

## NOTES – DRINKING WATER DIVISION - CALIFORNIA

11S 2011 Notice to Users of California State Department of Health Water Test Database WQM DOCUMENTATION.DOC

The **CHEMICAL.ZIP** contains chemical data from January 1, 2006 through this month. The **CHEMHIST.ZIP** contains chemical data from January 1, 2000 through December 31, 2005, and **CHEMARC.V.ZIP** from the earliest findings through December 31, 1999. The zipped files must be copied to your drive and expanded. After expansion, the **.DBF** file can be imported into most well know database software programs, such as Microsoft Access, Fox Pro, or Paradox. Note that spreadsheet programs such as Excel are not able to import all of the records in the database and should not be used to prepare reports.

**NOTICE TO USERS OF THE DATABASE:** Users of this database should use care in interpreting these data. For example, a single detection of a contaminant may not indicate contamination. DHS would not consider a single detection of a contaminant, if unconfirmed with a follow-up detection, to be an actual finding. As another example, the presence of a contaminant in raw water at a given concentration does not necessarily mean that the water was served by the water system to its customers, or, if served, that the contaminant was present at that concentration. Water systems may not use certain sources or may treat or blend them prior to service.

Why are some non-detects (ND) shown as 0.000 in stead of <0.5 (assuming 0.5 is the detection limit) in the FINDING field? If it is on the same analyses, it will indicate that the laboratory has decided to report data it has detected below the State detection limit (DLR). If these are on different analyses, it is just a preference on key entry, either <DLR or ND, both essentially meaning the same thing.

There are approximately 18 sources without a system name, and are considered “orphans”.

Questions about contaminants in particular sources are best addressed by the specific public water system, or by the DHS district office.

**FOR ADDITIONAL INFORMATION:** To find out more about chemical contaminants in drinking water, please go to the Drinking Water Program’s website at <http://ww2.cdph.ca.gov/programs/Pages/DWP.aspx>

### ERROR MESSAGES:

If you receive the error message *Unexpected Error from External Database Driver (8961)* when you try to import dBase files into Access, go to the following Microsoft website for instructions to fix it:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;321003>

The file titled **WQM Documentation.doc** contains all the documentation necessary to interpret the contents on this CD.

<b>COUNTY</b>	<b>USER ID</b>	<b>NUMBER</b>	<b>COUNTY</b>	<b>USER ID</b>	<b>NUMBER</b>
ALAMEDA	ENG	01	ORANGE	TEE	30
ALPINE	TEN /PTA	02	PLACER	TEN	31
AMADOR	PTA	03	PLUMAS	BUG	32
BUTTE	BUG	04	RIVERSIDE	WAT	33
CALAVERAS	PTA	05	SACRAMENTO	TEN	34
COLUSA	BUG	06	SAN BENITO	HEN	35
CONTRA COSTA	ENG	07	SAN BERNARDINO	TAN	36
DEL NORTE	ATT	08	SAN DIEGO	WAT	37
EL DORADO	TEN	09	SAN FRANCISCO	ENG	38
FRESNO	CYA /AGE	10	SAN JOAQUIN	PTA	39
GLENN	BUG	11	SAN LUIS OBISPO	TAP	40
HUMBOLDT	ATT	12	SAN MATEO	ENG	41
IMPERIAL	WAT	13	SANTA BARBARA	TAP	42
INYO	TAN	14	SANTA CLARA	HEN	43
KERN	CYA	15	SANTA CRUZ	HEN	44
KINGS	CYA	16	SHASTA	BUG	45
LAKE	RXR	17	SIERRA	BUG	46
LASSEN	BUG	18	SISKIYOU	ATT	47
LOS ANGELES	MET/4TH	19	SOLANO	ENG	48
MADERA	AGE	20	SONOMA	RXR	49
MARIN	ENG	21	STANISLAUS	PTA	50
MARIPOSA	AGE	22	SUTTER	BUG	51
MENDOCINO	RXR	23	TEHAMA	BUG	52
MERCED	AGE	24	TRINITY	ATT	53
MODOC	BUG	25	TULARE	CYA	54
MONO	TAN	26	TUOLUMNE	AGE	55
MONTEREY	HEN	27	VENTURA	TAP	56
NAPA	RXR	28	YOLO	TEN	57
NEVADA	TEN	29	YUBA	BUG	58

