<u>Data Validation – Ascon Water Samples</u> July 20, 2004

Level II data packages were received in the Geosyntec-Knoxville, TN office July 16, 2004 for data validation. The following documents were referenced with regard to performing this data validation, USEPA National Functional Guidelines for Organic and Inorganic Data Review, EPA SW846 and Standard Methods. The data review process provides information on the analytical limitations of data based on specified quality control (QC) criteria.

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

<u>INF0543</u>

aboratory ID
NF0543-01
NF0543-02
NF0543-03
NF0543-04
NF0543-05

Matrix: Water

All technical holding times were met for the samples except for a 1/10 dilution for a matrix spike/matrix spike duplicate analysis for hexavalent chromium.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – All results are acceptable for use without qualification.

EPA7199 Hexavalent Chromium – Sample MW19-GW02-06/04 was "R" qualified as rejected due to no recoveries in the MS/MSD and subsequent analysis of MS/MSD in gross exceedence of holding time. All of the remaining results are acceptable for use without qualification.

<u>INF0462</u>

Client ID	Laboratory ID
MW17-GW02-06/04	INF0462-01
DW70-GW02-06/04	INF0462-02
EB01-GW02-06/04	INF0462-03
FB01-GW02-06/04	INF0462-04
MW16-GW02-06/04	INF0462-05
TB01-GW02-06/04	INF0462-06

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 1625C Modified n-Nitrosodimethylamine – All results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – All results are acceptable for use without qualification.

<u>INF0648</u>

<u>Client ID</u> <u>Laboratory ID</u>

AW3-GW02-06/04	INF0648-01
MW13-GW02-0604	INF0648-02
MW15-GW02-06/04	INF0648-03
TB03-GW02-06/04	INF0648-04

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 7470A Mercury – Sample AW3-GW02-06/04 result was "R" qualified as rejected due to very low recovery of 19% on the MS/MSD. All other results are acceptable for use without qualification.

EPA 6020 Metals – The following analytes are "J-" qualified as estimated with a low bias due to low recovery in the MS/MSD for Sample AW3-GW02-06/04: beryllium, cadmium, selenium, and zinc. All other results are acceptable for use without qualification.

<u>INF0752</u>

Client ID	Laboratory ID
MW9-GW02-06/04	INF0752-01
AW1A-GW02-06/04	INF0752-02
AW1-GW02-06/04	INF0752-03
TB04-GW02-06/04	INF0752-04

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All are results acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All samples were reported as "J" flagged as estimated for benzo(k)fluoranthene due to a low bias in the method. All other results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – The following analytes are "J-" qualified as estimated with a low bias due to low recovery in the MS/MSD for Sample MW9-GW02-06/04: beryllium, cadmium, selenium, and zinc. All other results are acceptable for use without qualification.

EPA7199 Hexavalent Chromium – Sample AW1-GW02-06/04 was "R" qualified as rejected due to no recoveries in the MS/MSD. All of the remaining results are acceptable for use without qualification.

<u>INF0794</u>

Client ID	Laboratory ID
NMW2-GW02-06/04	INF0794-01
B7-GW02-06/04	INF0794-02
TB05-GW02-06/04	INF0794-03
GP23-GW02-06/04	INF0794-04

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – All results are acceptable for use without qualification.

<u>INF0831</u>

Client ID	Laboratory ID
AW5-GW02-06/04	INF0831-01
TB06-GW02-06/04	INF0831-02

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – All results are acceptable for use without qualification.

EPA7199 Hexavalent Chromium – Sample AW5-GW02-06/04 was "R" qualified as rejected due to no recoveries in the MS/MSD. All of the remaining results are acceptable for use without qualification.

INF1005

<u>Client ID</u>	Laboratory ID
TB07-GW02-06/04	INF1005-01
GB12-GW02-06/04	INF1005-02
AW4A-GW02-06/04	INF1005-03

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – The following analytes are "J-" qualified as estimated with a low bias due to low recovery in the MS/MSD for Sample GP12-GW02-06/04: selenium and zinc. All other results are acceptable for use without qualification.

EPA7199 Hexavalent Chromium – Sample AW4A-GW02-06/04 was "R" qualified as rejected due to no recoveries in the MS/MSD.

INF1118

<u>Client ID</u>	Laboratory ID
B4A-GW02-06/04	INF1118-01
D40A-GW02-06/04	INF1118-02
EB02-GW02-06/04	INF1118-03
FB02-GW02-06/04	INF1118-04
GP1-GW02-06/04	INF1118-05
GB24-GW02-06/04	INF1118-06
TB08-GW02-06/04	INF1118-07

Matrix: Water

All technical holding times were met for the samples.

EPA 5030B/8260B Volatile Organic Compounds (VOC) - All results are acceptable for use without qualification.

EPA 3520C/8270C Semi-volatile Organic Compounds (SVOC) – All results are acceptable for use without qualification.

EPA 7470A Mercury – All results are acceptable for use without qualification.

EPA 6020 Metals – All results are acceptable for use without qualification.

EPA7199 Hexavalent Chromium – Sample GP1-GW02-06/04 was "R" qualified as rejected due to no recoveries in the MS/MSD.

<u>ING0135</u>

<u>Client ID</u> B7-GW02-06/04 Laboratory ID ING0135-01

Matrix: Water

All technical holding times were met for the samples.

Modified EPA 3520/8270 1,4-Dioxane – All results are acceptable for use without qualification.

The data packages were reviewed. The data are acceptable for use as qualified with the exception of some values for Chromium VI which were qualified as "R" or rejected, due to poor or no recoveries of the spike in their associated MS/MSD. Overall, the analyses were generally within the requirements of the referenced methods.

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Reviewer: Julia K. Caprio Geosyntec Consultants July 20, 2004