APPENDIX C:

AUTOMATED WATER QUALITY AND WATER LEVEL QUALIFICATIONS

Data period: 5/2009 - 11/30/2011

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Note: Data presented here reflects qualifiers applied through 11/30/2011. Methodology used for qualifying data may be refined as long term data trends become clearer.

A. Equipment Type

Automated equipment deployed consists of one of the types of instruments listed below:

Probe Type	Manufacturer	Baseline Parameters Measured
AT 100	In-Situ	Conductivity, Temperature
AT 200	In-Situ	Conductivity, Temperature, Pressure
LT 500	In-Situ	Temperature, Pressure
SL 500	YSI/Sontek	Velocity X, Velocity Y, Pressure

Key: AT = AquaTroll. LT = LevelTroll. SL = Side-Looker.

B. List of Qualifiers

Qualifiers are applied to each data point based on descriptions provided in Sections C and D below.

Qualifier	Qualifier Description	Definition
C	Cleaning/Calibration	Tagged at the point where a cleaning and/or calibration event occurred.
E	Estimated	Designated estimated data. "**E**" tags are converted to "**M**" codes when data cannot be reasonably estimated.
G	Calculated	Calculated data. Applies primarily to water level data where Reference Levels and Pressures have been adjusted/corrected.
?	Questionable (do not use)	Indicates questionable data (data appears suspect or questionable), not to be used. Temporarily tag data "**M**" and apply missing data rule. Note: It is advised not to use this data except if there is a solid reason to do so.

C. Overall Description of Qualifying and Validating Methodology

All data collected are assessed using the following steps:

For Water Quality Parameters: S,SC,T,TDS,D (applicable only to AT100 and AT200)
S=Salinity, SC=Specific Conductance, T=Temperature, TDS=Total Dissolved Solids, D=Density

1. All data gaps are manually patched in to the Electronic Data Management System (EDMS) site.
2. The data are exported into MSExcel and graphs for Specific Conductance, Temperature and Salinity are generated.
3. These graphs are manually reviewed by technical staff for any apparent anomalies.
4. Any apparent anomalies are reviewed in the raw data, and compared to field records for possible cleaning, calibration or maintenance events that may have affected data.
5. Data from cleaning and calibration events are qualified with a "C" (Cleaning/Calibration) and "?" (Questionable).
6. Data from any maintenance events are qualified with a "?" as unusable, questionable data.
7. Data that is obviously in error, due to equipment malfunction, is qualified with a "?" as unusable.
8. Any additional anomalies are jointly reviewed by technical staff, and if evidence of equipment, human or other interference is found, the data is qualified with a "?"; otherwise no qualifiers are applied to the data.
9. Data are also compared to field calibration logs and calibration time requirements (see Tables below). Data found to be outside of either calibration requirements and/or calibration/verification tolerances are qualified with an "E" for estimated.
10. If probes are observed to be outside parameter tolerances during calibration/verification events, these existing probes are substituted with new probes.
11. Probes failing calibration are then sent back to the manufacturer for inspection, recalibration, and/or repair.

Calibration requirement intervals for all probes.

Calibration Requirements	Probes at:	Calibration Interval
Regular cleaning/calibration	TPBBSW 1,2,3,4,5,10 and 14	Approximately every 6-8 weeks
	All other probes	Approximately every 8-10 weeks
Factory Calibration	All probes	Approximately 12-18 months from time of deployment

Parameters calibrated or verified per QAPP (December 2011).

Parameters	Calibration or Verification	Tolerances
Specific Conductance	Calibration	Values must be within 5% of standardized values.
Temperature	Verification	Values must be within 0.5°C of NIST traceable thermometer reading

12. Further description for specific parameters qualified under particular circumstances is described in Section D.

13. As a final step, all data is then validated by a different technical staff member.

For Level Surface Elevation Parameters (L,P) (applicable only to AT200 and LT500)
L=Level, P=Pressure

1. All possible data gaps are manually patched in to the Electronic Data Management System (EDMS) site.
2. The data are exported into Excel and graphs for Stage are generated.
3. These graphs are manually reviewed by appropriate staff for trends and any apparent anomalies.
4. Any apparent anomalies are reviewed in the raw data, and compared to field records for possible cleaning, calibration or maintenance events that may have affected data.
5. Data from cleaning and calibration events are qualified with a "C" and "?".
6. Data from any maintenance events are qualified with a "?" as unusable, questionable data.
7. Data that is obviously in error, due to equipment malfunction, is qualified with a "?" as unusable.
8. Any additional anomalies are jointly reviewed by several staff members, and if evidence of equipment, human or other interference is found the data is qualified with a "?", otherwise no qualifiers are applied to the data.
9. Water level data are reviewed in conjunction with a spreadsheet maintained by field crew comparing accuracy of probe level surface elevation to manually calculated measurements. Any data showing an error of .1 or greater is qualified with an "E".
10. Data where the water table has dropped below the probe, or has risen above the top of the well casing is qualified with a "?".
11. Further description for specific parameters qualified under particular circumstances is described in Section D.
12. As a final step, all data are then validated by a different technical staff member.

For Flowmeters (applicable to SL500)

1. All possible data gaps are manually patched in to the Electronic Data Management System (EDMS) site.
2. The data are exported into Excel and graphs are generated.
3. These graphs are manually reviewed by appropriate staff for trends and any apparent anomalies.
4. Any apparent anomalies are reviewed in the raw data, and compared to field records for possible cleaning, calibration or maintenance events that may have affected data.
5. Data from cleaning and calibration events is qualified with a "C" and "?".
6. Data from any maintenance events are qualified with a "C" and "?" as unusable, questionable data.
7. Data that is obviously in error, due to equipment malfunction, is qualified with a "?" as unusable.
8. Any additional anomalies are jointly reviewed by several staff members, and if evidence of equipment, human or other interference is found the data is qualified with a "?", otherwise no qualifiers are applied to the data.

9. Further description for specific parameters qualified under particular circumstances is described in Section D.
10. As a final step, all data is then validated by a different technical staff member.

D. Specific Situations for Data Qualifying

For all automated units:
There are multiple reasons why probes may begin to report erroneous values. These include sediment buildup within the probe, well fouling, electrical system failure and flood events. Professional judgement based on overall data trends and comparison to surrounding wells are used to assess these situations. As a baseline rule, if values change within a short time period, by greater than 30% for no environmental reason, such as a rainfall event, then affected parameters are to be qualified with "?".If values suddenly change by 30% or less, under conditions described above, parameters can be qualified with "E". Additionally, due to the relationship between the parameters, qualifiers applied may be more than to that single data column.

Relationships between parameters:

Measured Parameter	Calculated Values
Conductivity	Salinity
Conductivity	Specific Conductance
Conductivity	Total Dissolved Solids
Conductivity, Temperature	Density
Pressure	Water Level

For the AT100

- If Specific Conductivity is qualified, then Salinity and TDS need to be qualified.
- During Cleaning and Calibration, or when probe is pulled for maintenance, qualify S, SC, T, TDS, D for duration of event and until readings stabilize to values approximately the same as before the probe was pulled.
- If values are oscillating every 15 minutes exactly, it is assumed to be an issue with the probe or some part of the electronic system. This pattern has only been observed in groundwater wells.
- Oscillations such as these which are 5% of previously observed values, as seen in overall data trends, can be qualified with E. If data oscillates normally, such as in the case of tidally influenced stations, and it is not clear that values are erroneous, then these values are not qualified.
- Oscillations such as these which are greater than 5% of typical values can be qualified with "?".
- If, based on stage data from the LT500, the well is observed to have water above the top of casing (flooded) then S, SC, T, TDS and D are qualified with "?". We are continuing to evaluate this situation.

For the AT200

- If Specific Conductivity is qualified, then Salinity, TDS, and Density need to be qualified.
- If Temperature is qualified, then Salinity, TDS, Density, and Water Level need to be qualified.
- If Pressure is qualified, then Density and Water Level need to be qualified.
- During Cleaning and Calibration, or when probe is pulled for maintenance, qualify P, S, SC, T, TDS, D, L.
- When a qualifier is applied to S and SC, apply to TDS and D as well.
- If values are oscillating every 15 minutes exactly, it is assumed to be an issue with the probe or some part of the electronic system.
- Oscillations such as these which are 5% of typical values can be qualified with "E".
- Oscillations such as these which are greater than 5% of typical values can be qualified with "?".
- If, based on stage data, the well is observed to have water above the top of casing (flooded) then S, SC, T, TDS and D are qualified. We are continuing to evaluate this situation.

For the LT500

- If Pressure is qualified, Water Level needs to be qualified.
- During Cleaning and Calibration, or when probe is pulled for maintenance, qualify P, T, L.
- When water level is above the surveyed top of casing (well is flooded) then qualify P, L with "?".
- During cleaning and calibration, if the probe is reading water level surface elevation greater than 0.1 ft. outside of manually observed values, Level is qualified with an "E" back to the point where it was last observed to be within range.

For Flow Meters

- If the unit is pulled for maintenance, all parameters except voltage are to be qualified with a "C?".

