

Assessment of Groundwater Resources in the Southern Coastal Water Province of Belize Referred to as Savannah Groundwater Province

Final Report

Volume C Annex 9 *Water Management Database*

September 2014

Contracted by:

The United Nations Development Programme (UNDP)
3rd floor, Lawrence Nicholas Building, Belmopan, Cayo District, Belize, C.A.

Contractor:

GEOMEDIA Ltd.
Hornokrcska 707, 140 00 Prague 4, Czech Republic

Contract No. GCCA/PS/2013/04

Prepared by:

Dr. Michal Stibitz	Executive Project manager
Dr. Hana Jirakova	Administrative Project manager
Vaclav Frydrych	Head of field work
Dr. Zdenek Patzelt	Field work / Hydrogeology
Jason Fisher	Field work / Hydrogeology, Drilling supervisor
Roman Sigut	Environmental and groundwater modeling
Emil Moravec	Field work / GIS

1. Water Management Database

1.1. General Description

One of the major tasks of the groundwater assessment project in Savannah Groundwater Province was to use existing data from different governmental agencies and departments, private water management companies or other organizations in Belize. Further data were acquired in the field by GEOMEDIA during the project duration.

Quite a bit set of data was acquired but the data character is very heterogenous. The challenge for all concerned agencies is presenting information in an easily, preferably unified comprehensible format to policy makers or the public. Also, after collecting the data sets it was needed to develop a way to effectively store and retrieve the information.

For the abovementioned reasons, available and relevant data, i.e. observations and data measured and observed by GEOMEDIA during the project as well as historic information provided by local GOB and private agencies were integrated together and a Water Management Database (WMD) was built using Microsoft Office Excel package. This assures on one hand a very universal application platform, on the other hand assures the robustness in utilization. The WMD integrates multitude of data from the fields of geology, hydrogeology and hydrochemistry.

The purpose of the WMD is to provide information for integrated and coordinated regional water management by governmental, public and private organizations. Further purpose of the WMD is to provide data for scientific and research activities.

The WMD is provided in paper format as well as in electronic format on CD-ROM so as it could be continuously improved and enriched by new data in future (Annex 9).

Proposed Guideline for maintenance and operation of the WMD is enclosed in Annex 6.

1.2. Applied Data

WMD includes only data with exact coordinate localization or data where coordinates could be easily estimated based on map reading or field knowledge.

Provided archive data that were sometimes missing key information on the measurement or sampling localization were excluded from the database as it could introduce significant errors in the data sets and cause further misunderstanding in data reading. Missing coordinates could be often replaced by estimates or by new geographical measurement if the measurement or sampling was easy to identify based on other provided information. If it was not the case, these data were not used as a database input. The example of this situation is data set from Ministry of Health including water analyses. The information did not include coordinates and even the description of the sampling point did not help to identify the well. This is recommended for further consideration and to be consequently added into WMD. Other reason for excluding these data from the WMD is the character of sampled water often representing tap water or samples from rudimentary water system. Such samples might have modified chemical composition due to increased potential of pollution and not representing raw groundwater parameters.

Special group of data is formed by data acquired from the Department of Rural Development. They were all included in the WMD despite the fact that missing coordinates or other identifiers did not allow the exact identification of the well in space. Therefore, these data may be duplicated with other data having assigned coordinates. In practice it means that one well might possess two different ID numbers because one ID was assigned to a well identified by GEOMEDIA and the other by Rural Development and in reality both records may refer to the same well. This has to be kept in mind for further WMD processing and it is recommended to additionally fill in missing coordinates and if possible to harmonize the ID numbers.

Tab. 1 provides the final list of data suppliers together with information on the amount of applied data in WMD compared to total amount of records obtained from local authorities or measured in field.

Tab. 1 List of processed hydrogeological data – comparison of total amount of data and applied in WMD.

Data Source	Data description	Total number of records	Number of records applied in WMD
GEOMEDIA Ltd.	Field chemical analyses	113	113
	Field hydrogeological measurements	84	84
	Laboratory analysis (Bowen&Bowen Ltd.)	13	13
	Well log data, pump test, geological profile, laboratory chemical analysis (HGE-1)	1	1
Ministry of Labour, Local Government and Rural Development, Department of Rural Development	Water well log reports, Stan Creek District	38	38
	Water well log reports, Toledo District	17	17
Public Utilities Commission	Chemical well data, Stan Creek District	4	4
	Hydrogeological characteristics (yield, GW level)	3	3
	Basic Information about 4 wells and chemical data for 1 well, Ara Macao Resort (Report TNCE, 2006)	4	4
Ministry of Health	Groundwater and surface water chemical data, Stan Creek District	92	2
	Groundwater and surface water chemical data, Toledo District	10	0
Belize Aquaculture Ltd.	Chemical data for 5 wells (time series)	76	76
	Chemical data for one surface water sample (time series)	11	11
Belize Water Service Ltd.	Chemical data for 1 wells (Dangriga Village) – raw and treated water	2	1
Public Health Bureau (The Ministry of Health)	Chemical data for 3 wells, Stan Creek District	3	3
Banana farms	Chemical data for banana farms	108	108

1.3. Data Processing

The original source data were processed and validated. The data processing is based on evaluation of the data accuracy and relevancy. The data validation is based on environmental and geo-scientific statistical methods.

The aim of the WMD was to integrate as much data as possible acquired from local authorities or measured in field. The numbers of data are given in Tab. 1. The data fields in WMD cover a range of different parameters that may be measured or identified for each documentation point. As obvious, the applied data have different character and do not cover all data fields. In general, missing information is represented by a blank cell in the WMD except of the chemistry data. Missing chemical analysis is recorded as NT (=not tested). In case the value is expressed as < the record is indicated as ND (not detected).

1.4. Database Schema

All aspects of our data required developing an appropriate database structure. Data are stored in excel data sets and organized into a schema with five main data sets, as displayed in Fig. 1.

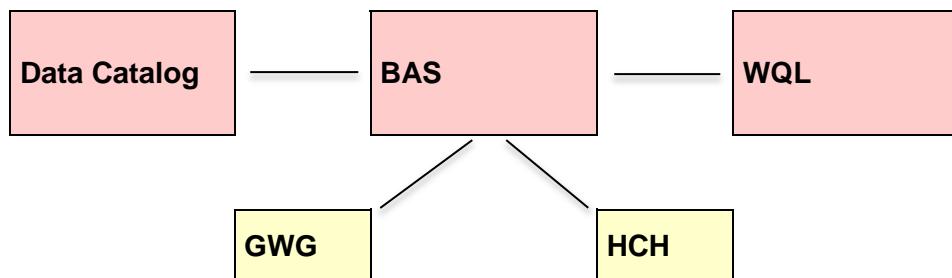


Fig. 1 Water Management Database Schema (Data Catalog-data overview, BAS - basic data, WQL - water quality limits, GWG – groundwater and geology, HCH – hydrochemistry).

These five data sets are interconnected and together, they form compact database. This approach ensured to create dynamic, functional and useful utility for better monitoring and understanding of groundwater and surface water.

Fields describing the same information in different data sets have the same name, format and uses the same coding.

1.4.1. Data Catalog

The Data Catalogue provides an explanation how the data are organized and an overview of all applied data by introducing monitored and evaluated values. Data Catalog includes for sections such as following: List of data sets, List of fields, Abbreviations and applied Units:

- „List of data sets“ provides the description of BAS, GWG, HCH and WQL data sets (Tab. 2).
- „List of fields“ provides description of applied field for BAS, GWG and HCH data sets (Tab. 3, Tab. 4, Tab. 5).
- „Abbreviations“ provides a list of applied abbreviations within the WMD (Tab. 6).
- „Units“ provides a list of applied units within the WMD (Tab. 7).

1.4.2. BAS – Basic data

The BAS data set (Tab. 8) lists all objects that are subject of the WMD. Applied data fields in BAS are described in Data Catalog including specification of the data format, units, comment on possible values and detailed explanation. Here, it is also described whether unique object is further included in GWG data set, HCH data set or both.

1.4.3. GWG – Groundwater and Geology

The GWG data set (Tab. 9) describes those objects listed in BAS that possess information on hydrogeology and (or) geology. Applied data fields in GWG are described in Data Catalog including specification of the data format, units, comment on possible values and detailed explanation.

1.4.4. HCH - Hydrochemistry

The HCH data set (Tab. 10) describes those objects listed in BAS that possess information on hydrochemistry. Applied data fields in HCH are described in Data Catalog including specification of the data format, units, comment on possible values and detailed explanation.

1.4.5. WQL – Water Quality Limits

The WQL data set (Tab. 11) was created alongside hydrochemistry data in order to compare the analyses with general standard values. Introduced water quality limits are established according to Water Health Organisation's drinking water standards, Guidelines for Canadian Drinking Water Quality and United States Environmental Protection Agency standards. This table also suggests if the applied standard refers to recommended or maximum levels.

1.5. Future use of the Water Management Database

As proposed in Guidelines for maintenance and operation in Annex 6, the WMD is to be housed by NIWRA. Organizations acquiring relevant data related to hydrogeology, geology or hydrochemistry shall act as nodes for data input. As proposed WMD should be further maintained and continuously extended. New measurements or parameters can be easily added to any WMD data set. Added data might cover not only Savannah Province area but also other regions in Belize. This approach shall ensure continuously updated data set used for any further groundwater assessment or groundwater monitoring.

Tab. 2 Data Catalog - List of data sets.

Data set	Detailed explanation
BAS	The BAS (Base data) data set lists all objects that are subject of the WMD. Applied data fields in BAS are described in Data Catalog including specification of the data format, units, comment on possible values and detailed explanation. Here, it is also described whether unique object is further included in GWG data set, HCH data set or both.
GWG	The GWG (Groundwater and Geology) data set describes those objects listed in BAS that possess information on hydrogeology and (or) geology. Applied data fields in GWG are described in Data Catalog including specification of the data format, units, comment on possible values and detailed explanation.
HCH	The HCH (Hydrochemistry) data set describes those objects listed in BAS that possess information on hydrochemistry. Applied data fields in HCH are described in Data Catalog including specification of the data format, units, comment on possible values and detailed explanation.
WQL	The WQL (Water Quality Limit) data set was created alongside hydrochemistry data in order to compare the analyses with general standard values. Introduced water quality limits are established according to Water Health Organisation's drinking water standards, Guidelines for Canadian Drinking Water Quality and United States Environmental Protection Agency standards. This table also suggests if the applied standard refers to recommended or maximum levels.

Tab. 3 Data Catalog - List of fields – BAS data set.

BAS	Description	Format	Unit	Comment on possible values	Additional information
ID	Identifier	Number	-		Unique number assigned to specific object.
Data_orig	Data origin	Text	-	GMD/RUD/PUC/MOH/BAL/BWS/PHB/BAN	Name of organisation providing data (see List of abbreviations below).
Coord_X	Coordinate X	Number	m		UTM system applied.
Coord_Y	Coordinate Y	Number	m		UTM system applied.
Coord_lat	Coordinate - longitude	Number	deg		Easting
Coord_lon	Coordinate - latitude	Number	deg		Northing
Coord_Z	Altitude	Number	m a.s.l		
Coord_met	Coordinate method	Text	-	GPS/Map/Original	Coordinate acquisition method. GPS - direct measuring, Map - estimated from map, Original - values from original source document.
Date_inp	Date input	Number	-		Date of object record insertion in the WMD database.
District	District	Text	-		Name of district in Belize.
Site	Site	Text	-		Name of nearby village.
Obj_name	Object name	Text	-		Name identifying the object.
Obj_type	Object type	Text	-	Hand pump/Dug well/Watercourse/Water tower/Drilled well/Other	Character of the object (see Additional table below)
Obj_sub	Object subtype	Text	-	Outcrop/Domestic/Public supply/Agricultural/Exploratory/Other	Purpose of the object (see Additional table below)
Obj_notes	Object description	Text	-		Additional, detailed information.
Obj_depth	Object depth	Number	m b.s.		Depth of object measured from the surface (not from datum).
Datum_h	Datum height	Number	m		Height of datum above surface.
GWG	Groundwater and Geology	logical	-	Yes/No	Object record(s) in Groundwater and Geology data set.
HCH	Hydrochemistry	logical	-	Yes/No	Object record(s) in Hydrogeology data set.

Tab. 4 Data Catalog - List of fields – GWG data set.

