STATE OF NEVADA
Jim Gibbons, Governor
Department of Conservation & Natural Resources
Allen Biaggi, Director
DIVISION OF ENVIRONMENTAL PROTECTION
Leo M. Drozdoff, P.E., Administrator
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protecting the future for generations

February 28, 2010

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Re. **BMI Plant Sites and Common Areas Projects, Henderson, Nevada**
NDEP-Required Electronic Data Deliverables (EDD) Format

Dear Sirs and Madam:

All of the parties listed above shall be referred to as "the Companies" for the purposes of this letter.

NDEP will electronically transmit a revised EDD format to the Companies which the NDEP will require the Companies to conform to for all future Deliverables. The EDD format has been revised due to changes in types of data that are being generated. In addition, different end uses for the data have resulted in modifications to the EDD. Please note that a new Appendix J has been added which annotates the changes made to this document.

Sincerely,

Brian A Rakvica, P.E.
Supervisor, Special Projects Branch
Bureau of Corrective Actions
Fax: (702) 486-5733

BAR:s

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Attachment A

Unified Chemical EDD Format

The objective of this guidance is to specify the design of the format for the submission of electronic chemical data from the Companies to NDEP. The goal is to streamline the uploading of the Companies' electronic data into the regional database maintained by the NDEP. This task requires defining each element of the EDD(s) so that they are provided in a consistent format. Provided below are the required elements of the EDD format and descriptions of the elements. Requested formats and codes are provided in appendices, which should be followed to the extent possible. Additions to the fields should be provided as comments to this guidance or in formal communications if they are developed later in the project. Due to the resources required to modify the EDD for each Company it is the desire of the NDEP to modify this EDD as infrequently as possible.

The chemical EDD should be delivered as a Microsoft Access database (file format Access 2000 or later) with the data organized into several tables. The fields to be included in each table are described in Appendix A.

It is understood that the database developed for the data validation summary report (DVSR) will include additional fields and records (e.g. quality control (QC) data). However, these additional fields and records should be provided in a separate table from the format described here. All native samples, including replicates should be included in this EDD but QC results (other than replicates) will not be incorporated into the regional database at this time.

It is understood that not all fields will contain a value. Empty fields will be represented as "NULLs" in the Microsoft Access database.

Non-Analytical Data

There are some data which will be stored in the regional database but which do not fit into the same format as the analytical data. Examples of these data are hydraulic parameters and soil material properties as described in Appendices G and H. Separate data tables will be developed to hold these data, which are not part of the standard EDD deliveries.

Groundwater level monitoring data will be delivered separately from the analytical data and will have its own EDD guidance document.

Obsolete Data

Over time some data may become obsolete as sampled soils are removed during remediation. The companies must notify NDEP on a per-sample basis of all data which become obsolete. Obsolete samples should be provided in an auxiliary table named "obsolete_samples" included in the first EDD delivery after the data have been rendered obsolete.

CAS Identifiers

Assigning a unique identifier for each chemical reported is a major challenge in developing a unified database. For purposes of the EDD, CAS numbers will be used to identify chemicals whenever possible. However, some substances may not have a CAS number, while others may in practice be referred to by more than one CAS number. To address this issue, this document provides a comprehensive list of identifiers and "analyte names" to be used in all chemical EDDs. This list can be found in Appendix I. All values reported must be identified with a "cas_id" as listed in Appendix I.

Appendix I was developed based on all the data that has been incorporated into the all companies database to date. NDEP recognizes that this list will continue to be refined and expanded as new chemicals are introduced. If an EDD contains chemicals (or other parameters) which are not currently in Appendix I, a list of identifiers and descriptions of those parameters must be provided in a table named "cas_id_new" containing two fields, "cas_id" and "analyte_name."

Given the variety of ways in which CAS ids are employed in actual data collection, it is possible that the companies may not agree with all the choices made in assembling the Appendix I table. The companies are encouraged to provide feedback with the goal of making the table as easy to use as possible.

Lookup Tables

The latest version of all lookup tables which are attached as appendices to this document will also be made available online as downloadable MS Excel files from the website which hosts the regional database. The URL for the website is http://ndep.gisdt.org

Asbestos

NDEP has recently provided technical guidance surrounding the calculation of asbestos related risk (*Asbestos-Related Risk Assessment Guidance* dated April 24, 2009). The reporting of asbestos in the Companies' supplied EDD should follow this guidance. Both the asbestos fibrous variety (chrysotile or amphibole) and the size and shape influence the asbestos-related risk (ARR). The modified elutriator method described in that document along with TEM analysis is the preferred technique for asbestos analysis associated with the BMI Complex and Common Areas. The important laboratory reporting parameters for asbestos are: Soil Concentrations (fibers or structures), Analytical Sensitivity (S/g) and Asbestos Sensitivity Units. Note that the Soil Concentration is derived from the number of fibers observed (unitless) times the analytical sensitivity (f/g). The elutriator method provides sensitivity in units of Structures/g $_{PM10}$ It is critical that the laboratory report the biologically relevant structures – meaning those structures that are within the protocol dimensions of less than **0.4** µm in diameter and are >5 µm but less than 10 µm in length or are of less than **0.4** µm in diameter and > 10 µm in length. These details are consistent with a report of both the Long and Total asbestos structures in each sample.
An example of the information that should be reported for an asbestos sample would include (subset shown here of all fields) the following. Note, we have removed the asbestos_type field from the prior EDD structure.

Field Name	Record (what is to be reported in the EDD)
sample_id_field	MC1-J07
Cas_id	12001-29-5L
Analyte_name	Long Chrysotile Protocol Structure*
Result_reported	3
Asbestos_analytical_sensitivity	2.400E+06**
Asbestos_sensitivity_units	s/gPM10

*Each sample should include results for all asbestos types: Total Chrysotile Protocol Structure, Long Chrysotile Protocol Structure, Long Amphibole Protocol Structure, Total Amphibole Protocol Structure, Long Asbestos Protocol Structure, Total Asbestos Protocol Structure.

** This should be the mean value, not the 95% UCL value.

EDD Data Fields

Required Fields:

Short Description	Field Name	Detailed Description
DVSR Identification	dvsr_id	A unique ID for each DVSR, from each company. The ID should contain elements that make it clear which company supplied the DVSR, the year of submittal, and a unique number designation. Format: ZZZZZ-YYYY-XXXX where ZZZZZ = company, or background (BKG), YYYY = number of the DVSR, XXXX = year.
Sub-area or parcel designation	sub_area	A unique designation for each sub-area or parcel.
LOU designation	lou	A designation for LOU associated with the sample. If no LOU is associated with the sample this field should be labeled as "NULL".
Sample top depth	sample_top_depth	Sample top depth in feet. For Companies which only record a single sample depth, this value should go in both the sample_top_depth and sample_bottom_depth fields.
Sample bottom depth	sample_bottom_depth	Sample bottom depth in feet. For Companies which only record a single sample depth, this value should go in both the sample_top_depth and sample_bottom_depth fields.
Northing Coordinate	northing	Northing coordinate of the sample in NAD 1983 State Plane Nevada East feet

Short Description	Field Name	Detailed Description
Easting Coordinate	easting	Easting coordinate of the sample in NAD 1983 State Plane Nevada East feet
Sample Identification - Field	sample_id_field	The ID used on the Chain of Custody, or similar field record. This ID should be unique to the sample and also consistent (identical) for all records associated with that sample. For example, where multiple analytes are reported the sample ID should be identical for all.
Sample Identification - Laboratory	sample_id_lab	The ID of the sample used at the laboratory. This ID should generally be unique to the sample and also consistent for all records associated with that sample. For example, where multiple analytes are reported the sample ID should be identical for all. There are instances where a different name may be required (e.g. reanalysis) but the use of multiple names should be minimized as much as possible.
Sample Collection Information	sample_collection_comment	Field for capturing information about how the sample was collected, for example, when groundwater samples have been collected from open boreholes using a bailer or from direct push equipment versus collecting the sample from a well using a submersible pump. This field should be populated only in cases where the sample was collected in a "non-standard" manner.
Laboratory Identification/ code	lab_id	A unique identification of each laboratory, down to the laboratory location. For example, TestAmerica-Richland, Washington should have a designation that differs from other TestAmerica locations. Companies should provide a recommended ID for each laboratory currently used or expected. A designation for field analysis should be included.
SDG- Sample Delivery Group	sdg_id	The Sample Delivery Group identification supplied by the laboratory.
Analytical Batch Identification	batch_id	The analytical batch identification supplied by the laboratory.
Location Identification	location_id	An identification of the well or location where the sample was taken. The ID should be unique to that well or location and should be used in all future reports and EDDs. In the case of wells, the identifier should match the appropriate well name in the All Wells Database currently maintained by BRC. Companies are welcome to edit the All Wells database to ensure that identifiers for their wells match their current usage. For soil data, this identifier will be considered to be Company-specific; as part of the development of the regional database, a location table will be developed which will allow locations to be uniquely identified across companies.

Short Description	Field Name	Detailed Description
hydrogeologic	hydro	The designation of the water-bearing zone associated with the sample: Shallow Zone, Middle Zone, or Deep Zone. This hydrogeologic nomenclature is described in the January 6, 2009 letter (*Hydrogeologic and Lithologic Nomenclature Unification)* from NDEP to the Companies.
lithologic	litho	The designation of the lithologic nomenclature tags: Qal (Quaternary Alluvium), xMCf (transitional Muddy Creek formation), or UMCf (Upper Muddy Creek formation). This lithologic nomenclature is described in the January 6, 2009 letter (*Hydrogeologic and Lithologic Nomenclature Unification)* from NDEP to the Companies.
Sample Matrix Identification/ code	matrix	A short code that designates the matrix of the sample. A recommended set is provided in Appendix B.
Sample Type Identification/ code	sample_type	A short code that designates the sample type (e.g. Field Duplicate as FD). A recommended set is provided in Appendix C.
Analytical Method Name/code	analytical_method	An identifier for the analytical method used for that suite of analyses. The identifier should include the version of the method. For example, many of the SW-846 methods have a letter at the end to indicate the version (e.g. 8330B). A recommended format is provided in Appendix D.
Preparation Method Name/code	preparation_method	An identifier for the preparation method used for that suite of analyses. Use the same guidelines as found in Appendix D.
Analytical Suite	analytical_suite	A short code that designates the analytical suite, such as SVOC. A recommended list is provided in Appendix E.
Analyst Name	analyst_name	The name, or initials, of the analyst that performed the analysis. This field is required for asbestos results.
Total or Dissolved	filtered_flag	A flag T (true) or F (false) indicating whether the sample was filtered. T indicates the aqueous sample was filtered and is dissolved.
Sample Date	sample_date	The Year, Month, and Day of sample collection. Requested format: XXXXYYZZ, where XXXX=year, YY= month, and ZZ = day of month. This same format shall be used for all dates.
Sample Time	sample_time	The Hour:Minute:Seconds sample was collected. A 24 hour format is requested: 12:15:00 indicates 15 minutes after Noon. One hour later would be 13:15:00.

