

Data Validation – Ascon Groundwater Samples

December 2006 Groundwater Samples

Level II data packages were received in the Geosyntec-Knoxville, TN office in January 2007 for Tier II data validation. The following documents were referenced with regard to performing this data validation: USEPA National Functional Guidelines for Organic Data Review, USEPA National Functional Guidelines for Inorganic Data Review, SW846 EPA Methods 8260B, 8270C, 6020 and 7470A. The data review process provides information on the analytical limitations of data based on specified quality control (QC) criteria.

Test America Analytical Testing Corporation (formerly Del Mar Analytical) of Irvine, California performed the sample analyses.

The data are discussed by report number and analytical test as follows:

IPL0360

<u>Client ID</u>	<u>Laboratory ID</u>
MW19-GW04-12/06	IPL0360-01
AW3-GW04-12/06	IPL0360-02
EB-1	IPL0360-03
FB-1	IPL0360-04
TB-1	IPL0360-05

Matrix: Groundwater, and one (1) equipment blank, one (1) field blank and one (1) trip blank.

Samples Collected: 12/5/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 8270C –

For samples MW19-GW04-12/06 and AW3-GW04-12/06, Aniline and 3,3-Dichlorobenzidine are UJ qualified as estimated below the reporting limit due to low recoveries outside of the Quality Control (QC) criteria in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD).

For samples MW19-GW04-12/06 and AW3-GW04-12/06, Benzidine is R qualified as rejected due to 0% recoveries in the LCS and LCSD. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

IPL0522

<u>Client ID</u>	<u>Laboratory ID</u>
MW18-GW04-12/06	IPL0522-01
MW28-GW04-12/06	IPL0522-02
MW16-GW04-12/06	IPL0522-03
TB-2	IPL0522-04

Matrix: Groundwater and one (1) trip blank

Samples Collected: 12/6/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

For sample MW16-GW04-12/06, Bromochloromethane is UJ qualified as estimated below the reporting limit due to low spike recovery outside of the QC criteria in the matrix spike (MS). No other qualifications are applied to the remaining sample data.

Method 8270C –

For samples MW18-GW04-12/06, MW28-GW04-12/06 and MW16-GW04-12/06, Aniline and 3,3-Dichlorobenzidine are UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the LCS and/or LCSD.

For samples MW18-GW04-12/06, MW28-GW04-12/06 and MW16-GW04-12/06, Benzidine is R qualified as rejected due to 0% recoveries in the LCS and LCSD. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

IPL0763

<u>Client ID</u>	<u>Laboratory ID</u>
MW17-GW04-12/06	IPL0763-01
MW13-GW04-12/06	IPL0763-02
MW15-GW04-12/06	IPL0763-03
TB-3	IPL0763-04

Matrix: Groundwater and one (1) trip blank.

Samples Collected: 12/7/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 8270C –

For samples MW17-GW04-12/06, MW13-GW04-12/06 and MW15-GW04-12/06, Aniline and 3,3-Dichlorobenzidine are UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the LCS and/or LCSD.

For samples MW17-GW04-12/06, MW13-GW04-12/06 and MW15-GW04-12/06, Benzidine is R qualified as rejected due to 0% recoveries in the LCS and LCSD. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

IPL0935

<u>Client ID</u>	<u>Laboratory ID</u>
MW9-GW04-12/06	IPL0935-01
AW1A-GW04-12/06	IPL0935-02
AW1-GW04-12/06	IPL0935-03
TB-4	IPL0935-04

Matrix: Groundwater and one (1) trip blank.

Samples Collected: 12/8/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 8270C –

For samples MW9-GW04-12/06, AW1A-GW04-12/06 and AW1-GW04-12/06, Hexachlorobutadiene is UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the LCS and LCSD.

For samples MW9-GW04-12/06, AW1A-GW04-12/06 and AW1-GW04-12/06, Benzidine is R qualified as rejected due to low and 0% recoveries in the LCS and LCSD, respectively. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

IPL1141

<u>Client ID</u>	<u>Laboratory ID</u>
AW2-GW04-12/06	IPL1141-01
AW8-GW04-12/06	IPL1141-02
NMW2-GW04-12/06	IPL1141-03
TB-5	IPL1141-04

Matrix: Groundwater and one (1) trip blank.

Samples Collected: 12/11/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 8270C –

For samples AW2-GW04-12/06, AW8-GW04-12/06 and NMW2-GW04-12/06, Hexachlorobutadiene is UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the LCS and LCSD.

For samples AW2-GW04-12/06, AW8-GW04-12/06 and NMW2-GW04-12/06, Benzidine is R qualified as rejected due to unacceptably low and 0% recoveries in the LCS and LCSD, respectively. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as

undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

Method 6020 –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 7470A –

For sample AW2-GW04-12/06, Mercury is UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the matrix spike/matrix spike duplicate (MS/MSD). No other qualifications are applied to the remaining sample data.

IPL1402

<u>Client ID</u>	<u>Laboratory ID</u>
GP23-GW04-12/06	IPL1402-01
GP12-GW04-12/06	IPL1402-02
AW4A-GW04-12/06	IPL1402-03
AW14A-GW04-12/06	IPL1402-04
TB-6	IPL1402-05

Matrix: Groundwater and one (1) trip blank.

Samples Collected: 12/12/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 8270C –

For samples GP23-GW04-12/06, GP12-GW04-12/06, AW4A-GW04-12/06 and AW14A-GW04-12/06, Hexachlorobutadiene is UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the LCS and LCSD.

For samples GP23-GW04-12/06, GP12-GW04-12/06, AW4A-GW04-12/06 and AW14A-GW04-12/06, Benzidine is R qualified as rejected due to inacceptably low and 0% recoveries in the LCS and LCSD, respectively. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

IPL1486

<u>Client ID</u>	<u>Laboratory ID</u>
AW5-GW04-12/06	IPL1486-01
EB-2	IPL1486-02
FB-2	IPL1486-03
B4A-GW04-12/06	IPL1486-04
B7-GW04-12/06	IPL1486-05
TB-7	IPL1486-06

Matrix: Groundwater, one (1) equipment blank, one (1) field blank and one (1) trip blank.

Samples Collected: 12/13/06

All technical holding times were met. The groundwater samples for EPA 8260 analysis were received unpreserved; however, the samples were analyzed within the EPA required 7 day holding time.

Method 8260B –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 8270C –

For samples AW5-GW04-12/06, EB-2, B4A-GW04-12/06 and B7-GW04-12/06, Aniline and Hexachlorobutadiene are UJ qualified as estimated below the reporting limit due to low recoveries outside of the QC criteria in the LCS and LCSD.

For samples AW5-GW04-12/06, EB-2, B4A-GW04-12/06 and B7-GW04-12/06, Benzidine is R qualified as rejected due to unacceptably low recovery in the LCSD. No other qualifications are applied to the remaining sample data.

For samples with detections of Di-n-butylphthalate less than 110 ug/L and/or Bis(2-ethyl)phthalate less than 29 ug/L (10X the result detected in EB-1) the results are U qualified as undetected due to the concentrations of Di-n-butylphthalate and Bis(2-ethyl)phthalate in sample EB-1.

Method 6020 –

No qualifications are applied to the samples. The data met the requirements of the method and are acceptable for use.

Method 7470A –

For sample B7-GW04-12/06, Mercury is R qualified as rejected due to unacceptably low recoveries in the MS and MSD. No other qualifications are applied to the remaining sample data.

The data packages were reviewed. The data are acceptable for use as qualified, with the exception of the rejected data.

Reviewer: Mary E. Tyler
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