

Revision Date: 16 October 1997

**TECHNICAL REPORT
FOR THE
ERPIMS 2.0 Database Model
OF THE
ENVIRONMENTAL RESOURCES PROGRAM
INFORMATION MANAGEMENT SYSTEM (ERPIMS)**

Air Force Center for Environmental Excellence (AFCEE)
3207 North Road
Brooks AFB, TX 78235-5363

ERPIMS 2.0 DATABASE MODEL1

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Facilities, Sites and Zones Information

Table Name:COMMAND

Short Name: ACI

Description: Air Force major commands.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|------------|-----------|-----|-----|-----|--------|--|
| Major Command Code | AFCID | C5 | PK | | NO | YES | Air Force command identifier. Identifier used to represent an Air Force major command. Synonymous with MAJCOM. |
| Major Command Name | AFCNAME | C30 | | | NO | YES | AIR FORCE COMMAND NAME: Full name of Air Force command (MAJCOM). |
| Description | CMDDESC | C240 | | | NO | NO | Textual description describing the major command. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was entered; manually or by an application. |

Table Name:INSTALLATION

Short Name: AFI

Description: Current and former Air Force installations.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|------------|-----------|-----|-----|-----|--------|--|
| Installation Code | AFIID | C5 | PK | | NO | YES | AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Installation Name | AFINAME | C30 | | | NO | YES | AIR FORCE INSTALLATION NAME: Full name of an Air Force installation. |
| Major Command Code | AFCID | C5 | FK | REF | NO | YES | (References Table: ACI) Air Force command identifier. Identifier used to represent an Air Force major command. Synonymous with MAJCOM. |
| Base Closure Flag | BCFLAG | C1 | | AFS | NO | NO | Indicates if the installation is selected for closure. |
| NPL Date | NPLDATE | D | | | NO | NO | Date the installation was added to the National Priorities List. |
| NPL Delist Date | NPLDELIST | D | | | NO | NO | Date the installation was removed to the National Priorities List. |
| EPA ID Number | EPAID | C12 | | | NO | NO | EPA designation for the installation (EPA site). |
| EPA Region | EPAREGN | N2 | | | NO | YES | EPA REGION NUMBER: Number designating the EPA region within which the installation resides. (updated from WIMS-ES). |
| Quadrangle | QUAD | C1 | | | NO | NO | Code for a US Military Grid System quadrangle. The |

quadrangle is usually 6 degrees long by 8 degrees lat, but above 72 degrees N. lat, it is 6 degrees long by 12 degrees lat. Only N and P - X are used for the Northern hemisphere. (C_H, J_N, P_X).

| | | | | | | |
|-------------------------|---------------|-------|-----|-----|--|--|
| Coordinate System Basis | COORDBAS | C25 | | YES | COORDINATE BASIS to which all coordinates are referenced at the installation. | |
| North Adjustment | NADJ | N10,2 | | YES | The adjustment factor to be applied to north coordinates to equate to the coordinate system basis. | |
| East Adjustment | EADJ | N10,2 | | YES | The adjustment factor to be applied to east coordinate to equate to the coordinate system basis. | |
| State | STECODE | C2 | STE | NO | YES | STATE: The standard 2-character code for a State. (updated from WIMS-ES). |
| County | COUNTY | C20 | | NO | YES | COUNTY: County in which the installation is primarily located. (updated from the Work Information Management System, Environmental Subsystem [WIMS-SE]). |
| Contractor_OK | CONTRACTOR_OK | C1 | | | | Coded value indicating whether the code value in this record can be used for contractor data loading |
| Update User | UPUSER | C12 | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: CONTRACT

Short Name: CONTRACT [NEW]

Description: Service center and base-level contract, delivery order and project information.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-----------------------|-------------|-----------|-----|-----|-----|--------|---|
| Contract Sequence | CONTRACTSEQ | N | PK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Contract Number | CONTRACT_ID | C16 | | | NO | NO | Number identifying the contract; this number must be unique across all Air Force organizations. |
| Delivery Order Number | DO_ID | C4 | | | NO | NO | Number identifying the delivery order. |
| Project Identifier | PROJECT_ID | C20 | | | NO | NO | Name of the project the contract is for. |
| Contract Type | CTYPE | C5 | | CNT | NO | NO | Type of contract |
| Contracting Agency | AGENCY | C5 | | CAG | NO | NO | Name of the agency administering the contract. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |

Table Name: MAP REFERENCE**Short Name: MRI****Description:** Description of the physical map of an installation.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Map Reference Identifier | MAPRID | C8 | PK | | REQ | YES | Unique identifier assigned to each map for an installation. |
| Mapping Company Code | MAPCODE | C4 | | MAP | REQ | YES | Coded value identifying the company responsible for producing a map of a designated area. |
| Map Type Code | MTCCODE | C4 | | MTC | REQ | YES | Coded value identifying the type of map. |
| Map Coverage Code | MCCCODE | C1 | | MCC | REQ | YES | Coded value delineating the extent to which a reference map covers specified features associated with a site, zone, or entire installation. |
| Map Scale | MAPSCALE | N4 | | | OPT | YES | The drawing scale of a map expressed as inches of drawing per feet of terrain. |
| Lower Left North | LLNORTH | N8 | | | CND | YES | The lower left y-value of a general area of interest. |
| Lower Left East | LLEAST | N8 | | | CND | YES | The lower left x-value of a general area of interest. |
| Upper Right North | URNORTH | N8 | | | CND | YES | The upper right y-value of a general area of interest. |
| Upper Right East | UREAST | N8 | | | CND | YES | The upper right x-value of a general area of interest. |
| Benchmark Designation | BMDESIG | C20 | | | OPT | YES | Code, label, name, etc. of a benchmark. |
| Benchmark Northing | BMNORTH | N10,2 | | | OPT | YES | The y-value of a map benchmark. |
| Benchmark East | BMEAST | N10,2 | | | OPT | YES | The x-value of a map benchmark. |
| Benchmark Elevation | BMELEV | N7,2 | | | OPT | YES | The ground surface elevation of a map benchmark. |
| Description | MAPDESC | C240 | | | OPT | YES | Textual description of the mapped area. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: SITE**Short Name: GSI****Description: Description of an Air Force ERP site. A site is an area on an installation that contains possible contamination.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-------------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | NO | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Site Identifier | SITEID | N3 | PK | | NO | YES | Number which uniquely identifies a site. |
| Site Abbreviated Name | SITEXREF | C10 | | | NO | YES | Short name for the site |
| Site Name | SITENAME | C35 | | | NO | YES | SITE NAME: The name of a site. |
| WIMS-ES Id | WIMS_ID | C5 | | WMS | NO | YES | WORK INFORMATION MANAGEMENT SYSTEM IDENTIFIER: The identifier for the site in the Work Information Management System - Environmental Subsystem. This identifier is assigned by HQUSAF/CEVR. |
| Site Program Management Class | SPMCODE | C2 | | SPM | | YES | Site Class. from a Program Management Perspective. |
| Lower Left North | LLNORTH | N8 | | | NO | YES | The lower left y-value of a general area of interest. |
| Lower Left East | LLEAST | N8 | | | NO | YES | The lower left x-value of a general area of interest. |
| Upper Right North | URNORTH | N8 | | | NO | YES | The upper right y-value of a general area of interest. |
| Upper Right East | UREAST | N8 | | | NO | YES | The upper right x-value of a general area of interest. |
| Coordinate Type | CRDTYPE | C3 | | CRT | NO | NO | The type of coordinate system used (i.e., UTM,STP,GEO). |
| Coordinate Method | CRDMETH | C5 | | CRD | NO | NO | Indicates method used to determine the location (e.g., Survey, GPS, estimated, digitized). |
| Coordinate Uncertainty | CRDUN | N6,3 | | | NO | NO | The expression of the precision of the location coordinates. |
| Survey Coordinate Units | CRDUNITS | C10 | | UTM | NO | NO | Code indicating whether the applicable state-planer system uses feet or meters as the unit of measure. |
| Surface Area | SURFAREA | N7,2 | | | NO | YES | Surface area of the site ft ² /m ² . |
| Map Reference Identifier | MAPRID | C8 | FK | | NO | YES | Identifies the map reference; currently available in ERPIMS for tracking physical map of installation. |
| Site Type | STCCODE | C2 | | STC | NO | YES | General type of the site. |
| Topographic Setting | STSCODE | C2 | | STS | NO | YES | General topographic setting of the area where the site is located or the geomorphic process over which the site is located. |
| Official Site Identifier Type | OSITEID | C5 | | OSI | NO | YES | Unique identifier of the "official" site that an "unofficial" site is considered to be a part of from a program management perspective. |
| NPL Date | NPLDATE | D | | | NO | NO | Date the installation was added to the National Priorities List. |
| NPL Delist Date | NPLDELIST | D | | | NO | NO | Date the installation was removed to the National Priorities List. |

| | | | | | | |
|-----------------------------|----------|------|-----|----|-----|--|
| Site Status | STACODE | C5 | STA | NO | NO | Current status of the site as of a particular date. |
| Status Date | STADATE | D | | NO | NO | Date for which the status indicator was established. |
| Final Disposition | CLSCODE | C4 | CLS | NO | YES | Final disposition of the site in the ERP process. |
| HRS Score | HRS | N5 | | NO | YES | Score for the site based on the Hazard Ranking System (HRS) model analysis. |
| HRS Model | HRSMODEL | C5 | HRS | NO | NO | Version of the Hazard Ranking System (HRS) used to generate the HRS score. |
| STP Zone | STPZONE | C5 | | NO | NO | The coordinate zone needed in order for the Geodetic Datum attribute to make sense. For Compatibility with DESCIM. |
| STP Projection | STPPROJ | C5 | | NO | NO | Geographic projection used by the state planar system. |
| UTM Zone | UTMZONE | C5 | UTZ | NO | NO | The coordinate zone needed in order for the Geodetic Datum attribute to make sense. For Compatibility with DESCIM. |
| Relative Risk Ranking Score | RRSCORE | N3 | | NO | NO | Used to indicate relative risk assessment. For compatibility with DESCIM model. |
| Relative Risk Ranking Model | RRMODEL | C5 | RRM | NO | NO | Indicates the model used for obtaining the relative risk assessment score. For compatibility with DESCIM model. |
| Description | SITEDESC | C240 | | NO | YES | SITE DESCRIPTION: General description of a site. |
| Update User | UPUSER | C12 | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: SITE OPERABLE UNIT XREF Short Name: SOX [NEW]**Description: Cross-reference table between operable units and sites.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Site Identifier | SITEID | N3 | PK | | REQ | NO | Number which uniquely identifies a site. |
| Operable Unit Code | OUCODE | C3 | PK | | REQ | NO | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: SITE CONTAMINATION Short Name: SCC

Description: Description of the type of contamination at a site. This is usually based on the preliminary assessment.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table: AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Analyte Group | GROUPCODE | C10 | PK | REF | REQ | YES | (Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Site Identifier | SITEID | N3 | PK | | REQ | YES | Number which uniquely identifies a site. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: ZONE**Short Name: ZDI****Description: User defined groupings of sampling locations.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Zone Identifier | ZONEID | C10 | PK | | REQ | YES | Unique identifier for a group of individual locations maintained for collective study and evaluation. |
| Zone Name | ZNAME | C35 | | | REQ | NO | Name of the zone. |
| Description | ZONEDESC | C240 | | | OPT | YES | Textual description of the zone and its purpose. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Remedial Action Operating Information

Table Name: OPERABLE UNIT

Short Name: OU [NEW]

Description: Description of the remedial action activity.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|------------|-----------|-----|-----|-----|--------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Operable Unit Code | OUCODE | C3 | PK | | REQ | NO | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Operable Unit Name | OUNAME | C35 | | | REQ | NO | Name of the operable unit. |
| Description | OUDESC | C240 | | | OPT | NO | Textual description of the Operable Unit. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: OPERABLE UNIT CONTAMINANT

Short Name: OUC [NEW]

Description: Type of contaminant being treated by the operable unit.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|-------------|-----------|-----|-----|-----|--------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table: AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Operable Unit Code | OUCODE | C3 | PK | | REQ | NO | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Analyte Group | GROUPCODE | C10 | PK | REF | REQ | NO | Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | REQ | NO | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application |

Table Name: REMEDIATION SYSTEM Short Name: RSI [NEW]

Description: Series of remediation technologies that work in concert .

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table: AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | REQ | NO | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | REQ | NO | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation System Name | RSNAME | C35 | | | REQ | NO | Name of the remediation system. |
| Description | RSDESC | C240 | | | OPT | NO | Textual description of the Remediation Train. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: REMEDIATION TECHNOLOGY Short Name: RTI [NEW]

Description: Description of a discrete remediation activity.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-----------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | REQ | NO | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | REQ | NO | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation Technology Id | RTID | C15 | PK | | REQ | NO | User defined name for the Remediation Technology. Used as part of the primary key. |
| Remediation Technology Type | RTTYPE | C5 | PK | RTT | REQ | NO | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Remediation Technology Name | RTNAME | C35 | | | REQ | NO | Name of the remedial Technology. |
| Remediation Technology | RTCLASS | C1 | | RTC | REQ | NO | A coded value representing the Remediation |

| | | | | | | | | |
|--------------------|-----------|------|----|-----|-----|----|--|--|
| Class | | | | | | | | Technology Class (in-situ, ex-situ or mixed). |
| Analyte Group | GROUPCODE | C10 | FK | REF | REQ | NO | | (Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Media | MEDIA | C2 | | MED | REQ | NO | | Coded value identifying the sample medium actually being treated, i.e., soil, water, etc. |
| Established Date | ESTDATE | D | | | REQ | NO | | Date the construction of the remediation technology was complete |
| Start Date | STARTDATE | D | | | REQ | NO | | Date the remediation technology started operating |
| Description | RTDESC | C240 | | | OPT | NO | | Textual description of the remedial unit. |
| Update User | UPUSER | C12 | | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: REMEDIATION SYSTEM PERFORMANCE Short Name: RSP [NEW]

Description: Information about the effectiveness of the remediation system.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------------|-------------|-----------|-----|-----|-----|--------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | REQ | NO | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | REQ | NO | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Beginning Date | BEGDATE | D | PK | | REQ | NO | Beginning date of the remediation. |
| Ending Date | ENDDATE | D | PK | | REQ | NO | Ending date of the remediation. |
| Performance Parameter | PARAMETER | C5 | PK | REF | REQ | NO | (Reference table PRFLST) Performance parameter (e.g. Destroyed mass, extracted mass, concentration, collection frequency) |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Parameter Value | PARVAL | N10,2 | | | REQ | NO | PARAMETER VALUE: value of calculated parameter reported in units consistent with UNITMEAS. |
| Parameter Uncertainty | PARUN | N10,2 | | | REQ | NO | A value which measures the uncertainty of the measurement (expressed as + or - some value). |
| Units | UNITS | C10 | | UTR | REQ | NO | UNITS OF MEASURE - REMEDIATION: Units of measure associated with a record. |
| Remarks | REMARKS | C240 | | | REQ | NO | Textual description of parameter and result. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |

| | | | | | | | |
|--------------------|--------|----|--|--|--|--|--|
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: REMEDIATION TECHNOLOGY PERFORMANCE Short Name: RTP [NEW]

Description: Information about the effectiveness of the remediation technology.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-----------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | REQ | NO | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | REQ | NO | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation Technology Id | RTID | C15 | PK | | REQ | NO | User defined name for the Remediation Technology. Used as part of the primary key. |
| Beginning Date | BEGDATE | D | PK | | REQ | NO | Beginning date of the remediation. |
| Ending Date | ENDDATE | D | PK | | REQ | NO | Ending date of the remediation. |
| Performance Parameter | PARAMETER | C5 | PK | REF | REQ | NO | (Reference table PRFLST) Performance parameter (e.g. Destroyed mass, extracted mass, concentration, collection frequency) |
| Remediation Technology Type | RTTYPE | C5 | PK | RTT | REQ | NO | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Parameter Value | PARVAL | N10,2 | | | REQ | NO | PARAMETER VALUE: value of calculated parameter reported in units consistent with UNITMEAS. |
| Parameter Uncertainty | PARUN | N10,2 | | | REQ | NO | A value which measures the uncertainty of the measurement (expressed as + or - some value). |
| Units | UNITS | C10 | | UTR | REQ | NO | UNITS OF MEASURE - REMEDIATION: Units of measure associated with a record. |
| Remarks | REMARKS | C240 | | | REQ | NO | Textual description of parameter and result. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LOCATION REMEDIATION SYSTEM XREF Short Name: LSX [NEW]**Description: Cross-reference table between locations and remediation systems.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Remediation System Id | RSID | C10 | PK | | REQ | NO | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | REQ | NO | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: REMEDIATION OPERABLE UNIT XREF Short Name: ROX [NEW]

Description: Cross-reference table between operable units and remediation trains.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Operable Unit Code | OUCODE | C3 | PK | | REQ | NO | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Remediation System Id | RSID | C10 | PK | | REQ | NO | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | REQ | NO | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Location Information

