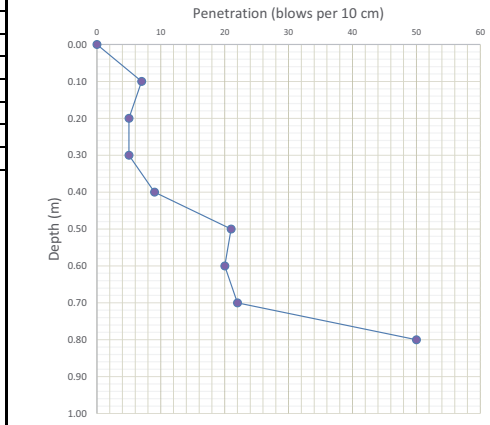


Manual DPL Results Lambaala EP3

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	16/04/2016	Location:	EP3		
Elevation:	1078	UTM X	525578		
UTM Datum	(ARC 1960)	UTM Y	80067		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	7
0.20	5
0.30	5
0.40	9
0.50	21
0.60	20
0.70	22
0.80	50

Penetration vs Depth

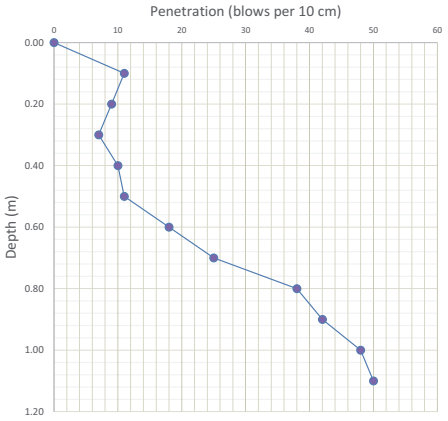


Manual DPL Results Lambaala EP4

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	16/04/2016	Location:	EP4		
Elevation:	1074	UTM X	525788		
UTM Datum	(ARC 1960)	UTM Y	79945		
Weather & conditions:	0				

Z (m.b.g.l)	N_{11}
0.00	0
0.10	11.00
0.20	9.00
0.30	7.00
0.40	10.00
0.50	11.00
0.60	18.00
0.70	25.00
0.80	38.00
0.90	42.00
1.00	48.00
1.10	50.00

Penetration vs Depth

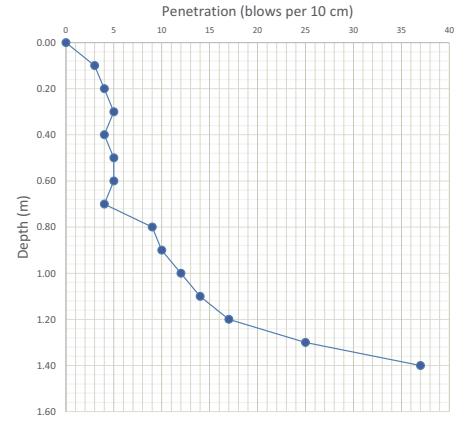


Manual DPL Results Lambaala EP5

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	00/01/1900	Location:	EP5		
Elevation:	1086	UTM X	526259		
UTM Datum	(ARC 1960)	UTM Y	79905		
Weather & conditions:	0				

Z (m.b.g.l)	N11
0.00	0
0.10	3.00
0.20	4.00
0.30	5.00
0.40	4.00
0.50	5.00
0.60	5.00
0.70	4.00
0.80	9.00
0.90	10.00
1.00	12.00
1.10	14.00
1.20	17.00
1.30	25.00
1.40	37.00

Penetration vs Depth



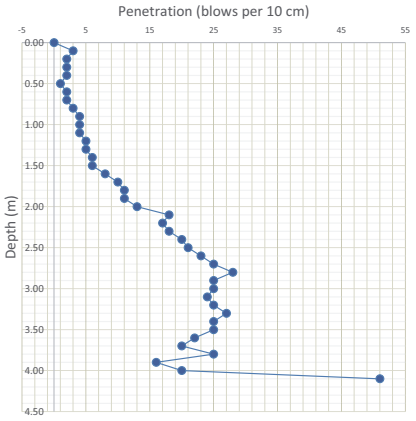
Manual DPL Results Lambaala 6 (Swamp 1)

Client:	JICA	District:	Luuka	Cone Type	0
Date:	27/04/2016	Location:	Swamp 1		
Elevation:	1071	UTM X	525639		
UTM Datum	(ARC 1960)	UTM Y	79988		

Weather & conditions: 0

Z (m.b.g.l)	N11
0.00	0
0.10	3.00
0.20	2.00
0.30	2.00
0.40	2.00
0.50	1.00
0.60	2.00
0.70	2.00
0.80	3.00
0.90	4.00
1.00	4.00
1.10	4.00
1.20	5.00
1.30	5.00
1.40	6.00
1.50	6.00
1.60	8.00
1.70	10.00
1.80	11.00
1.90	11.00
2.00	13.00
2.10	18.00
2.20	17.00
2.30	18.00
2.40	20.00
2.50	21.00
2.60	23.00
2.70	25.00
2.80	28.00
2.90	25.00
3.00	25.00
3.10	24.00
3.20	25.00
3.30	27.00
3.40	25.00
3.50	25.00
3.60	22.00
3.70	20.00
3.80	25.00
3.90	16.00
4.00	20.00
4.10	51.00

Penetration vs Depth



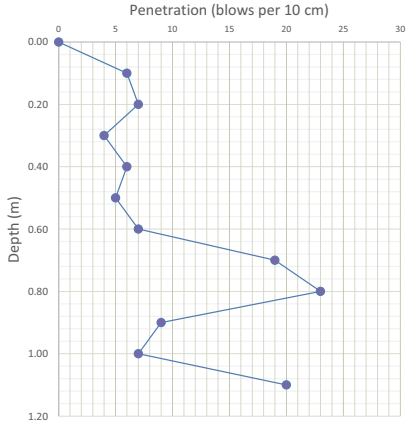
Manual DPL Results Nambaale RGC EP3

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	16/04/2016	Location:	EP3		
Elevation:	1074	UTM X	540326		
UTM Datum	(ARC 1960)	UTM Y	92060		

Weather & conditions: 0

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6.00
0.20	7.00
0.30	4.00
0.40	6.00
0.50	5.00
0.60	7.00
0.70	19.00
0.80	23.00
0.90	9.00
1.00	7.00
1.10	20.00

Penetration vs Depth

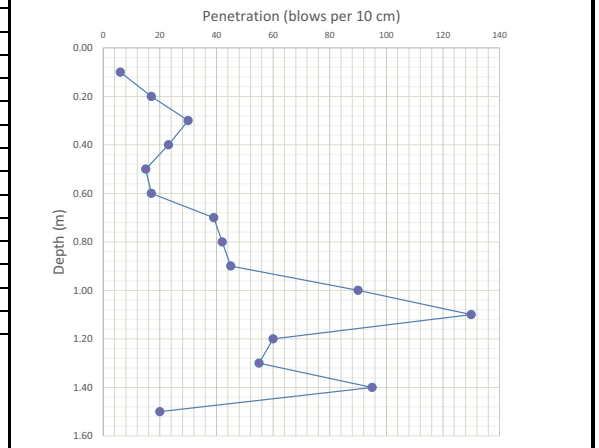


Manual DPL Results Kyanvuma EP1

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	06/05/2014	Location:	EP1		
Elevation:	1099	UTM X	530766		
UTM Datum	(ARC 1960)	UTM Y	84631		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	
0.10	6
0.20	17
0.30	30
0.40	23
0.50	15
0.60	17
0.70	39
0.80	42
0.90	45
1.00	90
1.10	130
1.20	60
1.30	55
1.40	95
1.50	20

Penetration vs Depth

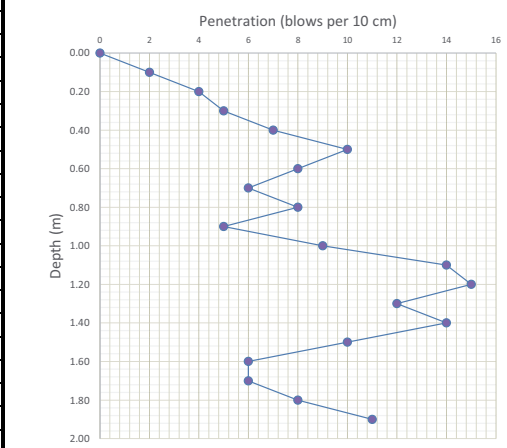


Manual DPL Results Kyanvuma EP 2

Client:	JICA	District:	Luuka	Cone Type	CT1
Date:	15/04/2016	Location:	EP2		
Elevation:	1099	UTM X	529538		
UTM Datum	(ARC 1960)	UTM Y	83402		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2
0.20	4
0.30	5
0.40	7
0.50	10
0.60	8
0.70	6
0.80	8
0.90	5
1.00	9
1.10	14
1.20	15
1.30	12
1.40	14
1.50	10
1.60	6
1.70	6
1.80	8
1.90	11
2.00	12

Penetration vs Depth

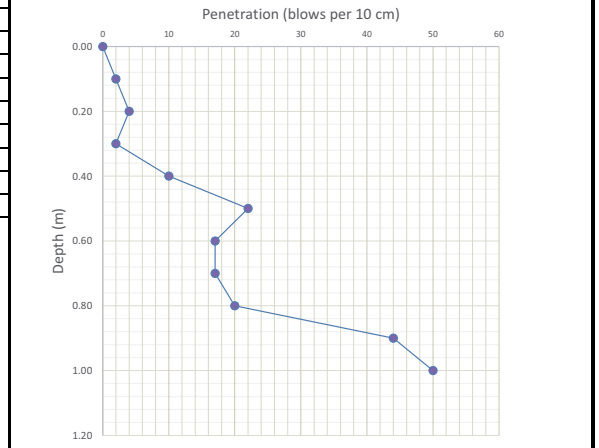


Manual DPL Results Kyanvuma EP3

Client:	JICA	District:	Luuka	Cone Type	0
Date:	16/04/2016	Location:	EP3		
Elevation:	1121	UTM X	529491		
UTM Datum	(ARC 1960)	UTM Y	83860		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2
0.20	4
0.30	2
0.40	10
0.50	22
0.60	17
0.70	17
0.80	20
0.90	44
1.00	50

Penetration vs Depth

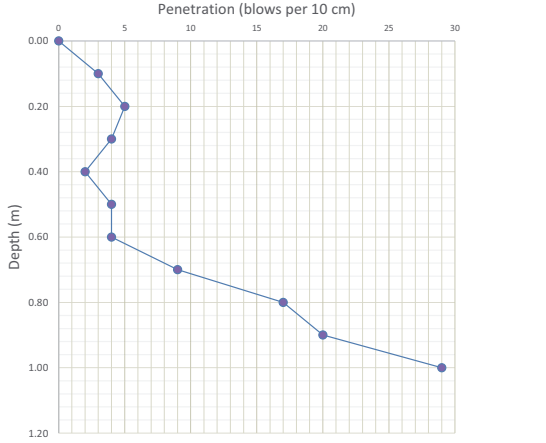


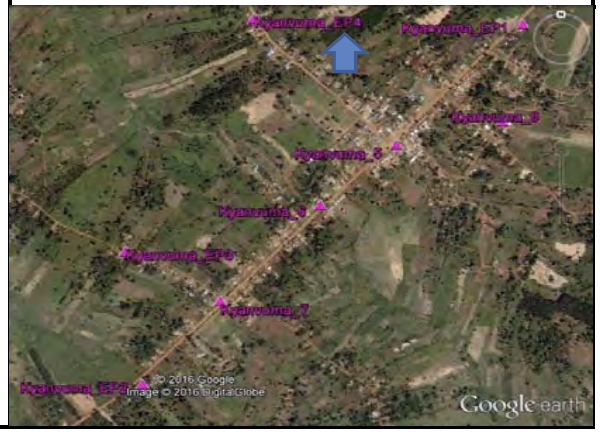
Manual DPL Results Kyanvuma EP 4

Client:	JICA	District:	Luuka	Cone Type	0
Date:	16/04/2016	Location:	EP4		
Elevation:	1113	UTM X	529908		
UTM Datum	(ARC 1960)	UTM Y	84657		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3
0.20	5
0.30	4
0.40	2
0.50	4
0.60	4
0.70	9
0.80	17
0.90	20
1.00	29

