

Parameter	Matrix	Prep Method	Analytical Method	Holding Time ⁵	Minimum Volume	Sampling		
						Container	Preservative ⁷	
TPH/Diesel ³	Water	EPA 3520C	EPA 8015B	14/ 40 ⁶	500 mL	1L G	None	
	Soil	CA LUFT ⁴	EPA 8015B	14/ 40 ⁶	50 g			
TPH/Gasoline ²	Water	EPA 3550C	EPA 8015B	14/ 40 ⁶	50 g	2 x 40mL VOA	HCL ⁸	
		EPA 5030B	EPA 8015B	14 days	40 mL			
	EPA 5030B	EPA 8260B-m	14 days	40 mL	2 x 40mL VOA			
	Soil	EPA 5030B	EPA 8015B	14 days	5 g			
Alcohols (Methanol, Ethanol) BTXE ¹	Water	EPA 5035	EPA 8015B	7 days	5 g	'Encore' or similar	frozen	
		Direct Inject	EPA 8015B	14 days	40 mL			2x40mL VOA
		EPA 5030B	EPA 8021B	14 days	40 mL			2 x 40mL VOA
Carbon Dioxide (dissolved) Creosote, coal tar	Soil	EPA 5030B ⁹	EPA 8021B	14 days	5 g	3x40mL VOA	None	
	Water	METHOD ⁴	RSK-175	14 days	40 mL			
1,4-Dioxane	Water	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None ⁸	
	Soil	EPA 3550C	EPA 8270C	14/ 40 ⁶	30 g			
	Water	EPA 3520C	EPA 8270-SIM	7/ 40 ⁶	1 L			
Dioxins & Furans	Soil	EPA 3550C	EPA 8270-SIM	14/ 40 ⁶	30 g	1L G	None ⁸	
	Water	METHOD ⁴	EPA 8280A	30/ 45 ⁶	1 L			
Dioxins & Furans (Low Concentration)	Soil	METHOD ⁴	EPA 8280A	30/ 45 ⁶	10 g	1L G	None ⁸	
	Water	METHOD ⁴	EPA 8290	30/ 45 ⁶	1 L			
Dissolved Gasses (except CO ₂)	Soil	METHOD ⁴	EPA 8290	30/ 45 ⁶	10 g	3x40mL VOA	HCL	
Dissolved Gasses (CO ₂)	Water	METHOD ⁴	RSK-175	14 days	40 mL			
Explosives (Nitroaromatics & Nitramines)	Water	METHOD ⁴	RSK-175	14 days	40 mL	3x40mL VOA	None	
	Water	EPA 3535	EPA 8330	7/ 40 ⁶	1 L			1L G
Gasoline Oxygenates	Soil	METHOD ⁴	EPA 8330	14/ 40 ⁶	10 g	2x40mL VOA	HCL ⁸	
	Water	EPA 5030B	EPA 8260B	14 days	40 mL			
Halogenated VOCs (old 8010 list)	Soil	EPA 5030B ⁹	EPA 8260B	14 days	5 g	2x40mL VOA	HCL ⁸	
	Water	EPA 5030B	EPA 8260B	14 days	40 mL			
MTBE (Methyl tert-Butyl Ether)	Water	EPA 5030B ⁹	EPA 8260B	14 days	40 mL	2x40mL VOA	HCL ⁸	
		EPA 5030B	EPA 8260B	14 days	40 mL			
	Soil	EPA 5030B ⁹	EPA 8021B	14 days	5 g	2x40mL VOA	HCL ⁸	
		EPA 5030B ⁹	EPA 8260B	14 days	5 g			
Nitroaromatics & Nitramines (Explosives)	Water	EPA 5030B ⁹	EPA 8260B	14 days	5 g	1L G	None ⁸	
	Soil	EPA 3535	EPA 8330	7/ 40 ⁶	1 L			
Organochlorine Herbicides	Water	METHOD ⁴	EPA 8330	14/ 40 ⁶	10 g	1L G	None	
		METHOD ⁴	EPA 8151A	7/ 40 ⁶	1 L			
Organochlorine Pesticides	TCLP Leachate	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None	
		Soil	METHOD ⁴	EPA 8151A	14/ 40 ⁶			30 g
	Water	EPA 3520C	EPA 8081A	7/ 40 ⁶	1 L	1L G	None	
		EPA 608	EPA 608	7/ 40 ⁶	1 L			1L G
PCBs (Polychlorinated Biphenyl)	TCLP Leachate	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None	
		Soil	EPA 3550C	EPA 8081A	14/ 40 ⁶			30 g
	Water	EPA 3545	EPA 8081A	14/ 40 ⁶	15 g	1L G	None	
		EPA 3520C	EPA 8082	7/ 40 ⁶	1 L			
TCLP Leachate	EPA 608	EPA 608	7/ 40 ⁶	1 L	1L G	None		
TCLP Leachate	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None		