Table Name: LOCATION

Short Name: LDI

Description: General information about sampling locations.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|------------------------|------------|-----------|-----|-----|-----|--------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Location Type | LTCCODE | C2 | | LTC | REQ | YES | LOCATION CLASSIFICATION CODE: Coded value describing location where measurements or samples are taken. |
| Location Proximity | LPRCODE | C1 | | LPR | REQ | YES | Location Proximity Code. Coded value indicating whether sampling or measuring location is inside or outside the Air Force installation boundaries. |
| North Coordinate | NCOORD | N10,2 | | | CND | YES | NORTH STATE PLANE COORDINATE: The y-value (North-South) of the distance in feet of a sampling or measuring location from the reference location of known state plane coordinates. |
| East Coordinate | ECOORD | N10,2 | | | CND | YES | EAST STATE PLANE COORDINATE: The x-value (East-West) of the distance in feet of a sampling or measuring location from the reference location of known state plane coordinates. |
| Coordinate Type | CRDTYPE | C3 | | CRT | REQ | NO | The type of coordinate system used (i.e., UTM,STP,GEO). |
| Coordinate Method | CRDMETH | C5 | | CRD | REQ | NO | Indicates method used to determine the location (e.g., survey, GPS, estimated, digitized). |
| Coordinate Units | CRDUNITS | C10 | | UTM | REQ | NO | Units of measure of the surveyed northing and easting values. |
| Coordinate Uncertainty | CRDUN | N6,3 | | | OPT | NO | The expression of the precision of the location coordinates. |
| Date Established | ESTDATE | D | | | REQ | YES | DATE ESTABLISHED: The date that construction of a sampling or measuring location was completed. |
| Establishing Company | ESCCODE | C4 | | ESC | REQ | YES | ESTABLISHING COMPANY CODE: Coded value identifying the organization which establishes a sampling or measuring location, typically the prime contractor. |

| | | | | | | |
|---------------------------|------------|------|-----|-----|-----|---|
| Drilling Company | DRLCODE | C4 | DRL | CND | YES | DRILLING COMPANY CODE: Coded value identifying the organization that drilled a borehole at a sampling or measuring location. This organization is typically the drilling subcontractor. |
| Excavating Company | EXCCODE | C4 | EXC | CND | YES | EXCAVATING COMPANY CODE: Coded value identifying the organization that excavated a test pit at a sampling or measuring location. |
| Construction Method | CMCCODE | C2 | CMC | CND | YES | CONSTRUCTION METHOD CODE: Coded value identifying the method by which a borehole or test pit was constructed (Drilling or Excavation Method). |
| Ground Surface Elevation | ELEV | N7,2 | | REQ | YES | SURFACE ELEVATION: Elevation of ground surface (for groundwater, soil, or sediment sampling) or water surface (for surface water sampling) at a sampling or measuring location. |
| Elevation Method | ELEVMETHOD | C5 | ELM | REQ | NO | Method used in to determine the location's elevation. |
| Elevation Units | ELEVUNITS | C10 | UTM | REQ | NO | The unit that the elevation was measured in (feet or meters) (f/m). |
| Elevation Uncertainty | ELEVUN | N6,3 | | OPT | NO | The expression of the precision of the location coordinates. |
| Modified Elevation Flag | ELFLAG | C1 | | OPT | NO | Flag that indicates whether or not more current measurements for the Ground Surface Elevation are available in the Well Maintenance table. |
| Depth | DEPTH | N7,2 | | CND | YES | BOREHOLE DEPTH: The total depth of a borehole (including boreholes drilled to install wells) measured in feet relative to ground surface. |
| Borehole Diameter | BHDIAM | N4,2 | | CND | YES | BOREHOLE DIAMETER: The diameter of a borehole in inches. |
| Borehole Angle | BHANGLE | N5,2 | | OPT | NO | Angle at which borehole was drilled. |
| Borehole Azimuth | BHAZIM | N6,2 | | OPT | NO | Azimuth (degrees on a compass) where the borehole was drilled. |
| Geodetic Datum | DATUM | C12 | | OPT | NO | Identifier representing the geodetic datum used in the survey (e.g., State Plane Coordinate System NAD 1983, Florida Western Zone). |
| STP Zone | STPZONE | C5 | STZ | CND | NO | The coordinate zone needed in order for the Geodetic Datum attribute to make sense. For Compatibility with DESCIM. |
| STP Projection | STPPROJ | C5 | STP | CND | NO | Geographic projection used by the state planar system. |
| UTM Zone | UTMZONE | C5 | UTZ | CND | NO | The coordinate zone needed in order for the Geodetic Datum attribute to make sense. For Compatibility with DESCIM. |
| Geophysical Log | GEOLOG | C35 | | OPT | NO | Contains the reference to any/all geophysical logs created during drilling operations. |
| Map Identification Number | MAPID | N6 | | | YES | GIS Map Identification. |
| Map Link Field | MSLINK | N6 | | | YES | GIS Link Field. |
| Feature Code | FCODE | C12 | | | YES | GIS Feature Code. |

| | | | | | |
|--------------------|---------|------|-----|-----|---|
| Description | LOCDESC | C240 | OPT | YES | LOCATION DESCRIPTION: Any additional information to describe a sampling or measuring location in text format. |
| Update User | UPUSER | C12 | | | The last user to update the record. |
| Update Time | UPTIME | D | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LOCATION OPERABLE UNIT XREF Short Name: LOX [NEW]

Description: Cross-reference table between sampling locations and operable units.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Operable Unit Code | OUCODE | C3 | PK | | REQ | NO | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LOCATION SITE XREF**Short Name: SLX****Description:** Information about a site and location that has been selected for ERP study.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Site Identifier | SITEID | N3 | PK | | REQ | YES | Number which uniquely identifies a site. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Geohydrologic Flow | GFCCODE | C1 | | GFC | REQ | YES | GEOHYDROLOGIC FLOW CLASSIFICATION: The GFCCODE is a single character that describes the hydrologic relationship between a location and a site. |
| Site Proximity | SPCODE | C1 | | SPR | REQ | NO | A coded value indicating whether the location is in the site, outside the site or background. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LOCATION ZONE XREF**Short Name: ZLX****Description:** Cross-reference table between sampling locations and zones.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Zone Identifier | ZONEID | C10 | PK | | REQ | YES | (VVL: ZDI) Unique identifier for a group of individual locations maintained for collective study and evaluation. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LOCATION ALIAS**Short Name: LOCALIAS [NEW]****Description:** Alternate names for sampling locations.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | NO | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | NO | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Alternate Name | ALTNAME | C35 | PK | | NO | NO | Name previously used for the site, or currently used by another organization. |
| Alias Date | ALIASDATE | D | | | NO | NO | Date the alias was established. |
| Description | LOCADESC | C240 | | | NO | NO | Textual description of the alias. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Borehole Technical Data

Table Name: LITHOLOGIC DESCRIPTION

Short Name: LTD

Description: Lithologic descriptions and classifications of cuttings and cores taken from boreholes and test pits.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-------------------------|-------------|-----------|-----|-----|-----|--------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Beginning Depth | BEGDEPTH | N7,2 | PK | | REQ | YES | BEGINNING DEPTH: Upper depth of a lithologic stratum, measured below the ground surface in feet (reported as a positive value). |
| Ending Depth | ENDDEPTH | N7,2 | PK | | REQ | YES | END DEPTH: Lower depth of a lithologic stratum, measured below the ground surface in feet (reported as a positive value). |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Logging Date | LOGDATE | D | | | OPT | YES | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC sample is created. |
| Logging Company | LOGCODE | C4 | | LOG | REQ | YES | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Lithology Code | LITHCODE | C4 | | LTH | REQ | YES | LITHOLOGY CODE: 4-Character code indicating lithologic description of layer. |
| ASTM Code | ASTMCODE | C4 | | AST | REQ | YES | (VVL: AST.ASTMCODE) ASTM Soil Classification Code. A 2 or 4 character code used in ASTM classification of unconsolidated deposits. Deposits possessing characteristics of two groups are designated by combinations of groups. |
| Hydrostratigraphic Unit | HS_UNIT | C25 | FK | | OPT | NO | Working name given to the unit. |
| Stratigraphic Unit | ST_UNIT | C20 | FK | | OPT | NO | Descriptive name given to the unit. |
| Description | VISDESC | C240 | | | REQ | YES | VISUAL DESCRIPTION: Textural and mineralogical description of the material comprising the layer, to augment or qualify the lithologic codes. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: STRATIGRAPHIC UNIT**Short Name: STU [NEW]****Description:** Description of the units in the interpreted stratigraphic column for an installation.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|---------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Stratigraphic Unit | ST_UNIT | C20 | PK | | REQ | NO | Descriptive name given to the unit |
| Stratigraphic Order | STRATORDER | N3 | | | OPT | NO | Number assigned to the unit by the interpreting geologist; unit 1 is the oldest; the number decreases with age. |
| Group Name | GRPNAME | C20 | | | OPT | NO | Name of the geological group of which the unit is a part. |
| Formation Name | FORMATION | C20 | | | OPT | NO | Name of the geological formation of which the unit is a part. |
| Member Name | MBRNAME | C20 | | | OPT | NO | Name of the geological member of which the unit is a part. |
| Bed Name | BEDNAME | C20 | | | OPT | NO | Name of the geological bed of which the unit is a part. |
| Description | SUDESC | C240 | | | OPT | NO | Textual description of the stratigraphic unit. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: HYDROSTRATIGRAPHIC UNIT Short Name: HSU [NEW]**Description:** Data for a body of rock or soil with lateral extent that composes a geologic framework for a hydrologic system.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Hydrostratigraphic Unit | HS_UNIT | C25 | PK | | REQ | NO | Working name given to the unit. |
| Unit Type | HSTYPE | C4 | | LTH | CND | NO | USCS soil or rock classification for the type of soil/rock which comprises this hydrostratigraphic unit. |
| Description | HSDDESC | C240 | | | OPT | NO | Textual description of the hydrostratigraphic unit. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Monitoring Well Information

Table Name: WELL

Short Name: WCI

Description: Contains well placement and completion information.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-------------------------------|-------------|-----------|-----|-----|-----|--------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Installation Date | INSDATE | D | | | REQ | YES | INSTALLATION DATE: Date that a well casing is installed |
| Well Owner | WELCODE | C4 | | WEL | REQ | YES | WELL OWNER CODE: Coded value identifying the owner of a well that is monitored or tested |
| Well Type | WTCCODE | C3 | | WTC | REQ | YES | WELL TYPE CLASSIFICATION CODE: Coded value identifying the type of well in which the measurements are being taken (e.g., slugged, observation). |
| Well Completion Method | WCMCODE | C2 | | WCM | REQ | YES | WELL COMPLETION METHOD CODE: Coded value identifying the method used to complete the well or the nature of the openings that allow water to enter the well. |
| Hydrogeologic Completion Zone | GZCCODE | C1 | | GZC | REQ | YES | Geologic Completion Zone. General hydrologic description of well completion zone |
| Sole Source Aquifer | SAQCODE | C4 | | SAQ | REQ | YES | SOLE SOURCE AQUIFER CODE: Coded value identifying the sole source aquifer in which the well was completed. |
| Well Development Procedures | WDPROC | C5 | | WDP | REQ | NO | Indicates the type of well development procedures used. |
| Measuring Point Elevation | MPELEV | N7,2 | | | REQ | YES | MEASURING POINT ELEVATION: Elevation of the measurement reference point used for ground water depth level measurements, expressed in feet above Mean Sea Level. |
| Modified Measuring Point Flag | MPFLAG | C1 | | | OPT | NO | Flag that indicates whether or not more current measurements for the Measuring Point Elevation are available in the Well Maintenance table. |

| | | | | | |
|--------------------|----------|------|-----|-----|--|
| Total Well Depth | TOTDEPTH | N6,2 | REQ | YES | TOTAL CASING DEPTH: Total depth in feet (positive value) below land surface of well casing including screen , blank casing, and well foot. |
| Remarks | REMARKS | C240 | OPT | YES | Textual description to provide any additional information necessary to understand the characteristics of the well casing interval. |
| Update User | UPUSER | C12 | | | The last user to update the record. |
| Update Time | UPTIME | D | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: WELL CONSTRUCTION INTERVAL Short Name: WINT [NEW]

Description: Description of each well interval.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Interval Beginning Depth | IBDEPTH | N7,2 | PK | | REQ | NO | Depth in feet to the top of the described interval. |
| Interval Ending Depth | IEDEPTH | N7,2 | PK | | REQ | NO | Depth in feet to the bottom of the described interval. |
| Classification | CLASS | C5 | PK | CLA | REQ | NO | Classification of the casing interval. May be seal, screen, well foot, blank, grout, or filter pack. |
| Screen Number | SCRNO | N1 | | | REQ | NO | Identifier used to group segments belonging to the same screened interval. |
| Material | MATERIAL | C3 | | MAT | REQ | NO | The material being used for well casing or construction includes grout, filter pack, screen, well seal, etc. |
| Segment Diameter | SDIAM | N5,2 | | | REQ | NO | The inside diameter of the well casing being described. For screen intervals, it is the inside diameter of the screen. |
| Screen Slot Size | SOUA | N5,3 | | | OPT | YES | SCREEN SLOT SIZE: Vertical size of slot opening in inches. |
| Percent Open Area | PCTOPEN | N5,2 | | | OPT | YES | PERCENT OPEN AREA: Percent of screened interval that is open for water flow. |
| Remarks | REMARKS | C240 | | | OPT | NO | Textual description to provide additional information necessary to understand the characteristics of the well casing interval. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: WELL MAINTENANCE Short Name: WMI [NEW]
Description: Historical log of maintenance activities at each well.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|---------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date | LOGDATE | D | PK | | REQ | NO | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC Sample is created. |
| Maintenance Type | MTYPE | C5 | PK | | REQ | NO | The type of maintenance performed on the well. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Measuring Point Elevation | MPELEV | N7,2 | | WMT | REQ | YES | MEASURING POINT ELEVATION: Elevation of the measurement reference point used for ground water depth level measurements, expressed in feet above Mean Sea Level. |
| Ground Surface Elevation | ELEV | N7,2 | | | REQ | YES | SURFACE ELEVATION: Elevation of ground surface (for groundwater, soil, or sediment sampling) or water surface (for surface water sampling) at a sampling or measuring location. |
| Remarks | REMARKS | C240 | | | OPT | NO | Textual description of the well maintenance. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Groundwater Technical Data

Table Name: CALCULATED HYDROLOGY

Short Name: CALC

Description: Parameters which are calculated or obtained from aquifer and tracer tests, such as pump or slug tests.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-----------------------------|-------------|-----------|-----|-----|-----|--------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Test Date/Time | LOGDATE | D | PK | | REQ | YES | The starting Date/Time of the aquifer test that is being taken. |
| Test Method | TESTMETH | C5 | PK | TMT | REQ | NO | The type of test that is being performed on the well for which the calculation is being made. |
| Calculation Method | CALCMETH | C5 | PK | CMT | REQ | YES | The type of method used to calculate the results (e.g., Theis, Theim, Chow, Hantush-Jacob, etc). |
| Result Type | CALCPARCODE | C5 | PK | CPC | REQ | NO | The type of result of the calculation (e.g., transmissivity, hydraulic conductivity, storage coefficient, etc.). |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Logging Company | LOGCODE | C4 | | LOG | REQ | NO | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Result Value | PARVAL | N11,6 | | | REQ | YES | The value of the calculation result. |
| Result Units | UNITS | C10 | | UTM | REQ | YES | The units used for the calculation result. |
| Radial Well Distance | WELLDIST | N6,2 | | | OPT | NO | The distance from the pumping well to the observation well. |
| Water Table Depth | WTDEPTH | N7,2 | | | OPT | NO | The estimated depth of the water table used for the calculation; this value would be the top of a confined aquifer. |
| Saturated Aquifer Thickness | AQTHICK | N7,2 | | | OPT | NO | The assumed saturated thickness of the aquifer used to perform the calculation. |
| Aquifer Base Depth | AQBASEDEPTH | N7,2 | | | OPT | NO | The estimated depth of the aquifer used to make the calculation. |
| Supporting Data | SUPPDATA | C3 | | SPD | CND | NO | Indicates that primary data (e.g., pump test or slug test data) supporting the calculation are available. |
| Remarks | REMARKS | C240 | | | OPT | NO | Comments concerning the calculation, including definitions or explanations for constants, variables, or assumptions used to derive the result. |

| | | | |
|--------------------|--------|-----|--|
| Update User | UPUSER | C12 | The last user to update the record. |
| Update Time | UPTIME | D | The date the record was last updated. |
| Update Description | UPDESC | C2 | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: PUMPING INTERVAL Short Name: PUMPINT [NEW]

Description: Description of the operation of an extraction or injection well over time.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Beginning Date/Time | BEGDATE | D | PK | | REQ | NO | The starting date/time the pumping was performed. |
| Ending Date/Time | ENDDATE | D | PK | | REQ | NO | The ending date/time the pumping was performed. |
| Beginning Interval Depth | BEGDEPTH | N9,2 | PK | | REQ | NO | The upper depth of the interval being tested |
| Ending Interval Depth | ENDDEPTH | N9,2 | PK | | REQ | NO | The lower depth of the interval that is being tested |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Logging Company | LOGCODE | C4 | | LOG | REQ | NO | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Well Type | WTCCODE | C3 | | WTC | REQ | NO | WELL TYPE CLASSIFICATION CODE: Coded value identifying the type of well in which the measurements are being taken (e.g., slugged, observation). |
| Pump Depth | PUMPDEPTH | N9,2 | | | REQ | NO | The depth of the pump |
| Pumping Rate | PUMPINGRATE | N6,1 | | | REQ | NO | The rate the well was pumped. |
| Rate Units | UNITS | C10 | | UTM | REQ | NO | The units the discharge was measured in (e.g., gal/min). |
| Remarks | REMARKS | C240 | | | OPT | NO | Comments describing the pumping. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: GROUNDWATER LEVEL Short Name: GWD
Description: Specific test data to determine the ground water level over time at a location.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date/Time | LOGDATE | D | PK | | REQ | YES | LOG DATE: Starting date/time that a sample is collected, a field test is performed, or a QC sample is created. |
| Beginning Interval Depth | IBDEPTH | N9,2 | PK | | REQ | NO | The upper depth of the interval being tested |
| Ending Interval Depth | IEDEPTH | N9,2 | PK | | REQ | NO | The lower depth of the interval that is being tested |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Logging Company | LOGCODE | C4 | | LOG | REQ | YES | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Static Water Depth | STATDEP | N7,2 | | | CND | YES | STATIC WATER DEPTH: Depth to water in feet measured from the measuring point. |
| Sounding | SOUNDING | N7,2 | | | CND | YES | SOUNDING: Total depth to the bottom of well in feet at time of test/sampling, measured from the measuring point. |
| Fluid Type Code | FTCODE | C1 | | FTC | REQ | NO | Coded value indicating whether the liquid level in the well is groundwater or some immisible nonaqueous liquid. |
| Measuring Method | MEASMETH | C5 | | MMT | REQ | NO | Coded value representing the method used to make the measurement. |
| Dry Well Flag | DRY | C1 | | | REQ | NO | Y/N flag indicating whether the well is dry. |
| Remarks | REMARKS | C240 | | | OPT | YES | Textual comment describing the groundwater measurement level. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: AQUIFER TEST**Short Name: ATI [NEW]**

