



Nevada Analytical Services

WATER AND SOIL TESTING LABORATORY

SAMPLE PRESERVATIVES AND HOLD TIMES

INORGANICS

WASTE WATER / SURFACE WATER / SOILD / OILS / AQUEOUS

Method	Parameter	Amount	Container	Preservative	Hold Time
2320, 310	Alkalinity	200 ml	1-500ml P	2-6 °C	14 days
350, 351, 353, 365	Ammonia, TKN, total Phosphorus	500 ml AQ 50 g solid	1-500 ml P	2-6 °C, H ₂ SO ₄ , pH<2 2-6 °C	28 days
405.1	BOD	1000 ml	1-1 L P	2-6 °C	24 hours
410.	COD	50 ml	1-500 ml P	2-6 °C, H ₂ SO ₄ , pH<2	28 days
300.0, 325, 375, 340	Chloride, Sulfate, Bromide, Fluoride	50 ml AQ 20 g solid	1-500ml P 125 mL G	2-6 °C	28 days
SM 9221	Coliform, fecal	100 ml	125ml P-sterile	2-6 °C, Na ₂ S ₂ O ₃	6 hours
110.2	Color	50 ml	1-500ml P	2-6 °C	48 hours
120.1	Conductivity	500 ml	1-500ml P	2-6 °C	28 days
335,4500	Cyanide, amenable	500mL AQ 20g	1- 500 ml P 125 ml G	2-6 °C, NaOH pH>12, 2-6 °C	14 days
335,4500 9010	Cyanide, total	500mL, 20g	1- 500ml P 125 ml G	2-6 °C, NaOH pH>12, 2-6 °C	14 days
1010	Flashpoint	100mL, 50g	1 L G 125 ml G	2-6 °C	7 days
425.1	MBAS (surfactants)	1000 mL	1-1L P	2-6 °C	48 hours
300.0, 4500	Nitrate, nitrite	100mL AQ 20g solid	1-250 ml P 125 ml G	2-6 °C	48 hours
353, 4500	Nitrate + Nitrite	100 mL	1- 250ml P	2-6 °C, H ₂ SO ₄ , pH<2	28 days
140.1	Odor	500mL	1-500ml G	2-6 °C	24 hours
413.1	Oil & grease	1000 mL	1-1 L G	2-6 °C, H ₂ SO ₄ , pH<2	28 days
150.1	pH (water)	50 mL	1-250ml P	None	Immediately
9045	pH (soil)	50 mL	P, G	None	Immediately
420.1 9065	Phenol	500mL AQ 100g solid	1 L G 125 ml G	2-6 °C, H ₂ SO ₄ , pH<2 2-6 °C	28 days
365	Phosphorus, ortho.	100mL AQ 50g solid	1-500ml P 125 ml G	Filter on site, 2-6 °C 2-6 °C	48 hours
2540C	Solids, dissolved	100ml	1-500mL P	2-6 °C	7 days
160.5	Solids, settleable	1000 mL	1 L P	2-6 °C	48 hours
160.2	Solids, suspended	1000 mL	1 L P	2-6 °C	7 days
160.3	Solids, total	500mL, 50g	1 L P	2-6 °C	7 days
160.4	Solids, volatile	500 mL	1 L P	2-6 °C	7 days
376.	Sulfide	500 mL AQ 50g solid	1 L P 125 ml G	2-6 °C NaOH pH>9, ZnAC 2-6 °C	7 days
415.1 9060	TOC	100mL AQ 50g Solid	250 ml G amb 125 ml G jar	2-6 °C, H ₂ SO ₄ , pH<2 2-6 °C	28 days
9020	TOX	500mL AQ 50g Solid	1 L G amb 125 mL G jar	2-6 °C, H ₂ SO ₄ , no head space 2-6 °C	28 days
180.1	Turbidity	100 mL	1-500ml P	2-6 °C	48 hours

P=Plastic, G=Glass AQ = Aqueous

Na₂S₂O₃ = Sodium thiosulfate; H₂SO₄ = Sulfuric acid; HCL = Hydrochloric Acid; MCA = Monochloroacetic acid

Notes: For holding time 7,30 (or X,Y) means 7 (X) days for extraction, plus 30 (Y) additional days for analysis



SAMPLE PRESERVATIVES AND HOLD TIMES

METALS

Method	Parameter	Amount	Container	Preservative	Hold Time
200, 6010, 6020, 7000	All metals except Cr(VI) and Hg	200 ml 20 g Solid	1-500ml P 250ml G	HNO ₃ , pH<2	6 months
245, 7470, 7471	Mercury	200 ml, 20 g Solid	1-500ml P 250ml G	HNO ₃ , pH<2	28 days
218, 3500 7196, 7197	Chromium hex.	200 ml 20 g Solid	1 L P 250mL G	2-6 °C	24 hours