Penetration vs Depth



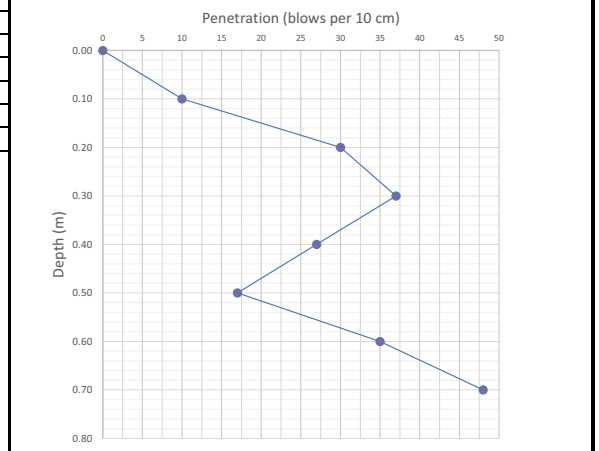


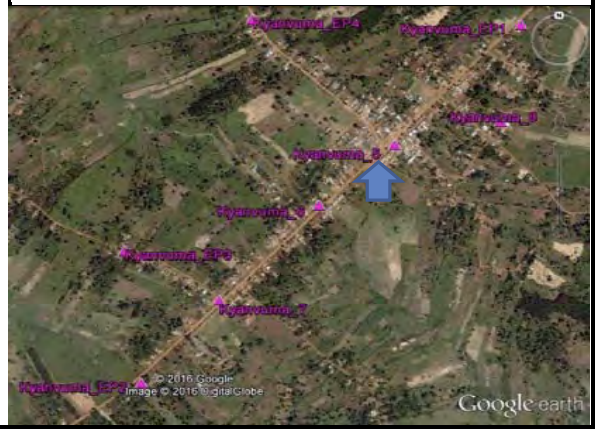
Manual DPL Results Kyanvuma 5

Client:	JICA	District:	Luuka	Cone Type	0
Date:	16/04/2016	Location:	5		
Elevation:	1117	UTM X	530351		
UTM Datum	(ARC 1960)	UTM Y	84215		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	10
0.20	30
0.30	37
0.40	27
0.50	17
0.60	35
0.70	48

Penetration vs Depth



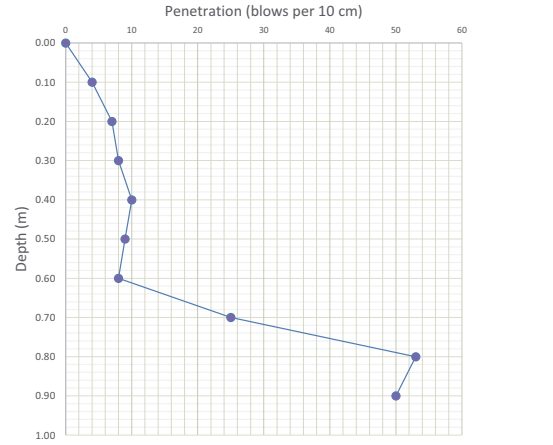


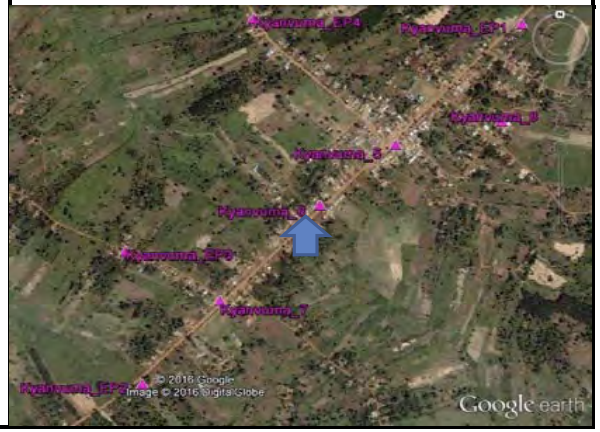
Manual DPL Results Kyanvuma 6

Client:	JICA	District:	Luuka	Cone Type	0
Date:	16/04/2016	Location:	6		
Elevation:	1119	UTM X	530109		
UTM Datum	(ARC 1960)	UTM Y	84010		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4
0.20	7
0.30	8
0.40	10
0.50	9
0.60	8
0.70	25
0.80	53
0.90	50

Penetration vs Depth



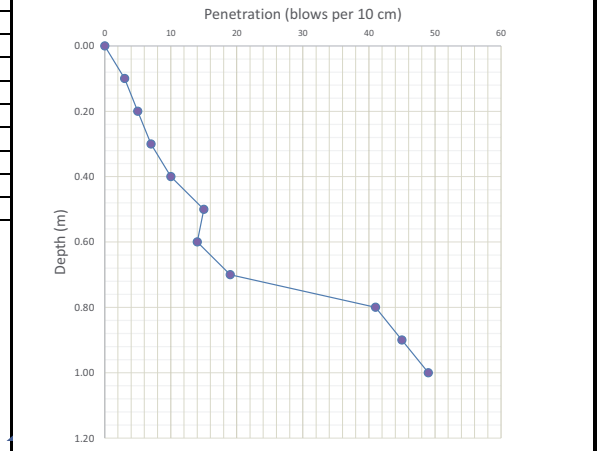


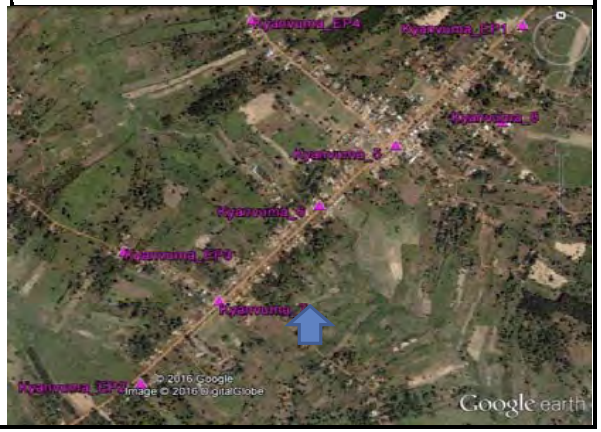
Manual DPL Results Kyanvuma 7

Client:	JICA	District:	Luuka	Cone Type	0
Date:	16/04/2016	Location:	7		
Elevation:	1127	UTM X	529788		
UTM Datum	(ARC 1960)	UTM Y	83685		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3
0.20	5
0.30	7
0.40	10
0.50	15
0.60	14
0.70	19
0.80	41
0.90	45
1.00	49

Penetration vs Depth



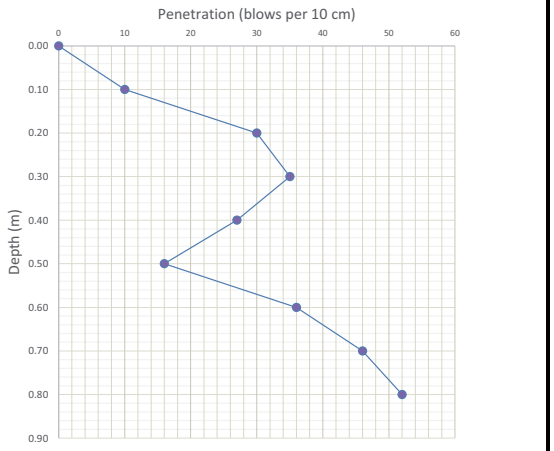


Manual DPL Results Kyanvuma 8

Client:	JICA	District:	Luuka	Cone Type	0
Date:	16/04/2016	Location:	8		
Elevation:	1121	UTM X	530689		
UTM Datum	(ARC 1960)	UTM Y	84292		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	10
0.20	30
0.30	35
0.40	27
0.50	16
0.60	36
0.70	46
0.80	52

Penetration vs Depth

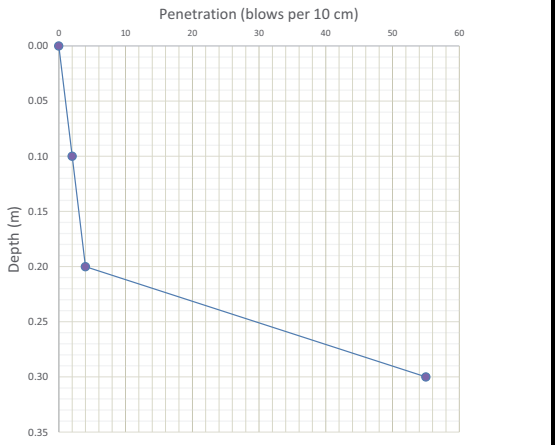


Manual DPL Results Nondwe EP1

Client:	JICA	District:	Iganga	Cone Type	CT1
Date:	17/04/2016	Location:	EP1		
Elevation:	1195	UTM X	567810		
UTM Datum	(ARC 1960)	UTM Y	50180		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2.00
0.20	4.00
0.30	55.00

Penetration vs Depth

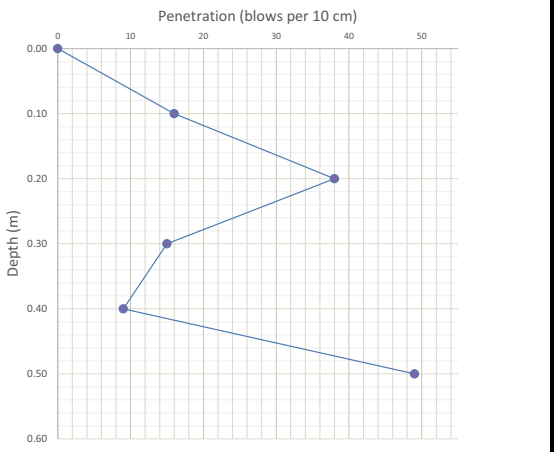


Manual DPL Results Nondwe EP2

Client:	JICA	District:	Iganga	Cone Type	CT1
Date:	17/04/2016	Location:	EP2		
Elevation:	1215	UTM X	566240		
UTM Datum	(ARC 1960)	UTM Y	1215		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	16.00
0.20	38.00
0.30	15.00
0.40	9.00
0.50	49.00

Penetration vs Depth

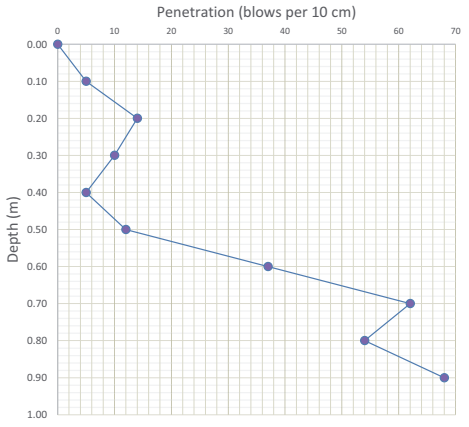


Manual DPL Results Nondwe EP3

Client:	JICA	District:	Iganga	Cone Type	0
Date:	17/04/2016	Location:	EP3		
Elevation:	1228	UTM X	565942		
UTM Datum	(ARC 1960)	UTM Y	51621		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	5.00
0.20	14.00
0.30	10.00
0.40	5.00
0.50	12.00
0.60	37.00
0.70	62.00
0.80	54.00
0.90	68.00

Penetration vs Depth

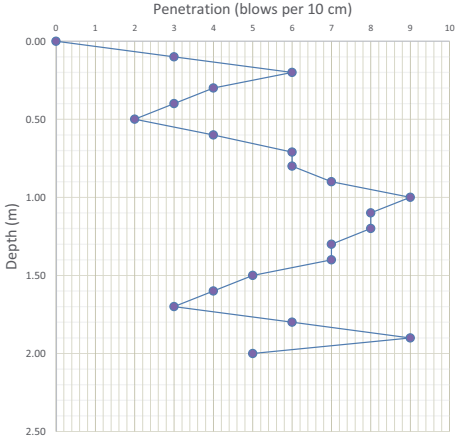


Manual DPL Results Nondwe EP4

Client:	JICA	District:	Iganga	Cone Type	0
Date:	17/04/2016	Location:	EP4		
Elevation:	1195	UTM X	566456		
UTM Datum	(ARC 1960)	UTM Y	217428		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3.00
0.20	6.00
0.30	4.00
0.40	3.00
0.50	2.00
0.60	4.00
0.71	6.00
0.80	6.00
0.90	7.00
1.00	9.00
1.10	8.00
1.20	8.00
1.30	7.00
1.40	7.00
1.50	5.00
1.60	4.00
1.70	3.00
1.80	6.00
1.90	9.00
2.00	5.00