Description: Data describing an aquifer pump, slug or tracer test used to determine aquifer attributes.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date/Time | LOGDATE | D | PK | | REQ | NO | LOG DATE: Starting date/time that a sample is collected, a field test is performed, or a QC sample is created. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Logging Company | LOGCODE | C4 | | LOG | REQ | NO | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Changing Head Direction | HEADDIR | C3 | | CHD | REQ | NO | The direction of the observed or expected well drawdown trend during a slug or aquifer test. This may be expressed as rising head, falling head, drawdown, residual, or recovery. |
| Slug Volume | SLUGVOL | N6,2 | | | OPT | NO | SLUG VOLUME: The volume of a slug used to displace ground water during a slug test. |
| Slug Units | UNITS | C10 | | UTM | OPT | NO | The units in which the volume of the slug was measured. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: TEST WELL

Short Name: TWI [NEW]

Description: Specific data for pump test wells.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date/Time | LOGDATE | D | PK | | REQ | NO | LOG DATE: Starting date/time that a sample is collected, a field test is performed, or a QC Sample is created. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Top Interval Depth | TIDEPH | N9,2 | | | OPT | NO | The upper depth of the interval being tested |
| Bottom Interval Depth | BIDEPH | N9,2 | | | OPT | NO | The lower depth of the interval that is being tested |
| Dynamic Fluid Depth | DEPWAT | N9,2 | | | OPT | NO | Recovery depth. Dynamic depth of water after recovery from purge, measured in feet from the measuring point. |
| Fluid Type Code | FTCODE | C1 | | FTC | REQ | NO | Coded value indicating whether the liquid level in the well is groundwater or some immisible nonaqueous liquid. |
| Remarks | REMARKS | C240 | | | OPT | NO | A textual description to aid in the understanding of the well test |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: PUMP RATE

Short Name: PUMPRATE [NEW]

Description: Measurements of the change in pump rate over time.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date/Time | LOGDATE | D | PK | | REQ | NO | LOG DATE: Starting date/time that a sample is collected, a |

| | | | | | | |
|--------------------|-----------|------|-----|-----|----|--|
| Starting Date/Time | STARTDATE | D | PK | REQ | NO | field test is performed, or a QC sample is created. |
| Ending Date/Time | ENDDATE | D | PK | REQ | NO | The initial date/time the pump rate was measured. |
| Pump Rate | PUMPRATE | N7,2 | | REQ | NO | The ending date/time the pump rate was measured. |
| Rate Units | UNITS | C10 | UTM | REQ | NO | The measured rate of the pump. |
| Remarks | REMARKS | C240 | | OPT | NO | The units used to measure the pump rate. |
| Update User | UPUSER | C12 | | | | Comments describing the pump rate. |
| Update Time | UPTIME | D | | | | The last user to update the record. |
| Update Description | UPDESC | C2 | | | | The date the record was last updated. |
| | | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: OBSERVATION WELL WATER LEVEL Short Name: OWL [NEW]

Description: Well fluid measurements collected during timed intervals.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|---------------------------|--------------|-----------|-----|-----|-----|--------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | Name of a location on an installation. |
| Observation Well Location | OBS_LOCATION | C15 | PK | | REQ | NO | Name of a well location on an installation. |
| Logging Date/Time | LOGDATE | D | PK | | REQ | NO | LOG DATE: Starting date/time that a sample is collected, a field test is performed, or a QC sample is created. |
| Measurement Date/Time | MEASDATE | D | PK | | REQ | NO | Date/Time the fluid level measurement was taken. |
| Dynamic Fluid Depth | DEPWAT | N9,2 | | | OPT | NO | The depth from the measuring point to the top of the fluid in the well bore. These measurements will include the water level at the beginning of the test (time=0). These measurements are used to calculate drawdown. |
| Fluid Type | FTCODE | C1 | | FTC | REQ | NO | The type of fluid encountered in the well. This would normally be groundwater. If another type of fluid is encountered in the well bore during the test, then it should be noted here and explained in the comments. |
| Well Type | WTCCODE | C3 | | WTC | REQ | NO | WELL TYPE CLASSIFICATION CODE: Coded value identifying the type of well in which the measurements are being taken (e.g., slugged, observation). |
| Remarks | REMARKS | C240 | | | OPT | NO | Comments concerning the drawdown measurements. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: TRACER INJECTION Short Name: TRI [NEW]

Description: Description of the tracer fluids injected into a well during well tests.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|----------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | Name of a location on an installation. |
| Start Date | STARTDATE | D | PK | | REQ | NO | Date that the tracer test was conducted. |
| Injection Start Time | STARTTIME | C4 | PK | | REQ | NO | The time that the tracer injection was started |
| Injection End Time | ENDTIME | C4 | PK | | REQ | NO | The time that the tracer injection was completed |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Tracer Concentration | TRC_CONC | N7,2 | | | OPT | NO | The value of the concentration of the tracer that was injected into the well |
| Concentration Units | TRCUNITS | C10 | | UTM | CND | NO | The units of measurement for the tracer concentration value |
| Tracer Type | TRCTYPE | C5 | | TRT | REQ | NO | The type of tracer that was used for the tracer test |
| Tracer Volume | TRCVOL | N7,2 | | | OPT | NO | The volume of the tracer that was used for the tracer test |
| Tracer Volume Units | TRCVOLUNITS | C10 | UTM | | OPT | NO | The units of measurement for the tracer volume value |
| Remarks | REMARKS | C240 | | | OPT | NO | Textual annotation that aids the understanding of the tracer test. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: TRACER OBSERVATION WELL Short Name: TOW [NEW]
Description: Information on observation wells sampled during a tracer test.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|---------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Start Date | STARTDATE | D | PK | | REQ | NO | Date that the tracer test was conducted. |
| Injection Start Time | STARTTIME | C4 | PK | | REQ | NO | The time that the tracer injection was started |
| Injection End Time | ENDTIME | C4 | PK | | REQ | NO | The time that the tracer injection was completed |
| Observation Well Location | OBS_LOCATION | C15 | PK | | REQ | NO | Location name for the observation well |
| Measurement Date/Time | MEASDATE | D | PK | | REQ | NO | Date that the observation well was measured. |
| Tracer Concentration | TRC_CONC | N7,2 | | | OPT | NO | The value of the concentration of the tracer that was injected into the well |
| Concentration Units | TRCUNITS | C10 | | UTM | CND | NO | The units of measurement for the tracer concentration value |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Environmental Measurements Technical Data

Table Name: ENVIRONMENTAL MEASUREMENT

Short Name: EMI [NEW]

Description: Result information for tests that fall outside the category of standard analytical testing.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|------------------------|-------------|-----------|-----|-----|-----|--------|--|
| Installation Code | AFIID | C5 | PK | REF | REQ | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | REQ | NO | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Sample Date/Time | LOGDATE | D | PK | | REQ | NO | The date/time the sample was taken. |
| Sample Matrix | MATRIX | C2 | PK | MTX | REQ | NO | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Top Tested Interval | SBD | N7,2 | PK | | REQ | NO | The top of the interval from which the sample was collected or recovered, expressed in feet relative to mean sea level. |
| Bottom Tested Interval | SED | N7,2 | PK | | REQ | NO | If the sample is recovered from an interval, the bottom of the interval the sample was recovered from. Interval is measured as elevation. Elevations use mean sea level as datum. Intervals below mean sea level are positive. |
| Test Date/Time | ANADATE | D | PK | | REQ | NO | The starting date/time of the sample test. This attribute is used if the samples are related to an aquifer test or tracer test. A series of samples taken at different times can be related using the start date and times. |
| Test Type | ANATYPE | C5 | PK | ANT | REQ | NO | The type of test being performed on the sample (e.g., air sampling, water velocity, soil sample, well bore fluid sample, etc.). |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Result Value | PARVAL | N7,2 | | | REQ | NO | The value of the test result. |
| Result Units | UNITS | C10 | | UTM | REQ | NO | The units of the result test. |
| Remarks | REMARKS | C240 | | | OPT | NO | Comments to clarify the sample test. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Chemistry Results

Table Name: SAMPLE COLLECTION

Short Name: SAMPLES

Description: Reports information regarding a water, soil, or environmental sampling event.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-------------------|-------------|-----------|-----|-----|-----|--------|---|
| Sample Sequence | SAMPLESEQ | N | PK | | NO | NO | Unique identifier assigned by the lab for the sampling group for a given test on a given day. |
| Installation Code | AFIID | C5 | AK | REF | REQ | YES | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Location Name | LOCID | C15 | AK | | REQ | YES | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Sample Date/Time | LOGDATE | D | AK | | REQ | YES | The date/time the sample was taken. |
| Sample Matrix | MATRIX | C2 | AK | MTX | REQ | YES | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Beginning Depth | SBD | N7,2 | AK | | REQ | YES | SAMPLE BEGINNING DEPTH: The upper depth in feet from the ground surface or the water surface at which a sample is collected. |
| Ending Depth | SED | N7,2 | AK | | REQ | YES | SAMPLE ENDING DEPTH: Lower depth in feet at which a soil sample is collected for analysis, relative to the ground surface. |
| Sample Type | SACODE | C2 | AK | SA | REQ | YES | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Sample Number | SAMPNO | N2 | AK | | REQ | NO | This is the numeric portion of the Sample Type. |
| Logging Company | LOGCODE | C4 | | LOG | REQ | YES | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Sampling Method | SMCODE | C2 | | SM | REQ | YES | Coded value identifying the sampling method used to collect a sample. |
| Sample Wetness | WETCODE | C5 | | WET | NO | NO | Moisture content of the sample (e.g., dry, moist, or wet). |
| Field Sample ID | FLDSAMPID | C30 | | | REQ | NO | Unique number assigned to the sample in the field. |
| Chain of Custody | COCID | C12 | | | OPT | NO | Unique identification reference to the chain of custody describing the transport of the sample to the laboratory. |
| Field Cooler ID | COOLER | C2 | | | REQ | NO | The unique number assigned to the cooler transporting the sample. |
| AB Field Lot ID | ABLLOT | C8 | | | REQ | NO | Ambient Blank Field Lot Identifier |

| | | | | | |
|--------------------|---------|------|-----|----|--|
| EB Field Lot ID | EBLOT | C8 | REQ | NO | Equipment blank field lot identifier. |
| TB Field Lot ID | TBLOT | C8 | REQ | NO | Test Blank Field Lot Identifier |
| Sampling Program | SAPROG | C3 | SPG | NO | Program under which the program was authorized (e.g., feasibility study, RACA, Quarterly). |
| Remarks | REMARKS | C240 | OPT | NO | Comment about the sample. |
| Update User | UPUSER | C12 | | | The last user to update the record. |
| Update Time | UPTIME | D | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: FIELDQC SAMPLE

Short Name: FQC [NEW]

Description: Quality controls samples taken at the field.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|-------------|-----------|-----|-----|-----|--------|---|
| Sample Sequence | SAMPLESEQ | N | PK | | NO | NO | Unique identifier assigned by the lab for the sampling group for a given test on a given day. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Installation Code | AFIID | C5 | AK | REF | NO | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Sample Date/Time | LOGDATE | D | AK | | NO | NO | The date/time the sample was taken. |
| Sample Matrix | MATRIX | C2 | AK | MTX | NO | NO | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Sample Type | SACODE | C2 | AK | SA | NO | NO | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Sample Number | SAMPNO | N2 | AK | | NO | NO | This is the numeric portion of the Sample Type. |
| Logging Company | LOGCODE | C4 | | LOG | NO | NO | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Sampling Method | SMCODE | C2 | | SM | NO | NO | Coded value identifying the sampling method used to collect a sample. |
| Field Sample ID | FLDSAMPID | C30 | | | NO | NO | Unique number assigned to the sample in the field. |
| Field Cooler ID | COOLER | C2 | | | NO | NO | The unique number assigned to the cooler transporting the sample. |
| Chain of Custody | COCID | C12 | | | NO | NO | The unique identification reference to the chain of custody describing the transport of a sample to the laboratory. |
| Remarks | REMARKS | C240 | | | NO | NO | Textual description of the FIELDQC sample. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, |

manually or by an application.

Table Name: LABQC SAMPLE**Short Name: LQC [NEW]****Description: Quality control samples taken at the lab.**

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Sample Sequence | SAMPLESEQ | N | PK | | NO | NO | Unique identifier assigned by the lab for the sampling group for a given test on a given day. |
| Installation Code | AFIID | C5 | AK | REF | NO | NO | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Contract Sequence | CONTRACTSEQ | N | FK | | NO | NO | Uniquely identifies a contract; Contract Number and Delivery Order Number may be null, so they can't be key fields. |
| Sample Date/Time | LOGDATE | D | AK | | NO | NO | The date/time the sample was taken. |
| Sample Matrix | MATRIX | C2 | AK | MTX | NO | NO | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Sample Type | SACODE | C2 | AK | SA | NO | NO | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Sample Number | SAMPNO | N2 | AK | | NO | NO | This is the numeric portion of the Sample Type. |
| Remarks | REMARKS | C240 | | | NO | NO | Textual description of the LABQC sample. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: TEST PROCEDURE**Short Name: TESTS****Description:** Information on test preparation and procedures for an environmental sample.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Test Sequence | TESTSEQ | N | PK | | NO | NO | SEQUENCE: A sequencing number which orders test results entries. |
| Sample Sequence | SAMPLESEQ | N | AK | | REQ | NO | Unique identifier assigned by the lab for the sampling group for a given test on a given day. |
| Laboratory | LABCODE | C4 | AK | LAB | REQ | YES | Analytical Laboratory Code. Coded value analysis of a sample. |
| Analytical Method | ANMCODE | C7 | AK | REF | REQ | YES | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Preparation Method | EXMCODE | C7 | AK | REF | REQ | YES | (Reference table: EXTLST) EXTRACTION METHOD CODE: Coded value representing the method used to extract or prepare a sample. |
| Run Number | RUN_NUMBER | N2 | AK | | REQ | YES | This information is stored in the Test Procedure class and is replaced by the use of Test Sequence. |
| Lab Sample ID | LABSAMPID | C12 | | | REQ | YES | Laboratory Sample Identification. |
| Lab Received Date/Time | LABRECDATE | D | | | NO | NO | The date/time the sample was received by the lab. |
| Lab Received Temp | LABRECTEMP | N3,1 | | | NO | NO | The temperature of the sample when it was received by the lab. |
| Lab Received Temp Units | LABRECUNITS | C10 | | UTM | NO | NO | Either degrees in Celsius or Fahrenheit. |
| Preparation Date/Time | EXTDATE | D | | | REQ | YES | Preparation Date/time is a more general identifier to indicate extractions or other preparation methods. For compatibility with DESCIM. |
| Leachate Date/Time | LCHDATE | D | | | OPT | NO | Date/time the sample was leached. |
| Leachate Method | LCHMETH | C7 | AK | REF | OPT | NO | (Reference table: LCHLST) Coded value identifying the leachate method. |
| Leachate Lot | LCHLOT | C10 | | | OPT | NO | The batch designator of an autonomous group of environmental samples and associated QC samples leached together. |
| Analysis Date/Time | ANADATE | D | | | REQ | YES | Date/Time the sample or extraction is analyzed in the laboratory. |
| Analytical Lot | ANALOT | C10 | | | OPT | NO | The batch designator of an autonomous group of environmental samples and associated QC samples analyzed together. |
| Preparation Lot | LABLOTCTL | C10 | | | REQ | NO | Preparation Lot is a more general identifier to indicate extractions or other preparation methods. For compatibility with DESCIM. |
| Laboratory Lot Sequence | LABLOT_SEQ | N | FK | | NO | NO | The batch designator of an autonomous group of environmental samples and associated QC samples analyzed together. |

| | | | | | | |
|-----------------------------|----------|-----|-----|-----|--|--|
| Calibration Reference | CALREFID | C10 | OPT | NO | A coded value which establishes a reference link between environmental and QC samples and their corresponding calibration records. | |
| Remediation Technology Type | RTTYPE | C5 | RTT | OPT | NO | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Basis | BASIS | C1 | BAS | REQ | YES | Basis. For tissue or solid samples enter whether results are reported on a wet (W) or dry (D) basis. |
| Update User | UPUSER | C12 | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LABORATORY AUTHORIZED METHOD Short Name: LAM [NEW]