GWG	Description	Format	Unit	Comment on possible values	Additional information
ID	Identifier	Number	-		Unique number assigned to specific object.
Data_orig	Data origin	Text	-	GMD/RUD/PUC/MOH/BAL/ BWS/PHB/BAN	Name of organisation providing data (see List of abbreviations below).
Date_rec	Record date	Number	-		Date of measurement.
GW_lev1	Depth of groundwater level	Number	m b.s.		Depth of groundwater level measured from the surface.
GW_lev2	Depth of groundwater level	Number	m		Depth of groundwater level measured from the datum.
GW_alt	Groundwater altitude	Number	m a.s.l.		
GW_type	Groundwater type	Text	-	Static/Dynamic	Character of groundwater level.
Pump_test	Pump test	logical	-	Yes/No	Existence of pump test data.
Yield_1	Average yield	Number	L/s		Real average yield.
Yield_2	Maximum yield	Number	L/s		Recommended maximum yield based on pumping test.
Hydr_cond	Hydraulic conductivity	Number	m/s		
Transm	Transmissivity	Number	m ² /s		
Depth_from	Depth from	Number	m b.s.		Beginning of depth interval in particular Stratigraphical/Geological section.
Depth_to	Depth to	Number	m b.s.		End of depth interval in particular Stratigraphical/Geological section.
Strat_1	Stratigraphy	Text	-		Description of stratigraphy referring to above mentioned depth interval.
Geol_1	Geology	Text	-		Description of geology referring to above mentioned depth interval.
Depth_from	Depth from	Number	m b.s.		Beginning of depth interval in particular Stratigraphical/Geological section.
Depth_to	Depth to	Number	m b.s.		End of depth interval in particular Stratigraphical/Geological section.
Strat_2	Stratigraphy	Text	-		Description of stratigraphy referring to above mentioned depth interval.
Geol_2	Geology	Text	-		Description of geology referring to above mentioned depth interval.
Depth_from	Depth from	Number	m b.s.		Beginning of depth interval in particular Stratigraphical/Geological section.
Depth_to	Depth to	Number	m b.s.		End of depth interval in particular Stratigraphical/Geological section.
Strat_3	Stratigraphy	Text	-		Description of stratigraphy referring to above mentioned depth interval.
Geol_3	Geology	Text	-		Description of geology referring to above mentioned depth interval.
Depth_from	Depth from	Number	m b.s.		Beginning of depth interval in particular Stratigraphical/Geological section.
Depth_to	Depth to	Number	m b.s.		End of depth interval in particular Stratigraphical/Geological section.
Strat_4	Stratigraphy	Text	-		Description of stratigraphy referring to above mentioned depth interval.
Geol_4	Geology	Text	-		Description of geology referring to above mentioned depth interval.
Depth_from	Depth from	Number	m b.s.		Beginning of depth interval in particular Stratigraphical/Geological section.
Depth_to	Depth to	Number	m b.s.		End of depth interval in particular Stratigraphical/Geological section.
Strat_5	Stratigraphy	Text	-		Description of stratigraphy referring to above mentioned depth interval.

GWG	Description	Format	Unit	Comment on possible values	Additional information
Geol_5	Geology	Text	-		Description of geology referring to above mentioned depth interval.
GWG_notes	GWG notes	Text	-		Aditonal, detailed information.

Tab. 5 Data Catalog - List of fields – HCH data set.

HCH	Description	Format	Unit	Comment on possible values	Additional information
ID	Identifier	Number	-		Unique number assigned to specific object.
Data_orig	Data origin	Text	-	GMD/RUD/PUC/MOH/BAL/BWS/PHB/BAN	Name of organisation providing data (see List of abbreviations below).
Date_rec	Record date	Number	-		Date of sampling.
Date_anl	Analysis date	Number	-		Date of analysis.
Smp_type	Sample type	Text	-	Groundwater/Surface water	Character of water sample.
Smp_name	Sample name	Text	-		Name identifying the water sample.
Smp_anl	Sample analysis	Text	-	Field/Laboratory	Character of water analysis.
W_temp	Water temperature	Number	°C		
Turb	Turbidity	Number	ntu		
pH	pH	Number	-		
Cond	Conductivity	Number	uS/cm		
Res	Resistivity	Number	ohm/cm		
Ca	Calcium	Number	ppm		
Cu	Copper	Number	ppm		
Al	Aluminum	Number	ppm		
Fe	Iron	Number	ppm		
Mn	Manganese	Number	ppm		
Mg	Magnesium	Number	ppm		
Na	Sodium	Number	ppm		
F	Fluoride	Number	ppm		
Cl	Chloride	Number	ppm		
Cl_T	Total Chlorine	Number	ppm		
Cl_F	Free Chlorine	Number	ppm		
HCO3	Bicarbonate	Number	ppm		
NH3	Ammonia	Number	ppm		
CO3	Carbonate	Number	ppt		
Hard	Hardness	Number	ppm		
Alk	Alkalinity	Number	ppm		
NO3-	Nitrate	Number	ppm		
NO2-	Nitrite	Number	ppm		
PO4	Phosphate	Number	ppm		
Sal	Salinity	Number	ppt		
NaCl	Sodium chloride	Number	ppm		
SO4	Sulphate	Number	ppm		
SO3	Sulfite	Number	ppm		
Col	Color	Number	-		Is measured with help of Secchi disc, colour scale vary

HCH	Description	Format	Unit	Comment on possible values	Additional information
					between 121.
DO	Dissolved oxygen	Number	ppm		
TDS	Total dissolved solids	Number	ppm		
TSS	Total suspended solids	Number	ppm		
OD_bio	Oxygen demand, biochemical	Number	ppm		
OD_chem	Oxygen demand, chemical	Number	ppm		
HCH_notes	HCH notes	Text	-		Notes for specific object in Gydochemistry data set.

Tab. 6 Data Catalog - List of abbreviations.

Technical abbreviation	Meaning
ND	Not detected
NT	Not tested
Organisation abbreviation	Meaning
BAL	Belize Aquaculture Limited
BAN	Banana Farms
BWS	Belize Water Services Limited
GMD	GEOMEDIA
MOH	Ministry of Health
PHB	Public Health Bureau
PUC	Public Utilities Commission
RUD	Ministry of Rural Development

Tab. 7 Data Catalog - List of units.

°C	Celsius degree
L/s	Liter per second
m	Meter
m a.s.l.	Meter above sea level
m b.s.	Meter below surface
m/s	Meter per second
m ² /s	Square meter per second
ntu	Nephelometric turbidity units
ohm/cm	Ohm per centimeter
ppm	Parts per million
ppt	Parts per thousand
uS/cm	Microsiemens per centimeter

Tab. 8 BAS – Basic data.

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0001	GMD	330090	1823467	16.48692	-88.59181	55.1	GPS	16-Aug-14
0002	GMD	307846	1806557	16.33244	-88.79873	39.3	GPS	16-Aug-14
0003	GMD	307867	1809355	16.35772	-88.79876	31.3	GPS	16-Aug-14
0004	GMD	307889	1810012	16.36366	-88.79861	28.4	GPS	16-Aug-14
0005	GMD	324048	1821805	16.47146	-88.64827	32.8	GPS	16-Aug-14
0006	GMD	326041	1821641	16.47013	-88.62959	32.3	GPS	16-Aug-14
0007	GMD	326036	1821682	16.47050	-88.62964	33.3	GPS	16-Aug-14
0008	GMD	326072	1821629	16.47002	-88.62930	34.6	GPS	16-Aug-14
0009	GMD	327017	1821752	16.47120	-88.62046	37.9	GPS	16-Aug-14
0010	GMD	326833	1821988	16.47332	-88.62220	36.1	GPS	16-Aug-14
0011	GMD	331986	1825419	16.50469	-88.57419	34.8	GPS	16-Aug-14
0012	GMD, BAN	323457	1826453	16.51342	-88.65416	31.9	GPS	16-Aug-14
0013	GMD	338440	1812244	16.38608	-88.51282	17.4	GPS	16-Aug-14
0014	GMD	338974	1811458	16.37901	-88.50776	21.0	GPS	16-Aug-14
0015	GMD	336443	1825834	16.50876	-88.53247	36.9	GPS	16-Aug-14
0016	GMD	325025	1827169	16.52001	-88.63953	41.1	GPS	16-Aug-14
0017	GMD	326869	1827015	16.51875	-88.62224	43.6	GPS	16-Aug-14
0018	GMD	328834	1828135	16.52901	-88.60392	49.9	GPS	16-Aug-14
0019	GMD	331986	1825419	16.50469	-88.57419	34.8	GPS	16-Aug-14
0020	GMD	334936	1826059	16.51068	-88.54661	40.7	GPS	16-Aug-14
0021	GMD	336433	1825824	16.50866	-88.53256	36.9	GPS	16-Aug-14
0022	GMD	338321	1831672	16.56164	-88.51529	49.6	GPS	16-Aug-14
0023	GMD	338500	1831725	16.56213	-88.51362	49.9	GPS	16-Aug-14
0024	GMD	337048	1832361	16.56778	-88.52727	52.0	GPS	16-Aug-14
0025	GMD	337024	1832573	16.56969	-88.52751	49.9	GPS	16-Aug-14
0026	GMD	337063	1832667	16.57055	-88.52715	47.3	GPS	16-Aug-14
0027	GMD	345525	1828476	16.53324	-88.44758	23.3	GPS	16-Aug-14
0028	GMD	338984	1811448	16.37892	-88.50767	21.0	GPS	16-Aug-14
0029	GMD	348390	1835226	16.59442	-88.42118	22.2	GPS	16-Aug-14
0030	GMD	350908	1837453	16.61471	-88.39773	18.4	GPS	16-Aug-14
0031	GMD	350929	1837537	16.61547	-88.39754	19.4	GPS	16-Aug-14
0032	GMD	339402	1841561	16.65108	-88.50586	62.1	GPS	16-Aug-14
0033	GMD	337534	1842771	16.66188	-88.52346	80.4	GPS	16-Aug-14
0034	GMD	337829	1842701	16.66127	-88.52069	72.7	GPS	16-Aug-14
0035	GMD	340681	1840611	16.64258	-88.49381	51.2	GPS	16-Aug-14

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0036	GMD	333557	1838441	16.62248	-88.56043	84.4	GPS	16-Aug-14
0037	GMD	333630	1838304	16.62125	-88.55973	86.3	GPS	16-Aug-14
0038	GMD	334384	1838009	16.61863	-88.55264	79.4	GPS	16-Aug-14
0039	GMD	342912	1842210	16.65718	-88.47300	49.6	GPS	16-Aug-14
0040	GMD	344395	1842861	16.66316	-88.45915	42.9	GPS	16-Aug-14
0041	GMD	343140	1845380	16.68584	-88.47108	48.9	GPS	16-Aug-14
0042	GMD	346713	1845585	16.68793	-88.43760	35.5	GPS	16-Aug-14
0043	GMD	347725	1847069	16.70141	-88.42821	33.2	GPS	16-Aug-14
0044	GMD	348395	1847830	16.70833	-88.42198	36.1	GPS	16-Aug-14
0045	GMD	348304	1847045	16.70123	-88.42278	37.8	GPS	16-Aug-14
0046	GMD	337058	1832371	16.56787	-88.52718	52.0	GPS	16-Aug-14
0047	GMD	339520	1828355	16.53175	-88.50383	32.1	GPS	16-Aug-14
0048	GMD	338712	1828424	16.53232	-88.51140	35.2	GPS	16-Aug-14
0049	GMD	348304	1832036	16.56559	-88.42178	47.3	GPS	16-Aug-14
0050	GMD, BAN	335414	1828589	16.53358	-88.54231	42.0	GPS	16-Aug-14
0051	GMD	335417	1828648	16.53411	-88.54229	42.7	GPS	16-Aug-14
0052	GMD	338000	1837047	16.61019	-88.51868	53.6	GPS	16-Aug-14
0053	GMD	337950	1836978	16.60956	-88.51915	55.2	GPS	16-Aug-14
0054	GMD	337966	1836847	16.60838	-88.51899	57.0	GPS	16-Aug-14
0055	GMD	337954	1836696	16.60702	-88.51909	58.4	GPS	16-Aug-14
0056	GMD	337735	1836727	16.60728	-88.52114	56.8	GPS	16-Aug-14
0057	GMD	337725	1836733	16.60733	-88.52124	55.7	GPS	16-Aug-14
0058	GMD	353013	1846711	16.69851	-88.37860	32.1	GPS	16-Aug-14
0059	GMD	353031	1846713	16.69853	-88.37843	30.9	GPS	16-Aug-14
0060	GMD	354436	1847823	16.70865	-88.36533	29.2	GPS	16-Aug-14
0061	GMD, BAN	354434	1847249	16.70346	-88.36531	26.6	GPS	16-Aug-14
0062	GMD, BAN	355804	1847259	16.70363	-88.35246	21.8	GPS	16-Aug-14
0063	GMD	356162	1847148	16.70265	-88.34910	29.2	GPS	16-Aug-14
0064	GMD,PUC	357290	1846994	16.70133	-88.33851	22.1	GPS	16-Aug-14
0065	GMD,PUC	358989	1845618	16.68900	-88.32249	13.3	GPS	16-Aug-14
0066	GMD,PUC	358992	1845594	16.68878	-88.32246	12.2	GPS	16-Aug-14
0067	GMD	331445	1837212	16.61122	-88.58013	81.3	GPS	16-Aug-14
0068	GMD	331429	1837234	16.61142	-88.58028	81.1	GPS	16-Aug-14
0069	GMD	331521	1837543	16.61422	-88.57944	57.2	GPS	16-Aug-14
0070	GMD	332562	1835712	16.59775	-88.56955	57.0	GPS	16-Aug-14
0071	GMD	332500	1835539	16.59618	-88.57012	65.2	GPS	16-Aug-14
0072	GMD	333782	1834338	16.58542	-88.55802	47.1	GPS	16-Aug-14
0073	GMD, BAN	332100	1833960	16.58188	-88.57375	63.9	GPS	16-Aug-14

