

INDUSTRIAL HYGIENE & ENVIRONMENTAL GUIDE TO METHODS, SAMPLE PRESERVATION, AND COLLECTION



Introduction

ALS Salt Lake City is pleased to offer our pocket guide to assist you in sample collection. IH analytes that ALS SLC screens for are listed in this guide in Section one. ALS developed methods are designated by “ALS”, OSHA methods are underlined, NIOSH methods begin with an ‘N’ and finally, EPA methods open with “EPA”. Section two contains the glossary of abbreviations used in Section one. Section three lists environmental analysis, preservation, container requirements and hold times. Should you have any questions regarding this guide, the analyses ALS SLC performs, sample preparation, etc. please contact one of our Project Managers at 1-800-356-9135.

Methodologies are subject to updates. Those performing sample collection should ensure the methodology is correct for their application.

To Order Call: 1-800-356-9135

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Section One—IH Analyte List with associated methods

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Acetaldehyde	N2538	0.01–0.05	1L @ 100ppm; 12L	SKC 226-27	
Acetic acid	N1603	0.1–1.0	20L @ 10ppm; 300L	SKC 226-01	
Acetoin	<u>1013</u>	0.05-0.2	9L GC FID 3 L 15 min	SKC 226-183	
Acetoin	N2558	0.01–0.2	1L; 10L	SKC 226-121	R (5 °C), L
Acetoin	<u>1012</u>	0.05	9L GC-ECD	SKC 226-183	
Acetone	<u>69</u>	0.05	3L	SKC 226-121	
Acetonitrile	N1606	0.01–0.2	1L @ 40ppm; 25L	SKC 226-09	C, P
Acid mist	<u>ID 165SG</u>	0.2	96L	SKC 226-10-03	
Acids (Inorganic)	N7903	0.2-0.5	3–100 0.3 for HF	SKC 226-10-03	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Acrylic acid	<u>28</u>	0.1	24L	SKC 226-30-08 (2)	
Acrylonitrile	N1604	0.01–0.2	3.5L @2ppm; 20L	SKC 226-01	
Acrylonitrile	<u>37</u>	0.2	20L	SKC 226-01	RTM
Alcohols I	N1400	0.01–0.2 (≤0.05 for ethyl alcohol)	RTM	SKC 226-01	C
Alcohols II	N1401	0.01–0.2	n-propyl alcohol 1– 10L; others 2–10L	SKC 226-01	
Alcohols III	N1402	0.01–0.2	1L; 10L	SKC 226-01	
Alcohols IV	N1403	0.01–0.05	RTM	SKC 226-01	
Aldehyde Screen	TO-11A	0.03–1.5	1 to 5 L HPLC-UV	DNPH coated Silica Gel SKC 226-119	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Aliphatic Aldehydes	N2018	0.1–1.5	1L @ 0.68–1.3mg/m ³ ; 15L @ 7.0–15.0mg/m ³	SKC 226-119 DNPH	R
Aliphatic Amines	ALS VAA-1	0.2	10L HPLC NBD Chloride	SKC 226-96	
Aliphatic Amines	ALS VAA-2	0.1	20L HPLC MTC	SKC 226-30-18	
Aliphatic Amines	ALS ALA-1	0.01–1.0	3L @ OSHA standards; 30L	SKC 226-98	
Aliphatic Amines	ALS ALA-2	0.1	10L HPLC-UV NITC	SKC 226-30-18	
Alkaline dust	N7401	1.0–4.0	70L @ 2mg/m ³ ; 1000L	PTFE (1µm)	
Alkyl Mercaptans	N2510 Mod	0.1L	10L GC-MS	SKC 226-35-03	
Alkyl chloride	N1000	0.01–1.0	16L @ 1ppm; 100L	SKC 226-01	
Allyl glycidyl ether	N2545	0.01–0.2	1.5L @ 5ppm; 8L	SKC 226-35-03	
Aluminum compounds	N7013	1.0–3.0	10L @ 5mg/m ³ ; 400L	MCE filter (.8µm)	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Aminoethanol compounds (tertiary)	ALS EA-2	0.01–0.2	4L; 24L GC-MS MTC	SKC 226-94	
Aminoethanol compounds	ALS EA-1	0.1	20L HPLC-UV	SKC 226-30-8 NITC	
Ammonia	N6015	0.1–0.2	0.1L @ 50ppm; 96L	SKC 226-10-06	
Aniline	<u>PV 2079</u>	0.2	30L GC-MS HFB	SKC 226-98	BS
Anisidine	N2514	0.5–1.0	24L; 320L GC-MS HFB	SKC 226-30-05	
Aromatic Amines	ALS ARA-2	1	100	SKC 225-9004	
Aromatic hydrocarbons	N1501	RTM	RTM	SKC 226-01	
Arsine	N6001	0.01–0.2	0.1L @ 0.05ppm; 10L	SKC 226-01	
Asbestos (bulk)	N9002	---	1 - 10 grams	bulk material	P