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPGW								
TPGW-1	TPGW-1S_AT_156275	9/12/2010 16:00	11/9/2010 9:30	E	S, SC, TDS, D	Factory initial calibration, high CCV (initial reading)		1/18/2012
		9/14/2010 14:45	9/14/2010 15:30	?	S, SC, TDS, D, T	Sampling event	SRH	2/25/2011
		9/19/2010 1:45	9/19/2010 4:15	?	S, SC, TDS, D	Jumps and drops		1/18/2012
		9/20/2010 10:00	9/24/2010 23:00	?	S, SC, TDS, D	Oscillates		1/18/2012
		11/9/2010 9:45	11/9/2010 11:15	C?	S, SC, T, TDS, D	Calibration event		1/18/2012
		1/18/2011 15:45	1/18/2011 17:34	C?	S, SC, T, TDS, D	Calibration event	HH	2/15/2011
		4/4/2011 12:34	4/4/2011 17:55	C?	S, SC, T, TDS, D	Calibration event	HH	2/27/2012
		5/3/2011 11:10	5/3/2011 15:25	?	S, SC, T, TDS, D	Probe was pulled		2/27/2012
		5/3/2011 21:55	5/5/2011 22:40	?	S, SC, TDS, D	Oscillates		1/18/2012
		6/2/2011 16:10	6/2/2011 18:43	C?	S, SC, T, TDS, D	Calibration event		1/18/2012
		7/29/2011 10:42	7/29/2011 10:42	C?	S, SC, T, TDS, D	Calibration event	HH	2/27/2012
		10/14/2011 14:10	10/14/2011 18:55	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/10/2011 12:40	11/10/2011 18:15	C?	S, SC, T, TDS, D	Calibration event		1/18/2012
		12/31/2011 5:30	1/11/2012 3:48	?	S, SC, TDS, D	Drops and oscillates	HH	1/18/2012
		1/5/2012 12:15	1/5/2012 14:03	C?	S, SC, T, TDS, D	Calibration event	HH	1/18/2012
		1/8/2012 11:03	1/11/2012 3:18	?	S, SC, TDS, D	Drops	HH	1/18/2012
		1/11/2012 3:33	1/11/2012 9:33	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/18/2012
	TPGW-1M_AT_156595	9/15/2010 2:45	9/15/2010 6:45	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/18/2012
		9/15/2010 7:00	9/30/2010 9:45	?	S, SC, TDS, D	Oscillates		1/18/2012
		9/30/2010 10:00	10/14/2010 13:30	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/18/2012
		10/14/2010 6:45	10/14/2010 13:30	?	S, SC, TDS, D	Oscillates	HH	1/20/2012
		11/9/2010 9:30	11/9/2010 9:30	C?	S, SC, T, TDS, D	Calibration event	HH	1/20/2012
		11/9/2010 18:15	5/12/2011 19:15	?	S, SC, TDS, D	Drops, oscillates		2/27/2012
		1/18/2011 15:30	1/18/2011 16:18	C?	S, SC, T, TDS, D	Calibration event	HH	2/15/2011
		4/4/2011 13:03	4/4/2011 14:07	C?	S, SC, T, TDS, D	Calibration event	HH	2/27/2012
		5/3/2011 10:07	5/3/2011 15:22	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/17/2011 10:30	5/20/2011 20:45	?	S, SC, TDS, D	Drops, oscillates		1/19/2012
		7/30/2011 10:00	8/18/2011 15:00	?	S, SC, TDS, D	Drops, oscillates		1/19/2012
		9/19/2011 19:00	9/22/2011 18:45	?	S, SC, TDS, D	Drops	HH	10/20/2011
		9/26/2011 21:00	9/28/2011 3:30	?	S, SC, TDS, D	Drops	HH	10/20/2011
		10/1/2011 10:30	11/2/2011 18:52	?	S, SC, TDS, D	Oscillates	HH	10/20/2011
		10/14/2011 13:30	10/14/2011 14:37	C?	S, SC, T, TDS, D	Calibration event	HH	2/27/2012
		11/2/2011 19:07	11/10/2011 11:22	E	S, SC, TDS, D	Oscillating less than 5%		1/19/2012
		11/10/2011 11:37	11/10/2011 14:30	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		11/11/2011 21:00	12/27/2011 15:00	?	S, SC, TDS, D	Oscillates		1/19/2012
		12/27/2011 15:15	12/28/2011 12:30	E	S, SC, TDS, D	Oscillating less than 5%		1/19/2012
		1/1/2012 14:00	1/18/2012 8:20	?	S, SC, TDS, D	Oscillates	HH	1/19/2012
		1/5/2012 11:45	1/5/2012 13:20	C?	S, SC, T, TDS, D	Calibration event	HH	1/19/2012
	TPGW-1D_AT_156132	9/14/2010 9:45	10/28/2010 3:15	?	S, SC, TDS, D	Oscillates		1/19/2012
		1/18/2011 15:12	1/18/2011 15:57	C?	S, SC, T, TDS, D	Calibration event	HH	2/15/2011
		4/4/2011 13:27	4/4/2011 14:22	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		4/4/2011 14:37	4/4/2011 15:52	E	S, SC, TDS, D	Oscillating less than 5%		1/19/2012
		4/4/2011 16:07	4/14/2011 15:07	?	S, SC, TDS, D	Oscillates		1/19/2012
		4/14/2011 11:07	4/14/2011 18:37	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/3/2011 9:37	5/3/2011 10:22	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/10/2011 10:22	5/11/2011 13:07	E	S, SC, TDS, D	Oscillating less than 5%		1/19/2012
		5/11/2011 13:22	6/2/2011 14:07	?	S, SC, TDS, D	Oscillates		1/19/2012
		6/2/2011 14:22	6/2/2011 16:58	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		6/8/2011 11:00	6/20/2011 12:28	?	S, SC, TDS, D	Oscillates		1/19/2012
		8/2/2011 4:00	10/14/2011 12:45	E	S, SC, TDS, D	Oscillating less than 5%		2/27/2012
		10/14/2011 13:00	10/14/2011 14:26	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/10/2011 10:41	11/10/2011 13:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/11/2012
		12/16/2011 4:15	1/5/2012 10:45	?	S, SC, TDS, D	Oscillates	HH	1/19/2012
		1/5/2012 11:00	1/5/2012 12:05	C?	S, SC, T, TDS, D	Calibration event	HH	1/19/2012
TPGW-2	TPGW-2S_AT_156123	6/22/2010 12:00	8/25/2010 16:26	E	S, SC, TDS, D	Factory initial calibration, CCV passes, no bracket		1/19/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		6/22/2010 12:00	6/27/2010 9:30	?	S, SC, TDS, D	Initial deployment, readings gradually rise and stabilize	SRH	3/1/2012
		6/29/2010 6:30	7/1/2010 18:30	?	S, SC, TDS, D	Oscillates		1/19/2012
		7/11/2010 12:00	7/18/2010 14:15	?	S, SC, TDS, D	Readings becoming unstable, gradually lowering, then oscillating	SRH	3/1/2012
		7/18/2010 14:15	7/29/2010 23:15	?	S, SC, TDS, D	Oscillates		1/19/2012
		7/29/2010 23:30	8/1/2010 9:30	E	S, SC, TDS, D	Oscillating less than 5%		1/19/2012
		8/4/2010 15:30	8/5/2010 6:30	?	S, SC, TDS, D	Oscillates		1/19/2012
		8/5/2010 6:45	8/10/2010 13:00	?	S, SC, TDS, D	After oscillations readings gradually rise then stabilized, period until stable qualified	SRH	3/1/2012
		8/25/2010 13:00	8/25/2010 20:30	C?	S, SC, TDS, D	Calibration event		1/19/2012
		8/28/2010 13:45	9/4/2010 15:30	?	S, SC, TDS, D	Drops and oscillates		1/19/2012
		10/21/2010 10:00	10/21/2010 13:00	?	S, SC, T, TDS, D	Probe was pulled		2/27/2012
		10/22/2010 13:45	10/22/2010 18:00	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		11/2/2010 20:00	11/9/2010 6:45	?	S, SC, TDS, D	Drops and oscillates		1/19/2012
		1/16/2011 11:31	1/16/2011 11:46	C?	S, SC, TDS, D	Calibration event	HH	2/15/2011
		3/18/2011 10:31	3/18/2011 13:46		S, SC, T, TDS, D	Sampling event	SRH	3/1/2012
		3/29/2011 13:31	3/29/2011 15:29	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/4/2011 10:14	5/4/2011 13:59	?	S, SC, T, TDS, D	Probe was pulled		2/27/2012
		5/20/2011 13:40	5/20/2011 14:40	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		10/6/2011 16:00	10/6/2011 17:19	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/15/2011 15:00	11/15/2011 15:30	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		11/19/2011 11:45	11/29/2011 21:30	?	S, SC, TDS, D	Oscillates		1/19/2012
		1/13/2012 14:15	1/13/2012 19:19	C?	S, SC, T, TDS, D	Calibration event	HH	1/19/2012
	TPGW-2M_AT_155882	6/22/2010 13:00	8/25/2010 16:15	E	S, SC, TDS, D	Factory initial calibration, CCV passes, no bracket		1/19/2012
		6/23/2010 20:45	6/24/2010 19:00	?	S, SC, TDS, D	Oscillates		1/19/2012
		8/25/2010 16:30	8/25/2010 17:22	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		9/6/2010 21:52	9/7/2010 0:07	?	S, SC, T, TDS, D	Temperature drop and rise over brief period, not reflected in other sites.	SRH	3/1/2012
		1/16/2011 11:11	1/16/2011 11:41	C?	S, SC, T, TDS, D	Calibration event	HH	2/15/2011
		3/29/2011 14:11	3/29/2011 15:15	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/4/2011 10:30	5/4/2011 11:45	?	S, SC, T, TDS, D	Probe was pulled		2/27/2012
		5/20/2011 13:00	5/20/2011 13:35	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		6/18/2011 17:00	7/4/2011 9:30	?	S, SC, TDS, D	Drops		1/19/2012
		10/5/2011 15:00	10/5/2011 15:48	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		10/16/2011 17:48	10/20/2011 22:03	?	S, SC, T, TDS, D	Well flooded	SRH	3/1/2012
		11/21/2011 7:15	11/27/2011 18:45	?	S, SC, TDS, D	Drops and oscillates		1/19/2012
		11/27/2011 19:00	12/24/2011 5:15	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/19/2012
		1/13/2012 13:45	1/13/2012 14:08	C?	S, SC, T, TDS, D	Calibration event	HH	1/19/2012
	TPGW-2D_AT_155887	6/22/2010 13:00	8/25/2010 16:45	E	S, SC, TDS, D	Factory initial calibration, CCV passes, no bracket		1/19/2012
		6/24/2010 0:45	6/26/2010 0:00	?	S, SC, TDS, D	Oscillates		1/19/2012
		7/18/2010 15:00	7/18/2010 15:00	?	S, SC, TDS, D	Single 15 minute drop	SRH	3/1/2012
		8/25/2010 17:00	8/25/2010 20:05	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		8/26/2010 15:20	9/2/2010 6:35	?	S, SC, TDS, D	Oscillates		1/19/2012
		9/29/2010 11:15	10/4/2010 1:15	?	S, SC, T, TDS, D	Well flooded	SRH	3/2/2012
		11/3/2010 11:30	11/5/2010 20:30	?	S, SC, T, TDS, D	Well flooded	SRH	3/2/2012
		1/16/2011 10:45	1/16/2011 13:55	C?	S, SC, T, TDS, D	Calibration event	HH	2/15/2011
		3/29/2011 14:40	3/29/2011 20:13	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		4/13/2011 10:13	4/13/2011 17:13	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/4/2011 9:58	5/4/2011 10:28	?	S, SC, T, TDS, D	Probe was pulled		2/27/2012
		5/20/2011 12:28	5/20/2011 21:13	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		6/18/2011 13:15	6/26/2011 19:15	?	S, SC, TDS, D	Oscillates		1/19/2012
		7/6/2011 10:45	7/8/2011 9:30	?	S, SC, T, TDS, D	Well flooded	SRH	3/2/2012
		7/18/2011 18:15	7/21/2011 8:45	?	S, SC, T, TDS, D	Well flooded	SRH	3/2/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPGW-3		10/5/2011 14:15	10/5/2011 17:06	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		10/8/2011 12:15	10/10/2011 16:15:00 PM	?	S, SC, T, TDS, D	Well flooded	SRH	3/2/2012
		10/16/2011 17:45	10/20/2011 3:00	?	S, SC, T, TDS, D	Well flooded	SRH	3/2/2012
		11/15/2011 14:00	11/15/2011 16:45	C?	S, SC, T, TDS, D	Calibration event	HH	2/27/2012
		12/4/2011 6:30	12/10/2011 13:30	?	S, SC, TDS, D	Oscillates	HH	1/12/2012
		12/10/2011 13:45	12/11/2011 5:30	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/19/2012
		1/13/2012 13:25	1/13/2012 19:10	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
	TPGW-3S_AT_151997	8/27/2010 13:00	8/27/2010 14:21	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		10/6/2010 22:06	10/7/2010 9:36	?	S, SC, T, TDS, D	probable surface water intrusion during surrounding flood event	SRH	3/1/2012
		12/10/2010 17:15	12/11/2010 3:45	?	S, SC, T, TDS, D	Sampling event	SRH	3/1/2012
		1/16/2011 13:29	1/16/2011 15:46	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/18/2011 13:46	3/19/2011 21:46	?	S, SC, T, TDS, D	Sampling event	SRH	3/1/2012
		3/31/2011 12:16	3/31/2011 13:22	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/4/2011 8:22	5/4/2011 15:37	C?	S, SC, T, TDS, D	Calibration event	HH	1/20/2012
		5/20/2011 11:07	5/20/2011 11:41	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		6/15/2011 12:45	6/15/2011 16:45	?	S, SC, T, TDS, D	Sampling event	SRH	3/1/2012
		10/5/2011 13:15	10/5/2011 16:27	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		11/8/2011 13:27	11/8/2011 16:04	C?	S, SC, T, TDS, D	Calibration event	HH	1/12/2012
	TPGW-3M_AT_156003	8/27/2010 13:30	8/27/2010 16:43	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		1/16/2011 13:16	1/16/2011 14:31	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/31/2011 12:47	3/31/2011 13:02	C?	S, SC, T, TDS, D	Calibration event	SRH	1/19/2012
		5/4/2011 8:32	5/4/2011 9:02	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/20/2011 10:32	5/20/2011 10:54	C?	S, SC, T, TDS, D	Calibration event	SRH	3/1/2012
		10/5/2011 12:30	10/5/2011 15:48	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/8/2011 13:03	11/8/2011 13:21	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		11/9/2011 3:06	11/23/2011 2:36	?	S, SC, TDS, D	Oscillates		1/19/2012
	TPGW-3D_AT_157230	8/27/2010 14:00	8/27/2010 17:51	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		10/6/2010 9:51	10/6/2010 18:06	?	S, SC, T, TDS, D	Well flooded	SRH	3/1/2012
		10/7/2010 23:21	10/8/2010 0:36	?	S, SC, T, TDS, D	Well flooded	SRH	3/1/2012
		1/16/2011 12:56	1/16/2011 14:56	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/31/2011 13:13	3/31/2011 14:43	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		4/13/2011 11:13	4/13/2011 13:58	?	S, SC, T, TDS, D	Probe was pulled		2/28/2012
		5/4/2011 8:58	5/4/2011 9:28	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		5/20/2011 9:43	5/20/2011 12:41	C?	S, SC, T, TDS, D	Calibration event		1/19/2012
		10/5/2011 12:00	10/5/2011 13:20	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/8/2011 12:20	11/8/2011 13:45	C?	S, SC, T, TDS, D	Calibration event		1/20/2012
TPGW-4	TPGW-4S_AT_151977	1/13/2011 11:45	1/13/2011 13:24	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/31/2011 9:24	3/31/2011 11:49	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		5/18/2011 12:34	5/18/2011 12:57	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		7/12/2011 14:00	7/12/2011 14:30	C?	S, SC, T, TDS, D	Calibration event	HH	2/28/2012
		9/8/2011 15:57	9/8/2011 16:42	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/2/2011 15:53	11/2/2011 16:26	C?	S, SC, T, TDS, D	Calibration event	HH	1/12/2012
		1/16/2012 14:00	1/16/2012 16:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/22/2012
	TPGW-4M_AT_155929	9/15/2010 18:45	9/15/2010 19:15	?	S, SC, T, TDS, D	Jumps		1/22/2012
		11/9/2010 12:15	11/9/2010 13:00	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		1/13/2011 12:00	1/13/2011 16:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/31/2011 10:15	3/31/2011 11:59	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		5/7/2011 11:29	5/7/2011 12:59	?	S, SC, T, TDS, D	Probe was pulled		2/28/2012
		5/18/2011 11:29	5/18/2011 12:40	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		9/8/2011 14:32	9/8/2011 15:04	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/2/2011 15:04	11/2/2011 16:10	C?	S, SC, T, TDS, D	Calibration event	HH	1/12/2012
		1/16/2012 14:00	1/16/2012 15:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/22/2012
	TPGW-4D_AT_156127	9/7/2010 13:30	11/16/2010 16:00	?	S, SC, TDS, D	Oscillates		1/22/2012
		11/9/2010 11:45	11/9/2010 11:45	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		11/16/2010 16:15	11/30/2010 14:45	?	S, SC, T, TDS, D	Probe was pulled		2/28/2012
		11/30/2010 15:00	3/31/2011 10:37	?	S, SC, TDS, D	Oscillates		1/22/2012
		1/13/2011 12:30	1/13/2011 13:07	C?	S, SC, T, TDS, D	Calibration event		1/22/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPGW-5	TPGW-5S_AT_156157	3/31/2011 10:52	3/31/2011 10:52	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		5/18/2011 10:45	5/18/2011 11:39	C?	S, SC, T, TDS, D	Calibration event		1/22/2012
		5/19/2011 2:54	6/16/2011 10:45	?	S, SC, TDS, D	Oscillates		2/28/2012
		6/16/2011 11:00	6/25/2011 11:30	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/22/2012
		6/19/2011 13:00	6/19/2011 13:30	?	S, SC, TDS, D	Oscillates	HH	1/22/2012
		9/8/2011 13:37	9/8/2011 14:47	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/11/2011 9:17	9/30/2011 8:47	?	S, SC, TDS, D	Oscillates	HH	10/20/2011
		11/2/2011 14:32	11/2/2011 15:03	C?	S, SC, T, TDS, D	Calibration event	HH	1/12/2012
		11/3/2011 1:18	11/14/2011 20:48	?	S, SC, TDS, D	Oscillates	HH	1/12/2012
		11/14/2011 21:03	11/16/2011 10:03	E	S, SC, TDS, D	Oscillating less than 5%	HH	1/22/2012
	TPGW-5S_AT_156157	11/10/2010 18:00	11/10/2010 19:00	C?		Residual from C/C event	HH	2/28/2012
		11/10/2010 18:00	1/19/2011 11:00	E	S, SC, TDS, D	High initial reading		1/13/2012
		1/19/2011 11:06	4/6/2011 9:24	E	S, SC, TDS, D	Low initial reading, probe 156157		1/23/2012
		1/19/2011 11:00	1/19/2011 14:09	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		1/22/2011 0:39	2/16/2011 7:09	?	S, SC, TDS, D	Oscillates		1/13/2012
		4/6/2011 9:39	4/6/2011 13:10	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		6/8/2011 12:55	6/8/2011 18:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/13/2012
		7/13/2011 1:45	7/14/2011 22:15	E	S, SC, TDS, D	Oscillating less than 5%		1/23/2012
		7/14/2011 22:30	7/29/2011 13:00	?	S, SC, TDS, D	Oscillates	HH	1/13/2012
		7/29/2011 16:00	7/29/2011 16:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/28/2012
		8/1/2011 4:30	8/25/2011 20:30	?	S, SC, TDS, D	Oscillates		1/23/2012
		9/9/2011 18:00	9/11/2011 23:15	?	S, SC, TDS, D	Oscillates	HH	2/28/2012
		9/22/2011 16:00	9/22/2011 17:15	?	S, SC, T, TDS, D	Sampling event	SRH	3/1/2012
		10/7/2010 13:15	10/7/2010 13:45	C?	S, SC, T, TDS, D	Calibration event	HH	2/28/2012
		11/10/2011 18:00	11/10/2011 20:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/13/2012
		1/5/2012 14:15	1/5/2012 17:21	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
	TPGW-5M_AT_155936	9/19/2010 9:15	9/19/2010 13:15	?	S, SC, TDS, D	Drops	HH	1/13/2012
		11/10/2010 16:30	11/10/2010 20:00	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		11/10/2010 20:15	1/19/2011 10:30	E	S, SC, TDS, D	High initial reading		1/23/2012
		11/17/2010 1:00	11/27/2010 15:45	?	S, SC, TDS, D	Oscillates		1/13/2012
		1/19/2011 10:45	1/19/2011 13:17	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		4/6/2011 10:17	4/6/2011 14:47	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		5/7/2011 14:02	5/7/2011 16:02	?	S, SC, T, TDS, D	Probe was pulled		1/23/2012
		6/8/2011 16:00	6/8/2011 23:30		S, SC, T, TDS, D	Residual from C/C event	HH	2/28/2012
		10/7/2011 11:28	10/7/2011 15:58	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/10/2011 15:58	11/10/2011 17:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/13/2012
		1/5/2012 13:57	1/5/2012 14:12	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
	TPGW-5D_AT_155939	11/10/2010 16:00	11/10/2010 17:45	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		11/10/2010 18:00	1/19/2011 10:15	E	S, SC, TDS, D	High initial reading		1/13/2012
		1/19/2011 10:00	1/19/2011 11:13	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		4/6/2011 10:58	4/6/2011 12:50	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		4/12/2011 13:20	4/12/2011 19:20	?	S, SC, T, TDS, D	Probe out of water		1/23/2012
		4/21/2011 11:50	4/28/2011 0:35	?	S, SC, TDS, D	Oscillates		1/13/2012
		6/8/2011 15:00	6/8/2011 15:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/28/2012
		7/29/2011 14:00	7/29/2011 14:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/28/2012
		10/7/2011 10:44	10/7/2011 11:31	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/10/2011 15:16	11/10/2011 15:31	C?	S, SC, T, TDS, D	Calibration event	HH	2/28/2012
		11/10/2011 15:16	11/11/2011 15:30	?	S, SC, T, TDS, D	Probe out of water	HH	1/13/2012
		1/5/2012 13:00	1/5/2012 13:54	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
TPGW-6	TPGW-6S_AT_155878	6/23/2010 10:00	8/17/2010 14:15	E	S, SC, TDS, D	Factory initial calibration, no CCV		1/13/2012
		8/17/2010 14:30	8/17/2010 14:30	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		1/11/2011 15:15	1/11/2011 17:46	C?	S, SC, T, TDS, D	Calibration event	HH	2/21/2011
		3/16/2011 14:16	3/16/2011 15:47	?	S, SC, T, TDS, D	Sampling event	SRH	3/1/2012
		3/24/2011 14:01	3/24/2011 17:31	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		5/17/2011 13:46	5/17/2011 21:53	C?	S, SC, T, TDS, D	Calibration event		1/13/2012
		7/7/2011 10:15	7/11/2011 10:15	?	S, SC, T, TDS, D	T Jumps	HH	10/20/2011
		7/13/2011 12:00	7/13/2011 12:30	C?	S, SC, T, TDS, D	Residual from C/C event	HH	2/29/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPGW-7		8/7/2011 13:30	8/8/2011 8:00	?	S, SC, T, TDS, D	T Jumps	HH	10/20/2011
		10/8/2011 18:15	10/9/2011 21:45	?	S, SC, T, TDS, D	Drops	-	2/29/2012
		10/16/2011 19:45	10/16/2011 22:15		S, SC, T, TDS, D	Probe was pulled	HH	2/29/2012
		1/9/2012 12:00	1/9/2012 13:39	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
	TPGW-6M_AT_155915	6/23/2010 9:00	8/17/2010 14:45	E	S, SC, TDS, D	Factory initial calibration, no CCV		1/13/2012
		8/17/2010 15:00	8/17/2010 15:00	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		1/11/2011 15:00	1/11/2011 16:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/21/2011
		3/24/2011 14:45	3/24/2011 16:11	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		5/17/2011 14:41	5/17/2011 16:56	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		9/6/2011 11:15	9/7/2011 23:17	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/27/2011 22:45	12/7/2011 11:45	?	S, SC, TDS, D	Drops	HH	1/13/2012
		1/9/2012 11:30	1/9/2012 16:54	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
	TPGW-6D_AT_155907	6/23/2010 9:00	8/17/2010 15:45	E	S, SC, TDS, D	Factory initial calibration, no CCV		1/13/2012
		6/25/2010 9:00	6/29/2010 21:15	?	S, SC, TDS, D	Oscillates		1/13/2012
		8/17/2010 15:45	8/17/2010 15:45	C?	S, SC, T, TDS, D	Calibration event		1/13/2012
		8/23/2010 15:00	8/23/2010 16:30	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
		1/11/2011 14:30	1/11/2011 15:54	C?	S, SC, T, TDS, D	Calibration event	HH	2/21/2011
		3/24/2011 15:24	3/24/2011 16:59	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		4/13/2011 12:59	4/13/2011 14:44	?	S, SC, T, TDS, D	Probe was pulled		1/23/2012
		5/17/2011 15:29	5/17/2011 18:33	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		9/6/2011 10:30	9/6/2011 11:26	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/28/2011 11:45	12/7/2011 10:15	?	S, SC, TDS, D	Drops	HH	1/13/2012
		1/9/2012 11:15	1/9/2012 11:55	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
TPGW-7	TPGW-7S_AT_156138	9/15/2010 18:00	9/15/2010 18:00	?	S, SC, TDS, D	Drops		1/13/2012
		9/29/2010 7:15	10/4/2010 22:45	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		10/13/2010 16:00	10/15/2010 19:45	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		10/26/2010 16:15	10/27/2010 3:22	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		1/13/2011 10:37	1/13/2011 17:14	C?	S, SC, T, TDS, D	Calibration event	HH	2/21/2011
		4/4/2011 7:59	4/4/2011 9:14	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		6/2/2011 12:14	6/2/2011 16:12	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		7/12/2011 12:00	7/12/2011 12:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/29/2012
		8/8/2011 16:15	8/9/2011 16:30	?	S, SC, T, TDS, D	Probe out of water	HH	1/23/2012
		10/8/2011 12:30	10/8/2011 14:30	?	S, SC, TDS, D	Drops	HH	10/20/2011
		10/8/2011 18:45	10/21/2011 9:08	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		10/14/2011 11:45	10/14/2011 13:08	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
	TPGW-7D_AT_157236	1/4/2012 14:15	1/4/2012 15:26	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
		10/26/2010 16:45	10/26/2010 19:22	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		11/16/2010 14:45	11/30/2010 15:00	?	S, SC, T, TDS, D	Oscillates		1/13/2012
		1/13/2011 10:21	1/13/2011 14:53	C?	S, SC, T, TDS, D	Calibration event	HH	2/21/2011
		4/4/2011 8:38	4/4/2011 8:58	C?	S, SC, T, TDS, D	Calibration event	HH	1/13/2012
		4/4/2011 9:13	4/14/2011 15:00	?	S, SC, T, TDS, D	Probe out of water	HH	1/13/2012
		4/16/2011 18:45	6/2/2011 13:00	?	S, SC, TDS, D	Oscillates		1/13/2012
		6/2/2011 11:00	6/2/2011 16:15	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		7/12/2011 12:00	7/12/2011 12:30	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		7/18/2011 18:00	7/21/2011 1:30	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2011
		10/8/2011 12:30	10/22/2011 18:46	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		10/14/2011 11:30	10/14/2011 14:00	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/14/2011 15:00	11/14/2011 17:15	C?	S, SC, T, TDS, D	Residual from C/C event	HH	2/29/2012
	TPGW-7D_AT_157236	11/17/2011 15:45	12/1/2011 23:45	?	S, SC, TDS, D	Oscillates from 0.27 to 0.32	HH	2/29/2012
		1/4/2012 14:04	1/4/2012 14:34	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
		10/26/2010 17:25	10/26/2010 18:28	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		1/13/2011 9:43	1/13/2011 14:16	C?	S, SC, T, TDS, D	Calibration event	HH	2/21/2011
		4/4/2011 10:01	4/4/2011 10:57	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		4/14/2011 13:12	4/14/2011 18:42	?	S, SC, T, TDS, D	Probe was pulled		1/23/2012
		6/2/2011 10:12	6/2/2011 11:31	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		7/18/2011 18:00	7/22/2011 20:45	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2011