Short Description	Field Name	Detailed Description
Preparation Date	prep_date	The Year, Month, and Day of laboratory sample preparation. Requested format: XXXXYYZZ, where XXXX=year, YY= month, and ZZ = day of month. This same format shall be used for all dates.
Preparation Time	prep_time	The Hour:Minute:Seconds the sample was prepared. A 24 hour format is requested: 12:15:00 indicates 15 minutes after Noon. One hour later would be 13:15:00.
Analysis Date	analysis_date	The Year, Month, and Day of sample analysis. Requested format: XXXXYYZZ, where XXXX=year, YY= month, and ZZ = day of month. This same format shall be used for all dates.
Analysis Time	analysis_time	The Hour:Minute: Seconds the sample was analyzed. A 24 hour format is requested: 12:15:00 indicates 15 minutes after Noon. One hour later would be 13:15:00.
CAS id or short code	cas_id	The Chemical Abstracts Society designation for the analyte, or a suitable code if no CAS designation for the analyte in question. Approved codes are listed in Appendix I. Asbestos types are treated as chemicals, in that each asbestos type (Total Chrysotile Protocol Structure, Long Chrysotile Protocol Structure, Long Amphibole Protocol Structure, Total Amphibole Protocol Structure, Long Asbestos Protocol Structure, Total Asbestos Protocol Structure) has its own code This field is also used to capture physical parameters. Appropriate physical parameters are provided in Appendix F.
Chemical Name	analyte_name	A unique name for the analyte which corresponds to the code in the cas_id field. Approved names are listed in Appendix I.
Result Type Code	result_type	A short code to indicate the type of result for this record. Acceptable values include: TG (Target), SURR (Surrogate), IS (Internal Standard), SC (Spike Compound), TIC (tentatively Identified Compound). Others should be recommended by the Companies during review of this EDD guidance.
Initial or Reanalysis	reanalysis_flag	The field should contain either “Initial” or “Reanalysis” or similar designations to indicate whether the result is from the initial analysis or reanalysis. A sample that requires dilution and subsequent reanalysis would be so designated as would a sample that required re-extraction.

Short Description	Field Name	Detailed Description
Lab Reported Result	result_reported	The analytical value for that analyte (or physical parameter) as reported by the laboratory. For asbestos, this is the number of structures.
Result Units	result_units	Units associated with the reported value.
Reported Results Uncertainty	result_uncertainty	The uncertainty value associated with the laboratory reported results. This will apply to radionuclides and possibly other analytes (e.g. XRF analysis results). This field is not applicable to asbestos. The DVSR (or laboratory report within the DVSR) should define the uncertainty (e.g. one sigma).
Asbestos Sensitivity	asbestos_analytical_sensitivity	The analytical sensitivity associated with the asbestos results. This should be the Mean value, not a 95% UCL value.
Asbestos Sensitivity Units	asbestos_sensitivity_units	The units associated with the asbestos sensitivity value (structures/gram usually as S/g PM10).
Detect Flag (risk assessment)	detect_flag_ra	A flag, T (true) or F (false), to indicate whether the value is considered a detection or not for purposes of risk assessment. Values less than the Sample Quantitation Limit (SQL) are generally considered Not Detected. Radionuclides and other reported values that are not censored at the laboratory will be reported as T. For all radionuclide results, the flag will always equal T (true) indicating a value (positive or negative) was reported, regardless of the value relative to the MDA. Other factors, such as blank contamination, can also cause a value to be reported as Not Detected – in these cases the reason for considering the value as Not Detected should be indicated in the final_validation_qualifier field.
Detect Flag (frequency of detection)	detect_flag_fod	A flag, T (true) or F (false), to indicate whether the value is considered a detection or not for purposes of frequency of detection. Values less than the Sample Quantitation Limit (SQL) for non-radionuclides or the MDA for radionuclides are considered Not Detected – all other values are considered Detected. Other factors, such as blank contamination, can also cause a value to be reported as Not Detected – in these cases the reason for considering the value as Not Detected should be indicated in the final_validation_qualifier field.
Method Detection Limit	method_detection_limit	The Method Detection Limit for the analyte. This definition should follow the December 3, 2008 NDEP guidance entitled *Detection Limits and Data Reporting*
Sample Quantitation Limit	sample_quantitation_limit	The SQL for the analytes. This definition should follow the December 3, 2008 NDEP guidance entitled *Detection Limits and Data Reporting*

Short Description	Field Name	Detailed Description
Practical Quantitation Limit	practical_quantitation_limit	The Practical Quantitation Limit (PQL) for the analyte. This definition should follow the December 3, 2008 NDEP guidance entitled *Detection Limits and Data Reporting*
Minimum Detectable Activity	minimum_detectable_activity	The Minimum Detectable Activity, also known as Minimum Detectable Concentration. This is used for radionuclide results.
Percent Moisture	percent_moisture	The percentage of moisture of a solid sample. Please provide this record as a whole number, such as 95 for 95% moisture (no decimal).
Dilution Factor	dilution_factor	Any dilution factor used to arrive at the final reported value.
Laboratory Qualifier	lab_qualifier	The qualifier that may have been assigned to a reported value by the laboratory that performed the analysis.
Was result validated	validation_flag	A flag, T (true) or F (false). T indicates the value was validated after the laboratory reported the value.
Validation Stage	validation_stage	The stage to which the data has been validated. This stage designation should be consistent with the NDEP Guidance dated April 19, 2009. Stage 2B or 4 are the anticipated values. The terms used need to be defined in the DVSR.
Final Validation Qualifier	final_validation_qualifier	The final non-laboratory qualifier applied to the value.
Final Validation Reason Codes	final_validation_reason_codes	The reason code(s) that corresponds to the final Validation Qualifier (if more than one code, should be represented as a comma-separated list of codes). At this point there is no specified set of values. The companies may use their codes (and combination of codes) as long as all values are defined in the DVSR. All validation values should be consistent with the December 3, 2008 NDEP guidance entitled *Detection Limits and Data Reporting* document. For example, any reference to a sensitivity indicator (SQL, PQL etc) should be consistent with that guidance and only those sensitivity indicators should be used.
Validation Reason Code	validation_reason_code	Individual validation reason code used in lookup table.
Final Validation Reason Description	validation_reason	The description of the reason code. For example, Holding Time Exceeded. The description should be consistent with the DVSR.
Comment Field (Sample)	sample_comment	A field to include comments associated with a specific sample.

Short Description	Field Name	Detailed Description
Comment Field (Result)	result_comment	A field to include comments associated with a specific result.

Appendix A: EDD Database Tables

The EDD should be a Microsoft Access database containing at least four tables: a samples table, a results table, a locations table, and a validation_reason table. The samples table will contain sample metadata and will have field_sample_id as its primary key. The results table will link to the samples table using field_sample_id as a foreign key. The validation reason will have rows consisting of the dvsr_id, the company-specific validation_reason_code, and the corresponding reason description.

For convenience, the EDD database should also contain a query that links the samples, location, and result tables, allowing a "flat-file" view of the data.

Details of the fields included in each table are shown in the table below. The data type of all fields should be text, except where indicated below.

Field Name	Table(s)
dvsr_id	**samples** **validation_reason**
validation_reason_code validation_reason	**validation_reason**
sub_area lou northing (number) easting (number) hydro litho	**locations**
location_id	**locations(primary key)** **samples(foreign key, references locations table)**
sample_top_depth (number) sample_bottom_depth (number) matrix sample_type filtered_flagsample_date (date) sample_time (time) percent_moisture (number) sample_collection_comment sample_comment	**samples**
sample_id_field	**samples**(primary key) **results**(foreign key, references sample_id field in samples table)

Field Name	Table(s)
analytical_method	
preparation_method	
analytical_suite	
analyst_name	
analysis_date (date)	
analysis_time (time)	
prep_date (date)	
prep_time (time)	
analyte_name	
cas_id	
result_type	
reanalysis_flag	
result_reported (number)	
result_units	
result_uncertainty (number)	
asbestos_analytical_sensitivity (number)	
asbestos_sensitivity_units	
detect_flag_ra	
detect_flag_fod	
method_detection_limit (number)	
sample_quantitation_limit (number)	
practical_quantitation_limit (number)	
minimum_detectable_activity (number)	
dilution_factor (number)	
sample_id_lab	
lab_id	
sdg_id	
batch_id	
lab_qualifier	
validation_flag	
validation_stage	
final_validation_qualifier	
final_validation_reason_codes	
result_comment	**results**

The following table lists fields for the two optional EDD data tables “obsolete_samples” and “cas_id_new”:

Field Name	Table
sample_id obsolete_reason	**obsolete_samples**
cas_id analyte_name	**cas_id_new**

Appendix B: Sample Matrix Identification/Code

matrix	Sample Matrix Identification
AO	Outdoor Air
AI	Indoor Air
AG	Soil Gas
AF	Flux Chamber Air
SD	Sediment
SO	Soil
SW	Swab or Wipe
TA	Animal Tissue
TP	Plant Tissue
WS	Surface Water
WG	Ground Water
NAPL	Non-aqueous phase liquid
BW	Blank Water

Appendix C: Sample Type Identification/Code

Sample Type Code	Description
AB	Ambient Conditions Blank
BD	Blank Spike Duplicate
BS	Blank Spike
DIL	Diluted Sample
EB	Equipment Blank
ER	Equipment Rinse
FB	Field Blank
FD	Field Duplicate Sample
FR	Field Replicate
FS	Field Spike

FLD	Field analyses such as pH, temperature, specific conductance
KD	Known (External Reference Material) Duplicate
LB	Lab Blank
LD	Lab Duplicate
LCS	Lab Control Spike
LCSD	Lab Control Spike Duplicate
LR	Lab Replicate
MB	Material/Method Blank
MBD	Material/Method Blank Duplicate
MS	Matrix Spike Lab
MSD	Lab Matrix Spike and Spike Duplicate pair considered as one sample
NORM	Normal Environmental Sample taken in field
ORIG	Original sample in laboratory
SPB	Soil Prep Blank
WPB	Water Prep Blank
RD	Regulatory Duplicate
RE	Re-analysis
RM	Known (External Reference Material) Rinsate
RN	Rinsate
SD	Lab Matrix Spike Duplicate considered as separate from spike
SPT	A field split sample
TB	Trip Blank
TBD	Trip Blank Duplicate
WT	Waste
FDMS	A combination field duplicate matrix spike

Appendix D: Analytical Method Name/Code Guidance

Recommended format and guidance for analytical names:

- If the method is based on the United Stated Environmental Protection Agency (EPA) SW-846, start the name with "SW-" followed by the number and any applicable letter: XXXXc such as 8260b (SW-8260b).
- If the method is based on an EPA method that includes a digit after the period (e.g. Clean Water Act methods), be sure to include that, even if the digit is zero. Start the name with EPA: EPA 300.0
- If the method is based on an EPA document and citing that document is sufficient to understand the method used, include the document number: EPA-540-R97-028.

- If the method is based on an ASTM method, include ASTM- prior to the letter and number designation: ASTM D5755-03. Be sure to include the Based Designation (D5755) and Edition-Version (-03).
- If the method is based on Standard Methods for the Examination of Water and Wastewater, include "SM" prior to the number along with the Base Designation (7500) and the method version (-Ra). The results would be "SM7500-Ra." The DVSR should include the edition (e.g. 18th edition) or year the method was approved.
- Proprietary methods specific to a laboratory should have a designation that can be traced to the DVSR and method standard operating procedure (SOP). The version of the method needs be included in the DVSR and may also be incorporated into the EDD.