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PCB Congeners	Soil	EPA 3550C	EPA 8082	14/ 40 ⁶	30 g		
		EPA 3545	EPA 8082	14/ 40 ⁶	15 g		
	Water	EPA 3520C	EPA 8082	7/ 40 ⁶	1 L	1L G	None
Pentachlorophenol	Soil	EPA 3550C	EPA 8082	14/ 40 ⁶	30 g		
		EPA 3545	EPA 8082	14/ 40 ⁶	15 g		
	Water	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None ⁸
Phenols (including cresols)	Soil	EPA 3550C	EPA 8270C	14/ 40 ⁶	30 g		
	Water	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None ⁸
Phthalates	Soil	EPA 3550C	EPA 8270C	14/ 40 ⁶	30 g		
	Water	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None ⁸
Polynuclear Aromatic Hydrocarbons	Soil	EPA 3550C	EPA 8270C	14/ 40 ⁶	30 g		
	Water	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None ⁸
		EPA 3520C	EPA 8270-SIM	7/ 40 ⁶	1 L	1L G	None ⁸
Semivolatile Organics	Soil	EPA 3520C	EPA 8310	7/ 40 ⁶	1 L	1L G	None ⁸
		EPA 3550C	EPA 8270C	14/ 40 ⁶	30 g		
		EPA 3550C	EPA 8270-SIM	14/ 40 ⁶	30 g		
	Water	EPA 3520C	EPA 8310	14/ 40 ⁶	30 g		
		EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None ⁸
		EPA 625	EPA 625	7/ 40 ⁶	1 L	1L G	None ⁸
TCLP Leachate	Soil	EPA 3520C	EPA 8270C	7/ 40 ⁶	1 L	1L G	None
	Soil	EPA 3550C	EPA 8270C	14/ 40 ⁶	30 g		
TCLP Extraction for Semivolatiles	Soil	EPA 1311	various	14 days	100 g ¹⁰		
TCLP-ZHE Extraction for Volatiles	Soil	EPA 1311	various	14 days	25 g		
Volatile Organics	Water	EPA 5030B	EPA 8260B	14 days	40 mL	2x40mL VOA	HCL ⁸
		EPA 624	EPA 624	14 days	40 mL	2x40mL VOA	HCL ⁸
TCLP Leachate	Water	EPA 5030B	EPA 8260B	14 days	40 mL		None
	Soil	EPA 5030B	EPA 8260B	14 days	5 g		
	Soil	EPA 5035	EPA 8260B	7 days	5 g	'Encore' or similar	Frozen

NOTES:

- 1.) Benzene, toluene, ethylbenzene, and xylenes: MTBE (methyl tert-butyl ether) may be added upon request.
- 2.) Total Petroleum Hydrocarbons as Gasoline: JP-4, Mineral spirits, or Stoddard solvent may be added upon request. Reporting limits may be higher for fuels other than gasoline.
- 3.) Total Petroleum Hydrocarbons as Diesel: motor oil, commercial jet fuel, JP-5, hydraulic oil, transformer oil, or Bunker C may be added upon request. Reporting limits may be higher for fuels other than diesel.
- 4.) CA LUFT: California Department of Health Services Leaking Underground Fuel Tank Manual, October 1989. "Method" indicates that the prep method is an integral part of the analytical method.
- 5.) Holding times specified in 40CFR 136.3 Table 2 (Clean Water Act/ NPDES) and SW-846 Table 2-36 Revision 3, December 1996.

LEGEND:

VOA: amber VOA vial

G: amber glass

P: Polyethylene

- 6.) X/Y: X days from sample collection to extraction, then Y days from extraction to analysis.
- 7.) Samples should be kept at 4⁰C from time of collection until analysis. Preserved containers can be supplied by C&T. HCL (hydrochloric acid) to pH < 2, H₂SO₄ (sulfuric acid) to pH < 2, NaOH (sodium hydroxide) to pH > 12
- 8.) Free chlorine should be neutralized with 0.008% Na₂S₂O₃.
- 9.) Prep method EPA 5035, using Encore (or equivalent) sampling devices, may be used in place of EPA 5030. Contact lab for details.
- 10.) 100g minimum for TCLP Extraction. 50g required for each analysis.