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		8/7/2011 16:30	8/8/2011 0:15	?	S, SC, T, TDS, D	potential surface water intrustion from flooding	SRH	2/29/2011
		10/13/2011 9:00	10/17/2011 3:10	?	S, SC, T, TDS, D	potential surface water intrustion from flooding	SRH	2/29/2011
		10/14/2011 11:00	10/14/2011 11:40	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		1/4/2012 13:43	1/4/2012 14:13	C?	S, SC, T, TDS, D	Calibration event	HH	1/23/2012
TPGW-8	TPGW-8S_AT_155890	9/15/2010 11:00	9/16/2010 12:00	?	S, SC, TDS, D	Starts low		1/15/2012
		9/20/2010 13:00	9/21/2010 1:46	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		10/26/2010 9:45	10/26/2010 16:11	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		12/8/2010 15:11	12/9/2010 5:11	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		1/4/2011 13:11	1/4/2011 17:57	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/3/2011 11:42	3/4/2011 14:27	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		3/24/2011 11:27	3/24/2011 20:48	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		5/17/2011 9:03	5/17/2011 11:49	C?	S, SC, T, TDS, D	Calibration event	HH	1/15/2012
		6/6/2011 11:34	6/7/2011 20:19	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		7/11/2011 16:00	7/11/2011 17:00	C?		Residual from C/C event	HH	2/29/2012
		8/6/2011 18:00	8/6/2011 22:00	?	S, SC, T, TDS, D	Drops	HH	1/24/2012
		8/7/2011 14:15	8/7/2011 19:30	?	S, SC, T, TDS, D	Drops	HH	1/24/2012
		8/13/2011 17:00	8/13/2011 21:15	?	S, SC, T, TDS, D	Drops	HH	1/24/2012
		9/2/2011 11:15	9/2/2011 22:00	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		9/8/2011 11:43	9/8/2011 14:43	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		10/8/2011 12:28	10/9/2011 3:43	?	S, SC, T, TDS, D	Drops	HH	10/20/2011
		11/14/2011 13:00	11/14/2011 14:00	C?		Residual from C/C event	HH	2/29/2012
		1/4/2012 12:00	1/4/2012 14:57	C?	S, SC, T, TDS, D	Calibration event	HH	1/15/2012
		10/26/2010 10:14	10/26/2010 12:44	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
	TPGW-8M_AT_154937	10/26/2010 10:29	1/4/2011 12:44	E	S, SC, TDS, D	High initial reading		1/15/2012
		1/4/2011 13:00	1/4/2011 17:15	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/24/2011 12:30	3/24/2011 14:34	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		5/17/2011 10:04	5/17/2011 11:23	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		7/11/2011 14:30	7/11/2011 17:00	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/8/2011 11:14	9/8/2011 12:44	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/14/2011 12:00	11/14/2011 17:30	C?		Residual from C/C event	HH	2/29/2012
		1/4/2012 11:45	1/4/2012 12:30	C?	S, SC, T, TDS, D	Calibration event	HH	1/15/2012
		10/13/2010 14:45	10/14/2010 7:15	?	S, SC, TDS, D	Drops		1/15/2012
	TPGW-8D_AT_154926	10/26/2010 10:30	10/26/2010 16:23	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		1/4/2011 12:23	1/4/2011 17:12	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/24/2011 12:57	3/24/2011 16:26	C?	S, SC, T, TDS, D	Calibration event		1/23/2012
		5/17/2011 10:56	5/17/2011 11:35	C?	S, SC, T, TDS, D	Calibration event	HH	1/15/2012
		7/11/2011 13:45	7/11/2011 15:15	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/8/2011 10:45	9/8/2011 13:17	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		10/8/2011 12:02	10/9/2011 23:02	?	S, SC, T, TDS, D	Drops	HH	1/24/2012
		11/14/2011 11:00	11/14/2011 13:00	C?		Residual from C/C event	HH	2/29/2012
		1/4/2012 11:00	1/4/2012 12:49	C?	S, SC, T, TDS, D	Calibration event	HH	1/15/2012
TPGW-9	TPGW-9S_AT_155889	6/24/2010 9:00	8/16/2010 12:00	E	S, SC, TDS, D	Factory initial calibration, no CCV		1/16/2012
		6/25/2010 9:15	6/25/2010 11:15	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		8/16/2010 12:15	8/16/2010 13:15	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		8/24/2010 8:00	8/24/2010 8:30	?	S, SC, T, TDS, D	Probe redeployed		1/16/2012
		9/15/2010 10:00	9/15/2010 12:15	?	S, SC, T, TDS, D	Drop and increase	HH	1/16/2012
		10/25/2010 14:30	10/25/2010 23:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		12/8/2010 13:15	12/8/2010 14:30	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		1/4/2011 14:15	1/4/2011 16:04	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/24/2011 10:20	3/24/2011 11:20	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		5/16/2011 10:50	5/16/2011 12:28	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		7/11/2011 11:15	7/11/2011 12:30	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		6/6/2011 9:13	6/6/2011 10:13	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		9/2/2011 9:15	9/2/2011 10:00	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		9/8/2011 8:54	9/8/2011 9:54	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		1/9/2012 13:15	1/9/2012 14:45	?	S, SC, T, TDS, D	All parameters "-16"	HH	1/24/2012
	TPGW-9M_AT_156175	6/24/2010 10:00	8/16/2010 12:15	E	S, SC, TDS, D	Factory initial calibration, no CCV		1/16/2012
		8/16/2010 12:30	8/16/2010 13:15	C?	S, SC, T, TDS, D	Calibration event		1/16/2012
		8/24/2010 8:00	8/24/2010 8:00	?	S, SC, T, TDS, D	Probe redeployed	HH	1/24/2012
		9/15/2010 10:45	9/15/2010 14:00	?	S, SC, T, TDS, D	Jumps and drops		1/24/2012
		10/25/2010 15:30	10/25/2010 15:30	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		11/4/2011 11:15	11/6/2011 12:00	?	S, SC, T, TDS, D	Oscillates	HH	1/24/2012
		12/8/2010 13:00	12/8/2010 22:15	?	S, SC, T, TDS, D	Probe redeployed	HH	1/24/2012
		1/4/2011 14:15	1/4/2011 21:58	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/24/2011 9:28	3/24/2011 19:00	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		5/16/2011 12:15	5/17/2011 3:09	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		7/11/2011 10:45	7/11/2011 14:15	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/8/2011 8:31	9/8/2011 10:03	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/22/2011 15:02	11/22/2011 17:30	C?	S, SC, T, TDS, D	Calibration event	HH	2/29/2012
		1/9/2012 13:15	1/9/2012 22:45	?	S, SC, T, TDS, D	All parameters "-16"	HH	1/24/2012
	TPGW-9D_AT_155879	6/24/2010 10:00	8/17/2010 11:45	E	S, SC, TDS, D	Factory initial calibration, no CCV		1/16/2012
		6/30/2010 14:00	6/30/2010 16:00	?	S, SC, T, TDS, D	Probe was pulled		1/24/2012
		8/16/2010 12:30	8/16/2010 14:15	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		8/17/2010 12:00	8/17/2010 12:00	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		10/6/2010 12:30	10/7/2010 9:45	?	S, SC, T, TDS, D	Oscillates		1/24/2012
		10/25/2010 15:15	10/25/2010 15:15	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		12/8/2010 13:00	12/8/2010 17:00	?	S, SC, T, TDS, D	Probe redeployed	HH	1/24/2012
		1/4/2011 15:00	1/4/2011 17:56	C?	S, SC, T, TDS, D	Calibration event	HH	2/16/2011
		3/24/2011 8:26	3/24/2011 11:40	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		4/12/2011 8:10	4/12/2011 13:40	?	S, SC, T, TDS, D	Probe was pulled		1/24/2012
		5/16/2011 13:10	5/16/2011 17:38	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		9/6/2011 14:02	9/6/2011 14:17	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		1/9/2012 13:15	1/9/2012 16:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/24/2012
TPGW-10	TPGW-10S_AT_165871	9/4/2010 17:30	9/6/2010 0:15	?	S, SC, TDS, D	Oscillates		1/16/2012
		1/21/2011 14:39	1/21/2011 14:57	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/10/2011 9:57	3/10/2011 10:23	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		5/5/2011 7:38	5/5/2011 7:58	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		6/22/2011 14:30	6/22/2011 14:45	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/21/2011 7:45	9/21/2011 9:43	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		11/4/2011 8:43	11/4/2011 9:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
	TPGW-10M_AT_164529	9/7/2010 7:45	9/10/2010 12:30	?	S, SC, TDS, D	Oscillates		1/16/2012
		1/21/2011 14:29	1/21/2011 14:59	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/10/2011 11:30	3/10/2011 11:45	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		5/5/2011 8:16	5/5/2011 9:16	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		6/22/2011 15:00	6/22/2011 15:15	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		8/2/2011 9:00	8/2/2011 10:00	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		9/21/2011 8:30	9/21/2011 10:04	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		11/4/2011 7:49	11/4/2011 8:51	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
	TPGW-10D_AT_168177	9/5/2010 14:45	9/22/2010 23:15	?	S, SC, TDS, D	Oscillates		1/16/2012
		11/17/2010 9:00	11/17/2010 11:00	C?	S, SC, T, TDS, D	Calibration event	HH	2/29/2012
		1/21/2011 14:00	1/21/2011 15:15	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/10/2011 11:45	3/10/2011 12:53	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		4/18/2011 12:08	4/18/2011 18:23	?	S, SC, T, TDS, D	Calibration event		1/24/2012
		5/5/2011 8:38	5/5/2011 10:03	C?	S, SC, T, TDS, D	Calibration event		1/24/2012
		6/20/2011 13:45	6/22/2011 14:15	?	S, SC, TDS, D	Drops and oscillates	HH	10/20/2011
		6/22/2011 14:30	6/22/2011 15:00	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		8/2/2011 8:15	8/2/2011 9:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		9/21/2011 9:00	9/21/2011 9:56	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		11/4/2011 7:55	11/4/2011 8:10	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
TPGW-11	TPGW-11S_AT_165269	9/23/2010 12:00	9/23/2010 12:30	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		11/17/2010 14:00	11/17/2010 15:15	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		11/17/2010 14:00	1/21/2011 13:15	E	S, SC, TDS, D	High initial reading		3/20/2012
		1/21/2011 13:30	1/21/2011 14:05	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		3/11/2011 14:05	3/11/2011 14:42	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		4/29/2011 11:57	4/29/2011 12:31	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		6/22/2011 11:46	6/22/2011 13:08	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		11/3/2011 13:00	11/3/2011 14:07	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
	TPGW-11M_AT_165283	11/17/2010 12:00	1/21/2011 12:45	E	S, SC, TDS, D	High initial reading		3/20/2012
		11/17/2010 12:00	11/17/2010 12:15	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		1/21/2011 12:57	1/21/2011 14:57	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/11/2011 13:12	3/11/2011 14:31	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		4/29/2011 10:01	4/29/2011 10:59	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		6/22/2011 12:29	6/22/2011 13:44	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		9/16/2011 12:00	9/16/2011 12:00	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
	TPGW-11D_AT_165277	9/23/2010 10:45	9/23/2010 10:45	?	S, SC, TDS, D	Sampling event	SRH	2/29/2011
		9/26/2010 20:15	9/28/2010 18:30	?	S, SC, TDS, D	Oscillates		3/20/2012
		11/17/2010 13:00	11/17/2010 13:45	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		11/17/2010 13:00	1/21/2011 12:00	E	S, SC	High initial reading		3/20/2012
		1/21/2011 12:15	1/21/2011 14:49	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/11/2011 13:19	3/11/2011 16:11	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		4/20/2011 10:11	4/20/2011 15:11	?	S, SC, T, TDS, D	Probe out of water		3/20/2012
		4/29/2011 9:11	4/29/2011 9:33	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		6/22/2011 11:18	6/22/2011 12:45	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		8/3/2011 10:00	8/3/2011 10:15	?	S, SC, T, TDS, D	Newly deployed	HH	1/16/2012
		11/3/2011 11:15	11/3/2011 12:22	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
TPGW-12	TPGW-12S_AT_155925	8/26/2010 15:15	8/26/2010 16:45	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		9/6/2010 21:59	9/8/2010 23:46	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		9/20/2010 10:30	9/25/2010 12:00	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		10/4/2010 21:00	10/11/2010 23:45	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		11/5/2010 12:00	11/5/2010 12:21	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		11/14/2010 17:00	11/14/2010 17:45	?	S, SC, T, TDS, D	Drops		3/20/2012
		11/15/2010 17:30	11/15/2010 18:30	?	S, SC, T, TDS, D	Drops		3/20/2012
		11/16/2010 6:00	11/16/2010 7:30	?	S, SC, T, TDS, D	Drops		3/20/2012
		11/16/2010 7:45	11/17/2010 6:15	?	S, SC, T, TDS, D	sharp drop, then gradual rise, maintenance event	SRH	2/29/2012
		1/18/2011 9:46	1/18/2011 12:31	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/25/2011 13:50	3/25/2011 14:35	?	S, SC, T, TDS, D	Jumps		3/20/2012
		5/31/2011 14:20	5/31/2011 14:57	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		8/25/2011 7:00	8/25/2011 8:00	?	S, SC, T, TDS, D	possible surface water intrustion	SRH	2/29/2012
		8/25/2011 19:45	8/25/2011 20:00	?	S, SC, T, TDS, D	possible surface water intrustion	SRH	2/29/2012
		8/27/2011 8:45	8/30/2011 19:45	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2012
		9/30/2011 10:52	9/30/2011 11:07	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		10/6/2011 18:22	10/30/2011 14:52	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2011
		11/2/2011 2:37	11/14/2011 18:37	?	S, SC, T, TDS, D	Well flooded	SRH	2/29/2011
		11/24/2011 22:07	11/25/2011 6:38	?	S, SC, T, TDS, D	possible surface water intrustion	SRH	2/29/2011
		11/25/2011 23:07	11/25/2011 23:38	?	S, SC, T, TDS, D	possible surface water intrustion	SRH	2/29/2011
		11/26/2011 11:37	11/26/2011 12:23	?	S, SC, T, TDS, D	possible surface water intrustion	SRH	2/29/2011
		1/10/2012 10:30	1/10/2012 10:50	C?	S, SC, T, TDS, D	Calibration event	HH	1/24/2012
	TPGW-12M_AT_157272	8/26/2010 15:30	8/26/2010 15:45	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		1/18/2011 10:00	1/18/2011 10:15	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/25/2011 14:15	3/25/2011 15:26	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		5/4/2011 14:41	5/4/2011 15:26	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		5/31/2011 13:27	5/31/2011 13:57	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		6/20/2011 12:45	7/4/2011 12:45	?	S, SC, TDS, D	Oscillates		3/20/2012
		9/30/2011 10:15	9/30/2011 10:32	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		12/5/2011 8:15	12/20/2011 7:15	?	S, SC, TDS, D	Drops and oscillates	HH	1/16/2012
		1/10/2012 10:00	1/10/2012 10:24	C?	S, SC, T, TDS, D	Calibration event	HH	1/24/2012
	TPGW-12D_AT_155922	6/29/2010 10:00	7/1/2010 0:00	?	S, SC, TDS, D	Drops		3/20/2012
		8/26/2010 16:00	8/26/2010 16:28	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		8/31/2010 18:00	9/3/2010 21:00	?	S, SC, TDS, D	Oscillates		3/20/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		11/5/2010 12:30	11/5/2010 12:30	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		1/18/2011 10:15	1/18/2011 13:33	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/25/2011 15:03	3/25/2011 16:48	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		4/13/2011 8:18	4/13/2011 10:33	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		5/4/2011 11:48	5/4/2011 14:33	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		5/31/2011 11:47	5/31/2011 12:32	C?	S, SC, T, TDS, D	Calibration event	HH	1/16/2012
		9/30/2011 9:42	9/30/2011 12:42	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		1/10/2012 9:30	1/10/2012 11:40	C?	S, SC, T, TDS, D	Calibration event	HH	1/24/2012
TPGW-13	TPGW-13S_AT_155892	6/28/2010 1:30	6/28/2010 6:15	?	S, SC, TDS, D	Oscillates		3/20/2012
		6/30/2010 12:00	6/30/2010 13:15	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		8/26/2010 12:30	8/26/2010 12:38	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		9/1/2010 9:15	9/1/2010 9:15	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		9/29/2010 17:15	9/29/2010 17:15	?	T	Single aberrant reading	SRH	2/29/2011
		11/10/2010 10:30	11/10/2010 10:30	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		12/9/2010 15:30	12/9/2010 16:00	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2010
		12/9/2010 16:15	12/9/2010 16:15	?	T	Sampling event	SRH	2/29/2010
		1/27/2011 11:30	1/27/2011 11:52	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/9/2011 13:22	3/9/2011 14:08	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2011
		3/9/2011 15:07	3/9/2011 17:07	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		3/30/2011 9:37	3/30/2011 11:01	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		5/19/2011 11:46	5/19/2011 14:14	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		9/14/2011 10:45	9/14/2011 11:48	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		12/4/2011 6:15	12/23/2011 22:45	?	S, SC, TDS, D	Drops		
		12/25/2011 12:45	1/4/2012 12:00	?	S, SC, TDS, D	Drops		
		1/11/2012 10:15	1/11/2012 12:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/24/2012
	TPGW-13M_AT_155897	6/25/2010 11:15	6/25/2010 12:45	?	S, SC, TDS, D	Drops		3/21/2012
		6/27/2010 15:30	6/30/2010 11:15	?	S, SC, TDS, D	Drops		3/21/2012
		6/30/2010 11:30	6/30/2010 13:30	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		8/2/2010 0:00	8/26/2010 10:45	?	S, SC, TDS, D	Oscillates		3/21/2012
		8/26/2010 11:00	8/26/2010 13:45	C?	S, SC, T, TDS, D	Calibration event	HH	1/17/2012
		8/26/2010 20:00	1/27/2011 14:00	?	S, SC, TDS, D	Oscillates		3/21/2012
		9/29/2010 17:15	9/29/2010 17:30	?	T	Aberrant reading, probably maintenance event	SRH	2/29/2012
		11/10/2010 9:45	11/10/2010 11:30	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		1/27/2011 10:45	1/27/2011 14:00	?	T	Calibration event	SRH	2/29/2011
		3/9/2011 14:46	3/9/2011 15:46	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		5/19/2011 10:59	5/19/2011 12:29	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		7/17/2011 10:45	7/30/2011 19:00	?	S, SC, T, TDS, D	Oscillates		3/21/2012
		8/4/2011 11:00	8/4/2011 11:00	?	S, SC, T, TDS, D	Single aberrant reading	SRH	2/29/2011
		8/31/2011 8:15	8/31/2011 15:30	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/14/2011 8:45	9/14/2011 9:00	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		9/14/2011 9:15	9/15/2011 11:00	?	S, SC, T, TDS, D	Probe out of water	HH	1/17/2012
		9/18/2011 4:15	10/6/2011 21:00	?	S, SC, TDS, D	Oscillates	HH	10/20/2011
		11/21/2011 20:15	12/14/2011 12:45	?	S, SC, TDS, D	Oscillates	HH	1/17/2012
		12/17/2011 3:45	12/24/2011 6:30	?	S, SC, TDS, D	Oscillates	HH	1/17/2012
		1/11/2012 10:15	1/11/2012 12:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/25/2012
	TPGW-13D_AT_154952	6/24/2010 13:45	6/30/2010 11:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		6/30/2010 11:45	6/30/2010 16:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/25/2012
		7/17/2010 9:00	9/14/2010 19:45	?	S, SC, TDS, D	Oscillates		3/21/2012
		8/26/2010 10:00	8/26/2010 16:15	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		10/7/2010 12:45	10/9/2010 23:15	?	S, SC, TDS, D	Oscillates		3/21/2012
		10/31/2010 17:00	11/1/2010 14:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		11/4/2010 19:00	11/4/2010 21:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		11/7/2010 18:00	11/7/2010 20:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		11/15/2010 3:45	11/24/2010 7:15	?	S, SC, TDS, D	Oscillates		3/21/2012
		1/27/2011 10:30	1/27/2011 13:19	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/9/2011 12:34	3/9/2011 18:30	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		3/14/2011 3:30	3/18/2011 18:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		4/14/2011 8:45	4/14/2011 19:30	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		4/18/2011 1:45	4/23/2011 14:45	?	S, SC, TDS, D	Oscillates		3/21/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPGW-14		5/4/2011 7:45	5/4/2011 14:15	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		5/19/2011 9:47	5/19/2011 18:02	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		5/23/2011 13:17	5/28/2011 21:47	?	S, SC, TDS, D	Oscillates	HH	10/20/2011
		6/20/2011 13:30	6/22/2011 15:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		7/24/2011 1:45	7/25/2011 11:30	E	S, SC, TDS, D	Oscillating less than 5%		3/21/2012
		8/4/2011 11:00	8/4/2011 18:15	?	S, SC, TDS, D	Oscillates	HH	10/20/2011
		9/14/2011 9:30	9/14/2011 11:29	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/14/2011 11:44	11/16/2011 12:14	?	S, SC, T, TDS, D	Zero readings. Apparent lightning strike.	HH	1/17/2012
		11/20/2011 9:30	11/26/2011 5:15	?	S, SC, TDS, D	Oscillates	HH	1/17/2012
	TPGW-14S_AT_156173	9/21/2010 9:30	9/24/2010 5:00	?	S, SC, TDS, D	Oscillates		3/21/2012
		9/27/2010 16:00	9/27/2010 16:30	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		11/17/2010 15:00	11/17/2010 15:00	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		12/14/2010 10:15	12/14/2010 12:30	?	S, SC, T, TDS, D	Sampling event	HH	3/21/2012
		1/21/2011 10:28	1/21/2011 12:13	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/11/2011 11:00	3/11/2011 14:30	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		4/28/2011 12:00	4/28/2011 12:52	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		11/3/2011 9:45	11/3/2011 12:00	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
	TPGW-14M_AT_156137	9/23/2010 9:45	9/27/2010 2:45	?	S, SC, TDS, D	Oscillates		3/21/2012
		9/27/2010 16:00	9/27/2010 16:00	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		10/1/2010 13:00	10/5/2010 11:30	?	S, SC, TDS, D	Oscillates		3/21/2012
		11/17/2010 16:00	11/17/2010 16:30	C?	S, SC, T, TDS, D	Calibration event	HH	1/25/2012
		12/14/2010 9:30	12/14/2010 10:00	?	S, SC, T, TDS, D	Sampling event	SRH	2/29/2012
		1/18/2011 20:45	1/21/2011 4:45	?	S, SC, TDS, D	Oscillates		3/21/2012
		1/21/2011 10:11	1/21/2011 12:56	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/11/2011 10:25	3/11/2011 12:55	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		4/28/2011 11:21	4/28/2011 13:21	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		9/16/2011 11:30	9/16/2011 12:06	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/3/2011 9:06	11/3/2011 10:02	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
	TPGW-14D_AT_156192	9/19/2010 21:15	9/19/2010 21:15	?	S, SC, TDS, D	Jumps		3/21/2012
		9/24/2010 4:30	9/27/2010 14:45	?	S, SC, TDS, D	Drops and oscillates		3/21/2012
		9/27/2010 15:00	9/27/2010 20:00	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		11/17/2010 14:00	11/17/2010 15:00	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		1/21/2011 9:15	1/21/2011 10:08	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/11/2011 9:38	3/11/2011 10:40	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		4/19/2011 9:55	4/19/2011 12:10	?	S, SC, T, TDS, D	Probe out of water		3/21/2012
		4/28/2011 9:55	4/28/2011 10:28	C?	S, SC, T, TDS, D	Calibration event		3/21/2012
		9/16/2011 10:45	9/16/2011 11:23	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
		11/3/2011 8:39	11/3/2011 10:31	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011
BBSW								
TPBBSW-1 AT100	TPBBSW-1B_AT_186147	11/16/2010 13:30	11/16/2010 13:45	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		6/21/2011 10:45	6/21/2011 10:45	C?	S, SC, T, TDS, D	Calibration event	HH	10/25/2011
		8/1/2011 11:30	8/1/2011 12:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/6/2012
		9/9/2011 0:45	9/9/2011 1:00	?	S, SC, T, TDS, D	Drops	HH	1/9/2012
		9/14/2011 11:30	9/16/2011 14:00	?	S, SC, T, TDS, D	Drops	HH	1/9/2012
		9/28/2011 17:00	9/29/2011 11:00	?	S, SC, T, TDS, D	High	HH	1/9/2012
TPBBSW-2 AT100	TPBBSW-2B_AT_186129	11/16/2010 16:00	11/16/2010 17:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		4/29/2011 10:45	4/29/2011 10:45	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		6/21/2011 11:30	6/21/2011 11:30	C?	S, SC, T, TDS, D	Calibration event	HH	10/25/2011
		9/16/2011 13:00	9/16/2011 13:00	C?	S, SC, T, TDS, D	Calibration event	HH	10/25/2011
		11/1/2011 10:00	11/1/2011 10:00	C?	S, SC, T, TDS, D	Calibration event		3/6/2012
TPBBSW-3 AT200	TPBBSW-3B_AT_156059	9/17/2010 17:00	6/13/2011 12:00	G	L	Calculated	HH	3/20/2012
		9/20/2010 16:45	9/22/2010 18:00	?	S, SC, TDS, D	Drops	HH	1/9/2012
		11/15/2010 0:00	1/21/2011 13:00	E	S, SC, TDS, D	Estimated	HH	3/20/2012
		1/21/2011 13:15	1/21/2011 13:16	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/17/2011
		9/16/2011 13:02	9/16/2011 13:21	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/20/2012
		11/3/2011 12:45	11/3/2011 12:45	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/20/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		11/3/2011 13:00	12/1/2011 23:45	E	L	Estimated		3/20/2012
TPBBSW-4 AT100	TPBBSW-4B_AT_186139	11/16/2010 13:30	11/16/2010 13:45	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		3/8/2011 9:45	3/8/2011 10:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		6/21/2011 9:45	6/21/2011 9:45	C?	S, SC, T, TDS, D	Calibration event	HH	10/25/2011
		8/2/2011 10:00	8/2/2011 10:00	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		11/1/2011 9:15	11/1/2011 9:15	C?	S, SC, T, TDS, D	Calibration event		3/6/2012
TPBBSW-5 AT100	TPBBSW-5B_AT_186147	11/16/2010 14:30	11/16/2010 15:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		11/16/2010 15:15	11/30/2010 15:00	?	S, SC, T, TDS, D	Probe out of water	HH	1/9/2012
		3/8/2011 11:15	3/8/2011 11:15	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		6/21/2011 9:00	6/21/2011 9:00	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		8/1/2011 8:45	8/1/2011 8:45	C?	S, SC, T, TDS, D	Calibration event	HH	1/9/2012
		11/1/2011 8:30	11/1/2011 8:30	C?	S, SC, T, TDS, D	Calibration event		3/6/2012
TPBBSW-10 AT200	TPBBSW-10B_AT_156390	2/9/2011 13:00	3/7/2011 12:15	?	L			3/20/2012
		2/9/2011 13:00	8/2/2011 12:00	E	L			3/20/2012
		9/21/2011 7:15	9/21/2011 7:19	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/9/2012
		11/4/2011 9:02	11/4/2011 9:02	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/9/2012
TPBBSW-14 AT200	TPBBSW-14B_AT_156284	2/14/2011 12:30	6/13/2011 10:00	G	L			3/20/2012
		2/14/2011 12:30	12/1/2011 23:45	E	L			3/20/2012
		3/22/2011 5:45	3/22/2011 5:45	?	S, SC, T, D	Single aberrant reading	HH	3/6/2012
		9/16/2011 10:00	9/16/2011 10:02	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/9/2012
		11/3/2011 8:00	11/3/2011 8:03	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/9/2012
CCS								
TPSWCCS-1 AT200	TPSWCCS-1B_AT_155414	1/14/2011 13:00	1/14/2011 13:10	C?	P, S, SC, T, TDS, D, L	Calibration event		3/6/2012
		3/29/2011 10:55	5/1/2011 7:00	?	P, S, SC, D	Drops		3/20/2012
		9/7/2011 13:43	9/7/2011 13:58	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	10/20/2011
TPSWCCS-2 AT200	TPSWCCS-2B_AT_177085	11/10/2010 11:00	11/10/2010 11:00	C?	P, S, SC, T, TDS, D, L	Calibration event		3/20/2012
		12/9/2010 15:15	12/10/2010 13:30	?	S, SC, TDS, D	Oscillates		3/20/2012
		1/14/2011 11:45	1/14/2011 12:00	C?	P, S, SC, T, TDS, D, L	Calibration event		3/20/2012
		2/8/2011 2:00	2/8/2011 2:00	?	S, SC, TDS, D	Single aberrant reading		3/20/2012
		2/8/2011 17:00	2/8/2011 17:00	?	S, SC, TDS, D	Single aberrant reading		3/20/2012
		2/21/2011 3:45	2/21/2011 3:45	?	S, SC, TDS, D	Single aberrant reading		3/20/2012
		2/22/2011 12:15	2/22/2011 12:15	?	S, SC, TDS, D	Single aberrant reading		3/20/2012
		2/24/2011 15:45	2/24/2011 15:45	?	S, SC, TDS, D	Single aberrant reading		3/20/2012
		2/27/2011 10:00	2/27/2011 11:15	?	S, SC, TDS, D	Drops		3/20/2012
		5/19/2011 14:00	5/19/2011 14:00	C?	P, S, SC, T, TDS, D, L	Calibration event		3/20/2012
TPSWCCS-3 AT200	TPSWCCS-3B_AT_156361	1/14/2011 10:45	1/14/2011 10:53	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		3/28/2011 10:30	3/28/2011 10:42	C?	P, S, SC, T, TDS, D, L	Calibration event		3/6/2012
		6/6/2011 14:00	6/6/2011 16:15	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/9/2012
		9/5/2011 21:00	9/5/2011 21:15	?	S, SC, TDS, D	Jumps	HH	1/9/2012
		9/7/2011 12:58	9/7/2011 13:13	C	P, S, SC, T, TDS, D, L	Calibration event	HH	10/20/2011
		11/16/2011 18:00	11/17/2011 13:15	?	S, SC, TDS, D	Drops	HH	1/9/2012
TPSWCCS-4	TPSWCCS-4T_AT_156473	11/8/2010 13:30	11/8/2010 13:30	C?	P, S, SC, T, TDS, D, L	Calibration event		3/6/2012
		1/14/2011 13:59	1/14/2011 14:14	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
		3/31/2011 15:14	3/31/2011 15:37	C?	P, S, SC, T, TDS, D, L	Calibration event		3/6/2012
		9/9/2011 12:30	9/9/2011 12:36	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
		10/5/2011 10:36	10/5/2011 10:36	C?	P, S, SC, T, TDS, D, L	Calibration event		3/20/2012
		10/5/2011 11:21	10/5/2011 11:21	?	S, SC, TDS, D	Single aberrant reading	SH	2/25/2011
		11/7/2011 11:24	11/7/2011 11:39	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
	TPSWCCS-4B_AT_155834	1/14/2011 14:00	1/14/2011 14:07	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/31/2011 15:22	3/31/2011 15:35	C?	S, SC, T, TDS, D	Calibration event		3/6/2012
		9/9/2011 12:26	9/9/2011 12:41	C?	S, SC, T, TDS, D	Calibration event	HH	10/20/2011