## COUNTY CODES

01C	ALAMEDA COUNTY	30C	ORANGE COUNTY
02C	ALPINE COUNTY	31C	PLACER COUNTY
03C	AMADOR COUNTY	32C	PLUMAS COUNTY
04C	BUTTE COUNTY	33C	RIVERSIDE COUNTY
05C	CALAVERAS COUNTY	34C	SACRAMENTO COUNTY
06C	COLUSA COUNTY	35C	SAN BENITO COUNTY
07C	CONTRA COSTA COUNTY	36C	SAN BERNARDINO COUNTY
08C	DEL NORTE COUNTY	37C	SAN DIEGO COUNTY
09C	EL DORADO COUNTY	38C	SAN FRANCISCO COUNTY
10C	FRESNO COUNTY	39C	SAN JOAQUIN COUNTY
11C	GLENN COUNTY	40C	SAN LUIS OBISPO COUNTY
12C	HUMBOLT COUNTY	41C	SAN MATEO COUNTY
13C	IMPERIAL COUNTY	42C	SANTA BARBARA COUNTY
14C	INYO COUNTY	43C	SANTA CLARA COUNTY
15C	KERN COUNTY	44C	SANTA CRUZ COUNTY
16C	KINGS COUNTY	45C	SHASTA COUNTY
17C	LAKE COUNTY	46C	SIERRA COUNTY
18C	LASSEN COUNTY	47C	SISKIYOU COUNTY
19C	LOS ANGELES COUNTY	48C	SOLANO COUNTY
20C	MADERA COUNTY	49C	SONOMA COUNTY
21C	MARIN COUNTY	50C	STANISLAUS COUNTY
22C	MARIPOSA COUNTY	51C	SUTTER COUNTY
23C	MENDOCINO COUNTY	52C	TEHAMA COUNTY
24C	MERCED COUNTY	53C	TRINITY COUNTY
25C	MODOC COUNTY	54C	TULARE COUNTY
26C	MONO COUNTY	55C	TUOLUMNE COUNTY
27C	MONTEREY COUNTY	56C	VENTURA COUNTY
28C	NAPA COUNTY	57C	YOLO COUNTY
29C	NEVADA COUNTY	58C	YUBA COUNTY

**California Water Quality Monitoring Database  
Documentation**

**Findings (Chemical.dbf) Years 1997 to current date**

FIELDNAME = PRIM\_STA\_CDE -- primary station code or state source number  
FIELDNAME = SAMP\_DATE -- date sample collected  
FIELDNAME = SAMP\_TIME -- time (24 hour) sample collected  
FIELDNAME = LAB\_NUM -- number of laboratory which conducted analysis  
FIELDNAME = ANALYSIS --date analysis completed  
FIELDNAME = INDATE -- date analysis keyed in  
FIELDNAME = METHOD -- analytical method (required for pesticides, optional for others)  
FIELDNAME = INBY -- inputter code (optional)  
FIELDNAME = SPC, FLG -- default/composite flag  
FIELDNAME = STORE\_NUM --U.S. EPA STORET number for chemical/parameter  
FIELDNAME = XMOD -- modifier for finding (“<” means Not Detected. “F” means False Positive confirmed with two or more follow-up samples. “I” means Invalid. “Q” means Questionable)  
FIELDNAME = FINDING -- numerical result of analysis (if finding preceded by “<” means not detected at that number)

