

State Water Resources Control Board (SWRCB)**Letter No. 015****Subject:** 8260FA, GC/MS Analysis of Minimal Fuel Oxygenates List**Date:** April 26 2002**Overview**

Within the LUST Cleanup program, many soil and water samples are analyzed for VOCs (halogenated and aromatic) and oxygenates by GC/MS (USEPA Method 8260B). As required by AB2886, electronic EDF data for these analyses are reported to the SWRCB GeoTracker system. In some specific cases, samples are analyzed only for oxygenate compounds. USEPA Method 8260B is recommended for analysis of Tert-butyl Alcohol.

For data comparability purposes the SWRCB recommends the following minimal analyte list, spiking compounds, surrogate compounds and reporting limits for this method. This minimal analyte list includes only oxygenate compounds. The SWRCB does not recommend routine monitoring of monitoring ground water wells focus exclusively on oxygenates.

Special Conditions:

This applies to all sample matrices.

Areas of Impact:

Field(s): *ANMCODE*, *PARLABEL*

Entry: *ANMCODE* = "8260FA" (Volatile Organic Compounds by GC/MS Fuel Oxygenates)

PARLABEL = various; refer to list below

Policy:**a) Quality Control Requirements**

Preparation/analytical batch should include:

- one laboratory method blank
- one matrix spike
- one matrix spike duplicate or one matrix duplicate if target compounds are present
- one blank spike

Control limits for the blank spike/blank spike duplicates are 70% - 130% per SW-846.

b) Analytes

“8260FA” Spiking Compounds¹

PARLABEL	Description
Halogenated Compounds	
DCA12	1,2-Dichloroethane
ETHANOL	Ethanol (EtOH)
TBA	tert-Butyl alcohol (TBA)
Oxygenate Compounds	
MTBE	Methyl-tert-butyl ether (MTBE)

¹ From Region 4

“8260FA” Analytes and Detection Limits

PARLABEL	Description	Order	Surr.	Water (ug/L)			Soil (ug/kg)	
				MDL	MRL	MCL	MDL	MRL
MTBE	Methyl-tert-butyl ether (MTBE)	1			2			5
ETBE	Ethyl tert-butyl ether (ETBE)	2			2			5
TAME	tert-Amyl methyl ether (TAME)	3			2			5
DIPE	Di-isopropyl ether (DIPE)	4			2			5
TBA	tert-Butyl alcohol (TBA)	5			10			20
ETHANOL	Ethanol (EtOH)	6			1000			1000
DBFM	Dibromofluoromethane ¹		4					
DCA12D4	1,2-Dichloroethane-d4 ¹		4					
BR4FBZ	4-Bromofluorobenzene ¹		4					
BZMED8	Toluene-d8 ¹		4					

MDL – Method Detection Limit

MRL – Method Reporting Limit (from Region 4)

MCL – Maximum Contamination Limit (from DHS California Drinking Water Quality Database 01/08/2002)

¹ SW-846 recommended surrogate