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0074	GMD, BAN	334132	1832641	16.57011	-88.55462	53.5	GPS	16-Aug-14
0075	GMD	334171	1832765	16.57123	-88.55426	52.2	GPS	16-Aug-14
0076	GMD, BAN	334283	1828635	16.53392	-88.55291	42.8	GPS	16-Aug-14
0077	GMD	357830	1851245	16.73978	-88.33371	12.5	GPS	16-Aug-14
0078	GMD	357834	1851252	16.73984	-88.33367	12.5	GPS	16-Aug-14
0079	GMD	358242	1851209	16.73948	-88.32985	13.4	GPS	16-Aug-14
0080	GMD	352621	1854535	16.76919	-88.38278	29.5	GPS	16-Aug-14
0081	GMD	352704	1854683	16.77053	-88.38202	29.6	GPS	16-Aug-14
0082	GMD	358463	1859060	16.81044	-88.32827	20.3	GPS	16-Aug-14
0083	GMD	357599	1858726	16.80737	-88.33635	22.6	GPS	16-Aug-14
0084	GMD	359529	1858208	16.80281	-88.31821	19.0	GPS	16-Aug-14
0085	GMD	358999	1855680	16.77993	-88.32303	19.8	GPS	16-Aug-14
0086	GMD	359920	1856439	16.78684	-88.31443	17.9	GPS	16-Aug-14
0087	GMD	360634	1857299	16.79466	-88.30779	17.7	GPS	16-Aug-14
0088	GMD	352666	1857689	16.79769	-88.38257	29.3	GPS	16-Aug-14
0089	GMD	350031	1849856	16.72674	-88.40677	35.4	GPS	16-Aug-14
0090	GMD, BAN	348390	1849166	16.72040	-88.42211	33.3	GPS	16-Aug-14
0091	GMD	348390	1849175	16.72048	-88.42211	33.7	GPS	16-Aug-14
0092	GMD	349893	1848755	16.71678	-88.40799	37.4	GPS	16-Aug-14
0093	GMD	350394	1848382	16.71344	-88.40327	32.0	GPS	16-Aug-14
0094	GMD	307739	1809773	16.36149	-88.80000	36.3	GPS	16-Aug-14
0095	GMD	310393	1812474	16.38611	-88.77538	43.7	GPS	16-Aug-14
0096	GMD	313692	1818801	16.44354	-88.74501	19.9	GPS	16-Aug-14
0097	GMD	313817	1819079	16.44606	-88.74386	22.0	GPS	16-Aug-14
0098	GMD	359428	1891215	17.10109	-88.32124	18.8	GPS	16-Aug-14
0099	GMD	324246	1821765	16.47112	-88.64641	44.4	GPS	16-Aug-14
0100	GMD	324431	1827161	16.51989	-88.64509	33.6	GPS	16-Aug-14
0101	GMD	333425	1827280	16.52161	-88.56085	37.8	GPS	16-Aug-14
0102	GMD	339781	1821012	16.46541	-88.50087	29.1	GPS	16-Aug-14
0103	GMD	338284	1824760	16.49918	-88.51515	41.1	GPS	16-Aug-14
0104	GMD	338152	1824839	16.49988	-88.51640	43.9	GPS	16-Aug-14
0105	GMD	346600	1827613	16.52551	-88.43745	8.5	GPS	16-Aug-14
0106	GMD	346774	1827659	16.52594	-88.43582	11.4	GPS	16-Aug-14
0107	GMD	346798	1827821	16.52740	-88.43561	12.0	GPS	16-Aug-14
0108	GMD	344976	1827821	16.52728	-88.45268	25.3	GPS	16-Aug-14
0109	GMD	346428	1825208	16.50376	-88.43890	20.5	GPS	16-Aug-14
0110	GMD	346440	1825237	16.50403	-88.43879	18.8	GPS	16-Aug-14
0111	GMD	346421	1825274	16.50436	-88.43897	18.8	GPS	16-Aug-14

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0112	GMD	345926	1820567	16.46179	-88.44329	14.3	GPS	16-Aug-14
0113	GMD	342322	1826275	16.51314	-88.47743	21.0	GPS	16-Aug-14
0114	GMD	345550	1828917	16.53722	-88.44737	16.1	GPS	16-Aug-14
0115	GMD	346309	1831337	16.55914	-88.44042	12.9	GPS	16-Aug-14
0116	GMD	346268	1831535	16.56093	-88.44082	18.3	GPS	16-Aug-14
0117	GMD	347950	1835187	16.59404	-88.42530	17.9	GPS	16-Aug-14
0118	GMD	350718	1837141	16.61188	-88.39949	12.6	GPS	16-Aug-14
0119	GMD	342977	1841903	16.65441	-88.47237	42.2	GPS	16-Aug-14
0120	GMD	343592	1842424	16.65916	-88.46664	38.6	GPS	16-Aug-14
0121	GMD	344885	1843440	16.66843	-88.45459	36.5	GPS	16-Aug-14
0122	GMD	348896	1848918	16.71819	-88.41735	26.7	GPS	16-Aug-14
0123	GMD	352879	1857601	16.79691	-88.38056	26.6	GPS	16-Aug-14
0124	GMD	353119	1859609	16.81507	-88.37844	19.7	GPS	16-Aug-14
0125	GMD	338082	1842791	16.66210	-88.51832	56.8	GPS	16-Aug-14
0126	GMD,BAL	352104	1843468	16.66914	-88.38691	27.1	GPS	16-Aug-14
0127	GMD,BAL	354447	1841011	16.64708	-88.36479	20.2	GPS	16-Aug-14
0128	GMD,BAL	354515	1841026	16.64722	-88.36415	22.4	GPS	16-Aug-14
0129	GMD,BAL	350887	1840851	16.64542	-88.39815	24.0	GPS	16-Aug-14
0130	GMD	351780	1899575	17.17616	-88.39367	22.4	GPS	16-Aug-14
0131	GMD	356662	1896894	17.15224	-88.34760	25.2	GPS	16-Aug-14
0132	GMD	358379	1899665	17.17739	-88.33164	18.2	GPS	16-Aug-14
0133	GMD	358171	1901222	17.19145	-88.33370	17.2	GPS	16-Aug-14
0134	GMD	358826	1897359	17.15658	-88.32729	18.4	GPS	16-Aug-14
0135	GMD	359148	1895557	17.14031	-88.32415	23.3	GPS	16-Aug-14
0136	GMD	358476	1893714	17.12362	-88.33035	23.1	GPS	16-Aug-14
0137	GMD	359418	1891205	17.10100	-88.32134	18.8	GPS	16-Aug-14
0138	GMD	359801	1891394	17.102732	-88.31775	17.3	GPS	16-Aug-14
0139	GMD	357702	1889479	17.08530	-88.33735	21.4	GPS	16-Aug-14
0140	GMD	358879	1882507	17.02236	-88.32585	31.9	GPS	16-Aug-14
0141	GMD	360448	1880340	17.00288	-88.31097	39.1	GPS	16-Aug-14
0142	GMD	364426	1876628	16.96957	-88.27338	30.3	GPS	16-Aug-14
0143	GMD	356057	1879743	16.99721	-88.35217	49.4	GPS	16-Aug-14
0144	GMD	356340	1879790	16.997653	-88.34952	50.1	GPS	16-Aug-14
0145	GMD	354841	1861574	16.83294	-88.36241	34.0	GPS	16-Aug-14
0146	GMD	358985	1860152	16.82034	-88.32344	24.4	GPS	16-Aug-14
0147	GMD	356193	1863883	16.85389	-88.34987	30.2	GPS	16-Aug-14
0148	GMD	356173	1863885	16.85391	-88.35006	29.0	GPS	16-Aug-14
0149	GMD	356152	1863887	16.85392	-88.35026	29.2	GPS	16-Aug-14

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0150	GMD	356134	1863886	16.85391	-88.35043	29.9	GPS	16-Aug-14
0151	GMD	354119	1873302	16.93888	-88.36995	47.3	GPS	16-Aug-14
0152	GMD	355936	1877628	16.97809	-88.35317	60.5	GPS	16-Aug-14
0153	GMD	362618	1879350	16.99406	-88.29053	25.1	GPS	16-Aug-14
0154	GMD	362624	1879343	16.99400	-88.29047	25.9	GPS	16-Aug-14
0155	GMD	365137	1877859	16.98073	-88.26678	29.9	GPS	16-Aug-14
0156	GMD	355749	1879952	16.99908	-88.35508	51.0	GPS	16-Aug-14
0157	GMD	355746	1879965	16.99920	-88.35511	50.2	GPS	16-Aug-14
0158	GMD	356037	1879386	16.99398	-88.35234	47.5	GPS	16-Aug-14
0159	GMD	355997	1878964	16.99017	-88.35269	37.8	GPS	16-Aug-14
0160	GMD	360634	1880146	17.00113	-88.30921	38.1	GPS	16-Aug-14
0161	GMD	357362	1867462	16.88631	-88.33913	34.8	GPS	16-Aug-14
0162	GMD	357352	1867452	16.88622	-88.33922	34.8	GPS	16-Aug-14
0163	GMD	359305	1879743	16.99741	-88.32167	22.4	GPS	16-Aug-14
0164	GMD	359280	1879833	16.99822	-88.32191	26.9	GPS	16-Aug-14
0165	GMD	354089	1879550	16.99534	-88.37064	52.3	GPS	16-Aug-14
0166	GMD	354212	1879889	16.99841	-88.36951	57.0	GPS	16-Aug-14
0167	GMD	345525	1828436	16.53288	-88.44757	23.3	GPS	16-Aug-14
0168	GMD	347735	1847079	16.70150	-88.42812	33.2	GPS	16-Aug-14
0169	GMD	358222	1851199	16.73939	-88.33003	13.4	GPS	16-Aug-14
0170	GMD	352676	1857699	16.79779	-88.38248	29.3	GPS	16-Aug-14
0171	GMD	360458	1880350	17.00297	-88.31088	39.1	GPS	16-Aug-14
0172	GMD	360468	1880360	17.00306	-88.31078	39.1	GPS	16-Aug-14
0173	GMD	358995	1860162	16.82043	-88.32334	24.7	GPS	16-Aug-14
0174	GMD	320597	1826915	16.51738	-88.68099	41.0	GPS	16-Aug-14
0175	RUD							16-Aug-14
0176	RUD							16-Aug-14
0177	RUD							16-Aug-14
0178	RUD							16-Aug-14
0179	RUD							16-Aug-14
0180	RUD							16-Aug-14
0181	RUD							16-Aug-14
0182	RUD							16-Aug-14
0183	RUD							16-Aug-14
0184	RUD							16-Aug-14
0185	RUD							16-Aug-14
0186	RUD							16-Aug-14
0187	RUD							16-Aug-14

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0188	RUD							16-Aug-14
0189	RUD							16-Aug-14
0190	RUD							16-Aug-14
0191	RUD							16-Aug-14
0192	RUD							16-Aug-14
0193	RUD							16-Aug-14
0194	RUD							16-Aug-14
0195	RUD							16-Aug-14
0196	RUD							16-Aug-14
0197	RUD							16-Aug-14
0198	RUD							16-Aug-14
0199	RUD							16-Aug-14
0200	RUD							16-Aug-14
0201	RUD							16-Aug-14
0202	RUD							16-Aug-14
0203	RUD							16-Aug-14
0204	RUD							16-Aug-14
0205	RUD							16-Aug-14
0206	RUD							16-Aug-14
0207	RUD							16-Aug-14
0208	RUD							16-Aug-14
0209	RUD							16-Aug-14
0210	RUD							16-Aug-14
0211	RUD							16-Aug-14
0212	RUD							16-Aug-14
0213	RUD							16-Aug-14
0214	RUD							16-Aug-14
0215	RUD							16-Aug-14
0216	RUD							16-Aug-14
0217	RUD							16-Aug-14
0218	RUD							16-Aug-14
0219	RUD							16-Aug-14
0220	RUD							16-Aug-14
0221	RUD							16-Aug-14
0222	RUD							16-Aug-14
0223	RUD							16-Aug-14
0224	RUD							16-Aug-14
0225	RUD							16-Aug-14