Penetration vs Depth

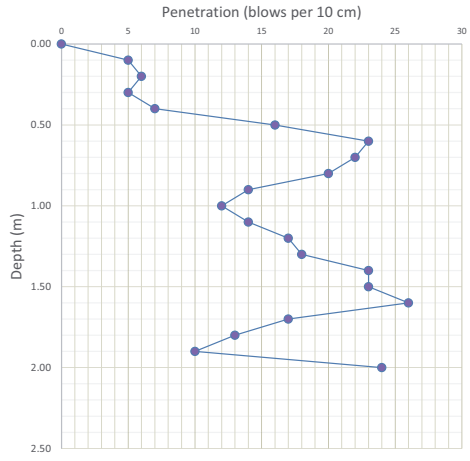


Manual DPL Results Nondwe EP5

Client:	JICA	District:	Iganga	Cone Type	0
Date:	17/04/2016	Location:	EP5		
Elevation:	1212	UTM X	565516		
UTM Datum	(ARC 1960)	UTM Y	50909		
Weather & conditions:					

Z (m.b.g.l)	N_{10}
0.00	0
0.10	5.00
0.20	6.00
0.30	5.00
0.40	7.00
0.50	16.00
0.60	23.00
0.70	22.00
0.80	20.00
0.90	14.00
1.00	12.00
1.10	14.00
1.20	17.00
1.30	18.00
1.40	23.00
1.50	23.00
1.60	26.00
1.70	17.00
1.80	13.00
1.90	10.00
2.00	24.00

Penetration vs Depth

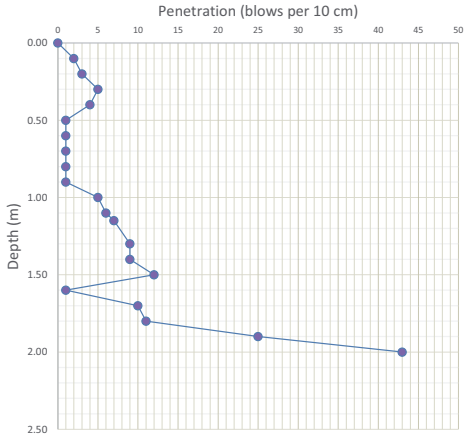


Manual DPL Results Nondwe 6

Client:	JICA	District:	Iganga	Cone Type	0
Date:	17/04/2016	Location:	6		
Elevation:	1213	UTM X	566836		
UTM Datum	(ARC 1960)	UTM Y	50524		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2.00
0.20	3.00
0.30	5.00
0.40	4.00
0.50	1.00
0.60	1.00
0.70	1.00
0.80	1.00
0.90	1.00
1.00	5.00
1.10	6.00
1.15	7.00
1.30	9.00
1.40	9.00
1.50	12.00
1.60	1.00
1.70	10.00
1.80	11.00
1.90	25.00
2.00	43.00

Penetration vs Depth

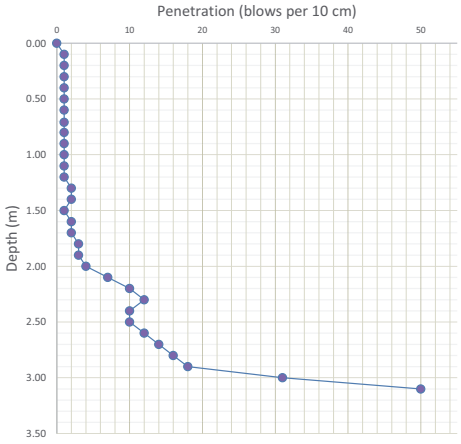


Manual DPL Results Nondwe (Swamp 1)

Client:	JICA	District:	Iganga	Cone Type	0
Date:	17/04/2016	Location:	7		
Elevation:	1198	UTM X	565792		
UTM Datum	(ARC 1960)	UTM Y	50819		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	1.00
0.20	1.00
0.30	1.00
0.40	1.00
0.50	1.00
0.60	1.00
0.71	1.00
0.80	1.00
0.90	1.00
1.00	1.00
1.10	1.00
1.20	1.00
1.30	2.00
1.40	2.00
1.50	1.00
1.60	2.00
1.70	2.00
1.80	3.00
1.90	3.00
2.00	4.00
2.10	7.00
2.20	10.00
2.30	12.00
2.40	10.00
2.50	10.00
2.60	12.00
2.70	14.00
2.80	16.00
2.90	18.00
3.00	31.00
3.10	50.00

Penetration vs Depth

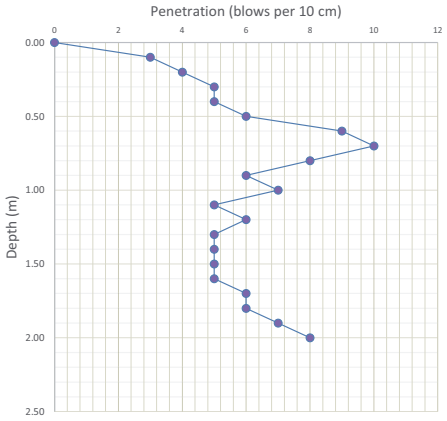


Manual DPL Results Kasasira EP1

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	26/04/2016	Location:	EP1		
Elevation:	1077	UTM X	578680		
UTM Datum	(ARC 1960)	UTM Y	120739		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3
0.20	4
0.30	5
0.40	5
0.50	6
0.60	9
0.70	10
0.80	8
0.90	6
1.00	7
1.10	5
1.20	6
1.30	5
1.40	5
1.50	5
1.60	5
1.70	6
1.80	6
1.90	7
2.00	8

Penetration vs Depth



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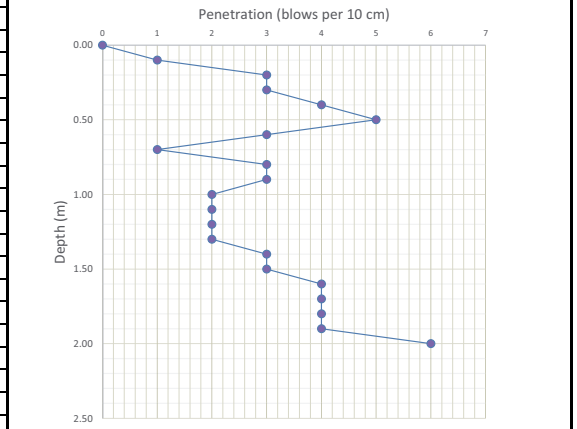
Manual DPL Results Kasasira EP2

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	26/04/2016	Location:	EP2		
Elevation:	1077	UTM X	579085		
UTM Datum	(ARC 1960)	UTM Y	120567		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	1
0.20	3
0.30	3
0.40	4
0.50	5
0.60	3
0.70	1
0.80	3
0.90	3
1.00	2
1.10	2
1.20	2
1.30	2
1.40	3
1.50	3
1.60	4
1.70	4
1.80	4
1.90	4
2.00	6

Penetration vs Depth

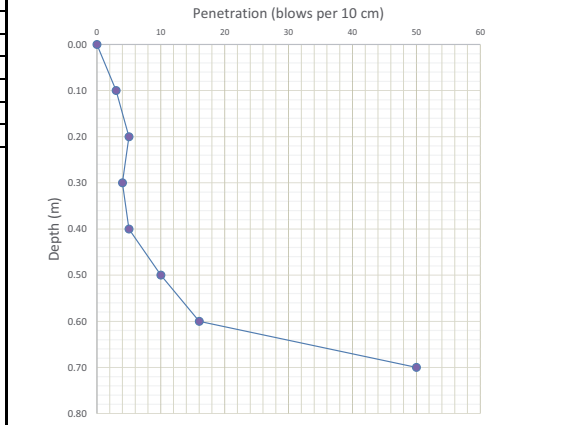


Manual DPL Results Kasasira EP3

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	26/04/2016	Location:	EP3		
Elevation:	1069	UTM X	574779		
UTM Datum	(ARC 1960)	UTM Y	121080		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3
0.20	5
0.30	4
0.40	5
0.50	10
0.60	16
0.70	50

Penetration vs Depth



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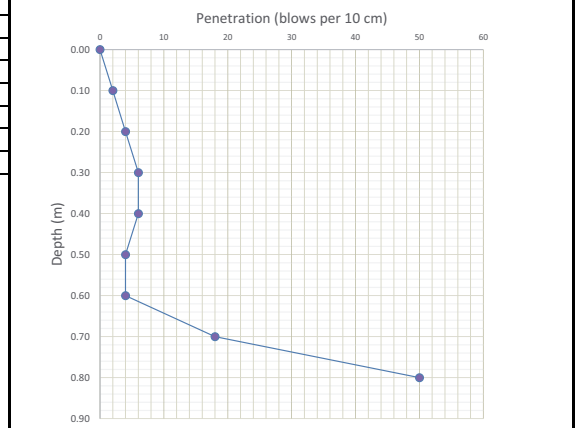
Manual DPL Results Kasasira EP4

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	26/04/2016	Location:	EP4		
Elevation:	1068	UTM X	578575		
UTM Datum	(ARC 1960)	UTM Y	121451		
Weather & conditions:	0				

Z (m.b.g.l)	N_{11}
0.00	0
0.10	2.00
0.20	4.00
0.30	6.00
0.40	6.00
0.50	4.00
0.60	4.00
0.70	18.00
0.80	50.00

Penetration vs Depth

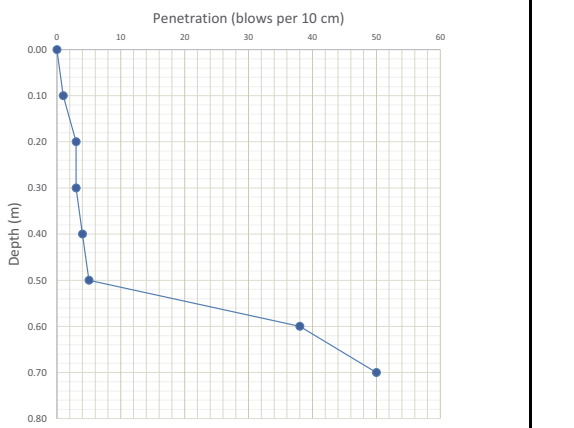


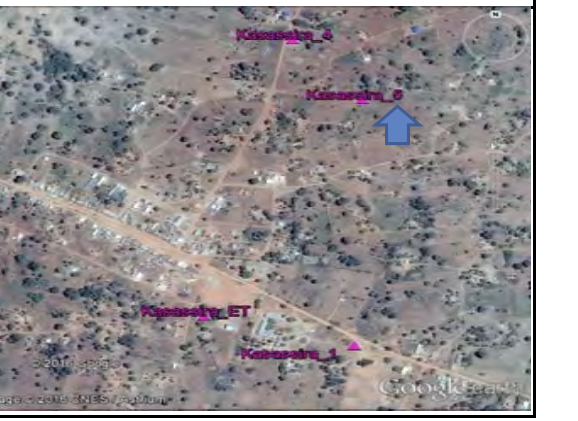
Manual DPL Results Kasasira EP5

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	00/01/1900	Location:	EP5		
Elevation:	1073	UTM X	578698		
UTM Datum	(ARC 1960)	UTM Y	121310		
Weather & conditions:	0				

Z (m.b.g.l)	N11
0.00	0
0.10	1.00
0.20	3.00
0.30	3.00
0.40	4.00
0.50	5.00
0.60	38.00
0.70	50.00

Penetration vs Depth





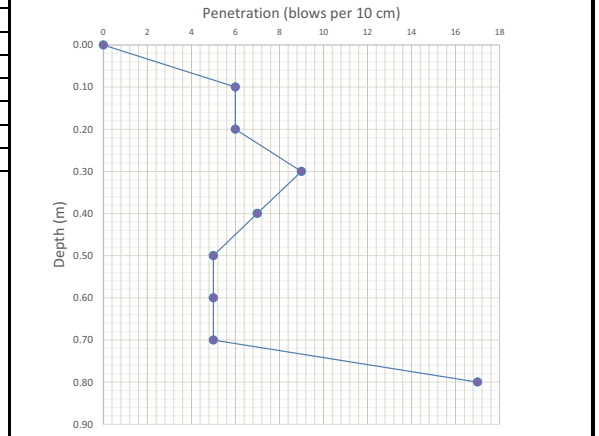
A11-6-23

Manual DPL Results Kameke-Pallisa RGC EP1

Client:	JICA	District:	Pallisa	Cone Type	CT3
Date:	17/04/2016	Location:	EP1		
Elevation:	1114	UTM X	585457		
UTM Datum	(ARC 1960)	UTM Y	139878		
Weather & conditions:	Sunny, becoming cloudy, sloping. Top of the hill - point shifted because of thick vegetation.				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6.00
0.20	6.00
0.30	9.00
0.40	7.00
0.50	5.00
0.60	5.00
0.70	5.00
0.80	17.00