**Chemicals (Storet.dbf)**

FIELDNAME = STORE\_NUM -- U.S. EPA STORET number for chemical/parameter  
FIELDNAME = CHEMICAL -- name of chemical/parameter  
FIELDNAME = AKA 1 -- first also known as for chemical name  
FIELDNAME = AKA 2 -- second also known as for chemical name  
FIELDNAME = CLS -- class for chemical (P = purgeable or VOC; A = agricultural; T = “Title 22” or inorganics, physical, and minerals; R = radiological; B = bna or base, neutral, acid extractable; X = other)  
FIELDNAME = RPT\_CDE -- reporting code for chemical for regulatory monitoring  
Compliance tracking (01-04 = organics; A1-A6 = agricultural; IO = inorganics; GM = general mineral; GP = general physical; NI = nitrate/nitrite; RA = radiological); S1 = regulated VOC; S2 = regulated SOC; TH = trihalomethanes – total; UA = State unregulated; UB = Federal Unregulated; XX = all other; I, 01, AU, SS, X, UC = no longer used  
FIELDNAME = REPORT, UN -- reporting units for chemical  
FIELDNAME = MCL -- maximum contaminant level or enforceable drinking water standard. They are health protective drinking water standards to be met by public water systems. MCLs take into account not only a chemicals’ health risks but also factors such as their detectability and treatability, as well as costs of treatment. Health & Safety Code §116365(a) requires California Department of Public Health to establish a contaminant’s MCL at a level as close to its Public Health Goal (PHG) as is technically and economically feasible, placing primary emphasis on the protection of public health.  
FIELDNAME = AL -- advisory action level (no longer used)  
FIELDNAME = MDL -- method detection level or detection level for purposes of reporting. These are the levels of detection associated with the use of a method to analyze for a chemical. They indicate the levels at which chemicals can be detected under ideal conditions, are method and chemical specific, and can vary from one lab to another. MDLs are “published” in the federal register by EPA for each chemical for each method; they are determined by evaluating the performance of a number of laboratories doing the analyses.  
FIELDNAME = RCL -- reporting contaminant level or reporting level (RL). The Reporting Level, as defined by the California Department of Public Health’s Sanitation and Radiation Laboratories Branch, is the required concentration at which an analyte can yet be detected in a sample and its concentration can be reported with a reasonable degree of accuracy and precision. A criterion of ± 20% accuracy and 20% RSD for replicate determinations is often used to define “reasonable”. The acceptable ranges depend somewhat on the analytical methodology used. For samples that do not pose a particular matrix problem, the RL is typically about three to five times higher than the MDL. Similar to the MDL, the RL is a laboratory-specific number, which may change with time. When a sample has to be diluted before analysis, either because of matrix problems or to get the instrument response within the linear dynamic range, the RL is raised by a factor corresponding to the dilution factor.  
FIELDNAME = RPHL -- recommended public health level or public health goal (PHG) is established by the State of California Office of Environmental Health Hazard Assessment (OEHHA). It is the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs are not regulatory standards; however, state law requires DHS to set drinking water standards for chemical contaminants as close to the corresponding PHG as is economically and technically feasible.  
FIELDNAME = CHEMICAL N -- name of chemical/parameter  
FIELDNAME = GM, SORT -- not applicable  
FIELDNAME = OC, SORT -- not applicable

### **Drinking water Sources (Siteloc.dbf)**

FIELDNAME = PRIM\_STA\_CDE – primary station code or state source number  
FIELDNAME = FRDS\_NO – Federal Reporting Data System number for source (system number + sequence number)  
FIELDNAME = COUNTY – county number  
FIELDNAME = DISTRICT – number of district in which source resides  
FIELDNAME = USER\_ID – district acronym  
FIELDNAME = SYSTEM\_NO – water system number (county number + system type + sequence number)  
FIELDNAME = WATER\_TYPE – source of water G = well/groundwater; M = mixed (mixture of surface and ground water, i.e., river/well); S = surface; W = waste (wastewater generator – very rarely will have data at this time);  
A, B, C, H, N, P, T = misclassified or no longer used  
FIELDNAME = SOURCE\_NAME – name of source  
FIELDNAME = STATION TY – station type  
FIELDNAME = STATUS – operation status of well (see page 6)  
FIELDNAME = COMMENT\_1 – comments about source