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		11/7/2011 11:11	11/7/2011 11:43	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
TPSWCCS-5	TPSWCCS-5T_AT_156471	11/8/2010 14:30	11/8/2010 14:45	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/6/2012
		1/16/2011 14:16	3/3/2011 11:47	E	S, SC, TDS, D	High initial reading	HH	1/10/2012
		1/16/2011 14:16	1/16/2011 14:31	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		3/30/2011 10:46	3/30/2011 11:07	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/6/2012
		9/9/2011 11:06	9/9/2011 11:39	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	10/20/2011
		11/7/2011 10:09	11/7/2011 10:35	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
	TPSWCCS-5B_AT_164536	9/5/2010 15:15	9/7/2010 21:45	?	S, SC, TDS, D	Drops		3/20/2012
		10/1/2010 13:30	11/8/2010 14:15	?	S, SC, TDS, D	Drops over time		3/20/2012
		11/8/2010 15:00	11/8/2010 15:30	C?	S, SC, T, TDS, D	Calibration event		3/6/2012
		1/11/2011 0:45	1/11/2011 12:07	?	S, SC, TDS, D	half need to be removed		3/20/2012
		1/16/2011 14:15	1/16/2011 14:24	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		1/21/2011 16:09	7/22/2011 11:00	?	S, SC, TDS, D	Drops		3/6/2012
		3/30/2011 10:54	3/30/2011 11:26	C?	S, SC, T, TDS, D	Calibration event		3/20/2012
		9/9/2011 10:53	9/9/2011 11:30	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
		10/9/2011 15:45	10/18/2011 11:00	?	S, SC, TDS, D	Drops and oscillates	HH	10/20/2011
		10/18/2011 11:15	11/7/2011 10:00	?	S, SC, TDS, D	Oscillates	HH	1/10/2012
		11/7/2011 10:15	11/7/2011 10:38	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
TPSWCCS-6	TPSWCCS-6T_AT_156297	9/16/2010 4:00	9/16/2010 4:15	?	S, SC, TDS, D	Drops		3/6/2012
		9/16/2010 18:45	9/16/2010 19:00	?	S, SC, TDS, D	Drops		3/6/2012
		1/18/2011 10:45	1/18/2011 11:09	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		5/4/2011 12:45	5/5/2011 2:00	?	P, S, SC, T, TDS, D, L	Drops		3/6/2012
		9/9/2011 9:05	9/9/2011 9:48	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	10/20/2011
		11/7/2011 13:03	11/7/2011 13:30	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
	TPSWCCS-6B_AT_164475	11/5/2010 15:00	11/5/2010 15:30	?		Drops		3/6/2012
		1/18/2011 10:45	1/18/2011 11:04	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/30/2011 14:34	3/30/2011 15:02	C?	S, SC, T, TDS, D	Calibration event	HH	3/6/2012
		6/14/2011 13:02	6/14/2011 14:14	C?	S, SC, T, TDS, D	Calibration event	HH	3/6/2012
		8/1/2011 12:00	9/16/2011 13:46	?	S, SC, T, TDS, D	Drops and oscillates	HH	1/10/2012
		11/7/2011 13:15	11/7/2011 13:32	C?		Calibration event		3/20/2012
TPSWCCS-7	TPSWCCS-7B_AT_155247	9/27/2010 7:45	10/1/2010 19:30	?	S, SC, TDS, D	Drops		3/6/2012
		10/3/2010 17:00	10/3/2010 18:15	?	S, SC, TDS, D	Drops		3/6/2012
		10/4/2010 4:15	10/4/2010 8:30	?	S, SC, TDS, D	Drops		3/6/2012
		10/4/2010 11:30	10/4/2010 11:45	?	S, SC, TDS, D	Drops		3/6/2012
		11/10/2010 12:15	11/10/2010 12:30	C?	P, S, SC, T, TDS, D, L	Calibration event		3/6/2012
		1/14/2011 11:30	1/14/2011 11:30	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		3/26/2011 11:15	3/26/2011 11:30	?	S, SC, TDS, D	Drops		3/6/2012
		3/28/2011 4:30	3/28/2011 10:00	?	S, SC, TDS, D	Drops		3/6/2012
		3/28/2011 12:00	3/28/2011 12:15	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/6/2012
		4/20/2011 19:45	4/21/2011 17:15	?	S, SC, TDS, D	Drops		3/6/2012
		5/1/2011 4:30	5/4/2011 0:00	?	S, SC, TDS, D	Drops		3/6/2012
		5/5/2011 7:30	5/6/2011 16:00	?	S, SC, TDS, D	Drops		3/6/2012
		5/12/2011 13:00	5/12/2011 13:30	?	S, SC, TDS, D	Drops		3/6/2012
		6/1/2011 15:00	6/1/2011 16:15	?	S, SC, TDS, D	Drops		3/6/2012
		6/8/2011 20:15	11/30/2011 0:00	?	S, SC, TDS, D	intermittently wacky		3/6/2012
		8/1/2011 0:00	11/30/2011 0:00	?	S, SC, TDS, D	This probe had sedimentation build up in the sensor, despite repeated cleaning attempt, this has been a continued issue. Although small amounts of data during this period may be good, it is difficult to tell, and the vast majority is clearly bad.	SH	2/25/2011

