

THE REPUBLIC OF UGANDA
THE WATER STATUTE, NO.9 OF 1995
The Water Resources Regulations, 1997

BOREHOLE COMPLETION REPORT

To be completed in triplicate (3)

WATER POINT INFORMATION

1. IDENTIFICATION AND LOCATION DATA

Type of water point: () Borehole: () Dug well: () Augered/drilled shallow well: () Protected spring:
 Identification: National I.D. No. **DWD 31372** Project I.D. No. **WILDE FOUNDATION**
 Location: Longitude E: _____ Latitude: N/S: _____ Altitude: _____
 District: **KITGUM/LAMWO** County: **LAMWO** Sub-County: **LOKUNG**
 Parish: **ABAKA OYAK** Village: **YWAYA** Water point: _____
 Water point ownership: () Private: () Communal: () Institutional:
 Water point use: () Domestic () Irrigation: () Livestock: () Industrial:
 Water point abandoned: () Low yield: () water quality: () Technical:

2. SITE SELECTION DATA

Site by: Name: _____ Title: _____
 Method of site selection: Topographic maps: _____ Resistivity: _____
 Electromagnetic: _____ VLF: _____
 Other (specify): _____ None: _____
 Attach site selection results

3. CONSTRUCTION DATA

Constructed by: Name: **BITTE FRED** Title: **HEAD DRILLER**
 Method of construction: () Air rotary () Cable tool: () Mud rotary:
 () Augered: () Dug: () Other (specify): _____
 Date for completion of construction: day, month, year: _____
 Total depth of borehole/well at date of completion (m): **40m**
 Borehole/well diameter: mm: **254** From: **0** To: **18**
 mm: **203** From: **18** To: **40**
 mm: _____ From: _____ To: _____
 mm: **-** From: **-** To: **-**
 Permanent casing/well ring diameter: mm: **127** Length (m): **40.5**
 Permanent casing/well ring material: () PVC: () Mild steel: () Concrete:
 () Bricks: () Other:
 Bottom of casing/well lining: (m.b.g.l.): _____
 Borehole sealing: () None: () Cement: () Bentonite: () Other:
 Filter slot size & intervals: mm: **01** From: **22.3** To: **25.25**
 Mm: **01** From: **28.2** To: **31.15**
 mm: **-** From: **-** To: **-**
 Development of borehole filters: () Gravel pack: () Natural dev.
 Well development: Duration (hrs): : **5hrs**

Method of development: (✓) Air lift: () Bailed: () Compressed air: () Other (specify):
 Spring, height x width (m): H: _____ x W: _____
 No. of spring outlets: _____

4. INSTALLATION DATA

Type of pump installation: () Submersible pump: () Centrifugal pump:
 () Hand pump: () Bucket:
 Date of pump installation: day/month/year: _____
 Name of pump: _____ Pump capacity: : _____ m³/h
 Pump installation/intake depth: _____ m.b.g.l.
 Riser pipe material: () Galvanised iron: () Stainless steel: () PVC:
 Riser pipe diameter: _____ mm
 Pumping rod material: () Galvanised iron: () Stainless steel: () Wire:
 Pumping rod diameter: _____ mm

5. GEOLOGICAL AND HYDROGEOLOGICAL DATA

Depth to bedrock: m.b.g.l: 40m
 Overall geological setting: _____
 Lithology: From: 0m To: 6.70 Description: Clay and top soil
 (m.b.g.l.) From: 6.7 To: 12.70 Description: Schist(Brown)
 From: 12.7 To: 18.70 Description: Moist Schist - collapsing
 From: 18.70 To: 30.70 Description: Quick sand - collapsing
 From: 30.70 To: 40.0 Description: Quick sand and wet granite
 From: _____ To: _____ Description: _____
 Aquifer depth (top of aquifer), type and yield:
 Depth (m.b.g.l.): 20 -36 Overburden: 40 Yield m³/h: 0.5m³ /hr
 Depth (m.b.g.l.): - Bedrock: - Yield m³/h: -

