

Table 4-1
Chemicals of Concern for Different Product Releases and Commonly Used Analytical Methods

Chemical	Gasoline	Diesel/	Kerosene	Heavy Fuel Oils	Waste/ Used Oil	Analytical Methods	
		Light Fuel Oils	Jet Fuel			Groundwater	Soil
Benzene	X	NC	NC	NC	X	SW-846 8260B	SW-846 8260B
Toluene	X	NC	NC	NC	X	SW-846 8260B	SW-846 8260B
Ethylbenzene	X	NC	NC	NC	X	SW-846 8260B	SW-846 8260B
Xylenes (total)	X	NC	NC	NC	X	SW-846 8260B	SW-846 8260B
Ethylene dibromide (EDB)	X**	NC	NC	NC	NC	SW-846 8260B or 8011 ¹	SW-846 8260B
Ethylene dichloride (EDC (1,2-DCA))	X**	NC	NC	NC	NC	SW-846 8260B	SW-846 8260B
Methyl-tert-butyl-ether (MTBE)	X	NC	NC	NC	X	SW-846 8260B	SW-846 8260B
Tertiary butyl alcohol (TBA)	X	X	NC	NC	X	SW-846 8260B	SW-846 8260B
Ethanol	X	X	NC	NC	NC	SW-846 8015B	SW-846 8015B
Acenaphthene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Anthracene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Benzo(a)anthracene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Benzo(a)pyrene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Benzo(b)fluoranthene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Benzo(g,h,i)perylene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Benzo(k)fluoranthene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Chrysene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Fluoranthene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Fluorene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Naphthalene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Phenanthrene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
Pyrene	NC	X	X	X	X	SW-846 8270C	SW-846 8270C
TPH GRO							8015M
>C6-C8 Aliphatics	X	NC	X	NC	X	*	*
>C8-C10 Aliphatics	X	X	X	NC	X	*	*
>C8-C10 Aromatics	X	X	X	NC	X	*	*

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		Light Fuel Oils	Jet Fuel			Groundwater	Soil
TPH DRO						8015M	
>C10-C12 Aliphatics	X	X	X	NC	X	*	*
>C12-C16 Aliphatics	NC	X	X	NC	X	*	*
>C16-C21 Aliphatics	NC	X	NC	X	X	*	*
>C10-C12 Aromatics	X	X	X	NC	X	*	*
>C12-C16 Aromatics	X	X	X	NC	X	*	*
>C16-C21 Aromatics	NC	X	NC	NC	X	*	*
TPH ORO						8015M	
>C21-C35 Aliphatics	NC	X	NC	X	X	*	*
>C21-C35 Aromatics	NC	X	NC	X	X	*	*

Notes:

X: Chemical of concern to be analyzed

NC: Not a chemical of concern

¹ Groundwater samples may be analyzed by SW-846 8011 to achieve a lower limit for EDB.

*: Contact laboratory for an appropriate GC/FID method. Available methods include the Massachusetts Method and the TPH Criteria Working Group Method. Fractionation is recommended only for Tier 2B evaluation.

**: Chemical of concern for leaded gasoline.