Penetration vs Depth

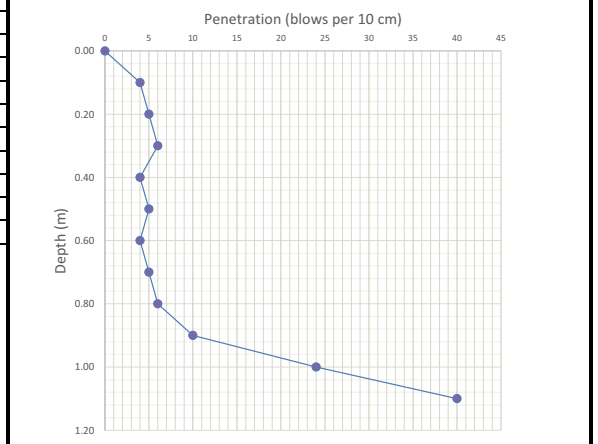


Manual DPL Results Kameke-Pallisa RGC EP2

Client:	JICA	District:	Palisa	Cone Type	CT3
Date:	17/04/2016	Location:	EP2		
Elevation:	1119	UTM X	585966		
UTM Datum	(ARC 1960)	UTM Y	139819		
Weather & conditions:	Cloudy, sloping, humus, roots.				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	5.00
0.30	6.00
0.40	4.00
0.50	5.00
0.60	4.00
0.70	5.00
0.80	6.00
0.90	10.00
1.00	24.00
1.10	40.00

Penetration vs Depth

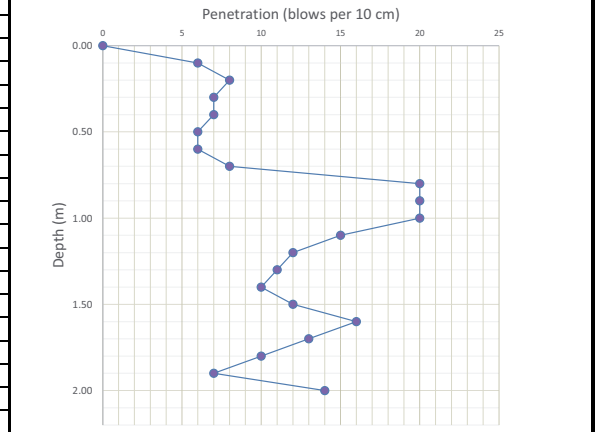


Manual DPL Results Kameke-Pallisa RGC EP3

Client:	JICA	District:	Palisa	Cone Type	CT3
Date:	17/04/2016	Location:	EP3		
Elevation:	1116	UTM X	585758.4		
UTM Datum	(ARC 1960)	UTM Y	140437		
Weather & conditions:	Cloudy, sloping, top of the hill, laterite and roots.				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6
0.20	8
0.30	7
0.40	7
0.50	6
0.60	6
0.70	8
0.80	20
0.90	20
1.00	20
1.10	15
1.20	12
1.30	11
1.40	10
1.50	12
1.60	16
1.70	13
1.80	10
1.90	7
2.00	14

Penetration vs Depth

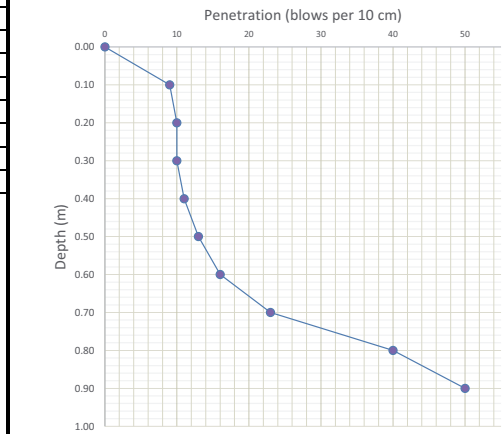


Manual DPL Results Kameke-Pallisa RGC EP4

Client:	JICA	District:	Palisa	Cone Type	0
Date:	17/04/2016	Location:	EP4		
Elevation:	119	UTM X	586178.4		
UTM Datum	(ARC 1960)	UTM Y	140143		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	9.00
0.20	10.00
0.30	10.00
0.40	11.00
0.50	13.00
0.60	16.00
0.70	23.00
0.80	40.00
0.90	50.00

Penetration vs Depth

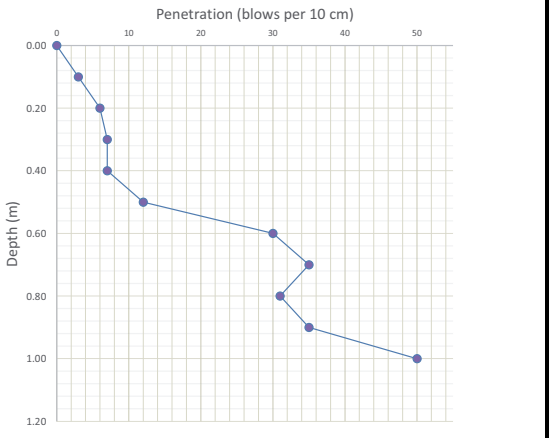


Manual DPL Results Kameke-Pallisa RGC EP5

Client:	JICA	District:	Palisa	Cone Type	0
Date:	17/04/2016	Location:	EP5		
Elevation:	1111	UTM X	586325		
UTM Datum	(ARC 1960)	UTM Y	139757		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3
0.20	6
0.30	7
0.40	7
0.50	12
0.60	30
0.70	35
0.80	31
0.90	35
1.00	50

Penetration vs Depth

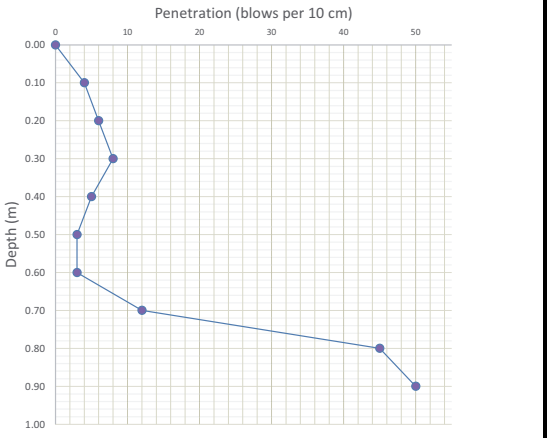


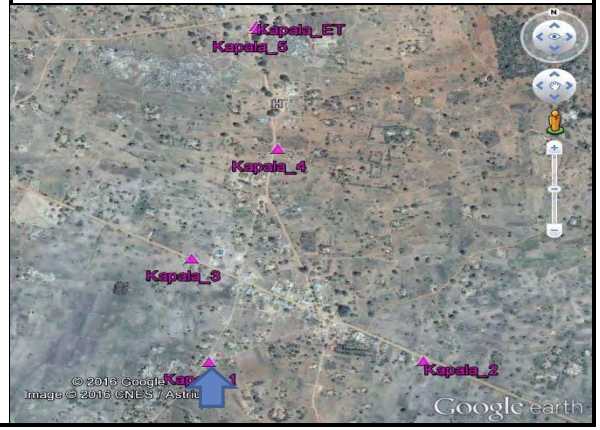
Manual DPL Results Kapala RGC EP1

Client:	JICA	District:	Palisa	Cone Type	CT1
Date:	17/04/2016	Location:	EP1		
Elevation:	1050	UTM X	5680714		
UTM Datum	(ARC 1960)	UTM Y	137584		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	6.00
0.30	8.00
0.40	5.00
0.50	3.00
0.60	3.00
0.70	12.00
0.80	45.00
0.90	50.00

Penetration vs Depth



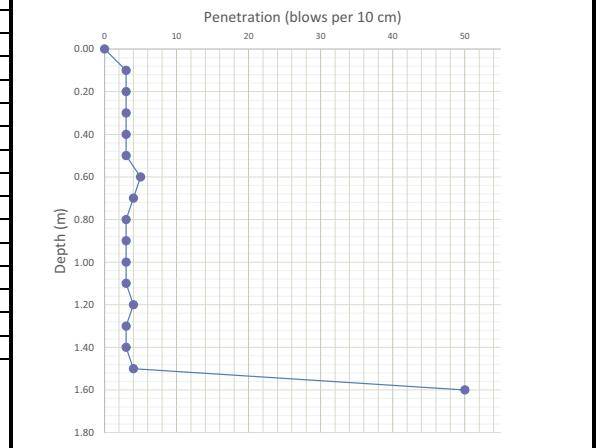


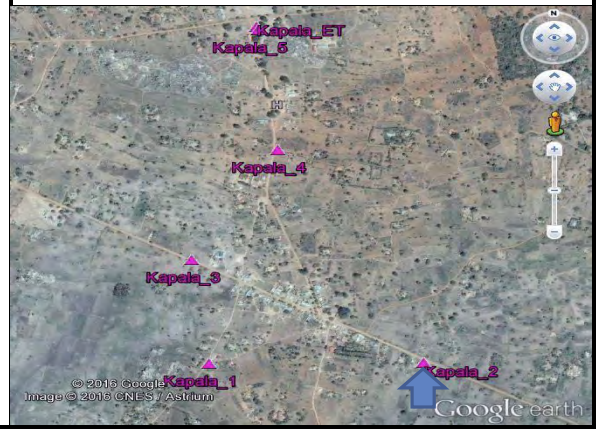
Manual DPL Results Kapala RGC EP2

Client:	JICA	District:	Palisa	Cone Type	CT1
Date:	17/04/2016	Location:	EP2		
Elevation:	1048	UTM X	568749		
UTM Datum	(ARC 1960)	UTM Y	137573		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3.00
0.20	3.00
0.30	3.00
0.40	3.00
0.50	3.00
0.60	5.00
0.70	4.00
0.80	3.00
0.90	3.00
1.00	3.00
1.10	3.00
1.20	4.00
1.30	3.00
1.40	3.00
1.50	4.00
1.60	50.00

Penetration vs Depth



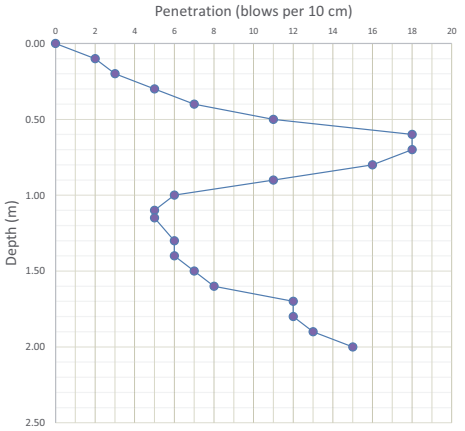


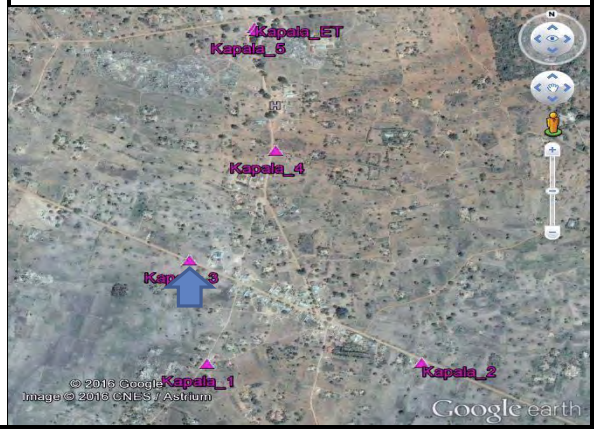
Manual DPL Results Kapala RGC EP3

Client:	JICA	District:	Palisa	Cone Type	0
Date:	17/04/2016	Location:	EP3		
Elevation:	1042	UTM X	568025		
UTM Datum	(ARC 1960)	UTM Y	138003		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2.00
0.20	3.00
0.30	5.00
0.40	7.00
0.50	11.00
0.60	18.00
0.70	18.00
0.80	16.00
0.90	11.00
1.00	6.00
1.10	5.00
1.15	5.00
1.30	6.00
1.40	6.00
1.50	7.00
1.60	8.00
1.70	12.00
1.80	12.00
1.90	13.00
2.00	15.00