DRINKING WATER

Method	Parameter	Amount	Container	Preservative	Hold Time
310, 305, SM2320	Alkalinity, Acidity	100 ml	1-500ml P	2-6 °C	14 days
TEM	Asbestos	1000ml	1-1L P	2-6 °C	48 hours
300.0, 375, 325	Chloride, Sulfate, Bromide	500 ml	1-500ml P	2-6 °C	28 days
300.0, 353, SM4500	Nitrate, nitrite	100 ml	1-250 ml P	2-6 °C	48 hours
353, SM4500	Nitrate + Nitrite	100 ml	1-500 ml P	2-6 °C, H ₂ SO ₄ , pH <2	28 days
335, SM4500	Cyanide	500 ml	1-500 ml P	2-6 °C, ascorbic acid (if chlorinated), NaOH, pH>12	14 days
300.0, 340, SM4500	Fluoride	300 ml	1-250ml P	None	28 days
200.8	Lead and Copper	1000 ml	1-1L P	None, preserved at laboratory with HNO ₃ , pH<2	6 months
SM 2330B	Corrosivity	500 ml	1-250ml P	None	None
SM 9223	Total Coliform	100 ml	100ml P (sterile)	2-6 °C, Na ₂ S ₂ O ₃	30 hours
524.2	THMs	120 ml	2-40ml VOA vials	2-6 °C, ascorbic acid, HCl in field	14 days
504.1	EDB/DBCP	80 ml	2-40ml VOA vials	2-6 °C, Na ₂ S ₂ O ₃	14 days
508	Pesticides	1000 ml	11L amber G	2-6 °C, Na ₂ S ₂ O ₃	7, 14 days
515.1	Herbicides	1000 ml	1-1L amber G	2-6 °C, Na ₂ S ₂ O ₃	14, 28 days
524.2	Volatiles	120 ml	2-40mL VOA vials	2-6 °C, ascorbic acid, HCl in field	14 days
525.2	Semi-volatiles	2000 ml	2-1L amber G	2-6 °C, Sodium sulfite, HCl in field	14 , 30 days
531.1	Carbamates	40 ml	1-40ml VOA vial	2-6 °C, Na ₂ S ₂ O ₃ , MCA in field	28 days
547	Glyphosate	125 ml	1-125ml amber G	2-6 °C, Na ₂ S ₂ O ₃	14 days
548.1	Endothall	250 ml	2-250ml amber G	2-6 °C, Na ₂ S ₂ O ₃	7, 14 days
549.1	Diquat/Paraquat	1000 ml	1-1L amber P	2-6 °C, Na ₂ S ₂ O ₃	7, 21 days
550	PAHs (PNAs)	2000 ml	2-1L amber G	2-6 °C, Na ₂ S ₂ O ₃ , HCl	7 days
551	D/DBP	80 ml	2-40mL G vials	2-6 °C, Ammonium chloride, pH 4.5-5	14 days
552.1	Haloacetic Acids	150 ml	1-125ml amber G	2-6 °C, Ammonium chloride	28 days

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SAMPLE PRESERVATIVES AND HOLD TIMES

ORGANICS

GROUND WATER / HAZARDOUS WASTE

Method	Parameter	Amount	Container	Preservative	Hold Time
8015A W	Non-halogenated Volatiles	80mL	2-40mL G vials	2-6°C, 1:1 HCl	14 days
8015A S	Non-halogenated Volatiles	100g	1-4oz jar	2-6°C	14 days
8041 W	Phenols	1000mL	1-1L G amber	2-6°C	7,40 days
8041 S	Phenols	100g	1-8 oz G jar	2-6°C	14 days
8061A W	Phthalate esters	1000mL	1-1L G amber	2-6°C	7,40 days
8061A S	Phthalate esters	100g	1-8oz G jar	2-6°C	14 days
608,8081W	Pesticides	1000 mL	2-1L G amber	2-6°C, Na ₂ S ₂ O ₃ , if chlorinated, pH: 5-9	7,40 days
8081A (oil)	Pesticides	80mL	2-40mL G vials	2-6°C	7,40 days
8081A S	Pesticides	100g	1-8oz G jar	2-6°C	14 days
8082 W	PCB's	1000 mL	2-1L G amber	2-6°C, pH: 5-9	7,40 days
8082 (oil)	PCB's	80mL	2-40mL G vials	2-6°C	7,40 days
8082 S	PCB's	100g	1-8oz G jar	2-6°C	14 days
8091 W	Nitroaromatics & Ketones	1000mL	1-1L G amber	2-6°C	7,40 days
8100 S	PNA's	100g	1-8oz G jar	2-6°C	7,40 days
8100 S	PNA's	1000mL	1-1L G amber	2-6°C	14 days
614,8141W	Organophosphorus pesticides	1000mL	2-1L G amber	2-6°C	7,40 days
8141A S	Organophosphorus pesticides	100g	1-8oz G amber	2-6°C	14,40 days
615, 8151A W	Chlorinated herbicides	1000 mL	2-1L G amber	2-6°C	7,30 days
8151A S	Chlorinated herbicides	100g	1-8oz G jar	2-6°C	14 days
624, 8260B W	Volatile Organics (GC/MS)	80mL	2-40mL G vials	2-6°C, Na ₂ S ₂ O ₃ , if chlorinated, 1:1 HCl, pH <2	14 days
8260B S	Volatile Organics (GC/MS)	100g	1-8oz G jar	2-6°C	14 days
625, 8270C W	Semi-volatiles	2000mL	2-1L G amber	2-6°C, Na ₂ S ₂ O ₃ if chlorinated	7,40 days
8270C S	Semi-volatiles	100g	1-8oz G jar	2-6°C	14,40 days
8015B W	TPH in water	1000mL	1-1L G amber	2-6°C, 1:1 H ₂ SO ₄	14 days
8015B S	TPH in soil	100g	1-8oz G jar	2-6°C	14 days

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SAMPLE PRESERVATIVES AND HOLD TIMES

RADIONUCLIDES

Method	Parameter	Amount	Container	Preservative	Hold Time
900	Radiological, all except Rn222 and Tritium	1 Gallon 50 g solid	2-1/2 Gallon P 250 mL G jar	None None	6 months 6 months
RN-222	Radon 222	80 ml	2x40 mL amber G	None	72 hours
906.0	Tritium (H3)	250 ml AQ 300 g (Sample size varies with solid moisture content)	1-250 mL G 2 - 250 mL G jar	None None	6 months 6 months

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