Preparation methods are not absolutely required in the EDD but a field (preparation_method) is included in the EDD structure to provide this information. However, all preparation methods that are distinct from the determination method must be included in the DVSR report. If preparation methods are included in the EDD they need to be in a separate column.

A designation indicating that method is a modified version (e.g. mod) is recommended but not required. However, the DVSR should indicate if the method is a modified version of a published method.

Appendix E: Analytical Suite Name/Code

Analytical Method Code	Description
ALDH	Aldehyde analysis
ASB	Asbestos
CRVL	Hexavalent chromium
CYAN	Cyanide
DIO_FUR	Dioxin and Furan
FIELD	Field measurements
GENERAL	Wet chemistry type measurements anions, hardness, bicarbonate, alkalinity, perchlorate, ammonia, bromide, TKN, etc
HERB	Herbicides
METALS	Metals and elements using ICP, AA, ICP-MS
ORG_ACID	Organic Acids analysis
PCB	PCB analysis, aroclors or congeners.
WPH	pH of aqueous sample
OCPEST	Organo-chlorine pesticide
OPPEST	Organo-phosphate pesticide
SOLIDS	TDS, TSS
SVOC	Semi-Volatile Organic Compounds, exclusive of Pesticides, PCBs, and PAHs.

TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbons, all molecular weights
VOC	Volatile Organic Compounds
XRFMetals	Metals and elements using XRF.
RADS	Radionuclides
PAH	Polyaromatic Hydrocarbon
TEM	Transmission Electron Microscopy (asbestos)
PLM	Polarized Light Microscopy (asbestos)
XRD	X-ray Diffraction (asbestos and metals)

Appendix F: Field Measurements

cas_id	Physical Parameter (analyte_name)
DO	Dissolved Oxygen
TEMP	Groundwater Temperature (°C)
EC	Electrical Conductivity
ORP	Oxidation Reduction Potential - Redox
WPH	Aqueous pH

Appendix G: Hydraulic Parameters

ID	Description
HYCO	Hydraulic Conductivity
STOR	Storativitity
TRANS	Transmissivity

Appendix H: Soil Material Properties

ID	Description
CEC	Cation Exchange Capacity
DBD	Dry Bulk Density
GSD	Grain Size Distribution
USCS	Unified Soil Classification System Description
FOC	Fraction Organic Carbon
MSC	Munsell Soil Color

SGR	Specific Gravity
SPH	Soil pH
TOP	Total Porosity
VMC	Volumetric Moisture Content
VWC	Volumetric Water Content

Appendix I: CAS IDS/ANALYTE CODES

cas_id	analyte_name
SIEVE_100	#100 SIEVE
SIEVE_016	#16 SIEVE
SIEVE_200	#200 SIEVE
SIEVE_030	#30 SIEVE
SIEVE_004	#4 SIEVE
SIEVE_050	#50 SIEVE
SIEVE_008	#8 SIEVE
35507-09-6	[Z]-7-Hexadecene
630-20-6	1,1,1,2-Tetrachloroethane
71-55-6	1,1,1-Trichloroethane
79-34-5	1,1,2,2-Tetrachloroethane
79-00-5	1,1,2-Trichloroethane
782-08-1	1,1-Bis[4-chlorophenyl]chloromethane
513-88-2	1,1-Dichloroacetone
75-34-3	1,1-Dichloroethane
75-35-4	1,1-Dichloroethene
563-58-6	1,1-Dichloropropene
75-37-6	1,1-Difluoroethane
39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran
3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
634-66-2	1,2,3,4-Tetrachlorobenzene
634-90-2	1,2,3,5-Tetrachlorobenzene
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran
40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
87-61-6	1,2,3-Trichlorobenzene
96-18-4	1,2,3-Trichloropropane
95-94-3	1,2,4,5-Tetrachlorobenzene
95-94-3i	1,2,4,5-Tetrachlorobenzene Isomer
291-22-5	1,2,4,5-Tetrathiane
120-82-1	1,2,4-Trichlorobenzene
95-63-6	1,2,4-Trimethylbenzene

289-16-7	1,2,4-Trithiolane
6576-93-8	1,2,5-Trithiepane
84-69-5	1,2-Benzenedicarboxylic acid, bis[2-methylpropyl] ester
4376-18-5	1,2-Benzenedicarboxylic acid, monomethyl
100014-25-3	1,2-Bis[bis[2-chloroethyl]phos
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane
430-58-0	1,2-Dichloro-1-fluoroethylene
95-50-1	1,2-Dichlorobenzene
107-06-2	1,2-Dichloroethane
17060-07-0	1,2-Dichloroethane-d4
540-59-0	1,2-Dichloroethene
78-87-5	1,2-Dichloropropane
624-73-7	1,2-Diiodoethane
122-66-7	1,2-Diphenylhydrazine
540-63-6	1,2-Ethanedithiol
544-25-2	1,3,5-Cycloheptatriene
108-70-3	1,3,5-Trichlorobenzene
108-67-8	1,3,5-Trimethylbenzene
106-99-0	1,3-Butadiene
55880-77-8	1,3-Butadiene, pentachloro-
534-07-6	1,3-Dichloroacetone
541-73-1	1,3-Dichlorobenzene
142-28-9	1,3-Dichloropropane
542-75-6	1,3-Dichloropropene
81-20-9	1,3-Dimethyl-2-nitrobenzene
1193-11-9	1,3-Dioxolane, 2,2,4-trimethyl
144-19-4	1,3-Pentanediol
100012-68-9	1,4,7-Androstatrien-3,17-dione
628-41-1	1,4-Cyclohexadiene
14D22CEBZ	1,4-dichloro-2-[2-chloroethenyl]-benzene
106-46-7	1,4-Dichlorobenzene
3855-82-1	1,4-Dichlorobenzene-d4
123-91-1	1,4-Dioxane
17647-74-4	1,4-Dioxane-d8
3650-28-0	1,4-Methanoindan, hexahydro-7-isopropyl-4-methyl-8-methylene
SIEVE_1/2-IN	1/2-IN SIEVE
6285-05-8	1-[4-chlorophenyl]-1-Propanone
SIEVE_1-1/2-IN	1-1/2-IN SIEVE
109719-83-7	13C-1,2,3,4,6,7,8-HpCDD
109719-84-8	13C-1,2,3,4,6,7,8-HpCDF
109719-94-0	13C-1,2,3,4,7,8,9-HpCDF
109719-80-4	13C-1,2,3,4,7,8-HxCDD
114423-98-2	13C-1,2,3,4,7,8-HXCDF
109719-81-5	13C-1,2,3,6,7,8-HxCDD
116843-03-9	13C-1,2,3,6,7,8-HxCDF
116843-04-0	13C-1,2,3,7,8,9-HxCDF
109719-79-1	13C-1,2,3,7,8-PeCDD
109719-77-9	13C-1,2,3,7,8-PeCDF
234432-85-0	13C12-PCB 1
234432-89-4	13C12-PCB 104

208263-62-1	13C12-PCB 105
235416-29-2	13C12-PCB 111
208263-63-2	13C12-PCB 114
160901-73-5	13C12-PCB 118
208263-64-3	13C12-PCB 123
160901-75-7	13C12-PCB 126
208263-67-6	13C12-PCB 15
234432-90-7	13C12-PCB 155
208263-68-7	13C12-PCB 156
13C12-PCB-156/157	13C12-PCB 156/157
208263-69-8	13C12-PCB 167
160901-79-1	13C12-PCB 169
160901-80-4	13C12-PCB 170
232919-67-4	13C12-PCB 178
160901-82-6	13C12-PCB 180
234432-91-8	13C12-PCB 188
208263-73-4	13C12-PCB 189
234432-87-2	13C12-PCB 19
208263-74-5	13C12-PCB 194
105600-26-8	13C12-PCB 202
234446-64-1	13C12-PCB 205
208263-75-6	13C12-PCB 206
234432-92-9	13C12-PCB 208
105600-27-9	13C12-PCB 209
208263-76-7	13C12-PCB 28
208263-77-8	13C12-PCB 3
208263-79-0	13C12-PCB 37
234432-86-1	13C12-PCB 4
234432-88-3	13C12-PCB 54
160901-67-7	13C12-PCB 77
160901-68-8	13C12-PCB 81
116843-05-1	13C-2,3,4,6,7,8-HxCDF
116843-02-8	13C-2,3,4,7,8-PeCDF
76523-40-5	13C-2,3,7,8-TCDD
89059-46-1	13C-2,3,7,8-TCDF
114423-97-1	13C-Octachlorodibenzodioxin
127062-51-5	13-Hexyloxacyclotridec-10-EN-2
17351-34-7	14-Pentadecenoic acid
4764-72-1	15-Octadecenoic acid, methyl e
2733-88-2	15-Tetracosenoic acid, methyl
6971-40-0	17-Pentatriacontene
2642-80-0	1-Chloro-2,2-bis[p-chlorophenyl]ethane
628-34-2	1-Chloro-2-ethoxyethane
544-10-5	1-Chlorohexane
6624-79-9	1-Dotriacontanol
629-96-9	1-Eicosanol
95-14-7	1H-Benzotriazole
1454-85-9	1-Heptadecanol
1H1PP2	1-hydroxy,1-phenyl,propanon-2
SIEVE_1-IN	1-IN SIEVE

590-67-0	1-Methylcyclohexanol
108-03-2	1-Nitropropane
6570-87-2	1-Pentanol, 3,4-dimethyl-
763-29-1	1-Pentene, 2-methyl-
5155-70-4	1-Phenanthrenecarboxylic acid
78-83-1	1-Propanol, 2-methyl-
69102-77-8	1-Propene, pentachloro-
464-06-2	2,2,3-Trimethylbutane
540-84-1	2,2,4-Trimethylpentane
DCBZL	2,2'-/4,4'-Dichlorobenzil
2642-82-2	2,2-Bis[p-chlorophenyl]ethanol
21854-95-5	2,2'-Dichlorobenzil
594-20-7	2,2-Dichloropropane
100014-71-4	2,2'-Dichlorostilbene
590-35-2	2,2-Dimethylpentane
1003-17-4	2,2-Dimethyltetrahydrofuran
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran
2346TCP	2,3,4,6-Tetrachloropyridine
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran
921-47-1	2,3,4-trimethylhexane
2402-79-1	2,3,5,6-Tetrachloropyridine
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran
TCDD2378CL37	2,3,7,8-tetrachlorodibenzo-p-dioxin-CL37
1746-01-6	2,3,7,8-Tetrachlororodibenzo-p-dioxin
31566-10-6	2,3-Dicarbaheptaborane[7], 2,3-dimethyl-
565-59-3	2,3-Dimethylpentane
4808-48-4	2,3-Diphenylmaleic anhydride
93-76-5	2,4,5-T
93-72-1	2,4,5-TP [Silvex]
95-95-4	2,4,5-Trichlorophenol
118-79-6	2,4,6-Tribromophenol
88-06-2	2,4,6-Trichlorophenol
94-75-7	2,4-D
94-82-6	2,4-DB
53-19-0	2,4-DDD
3424-82-6	2,4-DDE
789-02-6	2,4'-DDT
789-05-6i	2,4'-DDT isomer
85-29-0	2,4'-Dichlorobenzophenone
120-83-2	2,4-Dichlorophenol
19719-28-9	2,4-Dichlorophenylacetic acid
108-08-7	2,4-Dimethylpentane
105-67-9	2,4-Dimethylphenol
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
1618-26-4	2,4-Dithiapentane
1618-26-4[1]	2,4-Dithiapentane isomer 1
1921-70-6	2,6,10,14-Tetramethylpentadecane
28469-92-3	2,6-Dichlorostyrene
1072-05-5	2,6-Dimethylheptane