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
						All has been removed		
SWC								
TPSWC-1	TPSWC-1T_AT_155906	11/9/2010 17:00	11/9/2010 17:00	C?	P, S, SC, T, TDS, D, L	Calibration event		3/20/2012
		1/13/2011 14:00	1/13/2011 14:17	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/17/2011
		3/25/2011 12:17	3/25/2011 12:52	C?	P, S, SC, T, TDS, D, L	Calibration event		3/8/2012
		10/3/2011 11:00	10/3/2011 11:41	C?	P, S, SC, T, TDS, D, L	Calibration event	TT	10/21/2011
	TPSWC-1B_AT_156128	1/13/2011 14:00	1/13/2011 14:32	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/25/2011 12:17	3/25/2011 13:00	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		5/25/2011 15:30	5/25/2011 15:45	C?	S, SC, T, TDS, D	Calibration event	HH	3/8/2012
		10/3/2011 11:00	10/3/2011 11:49	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
TPSWC-2	TPSWC-2T_AT_156485	11/9/2010 16:00	11/9/2010 16:00	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
		1/13/2011 14:45	1/13/2011 15:33	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/17/2011
		3/25/2011 10:35	3/25/2011 11:26	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/17/2011
		10/3/2011 12:30	10/3/2011 13:15	C?	P, S, SC, T, TDS, D, L	Calibration event		3/8/2012
	TPSWC-2B_AT_156188	1/13/2011 14:53	3/25/2011 12:17	E	S, SC, TDS, D	Low initial reading	HH	1/10/2012
		1/13/2011 14:45	1/13/2011 15:43	C?	S, SC, T, TDS, D	Calibration event	HH	2/17/2011
		3/25/2011 10:28	3/25/2011 11:36	C?	S, SC, T, TDS, D	Calibration event	HH	3/8/2012
		5/25/2011 13:51	5/25/2011 14:25	C?	S, SC, T, TDS, D	Calibration event	HH	3/8/2012
		7/20/2011 9:10	7/20/2011 9:10			C/C event. Log was stopped; nothing qualified		3/8/2012
		10/3/2011 12:29	10/3/2011 13:15	C?	S, SC, T, TDS, D	Calibration event	TT	10/21/2011
TPSWC-3	TPSWC-3T_AT_155379	11/9/2010 12:15	11/9/2010 15:00	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/8/2012
		1/13/2011 15:54	3/25/2011 9:09	E	S, SC, TDS, D	Low initial reading		3/20/2012
		1/13/2011 15:45	1/13/2011 16:09	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
	TPSWC-3B_AT_156376	11/9/2010 14:30	11/9/2010 16:00	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		1/13/2011 15:45	1/13/2011 16:07	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/25/2011 9:22	3/25/2011 9:53	C?	S, SC, T, TDS, D	Calibration event	HH	3/8/2012
		5/25/2011 11:38	5/25/2011 12:04	C?	S, SC, T, TDS, D	Calibration event	HH	3/8/2012
		10/3/2011 13:30	10/3/2011 16:14	C?	S, SC, T, TDS, D	Calibration event	TT	10/21/2011
TPSWC-4	TPSWC-4T_AT_156634	10/28/2010 9:15	10/28/2010 10:00	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/7/2012
		1/16/2011 12:00	1/16/2011 12:22	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		3/31/2011 14:07	3/31/2011 14:25	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
		7/19/2011 11:15	7/20/2011 13:45	?	P, S, SC, T, TDS, D, L	wacky	SRH	3/8/2012
		7/20/2011 15:00	8/1/2011 16:00	?	S, SC, T, TDS, D	wacky		3/8/2012
		10/3/2011 9:45	10/3/2011 10:08	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/7/2012
		11/8/2011 9:36	11/8/2011 10:06	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	3/7/2012
	TPSWC-4B_AT_156155	installation	10/28/10 10:29	E	T	Low probe reading		3/8/2012
		10/28/2010 9:45	10/28/2010 10:16	C?	S, SC, T, TDS, D	Calibration event	HH	3/6/2012
		1/16/2011 12:04	3/31/2011 13:48	E	S, SC, TDS, D	Low initial reading, probe 156155	HH	1/10/2012
		1/16/2011 12:01	1/16/2011 12:18	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/31/2011 14:03	3/31/2011 14:32	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
		5/25/2011 10:02	5/25/2011 10:18	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
		7/21/2011 11:45	7/21/2011 13:30	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
		8/11/2011 8:30	8/11/2011 9:45	?	S, SC, TDS, D	Drops	TT	10/21/2011
		8/11/2011 21:00	8/11/2011 21:30	?	S, SC, TDS, D	Drops	TT	10/21/2011

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		8/15/2011 0:00	8/15/2011 0:15	?	S, SC, TDS, D	Drops	TT	10/21/2011
		10/3/2011 9:45	10/3/2011 10:09	C?	S, SC, T, TDS, D	Calibration event	TT	10/21/2011
		11/8/2011 9:39	11/8/2011 9:53	C?	S, SC, T, TDS, D	Calibration event	HH	3/7/2012
TPSWC-5T	TPSWC-5T_AT_199072	11/8/2010 15:30	11/8/2010 15:45	C?	P, S, SC, T, TDS, D, L	Calibration event		3/8/2012
		1/14/2011 14:45	3/30/2011 13:50	E	S, SC, TDS, D	High initial reading		3/8/2012
		1/14/2011 14:45	1/14/2011 14:50	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		2/23/2011 12:20	2/23/2011 13:05	?	P, S, SC, T, TDS, D, L	Maintenance event		3/8/2012
		4/16/2011 14:45	4/16/2011 16:00	?	P, S, SC, T, TDS, D, L	Maintenance event	HH	2/21/2012
		11/8/2011 11:00	11/8/2011 11:30	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	1/10/2012
	TPSWC-5B_AT_164508	9/15/2010 12:00	9/16/2010 12:45	?	S, SC, TDS, D	Drops		3/8/2012
		11/8/2010 16:00	11/8/2010 16:15	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		11/17/2010 22:15	11/18/2010 6:45	?	S, SC, TDS, D	Drops		3/8/2012
		1/14/2011 14:41	1/14/2011 14:56	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		2/23/2011 12:26	2/23/2011 13:11	?	S, SC, T, TDS, D	Drops		3/8/2012
		3/30/2011 12:45	3/30/2011 13:12	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
		5/31/2011 9:12	5/31/2011 9:44	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		8/23/2011 23:45	8/25/2011 1:00	?	S, SC, TDS, D	Drops	HH	1/10/2012
		9/5/2011 16:00	9/5/2011 20:00	?	S, SC, TDS, D	Drops		3/8/2012
		9/6/2011 17:00	9/6/2011 17:15	?	S, SC, T, TDS, D	Drops	HH	1/10/2012
		9/7/2011 14:30	9/7/2011 15:00	?		Maintenance event		3/8/2012
		9/13/2011 13:45	9/13/2011 17:16	C?	S, SC, T, TDS, D	Calibration event	TT	10/21/2011
		9/14/2011 13:46	9/14/2011 14:01	?	S, SC, T, TDS, D	Maintenance event	HH	1/10/2012
		9/21/2011 13:01	9/21/2011 13:16	?	S, SC, T, TDS, D	Drops	HH	1/10/2012
		9/27/2011 6:16	9/27/2011 8:46	?		Drops	TT	10/21/2011
		10/14/2011 11:31	10/15/2011 16:31	?		Drops	HH	1/10/2012
		11/8/2011 11:01	11/8/2011 11:18	C?	S, SC, T, TDS, D	Calibration event	HH	1/10/2012
TPSWID								
TPSWID-1	TPSWID-1T_AT_156062	11/5/2010 12:15	11/5/2010 16:15	C?	P, S, SC, T, TDS, D, L	Calibration event		3/8/2012
		1/14/2011 12:30	1/14/2011 12:43	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		4/4/2011 12:15	4/4/2011 12:15	?	P, S, SC, T, TDS, D, L	D = 0		3/8/2012
		5/18/2011 0:00	5/20/2011 15:45	?	S, SC, TDS, D	Drops		3/8/2012
		9/7/2011 14:15	9/7/2011 15:00	C?	P, S, SC, T, TDS, D, L	Calibration event	TT	10/20/2011
	TPSWID-1B_AT_155421	11/5/2010 15:15	11/5/2010 15:51	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		1/14/2011 12:36	1/14/2011 12:36	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/29/2011 10:06	3/29/2011 10:27	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		6/1/2011 15:27	6/1/2011 16:00	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		9/7/2011 14:15	9/7/2011 15:14	C?	S, SC, T, TDS, D	Calibration event	TT	10/20/2011
TPSWID-2	TPSWID-2T_AT_155346	11/10/2010 12:30	11/10/2010 14:30	C?	P, S, SC, T, TDS, D, L	Calibration event		3/8/2012
		1/14/2011 11:45	1/14/2011 12:00	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		1/14/2011 12:15	3/28/2011 10:00	G	L			3/8/2012
		9/7/2011 10:43	9/7/2011 11:13	C?	P, S, SC, T, TDS, D, L	Calibration event	TT	10/20/2011
	TPSWID-2B_AT_151997	11/10/2010 12:30	11/10/2010 12:30	C?	S, SC, T, TDS, D	Calibration event	HH	3/8/2012
		1/14/2011 11:45	1/14/2011 12:05	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/28/2011 13:50	3/28/2011 14:24	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		6/1/2011 13:24	6/1/2011 13:37	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		9/7/2011 10:45	9/7/2011 11:20	C?	S, SC, T, TDS, D	Calibration event	TT	10/20/2011
TPSWID-3	TPSWID-3T_AT_157516	1/14/2011 10:15	1/14/2011 10:28	C?	P, S, SC, T, TDS, D, L	Calibration event	HH	2/18/2011
		3/28/2011 9:28	3/28/2011 9:50	C?	P, S, SC, T, TDS, D, L	Calibration event		3/8/2012
		5/14/2011 11:00	5/14/2011 11:15	?	S, SC, TDS, D	Drops		3/8/2012
		5/14/2011 17:00	5/14/2011 17:30	?	P, S, SC, T, TDS, D, L	Drops		3/8/2012
		5/18/2011 16:45	6/1/2011 10:30	?	S, SC, TDS, D	Oscillates		3/8/2012
		6/8/2011 11:45	6/10/2011 15:30	?	S, SC, TDS, D	Oscillates		3/8/2012

Table C-1. Water Quality Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		9/7/2011 8:56	9/7/2011 9:13	C?	P, S, SC, T, TDS, D, L	Calibration event	TT	10/20/2011
		1/6/2012 10:15	1/6/2012 10:51	C?	P, S, SC, T, TDS, D, L	Calibration event		3/20/2012
	TPSWID-3B_AT_196193	1/14/2011 10:15	1/14/2011 10:30	C?	S, SC, T, TDS, D	Calibration event	HH	2/18/2011
		3/28/2011 9:30	3/28/2011 9:56	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		6/1/2011 11:06	6/1/2011 11:21	C?	S, SC, T, TDS, D	Calibration event		3/8/2012
		9/7/2011 9:00	9/7/2011 9:10	C?	S, SC, T, TDS, D	Calibration event	TT	10/20/2011

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPGW								
TPGW-1	TPGW-1S_LT_155891	9/22/2011 18:30	9/22/2011 18:45	?	P, T, L	Sampling event	SRH	2/20/2012
		9/22/2011 19:00	9/22/2011 21:00	?	T	Sampling event	SRH	2/20/2012
		10/14/2011 14:15	10/14/2011 14:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/10/2011 12:45	11/10/2011 13:00	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/10/2011 13:15	11/10/2011 13:15	?	T	Calibration event	SRH	1/13/2012
	TPGW-1M_LT_155881	6/10/2011 14:45	6/10/2011 15:00	?	P, L	Jump and drop	SRH	10/26/2011
		9/22/2011 17:45	9/22/2011 18:00	?	P, T, L	Sampling event	SRH	2/20/2012
		10/14/2011 13:30	10/14/2011 13:45	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/10/2011 11:45	11/10/2011 12:15	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/10/2011 12:30	11/10/2011 13:15	?	T	Calibration event	SRH	1/13/2012
	TPGW-1D_LT_155865	9/22/2011 18:15	9/22/2011 18:15	?	P, T, L	Sampling event	SRH	2/20/2012
		10/14/2011 13:00	10/14/2011 13:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/10/2011 10:45	11/10/2011 11:15	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/10/2011 11:30	11/10/2011 12:45	?	T	Calibration event	SRH	1/13/2012
TPGW-2	TPGW-2S_LT_156546	10/6/2011 16:00	10/6/2011 16:00	C?	P, T, L	Calibration event	JJ	10/20/2011
	TPGW-2M_LT_156421	10/5/2011 15:00	10/5/2011 15:00	C?	T	Calibration event	JJ	10/20/2011
		9/29/2010 13:15	10/1/2010 0:45	?	P, L	Water level above top of casing	SRH	2/6/2012
		12/10/2010 12:00	12/10/2010 12:00	?	P, L	Sampling event	SRH	1/19/2012
		8/8/2011 11:15	8/11/2011 23:45	?	P, L	Water level above top of casing	SRH	1/31/2012
		8/14/2011 15:30	8/16/2011 3:45	?	P, L	Water level above top of casing	SRH	1/31/2012
		8/30/2011 22:30	9/3/2011 20:30	?	P, L	Water level above top of casing	SRH	1/31/2012
		8/30/2011 22:30	8/30/2011 23:15	?	P, L	Water level above top of casing	SRH	2/6/2012
		9/27/2011 9:15	9/28/2011 13:30	?	P, L	Water level above top of casing	SRH	1/31/2012
		10/8/2011 12:00	10/10/2011 15:45	?	P, L	Water level above top of casing	SRH	1/31/2012
		10/16/2011 17:45	10/20/2011 22:00	?	P, L	Water level above top of casing	SRH	1/31/2012
	TPGW-2D_LT_156514	9/29/2010 11:15	10/4/2010 1:15	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/3/2010 11:30	11/5/2010 20:30	?	P, L	Water level above top of casing	SRH	2/6/2012
		12/10/2010 12:00	12/10/2010 12:00	?	P, L	Sampling event	SRH	1/19/2012
		5/20/2011 13:00	10/5/2011 11:15	E	L	Reference level not reset correctly due to water above top of well casing; outside of 0.1 level of accuracy	SRH	11/28/2011
		7/6/2011 10:45	7/8/2011 9:30	?	P, L	Water level above top of casing	SRH	1/31/2011
		7/6/2011 10:45	7/6/2011 13:30	?	P, L	Water level above top of casing	SRH	2/6/2012
		7/18/2011 18:15	7/21/2011 8:45	?	P, L	Water level above top of casing	SRH	1/31/2011
		10/8/2011 12:15	10/10/2011 16:15	?	P, L	Water level above top of casing	SRH	1/31/2011
		10/16/2011 17:45	10/20/2011 3:00	?	P, L	Water level above top of casing	SRH	1/31/2011
TPGW-3	TPGW-3S_LT_156543	8/26/2010 15:00	5/20/2011 12:00	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		3/31/2011 13:00	7/18/2011 14:30	E	L	WLs outside of accuracy parameter of 0.1	SRH	11/28/2011
		10/5/2011 13:15	10/5/2011 13:30	C?	P, T, L	Calibration event	JJ	10/20/2011
		10/5/2011 13:45	10/5/2011 13:45	C?	T	Calibration event	SRH	10/20/2011
		11/8/2011 13:30	11/8/2011 13:30	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/8/2011 13:45	11/8/2011 14:00	?	T	Calibration event	SRH	1/13/2012
	TPGW-3M_LT_156615	8/26/2010 16:00	5/20/2011 11:30	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		10/6/2010 10:46	10/6/2010 12:31	?	P, L	Water level above top of casing	SRH	2/7/2012
		10/6/2010 21:31	10/7/2010 0:46	?	P, L	Water level above top of casing	SRH	2/7/2012
		10/8/2011 20:15	10/8/2011 23:15	?	P, L	Water level above top of casing	SRH	2/7/2012
		11/8/2011 13:15	11/8/2011 13:15	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/8/2011 13:30	11/8/2011 13:30	?	T	Calibration event	SRH	1/13/2012
	TPGW-3D_LT_156623	8/26/2010 16:00	5/20/2011 11:00	E	L	Outside 0.1' level of accuracy	SRH	2/6/2012
		10/6/2010 10:18	10/6/2010 13:20	?	P, L	Water level above top of casing	SRH	2/6/2012
		10/6/2010 21:18	10/7/2010 1:18	?	P, L	Water level above top of casing	SRH	2/6/2012
		10/7/2010 12:03	10/7/2010 12:18	?	P, L	Water level above top of casing	SRH	2/6/2012
		10/7/2010 23:33	10/8/2010 0:48	?	P, L	Water level above top of casing	SRH	2/6/2012
		10/5/2011 12:00	10/5/2011 12:00	C?	P, T, L	Calibration event	JJ	10/20/2011