ID	Data_orig	Coord_X	Coord_Y	Coord_lat	Coord_lon	Coord_Z	Coord_met	Date_inp
0226	RUD							16-Aug-14
0227	RUD							16-Aug-14
0228	RUD							16-Aug-14
0229	RUD							16-Aug-14
0230	PUC	348824	1828463	16.53333	-88.41667		Original	16-Aug-14
0231	PUC	338249	1841451	16.65000	-88.51667		Original	16-Aug-14
0232	PUC	365139	1876303	16.96667	-88.26667		Original	16-Aug-14
0233	PUC	357977	1867129	16.88333	-88.33333		Original	16-Aug-14
0234	PUC	336400	1832243	16.56667	-88.53333		Original	16-Aug-14
0235	PUC	370463	1876269	16.96667	-88.21667		Original	16-Aug-14
0236	PUC	354363	1857933	16.80000	-88.36667		Original	16-Aug-14
0237	BAL	353171	1843294	16.66764	-88.37690		Map	16-Aug-14
0238	BAL	350993	1843574	16.67003	-88.39734		Map	16-Aug-14
0239	BWS							16-Aug-14
0240	PHB							16-Aug-14
0241	PHB							16-Aug-14
0242	PHB							16-Aug-14
0243	PUC	356635	1843367	16.66851	-88.34442		Map	16-Aug-14
0244	BAN	336047	1832175	16.56603	-88.53664		Original	16-Aug-14
0245	BAN	335500	1830812	16.55367	-88.54167		Original	16-Aug-14
0246	BAN	336724	1830812	16.55376	-88.53020		Original	16-Aug-14
0247	BAN	336856	1815306	16.41364	-88.52786		Original	16-Aug-14
0248	BAN	336057	1817315	16.43174	-88.53548		Original	16-Aug-14
0249	BAN	324968	1824003	16.49139	-88.63982		Original	16-Aug-14
0250	BAN	334013	1826201	16.51190	-88.55526		Original	16-Aug-14
0251	BAN							16-Aug-14
0252	BAN	333201	1827045	16.51947	-88.56293		Original	16-Aug-14
0253	BAN							16-Aug-14
0254	BAN	357322	1847065	16.70197	-88.33821		Original	16-Aug-14

Tab. 8 BAS – Basic data (part 2)

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0001	Toledo	Bladen - Swasey		other	outcrop				Yes	No
0002	Toledo	Indian Creek - Golden Stream		hand pump	domestic				Yes	Yes
0003	Toledo	Golden Stream		hand pump	domestic				Yes	Yes
0004	Toledo	Golden Stream		Watercourse					Yes	Yes
0005	Toledo	Bladen		dug well	domestic		6.4		Yes	Yes

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0006	Toledo	Bladen		drilled well			25.0		Yes	No
0007	Toledo	Bladen		drilled well					Yes	No
0008	Toledo	Bladen		dug well	domestic		4.9		Yes	Yes
0009	Toledo	Bladen		drilled well	public supply				Yes	Yes
0010	Toledo	Bladen		Water Tower	public supply				Yes	No
0011	Toledo	Swasey		dug well	domestic		6.6		Yes	Yes
0012	Toledo	Trio		drilled well	agricultural				Yes	Yes
0013	Toledo	Monkey River		drilled well	public supply		21.5		Yes	Yes
0014	Toledo	Monkey River		drilled well			16.8		Yes	No
0015	Toledo	Bella Vista		Water Tower	public supply				Yes	No
0016	Toledo	Trio		dug well	domestic		6.8		Yes	Yes
0017	Toledo	Trio		hand pump	domestic				Yes	Yes
0018	Toledo	Trio - Swasey		other	outcrop				Yes	No
0019	Toledo	San Isidro		Water Tower	public supply				Yes	No
0020	Toledo	San Isidro		dug well	domestic		4.5		Yes	Yes
0021	Toledo	Bella Vista		dug well	public supply		58.0		Yes	Yes
0022	Stann Creek	San Juan		Water Tower	public supply				Yes	No
0023	Stann Creek	San Juan		drilled well	public supply				Yes	No
0024	Stann Creek	Cowpen		drilled well	public supply		18.5		Yes	Yes
0025	Stann Creek	Cowpen		dug well					Yes	No
0026	Stann Creek	Cowpen		dug well	domestic		7.6		Yes	Yes
0027	Stann Creek	Independence		drilled well			19.2		Yes	Yes
0028	Toledo	Monkey River		Water Tower					Yes	No
0029	Stann Creek	Mango Creek		drilled well	agricultural				Yes	Yes
0030	Stann Creek			drilled well	agricultural				Yes	Yes
0031	Stann Creek			drilled well	agricultural		2.0		Yes	No
0032	Stann Creek	Georgetown		drilled well	domestic				Yes	No
0033	Stann Creek	Maya Mopan		hand pump	domestic				Yes	Yes
0034	Stann Creek	Maya Mopan		hand pump					Yes	No
0035	Stann Creek	Georgetown		drilled well	public supply				Yes	Yes
0036	Stann Creek	Red Bank		drilled well	public supply				Yes	No
0037	Stann Creek	Red Bank		hand pump	domestic				Yes	Yes
0038	Stann Creek	Red Bank		dug well	domestic		3.1		Yes	No
0039	Stann Creek	San Roman		Water Tower	public supply				Yes	No
0040	Stann Creek	Santa Rosa		dug well	domestic		5.9		Yes	Yes
0041	Stann Creek	Santa Rosa		drilled well	public supply				Yes	No
0042	Stann Creek	Santa Rosa / Santa Cruz		dug well	domestic		9.7		Yes	Yes
0043	Stann Creek	Santa Cruz		drilled well	public supply				Yes	Yes

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0044	Stann Creek	Mayan King		drilled well	public supply		22.1		Yes	No
0045	Stann Creek	Santa Cruz		dug well	domestic		6.1		Yes	No
0046	Stann Creek	Cowpen		Water Tower	public supply				Yes	No
0047	Stann Creek	San Juan		drilled well	exploratory		395.0		Yes	No
0048	Stann Creek	San Juan		drilled well	exploratory		678.0		Yes	No
0049	Stann Creek	San Juan		drilled well	exploratory		1040.0		Yes	No
0050	Stann Creek	San Isidro		drilled well	agricultural				Yes	Yes
0051	Stann Creek	San Isidro		drilled well	agricultural		22.9		Yes	No
0052	Stann Creek	Red Bank		Watercourse	agricultural				Yes	Yes
0053	Stann Creek	Red Bank		drilled well	exploratory		60.0		Yes	Yes
0054	Stann Creek	Red Bank		drilled well	exploratory		37.0		Yes	No
0055	Stann Creek	Red Bank		drilled well	exploratory		110.0		Yes	Yes
0056	Stann Creek	Red Bank		drilled well	agricultural		8.9		Yes	Yes
0057	Stann Creek	Red Bank		drilled well	exploratory		25.0		Yes	No
0058	Stann Creek	Sagitun		drilled well	agricultural		27.5		Yes	Yes
0059	Stann Creek	Sagitun		drilled well	agricultural				Yes	No
0060	Stann Creek	Sagitun		drilled well	agricultural		61.0		Yes	Yes
0061	Stann Creek	Sagitun		drilled well	domestic				Yes	Yes
0062	Stann Creek	Sagitun		drilled well	agricultural		12.5		Yes	Yes
0063	Stann Creek	Sagitun		drilled well	public supply		24.5		Yes	Yes
0064	Stann Creek	Sagitun		drilled well	domestic		110.0		Yes	Yes
0065	Stann Creek	Riversdale		drilled well	exploratory		38.4		Yes	Yes
0066	Stann Creek	Riversdale		drilled well	exploratory		20.8		Yes	Yes
0067	Toledo	San Pablo		Water Tower	public supply				Yes	No
0068	Toledo	San Pablo		hand pump	domestic				Yes	No
0069	Toledo	San Pablo		Watercourse					Yes	Yes
0070	Toledo	San Pablo		dug well	agricultural		6.0		Yes	No
0071	Toledo	San Pablo		drilled well	agricultural		24.5		Yes	Yes
0072	Stann Creek	San Pablo		Watercourse					Yes	Yes
0073	Toledo	San Pablo		drilled well	agricultural		18.0		Yes	Yes
0074	Toledo	Cowpen		drilled well	agricultural		35.0		Yes	Yes
0075	Toledo	Cowpen		drilled well	public supply		23.0		Yes	Yes
0076	Toledo	Swasey		drilled well	agricultural		23.7		Yes	Yes
0077	Stann Creek	Kanatic Resort		drilled well			17.0		Yes	Yes
0078	Stann Creek	Kanatic Resort		drilled well	public supply		18.0		Yes	Yes
0079	Stann Creek	Kanatic Resort		drilled well	exploratory		19.5		Yes	Yes
0080	Stann Creek	Maya Centre		drilled well	exploratory				Yes	No
0081	Stann Creek	Maya Centre		drilled well	exploratory				Yes	No

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0082	Stann Creek	Sittee		drilled well	public supply		25.0		Yes	Yes
0083	Stann Creek	Sittee		drilled well	exploratory		22.0		Yes	No
0084	Stann Creek	Sittee		drilled well	exploratory		25.0		Yes	No
0085	Stann Creek	Sittee		drilled well	exploratory		27.0		Yes	No
0086	Stann Creek	Sittee		drilled well	exploratory		25.0		Yes	No
0087	Stann Creek	Sittee		drilled well	public supply		25.0		Yes	Yes
0088	Stann Creek	Maya Centre		drilled well	public supply				Yes	No
0089	Stann Creek	South Stan Creek		dug well	domestic		10.8		Yes	Yes
0090	Stann Creek	South Stan Creek		drilled well	agricultural		15.9		Yes	Yes
0091	Stann Creek	South Stan Creek		drilled well	agricultural		15.9		Yes	Yes
0092	Stann Creek	South Stan Creek		drilled well	agricultural		28.0		Yes	Yes
0093	Stann Creek	South Stan Creek		drilled well	agricultural		30.0		Yes	Yes
0094	Toledo	Golden Stream		hand pump	domestic				Yes	Yes
0095	Toledo	Tambran		hand pump	domestic				Yes	Yes
0096	Toledo	Medina Bank		Watercourse					Yes	Yes
0097	Toledo	Medina Bank		Watercourse					Yes	Yes
0098	Stann Creek	Mullins River		Water Tower	public supply				Yes	No
0099	Toledo	Bladen		Watercourse					Yes	Yes
0100	Toledo	Trio		Watercourse					Yes	Yes
0101	Stann Creek	Swasey		Watercourse					Yes	Yes
0102	Toledo	Esperanza		Watercourse					Yes	Yes
0103	Toledo	Bella Vista		drilled well	public supply				Yes	No
0104	Toledo	Bella Vista		dug well	domestic		5.1		Yes	Yes
0105	Stann Creek	Independence		drilled well	public supply		55.0		Yes	Yes
0106	Stann Creek	Independence		drilled well	public supply		30.5		Yes	No
0107	Stann Creek	Independence		drilled well	public supply		30.5		Yes	No
0108	Toledo	Independence		dug well	domestic		6.9		Yes	Yes
0109	Toledo	Independence		drilled well	agricultural		24.5		Yes	No
0110	Toledo	Independence		drilled well	agricultural		9.5		Yes	Yes
0111	Toledo	Independence		Water Tower	agricultural				Yes	Yes
0112	Toledo	Esperanza		drilled well	domestic		5.9		Yes	Yes
0113	Stann Creek	Independence		Watercourse					Yes	Yes
0114	Stann Creek	Independence		Watercourse					Yes	Yes
0115	Stann Creek	Lime Tree Village		Watercourse					Yes	Yes
0116	Stann Creek	Lime Tree Village		drilled well	domestic				Yes	No
0117	Stann Creek	Mango Creek		Watercourse					Yes	Yes
0118	Stann Creek			Watercourse					Yes	Yes
0119	Stann Creek	San Roman		Watercourse					Yes	Yes