Description: Referential list of certified laboratories for each analytical method.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Analytical Method | ANMCODE | C7 | PK | REF | NO | NO | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | NO | NO | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Laboratory | LABCODE | C4 | PK | LAB | NO | NO | Analytical Laboratory Code. Coded value identifying the analytical laboratory that performed the analysis of a sample. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: LABORATORY LOT**Short Name: LLI [NEW]****Description: Analytical lot information used by the Army.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Laboratory Lot Sequence | LABLOT_SEQ | N | PK | | NO | NO | Unique identifier assigned by the lab for the sampling group for a given test on a given day. |
| Analytical Method | ANMCODE | C7 | AK | REF | NO | NO | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | AK | MTY | NO | NO | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Laboratory | LABCODE | C4 | AK | LAB | NO | NO | Analytical Laboratory Code. Coded value identifying the analytical laboratory that performed the analysis of a sample. |
| Laboratory Lot | LABSAMPID | C12 | AK | | NO | NO | LABORATORY SAMPLE IDENTIFICATION NUMBER: Identifier assigned to a sample by a laboratory and included in the reporting of the results. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: ANALYTICAL RESULT**Short Name: RESULTS****Description: Information on analytical results of an environmental sampling test procedure.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Result Sequence | RESULTSEQ | N | PK | | NO | NO | SEQUENCE: A sequencing number which orders test results entries. |
| Test Sequence | TESTSEQ | N | AK | | NO | NO | SEQUENCE: A sequencing number which orders test results entries. |
| Analyte | PARLABEL | C12 | AK | REF | REQ | YES | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Analyte Type | PRCCODE | C3 | | PRC | REQ | NO | PARAMETER CLASS CODE: Coded value identifying a class or group that a parameter is associated with (e.g. ORG, MET, STD, etc.) |
| Primary Value Qualifier | PARVQ | C2 | | PVQ | REQ | YES | PARAMETER VALUE QUALIFIER: Coded value qualifying the analytical results field (PARVAL). |
| Primary Value | PARVAL | N14,4 | | | REQ | YES | PARAMETER VALUE: value of calculated parameter reported in units consistent with UNITMEAS. |

| | | | | | | |
|------------------------------|-------------|-------|-----|-----|-----|--|
| Primary Value Uncertainty | PARUN | N12,4 | | CND | YES | A value which measures the uncertainty of the analytical test (expressed as + or - some value). |
| Primary Value Precision | PRECISION | N1 | | REQ | NO | Number indicating the precision (number of digits after the decimal point) of the results. |
| Expected Value | EXPECTED | N14,4 | | CND | YES | The target result for a quality control sample or surrogate spike. |
| Expected Value Exponent | EVEXP | N2 | | NO | NO | The integer value of the target result for a quality control sample or surrogate spike. |
| Expected Value Mantissa | EVMAN | N5,4 | | NO | NO | The decimal value of the target result for a quality control sample or surrogate spike. |
| Expected Value Precision | EVPREC | N1 | | CND | NO | Number indicating the precision (number of digits after the decimal point) of the results. |
| Method Detection Limit | MDL | N14,4 | | CND | NO | The smallest quantity of an analyte that can be detected from a prepared sample. |
| AFCEE Reporting Limit | RL | N14,4 | | CND | NO | The smallest quantity of an analyte that should be reported in accordance with the AFCEE QAPP. |
| Units | UNITS | C10 | UTM | REQ | YES | UNITS OF MEASURE: Units of measure used for the parameter value. |
| First Column Value Qualifier | VQ_1C | C2 | PVQ | CND | YES | A coded value qualifying the VAL_1C field. |
| First Column Value | VAL_1C | N14,4 | | OPT | YES | Field which represents the primary or initial value for a analyte generated from a Gas Chromatography or Gas Chromatography / Mass Spectroscopy results. |
| First Column Value Exponent | FCVALEXP | N2 | | NO | NO | The integer value of the First Column Value. |
| First Column Value Mantissa | FCVALMAN | N5,4 | | NO | NO | The decimal value of the First Column Value. |
| First Column Precision | FCVALPREC | N1 | | CND | NO | Number indicating the precision (number of digits after the decimal point) of the results. |
| Confirming Value Qualifier | VQ_CONFIRM | C2 | PVQ | CND | YES | Code value qualifying the confirming analytical result. |
| Confirming Value | VAL_CONFIRM | N14,4 | | OPT | YES | VAL_CONFIRM: The CONFIRMING VALUE of a chromatographic analytical result that requires second column confirmation. |
| Confirming Value Exponent | CNFVALEXP | N2 | | NO | NO | Integer number to express the chromatographic analytical result used to bring the concentration of the raw sample to the certified range. |
| Confirming Value Mantissa | CNFVALMAN | N5,4 | | NO | NO | Decimal number to express the chromatographic analytical result used to bring the concentration of the raw sample to the certified range. |
| Confirming Value Precision | CNFVALPREC | N1 | | CND | NO | Number indicating the precision (number of digits after the decimal point) of the results. |
| Dilution Factor | DILUTION | N8 | | OPT | NO | Numeric expression of the amount of dilution required to bring the analyte concentration in the sample into analysis range. |
| Dilution Factor Exponent | DILEXP | N2 | | NO | NO | Integer number to express the dilution factor used to bring the concentration of the raw sample to the certified range. |

| | | | | | | |
|----------------------------|-----------|------|-----|-----|---|---|
| Dilution Factor Mantissa | DILMAN | N5,4 | NO | NO | Decimal number to express the dilution factor used to bring the concentration of the raw sample to within the certified range. | |
| Dilution Factor Precision | DILPREC | N1 | OPT | NO | Number indicating the precision (number of digits after the decimal point) of the results. | |
| Uncorrected Value Exponent | UNCVALEXP | N2 | NO | NO | Integer number to express the chromatographic analytical result used to bring the concentration of the raw sample to the certified range. | |
| Uncorrected Value Mantissa | UNCVALMAN | N5,4 | NO | NO | The value is dependent on the test name (Analyte) Code and the unit of measurement. It is computed from the uncorrected value and the dilution factor and, where appropriate, the analysis accuracy and moisture content. Rounded to significant figures. | |
| Corrected Value Exponent | CRVALEXP | N2 | NO | NO | Integer value for the exponent (see Corrected Value Mantissa). | |
| Corrected Value Mantissa | CRVALMAN | N5,4 | NO | NO | The value is dependent on the test name (Analyte) Code and the unit of measurement. It is computed from the uncorrected value and the dilution factor and, where appropriate, the analysis accuracy and moisture content. Rounded to significant figures. | |
| Data Qualifier Type | DQTYPE | C2 | DQT | OPT | NO | A code identifying the type of data qualifier. |
| Data Qualifier | EPA_FLAGS | C6 | | OPT | YES | Codes that are assigned during chemistry data validation. |
| QAPP Flags | QAPPFLAGS | C2 | QAP | CND | NO | A coded value assigned to analytical results during laboratory or validation review |
| Special Handling | SPECHAND | C8 | | NO | NO | Code assigned by the laboratory to indicate other than usual analytical conditions or results |
| Update User | UPUSER | C12 | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: HOLDTIME EVALUATION**Short Name: HEV [NEW]****Description:** Data describing the results of the holding time analysis.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|------------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Test Sequence | TESTSEQ | N | PK | | NO | NO | SEQUENCE: A sequencing number which orders test results entries. |
| Holdtime Analysis Type | HT_ANATYPE | C3 | PK | HAT | NO | NO | A coded value indicating the type of holding time analysis (S2P, S2A, P2A). |
| Analysis Value | ANAVAL | N14,4 | | | NO | NO | Result of the calculation. |
| Evaluation | EVAL | C2 | | | NO | NO | Flag denoting the conclusion of the analysis (Pass, Fail, Not Applicable, etc.). |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |

Table Name: CHEMISTRY EVALUATION**Short Name: CEV [NEW]****Description:** Data describing the results of the accuracy, precision and contamination analysis.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Result Sequence | RESULTSEQ | N | PK | | NO | NO | SEQUENCE: A sequencing number which orders test results entries. |
| Chemistry Analysis Type | CH_ANATYPE | C13 | PK | CAT | NO | NO | The type of chemistry evaluation (contamination, precision, accuracy) performed. |
| Sample Type | SACODE | C2 | PK | SA | NO | NO | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Analysis Value | ANAVAL | N14,4 | | | NO | NO | Result of the calculation. |
| Evaluation | EVAL | C2 | | | NO | NO | Flag denoting the conclusion of the analysis (Pass, Fail, Not Applicable, etc.). |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Analytical Method and Other Codes

Table Name: PREPARATION METHOD

Short Name: EXTLST

Description: Referential list of known preparation methods.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|---------------|-----------|-----|-----|-----|--------|---|
| Preparation Method | EXMCODE | C7 | PK | | NO | YES | EXTRACTION METHOD CODE: Coded value representing the method used to extract or prepare a sample. |
| Preparation Name | EXT_NAME | C240 | | | NO | YES | EXTRACTION METHOD NAME: The full name of an extraction method. |
| Preparation Source | SOURCE | C25 | | | NO | YES | REFERENCE SOURCE DOCUMENT: A document reference to the source of analytic or extraction methods. |
| Contractor OK | CONTRACTOR_OK | C1 | | | | YES | Coded value indicating whether the code value in this record can be used for contractor data loading. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: ANALYTICAL METHOD

Short Name: METHLST

Description: Referential list of known analytical methods.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|---------------|-----------|-----|-----|-----|--------|---|
| Analytical Method | ANMCODE | C7 | PK | | NO | YES | ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Analytical Name | METHOD_NAME | C240 | | | NO | YES | The name of an analytical method. |
| Analytical Source | SOURCE | C25 | | | NO | YES | REFERENCE SOURCE DOCUMENT: A document reference to the source of analytic or extraction methods. |
| Contractor OK | CONTRACTOR_OK | C1 | | | | YES | Coded value indicating whether the code value in this record can be used for contractor data loading. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: LEACHATE METHOD**Short Name: LCHLST [NEW]****Description:** Referential list of known leachate methods.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Leachate Method | LCHMETH | C7 | PK | | NO | NO | Coded value identifying the leachate method. |
| Leachate Name | LCHNAME | C240 | | | NO | NO | Name for the leachate method. |
| Leachate Source | LCHSRC | C25 | | | NO | NO | Source of the leachate method. |
| Contractor OK | CONTRACTOR_OK | C1 | | | | NO | Coded value indicating whether the code value in this record can be used for contractor data loading. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: ANALYTE**Short Name: ANALLST****Description:** Referential list of known analytes.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Analyte | PARLABEL | C12 | PK | | NO | YES | PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Analyte Name | PARNAME | C240 | | | NO | YES | Name of the Analyte (ex. Trichloroethene) |
| Analyte Type | PRCCODE | C3 | | PRC | NO | YES | PARAMETER CLASS CODE: Coded value identifying a class or group that a parameter is associated with (e.g. ORG, MET, STD, etc.) |
| Chemical Abstract Number | CAS | C12 | | | NO | YES | CHEMICAL ABSTRACTS SERVICE CODE: Designation assigned to a specific parameter by the Chemical Abstracts Service. |
| Contractor OK | CONTRACTOR_OK | C1 | | | | YES | Coded value indicating whether the code value in this record can be used for contractor data loading. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: PERFORMANCE PARAMETERS Short Name: PRFLST [NEW]
Description: Referential list of official performance parameters.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Performance Parameter | PARAMETER | C12 | PK | | NO | YES | PERFORMANCE PARAMETER: Code assigned to official performance parameter (i.e. destroyed mass). |
| Parameter Name | NAME | C240 | | | NO | YES | Full name and description of performance parameter. |
| Analyte Type | PRCCODE | C3 | | PRC | NO | YES | PARAMETER CLASS CODE: Coded value identifying a class or group that a parameter is associated with (e.g. ORG, MET, STD, etc.) |
| Contractor OK | CONTRACTOR_OK | C1 | | | | YES | Coded value indicating whether the code value in this record can be used for contractor data loading. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: ANALYTE GROUP Short Name: ANALYTE_GROUPS
Description: Arbitrary grouping of analytes used to define components of a complex substance.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Analyte Group | GROUPCODE | C10 | PK | | NO | YES | GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Group Name | GROUPNAME | C50 | | | NO | YES | GROUP NAME: A short name for a group of environmental contaminants, e.g. Chlorinated Solvents. |
| Description | GROUPDESC | C240 | | | NO | YES | GROUP DESCRIPTION: A more detailed description of the criteria for including and excluding individual analytes from a particular group of contaminants. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |

Table Name: ANALYTE GROUP XREF Short Name: ANAGROUPXREF**Description:** Cross-reference table between analytes and analyte groups.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|---------------|------------|-----------|-----|-----|-----|--------|--|
| Analyte Group | GROUPCODE | C10 | PK | REF | NO | YES | (Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Analyte | PARLABEL | C12 | PK | REF | NO | YES | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |

Table Name: DETECTION LIMIT Short Name: ANPARXREF**Description:** Official detection limit for a combination of analytical method, analyte and matrix type.

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|------------------------|-------------|-----------|-----|-----|-----|--------|--|
| Analytical Method | ANMCODE | C7 | PK | REF | NO | YES | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Analyte | PARLABEL | C12 | PK | REF | NO | YES | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | NO | YES | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Method Detection Limit | MDL | N14,4 | | | CND | NO | The smallest quantity of an analyte that can be detected from a prepared sample. |
| AFCEE Reporting Limit | RL | N14,4 | | | CND | NO | The smallest quantity of an analyte that should be reported in accordance with the AFCEE QAPP. |
| Units | UNITS | C10 | | UTM | NO | NO | UNITS OF MEASURE: Units of measure associated with a record. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: VALID METHOD COMBINATION**Short Name: ANEXMXREF****Description: Valid combinations of analytical method, preparation method and sampling matrix.**

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Analytical Method | ANMCODE | C7 | PK | REF | NO | YES | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Preparation Method | EXMCODE | C7 | PK | REF | NO | YES | (Reference table: EXTLST) EXTRACTION METHOD CODE: Coded value representing the method used to extract or prepare a sample. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | NO | YES | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Leachate Method | LCHMETH | C7 | PK | REF | REQ | NO | (Reference table: LCHLST) Coded value identifying the leachate method. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: HOLDING TIME**Short Name: ANMAXREF****Description: Allowable holding times for a combination of analytical method and sampling matrix.**

| Column Name | Short Name | Data Type | Key | VVL | Sub | ERPIMS | Description |
|-------------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Analytical Method | ANMCODE | C7 | PK | REF | NO | YES | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | NO | YES | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Preservation Method | PRESREQ | C7 | PK | | NO | YES | Coded value representing the sample preservation method. |
| Default Reporting Units | UNITS | C10 | | UTM | NO | YES | Units of measure used as default for the expression of data on reports. |
| Sampling to Analysis | SAMPHOLDPER | N6 | | | NO | YES | Maximum time allowed between the collection of a sample and its subsequent analysis. |
| Preparation to Analysis | EXTHOLDPER | N6 | | | NO | YES | Maximum time allowed between the extraction of a sample and its subsequent analysis. |
| Sampling to Preparation | SAMPEXTPER | N6 | | | NO | YES | Maximum time allowed between the collection of a sample and its subsequent extraction. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: QC CRITERIA**Short Name: QC_CRITERIA****Description: Provides accuracy and precision acceptance criteria for analytical method, matrix type, and analyte.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-----------------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Analytical Method | ANMCODE | C7 | PK | REF | NO | YES | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | NO | YES | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Analyte | PARLABEL | C12 | PK | REF | NO | YES | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Surrogate | SURROGATE | C1 | | | NO | YES | A yes/no flag indicating the analyte is a surrogate. |
| Accuracy Lower | ACCURACY_LOWER | N6 | | | NO | YES | Accuracy Lower Limit. Lower control limit of percent recovery as measured for a known target analyte spiked into a QC sample. |
| Accuracy Upper | ACCURACY_UPPER | N6 | | | NO | YES | Accuracy Upper Limit. Upper control limit of percent recovery as measured for a known target analyte spiked into a QC sample. |
| Precision | PRECISION | N3 | | | NO | YES | Number indicating the precision (number of digits after the decimal point). |
| Relative Percent Difference | RPD | N5,2 | | | OPT | NO | Measure of variability that adjusts for the magnitude of observations. Used to assess total and analytical precision of duplicate measurements. |
| Relative Standard Deviation | RSD | N5,2 | | | OPT | NO | Relative standard deviation adjusted for magnitude of observations. Used to assess precision for replicate results. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: QC REQUIRED**Short Name: QC_REQUIRED****Description:** Indicates field and lab quality control samples required for the analytical method.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|------------------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Analytical Method | ANMCODE | C7 | PK | REF | NO | YES | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | NO | NO | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Field Duplicate | FD | N2 | | | NO | YES | The number of field duplicates required for this method. |
| Field Replicate | FR | N2 | | | NO | YES | The number of field replicates required for this method. |
| Matrix Spike | MS | N2 | | | NO | YES | The number of matrix spikes required for this method. |
| Matrix Spike Duplicate | SD | N2 | | | NO | YES | The number of matrix spike duplicates required for this method. |
| Reference Material | RM | N2 | | | NO | YES | The number of reference material samples required for this method. |
| Reference Material Duplicate | KD | N2 | | | NO | YES | The number of reference material duplicates required for this method. |
| Ambient Blank | AB | N2 | | | NO | YES | The number of ambient blanks required for this method. |
| Equipment Blank | EB | N2 | | | NO | YES | The number of equipment blanks required for this method. |
| Trip Blank | TB | N2 | | | NO | YES | The number of trip blanks required for this method. |
| Lab Blank | LB | N2 | | | NO | YES | The number of lab blanks required for this method. |
| Blank Spike | BS | N2 | | | NO | YES | The number of blank spikes required for this method. |
| Blank Spike Duplicate | BD | N2 | | | NO | YES | The number of blank spike duplicates required for this method. |
| Surrogate Spike | SS | N2 | | | NO | YES | The number of surrogate spikes required for this method. |
| Requirement Type | REQTYPE | C5 | | RQT | NO | NO | Coded value identifying the originator of the requirements (EPS, QAPP, etc). |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |

Table Name: VALID VALUE TYPE**Short Name: VALIDTYPES****Description:** Types of valid codes used in ERPIMS.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|--|
| Valid Value Type | TYPE | C4 | PK | | NO | YES | A coded value representing the valid value list to be maintained |
| Code Length | LENGTH | N3 | | | NO | YES | The maximum length of a valid value code |
| Description | NAME | C120 | | | NO | YES | Textual description of the Valid Values Type. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: VALID VALUE CODE**Short Name: VALIDVALUES****Description:** Referential list of miscellaneous valid codes for specific fields.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Valid Value Type | TYPE | C4 | PK | REF | NO | YES | (Reference Table: VALIDTYPES) A coded value representing the valid value list to be maintained. |
| Valid Value Code | CODE | C12 | PK | | NO | YES | A unique coded value used to represent the name in the adjacent field. |
| Description | NAME | C120 | | | NO | YES | Textual description of the Valid Values Code. |
| Contractor OK | CONTRACTOR_OK | C1 | | | | YES | Coded value indicating whether the code value in this record can be used for contractor data loading. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | | | Code identifying how the record was initially inserted, manually or by an application. |
| Handbook | HANDBOOK | C3 | | | | | The handbook associated with the data. |