606-20-2	2,6-Dinitrotoluene
128-37-0	2,6-Di-tert-Butyl-p-Cresol
112-34-5	2-[2-Butoxyethoxy]ethanol
706-14-9	2[3H]-Furanone, 5-hexyldihydro-
563-80-4	2-Butanone, 3-methyl-
112-07-2	2-Butoxyethyl acetate
126-99-8	2-Chloro-1,3-butadiene
37777-76-7	2-Chloro-6-fluorophenylacetic acid
118-91-2	2-Chlorobenzoic acid
609-65-4	2-Chlorobenzoyl chloride
611-19-8	2-Chlorobenzylchloride
110-75-8	2-Chloroethyl vinyl ether
91-58-7	2-Chloronaphthalene
95-57-8	2-Chlorophenol
95-49-8	2-Chlorotoluene
1121-05-7	2-Cyclopenten-1-one, 2,3-dimethyl-
3913-81-3	2-Decenal, [e]-
110-80-5	2-Ethoxyethanol
111-15-9	2-Ethoxyethyl acetate
104-76-7	2-Ethyl-1-hexanol
149-57-5	2-Ethylhexanoic acid
103-09-3	2-Ethylhexyl acetate
24468-13-1	2-ethylhexyl chloroformate
403-19-0	2-Fluoro-4-nitrophenol
1526-17-6	2-Fluoro-6-nitrophenol
321-60-8	2-Fluorobiphenyl
367-12-4	2-Fluorophenol
591-78-6	2-Hexanone
149-30-4	2-Mercaptobenzothiazole
994-05-8	2-Methoxy-2-methyl-butane
55045-07-3	2-Methyl-6-propyldodecane
591-76-4	2-Methylhexane
91-57-6	2-Methylnaphthalene
88-74-4	2-Nitroaniline
88-75-5	2-Nitrophenol
79-46-9	2-Nitropropane
3760-11-0	2-Nonenoic acid
111-13-7	2-Octanone
75207-54-4	2-Pentacosanone
502-69-2	2-Pentadecanone, 6,10,14-trime
58175-57-8	2-Propyl-1-pentanol
2463-77-6	2-Undecenal
91-94-1	3,3-Dichlorobenzidine
562-49-2	3,3-Dimethylpentane
3,4-Methylphenol	3,4-Methylphenol
926-82-9	3,5-Dimethylheptane
591-22-0	3,5-dimethyl-pyridine
100014-71-3	3,6-Dichloro-benzene-1,2-diol
SIEVE_3/4-IN	3/4-IN SIEVE
SIEVE_3/8-IN	3/8-IN SIEVE

2037-31-2	3-chlorobenzenethiol
535-80-8	3-Chlorobenzoic acid
620-20-2	3-Chlorobenzylchloride
108-43-0	3-Chlorophenol
4867-37-2	3-Chlorothioanisole
617-78-7	3-Ethylpentane
3HEX25D	3-Hexene-2,5-dione
6418-41-3	3-Methyl tridecane
72218-58-7	3-Methylheptyl acetate
589-34-4	3-Methylhexane
99-09-2	3-Nitroaniline
565-80-0	3-Pentanone, 2,4-dimethyl-
465-80-0	3-pentanone, 2,4-dimetyl-
625-33-2	3-Penten-2-one
72-54-8	4,4-DDD
72-55-9	4,4-DDE
50-29-3	4,4-DDT
44DCBZL	4,4-Dichlorobenzil
90-98-2	4,4'-Dichlorobenzophenone
5181-10-2	4,4'-Dichlorodiphenylsulphide
534-52-1	4,6-Dinitro-2-methylphenol
481216-TMH	4,8,12,16-Tetramethylheptadecan-4-olide
1918-02-1	4-Amino-3,5,6-trichloropicolinic acid
460-00-4	4-Bromofluorobenzene
101-55-3	4-Bromophenyl phenyl ether
59-50-7	4-Chloro-3-methylphenol
98-66-8	4-Chlorobenzene sulfonic acid
74-11-3	4-Chlorobenzoic acid
104-83-6	4-Chlorobenzylchloride
22711-23-5	4-Chlorodibenzoyl
106-48-9	4-Chlorophenol
98-57-7	4-Chlorophenyl methyl sulfone
7005-72-3	4-Chlorophenyl phenyl ether
123-09-1	4-Chlorothioanisole
106-54-7	4-Chlorothiophenol
106-43-4	4-Chlorotoluene
622-96-8	4-Ethyltoluene
552-54-5	4H-1-benzopyran-4-one, 3,5-dih
108-10-1	4-Methyl-2-pentanone [MIBK]
100-01-6	4-Nitroaniline
100-02-7	4-Nitrophenol
3744-02-3	4-Penten-2-One, 4-Methyl-
5166-53-01	5-methyl-3-hexen-2-one
100014-00-7	6S-2,3,8,8-tetramethyltricyclo
82-05-3	7H-Benz[de]anthracen-7-one
7225-66-3	7-Hexyl Tridecane
7225-66-3[1]	7-Hexyl Tridecane Isomer
7225-66-3[2]	7-Hexyl Tridecane Isomer 1
605-48-1	9,10-Dichloroanthracene
60-33-3	9,12-Octadecadienoic acid [Z,Z]-

301-02-0	9-Octadecenamide, [z]-
3906-30-7	9-Octadecenamide, n,n-dimethyl
112-79-8	9-Octadecenoic acid, [e]-
83-32-9	Acenaphthene
208-96-8	Acenaphthylene
75-07-0	Acetaldehyde
822-23-1	Acetic acid, Octadecyl ester
1878-66-6	Acetic acid, p-chlorophenyl-
67-64-1	Acetone
75-05-8	Acetonitrile
98-86-2	Acetophenone
532-27-4	Acetophenone, 2-chloro-
107-02-8	Acrolein
107-13-1	Acrylonitrile
14952-40-0	Actinium-227
14331-83-0	Actinium-228
POROS_AIR	Air Filled Porosity
15972-60-8	Alachlor
309-00-2	Aldrin
ALKB	Alkalinity, Bicarbonate [As CaCO3]
ALKC	Alkalinity, Carbonate [As CaCO3]
107-05-1	Allyl chloride
12587-46-1	ALPHA activity
319-84-6[1]	Alpha Lindane Isomer 1
319-84-6[2]	Alpha Lindane Isomer 2
A2PPBZMETH	alpha-2-propenylbenzenemethanol
319-84-6	alpha-BHC
6753-98-6	alpha-Caryophyllene
5103-71-9	alpha-Chlordane
98-83-9	alpha-Methylstyrene
7429-90-5	Aluminum
14596-10-2	Americium-241
7664-41-7	Ammonia
NH3NH3	Ammonia [as Ammonium]
NH3_N	Ammonia [as N]
14798-03-9	Ammonium
62-53-3	Aniline
120-12-7	Anthracene
7440-36-0	Antimony
14683-10-4	Antimony-124
14234-35-6	Antimony-125
Apparent Color	Apparent Color
12674-11-2	Aroclor 1016
11104-28-2	Aroclor 1221
11141-16-5	Aroclor 1232
53469-21-9	Aroclor 1242
12672-29-6	Aroclor 1248
11097-69-1	Aroclor 1254
11096-82-5	Aroclor 1260
37324-23-5	Aroclor 1262

11100-14-4	Aroclor 1268
7440-38-2	Arsenic
22541-54-4	Arsenic III
17428-41-0	Arsenic V
1332-21-4	Asbestos
3244-90-4	Aspon
1912-24-9	Atrazine
2642-71-9	Azinphos-ethyl
86-50-0	Azinphos-methyl
103-33-3	Azobenzene
7440-39-3	Barium
13981-41-4	Barium-133
14798-08-4	Barium-140
100-52-7	Benzaldehyde
134-96-3	Benzaldehyde, 4-hydroxy-3,5-dimethoxy-
55-21-0	Benzamide
39193-06-1	Benzamide, 4-chloro-n-[4-chlor
71-43-2	Benzene
53172-84-2	Benzene, [1-methyl-1-butenyl]-
622-38-8	Benzene, [ethylthio]-
1193-82-4	Benzene, [methylsulfinyl]-
1520-42-9	Benzene, 1,1',1''-[1-ethanyl-2-ylidene]tris-
3085-42-5	Benzene, 1,1'-sulfinylbis[4-chloro-
54935-00-1	Benzene, 1,4-dichloro-2-[2-chloroethenyl]
1123-84-8	Benzene, 1,4-dichloro-2-ethenyl-
611-14-3	Benzene, 1-ethyl-2-methyl-
45892-47-5	Benzene, 2,4-dichloro-1-[2-chl
1078-71-3	Benzene, heptyl-
100-66-3	Benzene, methoxy-
101-41-7	Benzeneacetic acid, methyl ester
5597-50-2	Benzenepropanoic acid, 4-hydro
103-25-3	Benzenepropanoic acid, methyl
98-64-6	Benzenesulfonamide, 4-chloro-
98-11-3	Benzenesulfonic acid
1212-08-4	Benzenesulfonothioic Acid, S-p
108-98-5	Benzenethiol
6320-03-2	Benzenethiol, 2-chloro-
92-87-5	Benzidine
56-55-3	Benzo[a]anthracene
50-32-8	Benzo[a]pyrene
B[b&k]F	Benzo[b,k]fluoranthene
205-99-2	Benzo[b]fluoranthene
191-24-2	Benzo[g,h,i]perylene
207-08-9	Benzo[k]fluoranthene
65-85-0	Benzoic acid
51-44-5	Benzoic acid, 3,4-dichloro-
1421-49-4	Benzoic acid, 3,5-bis[1,1-dimethylethyl]-4-hydroxy-
2905-65-9	Benzoic acid, m-chloro-
119-61-9	Benzophenone
33093-42-4	Benzophenone, 3,4,4'-trichloro

100-51-6	Benzyl alcohol
100-44-7	Benzyl chloride
7440-41-7	Beryllium
13966-02-4	Beryllium-7
12587-47-2	BETA activity
319-85-7	beta-BHC
71-52-3	Bicarbonate alkalinity
62338-43-6	Bicyclo[2.2.2]octa-2,5-diene,
141-66-2	Bidrin
BOD	Biochemical Oxygen Demand
92-52-4	Biphenyl
111-91-1	bis[2-Chloroethoxy]methane
111-44-4	bis[2-Chloroethyl] ether
108-60-1	bis[2-Chloroisopropyl] ether
117-81-7	bis[2-Ethylhexyl] phthalate
103-23-1	bis[2-ethylhexyl]adipate
1142-19-4i	Bis[4-chlorophenyl] disulfide isomer
2393-97-7	Bis[4-chlorophenylthio]methane
80-07-9	bis[p-Chlorophenyl] sulfone
1142-19-4	bis[p-Chlorophenyl]disulfide
3561-67-9	Bis[phenylthio]methane
7440-69-9	Bismuth
14331-79-4	Bismuth-210
15229-37-5	Bismuth-211
14913-49-6	Bismuth-212
14733-03-0	Bismuth-214
80-05-7	Bisphenol A
35400-43-2	Bolstar [Sulprofos]
7440-42-8	Boron
314-40-9	Bromacil
24959-67-9	Bromide
7726-95-6	Bromine
108-86-1	Bromobenzene
75-27-4	Bromodichloromethane
75-25-2	Bromoform
74-83-9	Bromomethane
BULK_DENS	Bulk Density
23184-66-9	Butachlor
78-78-4	Butane, 2-methyl-
85-68-7	Butylbenzyl phthalate
123-72-8	Butyraldehyde
7440-43-9	Cadmium
58-08-2	Caffeine
7440-70-2	Calcium
CTIC	Calculated Inorganic Carbon
334-48-5	Capric acid
124-07-2	Caprylic acid
86-74-8	Carbazole
7440-44-0	Carbon
124-38-9	Carbon dioxide