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0120	Stann Creek	San Roman		Watercourse					Yes	Yes
0121	Stann Creek	Santa Rosa		Watercourse					Yes	Yes
0122	Stann Creek	South Stan Creek		Watercourse					Yes	Yes
0123	Stann Creek	Maya Centre		Watercourse					Yes	Yes
0124	Stann Creek	Kendal		Watercourse					Yes	Yes
0125	Stann Creek	Maya Mopan		Watercourse					Yes	Yes
0126	Stann Creek		Well#4	drilled well	agricultural		23.8		Yes	Yes
0127	Stann Creek		Well#2	drilled well	agricultural		19.1		Yes	Yes
0128	Stann Creek		Well#1	drilled well	agricultural		19.1		Yes	Yes
0129	Stann Creek		SC	Watercourse	agricultural				Yes	Yes
0130	Belize	Gales Point		Watercourse					Yes	Yes
0131	Belize	Gales Point		drilled well			23.3		Yes	Yes
0132	Belize	Gales Point		Water Tower	public supply				Yes	No
0133	Belize	Gales Point		other					Yes	Yes
0134	Belize	Gales Point		Watercourse	public supply				Yes	Yes
0135	Belize	Gales Point		drilled well			14.3		Yes	No
0136	Belize	Mullins River		Watercourse					Yes	Yes
0137	Stann Creek	Mullins River		drilled well	public supply				Yes	No
0138	Stann Creek	Mullins River		drilled well	exploratory		23.7		Yes	Yes
0139	Stann Creek	Mullins River		Watercourse					Yes	Yes
0140	Stann Creek	Hope Creek		Watercourse					Yes	Yes
0141	Stann Creek	Hope Creek		drilled well	public supply				Yes	Yes
0142	Stann Creek	Sarawee		drilled well	public supply				Yes	Yes
0143	Stann Creek	Pomona		hand pump	domestic				Yes	Yes
0144	Stann Creek	Pomona		drilled well	domestic		27.9		Yes	Yes
0145	Stann Creek	Kendal		drilled well	domestic		12.2		Yes	No
0146	Stann Creek	Sittee		drilled well	public supply		10.5		Yes	Yes
0147	Stann Creek	Silk Gras		drilled well			17.6		Yes	No
0148	Stann Creek	Silk Gras		drilled well	public supply				Yes	Yes
0149	Stann Creek	Silk Gras		drilled well					Yes	No
0150	Stann Creek	Silk Gras		drilled well	exploratory		14.6		Yes	No
0151	Stann Creek	Silk Gras		Watercourse					Yes	Yes
0152	Stann Creek	Pomona		drilled well	domestic		12.7		Yes	Yes
0153	Stann Creek	Hope Creek		drilled well	agricultural		27.5		Yes	Yes
0154	Stann Creek	Hope Creek		drilled well			9.5		Yes	No
0155	Stann Creek	Long Bank		drilled well	agricultural		16.0		Yes	Yes
0156	Stann Creek	Pomona		drilled well	public supply		19.0		Yes	Yes
0157	Stann Creek	Pomona		drilled well			16.8		Yes	No

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0158	Stann Creek	Pomona		drilled well	domestic		40.0		Yes	No
0159	Stann Creek	Pomona		Watercourse					Yes	Yes
0160	Stann Creek	Hope Creek		drilled well	agricultural		11.0		Yes	Yes
0161	Stann Creek	Silk Gras		Water Tower					Yes	No
0162	Stann Creek	Silk Gras		drilled well	public supply		60.0		Yes	Yes
0163	Stann Creek	Hope Creek		drilled well	agricultural		36.5		Yes	Yes
0164	Stann Creek	Hope Creek		drilled well	domestic		27.5		Yes	Yes
0165	Stann Creek			drilled well					Yes	No
0166	Stann Creek			drilled well					Yes	Yes
0167	Stann Creek	Independence		drilled well	exploratory				Yes	No
0168	Stann Creek	Santa Cruz		Water Tower	public supply				Yes	No
0169	Stann Creek	Kanatic Resort		Watercourse					Yes	Yes
0170	Stann Creek	Maya Centre		Water Tower	public supply				Yes	No
0171	Stann Creek	Hope Creek		drilled well			24.3		Yes	No
0172	Stann Creek	Hope Creek		Water Tower					Yes	No
0173	Stann Creek	Sittee		Water Tower	public supply				Yes	No
0174	Toledo	Deep River	HGE-1	drilled well	exploratory		79.0		Yes	Yes
0175	Stann Creek	Cow Pen	Cow Pen1	drilled well	domestic		18.3		Yes	No
0176	Stann Creek	Dangriga	Dangriga1	drilled well	municipal		30.5		Yes	No
0177	Stann Creek	Dangriga	Dangriga2a	drilled well	domestic		30.5		Yes	No
0178	Stann Creek	Dangriga	Dangriga2b	drilled well	domestic		36.6		Yes	No
0179	Stann Creek	Hope Creek	Hope Creek	drilled well			18.3		Yes	No
0180	Stann Creek	Hope Creek	Hope Creek2	drilled well			18.3		Yes	No
0181	Stann Creek	Hope Creek	Hope Creek3	drilled well			30.5		Yes	No
0182	Stann Creek	Hope Creek	Hope Creek4	drilled well			21.4		Yes	No
0183	Stann Creek	Hopkins	Hopkins1	drilled well	domestic		39.7		Yes	No
0184	Stann Creek	Hopkins	Hopkins2	drilled well	domestic		21.4		Yes	No
0185	Stann Creek	Hopkins	Hopkins3	drilled well	municipal		67.1		Yes	No
0186	Stann Creek	Hopkins	Hopkins4	drilled well	domestic		18.3		Yes	No
0187	Stann Creek	Hopkins	Hopkins5	drilled well	domestic		15.3		Yes	No
0188	Stann Creek	Hopkins	Hopkins7	drilled well	domestic		13.1		Yes	No
0189	Stann Creek	Kanantik resort	Kanantik resort1	drilled well	infustrial		19.8		Yes	No
0190	Stann Creek	Kanantik resort	Kanantik resort2	drilled well	domestic		21.4		Yes	No
0191	Stann Creek	Kanantik	Kanantik3	drilled well	domestic		18.3		Yes	No
0192	Stann Creek	Maya Mopan	Maya Mopan1	drilled well			61.0		Yes	No
0193	Stann Creek	Maya Mopan	Maya Mopan2	drilled well	municipal		79.3		Yes	No
0194	Stann Creek	Maya Mopan	Maya Mopan3	drilled well			44.2		Yes	No
0195	Stann Creek	Maya Mopan	Maya Mopan4	drilled well			85.4		Yes	No

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0196	Stann Creek	Mullins river	Mullins river2	drilled well	municipal		67.1		Yes	No
0197	Stann Creek	Mullins river	Mullins river3	drilled well			27.5		Yes	No
0198	Stann Creek	Mullins river	Mullins river4	drilled well	municipal		15.3		Yes	No
0199	Stann Creek	Mullins river	Mullins river5	drilled well			45.8		Yes	No
0200	Stann Creek	Mullins river	Mullins river6	drilled well			11.9		Yes	No
0201	Stann Creek	Mullins river	Mullins river7	drilled well			24.4		Yes	No
0202	Stann Creek	Pomona	Pomona	drilled well	industrial		25.6		Yes	No
0203	Stann Creek	Pomona	Pomona2	drilled well	industrial		19.5		Yes	No
0204	Stann Creek	Pomona	Pomona3	drilled well	industrial		62.5		Yes	No
0205	Stann Creek	Sagitun	Sagitun1	drilled well	industrial		85.4		Yes	No
0206	Stann Creek	Sagitun	Sagitun5	drilled well	industrial		30.5		Yes	No
0207	Stann Creek	Sagitun	Sagitun6	drilled well	industrial		36.6		Yes	No
0208	Stann Creek	Santa Cruz	Santa Cruz1	drilled well	municipal		12.2		Yes	No
0209	Stann Creek	Santa Rosa	Santa Rosa	drilled well			93.9		Yes	No
0210	Stann Creek	Santa Rosa	Santa Rosa1	drilled well	municipal		19.8		Yes	No
0211	Stann Creek	Santa Rosa	Santa Rosa2	drilled well	municipal		50.3		Yes	No
0212	Stann Creek	Savannah Forest	Savannah Forest1	drilled well			18.3		Yes	No
0213	Toledo	Bladen	Bladen1a	drilled well	domestic		16.8		Yes	No
0214	Toledo	Bladen	Bladen1b	drilled well	domestic		19.8		Yes	No
0215	Toledo	Bladen	Bladen1c	drilled well	domestic		24.4		Yes	No
0216	Toledo	Bladen	Bladen1d	drilled well	domestic		24.4		Yes	No
0217	Toledo	Bladen	Bladen2a	drilled well	domestic		61.0		Yes	No
0218	Toledo	Bladen	Bladen2b	drilled well	domestic		18.3		Yes	No
0219	Toledo	Bladen	Bladen2c	drilled well	domestic		19.2		Yes	No
0220	Toledo	Golden Stream	Golden Stream 1	drilled well	domestic		42.7		Yes	No
0221	Toledo	Monkey River	Monkey River 1	drilled well			18.3		Yes	No
0222	Toledo	San Isidro	San Isidro 1	drilled well			56.4		Yes	No
0223	Toledo	San Isidro	San Isidro 2	drilled well			32.6		Yes	No
0224	Toledo	San Pablo	San Pablo 1	drilled well	domestic		31.4		Yes	No
0225	Toledo	Tambran	Tambran 1	drilled well	domestic		19.8		Yes	No
0226	Toledo	Trio	Trio 1	drilled well	domestic		30.5		Yes	No
0227	Toledo	Trio	Trio 2	drilled well	municipal		12.8		Yes	No
0228	Toledo	Trio	Trio 3	drilled well	domestic		35.1		Yes	No
0229	Toledo	Trio	Trio 4	drilled well					Yes	No
0230	Stann Creek	Independence					36.6		Yes	No
0231	Stann Creek	Maya Mopan					61.0		Yes	No
0232	Stann Creek	Sarawina					61.0		Yes	Yes
0233	Stann Creek	Silk Grass					24.4		Yes	No

ID	District	Site	Obj_name	Obj_type	Obj_sub	Obj_notes	Obj_depth	Datum_h	GWG	HCH
0234	Stann Creek	Cowpen							No	Yes
0235	Stann Creek	Dangriga							No	Yes
0236	Stann Creek	Kendal							No	Yes
0237	Stann Creek		Well#3	drilled well					No	Yes
0238	Stann Creek		Well#5	drilled well					No	Yes
0239	Stann Creek								No	Yes
0240	Stann Creek	Cowpen		drilled well					No	Yes
0241	Stann Creek	Mullins River		drilled well					No	Yes
0242	Stann Creek	Tres Bladden		drilled well					No	Yes
0243	Stann Creek	Ara Macao	Well 3	drilled well			20.4		Yes	No
0244			BF1						No	Yes
0245			BF2						No	Yes
0246			BF3						No	Yes
0247			BF9						No	Yes
0248			BF10						No	Yes
0249			BF11						No	Yes
0250			BF13						No	Yes
0251			BF15						No	Yes
0252			BF18						No	Yes
0253			BF19						No	Yes
0254			BF7						No	Yes

Tab. 9 GWG – Groundwater and Geology.