6. HYDROCHEMICAL DATA

Date sampling: day/month/year: _____

Sampling method: () pumping: _____ () Air-lift sampling: _____ () Bucket: _____

Sample preservation: _____ None: _____ Acid: _____ Other: _____

For pump and air-lift samples: Discharge before sampling (liter): _____

Samples analysed: Name: _____ Title: _____ Organization: _____

Parameter	Unit	Result	Date	Field/Lab
Turbidity	NTU			
Temp. (time of sampling)	°C			
Conductivity	uS/cm			
pH	----			
Tot. alkalinity (CaCO ₃)	mg/l			
Hardness (CaCO ₃)	mg/l			
Calcium (Ca ²⁺)	mg/l			
Magnesium (Mg ²⁺)	mg/l			
Sodium (Na ⁺)	mg/l			
Potassium (K ⁺)	mg/l			
Carbonate (CO ₃ ⁺)	mg/l			
Bicarbonate (HCO ₃ ⁺)	mg/l			
Sulphate (SO ₄ ²)	mg/l			
Chloride (Cl)	mg/l			
Nitrate (NO ₃)	mg/l			
Ammonium (NH ₄ ⁺)	mg/l			
Tot. Iron (Fe ²⁺ +Fe ³⁺)	mg/l			
Manganese (Mn ²⁺)	mg/l			
Fluoride (F)	mg/l			
Free Carbon dioxide (CO ₂)	mg/l			
Free Carbon dioxide (CO ₂)	mg/l			
Tot. dissolved solids	mg/l			
Faecal coli	no/100ml			

7. YIELD TEST, FLOW AND WATER LEVEL DATA

Test carried out by: Name: _____ Title: _____

Date of test: day/month/year: _____ Duration of test: _____ hrs

Type of test: step pump test: _____ Constant discharge: _____ Air lift test: _____ Natural flow: _____

Discharge (yield) during testing: _____

Static water level (m.b.g.l.): _____ (day/month/year) : _____

Pumping water level (m.b.g.l.): _____ Drawn down (m.b.g.l.): _____

Transmissivity: _____ m³/day Specified capacity: _____ m³/h/m

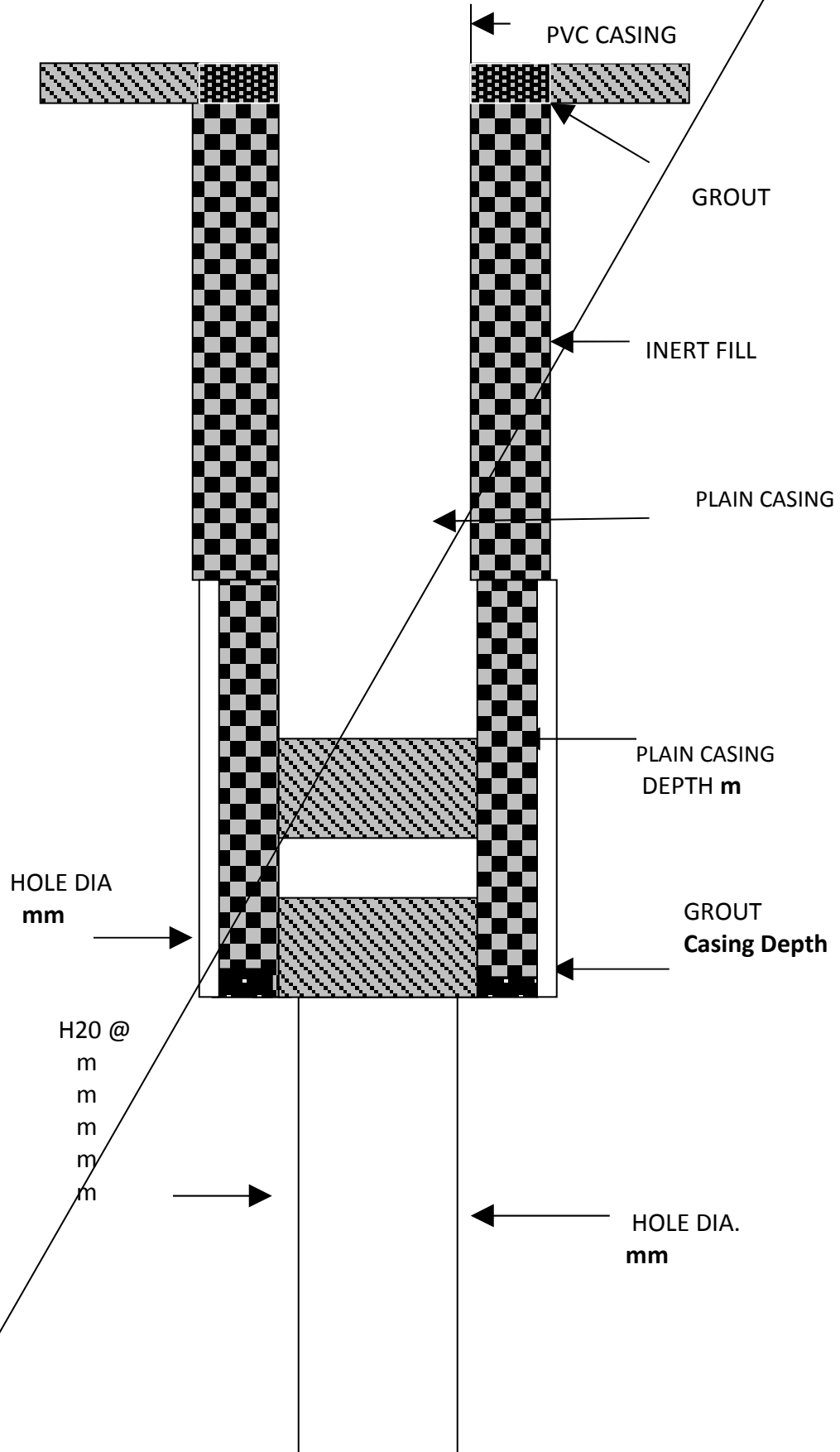
Hydrofracturing? Y/N: _____ If Y: day/month/year: _____