75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
3812-32-6	Carbonate alkalinity
786-19-6	Carbophenothion
786-19-6[1]	Carbophenothion Isomer 1
100015-81-8	Caryophyllene
CEC	Cation Exchange Capacity
13982-30-4	Cerium-139
13967-74-3	Cerium-141
14762-78-8	Cerium-144
7440-46-2	Cesium
13967-70-9	Cesium-134
14234-29-8	Cesium-136
10045-97-3	Cesium-137
COD	Chemical Oxygen Demand
7790-93-4	Chlorate
57-74-9	Chlordane
470-90-6	Chlorfenvinfos
16887-00-6	Chloride
7782-50-5	Chlorine
13898-47-0	Chlorite
13898-47-0	Chlorite
24934-91-6	Chlormephos
C2CEB	chloro[2-chloroethyl]-benzene
107-20-0	Chloroacetaldehyde
108-90-7	Chlorobenzene
74-97-5	Chlorobromomethane
75-00-3	Chloroethane
67-66-3	Chloroform
593-71-5	Chloroiodomethane
74-87-3	Chloromethane
5598-13-0	Chloropyrifos-methyl
2921-88-2	Chlorpyrifos
ChlorpyrophosME	Chlorpyrophos methyl ester
7440-47-3	Chromium
18540-29-9	Chromium [VI]
14392-02-0	Chromium-51
218-01-9	Chrysene
156-59-2	cis-1,2-Dichloroethene
10061-01-5	cis-1,3-Dichloropropene
61568-43-2	cis-2.4-Dimethylthiane
CLAY	CLAY
COARSE SAND	COARSE SAND
7440-48-4	Cobalt
14093-03-9	Cobalt-56
13981-50-5	Cobalt-57
13981-38-9	Cobalt-58
10198-40-0	Cobalt-60
COBBLES	COBBLES
7440-50-8	Copper

56-72-4	Coumaphos
7700-17-6	Crotoxyphos
57-12-5	Cyanide, Total
2597-49-1	Cyclobutane, ethenyl-
293-96-9	Cyclodecane
1501-82-2	Cyclododecene
110-82-7	Cyclohexane
55963-79-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, .g
10498-35-8	Cyclohexane, 1,2-dichloro-, cis-
822-86-6	Cyclohexane, 1,2-dichloro-, trans-
1122-82-3	Cyclohexane, isothiocyanato-
108-87-2	Cyclohexane, Methyl-
80-53-5	Cyclohexanemethanol, 4-hydroxy
108-94-1	Cyclohexanone
540-97-6	Cyclohexasiloxane, dodecamethyl-
55255-41-9	Cyclopentane, [trichloroethenyl]
822-50-4	Cyclopentane, 1,2-dimethyl-, t
2453-00-1	Cyclopentane, 1,3-dimethyl-
2532-58-3	Cyclopentane, 1,3-dimethyl-, cis-
1759-58-6	Cyclopentane, 1,3-dimethyl-, t
1640-89-7	Cyclopentane, ethyl-
96-37-7	Cyclopentane, methyl-
96-37-7	Cyclopentane, methyl-
541-02-6	Cyclopentasiloxane, decamethyl
99-87-6	Cymene [Isopropyltoluene]
D15_COEFF	D15 COEFF
D30_COEFF	D30 COEFF
D50_COEFF	D50 COEFF
D60_COEFF	D60 COEFF
D85_COEFF	D85 COEFF
75-99-0	Dalapon
8017-34-3	DDT, Technical
DTN	decahydro-trans-Napthalene
6975-98-0	Decane, 2-methyl-
13151-34-3	Decane, 3-methyl-
119-07-3	Decyl octyl phthalate
319-86-8i	Delta Lindane Isomer
319-86-8	delta-BHC
11B-delta	DELTA-BORON 11
Delta-D	Delta-D
Delta-O	Delta-O
8065-48-3	Demeton
298-03-3	Demeton-O
126-75-0	Demeton-S
DTW	Depth to Water
123-42-2	Diacetone alcohol
333-41-5	Diazinon
53-70-3	Dibenzo[a,h]anthracene
132-64-9	Dibenzofuran
132-65-0	Dibenzothiophene

73506-94-2	Dibromochloroethane
124-48-1	Dibromochloromethane
96-12-8	Dibromochloropropane
1868-53-7	Dibromofluoromethane
74-95-3	Dibromomethane
1918-00-9	Dicamba
97-17-6	Dichlorfenthion
79-02-7	Dichloroacetaldehyde
594-04-7	Dichloroiodomethane
75-09-2	Dichloromethane [Methylene chloride]
542-88-1	Dichloromethyl ether
120-36-5	Dichloroprop
62-73-7	Dichlorvos
60-57-1	Dieldrin
110-81-6	Diethyl disulfide
84-66-2	Diethyl phthalate
352-93-2	Diethyl sulfide
352-93-2	Diethyl sulfide
108-20-3	Diisopropyl ether
60-51-5	Dimethoate
131-11-3	Dimethyl phthalate
67-68-5	Dimethyl sulfoxide
624-92-0	Dimethyldisulfide
84-74-2	Di-n-butyl phthalate
117-84-0	Di-n-octyl phthalate
88-85-7	Dinoseb
TEQ_DF	Dioxins/Furans TEQ
78-34-2	Dioxothion
882-33-7	Diphenyl disulfide
139-66-2	Diphenyl sulfide
127-63-9	Diphenyl sulfone
122-39-4	Diphenylamine
501-65-5	Diphenylethyne
101-81-5	Diphenylmethane
7782-44-7	dissolved oxygen
298-04-4	Disulfoton
5989-27-5	D-Limonene
127-19-5	DMAC
629-97-0	Docosane
629-97-0 [1]	Docosane isomer
3891-98-3	Dodecane, 2,6,10-trimethyl-
143-07-7	Dodecanoic acid
544-85-4	Dotriacontane
TPH_DRO	DRO [C10-C28]
TPH_EFH	EFH [C8-C40]
112-95-8	Eicosane
EC	Electrical Conductivity
959-98-8	Endosulfan I
33213-65-9	Endosulfan II
1031-07-8	Endosulfan sulfate

72-20-8	Endrin
7421-93-4	Endrin aldehyde
53494-70-5	Endrin ketone
2104-64-5	EPN
112-84-5	Erucylamide
74-84-0	Ethane
624-89-5	Ethane, [methylthio]-
619-33-0	Ethane, 1,1-dichloro-2,2-diethoxy-
6628-18-8	Ethane, 1,2-bis[methylthio]-
106-93-4	Ethane, 1,2-dibromo-
27-72-1	Ethane, hexachloro-
134-81-6	Ethanedione, diphenyl-
75-08-1	Ethanethiol
64-17-5	Ethanol
115-20-8	Ethanol, 2,2,2-trichloro-
111-46-6	Ethanol, 2,2'-oxybis-
111-90-0	Ethanol, 2-[2-ethoxyethoxy]-
563-12-2	Ethion
13194-48-4	Ethoprop
141-78-6	Ethyl acetate
60-29-7	Ethyl ether
97-63-2	Ethyl methacrylate
56-38-2	Ethyl parathion
637-92-3	Ethyl tert-butyl ether
100-41-4	Ethylbenzene
74-85-1	Ethylene
107-21-1	Ethylene glycol
111-76-2	Ethylene glycol monobutyl ether
25550-14-5	Ethyltoluene
470-82-6	Eucalyptol
7440-53-1	Europium
14683-23-9	Europium-152
15585-10-1	Europium-154
14391-16-3	Europium-155
52-85-7	Fampphur
115-90-2	Fensulfothion
55-38-9	Fenthion
7439-89-6 [2+]	Ferrous Iron
FINE SAND	FINE SAND
Q376	Flashpoint
206-44-0	Fluoranthene
86-73-7	Fluorene
16984-48-8	Fluoride
944-22-9	Fonofos
50-00-0	Formaldehyde
FOC	Fraction organic Carbon
75-69-4	Freon-11 [Trichlorofluoromethane]
76-13-1	Freon-113 [1,1,2-Trifluoro-1,2,2-trichloroethane]
75-71-8	Freon-12 [Dichlorodifluoromethane]
28903-24-4	gamma-2,3,4,5,6-Pentachlorocyclohexene

58-89-9	gamma-BHC [Lindane]
5103-74-2	gamma-Chlordane
GRAVEL	GRAVEL
TPH_GRO	GRO[C4-C12]
GW_ELEVATION	GW_ELEVATION
HARD	Hardness, Total
TPH_HEMOG	HEM Oil and Grease
629-94-7	Heneicosane
76-44-8	Heptachlor
1024-57-3	Heptachlor epoxide
38998-75-3	Heptachlorodibenzofuran, Total
37871-00-4	Heptachlorodibenzo-p-dioxin, Total
593-49-7	Heptacosane
62016-79-9	Heptacosane, 1-chloro-
629-78-7	Heptadecane
13287-23-5	Heptadecane, 8-methyl-
7225-64-1	Heptadecane, 9-octyl
111-71-7	Heptanal
142-82-5	Heptane
3074-71-3	Heptane, 2,3-dimethyl-
2213-23-2	Heptane, 2,4-dimethyl
2216-30-0	Heptane, 2,5-dimethyl
592-27-8	Heptane, 2-methyl-
111-14-8	Heptanoic Acid
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
77-47-4	Hexachlorocyclopentadiene
55684-94-1	Hexachlorodibenzofuran, Total
34465-46-8	Hexachlorodibenzo-p-dioxin
67-72-1	Hexachloroethane
HCH	Hexachlorohexane
630-01-3	Hexacosane
629-54-9	Hexadecanamide
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-
57-10-3	Hexadecanoic acid
23470-00-0	Hexadecanoic acid, 2-hydroxy-1-[hydroxymethyl]ethyl ester
111-06-8	Hexadecanoic acid, Butyl ester
541-05-9	Hexamethylcyclotrisiloxane
680-31-9	Hexamethylphosphoramide
66-25-1	Hexanal
123-05-7	Hexanal, 2-ethyl-
110-54-3	Hexane
4337-65-9	hexanedioic acid, mono[2-ethylhexyl]ester
630-06-8	Hexatriacontane
630-06-8 [1]	Hexatriacontane isomer
107-41-5	Hexylene glycol
HYCO	HYDRAULIC CONDUCTIVITY
7647-01-0	Hydrochloric acid
14280-30-9	Hydroxide
OH-ALK	Hydroxide alkalinity

