

## Creating a Merge File for DUMPStat and CARStat

### Instructions for analytical labs who want to create compatible files

The DUMPStat and CARStat programs expect their lab data to be in a text file, with only one concentration measurement on each line. The files may contain data in fixed width columns, delimited with tabs, commas, semicolons or spaces, or in CSV format (a special type of delimited format where the fields are separated by commas and text fields are enclosed in quotes). The fields listed below can appear in any order, but the ordering must be consistent within each data file. On each line, you must have:

	Maximum width	Permissible formats
Constituent/Analyte name	64 characters	Any, see restrictions on characters below
Sample Point/Well name	16 characters	Any, see restrictions on characters below
Result (concentration)		Numeric only, may be blank for nondetects
Detection/Quantitation limit		Numeric only, may be blank for detects
Unit name	16 characters	Must be nonblank. This is the unit of measurement for the Result and Detection limit listed above, which must be in the same units as each other. The unit of measurement can change from line to line within the file. Standard abbreviations are preferred, but not required, e.g.: mg/l for milligrams per liter.
Detect qualifier		Field distinguishing detected samples from nondetects. You can make any entry in this field that consistently distinguishes detects from nondetects, but it is common to use ND for nondetects and blank for detects. The field is typically only a few characters wide. You are free to use a blank for nondetects if a nonblank character is used for detects, or you may make nonblank entries for each, as long as they are distinct.
Date sample was taken		Any of: dd/mm/yy, dd/mm/yyyy, ddmmyy, ddmmyyyy, mm/dd/yy, mm/dd/yyyy, mmddyy, mmddyyyy, yy/mm/dd, yyyy/mm/dd, yymmdd, yyyymmdd. Two digit year values will be handled correctly.

The names of the fields listed above are for reference only, and should not appear in the data file. You may make fields narrower than the maximum width, though constituent names must obviously be unique. (Don't truncate both Trichloroethane and Trichloroethene at 10 characters!) Constituent, Sample Point, and unit names are case-insensitive—CHLORIDE and Chloride are recognized as equivalent by DUMPStat.

Restrictions on characters in Constituent, Sample Point and unit names:

“	Quotation marks are stripped out of any field in a delimited format or from the constituent and location names in a fixed column format. If this is the only character in a constituent or location name, the record is rejected at merge time.
	Not allowed anywhere in location or constituent name
*	Not allowed anywhere in location or constituent name
&	Will be automatically replaced with + in constituent names
[	Not allowed as first character in location or constituent name
~	Cannot be the only character in a location or constituent name

A sample from a legal fixed-width data file, whose fields happen to be in the order Constituent, Well, Qualifier, Result, Limit, Date, Unit:

SODIUM	GW-25		12.5000	1.0000	19920916	MG/L
SODIUM	GW-25		15.1000	1.0000	19921202	MG/L
SODIUM	GW-25		12.7000	1.0000	19930324	MG/L
SODIUM	GW-26		12.8000	5.0000	19900723	MG/L
SODIUM	GW-26		27.2000	5.0000	19910214	MG/L
SODIUM	GW-26		25.7000	5.0000	19910625	MG/L
SODIUM	GW-26		11.5000	5.0000	19911204	MG/L
SODIUM	GW-26		9.6900	5.0000	19920318	MG/L
SODIUM	GW-26		14.8000	5.0000	19920604	MG/L
SODIUM	GW-26		19.8000	1.0000	19920916	MG/L
SODIUM	GW-26		14.0000	1.0000	19921202	MG/L
SODIUM	GW-26		8.4100	1.0000	19930324	MG/L
CHLORIDE	GW-01		15.7000	1.0000	19890913	MG/L
CHLORIDE	GW-01		18.5000	1.0000	19891016	MG/L
CHLORIDE	GW-02		168.	1.	19890913	MG/L
CHLORIDE	GW-02		138.	1.	19891016	MG/L
CHLORIDE	GW-03		47.6000	1.0000	19890913	MG/L
CHLORIDE	GW-03		49.5000	1.0000	19891016	MG/L
CHLORIDE	GW-04		882.	1.	19890914	MG/L
CHLORIDE	GW-04		679.	1.	19891013	MG/L
CHLORIDE	GW-05		386.	1.	19890914	MG/L
CHLORIDE	GW-05		390.	1.	19891013	MG/L
CHLORIDE	GW-06		33.8000	1.0000	19890914	MG/L
CHLORIDE	GW-06		87.5000	1.0000	19891013	MG/L
CHLORIDE	GW-08		40.0000	1.0000	19871016	MG/L
CHLORIDE	GW-08		36.0000	1.0000	19880129	MG/L
Benzene	GW-18	ND	6.0000	6.0000	19900724	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19910321	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19910626	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19910912	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19911204	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19920318	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19920603	ug/l
Benzene	GW-18		7.3000	6.0000	19920917	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19921202	ug/l
Benzene	GW-18	ND	6.0000	6.0000	19930324	ug/l