Attach pump-test results.

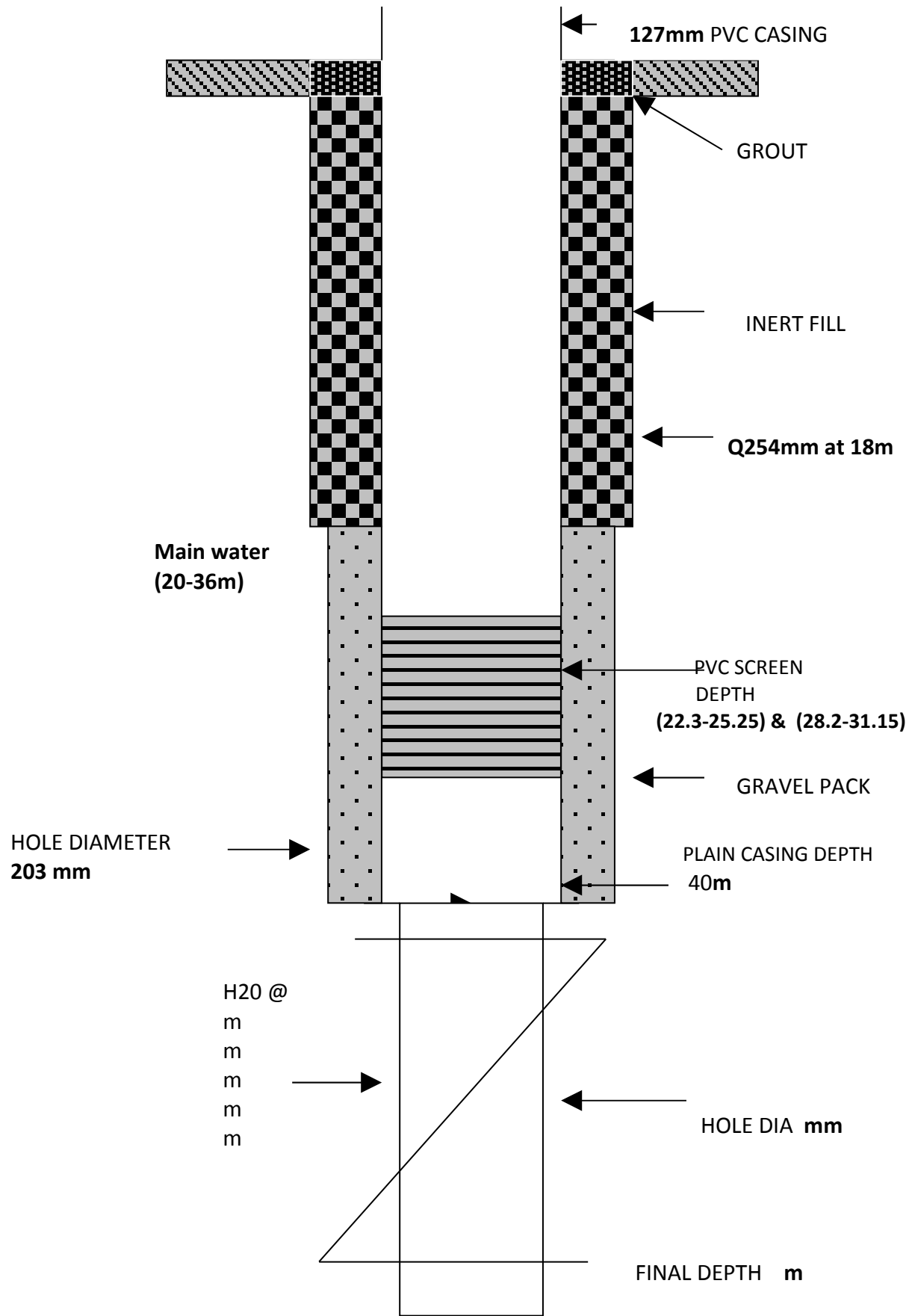
DWD No

LOCATION


DISTRICT



DWD No 31372 LOCATION YWAYA.E DISTRICT KITGUM/LAMWO



AQUA DRILL TECH (U) LTDP.O. BOX 1023, KAMPALA, EMAIL: office@aquadrilltech.com**AQUIFER TEST DATA SHEET**

