**Susitna-Watana Hydroelectric Project**

**2013 Focus Area Groundwater Wells Water Quality Study**

**Data Dictionary**

Focus Area groundwater well water quality samples were collected continuously for a four week period at monitoring sites along the Susitna River in July through August 2013. This document describes the standard abbreviations used in the MS Excel database used to assemble tables and graphs and to report values. Further, it describes the nomenclature for labeling sample bottles and identifying sample locations. The focus area groundwater well water quality data, formatted per AEA project data guidelines (April 2013), is described in the following sections. Each section corresponds to the column heading in the Excel database.

# PROJECT\_ID

This field reports the name of the study (focus areas) that corresponds to the analyzed results.

# SAMPLE\_ID

Describes the sample ID given to each sample by the field crew at the time of collection. This sample ID was recorded on the field form, sample bottle, and COC. The sample ID includes site names given to each specific groundwater well. Multiple wells were located at some focus areas. These are denoted with either MW1 or MW2 (monitoring well 1 or 2).

## GWS\_SAMPLE\_ID

This is the unabbreviated site id for each groundwater well.

# SAMPLE\_TYPE

This field indicates which type of water quality study the sample was collected for, Focus Area, groundwater. All samples in this dataset are associated with the Focus Area groundwater water quality study.

# FA\_PRM

Describes the project river mile (PRM) from which samples were collected. Refer to Table in Section B for corresponding PRMs and Site Names.

| **Project River Mile (PRM)** | **Focus Area Name** |
| --- | --- |
| 104 | Whiskers Slough |
| 113 | Oxbow 1 |
| 115 | Slough 6A |
| 128 | Slough 8A |
| 138 | Gold Creek |
| 141 | Indian River |
| 144 | Slough 21 |

# DUPE\_Y\_N\_FB

This field indicates whether the sample collected was a duplicate (Y=Yes, N=No), or a field blank (FB).

# GPS\_Coord \_Latitude

This field gives the global positioning system (GPS) latitude (WGS 84) for the transect end point location where samples were collected. Coordinates were taken with a handheld Garmin GPS unit from the left bank (LB).

# GPS\_Coord \_Longitude

This field gives the global positioning system (GPS) longitude (WGS 84) for the transect end point location where samples were collected. Coordinates were taken with a handheld Garmin GPS unit from the left bank (LB).

# MATRIX

This field describes the sample matrix. The focus area matrix was always water, denoted with a 1.

# COLLECT\_DATE\_TIME

This field describes the date and time of sample collection.

# COLLECT\_DATE

This field indicates the date that the sample was collected.

# LAB\_SAMPLE\_ID

This field reports the sample ID number given to each sample analyzed by SGS.

# WORK\_ORDER

This field indicates the work order number that each sample was analyzed under at SGS.

# ANALYTE

This field indicates the parameter for which the sample was analyzed for. Samples were analyzed for, ammonia-N, total metals, dissolved metals, total nitrate/nitrite, total organic carbon and dissolved organic carbon, turbidity, hardness, SRP, total Kjeldahl Nitrogen, and total phosphorus.

# DISSOLVED

This field reports whether the dissolved or total portion of the sample was analyzed. F denotes a dissolved sample, and T indicates the total portion was analyzed.

# RESULT

This field reports the results associated with the analysis of each constituent for each sample.

# LAB\_RESULTFLAG

This field reports the qualifier given to the result listed in column V by SGS. Qualifiers given to data by the lab include: “J” which means the result is less than the reporting limit but greater than or equal to the MDL so the concentration is an approximate value, “U” which indicates the analyte was analyzed for but not detected, and “R” which indicates the result had been rejected.

# RESULTFLAG\_POST\_QAQC\_VAL

This field reports the qualifier given to the result listed in column V by Tetra Tech. Qualifiers given to data by Tetra Tech include: “J” which means the result is less than the reporting limit but greater than or equal to the MDL so the concentration is an approximate value, “U” which indicates the analyte was analyzed for but not detected, “R” which indicates the result had been rejected, “UR” which indicates a non-detect, rejection, “J+” which indicates the result is an estimate and biased high, “JR” which indicates the result is an estimate and has been rejected, and “J-“ which indicates the result is an estimate and biased low.

# RESULTFLAG\_COMMENTS

This field gives the reasoning behind Tetra Tech’s result flag qualifications.

# UNITS

This field indicates the units of measure for each analyte.

# DL

This field reports the minimum detection limit for the associated sample and analysis.

# REPDL

This field reports the minimum reporting limit for the associated sample and analysis.

# W. QC\_1\_Review

This field indicates the date and field personnel who reviewed the field forms on the day the sample was collected.

# X. QC\_2\_Review

This field indicates the date and personnel who performed the data entry and data entry QC.

# Y. QC\_3\_Review

This field indicates the date and personnel who performed the senior review and QC on the data after data entry but before final submittal to AEA.