### **Water Systems (Watsys.dbf)**

FIELDNAME = SYSTEM\_NO – water system number (county number + system type + sequence number)  
FIELDNAME = SYSTEM NAM -  
FIELDNAME = HQNAME – organization that operates system  
FIELDNAME = ADDRESS – mailing address of water system  
FIELDNAME = CITY – mailing address city  
FIELDNAME = STATE – mailing address state  
FIELDNAME = ZIP – zipcode  
FIELDNAME = ZIP\_EXT- zip code extension  
FIELDNAME = POP SERV – population served  
FIELDNAME = CONNECTION – connections served  
FIELDNAME = AREA SERVE – Area served

### **Laboratories (Lab.dbf)**

FIELDNAME = LAB\_NUM – number of laboratory which conducted analysis  
FIELDNAME = LAB\_NAME – name of laboratory which conducted analysis  
FIELDNAME = ADDRESS – mailing address #1 of laboratory  
FIELDNAME = LAB CITY – mailing address city  
FIELDNAME = STATE – mailing address state  
FIELDNAME = ZIP – zip code  
FIELDNAME = AREA CODE – lab area code  
FIELDNAME = PHONE – lab phone number  
FIELDNAME = EXT -  
FIELDNAME = FAX AREA -  
FIELDNAME = FAX NO -  
FIELDNAME = CERT NO -  
FIELDNAME = EMAIL ADDR -  
FIELDNAME = COMMENT -  
FIELDNAME = LAB DATE -

## **Source Status Codes**

### **Abandoned – AB**

A source which is no longer being used, with no intention of being used in the future, and which is not destroyed.

### **Destroyed – DS**

A source which is filled and capped with no possibility of being used in the future.

### **Inactive raw – IR**

A source which is not in service for periods of one year or greater and which provides raw water which is sampled before any treatment.

### **Inactive treated – IT**

A source which is not in service for periods of one year or greater and which provides raw water to a system without any treatment.

### **Inactive untreated – IU**

A source which is not in service for periods of one year or greater and which provides raw water to a system without any treatment.

### **Standby Raw – SR**

A source which is used less than 15 calendar days per year, with periods not to exceed five consecutive days and which provides raw water which is sampled before any treatment.

### **Standby Treated – ST**

A source which is used less than 15 calendar days per year, with periods not to exceed five consecutive days and which provides raw water which is sampled after treatment.

### **Standby Untreated – SU**

A source which is used less than 15 calendar days per year, with periods not to exceed five consecutive days and which provides raw water without any treatment.

### **Active Raw – AR**

An active source which is sampled before any treatment.

### **Active treated – AT**

An active source which is sampled after any treatment.

### **Active untreated – AU**

An active source which is not treated.

### **Monitoring – MW**

A source, which is not, a drinking water source and which is utilized only for monitoring water quality.

### **Agricultural/Irrigation Well – AG**

Not a drinking water well; utilized only for agriculture.

### **Distribution system sample point, treated – DT**

Sample point within the distribution system after treatment.

### **Distribution system sample point, raw – DR**

Sample point within the distribution system before treatment.

### **Combined treated - CT**

Combined sources which are treated.

### **Combined untreated - CU**

Combined sources which are not treated.

### **Combined raw - CR**

Combined raw sources

### **Combined mixed - CM**

Combined sources

## Source Composite Data

Source composite records are identified with the one character “special” default code as follows:

- “T” = composite analysis - 2 sources
- “U” = composite analysis - 3 sources
- “V” = composite analysis - 4 sources
- “W” = composite analysis - 5 sources

The results of each analysis are recorded for each source in WQM. An example is provided below for an analysis of one organic chemical in a three-source composite:

	Source#1 -----	Source#2 -----	Source#3 -----
Special =	U	U	U
Source no. =	121003-001	121003-002	121003-003
Date/time =	9209260823	9209260823	9209260823
Lab. Number =	5091	5091	5091
Store_num =	34030	34030	34030
Xmod =	<	<	<
Finding	.5	.5	.5
Method	524.2	524.2	524.2

The records for a given composite will be grouped together in WQM. The sample dates and times will be the same for all records in a composite.