Penetration vs Depth



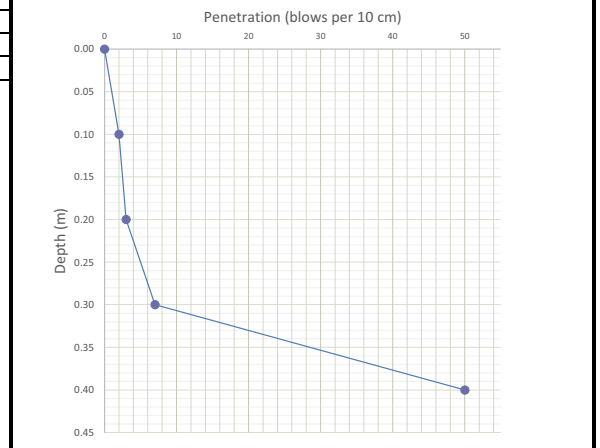


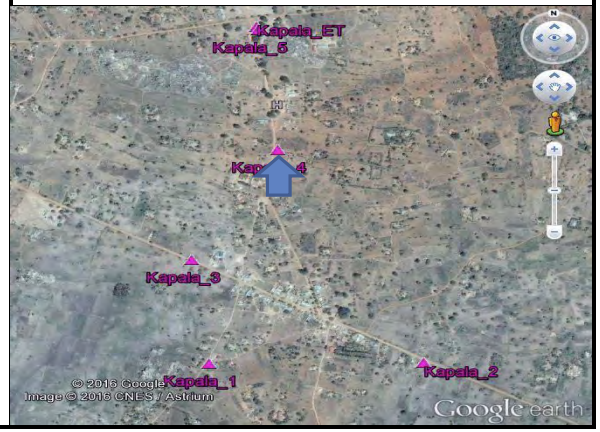
Manual DPL Results Kapala RGC EP4

Client:	JICA	District:	Palisa	Cone Type 0
Date:	17/04/2016	Location:	EP4	
Elevation:	1056	UTM X	568303	
UTM Datum	(ARC 1960)	UTM Y	138440	
Weather & conditions:	0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2.00
0.20	3.00
0.30	7.00
0.40	50.00

Penetration vs Depth



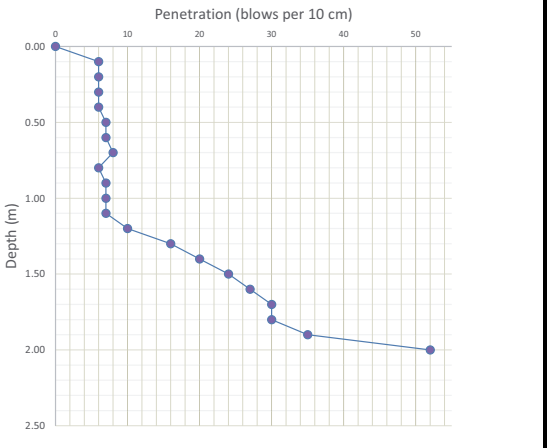


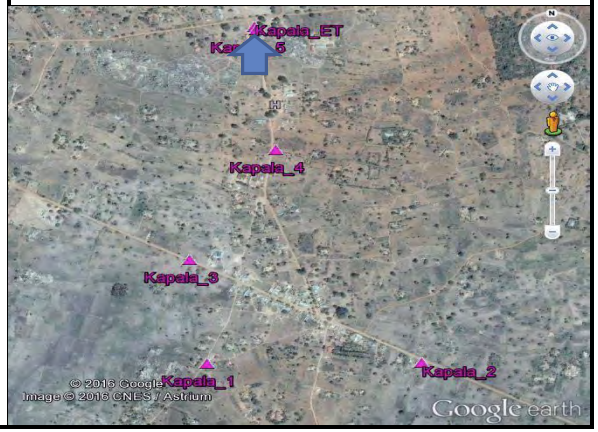
Manual DPL Results Kapala RGC EP5

Client:	JICA	District:	Palisa	Cone Type 0
Date:	17/04/2016	Location:	EP5	
Elevation:	1067	UTM X	568250	
UTM Datum	(ARC 1960)	UTM Y	138921	
Weather & conditions:	0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6.00
0.20	6.00
0.30	6.00
0.40	6.00
0.50	7.00
0.60	7.00
0.70	8.00
0.80	6.00
0.90	7.00
1.00	7.00
1.10	7.00
1.20	10.00
1.30	16.00
1.40	20.00
1.50	24.00
1.60	27.00
1.70	30.00
1.80	30.00
1.90	35.00
2.00	52.00

Penetration vs Depth



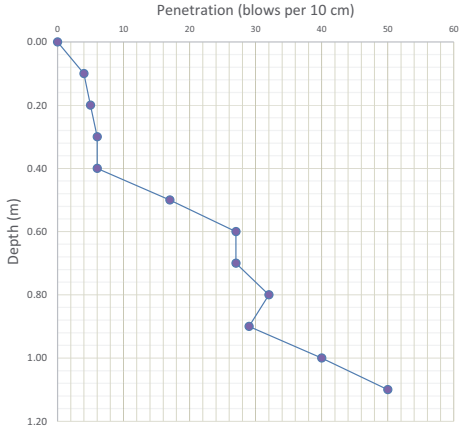


Manual DPL Results Buseta 1

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	17/04/2016	Location:	1		
Elevation:	1062	UTM X	583225		
UTM Datum	(ARC 1960)	UTM Y	120797		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	5.00
0.30	6.00
0.40	6.00
0.50	17.00
0.60	27.00
0.70	27.00
0.80	32.00
0.90	29.00
1.00	40.00
1.10	50.00

Penetration vs Depth

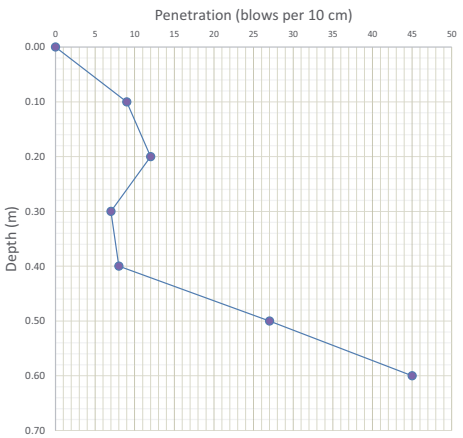


Manual DPL Results Buseta 2

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	17/04/2016	Location:	2		
Elevation:	1064	UTM X	583729		
UTM Datum	(ARC 1960)	UTM Y	714676		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	9.00
0.20	12.00
0.30	7.00
0.40	8.00
0.50	27.00
0.60	45.00

Penetration vs Depth

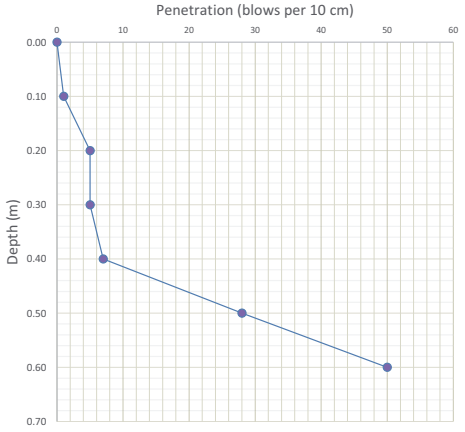


Manual DPL Results Buseta 3

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	16/04/2016	Location:	3		
Elevation:	1078	UTM X	583819		
UTM Datum	(ARC 1960)	UTM Y	80067		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	1.00
0.20	5.00
0.30	5.00
0.40	7.00
0.50	28.00
0.60	50.00

Penetration vs Depth

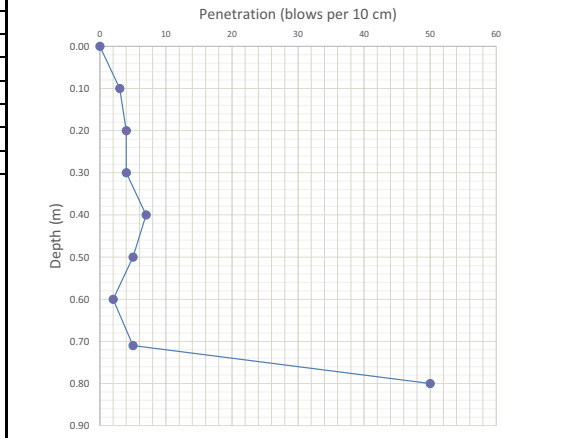


Manual DPL Results Buseta EP4

Client:	JICA	District:	Kibuku	Cone Type	CT1
Date:	17/04/2016	Location:	4		
Elevation:	1066	UTM X	584365		
UTM Datum	(ARC 1960)	UTM Y	119929		
Weather & conditions:	0				

Z (m.b.g.l)	N_{11}
0.00	0
0.10	3.00
0.20	4.00
0.30	4.00
0.40	7.00
0.50	5.00
0.60	2.00
0.71	5.00
0.80	50.00

Penetration vs Depth

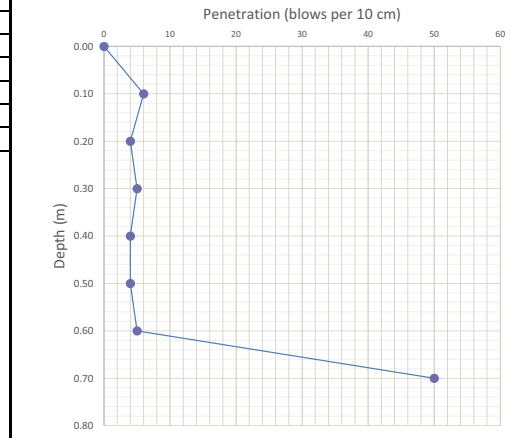


Manual DPL Results Buseta EP5

Client:	JICA	District:	Kibuku	Cone Type 0
Date:	17/04/2016	Location:	5	
Elevation:	1074	UTM X	582968	
UTM Datum	(ARC 1960)	UTM Y	120034	
Weather & conditions:	0			

Z (m.b.g.l)	N_{11}
0.00	0
0.10	6.00
0.20	4.00
0.30	5.00
0.40	4.00
0.50	4.00
0.60	5.00
0.70	50.00

Penetration vs Depth

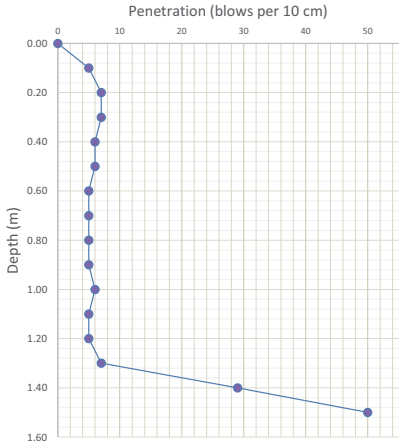


Manual DPL Results Kidetok EP1

Client:	JICA	District:	Selele	Cone Type CT1
Date:	24/04/2016	Location:	EP1	
Elevation:	1089	UTM X	546774	
UTM Datum	(ARC 1960)	UTM Y	163901	
Weather & conditions:	0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	5.00
0.20	7.00
0.30	7.00
0.40	6.00
0.50	6.00
0.60	5.00
0.70	5.00
0.80	5.00
0.90	5.00
1.00	6.00
1.10	5.00
1.20	5.00
1.30	7.00
1.40	29.00
1.50	50.00

Penetration vs Depth

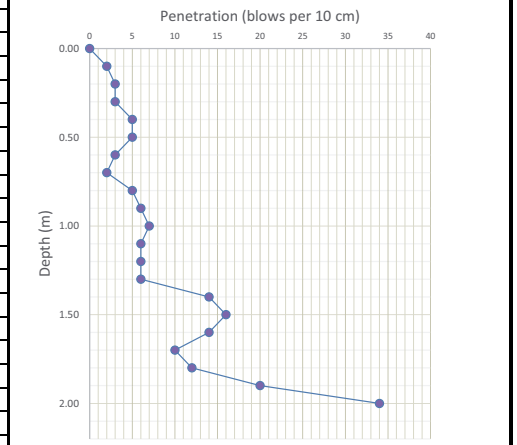


Manual DPL Results Kidetok EP2

Client:	JICA	District:	Selele	Cone Type	CT1
Date:	24/04/2016	Location:	EP2		
Elevation:	1070	UTM X	545755		
UTM Datum	(ARC 1960)	UTM Y	163005		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	2.00
0.20	3.00
0.30	3.00
0.40	5.00
0.50	5.00
0.60	3.00
0.70	2.00
0.80	5.00
0.90	6.00
1.00	7.00
1.10	6.00
1.20	6.00
1.30	6.00
1.40	14.00
1.50	16.00
1.60	14.00
1.70	10.00
1.80	12.00
1.90	20.00
2.00	34.00