ID	Data_orig	Date_rec	GW_lev1	GW_lev2	GW_alt	GW_type	Pump_test	Yield_1	Yield_2	Par_cond	Transm
0001	GMD	25-Jan-14					No				
0002	GMD	25-Jan-14					No				
0003	GMD	25-Jan-14					No				
0004	GMD	4-Feb-14					No				
0005	GMD	25-Jan-14	2.15		30.67	Static	No				
0006	GMD	25-Jan-14	0.43		31.86		No				
0007	GMD	25-Jan-14					No				
0008	GMD	25-Jan-14	1.80		32.75	Static	No				
0009	GMD	11-Feb-14					No				
0010	GMD	25-Jan-14					No				
0011	GMD	25-Jan-14	1.60		33.24	Static	No				
0012	GMD	25-Jan-14	8.25		23.68	Dynamic	No	6.80			
0013	GMD	26-Jan-14					No	4.75			
0014	GMD	26-Jan-14	1.85		19.14	Static	No				
0015	GMD	27-Jan-14					No				
0016	GMD	27-Jan-14	3.10		38.00	Static	No				
0017	GMD	27-Jan-14					No				
0018	GMD	27-Jan-14					No				
0019	GMD	27-Jan-14					No				
0020	GMD	27-Jan-14	0.85		39.83	Static	No				
0021	GMD	27-Jan-14					No	1.85			
0022	GMD	27-Jan-14					No				
0023	GMD	27-Jan-14					No				
0024	GMD	27-Jan-14					No	1.15			
0025	GMD	27-Jan-14					No				
0026	GMD	27-Jan-14	1.55		45.76	Static	No				
0027	GMD	27-Jan-14	3.80		19.53	Static	No				
0028	GMD	26-Jan-14					No				
0029	GMD	28-Jan-14					No				
0030	GMD	28-Jan-14					No				
0031	GMD	28-Jan-14	18.50		0.86		No				
0032	GMD	28-Jan-14					No				
0033	GMD	28-Jan-14					No				
0034	GMD	28-Jan-14					No				
0035	GMD	28-Jan-14					No				
0036	GMD	29-Jan-14					No				
0037	GMD	29-Jan-14					No				
0038	GMD	28-Jan-14	dry				No				
0039	GMD	29-Jan-14					No				
0040	GMD	29-Jan-14	1.85		41.02	Static	No				
0041	GMD	29-Jan-14					No				
0042	GMD	29-Jan-14	0.90		34.60	Static	No				

ID	Data_orig	Date_rec	GW_lev1	GW_lev2	GW_alt	GW_type	Pump_test	Yield_1	Yield_2	Par_cond	Transm
0043	GMD	29-Jan-14					No				
0044	GMD	29-Jan-14	5.95		30.19		No				
0045	GMD	29-Jan-14	0.30		37.48	Static	No				
0046	GMD	27-Jan-14					No				
0047	GMD	30-Jan-14	60.90		-28.84		No				
0048	GMD	30-Jan-14					No				
0049	GMD	30-Jan-14	20.00		27.25		No				
0050	GMD	31-Jan-14					No	5.70			
0051	GMD	31-Jan-14	4.35		38.32	Static	No				
0052	GMD	31-Jan-14					No				
0053	GMD	31-Jan-14	0.60		54.61		No				
0054	GMD	31-Jan-14	0.30		56.70		No				
0055	GMD	31-Jan-14	0.70		57.70	Static	No				
0056	GMD	31-Jan-14	1.45		55.31	Static	No	1.10			
0057	GMD	31-Jan-14	0.70		55.03	Static	No				
0058	GMD	31-Jan-14					No	6.10			
0059	GMD	31-Jan-14	4.12		26.73	Static	No				
0060	GMD	31-Jan-14					No	1.90			
0061	GMD	31-Jan-14					No				
0062	GMD	31-Jan-14	6.45		15.36	Dynamic	No	15.20			
0063	GMD	31-Jan-14					No				
0064	GMD	31-Jan-14	2.65		19.42	Static	No	5.70			
0064	PUC	5-Jun-06	2.17								
0065	GMD	31-Jan-14	1.40		11.91	Static	No				
0065	PUC	5-Jun-06	1.73								
0066	GMD	31-Jan-14	1.85		10.38	Static	No				
0066	PUC	5-Jun-06	1.82								
0067	GMD	1-Feb-14					No				
0068	GMD	1-Feb-14					No				
0069	GMD	1-Feb-14					No				
0070	GMD	1-Feb-14					No				
0071	GMD	1-Feb-14	11.92		53.24	Dynamic	No	6.10			
0072	GMD	1-Feb-14					No				
0073	GMD	1-Feb-14					No	10.20			
0074	GMD	1-Feb-14					No	5.70			
0075	GMD	1-Feb-14					No	3.80			
0076	GMD	1-Feb-14	6.28		36.51	Static	No				
0077	GMD	3-Feb-14	3.00		9.51	Static	No	0.00			
0078	GMD	3-Feb-14					No	7.90			
0079	GMD	3-Feb-14	1.49		11.94	Static	No	0.00			
0080	GMD	3-Feb-14					No				
0081	GMD	3-Feb-14					No				
0082	GMD	3-Feb-14					No	12.90			
0083	GMD	3-Feb-14					No	14.50			

ID	Data_orig	Date_rec	GW_lev1	GW_lev2	GW_alt	GW_type	Pump_test	Yield_1	Yield_2	Par_cond	Transm
0084	GMD	3-Feb-14					No	11.30			
0085	GMD	3-Feb-14					No	30.00			
0086	GMD	3-Feb-14					No	11.30			
0087	GMD	3-Feb-14					No	11.50			
0088	GMD	3-Feb-14					No				
0089	GMD	3-Feb-14	7.00		28.36	Static	No				
0090	GMD	3-Feb-14					No	15.10			
0091	GMD	3-Feb-14	7.60		26.13	Dynamic	No	15.00			
0092	GMD	3-Feb-14					No	15.00			
0093	GMD	3-Feb-14					No	15.00			
0094	GMD	4-Feb-14					No				
0095	GMD	4-Feb-14					No				
0096	GMD	4-Feb-14					No				
0097	GMD	4-Feb-14					No				
0098	GMD	8-Feb-14					No				
0099	GMD	4-Feb-14					No				
0100	GMD	4-Feb-14					No				
0101	GMD	4-Feb-14					No				
0102	GMD	4-Feb-14					No				
0103	GMD	4-Feb-14					No				
0104	GMD	4-Feb-14	1.88		42.06	Static	No				
0105	GMD	5-Feb-14					No	13.50			
0106	GMD	5-Feb-14					No				
0107	GMD	5-Feb-14					No	17.00			
0108	GMD	5-Feb-14	0.95		24.35	Static	No				
0109	GMD	5-Feb-14	3.75		16.70	Dynamic	No	1.50			
0110	GMD	5-Feb-14	1.35		17.40	Static	No	1.50			
0111	GMD	5-Feb-14					No				
0112	GMD	5-Feb-14	3.05		11.29	Static	No				
0113	GMD	5-Feb-14					No				
0114	GMD	6-Feb-14					No				
0115	GMD	6-Feb-14					No				
0116	GMD	6-Feb-14	6.25		12.05	Static	No				
0117	GMD	6-Feb-14					No				
0118	GMD	6-Feb-14					No				
0119	GMD	6-Feb-14					No				
0120	GMD	6-Feb-14					No				
0121	GMD	6-Feb-14					No				
0122	GMD	6-Feb-14					No				
0123	GMD	6-Feb-14					No				
0124	GMD	6-Feb-14					No				
0125	GMD	6-Feb-14					No				
0126	GMD	7-Feb-14	4.45		22.66	Static	No	6.80			
0127	GMD	7-Feb-14	3.10		17.06	Static	No	6.80			

ID	Data_orig	Date_rec	GW_lev1	GW_lev2	GW_alt	GW_type	Pump_test	Yield_1	Yield_2	Par_cond	Transm
0128	GMD	7-Feb-14	2.03		20.32	Static	No	6.80			
0129	GMD	7-Feb-14					No				
0130	GMD	8-Feb-14					No				
0131	GMD	8-Feb-14	5.20		19.96	Static	No				
0132	GMD	8-Feb-14					No				
0133	GMD	8-Feb-14					No				
0134	GMD	8-Feb-14					No				
0135	GMD	8-Feb-14	0.15		23.18	Static	No				
0136	GMD	8-Feb-14					No				
0137	GMD	8-Feb-14					No				
0138	GMD	8-Feb-14	1.35		15.97	Static	No				
0139	GMD	8-Feb-14					No				
0140	GMD	8-Feb-14					No				
0141	GMD	8-Feb-14					No				
0142	GMD	8-Feb-14	23.65		6.65	Dynamic	No				
0143	GMD	9-Feb-14					No				
0144	GMD	9-Feb-14	9.80		40.32	Static	No	20.50			
0145	GMD	9-Feb-14	7.00		27.04	Static	No				
0146	GMD	9-Feb-14	4.80		19.64	Static	No				
0147	GMD	9-Feb-14	5.40		24.79	Dynamic	No				
0148	GMD	9-Feb-14	6.90		22.05	Dynamic	No	8.00			
0149	GMD	9-Feb-14					No				
0150	GMD	9-Feb-14	4.85		25.00	Dynamic	No				
0151	GMD	9-Feb-14					No				
0152	GMD	9-Feb-14	9.05		51.43	Static	No				
0153	GMD	10-Feb-14					No	0.10			
0154	GMD	10-Feb-14	5.35		20.53	Static	No				
0155	GMD	10-Feb-14	4.25		25.60	Static	No				
0156	GMD	10-Feb-14	12.85		38.15	Dynamic	No	4.00			
0157	GMD	10-Feb-14	7.70		42.48	Static	No				
0158	GMD	10-Feb-14					No	15.00			
0159	GMD	10-Feb-14					No				
0160	GMD	10-Feb-14					No	5.30			
0161	GMD	10-Feb-14					No				
0162	GMD	10-Feb-14					No	1.60			
0163	GMD	13-Feb-14	3.55		18.85	Static	No				
0164	GMD	13-Feb-14	2.95		23.97	Static	No				
0165	GMD	13-Feb-14					No				
0166	GMD	13-Feb-14	3.90		53.12	Static	No				
0167	GMD	27-Jan-14					No				
0168	GMD	29-Jan-14					No				
0169	GMD	3-Feb-14					No				
0170	GMD	3-Feb-14					No				
0171	GMD	8-Feb-14	5.30		33.84	Static	No				

ID	Data_orig	Date_rec	GW_lev1	GW_lev2	GW_alt	GW_type	Pump_test	Yield_1	Yield_2	Par_cond	Transm
0172	GMD	8-Feb-14					No				
0173	GMD	9-Feb-14					No				
0174	GMD	22-Jul-14	11.50		29.50	Static	Yes	9.00			
0175	RUD	14-May-07	3.97				Yes	6.32	8.84		
0176	RUD		6.10								
0177	RUD	20-Jun-07									
0178	RUD	21-Jun-07									
0179	RUD	7-Sep-06	3.66								
0180	RUD	3-Aug-07	3.97								
0181	RUD	6-Sep-06									
0182	RUD	17-Feb-09	3.05				Yes	6.32	9.48		
0183	RUD	28-Nov-06									
0184	RUD	28-Nov-06									
0185	RUD	20-Apr-01	6.10						5.05		
0186	RUD	4-Dec-06	3.66				Yes	11.37	12.63		
0187	RUD	11-Dec-06	3.66				Yes	12.63	15.79		
0188	RUD	28-Nov-06									
0189	RUD	6-Mar-04	1.22								
0190	RUD	24-Sep-07	3.05				Yes		3.79		
0191	RUD	13-Dec-06	1.83								
0192	RUD	25-Jan-02									
0193	RUD	16-Jan-02									
0194	RUD	17-Jan-02					Yes		3.16		
0195	RUD	16-Jan-02									
0196	RUD	24-Apr-01									
0197	RUD	25-Apr-01									
0198	RUD	19-Jun-07	4.58								
0199	RUD	18-Sep-04	7.63				Yes		2.21		
0200	RUD	19-Jun-07	4.58				Yes	3.16	3.16		
0201	RUD	19-Jun-07									
0202	RUD	23-Nov-02					Yes		1.26		
0203	RUD	20-Nov-02	2.44				Yes		2.84		
0204	RUD	28-Nov-02	3.05				Yes		9.48		
0205	RUD	21-Jul-05	3.05								
0206	RUD	27-Aug-06	2.14				Yes	4.11	4.42		
0207	RUD	13-Jun-05	3.05								
0208	RUD	21-Oct-04	2.44				Yes		6.32		
0209	RUD	22-Jan-02									
0210	RUD	30-Jan-02	1.53				Yes		4.42		
0211	RUD	29-Jan-02	2.75				Yes	3.16	3.47		
0212	RUD	24-Sep-07	3.05								
0213	RUD	8-Jun-07									
0214	RUD	9-Jun-07									
0215	RUD	11-Jun-07									

ID	Data_orig	Date_rec	GW_lev1	GW_lev2	GW_alt	GW_type	Pump_test	Yield_1	Yield_2	Par_cond	Transm
0216	RUD	10-Jun-07									
0217	RUD	28-May-07									
0218	RUD	25-May-07	6.10								
0219	RUD	23-May-07	4.58								
0220	RUD										
0221	RUD	4-Sep-06	3.05				Yes	0.03	5.05		
0222	RUD	2-Aug-07									
0223	RUD	5-Apr-05									
0224	RUD	29-Jun-07									
0225	RUD	5-May-99	6.71								
0226	RUD	28-May-07									
0227	RUD	21-May-07									
0228	RUD	3-Jun-07	6.71								
0229	RUD	27-Jun-07	9.14				Yes		9.48		
0230	PUC								7.13		
0231	PUC								0.63		
0232	PUC								1.25		
0233	PUC								9.47		
0243	PUC		1.19								

Tab. 9 GWG – Groundwater and Geology (part 2)