Table Name: MAXIMUM CONTAMINANT LEVEL Short Name: MCLS [NEW]**Description: Maximum allowable concentration of a specific analyte, in a specific sampling matrix, according to a specific requirement.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Requirement Reference | REFERENCE | C18 | PK | | NO | NO | Coded value representing a regulation citing. |
| Section Reference | SECTION | C30 | | | NO | NO | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Analyte | PARLABEL | C12 | PK | REF | NO | NO | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Sample Matrix | MATRIX | C2 | PK | MTX | NO | NO | Coded value identifying the specific sample medium actually being analyzed, (e.g., drill cuttings, waste water, etc.). |
| Concentration | CONCENTRATION | N13,4 | | | NO | NO | Maximum allowable concentration of the analyte in the sampling matrix. |
| Concentration Units | UNITS | C10 | | UTM | NO | NO | Units of concentration. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Valid Flag | CVFCODE | C1 | | CVF | | | (VVL: VVLCVF) Coded value used internally by the database software to grant conditional access to various categories of users. The last user to update the record. |

Table Name: UNIT OF MEASUREMENT CONVERSION Short Name: UTMCON**Description: Units of measurement conversion factors.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Sub</u> | <u>ERPIMS</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|------------|---------------|---|
| Target Unit | UTMTO | C10 | PK | | NO | NO | Desired target unit. |
| Base Unit | UTMFROM | C10 | PK | | NO | NO | Existing unit to be converted. |
| Conversion Factor | CNVFACT | N | | | NO | NO | Number used to multiply UTMTO in order to convert it into UTMFROM. |
| Conversion Offset | SCLFACT | N | | | NO | NO | Value to be added to the result of multiplying the UTMFROM value by CNVFACT to obtain the UTMTO value. |
| Update User | UPUSER | C12 | | | | | The last user to update the record. |
| Update Time | UPTIME | D | | | | | The date the record was last updated. |
| Valid Flag | CVFCODE | C1 | | CVF | | | (VVL: VVLCVF) Coded value used internally by the database software to grant conditional access to various categories of users. The last user to update the record. |

Submission Tables

Facilities, Sites and Zones Information

Table Name: MAP REFERENCE

Short Name: SUBM_MRI

Description: Description of the physical map of an installation.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Map Reference Identifier | MAPRID | C8 | PK | | Unique identifier assigned to each map for an installation. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Mapping Company Code | MAPCODE | C4 | | MAP | Coded value identifying the company responsible for producing a map of a designated area. |
| Map Type Code | MTCCODE | C4 | | MTC | Coded value identifying the type of map. |
| Map Coverage Code | MCCCODE | C1 | | MCC | Coded value delineating the extent to which a reference map covers specified features associated with a site, zone, or entire installation. |
| Map Scale | MAPSCALE | N4 | | | The drawing scale of a map expressed as inches of drawing per feet of terrain. |
| Lower Left North | LLNORTH | N8 | | | The lower left y-value of a general area of interest. |
| Lower Left East | LLEAST | N8 | | | The lower left x-value of a general area of interest. |
| Upper Right North | URNORTH | N8 | | | The upper right y-value of a general area of interest. |
| Upper Right East | UREAST | N8 | | | The upper right x-value of a general area of interest. |
| Benchmark Designation | BMDESIG | C20 | | | Code, label, name, etc. of a benchmark. |
| Benchmark Northing | BMNORTH | N10,2 | | | The y-value of a map benchmark. |
| Benchmark East | BMEAST | N10,2 | | | The x-value of a map benchmark. |
| Benchmark Elevation | BMELEV | N7,2 | | | The ground surface elevation of a map benchmark. |
| Description | MAPDESC | C240 | | | Textual description of the mapped area. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: SITE OPERABLE UNIT XREF**Short Name: SUBM_SOX [NEW]****Description:** Cross-reference table between operable units and sites.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Site Identifier | SITEID | N3 | PK | | Number which uniquely identifies a site. |
| Operable Unit Code | OUCODE | C3 | PK | | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: SITE CONTAMINATION**Short Name: SUBM_SCC****Description:** Description of the type of contamination at a site. This is usually based on the preliminary assessment.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table: AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Analyte Group | GROUPCODE | C10 | PK | REF | (Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Site Identifier | SITEID | N3 | PK | | Number which uniquely identifies a site. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: ZONE**Short Name: SUBM_ZDI****Description:** User defined groupings of sampling locations.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Zone Identifier | ZONEID | C10 | PK | | Unique identifier for a group of individual locations maintained for collective study and evaluation. |
| Zone Name | ZNAME | C35 | | | Name of the zone. |
| Description | ZONEDESC | C240 | | | Textual description of the zone and its purpose. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Remedial Action Operating Information

Table Name: OPERABLE UNIT

Short Name: SUBM_OU [NEW]

Description: Description of the remedial action activity.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|----------------|-----------|-----|-----|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Operable Unit Code | OUCODE | C3 | PK | | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Operable Unit Name | OUNAME | C35 | | | Name of the operable unit. |
| Description | OUDESC | C240 | | | Textual description of the Operable Unit. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: OPERABLE UNIT CONTAMINANT**Short Name: SUBM_OUC [NEW]****Description:** Type of contaminant being treated by the operable unit.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table: AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Operable Unit Code | OUCODE | C3 | PK | | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Analyte Group | GROUPCODE | C10 | PK | REF | (Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants,(e.g. CHLOR, SOLVENT, PEST). |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: REMEDIATION SYSTEM**Short Name: SUBM_RSI [NEW]****Description:** Series of remediation technologies that work in concert .

| Column Name | Short Name | Data Type | Key | VVL | Description |
|--------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table: AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation System Name | RSNAME | C35 | | | Name of the remediation system. |
| Description | RSDESC | C240 | | | Textual description of the Remediation Train. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: REMEDIATION TECHNOLOGY Short Name: SUBM_RTI [NEW]**Description:** Description of a discrete remediation activity.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|------------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation Technology Id | RTID | C15 | PK | | User defined name for the Remediation Technology. Used as part of the primary key. |
| Remediation Technology Type | RTTYPE | C5 | PK | RTT | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Remediation Technology Name | RTNAME | C35 | | | Name of the remedial Technology. |
| Remediation Technology Class | RTCLASS | C1 | | RTC | A coded value representing the Remediation Technology Class (in-situ, ex-situ or mixed). |
| Analyte Group | GROUPCODE | C10 | | REF | (Reference table: ANALYTE_GROUPS) GROUP CODE: A unique code which identifies a group of environmental contaminants, e.g. CHLOR, SOLVENT, PEST). |
| Media | MEDIA | C2 | | MED | Coded value identifying the sample medium actually being treated, i.e., soil, water, etc. |
| Established Date | ESTDATE | D | | | Date the construction of the remediation technology was complete |
| Start Date | STARTDATE | D | | | Date the remediation technology started operating |
| Description | RTDESC | C240 | | | Textual description of the remedial unit. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: REMEDIATION SYSTEM PERFORMANCE Short Name: SUBM_RSP [NEW]**Description:** Information about the effectiveness of the remediation system.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Beginning Date | BEGDATE | D | PK | | Beginning date of the remediation. |
| Ending Date | ENDDATE | D | PK | | Ending date of the remediation. |
| Performance Parameter | PARAMETER | C5 | PK | REF | (Reference table PRFLST) Performance parameter (e.g. Destroyed mass, extracted mass, concentration, collection frequency) |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Parameter Value | PARVAL | N10,2 | | | PARAMETER VALUE: value of calculated parameter reported in units consistent with UNITMEAS. |
| Parameter Uncertainty | PARUN | N10,2 | | | A value which measures the uncertainty of the measurement (expressed as + or - some value). |
| Units | UNITS | C10 | | UTR | UNITS OF MEASURE - REMEDIATION: Units of measure associated with a record. |
| Remarks | REMARKS | C240 | | | Textual description of parameter and result. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: REMEDIATION TECHNOLOGY PERFORMANCE Short Name: SUBM_RTP [NEW]**Description:** Information about the effectiveness of the remediation technology.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation Technology Id | RTID | C15 | PK | | User defined name for the Remediation Technology. Used as part of the primary key. |
| Beginning Date | BEGDATE | D | PK | | Beginning date of the remediation. |
| Ending Date | ENDDATE | D | PK | | Ending date of the remediation. |
| Performance Parameter | PARAMETER | C5 | PK | REF | (Reference table PRFLST) Performance parameter (e.g. Destroyed mass, extracted mass, concentration, collection frequency) |
| Remediation Technology Type | RTTYPE | C5 | PK | RTT | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Parameter Value | PARVAL | N10,2 | | | PARAMETER VALUE: value of calculated parameter reported in units consistent with UNITMEAS. |
| Parameter Uncertainty | PARUN | N10,2 | | | A value which measures the uncertainty of the measurement (expressed as + or - some value). |
| Units | UNITS | C10 | | UTR | UNITS OF MEASURE - REMEDIATION: Units of measure associated with a record. |
| Remarks | REMARKS | C240 | | | Textual description of parameter and result. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: LOCATION REMEDIATION SYSTEM XREF Short Name: SUBM_LSX [NEW]**Description: Cross-reference table between locations and remediation systems.**

| Column Name | Short Name | Data Type | Key | VVL | Description |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: LOCATION REMEDIATION TECHNOLOGY XREF Short Name: SUBM_LTX [NEW]**Description: Cross-reference table between locations and remediation technologies.**

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Remediation Technology Id | RTID | C15 | PK | | User defined name for the Remediation Technology. Used as part of the primary key. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Remediation Technology Type | RTTYPE | C5 | PK | RTT | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: REMEDIATION SITE XREF Short Name: SUBM_RSX [NEW]

Description: Cross-reference table between remediation trains and sites.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Site Identifier | SITEID | N3 | PK | | Number which uniquely identifies a site. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: REMEDIATION OPERABLE UNIT XREF Short Name: SUBM_ROX [NEW]

Description: Cross-reference table between operable units and remediation trains.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Operable Unit Code | OUCODE | C3 | PK | | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Remediation System Id | RSID | C10 | PK | | User defined name for the Remediation System. Used as part of the primary key. |
| Remediation System Stage | RSSTAGE | C3 | PK | RSS | Type of remediation system (e.g., treatability study, pilot study, field demo, full-scale remediation). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Location Information

Table Name: LOCATION

Short Name: SUBM_LDI

Description: General information about sampling locations.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|------------------------|------------|-----------|-----|-----|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Location Type | LTCCODE | C2 | | LTC | LOCATION CLASSIFICATION CODE: Coded value describing location where measurements or samples are taken. |
| Location Proximity | LPRCODE | C1 | | LPR | Location Proximity Code. Coded value indicating whether sampling or measuring location is within or outside the Air Force installation boundaries. |
| North Coordinate | NCOORD | N10,2 | | | NORTH STATE PLANE COORDINATE: The y-value (North-South) of the distance in feet of a sampling or measuring location from the reference location of known state plane coordinates. |
| East Coordinate | ECOORD | N10,2 | | | EAST STATE PLANE COORDINATE: The x-value (East-West) of the distance in feet of a sampling or measuring location from the reference location of known state plane coordinates. |
| Coordinate Type | CRDTYPE | C3 | | CRT | The type of coordinate system used (i.e., UTM,STP,GEO). |
| Coordinate Method | CRDMETH | C5 | | CRD | Indicates method used to determine the location (e.g., survey, GPS, estimated, digitized). |
| Site Identifier | SITEID | C3 | | | Number which uniquely identifies a site. Used only for loading and validating non 4.0 handbook data. |
| Coordinate Units | CRDUNITS | C10 | | UTM | Units of measure of the surveyed northing and easting values. |
| Coordinate Uncertainty | CRDUN | N6,3 | | | The expression of the precision of the location coordinates. |
| Date Established | ESTDATE | D | | | DATE ESTABLISHED: The date that construction of a sampling or measuring location was completed. |
| Establishing Company | ESCCODE | C4 | | ESC | ESTABLISHING COMPANY CODE: Coded value identifying the organization which establishes a sampling or measuring location, typically the prime contractor. |

| | | | | |
|---------------------------|------------|------|-----|---|
| Drilling Company | DRLCODE | C4 | DRL | DRILLING COMPANY CODE: Coded value identifying the organization that drilled a borehole at a sampling or measuring location. This organization is typically the drilling subcontractor. |
| Excavating Company | EXCCODE | C4 | EXC | EXCAVATING COMPANY CODE: Coded value identifying the organization that excavated a test pit at a sampling or measuring location. |
| Construction Method | CMCCODE | C2 | CMC | CONSTRUCTION METHOD CODE: Coded value identifying the method by which a borehole or test pit was constructed (Drilling or Excavation Method). |
| Ground Surface Elevation | ELEV | N7,2 | | SURFACE ELEVATION: Elevation of ground surface (for groundwater, soil, or sediment sampling) or water surface (for surface water sampling) at a sampling or measuring location. |
| Elevation Method | ELEV METH | C5 | ELM | Method used in to determine the location's elevation. |
| Elevation Units | ELEV UNITS | C10 | UTM | The unit that the elevation was measured in (feet or meters) (f/m). |
| Elevation Uncertainty | ELEV UN | N6,3 | | The expression of the precision of the location coordinates. |
| Modified Elevation Flag | EL FLAG | C1 | | Flag that indicates whether or not more current measurements for the Ground Surface Elevation are available in the Well Maintenance table. |
| Depth | DEPTH | N7,2 | | BOREHOLE DEPTH: The total depth of a borehole (including boreholes drilled to install wells) measured in feet relative to ground surface. |
| Borehole Diameter | BH DIAM | N4,2 | | BOREHOLE DIAMETER: The diameter of a borehole in inches. |
| Borehole Angle | BH ANGLE | N5,2 | | Angle at which borehole was drilled. |
| Borehole Azimuth | BH AZIM | N6,2 | | Azimuth (degrees on a compass) of which the borehole was drilled. |
| Geodetic Datum | DATUM | C12 | | Identifier representing the geodetic datum used in the survey (e.g., State Plane Coordinate System NAD 1983, Florida Western Zone). |
| STP Zone | STP ZONE | C5 | STZ | The coordinate zone needed in order for the Geodetic Datum attribute to make sense. For Compatibility with DESCIM. |
| STP Projection | STP PROJ | C5 | STP | Geographic projection used by the state planar system. |
| UTM Zone | UTM ZONE | C5 | UTZ | The coordinate zone needed in order for the Geodetic Datum attribute to make sense. For Compatibility with DESCIM. |
| Geophysical Log | GEOLOG | C35 | | Contains the reference to any/all geophysical logs created during drilling operations. |
| Map Identification Number | MAP ID | N6 | | GIS Map Identification. |
| Map Link Field | MS LINK | N6 | | GIS Link Field. |

| | | | |
|-------------------------------|------------------|-------------|--|
| Functional System Description | FCODE LOCDESC | C12 C240 | Functional System Code. LOCATION DESCRIPTION: Any additional information to describe a sampling or measuring location in text format. |
| Record Status | RECORD_STATUS | C5 | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: LOCATION OPERABLE UNIT XREF Short Name: SUBM_LOX [NEW]**Description: Cross-reference table between sampling locations and operable units.**

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Operable Unit Code | OUCODE | C3 | PK | | A coded value representing the Operable Unit Name. Used as part of the primary key. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: LOCATION SITE XREF**Short Name: SUBM_SLX****Description:** Information about a site and location that has been selected for ERP study.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Site Identifier | SITEID | N3 | PK | | Number which uniquely identifies a site. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Geohydrologic Flow | GFCCODE | C1 | | GFC | GEOHYDROLOGIC FLOW CLASSIFICATION: The GFCCODE is a single character that describes the hydrologic relationship between a location and a site. |
| Site Proximity | SPCODE | C1 | | SPR | A coded value indicating whether the location is in the site, outside the site or background. |
| Site Name | SITENAME | C35 | | | The name of a site. Used only for loading and validating non 4.0 handbook data. |
| Site Abbreviated Name | SITEXREF | C10 | | | Short name for the site. Used only for loading and validating non 4.0 handbook data. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: LOCATION_ZONE_XREF Short Name: SUBM_ZLX

Description: Cross-reference table between sampling locations and zones.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Zone Identifier | ZONEID | C10 | PK | | (VVL: ZDI) Unique identifier for a group of individual locations maintained for collective study and evaluation. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Borehole Technical Data

Table Name: LITHOLOGIC DESCRIPTION Short Name: SUBM_LTD

Description: Lithologic descriptions and classifications of cuttings and cores taken from boreholes and test pits.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Beginning Depth | BEGDEPTH | N7,2 | PK | | BEGINNING DEPTH: Upper depth of a lithologic stratum, measured below the ground surface in feet (reported as a positive value). |
| Ending Depth | ENDDEPTH | N7,2 | PK | | END DEPTH: Lower depth of a lithologic stratum, measured below the ground surface in feet (reported as a positive value). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Logging Date | LOGDATE | D | | | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC sample is created. |
| Logging Company | LOGCODE | C4 | | LOG | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Lithology Code | LITHCODE | C4 | | LTH | LITHOLOGY CODE: 4-Character code indicating lithologic description of layer. |
| ASTM Code | ASTMCODE | C4 | | AST | (VVL: AST.ASTMCODE) ASTM Soil Classification Code. A 2 or 4 character code used in ASTM classification of unconsolidated deposits. Deposits possessing characteristics of two groups are designated by combinations of groups. |
| Hydrostratigraphic Unit | HS_UNIT | C25 | | | Working name given to the unit. |
| Stratigraphic Unit | ST_UNIT | C20 | | | Descriptive name given to the unit. |
| Stratigraphic Order | STRATORDER | N3 | | | Number assigned by the site geologist to each distinct lithologic interval at a site. Used only for loading and validating non 4.0 handbook data. |
| Description | VISDESC | C240 | | | VISUAL DESCRIPTION: Textural and mineralogical description of the material comprising the layer, to augment or qualify the lithologic codes. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' |

Record Warning

RECORD_WARNING C2000

generated by validation.