Penetration vs Depth

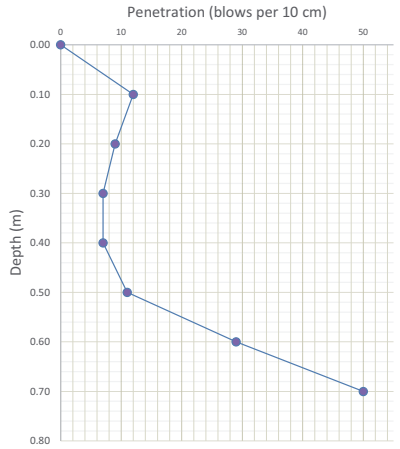


Manual DPL Results Kidetok EP3

Client:	JICA	District:	Selele	Cone Type	0
Date:	24/04/2016	Location:	EP3		
Elevation:	1056	UTM X	545419		
UTM Datum	(ARC 1960)	UTM Y	162735		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	12.00
0.20	9.00
0.30	7.00
0.40	7.00
0.50	11.00
0.60	29.00
0.70	50.00

Penetration vs Depth

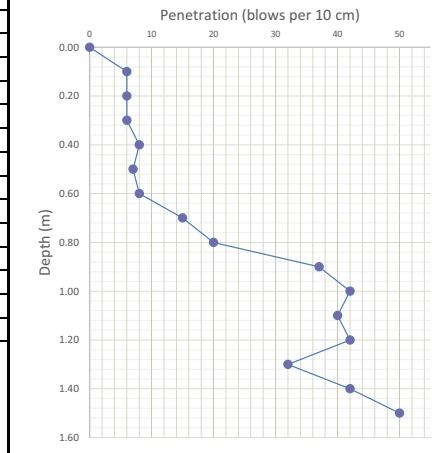


Manual DPL Results Kidetok EP4

Client:	JICA	District:	Selele	Cone Type	0
Date:	24/04/2016	Location:	EP4		
Elevation:	1067	UTM X	547645		
UTM Datum	(ARC 1960)	UTM Y	164806		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6.00
0.20	6.00
0.30	6.00
0.40	8.00
0.50	7.00
0.60	8.00
0.70	15.00
0.80	20.00
0.90	37.00
1.00	42.00
1.10	40.00
1.20	42.00
1.30	32.00
1.40	42.00
1.50	50.00

Penetration vs Depth

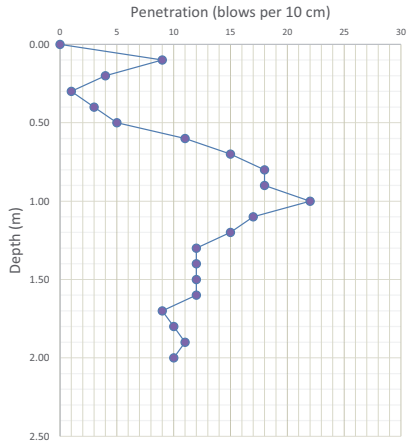


Manual DPL Results Kidetok EP5

Client:	JICA	District:	Selele	Cone Type	0
Date:	24/04/2016	Location:	EP5		
Elevation:	1084	UTM X	553629		
UTM Datum	(ARC 1960)	UTM Y	220443		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	9.00
0.20	4.00
0.30	1.00
0.40	3.00
0.50	5.00
0.60	11.00
0.70	15.00
0.80	18.00
0.90	18.00
1.00	22.00
1.10	17.00
1.20	15.00
1.30	12.00
1.40	12.00
1.50	12.00
1.60	12.00
1.70	9.00
1.80	10.00
1.90	11.00
2.00	10.00

Penetration vs Depth

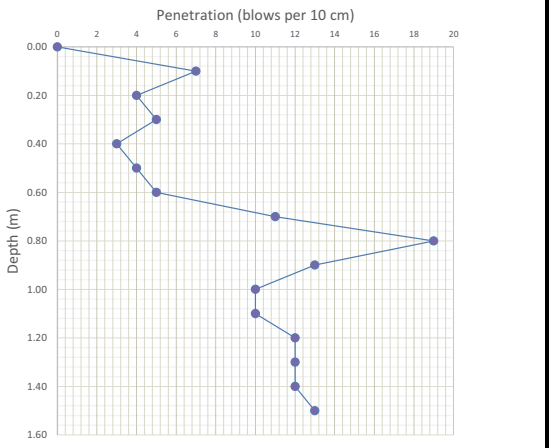


Manual DPL Results Tubur EP1

Client:	JICA	District:	Soroti	Cone Type	CT1
Date:	21/04/2016	Location:	EP1		
Elevation:	1102	UTM X	557387		
UTM Datum	(ARC 1960)	UTM Y	216074		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	7
0.20	4
0.30	5
0.40	3
0.50	4
0.60	5
0.70	11
0.80	19
0.90	13
1.00	10
1.10	10
1.20	12
1.30	12
1.40	12
1.50	13

Penetration vs Depth

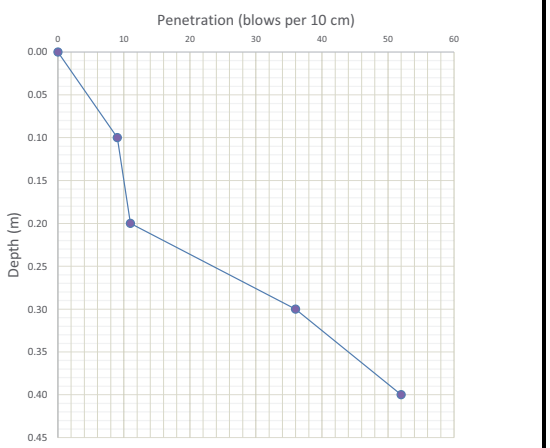


Manual DPL Results Tubur EP2

Client:	JICA	District:	Soroti	Cone Type	CT1
Date:	21/04/2016	Location:	EP2		
Elevation:	1102	UTM X	558080		
UTM Datum	(ARC 1960)	UTM Y	216248		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	9
0.20	11
0.30	36
0.40	52

Penetration vs Depth

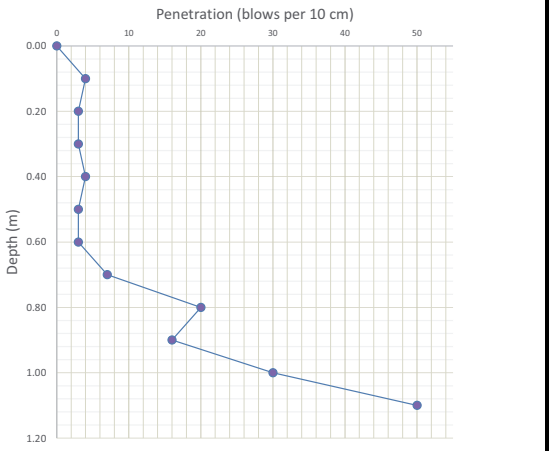


Manual DPL Results Tubur EP3

Client:	JICA	District:	Soroti	Cone Type	CT1
Date:	21/04/2016	Location:	EP3		
Elevation:	1101	UTM X	558335		
UTM Datum	(ARC 1960)	UTM Y	214847		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4
0.20	3
0.30	3
0.40	4
0.50	3
0.60	3
0.70	7
0.80	20
0.90	16
1.00	30
1.10	50

Penetration vs Depth

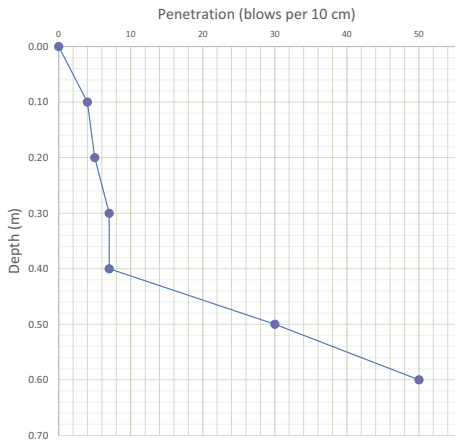


Manual DPL Results Tubur EP4

Client:	JICA	District:	Soroti	Cone Type	0
Date:	21/04/2016	Location:	EP4		
Elevation:	1117	UTM X	557775		
UTM Datum	(ARC 1960)	UTM Y	216594		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4
0.20	5
0.30	7
0.40	7
0.50	30
0.60	50

Penetration vs Depth

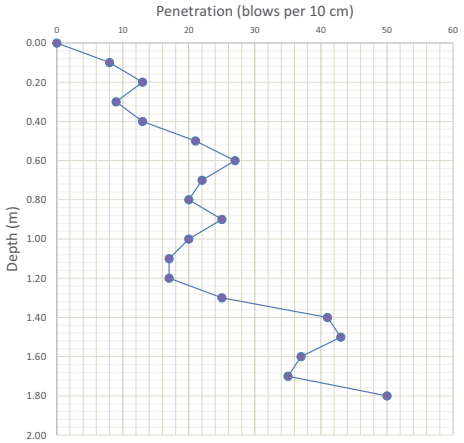


Manual DPL Results Tubur EP 5

Client:	JICA	District:	Soroti	Cone Type	0
Date:	21/04/2016	Location:	EP5		
Elevation:	1112	UTM X	557581		
UTM Datum	(ARC 1960)	UTM Y	216368		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	8
0.20	13
0.30	9
0.40	13
0.50	21
0.60	27
0.70	22
0.80	20
0.90	25
1.00	20
1.10	17
1.20	17
1.30	25
1.40	41
1.50	43
1.60	37
1.70	35
1.80	50

Penetration vs Depth

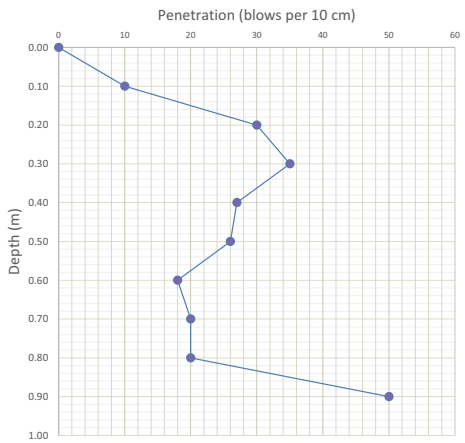


Manual DPL Results Tubur EP6

Client:	JICA	District:	Soroti	Cone Type	0
Date:	22/04/2016	Location:	EP6		
Elevation:	1100	UTM X	557160		
UTM Datum	(ARC 1960)	UTM Y	215800		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	10
0.20	30
0.30	35
0.40	27
0.50	26
0.60	18
0.70	20
0.80	20
0.90	50

Penetration vs Depth

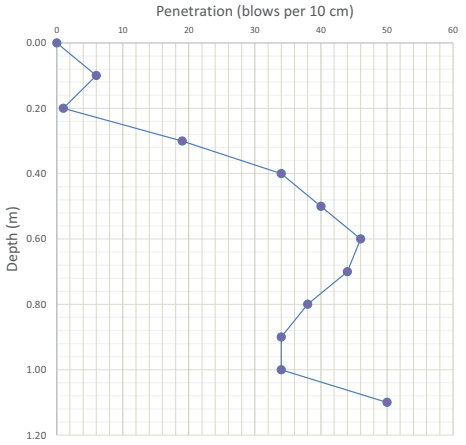


Manual DPL Results Tubur EP7

Client:	JICA	District:	Soroti	Cone Type	0
Date:	22/04/2016	Location:	EP7		
Elevation:	1088	UTM X	556423		
UTM Datum	(ARC 1960)	UTM Y	215247		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6
0.20	1
0.30	19
0.40	34
0.50	40
0.60	46
0.70	44
0.80	38
0.90	34
1.00	34
1.10	50

Penetration vs Depth

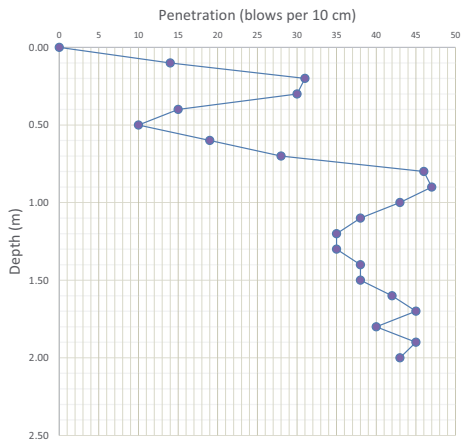


Manual DPL Results Tubur EP 8

Client:	JICA	District:	Soroti	Cone Type	0
Date:	21/04/2016	Location:	EP8		
Elevation:	1083	UTM X	555513		
UTM Datum	(ARC 1960)	UTM Y	214963		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	14.00
0.20	31.00
0.30	30.00
0.40	15.00
0.50	10.00
0.60	19.00
0.70	28.00
0.80	46.00
0.90	47.00
1.00	43.00
1.10	38.00
1.20	35.00
1.30	35.00
1.40	38.00
1.50	38.00
1.60	42.00
1.70	45.00
1.80	40.00
1.90	45.00
2.00	43.00