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		10/5/2011 12:15	10/5/2011 12:15	C?	T	Calibration event	SRH	10/20/2011
		10/8/2011 19:15	10/9/2011 0:01	?	P, L	Water level above top of casing	SRH	2/6/2012
		10/9/2011 8:15	10/9/2011 9:15	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/8/2011 12:30	11/8/2011 12:30	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/8/2011 13:00	11/8/2011 14:00	?	T	Calibration event	SRH	1/13/2012
TPGW-4	TPGW-4S_LT_155433	9/8/2011 16:00	9/8/2011 16:00	C?	P, T, L	Calibration event	SRH	1/13/2012
		9/8/2011 16:15	9/8/2011 17:15	?	T	Calibration event	SRH	1/13/2012
		11/2/2011 15:45	11/2/2011 15:45	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/2/2011 16:00	11/2/2011 16:30	?	T	Calibration event	SRH	1/13/2012
	TPGW-4M_LT_155709					No qualifications		
	TPGW-4D_LT_155574	6/8/2011 11:30	6/8/2011 12:45	?	P, L	Sharp Drop and rise	SRH	10/26/2011
		9/6/2011 9:15	9/6/2011 9:30	?	P, L	Drop and rise	SRH	10/26/2011
		9/6/2011 9:45	9/6/2011 11:30	?	T	Drop and rise	SRH	10/26/2011
		9/8/2011 13:30	9/8/2011 14:00	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/8/2011 14:15	9/8/2011 15:30	C?	T	Calibration event	SRH	10/20/2011
TPGW-5	TPGW-5S_LT_156547	10/7/2011 12:00	10/7/2011 12:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		10/7/2011 12:30	10/7/2011 12:45	C?	T	Calibration event	SRH	10/20/2011
		11/10/2011 17:00	11/10/2011 16:45	C?	P, T, L	Calibration event	SRH	1/13/2012
	TPGW-5M_LT_156544	10/7/2011 11:30	10/7/2011 11:30	C?	P, T, L	Calibration event	SRH	10/20/2011
		10/7/2011 12:00	10/7/2011 12:15	C?	T	Calibration event	SRH	
		11/10/2011 16:00	11/10/2011 16:15	C?	P, T, L	Calibration event	SRH	1/13/2012
	TPGW-5D_LT_156549	10/7/2011 10:45	10/7/2011 10:45	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/10/2011 15:30	11/10/2011 15:30	C?	P, T, L	Calibration event	SRH	1/13/2012
		11/10/2011 15:45	11/10/2011 16:30	?	T	Calibration event	SRH	1/13/2012
TPGW-6	TPGW-6S_LT_156617	9/6/2011 12:15	9/6/2011 12:45	C?	P, T, L	Calibration event	JJ	10/20/2012
		9/6/2011 13:00	9/6/2011 18:00	C?	T	Calibration event	SRH	2/20/2012
	TPGW-6M_LT_156622	6/6/2011 13:00	6/6/2011 13:00	?	P, T, L	Sampling event	SRH	2/20/2012
		6/6/2011 13:15	6/6/2011 14:30	?	T	Sampling event	SRH	2/20/2012
		9/6/2011 11:30	9/6/2011 11:45	C?	P, T, L	Calibration event	JJ	10/20/2012
		9/6/2011 12:00	9/6/2011 15:00	C?	T	Calibration event	SRH	3/1/2012
	TPGW-6D_LT_156609	10/8/2011 15:45	10/9/2011 10:01	?	P, L	Water level above top of casing	SRH	2/7/2012
		10/16/2011 23:15	10/17/2011 2:45	?	P, L	Water level above top of casing	SRH	2/7/2012
TPGW-7	TPGW-7S_LT_156619	9/17/2010 12:30	9/17/2010 12:30	?	P, T, L	Sampling event	SRH	2/20/2012
		9/17/2010 12:45	9/17/2010 13:45	?	T	Sampling event	SRH	2/20/2012
		9/29/2010 9:15	10/4/2010 9:00	?	L, P	Water level above top of casing	SRH	2/1/2012
		10/13/2010 16:00	10/14/2010 13:00	?	L, P	Water level above top of casing	SRH	2/1/2012
		6/8/2011 8:15	6/16/2011 10:15	?	P, L	surveyors moved sensor	SRH	3/2/2012
		7/12/2011 12:00	11/14/2011 14:30	E	L	Outside 0.1' level of accuracy	SRH	11/28/2011
		8/7/2011 14:30	8/8/2011 22:00	?	L, P	Water level above top of casing	SRH	1/31/2011
		10/8/2011 13:00	10/8/2011 18:30	?	L, P	Water level above top of casing	SRH	1/31/2011
		10/8/2011 18:45	10/14/2011 20:30	?	L, P	Water level above top of casing	SRH	2/1/2012
		10/14/2011 11:45	10/14/2011 12:00	C?	P, T, L	Calibration event	SRH	1/13/2011
		10/14/2011 12:15	10/14/2011 13:00	C?	P, T, L	Calibration event	SRH	1/13/2011
		10/16/2011 18:00	10/21/2011 9:00	?	L, P	Water level above top of casing	SRH	2/1/2012
	TPGW-7M_LT_156624	9/13/2010 17:00	9/15/2010 18:00	?	L, P	Water level apparently set wrong	SRH	
		9/15/2010 18:00	6/2/2011 12:00	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		9/17/2010 0:30	9/17/2010 12:45	?	T	Sampling event	SRH	2/20/2012
		9/17/2010 11:45	9/17/2010 12:15	?	P, T, L	Sampling event	SRH	2/20/2012
		6/8/2011 8:15	6/16/2011 9:31	?	P, L	Surveyors moved sensor	SRH	3/2/2012
		7/18/2011 18:00	7/21/2011 1:30	?	L, P	Water level above top of casing	SRH	1/31/2011
		8/7/2011 14:00	8/9/2011 18:00	?	L, P	Water level above top of casing	SRH	1/31/2011
		8/13/2011 17:30	8/14/2011 6:45	?	L, P	Water level above top of casing	SRH	1/31/2011
		10/8/2011 12:45	10/22/2011 18:45	?	L, P	Water level above top of casing	SRH	1/31/2011

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
	TPGW-7D_LT_156604	9/17/2010 10:30	9/17/2010 12:30	?	P, T, L	Sampling event	SRH	2/20/2012
		9/17/2010 12:45	9/17/2010 20:45	?	T	Sampling event	SRH	2/20/2012
		9/29/2010 16:45	9/30/2010 9:01	?	P, L	Water level above top of casing	SRH	2/7/2012
		6/8/2011 8:15	6/16/2011 9:01	?	L, P	Surveyors moved sensor	SRH	3/2/2012
		7/18/2011 18:00	7/22/2011 20:45	?	L, P	Water level above top of casing	SRH	1/31/2011
		8/31/2011 0:30	8/31/2011 3:30	?	L, P	Water level above top of casing	SRH	1/31/2011
TPGW-8	TPGW-8S_LT_157226	9/8/2011 11:45	9/8/2011 11:45	C?	P, T, L	Calibration event	SRH	10/20/2011
		9/8/2011 13:00	9/8/2011 18:00	C?	T	Calibration event	SRH	10/20/2011
		10/8/2011 12:45	10/22/2011 18:45	?	L, P	Water level above top of casing	SRH	1/31/2011
		10/8/2011 18:30	10/10/2011 16:30	?	P, L	Water level above top of casing	SRH	2/7/2012
		8/7/2011 14:00	8/16/2011 6:00	?	L, P	Water level above top of casing	SRH	1/31/2011
	TPGW-8M_LT_157519	9/8/2011 11:15	9/8/2011 11:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/8/2011 11:30	9/8/2011 17:15	C?	T	Calibration event	SRH	3/22/2012
	TPGW-8D_LT_157508	5/17/2011 11:00	5/17/2011 11:00	C?	P, T, L	Calibration event	SRH	1/13/2012
		5/17/2011 11:15	5/17/2011 12:00	?	T	Calibration event	SRH	1/13/2012
		5/17/2011 11:40	6/1/2011 10:30	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		10/8/2011 18:45	10/10/2011 9:30	?	P, L	Water level above top of casing	SRH	2/6/2012
TPGW-9	TPGW-9S_LT_155870	5/16/2011 12:00	5/16/2011 15:30	C?	P, T, L	Calibration event	SRH	1/17/2012
		9/8/2011 9:00	9/8/2011 9:00	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/8/2011 10:00	9/8/2011 11:30	C?	T	Calibration event	SRH	3/22/2012
	TPGW-9M_LT_155570	8/16/2010 14:00	5/16/2011 14:00	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		9/8/2011 8:30	9/8/2011 8:30	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/8/2011 8:45	9/8/2011 11:30	C?	T	Calibration event	SRH	3/22/2012
	TPGW-9D_LT_155855	8/16/2010 13:45	5/16/2011 14:30	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		6/2/2011 8:15	6/12/2011 13:30	?	L, P	Probe was probably out of water, may need extender. Data flat lines and PR negative or extremely low	SRH	10/27/2011
		9/6/2011 14:00	9/6/2011 14:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/6/2011 14:30	9/6/2011 21:00	C?	T	Calibration event		
		11/8/2011 15:10	11/8/2011 17:40	?	P, T, L	Probe reporting erroneous data. Electronic malfunction.	SRH	1/17/2011
		11/22/2011 15:45	11/22/2011 16:15	C?	P, T, L	Calibration event	SRH	1/17/2011
		11/22/2011 16:30	11/22/2011 16:30	?	T	Calibration event	SRH	1/17/2011
		11/8/2011 17:45	11/8/2011 20:40	?	T, L	Probe reporting erroneous data. Electronic malfunction.	SRH	1/17/2011
TPGW-10	TPGW-10S_LT_157238	9/21/2011 8:00	9/21/2011 8:00	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/21/2011 9:00	9/21/2011 13:15	C?	T	Calibration event	SRH	3/22/2012
		11/4/2011 8:45	11/4/2011 8:45	C?	P, T, L	Calibration event	SRH	1/17/2011
		11/4/2011 9:00	11/4/2011 9:15	C?	T	Calibration event	SRH	1/17/2011
	TPGW-10M_LT_157518	9/21/2011 8:30	9/21/2011 8:30	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/4/2011 8:15	11/4/2011 8:30	C?	P, T, L	Calibration event	SRH	1/17/2011
	TPGW-10D_LT_157234	9/21/2011 9:00	9/21/2011 9:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/4/2011 7:45	11/4/2011 8:00	C?	P, T, L	Calibration event	SRH	1/17/2011
		11/4/2011 8:15	11/4/2011 8:30	C?	T	Calibration event	SRH	1/17/2011
TPGW-11	TPGW-11S_LT_157225	4/29/2011 12:45	6/13/2011 14:45	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		6/22/2011 12:00	6/22/2011 12:15	C?	P, T, L	Calibration event	SRH	10/26/2011
		8/3/2011 10:55	11/3/2011 14:00	E	L	Outside of calibration period although within accuracy parameters	SRH	11/28/2011
		11/3/2011 13:00	11/3/2011 13:00	C?	P, T, L	Calibration event	SRH	1/17/2011
	TPGW-11M_LT_157436	4/29/2011 11:00	6/13/2011 14:00	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		6/22/2011 12:30	6/22/2011 12:30	C?	P, T, L	Calibration event	SRH	10/26/2011
		9/16/2011 10:15	9/16/2011 12:00	C		Calibration event	JJ	10/20/2011
		11/3/2011 12:15	11/3/2011 12:15	C?	P, T, L	Calibration event	SRH	1/17/2011
		11/3/2011 12:30	11/3/2011 12:45	?	T	Calibration event	SRH	1/17/2011
	TPGW-	9/17/2010 16:00	4/29/2011	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
	11D_LT_1 55903	6/22/2011 11:15	6/22/2011 12:00	C?	P, T, L	Calibration event	SRH	10/26/201 1
		8/3/2011 9:35	11/3/2011 12:00	E	L	Outside calibration period although within accuracy parameters	SRH	11/28/201 1
		11/3/2011 11:15	11/3/2011 11:45	C?	P, T, L	Calibration event	SRH	1/17/2011
TPGW-12	TPGW-12S_LT_15 5893	9/6/2010 21:15	9/6/2010 23:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/7/2010 9:30	9/7/2010 11:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/7/2010 22:45	9/7/2010 23:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/8/2010 11:00	9/8/2010 12:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/20/2010 21:59	9/20/2010 23:15	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/21/2010 9:44	9/21/2010 11:45	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/21/2010 22:14	9/22/2010 0:00	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/22/2010 23:14	9/23/2010 0:00	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/23/2010 11:14	9/23/2010 12:45	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/23/2010 23:59	9/24/2010 0:30	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/24/2010 11:59	9/24/2010 13:15	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/24/2010 23:59	9/25/2010 1:00	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/29/2010 13:58	9/29/2010 18:44	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/30/2010 1:43	9/30/2010 3:44	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/4/2010 20:58	10/4/2010 21:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/5/2010 9:28	10/5/2010 10:14	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/5/2010 19:28	10/6/2010 0:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/6/2010 7:28	10/6/2010 14:29	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/6/2010 19:28	10/7/2010 1:29	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/7/2010 8:58	10/7/2010 13:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/7/2010 20:28	10/8/2010 1:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/8/2010 9:43	10/8/2010 14:29	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/8/2010 21:58	10/9/2010 1:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/9/2010 10:58	10/9/2010 14:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/9/2010 22:58	10/10/2010 2:29	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/10/2010 12:58	10/10/2010 14:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/11/2010 1:28	10/11/2010 2:14	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/11/2010 14:28	10/11/2010 14:59	?	P, L	Water level above top of casing	SRH	2/2/2012
		8/27/2011 8:45	8/27/2011 8:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		8/28/2011 9:30	8/28/2011 9:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		8/30/2011 11:30	8/30/2011 11:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		9/30/2011 11:00	9/30/2011 11:00	C?	P, T, L	Calibration event	SRH	1/17/2011
		10/6/2011 19:00	10/6/2011 19:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/7/2011 6:45	10/7/2011 7:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/7/2011 18:45	10/7/2011 21:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/8/2011 7:00	10/8/2011 9:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/8/2011 17:15	10/9/2011 0:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/9/2011 5:30	10/9/2011 11:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/9/2011 18:45	10/9/2011 23:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/10/2011 7:30	10/10/2011 11:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/10/2011 20:00	10/10/2011 23:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/11/2011 8:15	10/11/2011 12:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/11/2011 20:15	10/11/2011 23:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/12/2011 9:30	10/12/2011 12:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/12/2011 21:45	10/12/2011 23:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/13/2011 10:00	10/13/2011 13:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/13/2011 22:00	10/14/2011 0:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/14/2011 10:45	10/14/2011 13:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/14/2011 22:45	10/15/2011 0:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/15/2011 11:15	10/15/2011 14:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/15/2011 23:15	10/16/2011 1:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/16/2011 11:30	10/16/2011 15:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/16/2011 22:30	10/17/2011 4:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/17/2011 11:45	10/17/2011 14:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/18/2011 1:00	10/18/2011 2:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/18/2011 14:00	10/18/2011 14:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		10/27/2011 10:45	10/27/2011 11:31	?	P, L	Water level above top of casing	SRH	2/2/2012

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		10/30/2011 13:30	10/30/2011 15:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/2/2011 2:00	11/2/2011 5:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/2/2011 14:30	11/2/2011 18:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/3/2011 3:30	11/3/2011 5:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/3/2011 16:45	11/3/2011 17:15	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/5/2011 17:45	11/5/2011 21:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/6/2011 5:00	11/6/2011 9:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/6/2011 17:30	11/6/2011 22:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/7/2011 6:00	11/7/2011 10:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/7/2011 18:15	11/7/2011 22:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/8/2011 7:15	11/8/2011 10:46	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/8/2011 19:30	11/8/2011 22:31	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/9/2011 8:00	11/9/2011 11:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/9/2011 19:30	11/9/2011 23:16	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/10/2011 8:45	11/10/2011 12:01	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/10/2011 21:00	11/10/2011 23:15	?	P, L	Water level above top of casing	SRH	2/2/2012
		11/11/2011 9:45	11/11/2011 12:16	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/11/2011 21:30	11/11/2011 23:31	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/12/2011 10:30	11/12/2011 13:01	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/12/2011 22:30	11/12/2011 23:46	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/13/2011 11:30	11/13/2011 13:01	?	P, L	Water level above top of casing	SRH	2/6/2012
		11/13/2011 23:45	11/14/2011 0:16	?	P, L	Water level above top of casing	SRH	2/6/2012
		12/14/2011 12:45	12/14/2011 14:01	?	P, L	Water level above top of casing	SRH	2/6/2012
	TPGW-12M_LT_1 55853	9/20/2010 22:46	9/20/2010 23:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/21/2010 9:01	9/21/2010 11:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/21/2010 21:31	9/22/2010 0:01	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/22/2010 22:46	9/23/2010 0:16	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/23/2010 10:16	9/23/2010 12:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/23/2010 22:46	9/23/2010 23:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/24/2010 12:01	9/24/2010 13:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/24/2010 23:01	9/24/2010 23:47	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/25/2010 0:16	9/25/2010 1:02	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/29/2010 2:16	9/29/2010 2:16	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/29/2010 13:31	9/29/2010 18:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/5/2010 19:46	10/6/2010 1:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/6/2010 6:46	10/6/2010 14:47	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/6/2010 18:16	10/7/2010 1:47	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/7/2010 8:01	10/7/2010 14:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/7/2010 20:01	10/8/2010 2:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/8/2010 9:16	10/8/2010 14:47	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/8/2010 21:31	10/9/2010 2:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/9/2010 10:31	10/9/2010 15:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/9/2010 22:31	10/10/2010 3:01	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/10/2010 12:01	10/10/2010 15:02	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/11/2010 0:31	10/11/2010 2:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/11/2010 13:46	10/11/2010 15:02	?	P, L	Water level above top of casing	SRH	2/1/2012
		8/28/2011 9:45	8/28/2011 10:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		8/29/2011 10:45	8/29/2011 11:01	?	P, L	Water level above top of casing	SRH	2/1/2012
		8/30/2011 12:00	8/30/2011 12:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/30/2011 10:15	9/30/2011 10:15	C?	P, T, L	Calibration event	SRH	1/17/2011
		9/30/2011 10:30	9/30/2011 11:45	C?	T	Calibration event	SRH	1/17/2011
		9/30/2011 10:30	11/27/2011 12:15	E	L	Outside 0.1' level of accuracy	SRH	1/30/2012
		10/6/2011 18:45	10/6/2011 19:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/7/2011 7:15	10/7/2011 7:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/7/2011 19:00	10/7/2011 21:16	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/8/2011 6:45	10/8/2011 9:17	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/8/2011 17:15	10/8/2011 23:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/9/2011 6:00	10/9/2011 10:16	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/9/2011 19:30	10/9/2011 22:01	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/10/2011 8:45	10/10/2011 10:01	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/11/2011 9:15	10/11/2011 11:16	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/11/2011 21:45	10/11/2011 22:46	?	P, L	Water level above top of casing	SRH	2/1/2012