Contains error number(s), signifying warnings,
separated by ',' generated by validation.**Table Name: STRATIGRAPHIC UNIT****Short Name: SUBM_STU [NEW]****Description:** Description of the units in the interpreted stratigraphic column for an installation.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Stratigraphic Unit | ST_UNIT | C20 | PK | | Descriptive name given to the unit |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Stratigraphic Order | STRATORDER | N3 | | | Number assigned to the unit by the interpreting geologist; unit 1 is the oldest; the number decreases with age. |
| Group Name | GRPNAME | C20 | | | Name of the geological group of which the unit is a part. |
| Formation Name | FORMATION | C20 | | | Name of the geological formation of which the unit is a part. |
| Member Name | MBRNAME | C20 | | | Name of the geological member of which the unit is a part. |
| Bed Name | BEDNAME | C20 | | | Name of the geological bed of which the unit is a part. |
| Description | SUDESC | C240 | | | Textual description of the stratigraphic unit. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: HYDROSTRATIGRAPHIC UNIT Short Name: SUBM_HSU [NEW]**Description:** Data for a body of rock or soil with lateral extent that composes a geologic framework for a hydrologic system.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Hydrostratigraphic Unit | HS_UNIT | C25 | PK | | Working name given to the unit. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Unit Type | HSTYPE | C4 | | LTH | USCS soil or rock classification for the type of soil/rock which comprises this hydrostratigraphic unit. |
| Description | HSDISC | C240 | | | Textual description of the hydrostratigraphic unit. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Monitoring Well Information

Table Name: WELL

Short Name: SUBM_WCI

Description: Contains well placement and completion information.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-------------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Installation Date | INSDATE | D | | | INSTALLATION DATE: Date that a well casing is installed |
| Well Owner | WELCODE | C4 | | WEL | WELL OWNER CODE: Coded value identifying the owner of a well that is monitored or tested |
| Well Type | WTCCODE | C3 | | WTC | WELL TYPE CLASSIFICATION CODE: Coded value identifying the type of well in which the measurements are being taken (e.g., slugged, observation). |
| Well Completion Method | WCMCODE | C2 | | WCM | WELL COMPLETION METHOD CODE: Coded value identifying the method used to complete the well or the nature of the openings that allow water to enter the well. |
| Hydrogeologic Completion Zone | GZCCODE | C1 | | GZC | Geologic Completion Zone. General hydrologic description of well completion zone |
| Sole Source Aquifer | SAQCODE | C4 | | SAQ | SOLE SOURCE AQUIFER CODE: Coded value identifying the sole source aquifer in which the well was completed. |
| Well Development Procedures | WDPROC | C5 | | WDP | Indicates the type of well development procedures used. |
| Measuring Point Elevation | MPELEV | N7,2 | | | MEASURING POINT ELEVATION: Elevation of the measurement reference point used for ground water depth level measurements, expressed in feet above Mean Sea Level. |
| Modified Measuring Point Flag | MPFLAG | C1 | | | Flag that indicates whether or not more current measurements for the Measuring Point Elevation are available in the Well Maintenance table. |

| | | | |
|------------------------|----------------|-------|---|
| Total Well Depth | TOTDEPTH | N6,2 | TOTAL CASING DEPTH: Total depth in feet (positive value) below land surface of well casing including screen, blank casing, and well foot. |
| Seal End Depth | SEDEPTH | N6,2 | Depth in feet (positive value) at which the bottom of the bentonite seal is positioned, relative to the ground surface. |
| Screen Beginning Depth | SBDEPTH | N6,2 | Depth in feet at which the top of the screen is placed, relative to the ground surface. |
| Screen Length | SCRLENGTH | N5,2 | Screen Length. The length in feet of the screened interval. |
| Filter Pack Length | FPL | N5,2 | Length in feet from the bottom of the seal to the bottom of the borehole |
| Casing Material Code | CMACODE | C3 | Casing Material Code. Coded value identifying the material used as a well casing. |
| Casing Inside Diameter | CASDIAM | N5,2 | Casing Inside Diameter. For monitoring wells, it is the inside diameter of the screened interval. |
| Screen Diameter | SCRDIAM | N5,2 | Inside diameter of the screened interval in inches. |
| Screen Slot Size | SOUA | N5,2 | SCREEN SLOT SIZE: Vertical size of slot opening in inches. |
| Percent Open Area | PCTOPEN | N3,1 | PERCENT OPEN AREA: Percent of screened interval that is open for water flow. |
| Remarks | REMARKS | C240 | Textual description to provide any additional information necessary to understand the characteristics of the well casing interval. |
| Record Status | RECORD_STATUS | C5 | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: WELL CONSTRUCTION INTERVAL Short Name: SUBM_WINT [NEW]**Description:** Description of each well interval.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Interval Beginning Depth | IBDEPTH | N7,2 | PK | | Depth in feet to the top of the described interval. |
| Interval Ending Depth | IEDEPTH | N7,2 | PK | | Depth in feet to the bottom of the described interval. |
| Classification | CLASS | C5 | PK | CLA | Classification of the casing interval. May be seal, screen, well foot, blank, grout, or filter pack. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Screen Number | SCRNO | N1 | | | Identifier used to group segments belonging to the same screened interval. |
| Material | MATERIAL | C3 | | MAT | The material being used for well casing or construction includes grout, filter pack, screen, well seal, etc. |
| Segment Diameter | SDIAM | N5,2 | | | The inside diameter of the well casing being described. For screen intervals, it is the inside diameter of the screen. |
| Screen Slot Size | SOUA | N5,3 | | | SCREEN SLOT SIZE: Vertical size of slot opening in inches. |
| Percent Open Area | PCTOPEN | N5,2 | | | PERCENT OPEN AREA: Percent of screened interval that is open for water flow. |
| Remarks | REMARKS | C240 | | | Textual description to provide additional information necessary to understand the characteristics of the well casing interval. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: WELL MAINTENANCE Short Name: SUBM_WMI [NEW]

Description: Historical log of maintenance activities at each well.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|---------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date | LOGDATE | D | PK | | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC Sample is created. |
| Logging Time | LOGTIME | C4 | PK | | Log Time. Time of day (24 hour clock format with no colon - HHMM) that a sample id measurement is made, or a QC sample is created. |
| Maintenance Type | MTYPE | C5 | PK | | The type of maintenance performed on the well. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Measuring Point Elevation | MPELEV | N7,2 | | WMT | MEASURING POINT ELEVATION: Elevation of the measurement reference point used for ground water depth level measurements, expressed in feet above Mean Sea Level. |
| Ground Surface Elevation | ELEV | N7,2 | | | SURFACE ELEVATION: Elevation of ground surface (for groundwater, soil, or sediment sampling) or water surface (for surface water sampling) at a sampling or measuring location. |
| Remarks | REMARKS | C240 | | | Textual description of the well maintenance. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Groundwater Technical Data

Table Name: CALCULATED HYDROLOGY

Short Name: SUBM_CALC

Description: Parameters which are calculated or obtained from aquifer and tracer tests, such as pump or slug tests.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Test Date | LOGDATE | D | PK | | The starting Date of the aquifer test that is being taken. |
| Test Time | LOGTIME | C4 | PK | | The starting Time of the aquifer test that is being taken. |
| Test Method | TESTMETH | C5 | PK | TMT | The type of test that is being performed on the well for which the calculation is being made. |
| Calculation Method | CALCMETH | C5 | PK | CMT | The type of method used to calculate the results (e.g., Theis, Theim, Chow, Hantush-Jacob, etc). |
| Result Type | CALCPARCODE | C5 | PK | CPC | The type of result of the calculation (e.g., transmissivity, hydraulic conductivity, storage coefficient, etc.). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Logging Company | LOGCODE | C4 | | LOG | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Result Value | PARVAL | N11,6 | | | The value of the calculation result. |
| Result Units | UNITS | C10 | | UTM | The units used for the calculation result. |
| Radial Well Distance | WELLDIST | N6,2 | | | The distance from the pumping well to the observation well. |
| Water Table Depth | WTDEPTH | N7,2 | | | The estimated depth of the water table used for the calculation; this value would be the top of a confined aquifer. |
| Saturated Aquifer Thickness | AQTHICK | N7,2 | | | The assumed saturated thickness of the aquifer used to perform the calculation. |
| Aquifer Base Depth | AQBASEDEPTH | N7,2 | | | The estimated depth of the aquifer used to make the calculation. |
| Supporting Data | SUPPDATA | C3 | | SPD | Indicates that primary data (e.g., pump test or slug test data) supporting the calculation are available. |
| Remarks | REMARKS | C240 | | | Comments concerning the calculation, including definitions or explanations for constants, variables, or assumptions used to derive the result. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' |

Record Warning

RECORD_WARNING C2000

generated by validation.
Contains error number(s), signifying warnings,
separated by ',' generated by validation.

Table Name: PUMPING INTERVAL Short Name: SUBM_PUMPINT [NEW]

Description: Description of the operation of an extraction or injection well over time.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Beginning Date | BEGDATE | D | PK | | The starting date the pumping was performed. |
| Beginning Time | BEGTIME | C4 | PK | | The starting time the pumping was performed. |
| Ending Date | ENDDATE | D | PK | | The ending date the pumping was performed. |
| Ending Time | ENDTIME | C4 | PK | | The ending time the pumping was performed. |
| Beginning Interval Depth | BEGDEPTH | N9,2 | PK | | The upper depth of the interval being tested |
| Ending Interval Depth | ENDDEPTH | N9,2 | PK | | The lower depth of the interval that is being tested |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Logging Company | LOGCODE | C4 | | LOG | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Well Type | WTCCODE | C3 | | WTC | WELL TYPE CLASSIFICATION CODE: Coded value identifying the type of well in which the measurements are being taken (e.g., slugged, observation). |
| Pump Depth | PUMPDEPTH | N9,2 | | | The depth of the pump |
| Pumping Rate | PUMPINGRATE | N6,1 | | | The rate the well was pumped. |
| Rate Units | UNITS | C10 | | UTM | The units the discharge was measured in (e.g., gal/min). |
| Remarks | REMARKS | C240 | | | Comments describing the pumping. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: GROUNDWATER LEVEL Short Name: SUBM_GWD

Description: Specific test data to determine the ground water level over time at a location.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date | LOGDATE | D | PK | | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC sample is created. |
| Logging Time | LOGTIME | C4 | PK | | Log Time. Time of day (24 hour clock format with no colon - HHMM) that a sample Id measurement is made, or a QC sample is created. |
| Beginning Interval Depth | IBDEPTH | N9,2 | PK | | The upper depth of the interval being tested |
| Ending Interval Depth | IEDEPTH | N9,2 | PK | | The lower depth of the interval that is being tested |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Logging Company | LOGCODE | C4 | | LOG | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Static Water Depth | STATDEP | N7,2 | | | STATIC WATER DEPTH: Depth to water in feet measured from the measuring point. |
| Sounding | SOUNDING | N7,2 | | | SOUNDING: Total depth to the bottom of well in feet at time of test/sampling, measured from the measuring point. |
| Fluid Type Code | FTCODE | C1 | | FTC | Coded value indicating whether the liquid level in the well is groundwater or some immisible nonaqueous liquid. |
| Measuring Method | MEASMETH | C5 | | MMT | Coded value representing the method used to make the measurement. |
| Dry Well Flag | DRY | C1 | | | Y/N flag indicating whether the well is dry. |
| Initial Water Depth | INITDEP | N7,2 | | | The first measurement of a well's water depth under dynamic conditions (pumping or purging) of a well. Used only for loading and validating non 4.0 handbook data. |
| Production Rate | PRODRATE | N6,1 | | | Pump/purge rate in gallons/minutes at which the well is evacuated during groundwater level measurement. Used only for loading and validating non 4.0 handbook data. |
| Pumping Level | PUMPDEP | N7,2 | | | Lowest dynamic water level depth in feet measured during pumping or purging, relative to the reference point. Used only for loading and validating non 4.0 handbook data. |
| Dynamic Fluid Depth | DEPWAT | N7,2 | | | Recovery depth. Dynamic depth of water after recovery from purge, measured in feet from the measuring point. Used only |

| | | | |
|----------------|----------------|-------|--|
| Recovery Time | RECTIME | C4 | for loading and validating non 4.0 handbook data. Elapsed time in minutes for water level to stabilize or recover to a certain level after purge. Used only for loading and validating non 4.0 handbook data. |
| Remarks | REMARKS | C240 | Textual comment describing the groundwater measurement level. |
| Record Status | RECORD_STATUS | C5 | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: AQUIFER TEST**Short Name: SUBM_ATI [NEW]****Description:** Data describing an aquifer pump, slug or tracer test used to determine aquifer attributes.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date | LOGDATE | D | PK | | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC sample is created. |
| Logging Time | LOGTIME | C4 | PK | | Log Time. Time of day (24 hour clock format with no colon - HHMM) that a sample Id measurement is made, or a QC sample is created. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Logging Company | LOGCODE | C4 | | LOG | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Changing Head Direction | HEADDIR | C3 | | CHD | The direction of the observed or expected well drawdown trend during a slug or aquifer test. This may be expressed as rising head, falling head, drawdown, residual, or recovery. |
| Slug Volume | SLUGVOL | N6,2 | | | SLUG VOLUME: The volume of a slug used to displace ground water during a slug test. |
| Slug Units | UNITS | C10 | | UTM | The units in which the volume of the slug was measured. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: TEST WELL**Short Name: SUBM_TWI [NEW]****Description:** Specific data for pump test wells.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date | LOGDATE | D | PK | | LOG DATE: Starting date that a sample is collected, a field test is performed, or a QC Sample is created. |
| Logging Time | LOGTIME | C4 | PK | | Log Time. Time of day (24 hour clock format with no colon - HHMM) that a sample Id measurement is made, or a QC sample is created. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Top Interval Depth | TIDEPH | N9,2 | | | The upper depth of the interval being tested |
| Bottom Interval Depth | BIDEPH | N9,2 | | | The lower depth of the interval that is being tested |
| Dynamic Fluid Depth | DEPWAT | N9,2 | | | Recovery depth. Dynamic depth of water after recovery from purge, measured in feet from the measuring point. |
| Fluid Type Code | FTCODE | C1 | | FTC | Coded value indicating whether the liquid level in the well is groundwater or some immisible nonaqueous liquid. |
| Remarks | REMARKS | C240 | | | A textual description to aid in the understanding of the well test |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: PUMP RATE**Short Name: SUBM_PUMPRATE [NEW]****Description:** Measurements of the change in pump rate over time.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Logging Date | LOGDATE | D | PK | | LOG DATE: Starting date/time that a sample is collected, a field test is performed, or a QC sample is created. |
| Logging Time | LOGTIME | C4 | PK | | Log Time. Time of day (24 hour clock format with no colon - HHMM) that a sample Id measurement is made, or a QC sample is created. |
| Starting Date | STARTDATE | D | PK | | The initial date the pump rate was measured. |
| Starting Time | STARTTIME | C4 | PK | | The initial time the pump rate was measured. |
| Ending Date | ENDDATE | D | PK | | The ending date the pump rate was measured. |
| Ending Time | ENDTIME | C4 | PK | | The ending time the pump rate was measured. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Pump Rate | PUMPRATE | N7,2 | | | The measured rate of the pump. |
| Rate Units | UNITS | C10 | | UTM | The units used to measure the pump rate. |
| Remarks | REMARKS | C240 | | | Comments describing the pump rate. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: OBSERVATION WELL WATER LEVEL Short Name: SUBM_OWL [NEW]

Description: Well fluid measurements collected during timed intervals.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|---------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | Name of a location on an installation. |
| Observation Well Location | OBS_LOCATION | C15 | PK | | Name of a well location on an installation. |
| Logging Date | LOGDATE | D | PK | | LOG DATE: Starting date/time that a sample is collected, a field test is performed, or a QC sample is created. |
| Logging Time | LOGTIME | C4 | PK | | Log Time. Time of day (24 hour clock format with no colon - HHMM) that a sample Id measurement is made, or a QC sample is created. |
| Measurement Date | MEASDATE | D | PK | | Date the fluid level measurement was taken. |
| Measurement Time | MEASTIME | C4 | PK | | Time the fluid level measurement was taken. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Dynamic Fluid Depth | DEPWAT | N9,2 | | | The depth from the measuring point to the top of the fluid in the well bore. These measurements will include the water level at the beginning of the test (time=0). These measurements are used to calculate drawdown. |
| Fluid Type | FTCODE | C1 | | FTC | The type of fluid encountered in the well. This would normally be groundwater. If another type of fluid is encountered in the well bore during the test, then it should be noted here and explained in the comments. |
| Well Type | WTCCODE | C3 | | WTC | WELL TYPE CLASSIFICATION CODE: Coded value identifying the type of well in which the measurements are being taken (e.g., slugged, observation). |
| Remarks | REMARKS | C240 | | | Comments concerning the drawdown measurements. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: TRACER INJECTION Short Name: SUBM_TRI [NEW]

Description: Description of the tracer fluids injected into a well during well tests.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | Name of a location on an installation. |
| Start Date | STARTDATE | D | PK | | Date that the tracer test was conducted. |
| Injection Start Time | STARTTIME | C4 | PK | | The time that the tracer injection was started. |
| Injection End Time | ENDTIME | C4 | PK | | The time that the tracer injection was completed. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Tracer Concentration | TRC_CONC | N7,2 | | | The value of the concentration of the tracer that was injected into the well. |
| Concentration Units | TRCUNITS | C10 | | UTM | The units of measurement for the tracer concentration value. |
| Tracer Type | TRCTYPE | C5 | | TRT | The type of tracer that was used for the tracer test. |
| Tracer Volume | TRCVOL | N7,2 | | | The volume of the tracer that was used for the tracer test. |
| Tracer Volume Units | TRCVOLUNITS | C10 | | UTM | The units of measurement for the tracer volume value. |
| Remarks | REMARKS | C240 | | | Textual annotation that aids the understanding of the tracer test. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: TRACER OBSERVATION WELL Short Name: SUBM_TOW [NEW]

Description: Information on observation wells sampled during a tracer test.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|---------------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Start Date | STARTDATE | D | PK | | Date that the tracer test was conducted. |
| Injection Start Time | STARTTIME | C4 | PK | | The time that the tracer injection was started |
| Injection End Time | ENDTIME | C4 | PK | | The time that the tracer injection was completed |
| Observation Well Location | OBS_LOCATION | C15 | PK | | Location name for the observation well |
| Measurement Date | MEASDATE | D | PK | | Date that the observation well was measured. |
| Measurement Time | MEASTIME | C4 | PK | | Time that the observation well was measured. |
| Tracer Concentration | TRC_CONC | N7,2 | | | The value of the concentration of the tracer that was injected into the well. |
| Concentration Units | TRCUNITS | C10 | | UTM | The units of measurement for the tracer concentration value. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Environmental Measurements Technical Data

Table Name: ENVIRONMENTAL MEASUREMENT

Short Name: SUBM_EMI [NEW]

Description: Result information for tests that fall outside the category of standard analytical testing.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Sample Date | LOGDATE | D | PK | | The date the sample was taken. |
| Sample Time | LOGTIME | C4 | PK | | Time of day (24 hour clock format with no colon - HHMM) that a sample is measured, or a QC sample is created. |
| Sample Matrix | MATRIX | C2 | PK | MTX | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Top Tested Interval | SBD | N7,2 | PK | | The top of the interval from which the sample was collected or recovered, expressed in feet relative to mean sea level. |
| Bottom Tested Interval | SED | N7,2 | PK | | If the sample is recovered from an interval, the bottom of the interval the sample was recovered from. Interval is measured as elevation. Elevations use mean sea level as datum. Intervals below mean sea level are positive. |
| Test Date | ANADATE | D | PK | | The starting date of the sample test. This attribute is used if the samples are related to an aquifer test or tracer test. A series of samples taken at different times can be related using the start date and times. |
| Test Time | ANATIME | C4 | PK | | The starting time of the sample test. This attribute is used if the samples are related to an aquifer test or tracer test. A series of samples taken at different times can be related using the start date and times. |
| Test Type | ANATYPE | C5 | PK | EMI | The type of test being performed on the sample (e.g., air sampling, water velocity, soil sample, well bore fluid sample, etc.). |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Result Value | PARVAL | N7,2 | | | The value of the test result. |
| Result Units | UNITS | C10 | | UTM | The units of the result test. |
| Remarks | REMARKS | C240 | | | Comments to clarify the sample test. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, |

Record Error

RECORD_ERROR C2000

VALID, ERROR, WARN, ASSOC.