Penetration vs Depth

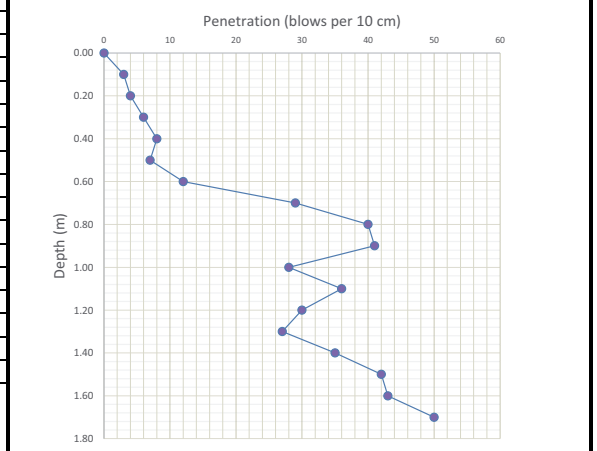


Manual DPL Results Tubur EP9

Client:	JICA	District:	Soroti	Cone Type	0
Date:	22/04/2016	Location:	EP9		
Elevation:	1084	UTM X	54683		
UTM Datum	(ARC 1960)	UTM Y	214825		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	3.00
0.20	4.00
0.30	6.00
0.40	8.00
0.50	7.00
0.60	12.00
0.70	29.00
0.80	40.00
0.90	41.00
1.00	28.00
1.10	36.00
1.20	30.00
1.30	27.00
1.40	35.00
1.50	42.00
1.60	43.00
1.70	50.00

Penetration vs Depth

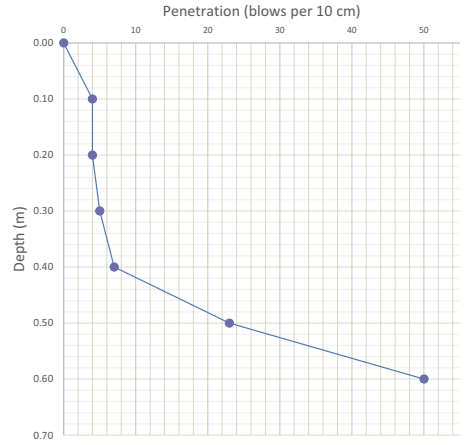


Manual DPL Results Tubur EP10

Client:	JICA	District:	Soroti	Cone Type	0
Date:	22/04/2016	Location:	EP10		
Elevation:	1078	UTM X	553727		
UTM Datum	(ARC 1960)	UTM Y	214625		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	4.00
0.30	5.00
0.40	7.00
0.50	23.00
0.60	50.00

Penetration vs Depth

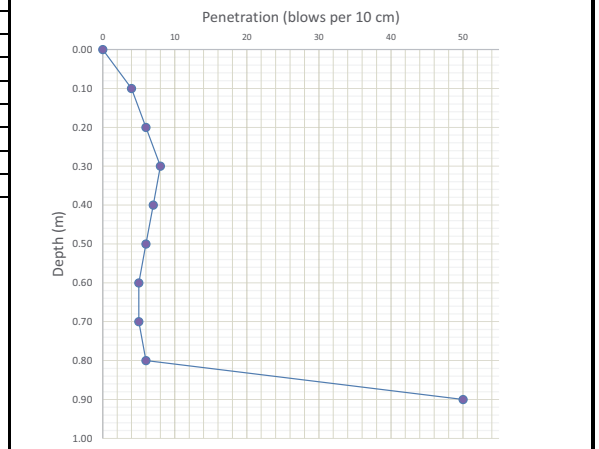


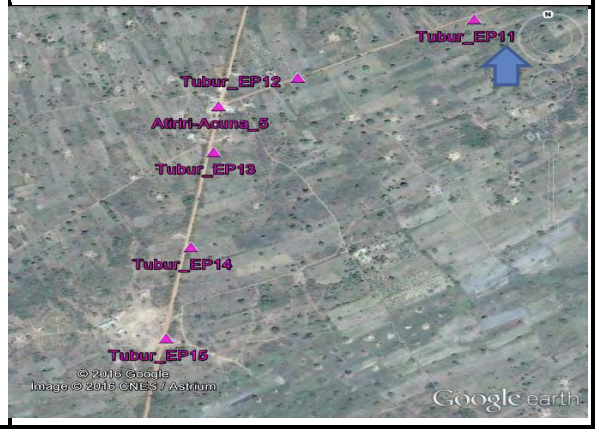
Manual DPL Results Tubur EP11

Client:	JICA	District:	Soroti	Cone Type	0
Date:	22/04/2016	Location:	EP11		
Elevation:	1075	UTM X	552813		
UTM Datum	(ARC 1960)	UTM Y	214330		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	6.00
0.30	8.00
0.40	7.00
0.50	6.00
0.60	5.00
0.70	5.00
0.80	6.00
0.90	50.00

Penetration vs Depth



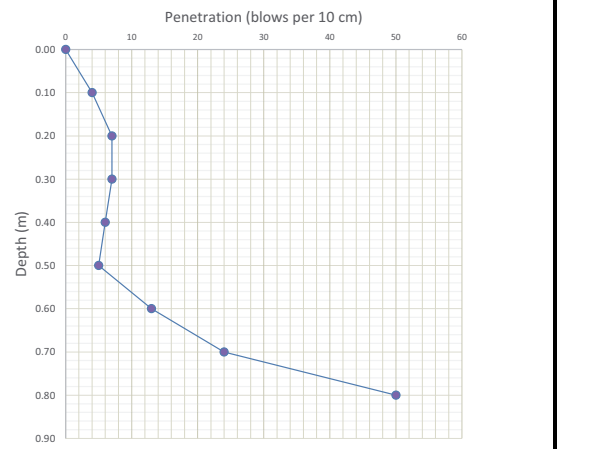


Manual DPL Results Tubur EP 12

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP12		
Elevation:	1074	UTM X	552344		
UTM Datum	(ARC 1960)	UTM Y	214181		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	7.00
0.30	7.00
0.40	6.00
0.50	5.00
0.60	13.00
0.70	24.00
0.80	50.00

Penetration vs Depth

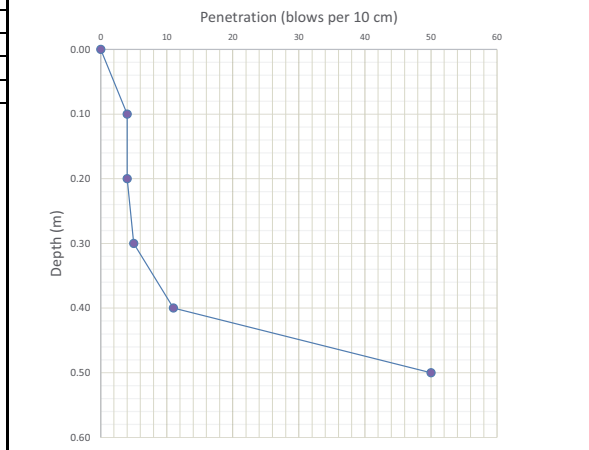


Manual DPL Results Tubur EP13

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP13		
Elevation:	1067	UTM X	552105		
UTM Datum	(ARC 1960)	UTM Y	213956		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	4.00
0.30	5.00
0.40	11.00
0.50	50.00

Penetration vs Depth

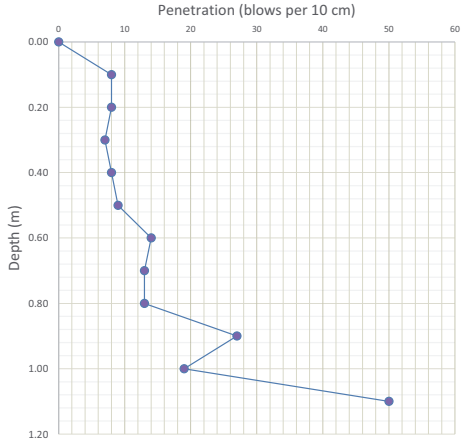


Manual DPL Results Tubur 14

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP14		
Elevation:	1060	UTM X	552016		
UTM Datum	(ARC 1960)	UTM Y	213645		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	8.00
0.20	8.00
0.30	7.00
0.40	8.00
0.50	9.00
0.60	14.00
0.70	13.00
0.80	13.00
0.90	27.00
1.00	19.00
1.10	50.00

Penetration vs Depth

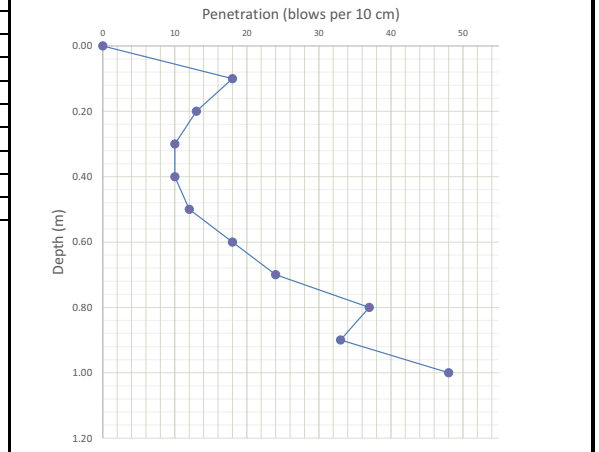


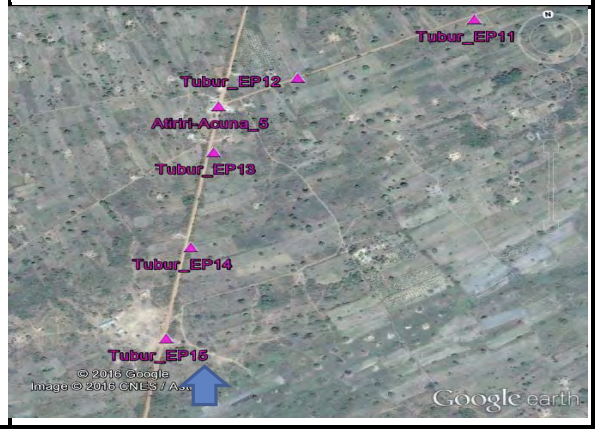
Manual DPL Results Tubur EP15

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP15		
Elevation:	1052	UTM X	551923		
UTM Datum	(ARC 1960)	UTM Y	213340		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	18.00
0.20	13.00
0.30	10.00
0.40	10.00
0.50	12.00
0.60	18.00
0.70	24.00
0.80	37.00
0.90	33.00
1.00	48.00

Penetration vs Depth



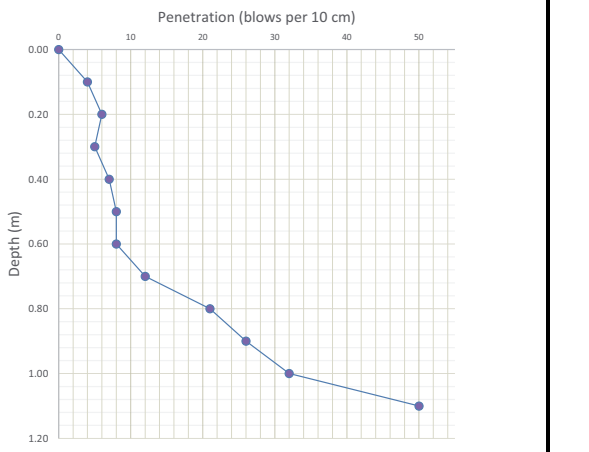


Manual DPL Results Tubur EP16

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP16		
Elevation:	1048	UTM X	551713		
UTM Datum	(ARC 1960)	UTM Y	212635		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	6.00
0.30	5.00
0.40	7.00
0.50	8.00
0.60	8.00
0.70	12.00
0.80	21.00
0.90	26.00
1.00	32.00
1.10	50.00

Penetration vs Depth

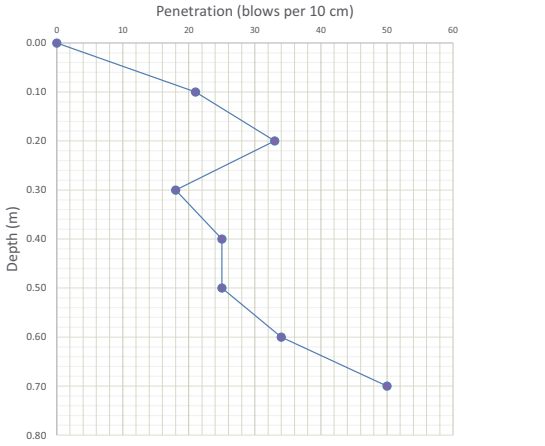


Manual DPL Results Tubur EP 17

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP17		
Elevation:	1055	UTM X	551610		
UTM Datum	(ARC 1960)	UTM Y	212289		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	21.00
0.20	33.00
0.30	18.00
0.40	25.00
0.50	25.00
0.60	34.00
0.70	50.00