ID	Depth_from	Depth_to	Strat_1	Geol_1	Depth_from	Depth_to	Strat_2	Geol_2	Depth_from	Depth_to	Strat_3	Geol_3
0174	0.0	21.3	Alluvium	Alluvium	21.3	24.4	Toledo formation	Yellow-brown Calcerenite	24.4	30.5	Toledo formation	Greenish gray mudstone
0175	0.0	1.5		Black dirt	1.5	6.1		Red clay	6.1	7.6		Yellow clay with Sand
0176	0.0	1.5		Top soil	1.5	9.2		Sand	9.2	30.5		Sand and gravel
0177	0.0	30.5		Red clay								
0178	0.0	36.6		Red clay								
0179	0.0	7.3		Red clay	7.3	10.7		Coarse sand	10.7	15.3		Small gravel
0180	0.0	11.6		Red clay	11.6	13.7		Sand	13.7	16.8		Gravel
0181	0.0	1.2		Top soil	1.2	25.9		Fine sand	25.9	29.0		Red Clay
0182												
0183	0.0	3.1		Red clay	3.1	6.1		White sand	6.1	9.2		Red clay with fine sand
0184	0.0	1.5		black dirt	1.5	3.1		Brown clay	3.1	7.0		Brown clay mix with fine sand
0185	0.0	3.1		Top soil	3.1	30.5		Sand	30.5	45.8		Sand and stone
0186	0.0	6.1		red clay	6.1	7.6		yellow clay with coarse sand	7.6	18.3		coarse sand with coarse rock
0187	0.0	3.1		brown dirt	3.1	7.6		red clay	7.6	9.2		coarse sand

ID	Depth_from	Depth_to	Strat_1	Geol_1	Depth_from	Depth_to	Strat_2	Geol_2	Depth_from	Depth_to	Strat_3	Geol_3
0188	0.0	3.1		black dirt	3.1	9.2		red clay	9.2	13.1		coarse sand with coarse rock
0189	0.0	1.2		top soil	1.2	1.8		fine black sand	1.8	4.0		coarse yellow sand
0190	0.0	12.2		yellow clay	12.2	15.3		coarse sand	15.3	18.3		red clay
0191	0.0	1.5		brown dirt	1.5	6.1		red clay	6.1	7.6		coarse sand
0192	0.0	0.9		top soil	0.9	25.9		fine sand	25.9	54.9		shale rock
0193	0.0	1.2		top soil	1.2	24.7		coarse sand	24.7	79.3		shale rock
0194	0.0	1.2		top soil	1.2	7.3		sand+clay	7.3	31.1		coarse sand
0195	0.0	1.2		top soil	1.2	24.7		coarse sand	24.7	61.0		shale rock
0196	0.0	3.1		top soil	3.1	67.1		sand				
0197	0.0	3.1		top soil	3.1	6.1		sand	6.1	27.5		limestone
0198	0.0	12.2		grey clay	12.2	15.3		fine sand				
0199												
0200												
0201	0.0	12.2		grey clay	12.2	24.4		fine sand				
0202	0.0	1.2		top soil	1.2	9.2		red clay	9.2	16.5		sand
0203	0.0	1.2		top soil	1.2	6.1		red clay	6.1	10.7		fine brown sand
0204	0.0	1.2		top soil	1.2	6.1		red clay	6.1	16.2		fine brown sand
0205	0.0	1.5		top soil	1.5	10.7		coarse sand	10.7	14.0		fine sand
0206	0.0	1.2		top soil	1.2	6.7		red clay	6.7	18.3		yellow clay
0207	0.0	1.5		top soil	1.5	9.2		coarse sand	9.2	14.6		fine sand
0208	0.0	1.5		top soil	1.5	4.6		clay	4.6	6.1		fine yellow sand
0209	0.0	0.9		top soil	0.9	4.6		yellow clay	4.6	7.3		coarse sand
0210	0.0	1.2		top soil	1.2	9.5		red clay	9.5	12.5		limestone
0211	0.0	1.2		top soil	1.2	8.5		Red clay	8.5	9.5		limestone
0212	0.0	6.1		red clay	6.1	9.2		Coarse sand	9.2	15.3		fine sand
0213												
0214	0.0	3.1		red clay	3.1	6.1		yellow clay with sand	6.1	19.8		fine sand
0215	0.0	0.3		top soil	0.3	12.2		red clay	12.2	24.4		sand
0216												
0217				red clay found on site								
0218	0.0	1.5		black dirt	1.5	4.6		red clay	4.6	18.3		yellow clay with fine sand
0219	0.0	6.1		red clay	6.1	19.2		coarse sand				
0220	0.0	6.1		clay	6.1	24.4		shale rock	24.4	36.6		lime stone
0221												
0222	0.0	12.2		yellow clay	12.2	30.5		shale rock	30.5	33.6		yellow clay
0223	0.0	1.5		top soil	1.5	6.1		yellow clay	6.1	7.6		limestone
0224	0.0	7.6		red clay	7.6	31.4		sand and gravel				
0225	0.0	0.3		top soil	0.3	2.1		clay	2.1	7.9		brown shale rock
0226	0.0	1.5		black dirt	0.0	30.5		red clay				

ID	Depth_from	Depth_to	Strat_1	Geol_1	Depth_from	Depth_to	Strat_2	Geol_2	Depth_from	Depth_to	Strat_3	Geol_3
0227	0.0	1.2		top soi	1.2	4.6		red clay	4.6	7.6		yellow clay
0228	0.0	1.5		black dirt	1.5	12.2		red clay	12.2	18.3		limestone
0229												
0230												
0231												
0232												
0233												
0243												

Tab. 9 GWG – Groundwater and Geology (part 3)

ID	Depth_from	Depth_to	Strat_4	Geol_4	Depth_from	Depth_to	Strat_5	Geol_5	GWG_notes
0174	30.5	70.1	Toledo formation	Limestone	70.1	79.2	Toledo formation	Dark gray mudstone	
0175	7.6	12.2		Coarse sand	12.2	18.3		Coarse sand with rock	
0176									
0177									
0178									
0179	15.3	18.3		Big gravel					
0180	16.8	18.3		Red Clay					
0181	29.0	30.5		Fine sand					
0182									
0183	9.2	24.4		white clay with some limestone	24.4	39.7		white sand mix with white clay	
0184	7.0	9.2		Red clay mix with fine sand	9.2	10.1		white sand	
0185	45.8	67.1		Clay					
0186									
0187	9.2	15.3		coarse sand with coarse rock					
0188									
0189	4.0	5.5		fine black sand	5.5	7.9		coarse white sand	
0190	18.3	24.4		coarse sand					
0191	7.6	9.2		fine sand	9.2	18.3		coarse sand	
0192	54.9	58.0		coarse sand	58.0	61.0		shale rock	
0193									
0194	31.1	44.2		shale rock					
0195	61.0	65.6		coarse rock	65.6	85.4		shale rock	
0196									
0197									
0198									

ID	Depth_from	Depth_to	Strat_4	Geol_4	Depth_from	Depth_to	Strat_5	Geol_5	GWG_notes
0199									
0200									
0201									
0202	16.5	24.4		black sand	24.4	25.6		solid limestone	
0203	10.7	13.7		white coarse sand	14.6	17.1		small gravel	
0204	16.2	58.0		solid granite	58.0	61.0		rock	
0205	14.0	30.5		coarse sand	30.5	45.1		fine sand	
0206	18.3	24.4		coarse sand	24.4	27.5		grey clay	
0207	14.6	21.4		gravel with sand	21.4	23.2		red clay	
0208	6.1	9.2		coarse sand	9.2	12.2		sand+gravel	
0209	7.3	7.6		limestone	7.6	25.3		grey clay+sand	
0210	12.5	15.3		coarse sand	15.3	19.8		gravel + stone	
0211	9.5	22.9		yellow clay + sand	22.9	38.1		grey clay + sand	
0212	15.3	18.3		yellow clay					
0213									
0214									
0215									
0216									
0217									
0218									
0219									
0220	36.6	42.7		soft lime stone					
0221									
0222	33.6	56.4		shale rock					
0223	7.6	12.2		hard lime stone	12.2	18.3		grey clay	
0224									
0225	7.9	19.8		grey shale rock					
0226									
0227	7.6	9.2		fine yellow clay	9.2	12.8		fine white sand	
0228	18.3	35.1		coarse rock					
0229									
0230									
0231									
0232									
0233									
0243									

Tab. 10 HCH – Hydrochemistry.

ID	Data_orig	Date_rec	Date_anl	Smp_type	Smp_name	Smp_anl	W_temp	Turb	pH	Cond	Res
0009	GMD	11-Feb-14	11-Feb-14	Groundwater		Field	27.4	0.00	7.79	550.0	1730
0009	GMD	14-Feb-14	19-Feb-14	Groundwater	S9	Laboratory	NT	0.25	7.80	556.0	NT
0011	GMD	26-Jan-14	26-Jan-14	Groundwater		Field	26.7	0.00	6.68	97.0	10000
0012	GMD	26-Jan-14	26-Jan-14	Groundwater		Field	26.4	0.00	7.13	298.0	3257
0012	BAN	3-Apr-12		Surface water		Laboratory	NT	NT	6.79	NT	NT
0012	BAN	4-Jul-12		Groundwater		Laboratory	NT	NT	5.51	NT	NT
0012	BAN	4-Jul-12		Surface water		Laboratory	NT	NT	5.26	NT	NT
0012	BAN	6-Oct-12		Surface water		Laboratory	NT	NT	5.44	NT	NT
0012	BAN	6-Jan-13		Groundwater		Laboratory	NT	NT	5.40	NT	NT
0012	BAN	6-Jan-13		Surface water		Laboratory	NT	NT	4.89	NT	NT
0012	BAN	1-Apr-13		Surface water		Laboratory	NT	NT	4.89	NT	NT
0012	BAN	8-Jul-13		Groundwater		Laboratory	NT	NT	5.00	NT	NT
0012	BAN	8-Jul-13		Surface water		Laboratory	NT	NT	5.00	NT	NT
0013	GMD	26-Jan-14	26-Jan-14	Groundwater		Field	27.6	0.00	6.60	80.0	11904
0035	GMD	29-Jan-14	29-Jan-14	Groundwater		Field	28.6	0.00	7.40	300.0	3115
0035	GMD	11-Feb-14	11-Feb-14	Groundwater		Field	29.1	0.00	7.53	267.0	3460
0035	GMD	14-Feb-14	19-Feb-14	Groundwater	S10	Laboratory	NT	0.15	7.51	284.0	NT
0037	GMD	29-Jan-14	29-Jan-14	Groundwater		Field	28.9	0.00	6.55	175.0	5263
0040	GMD	29-Jan-14	29-Jan-14	Groundwater		Field	27.6	0.00	6.53	63.0	14925
0126	BAL	20-Apr-12		Groundwater			NT	NT	6.16	NT	NT
0126	BAL	17-Sep-12		Groundwater			NT	14.60	6.12	34.4	NT
0126	BAL	9-Oct-12		Groundwater			NT	2.00	6.50	NT	NT
0126	BAL	31-Oct-12		Groundwater			NT	17.20	6.30	33.8	NT
0126	BAL	23-Nov-12		Groundwater			NT	4.60	6.40	44.0	NT
0126	BAL	28-Dec-12		Groundwater			NT	13.20	6.01	57.6	NT
0126	BAL	21-Jan-13		Groundwater			NT	7.00	6.00	45.6	NT
0126	BAL	13-Feb-13		Groundwater			NT	8.90	6.78	31.2	NT
0126	BAL	28-Mar-13		Groundwater			NT	2.70	5.84	25.3	NT
0126	BAL	19-Apr-13		Groundwater			NT	3.50	5.63	43.2	NT
0126	BAL	24-May-13		Groundwater			NT	17.80	5.35	27.8	NT
0126	BAL	20-Jun-13		Groundwater			NT	7.80	5.78	90.9	NT
0126	BAL	18-Jul-13		Groundwater			NT	3.20	5.26	33.5	NT
0126	BAL	14-Aug-13		Groundwater			NT	6.50	5.81	62.6	NT
0126	BAL	26-Sep-13		Groundwater			NT	15.40	7.60	44.6	NT
0126	BAL	24-Oct-13		Groundwater			NT	11.40	6.34	60.2	NT
0126	MOH	17-May-12		Groundwater			NT	19.80	5.98	36.6	NT

ID	Data_orig	Date_rec	Date_anl	Smp_type	Smp_name	Smp_anl	W_temp	Turb	pH	Cond	Res
0239	BWS	march, 2010		Surface water	Raw Water		21.9	5.30	7.37	62.6	NT
0239	BWS	march, 2011		Surface water	Treated Water		22.4	0.75	7.32	69.6	NT
0240	PHB	18-Jul-07		Groundwater	Untreated water	Laboratory	NT	8.00	7.80	77.2	NT
0241	PHB	19-Jul-07		Groundwater	Untreated water	Laboratory	NT	1.00	6.80	112.6	NT
0242	PHB	21-Jul-07		Groundwater	Untreated water	Laboratory	NT	4.00	7.10	266.0	NT
0244	BAN	3-Apr-12		Surface water		Laboratory	NT	NT	5.32	NT	NT
0244	BAN	4-Jul-12		Groundwater		Laboratory	NT	NT	5.12	NT	NT
0244	BAN	4-Jul-12		Surface water		Laboratory	NT	NT	6.07	NT	NT

Tab. 10 HCH – Hydrochemistry (part 2).