Contains error number(s), signifying errors, separated by ',' generated by validation.

Record Warning

RECORD_WARNING C2000

Contains error number(s), signifying warnings, separated by ',' generated by validation.

Chemistry Results

Table Name: SAMPLE COLLECTION

Short Name: SUBM_SAMPLES

Description: Reports information regarding a water, soil, or environmental sampling event.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-----------------------|------------|-----------|-----|-----|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Sample Date | LOGDATE | D | PK | | The date the sample was taken. |
| Sample Time | LOGTIME | C4 | PK | | The starting time of the sample test. This attribute is used if the samples are related to an aquifer test or tracer test. A series of samples taken at different times can be related using the start date and times. |
| Sample Matrix | MATRIX | C2 | PK | MTX | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Beginning Depth | SBD | N7,2 | PK | | SAMPLE BEGINNING DEPTH: The upper depth in feet from the ground surface or the water surface at which a sample is collected. |
| Ending Depth | SED | N7,2 | PK | | SAMPLE ENDING DEPTH: Lower depth in feet at which a soil sample is collected for analysis, relative to the ground surface. |
| Sample Type | SACODE | C3 | PK | SA | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Sample Number | SAMPNO | N2 | PK | | This is the numeric portion of the Sample Type. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Logging Company | LOGCODE | C4 | | LOG | LOGGING COMPANY CODE: Coded value identifying the company performing field tests. |
| Sampling Method | SMCODE | C2 | | SM | Coded value identifying the sampling method used to collect a sample. |
| Sample Wetness | WETCODE | C5 | | WET | Moisture content of the sample (e.g., dry, moist, or wet). |
| Field Sample ID | FLDSAMPID | C30 | | | Unique number assigned to the sample in the field. |
| Chain of Custody | COCID | C12 | | | Unique identification reference to the chain of custody describing the transport of the sample to the laboratory. |
| Field Cooler ID | COOLER | C2 | | | The unique number assigned to the cooler transporting the sample. |
| AB Field Lot ID | ABLLOT | C8 | | | Ambient Blank Field Lot Identifier. |

| | | | | |
|--------------------|----------------|-------|-----|--|
| EB Field Lot ID | EBLOT | C8 | | Equipment blank field lot identifier. |
| TB Field Lot ID | TBLOT | C8 | | Test Blank Field Lot Identifier. |
| Sampling Program | SAPROG | C3 | SPG | Program under which the program was authorized (e.g., feasibility study, RACA, Quarterly). |
| Lot Control Number | LOTCTLNUM | C5 | | Number denoting a set of samples that comprise an autonomous group of field environment samples and field Q samples. |
| Remarks | REMARKS | C240 | | Comment about the sample. |
| Record Status | RECORD_STATUS | C5 | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: TEST PROCEDURE**Short Name: SUBM_TESTS****Description:** Information on test preparation and procedures for an environmental sample.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-------------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Sample Date | LOGDATE | D | PK | | The date the sample was taken. |
| Sample Time | LOGTIME | C4 | PK | | The starting time of the sample test. This attribute is used if the samples are related to an aquifer test or tracer test. A series of samples taken at different times can be related using the start date and times. |
| Sample Matrix | MATRIX | C2 | PK | MTX | SAMPLING MATRIX: Coded value identifying the specific sample medium actually being analyzed, i.e., drill cuttings, waste water, etc. |
| Beginning Depth | SBD | N7,2 | PK | | SAMPLE BEGINNING DEPTH: The upper depth in feet from the ground surface or the water surface at which a sample is collected. |
| Ending Depth | SED | N7,2 | PK | | SAMPLE ENDING DEPTH: Lower depth in feet at which a soil sample is collected for analysis, relative to the ground surface. |
| Sample Type | SACODE | C3 | PK | SA | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Sample Number | SAMPNO | N2 | PK | | This is the numeric portion of the Sample Type. |
| Laboratory | LABCODE | C4 | PK | LAB | Analytical Laboratory Code. Coded value analysis of a sample. |
| Analytical Method | ANMCODE | C7 | PK | REF | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Preparation Method | EXMCODE | C7 | PK | REF | (Reference table: EXTLST) EXTRACTION METHOD CODE: Coded value representing the method used to extract or prepare a sample. |
| Run Number | RUN_NUMBER | N2 | PK | | This information is stored in the Test Procedure class and is replaced by the use of Test Sequence. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Lab Sample ID | LABSAMPID | C12 | | | Laboratory Sample Identification. |
| Lab Received Date/Time | LABRECDATE | D | | | The date/time the sample was received by the lab. |
| Lab Received Temp | LABRECTEMP | N3,1 | | | The temperature of the sample when it was received by the lab. |
| Lab Received Temp Units | LABRECUNITS | C10 | | UTM | Either degrees in Celsius or Fahrenheit. |

| | | | | | |
|-----------------------------|----------------|-------|----|-----|--|
| Preparation Date | EXTDATE | D | | | Preparation Date is a more general identifier to indicate extractions or other preparation methods. For compatibility with DESCIM. |
| Preparation Time | EXTTIME | C4 | | | Preparation time is a more general identifier to indicate extractions or other preparation methods. For compatibility with DESCIM. |
| Leachate Date | LCHDATE | D | | | Date the sample was leached. |
| Leachate Time | LCHTIME | C4 | | | Time the sample was leached. |
| Leachate Method | LCHMETH | C7 | PK | REF | (Reference table: LCHLST) Coded value identifying the leachate method. |
| Leachate Lot | LCHLOT | C10 | | | The batch designator of an autonomous group of environmental samples and associated QC samples leached together. |
| Analysis Date | ANADATE | D | | | Date the sample or extraction is analyzed in the laboratory. |
| Analysis Time | ANATIME | C4 | | | Time the sample or extraction is analyzed in the laboratory. |
| Analytical Lot | ANALOT | C10 | | | The batch designator of an autonomous group of environmental samples and associated QC samples analyzed together. |
| Preparation Lot | LABLOTCTL | C10 | | | Preparation Lot is a more general identifier to indicate extractions or other preparation methods. For compatibility with DESCIM. |
| Laboratory Lot Sequence | LABLOT_SEQ | N | FK | | The batch designator of an autonomous group of environmental samples and associated QC samples analyzed together. |
| Calibration Reference | CALREFID | C10 | FK | | A coded value which establishes a reference link between environmental and QC samples and their corresponding calibration records. |
| Remediation Technology Type | RTTYPE | C5 | | RTT | Type of remediation technology (e.g., slurry wall, in situ vitrification, bio-reactor). |
| Basis | BASIS | C1 | | BAS | Basis. For tissue or solid samples enter whether results are reported on a wet (W) or dry (D) basis. |
| Units | UNITS | C10 | | | The unit of measure used to report a result. |
| PVC Code | PVCCODE | C2 | | | Allows the coding of Gas Chromatography or Gas Chromatography/Mass Spectroscopy results indication whether the result reported was obtained from a primary or a confirmatory analysis. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, |

separated by ';' generated by validation.

Table Name: LABORATORY AUTHORIZED METHOD Short Name: SUBM_LAM [NEW]

Description: Referential list of certified laboratories for each analytical method.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|--|
| Analytical Method | ANMCODE | C7 | PK | REF | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | PK | MTY | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Laboratory | LABCODE | C4 | PK | LAB | Analytical Laboratory Code. Coded value identifying the analytical laboratory that performed the analysis of a sample. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: LABORATORY LOT**Short Name: SUBM_LLI [NEW]****Description:** Analytical lot information used by the Army.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|--|
| Laboratory Lot Sequence | LABLOT_SEQ | N | PK | | Unique identifier assigned by the lab for the sampling group for a given test on a given day. |
| Analytical Method | ANMCODE | C7 | | REF | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Matrix Type | MATRIX_TYPE | C1 | | MTY | SAMPLING MATRIX TYPE: Coded value identifying the sample medium actually being analyzed, i.e., soil, water, etc. |
| Laboratory | LABCODE | C4 | | LAB | Analytical Laboratory Code. Coded value identifying the analytical laboratory that performed the analysis of a sample. |
| Laboratory Lot | LABSAMPID | C12 | | | LABORATORY SAMPLE IDENTIFICATION NUMBER: Identifier assigned to a sample by a laboratory and included in the reporting of the results. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: ANALYTICAL RESULT**Short Name: SUBM_RESULTS****Description:** Information on analytical results of an environmental sampling test procedure.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|--------------------|-------------------|------------------|------------|------------|--|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | PK | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| Sample Date | LOGDATE | D | PK | | The date the sample was taken. |
| Sample Time | LOGTIME | C4 | PK | | The starting time of the sample test. This attribute is used if the samples are related to an aquifer test or tracer test. A series of samples taken at different times can be related using the start date and times. |
| Sample Matrix | MATRIX | C2 | PK | MTX | Coded value identifying the specific sample medium actually being analyzed, (e.g., drill cuttings, waste water, etc.). |
| Beginning Depth | SBD | N7,2 | | PK | SAMPLE BEGINNING DEPTH: The upper depth in feet from the ground surface or the water surface at which a sample is collected. |
| Ending Depth | SED | N7,2 | PK | | SAMPLE ENDING DEPTH: Lower depth in feet at which a soil sample is collected for analysis, relative to the ground surface. |
| Sample Type | SACODE | C3 | PK | SA | A coded value identifying whether the sample is QC or normal and the type is QC. |
| Sample Number | SAMPNO | N2 | PK | | This is the numeric portion of the Sample Type. |
| Laboratory | LABCODE | C4 | PK | LAB | Analytical Laboratory Code. Coded value analysis of a sample. |
| Analytical Method | ANMCODE | C7 | PK | REF | (Reference table: METHLST) ANALYTICAL METHOD CODE: Coded value representing the method of analysis of a given parameter. |
| Preparation Method | EXMCODE | C7 | PK | REF | (Reference table: EXTLST) EXTRACTION METHOD CODE: Coded value representing the method used to extract or prepare a sample. |
| Leachate Method | LCHMETH | C7 | PK | REF | (Reference table: LCHLST) Coded value identifying the leachate method. |
| Run Number | RUN_NUMBER | N2 | PK | | This information is stored in the Test Procedure class and |
| Analyte | PARLABEL | C12 | PK | REF | (Reference table: ANALLST) PARAMETER LABEL CODE: An abbreviated, common acronym representing a parameter/analyte. |
| Analyte Type | PRCCODE | C3 | | PRC | PARAMETER CLASS CODE: Coded value identifying a class or group that a parameter is associated with (e.g. ORG, MET, STD, etc.) |

| | | | | |
|------------------------------|-------------|-------|-----|--|
| PVC Code | PVCCODE | C2 | | Allows the coding of Gas Chromatography or Gas Chromatography/Mass Spectroscopy results indication whether the result reported was obtained from a primary or a confirmatory analysis. Used only for loading and validating non 4.0 handbook data. |
| Primary Value Qualifier | PARVQ | C2 | PVQ | PARAMETER VALUE QUALIFIER: Coded value qualifying the analytical results field (PARVAL). |
| Primary Value | PARVAL | N14,4 | | PARAMETER VALUE: value of calculated parameter reported in units consistent with UNITMEAS. |
| Primary Value Uncertainty | PARUN | N12,4 | | A value which measures the uncertainty of the analytical test (expressed as + or - some value). |
| Primary Value Precision | PRECISION | N1 | | Number indicating the precision (number of digits after the decimal point) of the results. |
| Expected Value | EXPECTED | N14,4 | | The target result for a quality control sample or surrogate spike. |
| Expected Value Precision | EVPREC | N1 | | Number indicating the precision (number of digits after the decimal point) of the results. |
| Method Detection Limit | MDL | N14,4 | | The smallest quantity of an analyte that can be detected from a prepared sample. |
| AFCEE Reporting Limit | RL | N14,4 | | The smallest quantity of an analyte that should be reported in accordance with the AFCEE QAPP. |
| Units | UNITS | C10 | UTM | UNITS OF MEASURE: Units of measure used for the parameter value. |
| First Column Value Qualifier | VQ_1C | C2 | PVQ | A coded value qualifying the VAL_1C field. |
| First Column Value | VAL_1C | N14,4 | | Field which represents the primary or initial value for a analyte generated from a Gas Chromatography or Gas Chromatography / Mass Spectroscopy results. |
| First Column Precision | FCVALPREC | N1 | | Number indicating the precision (number of digits after the decimal point) of the results. |
| Confirming Value Qualifier | VQ_CONFIRM | C2 | PVQ | Code value qualifying the confirming analytical result. |
| Confirming Value | VAL_CONFIRM | N14,4 | | VAL_CONFIRM: The CONFIRMING VALUE of a chromatographic analytical result that requires second column confirmation. |
| Confirming Value Precision | CNFVALPREC | N1 | | Number indicating the precision (number of digits after the decimal point) of the results. |
| Dilution Factor | DILUTION | N8 | | Numeric expression of the amount of dilution required to bring the analyte concentration in the sample into analysis range. |
| Dilution Factor Precision | DILPREC | N1 | | Number indicating the precision (number of digits after the decimal point) of the results. |
| Data Qualifier Type | DQTYPE | C2 | DQT | A code identifying the type of data qualifier. |
| Data Qualifier | EPA_FLAGS | C6 | | Codes that are assigned during chemistry data validation. |
| QAPP Flags | QAPPFLAGS | C2 | QAP | A coded value assigned to analytical results during |

| | | | | |
|-----------------------|----------------|-------|----|---|
| Lot Control Number | LOTCTLNUM | C5 | | laboratory or validation review Number denoting a set of samples that comprise an autonomous group of field environment samples and field Q samples. |
| Sampling Method | SMCODE | C2 | SM | Coded value identifying the sampling method used to collect a sample. |
| Preparation Lot | LABLOTCTL | C10 | | Preparation Lot is a more general identifier to indicate extractions or other preparation methods. For compatibility with DESCIM. |
| Submission Identifier | SUBM_ID | N | | Identifies the submission package this record is in. |
| Record Status | RECORD_STATUS | C5 | | The last status of this record. Status can be LOAD, VALID, ERROR, WARN, ASSOC. |
| Record Error | RECORD_ERROR | C2000 | | Contains error number(s), signifying errors, separated by ',' generated by validation. |
| Record Warning | RECORD_WARNING | C2000 | | Contains error number(s), signifying warnings, separated by ',' generated by validation. |

Table Name: HOLDTIME EVALUATION**Short Name: SUBM_HEV [NEW]****Description:** Data describing the results of the holding time analysis.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|------------------------|-------------------|------------------|------------|------------|--|
| Test Row | TEST_ROW | N | PK | | Actual rowid from SUBM_TESTS associated with the row in SUBM_HEV. |
| Holdtime Analysis Type | HT_ANATYPE | C3 | PK | HAT | A coded value indicating the type of holding time analysis (S2P, S2A, P2A). |
| Analysis Value | ANAVAL | N14,4 | | | Result of the calculation. |
| Evaluation | EVAL | C2 | | | Flag denoting the conclusion of the analysis (Pass, Fail, Not Applicable, etc.). |
| Update User | UPUSER | C12 | | | The last user to update the record. |
| Update Time | UPTIME | D | | | The date the record was last updated. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |

Table Name: CHEMISTRY EVALUATION**Short Name: SUBM_CEV [NEW]****Description:** Data describing the results of the accuracy, precision and contamination analysis.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-------------------------|-------------------|------------------|------------|------------|--|
| Result Row | RESULT_ROW | N | PK | | Actual rowid from the SUBM_RESULTS associated with the row in SUBM_CEV. |
| Chemistry Analysis Type | CH_ANATYPE | C13 | PK | CAT | The type of chemistry evaluation (contamination, precision, accuracy) performed. |
| Sample Type | SACODE | C2 | PK | SA | A coded value identifying whether the sample is QC or normal, and the type is QC. |
| Analysis Value | ANAVAL | N14,4 | | | Result of the calculation. |
| Evaluation | EVAL | C2 | | | Flag denoting the conclusion of the analysis (Pass, Fail, Not Applicable, etc.). |
| Update User | UPUSER | C12 | | | The last user to update the record. |
| Update Time | UPTIME | D | | | The date the record was last updated. |
| Update Description | UPDESC | C2 | | | Code identifying how the record was initially inserted, manually or by an application. |
| Submission Identifier | SUBM_ID | N | | | Identifies the submission package this record is in. |