118-29-6	Hydroxymethyl phthalimide
Ignitability	Ignitability
193-39-5	Indeno[1,2,3-cd]pyrene
20461-54-5	Iodide
7553-56-2	Iodine
Q901	Ion Balance Difference
14694-69-0	Iridium-192
7439-89-6	Iron
14596-12-4	Iron-59
75-28-5	Isobutane
115-11-7	Isobutylene
78-59-1	Isophorone
67-63-0	Isopropyl alcohol
98-82-8	Isopropylbenzene
872-56-0	Isopropylcyclobutane
25155-15-1	Isopropyltoluene
143-50-0	Kepone
Lab Cond	Laboratory conductivity
Lab pH	Laboratory pH
LI 25deg	Langelier Index - 25 degree
7439-91-0	Lanthanum
7439-92-1	Lead
14255-04-0	Lead-210
15816-77-0	Lead-211
15092-94-1	Lead-212
15067-28-4	Lead-214
21609-90-5	Leptophos
608-73-1	Lindane
608-73-1[1]	Lindane isomer 1
608-73-1[2]	Lindane isomer 2
608-73-1[3]	Lindane isomer 3
LIQLIM	LIQUID LIMIT
7439-93-2	Lithium
12172-73-5L	Long Amphibole Protocol Structure
1332-21-4L	Long Asbestos Protocol Structure
12001-29-5L	Long Chrysotile Protocol Structure
19890-84-7	Longifolenaldehyde
65794-96-9	m,p-Cresols
136777-61-2	m,p-Xylene
7439-95-4	Magnesium
121-75-5	Malathion
7439-96-5	Manganese
13966-31-9	Manganese-54
MBAS	MBAS
94-74-6	MCPA
93-65-2	MCPP
7085-19-0	Mecoprop
MEDIUM SAND	MEDIUM SAND
7439-97-6	Mercury
13982-78-0	Mercury-203

150-50-5	Merphos
141-79-7	Mesityl oxide
122-14-5	Metathione
126-98-7	Methacrylonitrile
74-82-8	Methane
74-93-1	Methanethiol
67-56-1	Methanol
5162-3-08	Methanone, [2-chlorophenyl]phenyl-
33146-57-5	Methanone, [4-chlorophenyl][2,4-dichlorophenyl]
134-85-0	Methanone, [4-chlorophenyl]phenyl-
72-43-5	Methoxychlor
79-20-9	Methyl Acetate
953-17-3	Methyl carbophenothion
20333-39-5	Methyl ethyl disulphide
78-93-3	Methyl ethyl ketone [2-Butanone]
74-88-4	Methyl iodide
110-12-3	Methyl isoamyl ketone
22967-92-6	Methyl mercury
80-62-6	Methyl methacrylate
110-43-0	Methyl n-amyl ketone
298-00-0	Methyl parathion
107-87-9	Methyl propyl ketone
75-18-3	Methyl sulfide
METHYLENE BROMIDE	Methylene bromide
25013-15-4	Methylstyrene
51218-45-2	Metolachlor
21087-64-9	Metribuzin
7786-34-7	Mevinphos
2385-85-5	Mirex
2212-67-1	Molinate
7439-98-7	Molybdenum
131-70-4	Monobutyl phthalate
6923-22-4	Monocrotophos
1634-04-4	MTBE [Methyl tert-butyl ether]
300-76-5	Naled
91-20-3	Naphthalene
3018-20-0	Naphthalene, 1,2,3,4-tetrahydro-1-phenyl-
493-02-7	Naphthalene, decahydro-, trans-
71-36-3	n-Butyl alcohol
104-51-8	n-Butyl benzene
112-40-3	n-Dodecane
14269-74-0	Neodymium-147
13968-59-7	Neptunium-239
544-76-3	n-Hexadecane
7440-02-0	Nickel
7440-03-1	Niobium
14681-63-1	Niobium-94
13967-76-5	Niobium-95
14797-55-8	Nitrate
NO3-N	Nitrate [as N]

NO3/NO2	Nitrate/Nitrite
NO3/NO2-N	Nitrate/Nitrite [as N]
14797-65-0	Nitrite
NO2-N	Nitrite [as N]
98-95-3	Nitrobenzene
4165-60-0	Nitrobenzene-d5
55-18-5	N-nitrosodiethylamine
62-75-9	N-Nitrosodimethylamine
621-64-7	N-nitrosodi-n-propylamine
86-30-6	N-nitrosodiphenylamine
630-03-5	Nonacosane
629-92-5	Nonadecane
124-19-6	Nonanal
111-84-2	Nonane
112-05-0	Nonanoic acid
103-65-1	n-Propylbenzene
629-59-4	n-Tetradecane
629-50-5	n-Tridecane
6006-33-3	n-Tridecylcyclohexane
126-68-1	O,O,O-Triethylphosphorothioate
100022-65-2	O,o'-diethyl s-methyl thiophos
298-06-6	O,O-Diethylphosphorodithioic acid
756-80-9	O,O-Dimethylphosphorodithioic acid
95-48-7	o-Cresol
OCDD	Octachlorodibenzodioxin
29082-74-4	Octachlorostyrene
630-02-4	Octacosane
593-45-3	Octadecane
57-11-4	Octadecanoic acid
621-61-4	Octadecanoic acid, 2-hydroxy-1-[hydroxymethyl]ethyl ester
646-13-9	Octadecanoic acid, 2-methylpropyl ester
556-67-2	Octamethylcyclotetrasiloxane
124-13-0	Octanal
111-65-9	Octane
3221-61-2	Octane, 2-methyl-
2216-33-3	Octane, 3-methyl-
2216-34-4	Octane, 4-methyl-
10544-50-0	Octasulfur
OIL/GREASE	Oil and grease
112-80-1	Oleic acid
OM	Organic Matter
OSOIL	ORGANIC SOILS
TPH_ORO	ORO [C25-C40]
11-36-9	Orthophosphate
84-15-1	o-Terphenyl
74685-36-2	Oxacyclotetradecane-2,11-dione
92-71-7	Oxazole, 2,5-diphenyl-
OX_RED_POT	oxidation-reduction potential
100022-28-6	Oxime-, methoxy-phenyl-
131-57-7	Oxybenzone

95-47-6	o-Xylene
7440-05-3	Palladium
2051-60-7	PCB 1
33146-45-1	PCB 10
39485-83-1	PCB 100
37680-73-2	PCB 101 [BZ]
68194-06-9	PCB 102 [BZ]
60145-21-3	PCB 103
56558-16-8	PCB 104
32598-14-4	PCB 105
PCB-105/127	PCB 105/127
70424-69-0	PCB 106
70424-68-9	PCB 107
PCB-107/124	PCB 107/124
70362-41-3	PCB 108 [BZ]/107 [IUPAC]
PCB-108/124	PCB 108/124
74472-35-8	PCB 109
PCB-109/107	PCB 109/107
2050-67-1	PCB 11
38380-03-9	PCB 110
PCB-110/115	PCB 110/115
39635-32-0	PCB 111
74472-36-9	PCB 112
68194-10-5	PCB 113
74472-37-0	PCB 114
PCB-115/116	PCB 115/116
18259-05-7	PCB 116 [BZ]
68194-11-6	PCB 117 [BZ]
31508-00-6	PCB 118
PCB-118/106	PCB 118/106
56558-17-9	PCB 119
PCB-12/13	PCB 12/13
68194-12-7	PCB 120
56558-18-0	PCB 121
PCB-121/88	PCB 121/88
76842-07-4	PCB 122
65510-44-3	PCB 123
70424-70-3	PCB 124
74472-39-2	PCB 125 [BZ]
57465-28-8	PCB 126
39635-33-1	PCB 127
38380-07-3	PCB 128
PCB-128/166	PCB 128/166
55215-18-4	PCB 129
PCB-129_CAS_CoE	PCB 129/138/160/163
PCB-129/138/163	PCB 129/138/163
2974-90-5	PCB 13 [BZ]
52663-66-8	PCB 130
61798-70-7	PCB 131
PCB-131/142	PCB 131/142

PCB-131/142/165	PCB 131/142/165
38380-05-1	PCB 132
PCB-132/168	PCB 132/168
35694-04-3	PCB 133
52704-70-8	PCB 134
PCB-134/143	PCB 134/143
PCB-134/147/149	PCB 134/147/149
PCB-135/144	PCB 135/144
PCB-135/151	PCB 135/151
PCB-135/151/154	PCB 135/151/154
38411-22-2	PCB 136
35694-06-5	PCB 137
35065-28-2	PCB 138 [BZ]
PCB-139/140	PCB 139/140
PCB-139/149	PCB 139/149
34883-41-5	PCB 14
59291-64-4	PCB 140
52712-04-6	PCB 141
41411-61-4	PCB 142
68194-15-0	PCB 143
68194-14-9	PCB 144
74472-40-5	PCB 145
51908-16-8	PCB 146
68194-13-8	PCB 147
PCB-147/149	PCB 147/149
74472-41-6	PCB 148
38380-04-0	PCB 149 [BZ]
2050-68-2	PCB 15
68194-08-1	PCB 150
52663-63-5	PCB 151
68194-09-2	PCB 152
PCB-152/150	PCB 152/150
35065-27-1	PCB 153
PCB-153/168	PCB 153/168
60145-22-4	PCB 154
33979-03-2	PCB 155
38380-08-4	PCB 156
PCB-156/157	PCB 156/157
69782-90-7	PCB 157
74472-42-7	PCB 158
39635-35-3	PCB 159
38444-78-9	PCB 16
41411-62-5	PCB 160
PCB-160/158	PCB 160/158
74472-43-8	PCB 161
39635-34-2	PCB 162
74472-44-9	PCB 163 [BZ]
74472-45-0	PCB 164
PCB-164/163/138	PCB 164/163/138
74472-46-1	PCB 165

41411-63-6	PCB 166
52663-72-6	PCB 167
59291-65-5	PCB 168 [BZ]
32774-16-6	PCB 169
37680-66-3	PCB 17
35065-30-6	PCB 170
52663-71-5	PCB 171
PCB-171/173	PCB 171/173
52663-74-8	PCB 172
PCB-172/192	PCB 172/192
68194-16-1	PCB 173
38411-25-5	PCB 174
40186-70-7	PCB 175
52663-65-7	PCB 176
52663-70-4	PCB 177
52663-67-9	PCB 178
52663-64-6	PCB 179
37680-65-2	PCB 18
PCB-18/30	PCB 18/30
35065-29-3	PCB 180
PCB-180/193	PCB 180/193
74472-47-2	PCB 181
60145-23-5	PCB 182
52663-69-1	PCB 183
74472-48-3	PCB 184
52712-05-7	PCB 185
74472-49-4	PCB 186
52663-68-0	PCB 187
PCB-187/182	PCB 187/182
74487-85-7	PCB 188
39635-31-9	PCB 189
38444-73-4	PCB 19
41411-64-7	PCB 190
74472-50-7	PCB 191
74472-51-8	PCB 192
69782-91-8	PCB 193
35694-08-7	PCB 194
52663-78-2	PCB 195
42740-50-1	PCB 196
PCB-196/203	PCB 196/203
33091-17-7	PCB 197
PCB-197/200	PCB 197/200
68194-17-2	PCB 198
PCB-198/199	PCB 198/199
52663-75-9	PCB 199
2051-61-8	PCB 2
38444-84-7	PCB 20 [BZ]
PCB-20/28	PCB 20/28
52663-73-7	PCB 200
40186-71-8	PCB 201