ID	Ca	Cu	Al	Fe	Mn	Mg	Na	F	Cl	Cl_T	Cl_F	HCO3	NH3	CO3	Hard	Alk	NO3-	NO2-	PO4
0009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0009	118.0	0.02	0.002	0.020	0.008	68.0	69.00	0.02	53.0	NT	NT	110.0	ND	ND	186	110	1.8	0.002	1.44
0011	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0012	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0012	NT	NT	0.013	0.140	0.042	7.5	6.89	NT	9.0	NT	NT	18.6	NT	NT	NT	NT	1.0	0.009	NT
0012	NT	NT	0.007	0.000	0.012	6.1	70.37	NT	14.5	NT	NT	33.0	NT	NT	NT	NT	8.2	0.053	NT
0012	NT	NT	0.006	0.120	0.062	3.0	7.48	NT	12.3	NT	NT	23.7	NT	NT	NT	NT	0.5	0.025	NT
0012	NT	NT	0.013	0.140	0.038	7.5	6.89	NT	9.0	NT	NT	18.6	NT	NT	NT	NT	2.0	0.009	NT
0012	NT	NT	0.007	0.000	0.012	6.1	70.37	NT	14.5	NT	NT	33.0	NT	NT	NT	NT	8.2	0.053	NT
0012	NT	NT	0.006	0.022	0.062	3.0	7.48	NT	12.3	NT	NT	23.7	NT	NT	NT	NT	0.5	0.025	NT
0012	NT	NT	0.005	0.023	0.056	2.5	7.53	NT	12.4	NT	NT	23.6	NT	NT	NT	NT	0.3	0.021	NT
0012	NT	NT	0.007	0.000	0.013	6.1	70.37	NT	13.2	NT	NT	33.0	NT	NT	NT	NT	8.0	0.053	NT
0012	NT	NT	0.007	0.022	0.064	3.0	7.48	NT	12.3	NT	NT	23.7	NT	NT	NT	NT	0.5	0.024	NT
0013	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0035	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0035	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0035	129.0	0.01	0.006	0.100	0.014	17.0	10.16	0.15	0.9	NT	NT	160.0	0.05	ND	146	160	1.8	0.015	2.09
0037	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0040	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
0126	NT	NT	NT	ND	NT	NT	NT	NT	ND	0.00	0.00	NT	NT	NT	46	28	0.7	0.002	NT
0126	NT	NT	NT	0.960	NT	NT	NT	NT	5.7	0.00	0.00	NT	NT	NT	5	4	0.8	0.003	NT
0126	NT	NT	NT	0.530	NT	NT	NT	NT	0.4	0.01	0.01	NT	NT	NT	23	24	2.7	0.120	NT
0126	NT	NT	NT	0.340	NT	NT	NT	NT	0.9	0.00	0.00	NT	NT	NT	7	14	0.6	0.001	NT
0126	NT	NT	NT	0.200	NT	NT	NT	NT	4.0	0.00	0.00	NT	NT	NT	6	27	0.4	0.003	NT
0126	NT	NT	NT	0.720	NT	NT	NT	NT	0.0	0.00	0.00	NT	NT	NT	166	12	0.6	0.004	NT
0126	NT	NT	NT	0.290	NT	NT	NT	NT	3.7	0.00	0.00	NT	NT	NT	75	42	1.0	0.001	NT

ID	Ca	Cu	Al	Fe	Mn	Mg	Na	F	Cl	Cl_T	Cl_F	HCO3	NH3	CO3	Hard	Alk	NO3-	NO2-	PO4
0126	NT	NT	NT	0.510	NT	NT	NT	NT	4.4	0.00	0.00	NT	NT	NT	175	11	0.6	0.002	NT
0126	NT	NT	NT	0.230	NT	NT	NT	NT	5.2	0.00	0.00	NT	NT	NT	75	39	0.2	0.000	NT
0126	NT	NT	NT	0.600	NT	NT	NT	NT	2.4	0.00	0.00	NT	NT	NT	20	8	0.4	0.000	NT
0126	NT	NT	NT	0.200	NT	NT	NT	NT	12.0	0.00	0.00	NT	NT	NT	16	0	0.3	0.003	NT
0126	NT	NT	NT	0.030	NT	NT	NT	NT	7.0	5.14	5.25	NT	NT	NT	32	7	1.3	0.004	NT
0126	NT	NT	NT	0.000	NT	NT	NT	NT	3.0	0.00	0.00	NT	NT	NT	4	21	0.3	0.003	NT
0126	NT	NT	NT	0.730	NT	NT	NT	NT	5.6	0.00	0.00	NT	NT	NT	4	20	0.8	0.004	NT
0126	NT	NT	NT	0.380	NT	NT	NT	NT	6.0	0.00	0.00	NT	NT	NT	16	0	0.3	0.005	NT
0126	NT	NT	NT	0.280	NT	NT	NT	NT	7.0	0.00	0.00	NT	NT	NT	8	12	0.4	0.006	NT
0126	NT	NT	NT	1.030	NT	NT	NT	NT	5.0	NT	NT	NT	NT	NT	10	5	2.3	NT	NT
0239	7.0	NT	0.070	0.320	NT	7.4	NT	0.06	13.0	NT	NT	NT	NT	NT	14	25	4.4	NT	0.21
0239	9.2	NT	0.090	0.070	NT	6.0	NT	0.04	18.4	1.40	NT	NT	NT	NT	15	17	5.8	NT	0.13
0240	NT	NT	NT	0.100	NT	NT	NT	NT	7.0	NT	NT	NT	NT	NT	32	16	1.8	NT	NT
0241	NT	NT	NT	0.130	NT	NT	NT	NT	26.0	NT	NT	NT	NT	NT	29	17	2.4	NT	NT
0242	NT	NT	NT	0.330	NT	NT	NT	NT	8.5	NT	NT	NT	NT	NT	109	106	2.0	NT	NT
0244	NT	NT	0.015	0.000	0.066	15.7	4.80	NT	9.2	NT	NT	1.2	NT	NT	NT	NT	1.2	0.001	NT
0244	NT	NT	0.015	0.001	0.066	15.7	4.81	NT	9.2	NT	NT	1.2	NT	NT	NT	NT	1.2	0.002	NT
0244	NT	NT	0.050	0.015	0.109	12.2	6.80	NT	15.3	NT	NT	6.2	NT	NT	NT	NT	19.0	0.006	NT

Tab. 10 HCH – Hydrochemistry (part 3).

ID	Sal	NaCl	SO4	SO3	Col	DO	TDS	TSS	OD_bio	OD_chem	HCH_notes
0009	0.27	NT	NT	NT	NT	7.12	357	NT	NT	NT	
0009	0.09	87.40	6.00	NT	NT	NT	278	NT	NT	NT	
0011	0.04	NT	NT	NT	NT	8.01	63	NT	NT	NT	
0012	0.14	NT	NT	NT	NT	4.57	193	NT	NT	NT	
0012	NT	NT	4.00	1.20	NT	NT	NT	NT	19	38	
0012	NT	NT	0.00	3.20	NT	NT	NT	NT	40	37	
0012	NT	NT	4.00	2.00	NT	NT	NT	NT	28	40	
0012	NT	NT	4.00	1.20	NT	NT	NT	NT	19	38	
0012	NT	NT	0.00	3.20	NT	NT	NT	NT	35	40	
0012	NT	NT	4.00	1.60	NT	NT	NT	NT	23	39	
0012	NT	NT	4.00	1.30	NT	NT	NT	NT	21	35	
0012	NT	NT	0.00	2.90	NT	NT	NT	NT	30	45	
0012	NT	NT	3.00	1.50	NT	NT	NT	NT	20	37	
0013	0.04	NT	NT	NT	NT	3.91	52	NT	NT	NT	
0035	0.15	NT	NT	NT	NT	2.92	195	NT	NT	NT	
0035	0.13	NT	NT	NT	NT	6.13	173	NT	NT	NT	

ID	Sal	NaCl	SO4	SO3	Col	DO	TDS	TSS	OD_bio	OD_chem	HCH_notes
0035	0.00	1.49	2.00	NT	NT	NT	142	NT	NT	NT	
0037	0.08	NT	NT	NT	NT	3.22	113	NT	NT	NT	
0040	0.03	NT	NT	NT	NT	5.44	40	NT	NT	NT	
0126	0.00	NT	0.00	NT	NT	NT	27	NT	NT	NT	
0126	0.00	NT	12.13	NT	NT	NT	13	NT	NT	NT	
0126	0.00	NT	4.42	NT	NT	NT	20	NT	NT	NT	
0126	0.00	NT	9.25	NT	NT	NT	15	NT	NT	NT	
0126	0.00	NT	3.39	NT	NT	NT	20	NT	NT	NT	
0126	0.00	NT	5.90	NT	NT	NT	26	NT	NT	NT	
0126	0.00	NT	0.00	NT	NT	NT	19	NT	NT	NT	
0126	0.00	NT	0.00	NT	NT	NT	12	NT	NT	NT	
0126	0.00	NT	4.00	NT	NT	NT	12	NT	NT	NT	
0126	0.00	NT	3.00	NT	NT	NT	21	NT	NT	NT	
0126	0.00	NT	1.00	NT	NT	NT	13	NT	NT	NT	
0126	0.00	NT	0.00	NT	NT	NT	44	NT	NT	NT	
0126	0.00	NT	0.00	NT	NT	NT	16	NT	NT	NT	
0126	0.00	NT	0.00	NT	NT	NT	30	NT	NT	NT	
0126	0.00	NT	2.00	NT	NT	NT	22	NT	NT	NT	
0126	0.00	NT	1.00	NT	NT	NT	29	NT	NT	NT	
0126	NT	NT	2.00	NT	NT	NT	18	NT	NT	NT	
0239	0.00	NT	0.80	NT	9	NT	30	NT	NT	NT	
0239	0.00	NT	6.00	NT	2	NT	33	NT	NT	NT	
0240	NT	NT	1.00	NT	NT	NT	39	NT	NT	NT	
0241	NT	NT	1.00	NT	NT	NT	56	NT	NT	NT	
0242	NT	NT	1.00	NT	NT	NT	135	NT	NT	NT	
0244	NT	NT	11.00	0.01	NT	NT	NT	NT	13	25	
0244	NT	NT	12.00	0.01	NT	NT	NT	NT	13	26	
0244	NT	NT	1.00	0.40	NT	NT	NT	NT	22	46	

Tab. 11 WQL – Water Quality Limits.

Physical	Unit	Standard values	Status	Data source
Turbidity	ntu	5.00	Recommended	WHO's drinking water standards
pH	-	6.5-8	Recommended	WHO's drinking water standards
Conductivity	uS/cm	500.00	Recommended	WHO's drinking water standards
Calcium (Ca)	ppm	200.00	Maximum level	Guidelines for Canadian Drinking Water Quality
Copper (Cu)	ppm	1.30	Maximum level	United States Environmental Protection Agency
Aluminium (Al)	ppm	0.20	Recommended	WHO's drinking water standards
Iron (Fe)	ppm	0.30	Recommended	WHO's drinking water standards
Manganese (Mn)	ppm	0.05	Recommended	United States Environmental Protection Agency
Magnesium (Mg)	ppm	50.00	Recommended	Guidelines for Canadian Drinking Water Quality
Sodium (Na)	ppm	200.00	Recommended	WHO's drinking water standards
Fluoride (F)	ppm	1.50	Maximum level	WHO's drinking water standards
Chloride (Cl)	ppm	250.00	Recommended	WHO's drinking water standards
Chlorine (Cl)	ppm	5.00	Recommended	WHO's drinking water standards
Ammonia (NH3)	ppm	0.30	Recommended	WHO's drinking water standards
Hardness	ppm	500.00	Recommended	Guidelines for Canadian Drinking Water Quality
Alkalinity	ppm	500.00	Recommended	United States Environmental Protection Agency
Nitrate (NO3-)	ppm	10.00	Maximum level	WHO's drinking water standards
Nitrite (No2-)	ppm	1.00	Maximum level	United States Environmental Protection Agency
Salinity	ppt	1.00	Recommended	United States Environmental Protection Agency
Sodium chloride (NaCl)	ppm	200.00	Recommended	WHO's drinking water standards
Sulphate (SO42-)	ppm	250.00	Recommended	United States Environmental Protection Agency
Total dissolved solids (TDS)	ppm	500.00	Recommended	United States Environmental Protection Agency