VILLAGE: YWAYA.E	PARISH: DIBOLYEC	GRID N/W:	DWD NO. 31372
S/COUNTY: LOKUNG	DISTRICT: KITGUM/LAMWO	GRID EAST:	STEP ()
PUMP SIZE: 80mm	TYPE :SUBMERSIBLE	DRILLERS YIELD: 0.5m³ /hr	DRAW DOWN (✓) RECOVERY ()
DEPTH OF PUMP INST.: 39m	TOTAL TIME OF TEST PUMPING: 180 mins	DRAW DOWN (mbmpt) 21.28	DYNAMIC WATER LEVEL 36.73
TIME START: 10:06 HRS	DATE START: 14/02/2010	BOREHOLE DEPTH: 40m	SKETCH OF MEASURING PT.
TIME END: 13:06 HRS	DATE END: 14/02/2010	STATIC WATER LEVEL (mbmpt) 15.45	

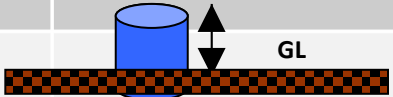
DATE/ TIME	TIME INTERVALS In min	WATER LEVEL (mbmpt)	DRAW DOWN (mbmpt)	YIELD (m ³ /hr)	Mineralisation	REMARKS
	0	20.37	0.07			
	1	21.50	1.19			Valve adjustment 61.20 secs
	2	21.89	1.58			
	3	22.40	2.09	1.0		
	4	22.80	2.49			
	5	23.20	2.89			
	6	23.66	3.35			Brownish water 61.20 secs
	7	23.81	3.50	1.0		
	8	23.90	3.57			
	9	24.04	3.73			
	10	24.23	3.92			Turbid water 61.20 secs
	12	24.49	4.16	1.0		
	14	24.56	4.25			
	16	24.64	4.33			
	18	24.86	4.55			
	20	24.90	4.59			Water slightly brownish and mica content
	25	25.37	5.06			
	30	25.69	5.38	1.0		61.20 secs
	35	25.92	5.61			
	40	26.08	5.77			
	45	26.22	5.91			
	50	26.28	5.97			
	55	26.30	6.99			Water cloudy and mica content
	60	26.38	6.07	1.0		61.20 secs
	70	26.49	6.18			
	80	26.74	6.46			
	90	26.80	6.49			
	100	26.88	6.57			Clear water, odourless
	120	26.97	6.66	1.0		61.20 secs
	140	27.08	6.77			
	160	27.14	6.83			
	180	27.18	6.87			
	210					

1 litre of clear water sample collected for water quality analysis

AQUA DRILL TECH (U) LTD

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S/COUNTY: LOKUNG	DISTRICT: KITGUM/LAMWO	GRID EAST:	STEP ()
PUMP SIZE: 80mm	TYPE : SUBMERSIBLE	DRILLERS YIELD: 0.5m ³ /hr	DRAW DOWN () RECOVERY (✓)
DEPTH OF PUMP INST.: 39m	TOTAL TIME OF TEST PUMPING: REC	DRAW DOWN (mbmpt) 21.28	DYNAMIC WATER LEVEL 36.73
TIME START: 13:06 HRS	DATE START: 14/02/2010	BOREHOLE DEPTH: 40m	SKETCH OF MEASURING PT.
TIME END: 14:01 HRS	DATE END: 14/02/2010	STATIC WATER LEVEL (mbmpt) 15.45	

DATE/ TIME	TIME INTERVALS In min	WATER LEVEL (mbmpt)	RECOVERY (mbmpt)	YIELD (m ³ /hr)	Mineralisation	Capacity of Measuring Container: 20lts
	0	36.73	0.00			
	1	36.27	0.10			
	2	35.88	0.49			
	3	35.42	0.95			
	4	35.02	1.35			
	5	34.91	1.91			
	6	34.20	2.17			
	7	33.80	2.57			
	8	33.40	2.97			
	9	32.88	3.49			
	10	32.14	4.23			
	12	31.96	4.41			
	14	31.69	4.68			
	16	30.05	6.32			
	18	29.04	7.33			
	20	28.48	7.89			
	25	26.39	9.98			
	30	24.32	12.05			
	35	21.95	14.42			
	40	20.02	16.35			
	45	18.21	18.16			
	50	17.34	19.39			
	55	16.48	20.25			
	60					
	70					
	80					
	90					
	100					
	120					
	140					
	160					
	180					

RECOVERY OF 95%