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
		10/13/2011 11:15	10/13/2011 12:16	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/14/2011 12:15	10/14/2011 12:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/15/2011 12:15	10/15/2011 13:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/16/2011 12:45	10/16/2011 14:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/16/2011 23:30	10/16/2011 23:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/17/2011 0:00	10/17/2011 2:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/30/2011 14:15	10/30/2011 14:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/2/2011 3:00	11/2/2011 4:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/2/2011 15:30	11/2/2011 17:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/13/2011 12:15	11/13/2011 12:46	?	P, L	Water level above top of casing	SRH	2/1/2012
		12/14/2011 0:30	12/14/2011 2:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		12/14/2011 11:45	12/14/2011 14:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		12/15/2011 0:15	12/15/2011 2:31	?	P, L	Water level above top of casing	SRH	2/1/2012
		12/15/2011 12:45	12/15/2011 14:46	?	P, L	Water level above top of casing	SRH	2/1/2012
	TPGW-12D_LT_155902	9/29/2010 14:45	9/29/2010 15:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/5/2010 20:45	10/10/2010 14:15	?	P, L	Water level above top of casing	SRH	2/1/2012
		9/30/2011 9:45	9/30/2011 9:45	C?	P, T, L	Calibration event	SRH	1/17/2011
		9/30/2011 10:00	9/30/2011 10:30	C?	T	Calibration event	SRH	1/17/2011
		10/8/2011 17:45	10/9/2011 22:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/10/2011 8:30	10/10/2011 9:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/11/2011 9:15	10/11/2011 10:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/17/2011 12:45	10/17/2011 14:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		10/18/2011 1:30	10/18/2011 1:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/2/2011 3:30	11/2/2011 3:30	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/2/2011 16:00	11/2/2011 16:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/5/2011 18:30	11/5/2011 19:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/6/2011 5:30	11/6/2011 10:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/6/2011 16:45	11/6/2011 23:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/7/2011 5:15	11/7/2011 11:15	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/7/2011 17:30	11/7/2011 23:15	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/8/2011 6:15	11/8/2011 11:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/8/2011 19:00	11/8/2011 23:30	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/9/2011 8:00	11/9/2011 11:15	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/9/2011 19:15	11/9/2011 23:30	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/10/2011 8:15	11/10/2011 12:00	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/10/2011 20:30	11/10/2011 22:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/11/2011 10:00	11/11/2011 11:30	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/11/2011 22:15	11/11/2011 22:45	?	P, L	Water level above top of casing	SRH	2/1/2012
		11/12/2011 11:15	11/12/2011 12:15	?	P, L	Water level above top of casing	SRH	2/1/2012
2	TPGW-13S_LT_156552	7/24/2011 1:00	7/24/2011 1:30	?	L, P T	Dramatic drop, data looks as if probe was pulled	SRH	10/26/2011
		9/14/2011 10:45	9/14/2011 11:00	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/14/2011 12:00	9/14/2011 19:30	C?	T	Calibration event	SRH	3/22/2012
		11/8/2011 12:30	11/14/2011 14:00	?	P, T, L	Apparent lightening strike, erroneous data	SRH	1/17/2011
		11/14/2011 14:15	11/14/2011 14:15	C?	P, T, L	Calibration event	SRH	1/17/2011
	TPGW-13M_LT_156548	6/9/2011 8:45	6/9/2011 9:30	?	P, T, L	Dramatic drop, data looks as if probe was pulled	SRH	10/26/2011
		8/4/2011 11:00	8/4/2011 11:00	?	P, L	Sudden fifteen minute drop, probable maintenance event	SRH	10/26/2011
		9/14/2011 8:45	9/14/2011 9:30	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/14/2011 9:45	9/14/2011 17:15	C?	T	Calibration event	SRH	3/22/2012
		11/8/2011 12:30	11/16/2011 12:00	?	P, T, L	Apparent lightening strike, erroneous data	SRH	1/17/2011
	TPGW-13D_LT_156542	5/4/2011 7:45	5/4/2011 7:45	C?	P, T, L	Calibration event	SRH	1/17/2011
		7/24/2011 1:00	7/24/2011 1:30	?	P, T, L	Dramatic drop, data looks as if probe was pulled	SRH	10/26/2011
		9/7/2011 8:31	9/7/2011 9:16	?	P, T, L	Sudden drop and jump	SRH	10/26/2011
		9/14/2011 10:01	9/14/2011 10:16	C?	P, T, L	Calibration event	JJ	10/20/2011
		9/14/2011 11:00	9/14/2011 23:15	C?	T	Calibration event	SRH	3/23/2011
TPGW-14	TPGW-	8/2/2011 15:00	9/16/2011 11:45	E	L	Outside 0.1' level of accuracy	SRH	11/28/201

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
	14S_LT_155710							1
		9/16/2011 12:00	9/16/2011 12:15	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/3/2011 9:45	11/3/2011 9:45	C?	P, T, L	Calibration event	SRH	1/17/2011
		11/3/2011 10:00	11/3/2011 10:15	C?	T	Calibration event	SRH	1/17/2011
	TPGW-14M_LT_155707	8/2/2011 14:45	9/16/2011 12:30	E	L	Outside 0.1' level of accuracy	SRH	11/28/2011
		9/16/2011 11:30	9/16/2011 11:30	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/3/2011 9:00	11/3/2011 9:15	C?	P, T, L	Calibration event	SRH	1/17/2011
	TPGW-14D_LT_155905	9/18/2010 0:00	4/28/2011 11:00	E	L	Outside 0.1' level of accuracy	SRH	2/7/2012
		8/2/2011 13:20	9/16/2011 10:30	E	L	Outside 0.1' level of accuracy	SRH	11/28/2011
		9/16/2011 10:45	9/16/2011 11:00	C?	P, T, L	Calibration event	JJ	10/20/2011
		11/3/2011 8:30	11/3/2011 8:45	C?	P, T, L	Calibration event	SRH	1/17/2012
		11/3/2011 9:00	11/3/2011 9:15	C?	T	Calibration event	SRH	1/17/2012
BBSW								
TPBBSW-10	TPBBSW-10B_AT_155864	2/9/2011 13:00	8/2/2011 11:30	E	L	Outside 0.1' level of accuracy; survey inaccurate, water level oscillations make programming difficult	SRH	1/30/2012
TPBBSW-14	TPBBSW-14B_AT_156284	2/14/2011 12:30	12/16/2011 0:17	E	L	Outside 0.1' level of accuracy; survey inaccurate, water level oscillations make programming difficult	SRH	1/30/2012
TPBBSW-3	TPBBSW-3B_AT_	9/17/2010 17:00	6/13/2011 12:00	E	L	Outside 0.1' level of accuracy; survey inaccurate, water level oscillations make programming difficult	SRH	1/30/2012
		9/16/2011 13:02	9/16/2011 13:22	C?	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
		11/3/2011 13:00	12/14/2011 12:15	E	L	Outside 0.1' level of accuracy	SRH	1/30/2012
		6/22/2011 14:00:00 PM	7/26/2011 12:15	E	L	Outside 0.1' level of accuracy; survey inaccurate, water level oscillations make programming difficult	SRH	1/30/2012
SWC								
TPSWC-1	TPSWC-1T_AT_155906	10/3/2011 11:00	10/3/2011 11:26	C?	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
TPSWC-2	TPSWC-2T_AT_156485	10/3/2011 12:30	10/3/2011 12:45	C?	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
TPSWC-3	TPSWC-3T_AT_155379	9/26/2010 19:30	9/26/2010 23:00	?	L	sharp rise and fall	SRH	1/17/2011
TPSWC-4	TPSWC-4T_AT_156634	9/21/2010 1:15	9/21/2010 4:15	?	L	sharp rise and fall	SRH	1/26/2012
		5/25/2011 10:15	7/21/2011 12:30	E	L	Outside 0.1' level of accuracy	SRH	11/28/2011
		7/19/2011 11:15	7/20/2011 13:45	?	L	Data not parsed correctly	SRH	1/26/2012
		10/3/2011 9:45	10/3/2011 10:08	C?	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
		11/8/2011 9:36	11/8/2011 10:06	C?	P, T, L, S, SC, WD	Calibration event	SRH	1/17/2011
TPSWC-5	TPSWC-5T_AT_155425	11/8/2010 12:15	11/8/2010 15:15	?	L	sharp rise and fall	SRH	1/17/2011
CCS								
TPSWCCS-1	TPSWCCS-1B_AT_155414	9/7/2011 13:43	9/7/2011 13:43	C	L, P, water D	Calibration event	SRH	10/25/2011
TPSWCCS-3	TPSWCCS-3B_AT_156361	9/7/2011 12:58	9/7/2011 12:58	C	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
TPSWCCS-4	TPSWCCS-4T_AT_156473	9/9/2011 12:30	9/9/2011 12:36	C	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
		10/5/2011 10:36	10/5/2011 10:36	C?	P, T, L, S, SC, WD	Demonstration maintenance event, not actually calibrated but pulled.	SRH	10/26/2011
		11/7/2011 11:54	11/7/2011 11:54	C?	P, T, L, S, SC, WD	Calibration event	SRH	1/17/2011
TPSWCCS-5	TPSWCCS-5T_AT_156471	9/9/2011 11:06	9/9/2011 11:24	C?	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011
TPSWCCS-6	TPSWCCS-6T_AT_156297	9/9/2011 9:05	9/9/2011 9:33	C?	P, T, L, S, SC, WD	Calibration event	SRH	10/25/2011

Table C-2. Water Level Qualifications for Automated Data

Site	Well	Date Range		Qualifier Details			Qualified	
		Start	End	Qualifiers	Parameters	Rationale	By	Date
TPSWCCS-7	TPSWCCS-7B_AT_155247	6/1/2011 14:00	7/25/2011 11:50	E	L	Outside 0.1' level of accuracy	SRH	11/28/2011
SWID								
TPSWID-1	TPSWID-1T_AT_156062	9/7/2011 14:15	9/7/2011 15:00	C?	P, T, L, S, SC, WD	Outside 0.1' level of accuracy	SRH	10/25/2011
		6/1/2011 16:00	7/25/2011 14:00	E	L	Outside 0.1' level of accuracy	SRH	11/28/2011
		11/28/2010 12:15	11/29/2010 11:00	?	L	Outside 0.1' level of accuracy	SRH	1/26/2012
TPSWID-2	TPSWID-2T_AT_155346	9/7/2011 10:43	9/7/2011 11:13	C?	P, T, L, S, SC, WD	Sharp increase, then drop	SRH	10/25/2011
TPSWID-3	TPSWID-3T_AT_157516	9/7/2011 8:56	9/7/2011 9:13	C?	P, T, L, S, SC, WD	Sharp increase, then drop	SRH	10/25/2011

Table C-3. Flow Meter Data Qualifications

Site	Date Range		Qualifier Details			Qualified	
	Start	End	Qualifiers	Parameters	Rationale	By	Date
TPFM-1S_CR_000007	8/4/2010 7:15	11/30/2010 10:15	?	Flow	0	HH	3/6/2012
	11/30/2010 12:00		C?	All	C/C event	HH	3/7/2012
	11/30/2010 12:15	6/28/2011 9:45	?	Flow	Values around 1	HH	3/6/2012
	2/21/2011 12:45		C?	All	C/C event	HH	3/7/2012
	3/13/2011 2:00				Duplicate time stamp; row to be removed.		
	3/13/2011 2:15				Duplicate time stamp; row to be removed.		
	3/13/2011 2:30				Duplicate time stamp; row to be removed.		
	3/13/2011 2:45				Duplicate time stamp; row to be removed.		
	3/30/2011 17:00		C?	All	C/C event	HH	3/7/2012
	4/1/2011 21:00	4/1/2011 21:15	C?	All	C/C event	HH	3/7/2012
	4/3/2011 7:15		?	All	Values vary greater than 30%	HH	3/7/2012
	4/9/2011 17:45		?	All	Values vary greater than 30%	HH	3/7/2012
	4/9/2011 19:30		?	All	Values vary greater than 30%	HH	3/7/2012
	4/10/2011 15:30		?	All	Values vary greater than 30%	HH	3/7/2012
	4/10/2011 16:30		?	All	Values vary greater than 30%	HH	3/7/2012
	4/12/2011 15:30		?	All	Values vary greater than 30%	HH	3/7/2012
	4/12/2011 17:45		?	All	Values vary greater than 30%	HH	3/7/2012
	4/19/2011 13:00	4/19/2011 13:15	C?	All	C/C event	HH	3/7/2012
	7/5/2011 14:00		C?	All	C/C event	HH	3/7/2012
	7/6/2011 9:30		C?	All	C/C event	HH	3/7/2012
	7/9/2011 7:30		C?	All	C/C event	HH	3/7/2012
	7/10/2011 3:15		C?	All	C/C event	HH	3/7/2012
	7/10/2011 8:00	7/10/2011 8:30	C?	All	C/C event	HH	3/7/2012
	7/10/2011 12:15	8/5/2011 11:00	?	Flow	Value is a constant 3308.54	HH	3/7/2012
	8/5/2011 11:15	8/5/2011 11:30	?	All	Low	HH	3/7/2012
	8/6/2011 0:00		?	All	Low	HH	3/7/2012
	8/6/2011 0:30	11/30/2011 23:45	?	Flow	Value is a constant 3201.492	HH	3/7/2012
TPFM-2S_CR_000008	8/4/2010 7:30	11/30/2010 11:45	?	Flow	0	HH	3/7/2012
	11/30/2010 11:45	11/30/2010 12:00	C?	All	C/C event	HH	3/7/2012
	2/21/2011 12:45		?	All	Values vary greater than 30%	HH	3/7/2012
	3/30/2011 17:00		?	All	Values vary greater than 30%	HH	3/7/2012
	4/1/2011 21:00	4/1/2011 21:15	?	All	Values vary greater than 30%	HH	3/7/2012
	4/3/2011 7:15		?	All	Values vary greater than 30%	HH	3/7/2012
	4/9/2011 17:45		?	All	Values vary greater than 30%	HH	3/7/2012
	4/9/2011 19:30		?	All	Values vary greater than 30%	HH	3/7/2012
	4/10/2011 15:30		?	All	Values vary greater than 30%	HH	3/7/2012
	4/10/2011 16:30	4/10/2011 16:45	?	All	Values vary greater than 30%	HH	3/7/2012
	4/12/2011 15:30	4/12/2011 16:00	?	All	Values vary greater than 30%	HH	3/7/2012
	4/12/2011 17:45		?	All	Values vary greater than 30%	HH	3/7/2012
	4/19/2011 13:00	4/19/2011 13:15	C?	All	C/C event	HH	3/7/2012
	4/21/2011 11:45	4/21/2011 12:00	?	All	Values vary greater than 30%	HH	3/7/2012
	6/28/2011 10:45	6/30/2011 9:45	?	Flow	Values drop from above 3000 to less than 2.	HH	3/6/2012
	7/29/2011 9:45	7/29/2011 10:00	?	Flow	Values vary greater than 30%	HH	3/7/2012
	8/5/2011 11:30	8/12/2011 8:15	?	VM	Values vary greater than 30%	HH	3/7/2012

Table C-3. Flow Meter Data Qualifications

Site	Date Range		Qualifier Details			Qualified	
	Start	End	Qualifiers	Parameters	Rationale	By	Date
	8/5/2011 11:30	11/30/2011 23:45	?	Flow	Values drop from around 2900 to -71.	HH	3/6/2012
TPFM-3S_CR_000005					Probe no longer in use		

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

		Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
		Change #1	Time to Apply Correction					Change #2	Time to Apply Correction		Change #3	Time to Apply Correction		
Well		(Reference Level)	Start	End	Lr	Pr	Density	(Survey Level)	Start	End		Start	End	Rationale
TPGW														
1	S	Apply ref level/ref pressure/density.	Start	6/2/2011@17:12	-0.71	2.39297	1.024							
	M	Apply ref level/ref pressure/density.	Start	6/2/2011@15:48	-1.35	1.74759	1.024	Subtract 0.01 ft from levels.	Start	6/2/2011 @15:48				
	D	Apply ref level/ref pressure/density.	Start	6/2/2011 @15:03	-1.25	1.72349	1.024	Subtract 0.02 ft from levels.	Start	6/2/2011 @15:03				
2	S	Apply ref level/ref pressure/density.	Start	5/20/2011@14:22	-0.99	1.00738	1.024	Add 0.01 ft to levels.	Start	5/20/2011@14:22				
	M	Apply ref level/ref pressure/density.	Start	5/20/2011@13:46	-0.31	2.19707	1.024	Add 0.02 ft to levels.	Start	5/20/2011@13:46				
	D	Apply ref level/ref pressure/density.	Start	5/20/2011@13:10	0.07	1.74787	1.024	Add 0.01 ft to levels.	Start	5/20/2011@13:10				
3	S	Apply ref level/ref pressure/density.	Start	5/20/2011@11:56	-0.72	2.76552	1.024							
	M	Apply ref level/ref pressure/density.	Start	5/20/2011@11:18	-0.77	2.22057	1.024							
	D	Apply ref level/ref pressure/density.	Start	5/20/2011@10:36	-0.85	2.51877	1.024							
4	S	Apply ref level/ref pressure/density.	Start	5/18/2011@12:59	-0.32	1.11989	0.999							
	M	Apply ref level/ref pressure/density.	Start	5/18/2011@12:15	-0.77	1.13259	1.012							
	D	Apply ref level/ref pressure/density.	Start	5/18/2011@11:28	-0.92	1.09399	1.012							
5	S	Apply ref level/ref pressure/density.	Start	6/8/2011@15:41	-0.28	1.74374	0.999							
	M	Apply ref level/ref pressure/density.	Start	6/8/2011@15:50	-0.73	1.6279	1.012							
	D	Apply ref level/ref pressure/density.	Start	6/8/2011@15:00	-0.9	1.65033	1.012							
6	S	Apply ref level/ref pressure/density.	Start	5/17/2011@14:17	-0.2	1.18523	0.999							
	M	Apply ref level/ref pressure/density.	Start	5/17/2011@15:19	-0.7	1.3862	1.012							
	D	Apply ref level/ref pressure/density.	Start	5/17/2011@16:18	-0.16	1.38835	1.012				Add 0.2 ft to levels.	4/13/2011 @14:15	5/17/2011@16:18	USGS pulled probe, resulting in offset of 0.2'.

Key:

? = Questionable.
C = Cleaning & Calibration.
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ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications: Reference Levels and Survey Changes – Qualification 1	Start	End	Rationale	Qualifications: Other Qualifications – Qualification 3	Start	End	Rationale	Qualifications: Other Qualifications – Qualification 4	Start	End	Rationale
TPGW													
1	S	Calculated (g)	Start	6/2/2011@17:12	Reference level and or survey change.								
	M	Calculated (g)	Start	6/2/2011@15:48	Reference level and or survey change.								
	D	Calculated (g)	Start	6/2/2011 @15:03	Reference level and or survey change.								
2	S	Calculated (g)	Start	5/20/2011@14:22	Reference level and or survey change.	E	Start	3/29/2011@14:26	Discrepancy between depth to water probe and Level TROLL (-0.152) - no obvious offset therefore not questionable.				
	M	Calculated (g)	Start	5/20/2011@13:46	Reference level and or survey change.								
	D	Calculated (g)	Start	5/20/2011@13:10	Reference level and or survey change.								
3	S	Calculated (g)	Start	5/20/2011@11:56	Reference level and or survey change.								
	M	Calculated (g)	Start	5/20/2011@11:18	Reference level and or survey change.								
	D	Calculated (g)	Start	5/20/2011@10:36	Reference level and or survey change.								
4	S	Calculated (g)	Start	5/18/2011@12:59	Reference level and or survey change.	E	Start	3/31/2011@10:13	Discrepancy between depth to water probe and Level TROLL (-0.108) - no obvious offset therefore not questionable.				
	M	Calculated (g)	Start	5/18/2011@12:15	Reference level and or survey change.	E	Start	3/31/2011@11:09	Discrepancy between depth to water probe and Level TROLL (-0.144) - no obvious offset therefore not questionable.				
	D	Calculated (g)	Start	5/18/2011@11:28	Reference level and or survey change.								
5	S	Calculated (g)	Start	6/8/2011@15:41	Reference level and or survey change.	?	12/19/2010@17:00	1/19/2011@11:15	Probe set incorrectly & correction not possible.				
	M	Calculated (g)	Start	6/8/2011@15:50	Reference level and or survey change.								
	D	Calculated (g)	Start	6/8/2011@15:00	Reference level and or survey change.	?	1/9/2011 @18:00	1/19/201@10:30	Probe set incorrectly & correction not possible.				
6	S	Calculated (g)	Start	5/17/2011@14:17	Reference level and or survey change.	E	Start	8/22/2010@12:15	Probe set incorrectly.				
	M	Calculated (g)	Start	5/17/2011@15:19	Reference level and or survey change.	E	Start	8/22/2010@12:15	Probe set incorrectly.	E	Start	3/24/2011@15:34	Discrepancy between depth to water probe and Level TROLL (-0.155) - no obvious offset therefore not questionable.
	D	Calculated (g)	Start	5/17/2011@16:18	Reference level and or survey change.	G & E	Start	8/22/2010@12:15	Levels adjusted to account for probe placement & offset.	G & E	4/13/2011@14:15	5/17/2011@16:18	probe not replaced correctly after induction logging

Key:

? = Questionable.	LR = Reference Level.
C = Cleaning & Calibration.	M = Intermediate Well.
D = Deep Well.	NA = Not applicable.
E = Estimated.	PR = Reference Pressure.
ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
ID = Interceptor Ditch.	USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPGW					
1	S				
	M				
	D				
2	S				
	M				
	D				
3	S				
	M				
	D				
4	S				
	M				
	D				
5	S				
	M				
	D				
6	S				
	M	E	3/24/2011@15:34	5/17/2011@15:19	Discrepancy between depth to water probe and Level TROLL (0.216) - no obvious offset therefore not questionable.
	D				

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LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
		Change #1 (Reference Level)	Time to Apply Correction					Change #2 (Survey Level)	Time to Apply Correction		Change #3	Time to Apply Correction		
			Start	End	Lr	Pr	Density		Start	End		Start	End	Rationale
TPGW														
7	S	Apply ref level/ref pressure/density.	Start	6/2/2011@12:58	-0.1	1.87156	0.999							
	M	Apply ref level/ref pressure/density.	Start	6/2/2011@11:35	-0.1	1.70187	0.999							
	D	Apply ref level/ref pressure/density.	Start	6/2/2011@10:51	-0.11	1.70651	0.999				Add 0.10 ft to levels.	4/14/2011 13:15	6/2/2011@10:51	Probe not reset properly after USGS pulled it for Induction Logging.
8	S	Apply ref level/ref pressure/density.	Start	6/1/2011@9:29	-1.8	1.48641	0.999	Add 1.56 ft to levels.	Start	6/1/2011@9:29				
	M	Apply ref level/ref pressure/density.	Start	6/1/2011@10:04	-1.82	1.49602	0.999	Add 1.57 ft to levels.	Start	6/1/2011@10:04				
	D	Apply ref level/ref pressure/density.	Start	6/1/2011@10:13	-1.81	1.08833	0.999	Add 1.56 ft to levels.	Start	6/1/2011@10:13	Add 0.11094 ft to levels. Add 0.17797 ft levels.	10/26/2010 11:45:00 AM 12/8/2010 2:15:00 PM	12/8/2010 @1400 1/4/11 /11 @12:45	Probe not reset properly after cleaning & calibration. Quarterly sampling; probe move and not set back to original location.