Validation Processing

Table Name: SUBMISSION INFORMATION

Short Name: SUBM_INFO

Description: Information on a submission from a contractor to describe the work.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Installation Code | AFIID | C5 | PK | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Contract Number | CONTRACT_ID | C16 | PK | | Number identifying the contract; this number must be unique across all Air Force organizations. |
| Delivery Order Number | DO_ID | C4 | PK | | Number identifying the delivery order. |
| Project Identifier | PROJECT_ID | C20 | PK | | Name of the project the contract is for. |
| Submission Date | SUBM_DATE | D | PK | | The date the submission was received. |
| Submission Group | SUBM_GROUP | N1 | PK | | The group identifier for the submission. |
| Submission Identifier | SUBM_ID | N | PK | | Identifies the submission package this record is in. |
| Handbook | HANDBOOK | C3 | PK | | The handbook to which to submission applies. |
| Load Date | LOAD_DATE | D | | | Date the submission was loaded to the SUBM tables. |
| Validation Date | VALIDATION_DATE | D | | | Date the submission was validated. |
| Data Status | DATA_STATUS | C5 | | | Status of the validation process. From left to right; columns are L, I, D, O, V. Values for each column are L - Load, E - Error, W - Warning, V - Valid, F - Failed and N - Not Applicable. |
| Purge Date | PURGE_DATE | D | | | Date the submission was purged. |
| Approval Date | APPROVAL_DATE | D | | | Date the submission was marked as approved for production. |
| Production Date | PRODUCTION_DATE | D | | | Date the submission was transferred to production. |
| Submission Directory | SUBM_DIR | C80 | | | The name of the directory where the source submission resides. |
| Batch Queue | BATCH_QUEUE | C30 | | | The queue from which the job will be submitted. |
| Report Directory | REPORT_DIR | C80 | | | The name of the directory where reports are stored. |
| Export Directory | EXP_DIR | C80 | | | The name of the directory where exports are stored. |
| Origin | ORIGIN | C10 | | | The source of the submission. |

Table Name: VALID VALUES**Short Name: SUBM_VVLS****Description:** Valid codes

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Valid Value Type | VVL_TYPE | C4 | PK | REF | (Reference Table: VALIDTYPES) A coded value representing the valid value list to be maintained. |
| Valid Value Code | VVL_CODE | C12 | PK | | A unique coded value used to represent the name in the adjacent field. |
| Description | VVL_NAME | C120 | | | Textual description of the Valid Values Code. |
| | VVL_MISC | C35 | | | Textual information about the VVL Code. |
| Submission Identifier | SUBM_ID | N | PK | | Identifies the submission package this record is in. |
| Handbook | HANDBOOK | C3 | | | The handbook to which the submission applies. |

Table Name: SUBMISSION GROUP CODES Short Name: SUBM_GROUP_CD**Description:** Information on submission tables, their table identifier and associated groups.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|--|
| Group Code | GROUP_CODE | N2 | | | Number to identify which group the table is associated with. |
| Table Identifier | TABLE_ID | C3 | PK | | Unique identifier for each submission table. |
| Table Name | TABLE_NAME | C20 | | | Submission table name. |

Table Name: IRPIMS ERRORS**Short Name: IRP_ERRORS****Description:** Validation errors, warnings - constants and associated fields.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|---|
| Table Identifier | TABLE_ID | C3 | FK | | Unique identifier for each submission table, derived from SUBM_GROUP_CD table. Table ID of the table the error is related to. |
| Field Name | FIELD_NAME | C12 | | | Name of field the error is related to. |
| Error Identifier | ERROR_ID | C4 | PK | | Abbreviation, code, for the error. |
| Handbook | HANDBOOK | C3 | PK | | Data loading handbook the error is related to. |
| Error Type | ERROR_TYPE | C4 | | | At what level validation rule is implemented: Field(FLD), Record(REC) or Submission(SUB), on the PC. |
| Error Severity | ERROR_SEVERITY | C4 | | | Whether it is an error or a warning. |
| Function | FUNCTION | C25 | | | Function that validates this error on the PC. |
| Argument | ARGUMENT | C15 | | | Argument the function takes on the PC. |
| Validation Type | VAL_TYPE | C1 | | | Validation subset identifier. |
| Error Text | ERROR_TEXT | C120 | | | Text used to describe the error. |

Table Name: ERROR DETAIL**Short Name: ERROR_DETAIL**

Description: Information on a validation errors and warnings.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| Error Rowid | ERR_ROW | ROWID | PK | | Actual rowid from the submission table associated with the row that is in error. |
| Table Identifier | TABLE_ID | C3 | PK | | Unique identifier for each submission table, derived from SUBM_GROUP_CD table. Table ID of the table the error is related to. |
| Submission Identifier | SUBM_ID | N | PK | | Identifies the submission package this record is in. |
| Error Identifier | ERROR_ID | C4 | PK | | Abbreviation, code, for the error, derived from IRP_ERRORS. |

Table Name: IRPIMS VVL EXPORT**Short Name: IRP_VVL**

Description: Expanded version of the VALIDTYPES that includes reference tables that will be treated as VVLs for export purposes.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|--|
| Valid Value Type | VVL_TYPE | C4 | | | A coded value representing the valid value list to be maintained |
| Description | VVL_NAME | C120 | | | Textual description of the Valid Values Type. |
| Code Length | LENGTH | N3 | | | The maximum length of a valid value code |
| Handbook | HANDBOOK | C3 | | | The handbook associated with the data. |
| Update Flag | VVL_UPDATE | C1 | | | Flag indicating whether the specified VVL or reference table can be updated through ERPTools/VAX. |
| Export Flag | VVL_EXPORT | C1 | | | Flag indicating whether the specified VVL or reference table can be exported through ERPTools/VAX. |
| Update Time | UPTIME | D | | | The date the record was last updated. |
| Update User | UPUSER | C12 | | | The last user to update the record. |
| Update Description | UPDESC | C2 | | | Code identifying how the record was initially inserted, manually or by an application. |

Export and Report Processing**Table Name: IRPIMS2 REPORT OUTPUT****Short Name: TIMS2_REPORT**

Description: Temporary storage area for spooled output of reports. This table is part of the Report Launcher application.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|--|
| Run Identifier | RUNID | N10 | | | Numeric designator for the print request. |
| Report Section | PART | N | | | Identifier for the report section that the stored line belongs to. |
| Line Number | LINE_NUMBER | N | | | Numeric sequence of the line in the report section. |
| Line | LINE | C255 | | | Line of report text output. |

Table Name: IRPIMS2 LAUNCH PARAMETERS**Short Name: TIMS2_LAUNCH_PARM_HEAD**

Description: Information on the selected print and batch options for a print request. This table is part of the Report Launcher application.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|---|
| Run Identifier | RUN_ID | N | PK | | Numeric designator for the print request. |
| Program Identifier | PROGRAM_ID | N | | | Numeric designator of the requested report. |
| Modifying User | MOD_USER | C30 | | | Name of the last user to modify the data in this table. |
| Modification Date | MOD_DATE | D | | | Date of last data modification. |
| Output File | OUTPUT_FILE | C80 | | | Name of the output file. |
| Special Options | SPECIAL_OPTIONS | C4 | | | Any special print options specified by the requesting user (i.e. print to screen, print to file). |
| Print Queue Name | QUEUE_NAME | C30 | | | Name of the desired print queue. |
| Format Number | FORM_NUMBER | C6 | | | Format of report. |
| Defer Until Date | DEFER_UNTIL | C20 | | | Desired date when the user would like the report to be run. |
| Login Date | LOGIN_DATE | D | | | Date the batch process actually started. |
| Finish Date | FINISH_DATE | D | | | Date the batch process actually ended. |
| Buffered I/O | BUFIO | N | | | System statistic returned by batch process. |
| Direct I/O | DIRIO | N | | | System statistic returned by batch process. |
| Page Faults | PAGEFLTS | N | | | System statistic returned by batch process. |
| Virtual Peak | VIRTPEAK | N | | | System statistic returned by batch process. |
| Workspace Peak | WSPEAK | N | | | System statistic returned by batch process. |
| End of File | EOF | N | | | System statistic returned by batch process. |
| CPU Time Used | CPUTIM | N | | | System statistic returned by batch process. |
| Defer Until Time | DEFER_TIME | C5 | | | System statistic returned by batch process. |
| Batch Queue Name | BATCH_QUEUE | C255 | | | Name of the desired batch queue. |

Table Name: IRPIMS2 LAUNCH PARAMETER DETAILS**Short Name: TIMS2_LAUNCH_PARM_DETAIL**

Description: Information on the parameters used in a print request. This table is part of the Report Launcher application.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------|-------------------|------------------|------------|------------|---|
| Run Identifier | RUN_ID | N | PK | | Numeric designator for the print request. |
| Parameter Sequence | PARMSEQ | N | PK | | Order in which the print request parameters are read. |
| Parameter Value | PARM_VALUE | C80 | | | Value of the specified parameter. |

Table Name: IRPIMS2 REPORT PARAMETERS**Short Name: TIMS2_LAUNCH_RPT_HEAD**

Description: Definition of the supported reports. This table is part of the Report Launcher application.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|----------------------|-------------------|------------------|------------|------------|---|
| Program Identifier | PROGRAM_ID | N | PK | | Numeric designator for the defined report. |
| Calling Program Type | CALL_TYPE | C3 | | | Type of program used to generate the report (i.e. COM, SQL, etc). |
| Program Name | PROGRAM_NAME | C80 | | | Name of the report file. |
| Program Title | PROGRAM_TITLE | C80 | | | Title used by the report. |
| Program Description | PROGRAM_DESC | C80 | | | Description and purpose of report. |
| Report Creator | CREATOR | C30 | | | Name of the user that created the report. |
| Creation Date | CREATE_DATE | D | | | Date the report was created. |
| Modifying User | MOD_USER | C30 | | | Name of the last user to modify the data in this table. |
| Modification Date | MOD_DATE | D | | | Date of last data modification. |
| Output File | OUTPUT_FILE | C80 | | | Name of the output file. |

Table Name: IRPIMS2 REPORT PARAMETER DETAILS**Short Name: TIMS2_LAUNCH_RPT_DETAIL**

Description: Definition of the parameters needed by the supported reports. This table is part of the Report Launcher application.

| Column Name | Short Name | Data Type | Key | VVL | Description |
|-------------------------|-------------------|------------------|------------|------------|--|
| Program Identifier | PROGRAM_ID | N | PK | | Numeric designator for the defined report. |
| Input Sequence | INPUTSEQ | N | PK | | Order in which the report parameters are entered. |
| Field Data Type | FLDTYPE | C8 | | | Data type of parameter. |
| Field Length | FLDLEN | N | | | Total number of characters allowed in the parameter. |
| Field Prompt | FLDPROMPT | C20 | | | Label to display on parameter entry form. |
| Display Field Flag | FLDDISP | C1 | | | Flag to indicate whether the parameter is displayable. |
| Enterable Field Flag | FLDENTER | C1 | | | Flag to indicate whether the parameter is enterable. |
| Mandatory Field Flag | FLDMAND | C1 | | | Flag to indicate whether the parameter is mandatory. |
| Fixed Length Field Flag | FLDFIXED | C1 | | | Flag to indicate whether the parameter is fixed length. |
| Skip Field Flag | FLDMAND | C1 | | | Flag to indicate whether the cursor moves to the next field after entering a value in this field. |
| Autohelp Field Flag | FLDMAND | C1 | | | Flag to indicate whether the help text is displayed automatically when the user enters this field. |
| Uppercase Field Flag | FLDMAND | C1 | | | Flag to indicate whether the parameter is forced to uppercase. |
| Modifying User | MOD_USER | C30 | | | Name of the last user to modify the data in this table. |
| Modification Date | MOD_DATE | D | | | Date of last data modification. |
| Field Name | FLDNAME | C30 | | | Name of the parameter. |
| Parameter Sequence | PARAMSEQ | N | | | Order in which the report parameters are sent to the program file. |
| Symbol Name | SYMBOL_NAME | C30 | | | Name of the parameter in the program file. |
| Field Help Text | FLDHELP | C80 | | | Help text for the specified field. |

| | | | | |
|-------------------|---------|-----|--|---|
| Field Default | FLDDFLT | C80 | | Default value of the field. |
| Field Lower Bound | FLDLOW | C30 | | Smallest value allowed in the field. |
| Field Upper Bound | FLDHI | C30 | | Largest value allowed in the field. |
| Null Substitute | IFNULL | C80 | | Value to use if the field is left null. |

Table Name: VVL EXPORT LIST**Short Name: IRP_EXPORT_VVL**

Description: Temporary storage area for the names of the VVLs that have been selected for export This application is part of the Report Launcher application.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|---------------------|-------------------|------------------|------------|------------|---|
| User Identification | USER_ID | N | PK | | Numeric identifier for the user. |
| VVL Type | VVL_TYPE | C3 | PK | REF | (Reference Table: VALIDTYPES) A coded value representing the valid value list to be exported. |

Table Name: DUPLICATE COORDINATES**Short Name: IRP_EXPORT_DUP_COORDS**

Description: Temporary storage area for resolving duplicate coordinate situations during export of AFCEE supplied data.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|---------------------|-------------------|------------------|------------|------------|---|
| User Identification | USER_ID | N | PK | | Numeric identifier for the user. |
| Installation Code | AFIID | C5 | | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Location Name | LOCID | C15 | | | LOCATION IDENTIFICATION: Unique identifier assigned to a location within a USAF installation where measurements or samples are taken. |
| North Coordinate | NCOORD | N10,2 | | | NORTH STATE PLANE COORDINATE: The y-value (North-South) of the distance in feet of a sampling or measuring location from the reference location of known state plane coordinates. |
| East Coordinate | ECOORD | N10,2 | | | EAST STATE PLANE COORDINATE: The x-value (East-West) of the distance in feet of a sampling or measuring location from the reference location of known state plane coordinates. |

Table Name: LOADED SUBMISSIONS**Short Name: IRP_LOAD**

Description: Temporary storage area for the location of submission files.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|-----------------------|-------------------|------------------|------------|------------|---|
| User Identification | USER_ID | N | PK | | Numeric identifier for the user. |
| Installation Code | AFIID | C5 | | REF | (Reference table AFI) AIR FORCE INSTALLATION IDENTIFICATION: Unique code used to represent an Air Force installation, plant, or base. |
| Contract Number | CONTRACT_ID | C16 | | | Number identifying the contract; this number must be unique across all Air Force organizations. |
| Delivery Order Number | DO_ID | C4 | | | Number identifying the delivery order. |
| Project Identifier | PROJECT_ID | C20 | | | Name of the project the contract is for. |
| Handbook | HANDBOOK | C3 | | | The handbook associated with the data. |
| Submission Date | SUBM_DATE | D | | | Date the submission was received. |
| Submission Group | SUBM_GROUP | N1 | | | The group identifier for the submission. |
| Submission Directory | SUBM_DIR | C80 | | | Directory where the submission files are stored. |
| Batch Groups Found | BCH_GROUPS_FOUND | N4 | | | Used to determine handbook 2.3 files to be loaded. |

Table Name: TIMS GUI REPORT INFO**Short Name: TIMS_REPORT_INFO**

Description: Definition of reports supported by the TIMS GUI application.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|--------------------------|---------------------|------------------|------------|------------|---|
| Report Id | REPORT_ID | N | PK | | Numeric designator for the defined report. |
| Report Title | REPORT_TITLE | C80 | | | Title used by the report. |
| Format Name | FORMAT_NAME | C20 | | | OMNIS report format. |
| Default Output File Name | DEFAULT_OUTPUT_FILE | C12 | | | Default name of generated output file. |
| Modifying User | MOD_USER | C30 | | | Name of the last user to modify the data in this table. |
| Modification Date | MOD_DATE | D | | | Date of last data modification. |

Table Name: TIMS GUI REPORT DETAILS**Short Name: TIMS_REPORT_INFO_DETAIL**

Description: Definition of parameters used in TIMS GUI reports.

| <u>Column Name</u> | <u>Short Name</u> | <u>Data Type</u> | <u>Key</u> | <u>VVL</u> | <u>Description</u> |
|------------------------|-------------------|------------------|------------|------------|--|
| Report Id | REPORT_ID | N | PK | | Numeric designator for the defined report. |
| Input Sequence | INPUTSEQ | N | PK | | Order in which the report parameters are entered. |
| Parameter Label | PARAM_LABEL | C20 | | | Label to display on parameter entry form. |
| Mandatory Field Flag | FLD_MANDATORY | C1 | | | Flag to indicate whether the parameter is mandatory. |
| VVL Support Flag | VVL_SUPPORTED | C1 | | | Flag to indicate whether or not the field uses a VVL. |
| VVL Table Name | VVL_TBL_NAME | C30 | | | Name of the VVL table to use. |
| VVL Column Name | VVL_COL_NAME | C30 | | | Name of the VVL column to use. |
| VVL Column Code | VVL_COL_CODE | C20 | | | Name of the code field in the VVL. |
| VVL Type | VVL_TYPE | C3 | | | Value used to identify the VVL in the VALIDVALUES table. |
| VVL Selection Criteria | VVL_SELECT | C1000 | | | SQL select statement for the desired values. |
| Field Type | FLD_TYPE | C1 | | | Coded value representing the type of parameter field. |
| Field Length | FLD_LENGTH | N | | | Maximum length of parameter. |
| Field Help Text | FLD_HELP | C80 | | | Help text for the specified field. |
| Field Default | FLD_DEFAULT | C20 | | | Default value of the field. |
| Modifying User | MOD_USER | C30 | | | Name of the last user to modify the data in this table. |
| Modification Date | MOD_DATE | D | | | Date of last data modification. |