Penetration vs Depth

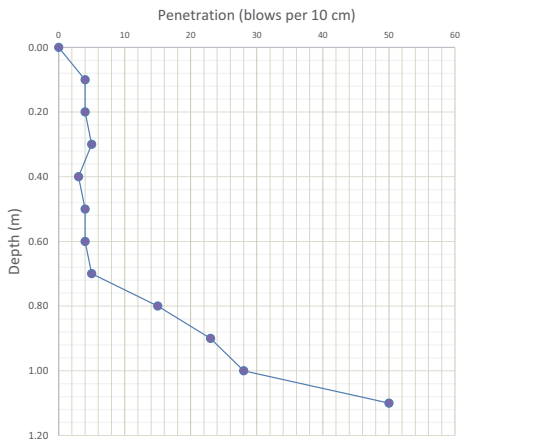


Manual DPL Results Tubur EP18

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP18		
Elevation:	1059	UTM X	551502		
UTM Datum	(ARC 1960)	UTM Y	211917		
Weather & conditions:		0			

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	4.00
0.30	5.00
0.40	3.00
0.50	4.00
0.60	4.00
0.70	5.00
0.80	15.00
0.90	23.00
1.00	28.00
1.10	50.00

Penetration vs Depth

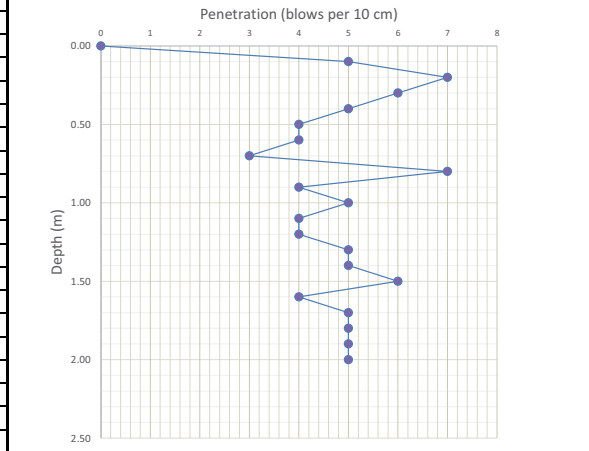


Manual DPL Results Tubur EP19

Client:	JICA	District:	Soroti	Cone Type	0
Date:	23/04/2016	Location:	EP19		
Elevation:	1057	UTM X	551354		
UTM Datum	(ARC 1960)	UTM Y	211417		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	5.00
0.20	7.00
0.30	6.00
0.40	5.00
0.50	4.00
0.60	4.00
0.70	3.00
0.80	7.00
0.90	4.00
1.00	5.00
1.10	4.00
1.20	4.00
1.30	5.00
1.40	5.00
1.50	6.00
1.60	4.00
1.70	5.00
1.80	5.00
1.90	5.00
2.00	5.00

Penetration vs Depth

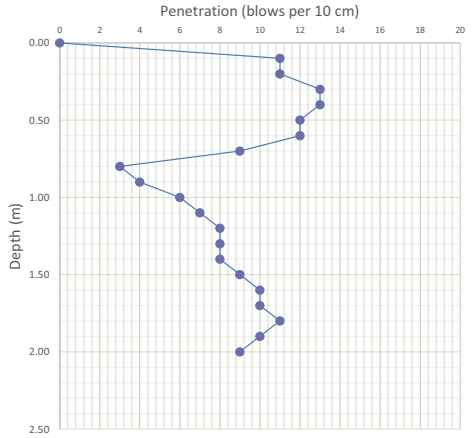


Manual DPL Results Acuna CP1

Client:	JICA	District:	Soroti	Cone Type	CT1
Date:	20/04/2016	Location:	CP1		
Elevation:	1039	UTM X	554680		
UTM Datum	(ARC 1960)	UTM Y	204221		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	11.00
0.20	11.00
0.30	13.00
0.40	13.00
0.50	12.00
0.60	12.00
0.70	9.00
0.80	3.00
0.90	4.00
1.00	6.00
1.10	7.00
1.20	8.00
1.30	8.00
1.40	8.00
1.50	9.00
1.60	10.00
1.70	10.00
1.80	11.00
1.90	10.00
2.00	9.00

Penetration vs Depth

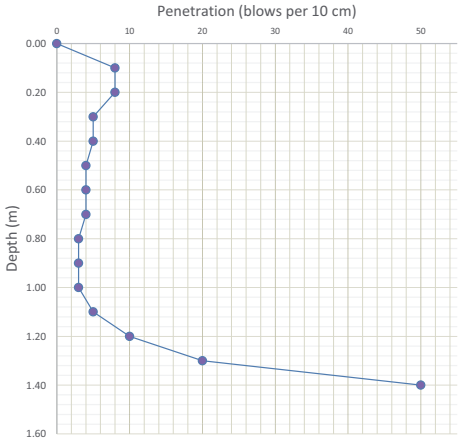


Manual DPL Results Acuna CP2

Client:	JICA	District:	Soroti	Cone Type	CT1
Date:	20/04/2016	Location:	CP2		
Elevation:	1060	UTM X	551085		
UTM Datum	(ARC 1960)	UTM Y	210586		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	8.00
0.20	8.00
0.30	5.00
0.40	5.00
0.50	4.00
0.60	4.00
0.70	4.00
0.80	3.00
0.90	3.00
1.00	3.00
1.10	5.00
1.20	10.00
1.30	20.00
1.40	50.00

Penetration vs Depth

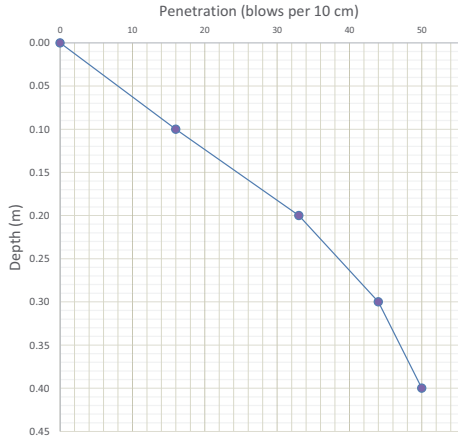


Manual DPL Results Acuna P5

Client:	JICA	District:	Soroti	Cone Type	0
Date:	20/04/2016	Location:	P5		
Elevation:	1042	UTM X	568025		
UTM Datum	(ARC 1960)	UTM Y	138003		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	16.00
0.20	33.00
0.30	44.00
0.40	50.00

Penetration vs Depth

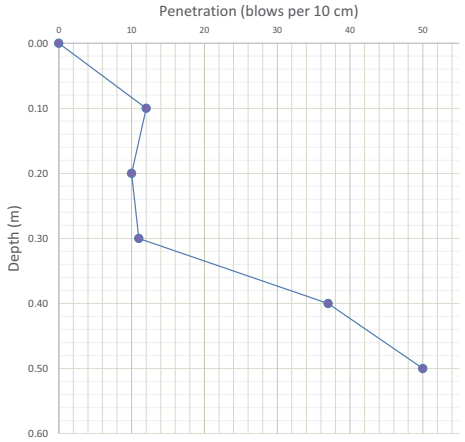


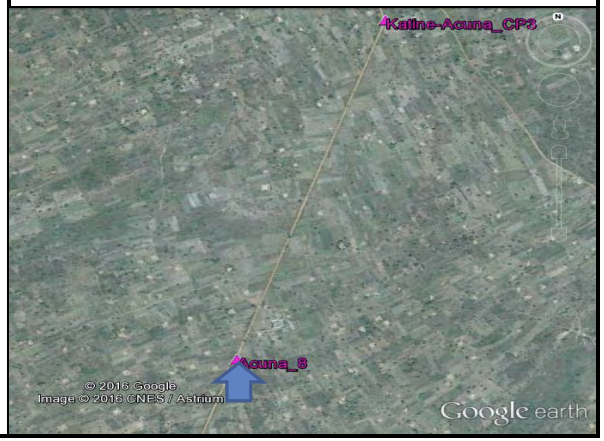
Manual DPL Results Acuna P8

Client:	JICA	District:	Soroti	Cone Type	0
Date:	20/04/2016	Location:	P8		
Elevation:	1084	UTM X	553326		
UTM Datum	(ARC 1960)	UTM Y	217428		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	12.00
0.20	10.00
0.30	11.00
0.40	37.00
0.50	50.00

Penetration vs Depth



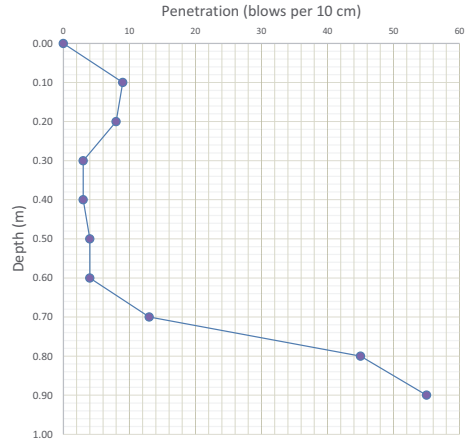


Manual DPL Results Acuna CP 3

Client:	JICA	District:	Soroti	Cone Type	0
Date:	20/04/2016	Location:	CP 3		
Elevation:	1097	UTM X	554154		
UTM Datum	(ARC 1960)	UTM Y	219595		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	9.00
0.20	8.00
0.30	3.00
0.40	3.00
0.50	4.00
0.60	4.00
0.70	13.00
0.80	45.00
0.90	55.00

Penetration vs Depth

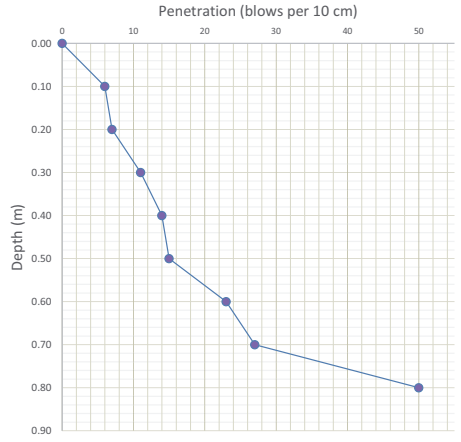


Manual DPL Results Acuna EP1

Client:	JICA	District:	Soroti	Cone Type	0
Date:	20/04/2016	Location:	EP1		
Elevation:	1093	UTM X	5562991		
UTM Datum	(ARC 1960)	UTM Y	221778		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	6.00
0.20	7.00
0.30	11.00
0.40	14.00
0.50	15.00
0.60	23.00
0.70	27.00
0.80	50.00

Penetration vs Depth

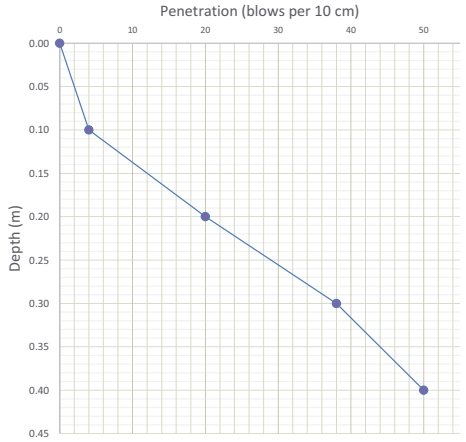


Manual DPL Results Acuna EP2

Client:	JICA	District:	Soroti	Cone Type	0
Date:	20/04/2016	Location:	EP2		
Elevation:	1084	UTM X	552622		
UTM Datum	(ARC 1960)	UTM Y	221955		
Weather & conditions:	0				

Z (m.b.g.l)	N_{10}
0.00	0
0.10	4.00
0.20	20.00
0.30	38.00
0.40	50.00

Penetration vs Depth



Manual DPL Acuna EP3

Client:	JICA	District:	Soroti	Cone Type	0
Date:	20/04/2016	Location:	EP3		
Elevation:	1093	UTM X	552860		
UTM Datum	(ARC 1960)	UTM Y	221596		

Weather & conditions: 0

Z (m.b.g.l)	N_{10}
0.00	0
0.10	9.00
0.20	8.00
0.30	6.00
0.40	5.00
0.50	10.00
0.60	50.00

Penetration vs Depth