2136-99-4	PCB 202
52663-76-0	PCB 203
74472-52-9	PCB 204
74472-53-0	PCB 205
40186-72-9	PCB 206
52663-79-3	PCB 207
52663-77-1	PCB 208
2051-24-3	PCB 209
PCB-21/20/33	PCB 21/20/33
PCB-21/33	PCB 21/33
38444-85-8	PCB 22
55720-44-0	PCB 23
55702-45-9	PCB 24
55712-37-3	PCB 25
38444-81-4	PCB 26
PCB-26/29	PCB 26/29
38444-76-7	PCB 27
PCB-27/24	PCB 27/24
7012-37-5	PCB 28
15862-07-4	PCB 29
2051-62-9	PCB 3
35693-92-6	PCB 30
16606-02-3	PCB 31
38444-77-8	PCB 32
PCB-32/16	PCB 32/16
38444-86-9	PCB 33 [BZ]
37680-68-5	PCB 34
37680-69-6	PCB 35
38444-87-0	PCB 36
38444-90-5	PCB 37
53555-66-1	PCB 38
38444-88-1	PCB 39
13029-08-8	PCB 4
PCB-4/10	PCB 4/10
38444-93-8	PCB 40
52663-59-9	PCB 41 [BZ]
PCB-41/71/40	PCB 41/71/40
36559-22-5	PCB 42
70362-46-8	PCB 43
PCB-43/49	PCB 43/49
41464-39-5	PCB 44
PCB-44/47/65	PCB 44/47/65
70362-45-7	PCB 45
PCB-45/51	PCB 45/51
41464-47-5	PCB 46
PCB-47/75/48	PCB 47/75/48
70362-47-9	PCB 48
41464-40-8	PCB 49 [BZ]
PCB-49/69	PCB 49/69
16605-91-7	PCB 5

62796-65-0	PCB 50
PCB-50/53	PCB 50/53
68194-04-7	PCB 51
35693-99-3	PCB 52
PCB-52/43/73	PCB 52/43/73
PCB-52/73	PCB 52/73
41464-41-9	PCB 53
15968-05-5	PCB 54
74338-24-2	PCB 55
41464-43-1	PCB 56
PCB-56/60	PCB 56/60
70424-67-8	PCB 57
41464-49-7	PCB 58
PCB-58/62/75	PCB 58/62/75
74472-33-6	PCB 59
PCB-59/62/75	PCB 59/62/75
25569-80-6	PCB 6
33025-41-1	PCB 60
33284-53-6	PCB 61 [BZ]
54230-22-7	PCB 62
74472-34-7	PCB 63
52663-58-8	PCB 64
PCB-64/41/68	PCB 64/41/68
33284-54-7	PCB 65
32598-10-0	PCB 66
PCB-66/80	PCB 66/80
73575-53-8	PCB 67
73575-52-7	PCB 68
60233-24-1	PCB 69
33284-50-3	PCB 7
32598-11-1	PCB 70
PCB-70/61/74/76	PCB 70/61/74/76
41464-46-4	PCB 71
41464-42-0	PCB 72
74338-23-1	PCB 73
PCB-74/61	PCB 74/61
32598-12-2	PCB 75 [BZ]
70362-48-0	PCB 76
32598-13-3	PCB 77
70362-49-1	PCB 78
41464-48-6	PCB 79
34883-43-7	PCB 8
PCB-8/5	PCB 8/5
33284-52-5	PCB 80
70362-50-4	PCB 81
52663-62-4	PCB 82
PCB-83/108	PCB 83/108
PCB-83/99	PCB 83/99
52663-60-2	PCB 84
PCB-85/116/117	PCB 85/116/117

PCB-85/120	PCB 85/120
55312-69-1	PCB 86 [BZ]
PCB-86/87/97/109/119/125	PCB 86/87/97/109/119/125
PCB-86_CAS_CoE	PCB 86_CAS_CoE
38380-02-8	PCB 87 [BZ]
55215-17-3	PCB 88 [BZ]
PCB-88/91	PCB 88/91
73575-57-2	PCB 89
PCB-89/90/101	PCB 89/90/101
34883-39-1	PCB 9
PCB-9/7	PCB 9/7
68194-07-0	PCB 90 [BZ]
PCB-90/101/113	PCB 90/101/113
68194-05-8	PCB 91
52663-61-3	PCB 92
73575-56-1	PCB 93 [BZ]
PCB-93/98/100/102	PCB 93/98/100/102
73575-55-0	PCB 94
38379-99-6	PCB 95
PCB-95/93	PCB 95/93
PCB-95/93/100	PCB 95/93/100
73575-54-9	PCB 96
PCB-97_STL_CoE	PCB 97_STL_CoE
PCB-98/102	PCB 98/102
38380-01-7	PCB 99
106-47-8	p-Chloroaniline [4-Chloroaniline]
80-07-9[1]	p-Chlorophenyl sulfone isomer 1
80-07-9[2]	p-Chlorophenyl sulfone isomer 2
106-44-5	p-Cresol
608-93-5	Pentachlorobenzene
30402-15-4	Pentachlorodibenzofuran, Total
36088-22-9	Pentachlorodibenzo-p-dioxin, Total
76-01-7	Pentachloroethane
87-86-5	Pentachlorophenol
629-99-2	Pentacosane
1560-93-6	Pentadecane, 2-methyl-
%GRAVEL	Percent Gravel
%MOISTURE	Percent moisture
%SAND	Percent Sand
%SAND_C	Percent SAND - Coarse
%SAND_F	Percent SAND - Fine
%SOLIDS	Percent Solids
Pct UA 25C	Percent Unionized Ammonia 25C
14797-73-0	Perchlorate
1520-96-3	Perylene-d12
pH	pH
pH CaCO3 sat60c	pH of CaCO3 saturation[25C]
pH CaCO3 sat25c	pH of CaCO3 saturation[60C]
85-01-8	Phenanthrene
108-95-2	Phenol

119-47-1	Phenol, 2,2'-methylenebis[6-[1
2772-45-4	Phenol, 2,4-bis[.alpha.,.alpha.-dimethylbenzyl]-
3864-99-1	Phenol, 2-[5-chloro-2h-benzotr
1200-09-5	Phenol, 4-[3-methyl-2-butenyl]
4165-62-2	Phenol-d5
13127-88-3	Phenol-d6
Phenolic Comp	Phenolic Compounds
882-33-7[1]	Phenyl disulfide isomer 1
882-33-7[2]	Phenyl disulfide isomer 2
298-02-2	Phorate
732-11-6	Phosmet
13171-21-6	Phosphamidon
14265-44-2	PHOSPHATE
2524-04-1	Phosphorochloridothioic acid, o,o'-diethyl ester
2953-29-9	Phosphorodithioic acid, o,o,s-trimethyl ester
3734-95-0	Phosphorothioic acid, s-[2-[[1-cyano-1-methylethyl]amino]-2-oxoethyl] o,o-diethyl ester
7723-14-0	Phosphorus
88-99-3	Phthalic acid
2306-33-4	Phthalic acid, monoethyl ester
85-44-9	Phthalic anhydride
23505-41-1	Pirimiphos ethyl
PLASLIM	PLASTIC LIMIT
PLASIND	PLASTICITY INDEX
7440-06-4	Platinum
7440-08-6	Polonium
PO-209	Polonium-209
13981-52-7	Polonium-210
15389-34-1	Polonium-212
15735-67-8	Polonium-214
15706-52-2	Polonium-215
15756-58-8	Polonium-216
15422-74-9	Polonium-218
POROSITY	POROSITY
7440-09-7	Potassium
13966-00-2	Potassium-40
55191-51-0	Pregn-1,4,6-triene-3,20-dione,
145-13-1	Pregnenolone
14834-73-2	Promethium-144
Pm-146	Promethium-146
7287-19-6	Prometryn
1918-16-7	Propachlor
115-07-1	Propene
107-12-0	Propionitrile
57-55-6	Propylene glycol
14331-85-2	Protactinium-231
15100-28-4	Protactinium-234
92-94-4	p-Terphenyl
1718-51-0	p-Terphenyl-d14
129-00-0	Pyrene
110-86-1	Pyridine

2176-62-7	Pyridine, pentachloro-
15623-45-7	Radium-223
13233-32-4	Radium-224
13982-63-3	Radium-226
15262-20-1	Radium-228
22481-48-7	Radon-220
14859-67-7	Radon-222
Resid chlorine	Residual chlorine
141-22-0	Ricinoleic acid
299-84-3	Ronnel
7440-17-7	RUBIDIUM
13967-48-1	Ruthenium-106
135-98-8	sec-Butylbenzene
7782-49-2	Selenium
420-56-4	Silane, fluorotrimethyl-
1066-40-6	Silanol, trimethyl-
7631-86-9	Silica
7440-21-3	Silicon
SILT	SILT
SILTCLAY	SILTCLAY
7440-22-4	Silver
378784-24-8	Silver-110m
122-34-9	Simazine
2949-92-0	S-methyl methanethiosulphonate
7440-23-5	Sodium
7775-09-9	Sodium Chlorate
13966-32-0	Sodium-22
14808-79-8-Diss	Soluble Sulfate
SPECIFIC_GRAVITY	Specific Gravity
PERM_AIR	SPECIFIC PERMEABILITY TO AIR
PERM_WATER	SPECIFIC PERMEABILITY TO WATER
7683-64-9	Squalene
22248-79-9	Stirophos [Tetrachlorovinphos]
7440-24-6	Strontium
100-42-5	Styrene
14808-79-8	Sulfate
18496-25-8	Sulfide
14265-45-3	Sulfite
3112-85-4	Sulfone, methyl phenyl
3689-24-5	Sulfotep
7704-34-9	Sulfur
7446-09-5	Sulfur dioxide
Surfactants	Surfactants
13494-80-9	Tellurium
12-17-9	Temperature
TIC	Tentatively Identified Compounds [TICs]
13071-79-9	Terbufos
75-65-0	tert-Butyl alcohol
98-06-6	tert-Butyl benzene
55722-27-5	Tetrachlorodibenzofuran, Total

41903-57-5	Tetrachlorodibenzo-p-dioxin, Total
127-18-4	Tetrachloroethene
877-09-8	Tetrachloro-m-xylene
646-31-1	TETRACOSANE
638-58-4	Tetradecanamide
107-49-3	Tetraethyl pyrophosphate
21646-99-1	Tetraethyl pyrophosphite
109-99-9	Tetrahydrofuran
119-64-2	Tetralin
14167-59-0	Tetratriacontane
7440-28-0	Thallium
14133-67-6	Thallium-207
14913-50-9	Thallium-208
420-12-2	Thiirane
28249-77-6	Thiobencarbe
297-97-2	Thionazin
110-02-1	Thiophene
3172-52-9	Thiophene, 2,5-dichloro-
53907-80-5	Thiophene, cis-hexahydro-1h-cyclopenta[c]
6012-97-1	Thiophene, tetrachloro-
110-01-0	Thiophene, tetrahydro-
108-98-5	Thiophenol
7440-29-1	Thorium
15623-47-9	Thorium-227
14274-82-9	Thorium-228
15594-54-4	Thorium-229
14269-63-7	Thorium-230
14932-40-2	Thorium-231
TH-232	Thorium-232
15065-10-8	Thorium-234
7440-31-5	Tin
13966-06-8	Tin-113
7440-32-6	Titanium
34643-46-4	Tokuthion [Protothiofos]
108-88-3	Toluene
2037-26-5	Toluene-d8
ALKALINITY	Total Alkalinity
12172-73-5T	Total Amphibole Protocol Structure
1332-21-4T	Total Asbestos Protocol Structure
TOTAL-ASB	Total Asbestos Structures
TOTAL_CHLORIDES	Total Chlorides
12001-29-5T	Total Chrysotile Protocol Structure
Total-DeCB	Total Decachlorinated Biphenyl
Total-DiCB	Total Dichlorinated Biphenyl
Dioxin	Total Dioxins
10-33-3	Total Dissolved Solids [TDS]
Total-HpCB	Total Heptachlorinated Biphenyl
Total-HxCB	Total Hexachlorinated Biphenyl
HpCDD	Total HpCDD
TOTIC	Total Inorganic Carbon