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g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications: Reference Levels and Survey Changes: Qualification 1	Start	End	Rationale	Qualifications: Other Qualifications: Qualification 3	Start	End	Rationale	Qualifications: Other Qualifications: Qualification 4	Start	End	Rationale
TPGW													
7	S	Calculated (g)	Start	6/2/2011@12:58	Reference level and or survey change.								
	M	Calculated (g)	Start	6/2/2011@11:35	Reference level and or survey change.								
	D	Calculated (g)	Start	6/2/2011@10:51	Reference level and or survey change.	G & E	########	6/2/2011@10:51	Levels adjusted to account for incorrect probe placement following induction logging: discrepancy between depth to water probe and Level TROLL on 6/2 (0.158) not marked as questionable because adjustment fixes offset and cause is known.				
8	S	Calculated (g)	Start	6/1/2011@9:29	Reference level and or survey change.	E	Start	3/24/2011@12:27	Discrepancy between depth to water probe and Level TROLL (-0.106) - no obvious offset therefore not questionable.				
	M	Calculated (g)	Start	6/1/2011@10:04	Reference level and or survey change.								
	D	Calculated (g)	Start	6/1/2011@10:13	Reference level and or survey change.	G & E	10/26/2010 @11:45	1/4/2011@12:45	Levels adjusted to account for probe placement & offset.				

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g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPGW					
7	S				
	M				
	D				
8	S				
	M				
	D				

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g = Gram.
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LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
		Change #1 (Reference Level)	Time to Apply Correction					Change #2 (Survey Level)	Time to Apply Correction		Change #3	Time to Apply Correction		
			Start	End	Lr	Pr	Density		Start	End		Start	End	Rationale
TPGW														
9	S	Apply ref level/ref pressure/density.	Start	5/16/2011@16:29	1.03	0.625084	0.999							
	M	Apply ref level/ref pressure/density.	Start	5/16/2011@13:02	-0.28	1.74365	0.999							
	D	Apply ref level/ref pressure/density.	Start	5/16/2011@14:03	-0.28	0.311454	0.999							
10	S	Apply ref level/ref pressure/density.	Start	6/14/2011@11:41	-1.32	1.23343	1.024	Subtract 0.2 ft from levels.	Start	6/14/2011@11:41				
	M	Apply ref level/ref pressure/density.	Start	6/14/2011@11:21	-0.9	1.59914	1.024	Subtract 0.3 ft from levels.	Start	6/14/2011@11:21				
	D	Apply ref level/ref pressure/density.	Start	6/14/2011@11:02	-1.09	1.23278	1.024	Subtract 0.1 ft from levels.	Start	6/14/2011@11:02				
11	S	Apply ref level/ref pressure/density.	Start	6/13/2011@14:42	-0.74	2.41229	1.024	Add 0.2 ft to levels.	Start	6/13/2011@14:42				
	M	Apply ref level/ref pressure/density.	Start	6/13/2011@13:51	-0.859	2.24409	1.024	Add 0.2 ft to levels.	Start	6/13/2011@13:51				
	D	Apply ref level/ref pressure/density.	Start	6/13/2011@13:31	-0.77	2.31846	1.024	Add 0.2 ft to levels.	Start	6/13/2011@13:31				

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M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

		Qualifications				Qualifications				Qualifications			
		Reference Levels and Survey Changes				Other Qualifications				Other Qualifications			
Well		Qualification 1	Start	End	Rationale	Qualification 3	Start	End	Rationale	Qualification 4	Start	End	Rationale
TPGW													
9	S	Calculated (g)	Start	5/16/2011@16:29	Reference level and or survey change.	?	Start	8/16/2010@13:45	Probe placement questionable.	?	1/24/2011@17:00	3/3/2011@14:45	Obvious offset not observed in mid and deep wells.
	M	Calculated (g)	Start	5/16/2011@13:02	Reference level and or survey change.	?	Start	8/16/2010@13:45	Probe placement questionable.				
	D	Calculated (g)	Start	5/16/2011@14:03	Reference level and or survey change.	?	Start	8/16/2010@13:45	Probe placement questionable.				
10	S	Calculated (g)	Start	6/14/2011@11:41	Reference level and or survey change.								
	M	Calculated (g)	Start	6/14/2011@11:21	Reference level and or survey change.								
	D	Calculated (g)	Start	6/14/2011@11:02	Reference level and or survey change.	E	Start	6/14/2011@11:02	Discrepancy between depth to water probe and Level TROLL (0.182) - no obvious offset therefore not questionable.				
11	S	Calculated (g)	Start	6/13/2011@14:42	Reference level and or survey change.								
	M	Calculated (g)	Start	6/13/2011@13:51	Reference level and or survey change.								
	D	Calculated (g)	Start	6/13/2011@13:31	Reference level and or survey change.	E	Start	4/29/2011@10:04	Discrepancy between depth to water probe and Level TROLL (0.194) - no obvious offset therefore not questionable.				

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ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
ID = Interceptor Ditch.	USGS = United States Geological Survey.

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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPGW					
9	S	?	4/11/2011@14:45	5/16/2011@11:57	Probe out of water.
	M				
	D				
10	S				
	M				
	D				
11	S				
	M				
	D				

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E = Estimated.
ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

		Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
		Change #1	Time to Apply Correction					Change #2	Time to Apply Correction		Change #3	Time to Apply Correction		
Well		(Reference Level)	Start	End	Lr	Pr	Density	(Survey Level)	Start	End		Start	End	Rationale
TPGW														
12	S	Apply ref level/ref pressure/density.	Start	5/31/2011@14:53	-0.68	1.25605	1.024							
	M	Apply ref level/ref pressure/density.	Start	5/31/2011@13:16	-0.57	2.39065	1.024							
	D	Apply ref level/ref pressure/density.	Start	5/31/2011@12:10	0.02	1.31059	1.024							
13	S	Apply ref level/ref pressure/density.	Start	5/19/2011@12:31	-0.55	1.30963	1.024				Subtract 0.22227 ft from level	Start	11/10/2010 10:15	Probe too deep at onset; corrected after 11/1
	M	Apply ref level/ref pressure/density.	Start	5/19/2011@11:26	0.24	2.55875	1.024							
	D	Apply ref level/ref pressure/density.	Start	5/19/2011@10:05	-1.07	3.15372	1.024							
14	S	Apply ref level/ref pressure/density.	Start	6/13/2011@11:49	-1.24	1.89096	1.024	Subtract 0.1 from levels.	Start	6/13/2011@11:49				
	M	Apply ref level/ref pressure/density.	Start	6/13/2011@11:31	-1.39	1.75835	1.024	Subtract 0.1 from levels.	Start	6/13/2011@11:31				
	D	Apply ref level/ref pressure/density.	Start	6/13/2011@11:27	-0.98	1.82613	1.024	Subtract 0.1 from levels.	Start	6/13/2011@11:27				
TPSWCCS														
1		Apply ref level/ref pressure.	Start	6/1/2011@15:54	-0.36	0.497215	NA				Add -0.82868 ft to levels.	1/14/2011 13:25	3/29/2011 11:55	Probe placed too shallow after reset of log.

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D = Deep Well.
E = Estimated.
ft = Feet.
g = Gram.
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LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

		Qualifications				Qualifications				Qualifications			
		Reference Levels and Survey Changes				Other Qualifications				Other Qualifications			
Well		Qualification 1	Start	End	Rationale	Qualification 3	Start	End	Rationale	Qualification 4	Start	End	Rationale
TPGW													
12	S	Calculated (g)	Start	5/31/2011@14:53	Reference level and or survey change.								
	M	Calculated (g)	Start	5/31/2011@13:16	Reference level and or survey change.								
	D	Calculated (g)	Start	5/31/2011@12:10	Reference level and or survey change.								
13	S	Calculated (g)	Start	5/19/2011@12:31	Reference level and or survey change.	G & E	Start	11/10/2010 10:15	Levels adjusted to account for probe placement & offset.				
	M	Calculated (g)	Start	5/19/2011@11:26	Reference level and or survey change.								
	D	Calculated (g)	Start	5/19/2011@10:05	Reference level and or survey change.	?	Start	3/26/201@12:30	Probe moved and no corrected water levels available prior to adjustment.	E	5/4/2011@9:57	5-19-2011@10:05	Discrepancy between depth to water probe and Level TROLL (0.117) - no obvious offset therefore not questionable.
14	S	Calculated (g)	Start	6/13/2011@11:49	Reference level and or survey change.								
	M	Calculated (g)	Start	6/13/2011@11:31	Reference level and or survey change.								
	D	Calculated (g)	Start	6/13/2011@11:27	Reference level and or survey change.								
TPSWCCS													
1		Calculated (g)	Start	6/1/2011@15:54	Reference level and or survey change.	G & E	#########	3/29/2011 11:55	Levels adjusted to account for probe placement & offset: discrepancy between depth to water probe and Level TROLL on 3/29 (0.773) not marked as questionable because adjustment fixes offset and cause is known.				

Key:

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ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPGW					
12	S				
	M				
	D				
13	S				
	M				
	D				
14	S				
	M				
	D				
TPSWCCS					
1					

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g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June

Well	Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
	Change #1 (Reference Level)	Time to Apply Correction					Change #2 (Survey Level)	Time to Apply Correction		Change #3	Time to Apply Correction		
		Start	End	Lr	Pr	Density		Start	End		Start	End	Rationale
2	Apply ref level/ref pressure.	Start	5/19/2011@13:54	-0.95	1.08363	NA	Add 0.45 ft to levels.	Start	5/19/2011@13:54				
3	No changes.					NA							
4	No changes.					NA							
5	No changes.					NA							
6	Apply ref level/ref pressure.	Start	6/14/2011@13:52	-2.39	0.815688	NA	Add 0.12 ft to levels.	Start	6/14/2011@13:52	Add 0.45 ft to levels.	Start	3/30/3011 @1	Depth to water error.

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ft = Feet.
g = Gram.
ID = Interceptor Ditch.
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M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
USGS = United States Geological Survey.

2011)

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well	Qualifications – Reference Levels and Survey Changes				Qualifications – Other Qualifications				Qualifications – Other Qualifications			
	Qualification 1	Start	End	Rationale	Qualification 3	Start	End	Rationale	Qualification 4	Start	End	Rationale
2	Calculated (g)	Start	5/19/2011@13:54	Reference level and or survey change.								
3												
4												
5												
6	Calculated (g)	Start	6/14/2011@13:52	Reference level and or survey change.	G & E	Start	3/30/2011 @15:19	Levels adjusted to account for offset; difference between observed and Level TROLL (0.545) not marked as questionable because adjustment fixes offset.	?	3/30/2011@15:19	6/14/2011@13:52	Observed vs Level TROLL reading (0.427); difference unexplained.

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M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
2					
3					
4					
5					
6					

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E = Estimated.
ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June

Well	Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
	Change #1 (Reference Level)	Time to Apply Correction					Change #2 (Survey Level)	Time to Apply Correction		Change #3	Time to Apply Correction		
		Start	End	Lr	Pr	Density		Start	End		Start	End	Rationale
TPSWC													
1	No changes.					NA							
2	No changes.					NA							
3	No changes.					NA							
4	No changes.					NA							
5*	No changes.					NA				Subtract 0.4 ft from levels.	1/14/2011 15:05	##########	Probe set incorrectly.

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E = Estimated.	PR = Reference Pressure.
ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
ID = Interceptor Ditch.	USGS = United States Geological Survey.

2011)

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well	Qualifications: Reference Levels and Survey Changes – Qualification 1	Start	End	Rationale	Qualifications: Other Qualifications – Qualification 3	Start	End	Rationale	Qualifications: Other Qualifications – Qualification 4	Start	End	Rationale
TPSWC												
1												
2												
3												
4												
5*						1/14/2011 15:05	3/30/2011 11:20	Levels adjusted to account for probe placement & offset: discrepancy between depth to water probe and Level TROLL on 3/30 (-0.49) not marked as questionable because adjustment fixes offset and cause is known.				

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ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPSWC					
1					
2					
3					
4					
5*					

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E = Estimated.
ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well	Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels			Other Level Corrections			
	Change #1 (Reference Level)	Time to Apply Correction					Change #2 (Survey Level)	Time to Apply Correction		Change #3	Time to Apply Correction		
		Start	End	Lr	Pr	Density		Start	End		Start	End	Rationale
TPSWID													
1	No changes.					NA							
2	No changes.					NA				Subtract 0.301 ft from levels.	1/14/2011 12:15	3/28/2011 11:00	Probe not dropped down deep enough during cleaning & calibration. Adjust to reflect deeper depth. Verified with ID staff gauge.
3	No changes.					NA							
TPBBSW													
1	No level data.												
2	No level data.												

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D = Deep Well.	NA = Not applicable.
E = Estimated.	PR = Reference Pressure.
ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
ID = Interceptor Ditch.	USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well	Qualifications: Reference Levels and Survey Changes				Qualifications: Other Qualifications				Qualifications: Other Qualifications			
	Qualification 1	Start	End	Rationale	Qualification 3	Start	End	Rationale	Qualification 4	Start	End	Rationale
TPSWID												
1												
2						1/14/2011 12:15	3/28/2011 11:00	Levels adjusted to account for probe placement & offset: discrepancy between depth to water probe and Level TROLL on 3/28 (-0.326) not marked as questionable because adjustment fixes offset and cause is known.				
3												
TPBBSW												
1												
2												

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D = Deep Well.	NA = Not applicable.
E = Estimated.	PR = Reference Pressure.
ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
ID = Interceptor Ditch.	USGS = United States Geological Survey.

Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPSWID					
1					
2					
3					
TPBBSW					
1					
2					

Key:

? = Questionable.
C = Cleaning & Calibration.
D = Deep Well.
E = Estimated.
ft = Feet.
g = Gram.
ID = Interceptor Ditch.
LR = Reference Level.
M = Intermediate Well.
NA = Not applicable.
PR = Reference Pressure.
Ref = Reference.
S = Shallow Well.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Reference Level, Reference Pressure & Density Changes						Changes Resulting from Revised Survey Levels				Other Level Corrections			
		Change #1 (Reference Level)	Time to Apply Correction					Change #2 (Survey Level)	Time to Apply Correction			Change #3	Time to Apply Correction		
			Start	End	Lr	Pr	Density		Start	End			Start	End	Rationale
TPBBSW															
3		Apply ref level/ref pressure.	Start	6/13/2011 @14:22	-1.683	1.87119	NA	Add 0.2 ft to levels.	Start	6/13/2011 @14:22					
4		No level data.													
5		No level data.													
10		No changes.					NA								
14		Apply ref level/ref pressure.	Start	6/13/2011 @11:09	-0.687	0.981507	NA	Subtract 0.3 ft from leve	Start	6/13/2011 @11:09					

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E = Estimated.	PR = Reference Pressure.
ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
ID = Interceptor Ditch.	USGS = United States Geological Survey.

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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well	Qualifications: Reference Levels and Survey Changes				Qualifications: Other Qualifications				Qualifications: Other Qualifications			
	Qualification 1	Start	End	Rationale	Qualification 3	Start	End	Rationale	Qualification 4	Start	End	Rationale
TPBBSW												
3	Calculated (g)	Start	6/13/2011 @14:	Reference level and or survey change.	G & E	Start	6/13/2011@14:22	Off from depth to water probe (0.164) but matches groundwater (otherwise would mark as questionable).				
4												
5												
10					?	Start	3/10/2011@14:15	Comparisons with other BBSW and TPGW 10.	E	/10/2011@14:3	6/14/2011@11	Discrepancy between depth to water probe and Level TROLL (0.212) - no obvious offset therefore not questionable.
14	Calculated (g)	Start	6/13/2011 @11:(	Reference level and or survey change.	?	Start	1/26/2011@12:15	Comparisons with other BBSW.	E	/26/2011@12:3	3/28/2011@9:4	Discrepancy between depth to water probe and Level TROLL (0.429) - no obvious offset therefore not questionable.

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ft = Feet.	Ref = Reference.
g = Gram.	S = Shallow Well.
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Table C-4. Changes to Automated Water Level Data (start of monitoring until June 2011)

Well		Qualifications			
		Other Qualifications			
		Qualification 5	Start	End	Rationale
TPBBSW					
3					
4					
5					
10					
14					

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? = Questionable.
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