Study Notes

Data for: Study Notes 01

0600Bh--Jack Fitz Cruise 01 05-10-2010

****DATA SOURCE****
Data were compiled from NewFields Environmental Forensics Practice, LLC (Alpha) lab electronic data from QC Batches 1005011, 1005012, 1005013, and 1005014. Data validation was completed for QC Batches 1005011 and 1005012 at a "summary" level on 07/09/2010 and 07/14/2010 respectively (coded in the database as S2BVM). Data validation was completed for QC Batches 1005013 and 1005014 at a "full review" level on 7/20/2010 and 7/19/2010 respectively (coded in the database as S4VM). Validation was performed by EcoChem.

****DATA COLLECTION PURPOSE****
Natural Resource Damage Assessment

****DATA USE QUALIFICATION****
Values for concentration and detection limit should be interpreted to 3 significant figures. Values for reporting limits should be interpreted to 1 significant figure.

****STUDY****
The data include water chemistry data.

****STATION****
StationIDs are based on the Grid locations recorded in the NOAA Field Sampling Information database, plus a sequential number used for each distinct latitude/longitude position reported. Datum was not provided but assumed to be NAD83.

****SAMPLES AND REPLICATES****
The original SampleIDs reported by the lab from the Chain-of-Custody is stored in the ExSampID field in the SmpWat.dbf table. The original SampleID reported by field staff is stored in FldSampID in the SmpWat.dbf table.

The collection depth of water samples in the fields UDepth and LDepth are reported in meters.

Identifiable field duplicates have "D" as the last character of the SampleID.

The default labrep code "1A" was used for most data.

Lab duplicates (second analysis of same sample for same analytical method) were assigned labrep "2A". Lab duplicates were identified as those samples with a "D" suffix on the lab ID (e.g., 1005011-09D was the lab duplicate for 1005011-09).

Several analytes are reported from 2 different analytical methods. The "preferred" result (usually with lower detection limits) is given the default labrep code (e.g., "1A" or "2A"). The alternate result has a "X" appended to the labrep code (e.g., "1AX" or "2AX")

The following chemcode/analytes were measured using two methods:

Methods: PIANO Volatile Hydrocarbons by GC/MS | 8260M and Total Saturated Hydrocarbons by GC/FID | 8015M
AHCN_C09/ Nonane
AHCN_C10/ Decane
AHCN_C11/ Undecane
AHCN_C12/ Dodecane
AHCN_C13/ Tridecane
Where both methods are used for the same sample, the results for PIANO Volatile Hydrocarbons by GC/MS were assigned labrep "1AX"

Methods: PIANO Volatile Hydrocarbons by GC/MS | 8260M and Alkylated Polynuclear Aromatic Hydrocarbons | 8270M
BTHIOPHNE/ Benzo(b)thiophene
METHNAP_1/ 1-Methylnaphthalene
METHNAP_2/ 2-Methylnaphthalene
NAPTHALENE/ Naphthalene
Where both methods are used for the same sample, the results for PIANO Volatile Hydrocarbons by GC/MS were assigned labrep "1AX"

In some cases, the lab re-analyzed some samples. These were identified with "E" on the labID (e.g., 1005011-05E was a re-analysis sample for 1005011-05). During data validation, the re-run samples were assigned "DNR" (do not report) qualifiers. So, none of the results for the re-run analyses were selected to replace the default labrep "1A" results. The re-run analyses were given a suffix of "2" (indicating second run of analytical method) to the standard labrep code (e.g., 1A2 or 1AX2).

Methods:
Total Saturated Hydrocarbons by GC/FID | 8015M | SOP. 0-003 Rev. 5 (abbreviated as 8015 M - Tot Sat. HC - GC/FID)
Alkylated Polynuclear Aromatic Hydrocarbons | 8270M | SOP. 0-008 Rev. 6 (abbreviated as 8270 M - Alkylated PAHs)
PIANO Volatile Hydrocarbons by GC/MS | 8260M | SOP. 0-019 Rev. 2 (abbreviated as 8260 M - PIANO VolHC - GC/MS)

****SUMMED PARAMETERS****
No sums were calculated.

****QUALIFIERS****
Qualifiers recorded in the chemistry files are those resulting from validation.
Descriptions for the lab supplied qualifiers are recorded in Qualify.dbf with the Labname (i.e., qualifiers may be lab dependent and data from other labs may be added in the future).
"F" qualifiers and "DNR" qualifiers were added by the data validators.
"F" (found) is used where the lab reported concentration was below the method detection limit (see DL field).
"DNR" (do not report) is used when two results are reported, such as where a dilution and original result are both provided or when the same analyte is reported from two different analytical methods. The DNR qualifier is applied to the result that should not be used.

****OTHER****
The original analyte in Alpha lab EDDs reported as Benzo(k)fluoranthene was identifed by the data validators to be a coelution of Benzo(k)fluoranthene and Benzo(j)fluoranthene. Therefore, the chemical data for the original Benzo(k)fluoranthene results have been assigned a chemical code for Benzo(j+k)fluoranthene.

The original analyte in Alpha lab EDDs reported as "Total Petroleum Hydrocarbons (C9-C44)" was proposed to need further distinction based on information acquired from the data validators. The analyte was not subjected to silica gel cleanup; thus, it was suggested that the results represented "Total Extractable Matter (C9-C44)". This is the chemical code/chemical name used to report these original total petroleum hydrocarbon results in the final chemistry tables.