TKN	Total Kjeldahl Nitrogen [TKN]
Total-MoCB	Total Monochlorinated Biphenyl
Total-NoCB	Total Nonachlorinated Biphenyl
Total-OcCB	Total Octachlorinated Biphenyl
TOC	Total Organic Carbon
TOH	Total Organic Halogen
1336-36-3	Total PCBs
Total-PeCB	Total Pentachlorinated Biphenyl
POROS_FLUID	Total Pore Fluid Saturations
TOP	Total Porosity
10-32-2	Total Suspended Solids [TSS]
TTEQ-a	Total TEQ - ENSR Calculated [a]
TTEQ-b	Total TEQ - ENSR Calculated [b]
Total-TeCB	Total Tetrachlorinated Biphenyl
TTHM	Total THM
Total-TriCB	Total Trichlorinated Biphenyl
8001-35-2	Toxaphene
156-60-5	trans-1,2-Dichloroethene
10061-02-6	trans-1,3-Dichloropropene
110-57-6	trans-1,4-Dichloro-2-butene
39765-80-5	Trans-nonachlor
3319-31-1	tri[2-Ethylhexyl] trimellitate
638-68-6	Triacontane
126-73-8	Tributyl phosphate
52-68-6	Trichlorfon
75-87-6	Trichloroacetaldehyde
302-17-0	Trichloroacetaldehyde monohydrate
79-01-6	Trichloroethene
327-98-0	Trichloronate
638-67-5	Tricosane
78-30-8	Tricresyl phosphate [TOCP]
98-08-8	Trifluorotoluene
1582-09-8	Trifluralin
519-73-3	Triphenylmethane
115-86-6	Triphenylphosphate
791-28-6	Triphenylphosphine oxide
3658-80-8	Trisulfide, dimethyl
10028-17-8	Tritium
7440-33-7	Tungsten
TURBIDITY	Turbidity
1120-21-4	Undecane
17301-23-4	Undecane, 2,6-dimethyl-
7440-61-1	Uranium
14158-29-3	Uranium-232
13966-29-5	Uranium-233/234
15117-96-1	Uranium-235/236
U-238	Uranium-238
7440-62-2	Vanadium
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide

75-01-4	Vinyl chloride
1330-20-7	Xylenes [total]
13982-36-0	Yttrium-88
Z7PDCL	Z-7-PENTADECENOL
7440-66-6	Zinc
13982-39-3	Zinc-65
7440-67-7	Zirconium
13967-71-0	Zirconium-95

Appendix J: Annotation of Updates to the Unified Chemical EDD Format Document

February, 2010

1. Clarified description of Well ID field.
2. Added this appendix.
3. Added section "Lookup Tables."
4. Updates to Appendix I, *CAS IDS/ANALYTE CODES:*
    a. Replaced redundant/overlapping CAS IDs for TPH analytes with 5 new IDs: TPH_GRO, TPH_DRO, TPH_ORO, TPH_EFH, and TPH_HEMOG
    b. Changed CAS ID Z7HEX to 35507-09-6 for [Z]-7-Hexadecene
    c. Removed redundant or erroneous CAS IDs '163', DICBTOT, DPPT, 100022-54-1(Ethyl 2-chloro-2-[3-chlorobenzene]), OSOIL, 100021-66-2(Trans-2,3-dimethylthiophane)
    d. There were duplicate CAS IDs for analytes 13C12-PCB 77, 13C12-PCB 81, 13C12-PCB 118, 13C12-PCB 126, and 13C12-PCB 169 – duplicates were removed.
    e. Changed analyte name for CAS ID 608-73-1 from 1,2,3,4,5,6-Hexachlorocyclohexane to Lindane
    f. Fixed misspelling of analyte name for CAS ID 126-98-7 (Methacrylonitrile was spelled Methylacrylonitrile)
    g. Changed analyte name for CAS ID 7440-08-6 from Polonium-209 to Polonium; added new CAS ID PO-209 for Polonium 209
    h. Changed analyte name for CAS ID 297-97-2 (incorrectly listed with analyte name TEPP) to Thionazin
    i. Changed CAS ID for Thiophenol from 108-95-5 to 108-98-5
    j. Added new CAS IDs
        - 4376-18-5 "1,2-Benzenedicarboxylic acid, monomethyl"
        - 544-25-2 "1,3,5-Cycloheptatriene"
        - 628-41-1 "1,4-Cyclohexadiene"
        - 109719-94-0 "13C-1,2,3,4,7,8,9-HpCDF"
        - 109719-80-4 "13C-1,2,3,4,7,8-HxCDD"
        - 116843-03-9 "13C-1,2,3,6,7,8-HxCDF"
        - 116843-04-0 "13C-1,2,3,7,8,9-HxCDF"
        - 116843-05-1 "13C-2,3,4,6,7,8-HxCDF"
        - 116843-02-8 "13C-2,3,4,7,8-PeCDF"
        - 2733-88-2 "15-Tetracosenoic acid, methyl"
        - 1454-85-9 1-Heptadecanol
        - 2642-82-2 "2,2-Bis[p-chlorophenyl]ethanol"
        - 21854-95-5 "2,2'-Dichlorobenzil"
        - 85-29-0 "2,4'-Dichlorobenzophenone"
        - 563-80-4 "2-Butanone, 3-methyl-"
        - 37777-76-7 2-Chloro-6-fluorophenylacetic acid
        - 108-43-0 3-Chlorophenol
        - 552-54-5 "4H-1-benzopyran-4-one, 3,5-dih"
        - POROS_AIR Air Filled Porosity
        - 14683-10-4 Antimony-124
        - 14234-35-6 Antimony-125
        - 13981-41-4 Barium-133
        - 14798-08-4 Barium-140
        - 100-66-3 "Benzene, methoxy-"

- 6320-03-2 "Benzenethiol, 2-chloro-"
- 51-44-5 "Benzoic acid, 3,4-dichloro-"
- 13966-02-4 Beryllium-7
- 62338-43-6 "Bicyclo[2.2.2]octa-2,5-diene,"
- BULK_DENS Bulk Density
- 123-72-8 Butyraldehyde
- 13982-30-4 Cerium-139
- 13967-74-3 Cerium-141
- 14762-78-8 Cerium-144
- 14234-29-8 Cesium-136
- 13898-47-0 Chlorite
- 14392-02-0 Chromium-51
- 61568-43-2 cis-2.4-Dimethylthiane
- CLAY CLAY
- COARSE SAND COARSE SAND
- 14093-03-9 Cobalt-56
- 55963-79-6 "Cyclohexane, 1,2,3,4,5,6-hexachloro-, .g"
- 540-97-6 "Cyclohexasiloxane, dodecamethyl-"
- 822-50-4 "Cyclopentane, 1,2-dimethyl-, t"
- 1759-58-6 "Cyclopentane, 1,3-dimethyl-, t"
- 96-37-7 "Cyclopentane, methyl-"
- Delta-D Delta-D
- Delta-O Delta-O
- 542-88-1 Dichloromethyl ether
- 352-93-2 Diethyl sulfide
- 122-39-4 Diphenylamine
- 14683-23-9 Europium-152
- 15585-10-1 Europium-154
- 14391-16-3 Europium-155
- FINE SAND FINE SAND
- FOC Fraction organic Carbon
- HYCO HYDRAULIC CONDUCTIVITY
- 14694-69-0 Iridium-192
- 14596-12-4 Iron-59LIQLIM LIQUID LIMIT13966-31-9 Manganese-54
- MEDIUM SAND MEDIUM SAND
- 13982-78-0 Mercury-203
- 5162-3-08 "Methanone, [2-chlorophenyl]phenyl-"
- 112-40-3 n-Dodecane
- 14269-74-0 Neodymium-147
- 13968-59-7 Neptunium-239
- 14681-63-1 Niobium-94
- 13967-76-5 Niobium-9592-71-7 "Oxazole, 2,5-diphenyl-"
- 92-71-7 "Oxazole, 2,5-diphenyl-"
- 7440-05-3 Palladium
- 37680-73-2 PCB 101 [BZ]
- 68194-06-9 PCB 102 [BZ]
- 70362-41-3 PCB 108 [BZ]/107 [IUPAC]
- 18259-05-7 PCB 116 [BZ]
- 68194-11-6 PCB 117 [BZ]
- 74472-39-2 PCB 125 [BZ]
- 2974-90-5 PCB 13 [BZ]
- 35065-28-2 PCB 138 [BZ]
- 38380-04-0 PCB 149 [BZ]
- 74472-44-9 PCB 163 [BZ]
- 59291-65-5 PCB 168 [BZ]
- 38444-84-7 PCB 20 [BZ]

- 38444-86-9 PCB 33 [BZ]
- 52663-59-9 PCB 41 [BZ]
- 41464-40-8 PCB 49 [BZ]
- 33284-53-6 PCB 61 [BZ]
- 32598-12-2 PCB 75 [BZ]
- 55312-69-1 PCB 86 [BZ]
- 38380-02-8 PCB 87 [BZ]
- 55215-17-3 PCB 88 [BZ]
- 68194-07-0 PCB 90 [BZ]
- 73575-56-1 PCB 93 [BZ]
- 1560-93-6 "Pentadecane, 2-methyl-"
- %SAND_C Percent SAND - Coarse
- %SAND_F Percent SAND - Fine
- 119-47-1 "Phenol, 2,2'-methylenebis[6-[1"
- 1200-09-5 "Phenol, 4-[3-methyl-2-butenyl]"
- 14265-44-2 PHOSPHATE
- 85-44-9 Phthalic anhydride
- PLASLIM PLASTIC LIMIT
- PLASIND PLASTICITY INDEX
- POROSITY POROSITY
- 14834-73-2 Promethium-144
- Pm-146 Promethium-146
- 13967-48-1 Ruthenium-106
- SILT SILT
- 378784-24-8 Silver-110m
- 13966-32-0 Sodium-22
- 14808-79-8-Diss Soluble Sulfate
- PERM_AIR SPECIFIC PERMEABILITY TO AIR
- PERM_WATER SPECIFIC PERMEABILITY TO WATER
- 110-01-0 "Thiophene, tetrahydro-"
- 13966-06-8 Tin-113
- POROS_FLUID Total Pore Fluid Saturations
- TOP Total Porosity
- 10028-17-8 Tritium
- 13982-36-0 Yttrium-88
- 13982-39-3 Zinc-65
- 13967-71-0 Zirconium-95