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Asbestos (fibers)	N7400	0.5–16	400L @ 0.1 fiber/cc Adj. to 100–1300 fiber/ mm ²	SKC 225-321A	P
Aspartame	N5031	1.0–3.0	70L @ 0.1 mg/m ³ ; 1200L	PTFE filter (1µm)	
Benzalkonium Choride	ALS QA- 1	1L	100L GC-MS	SKC 225-709 SKC 225-17-01	
Benzene	<u>12</u>	0.2	10L	SKC 226-01	RTM
Benzene Solubles	N5042	1.0–4.0	28L @ 5mg/m ³ ; 400L @ 5mg/m ³	PTFE (2µm), preweighted	
Benzidine & 3,3- Dichlorobenzidine	<u>65 Mod</u>	1L	100L GC-MS SIM	SKC 225-9004	D (benzidine)
Benzoyl peroxide	N5009	1.0–3.0	40L @ 5mg/m ³ ; 400L	MCE filter (.8µm)	R

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Bisphenol A & Diglycidyl Ether of	P&CAM 333	1L	10-480 HPLC	SKC 225-709	
Bromine	N6011	0.3–1.0	8L @ 0.1ppm; 360L	SKC 225-9006	
1- and 2-Bromopropane	N1025	0.01–0.2	0.1L; 12L	SKC 226-01 or 226-121	
Bromotrifluoromethane	N1017	0.01–0.05	0.1L @ 1000ppm; 1L	SKC 226-09	S, D
Bromoxynil	N5010	1.0–3.0	2L @ 0.1mg/m ³ ; 400L	PTFE filter (2µm)	R, L
1,3-Butadiene	N1024	0.01–0.5	5L @ 100ppm; 25L	SKC 226-37	R (<-4° C), S
1,3-Butadiene	<u>56</u>	0.05	3L	SKC 226-73	
2-Butanone	<u>84</u>	0.05	3L	SKC 226-121	BS
2-Butoxyethanol	<u>83</u>	0.1	48L	SKC 226-01	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
2-Butoxyethanol	<u>83</u>	0.1	48L	SKC 226-01	
n-Butyl glycidyl ether	N1616	0.01–0.2	15L @ 25ppm; 30L	SKC 226-01	R @ lab
Carbamate Insecticides	N5601	0.1–1.0	Variable; 480L	SKC 226-58, OVS2	
Carbaryl (Sevin)	N5601	1.0	60L, better-480L	SKC 226-58	BS
Carbon black	N5000	1.0–2.0	30L @ 3.5mg/m ³ ; 570L	PVC (5µm), preweighted	
Carbon black	<u>ID 196</u>	2.0	480L to 960L	PVC (5µm), preweighted	
Carbon Disulfide in Air	IH-AN-N 1622	0.01–0.2	0.4L; 36L	SKC 226-01/226-44	R
Chloramine Compounds	N7607 Draft	0.5–1.0	60L; 480L	Silica gel/filter cassette	R (5 °C)

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Chlordane	<u>67</u>	1.0	480L	SKC 226-30-16	
Chlorinated Organonitrogen Pesticides	N5602	0.1	10L	SKC 226-58	
Chlorinated terphenyl	N5014	1.0–3.0	100L @ 10.0µg/m ³ ; 1500L	Glass fiber filter (1µm)	
Chlorine dioxide	<u>ID 202</u>	0.5	120L TWA; 7.5L STEL	Impinger	
Chloroacetaldehyde	<u>76</u>	0.5	7.5L	SKC 226-15-GWS	
Chloroaniline	ALS ARA-2	1L	100L	SKC 225-9004	
p-Chlorobenzotrifluoride	N1026	0.01–0.2	0.1L; 10L @ 25ppm	SKC 226-01	
Chloroform	<u>05</u>	0.2	10L	SKC 226-01	RTM
Chloromethyl methyl ether (CMME)	<u>10</u>	0.5	50L	Impinger	SV, SB

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
p-Chlorophenol	N2014	0.05–0.2	1.5L @ 1ppm; 40L	SKC 226-10	
Chloroprene	ALS ARA-2	0.1	72L	SKC 226-196	
Chlorpyrifos, Diazinon, Malathion	N5600 Mod	0.1 -1.0	60L min for Malathion; 480L for others	SKC 226-58	BS
Copper	N7029	1.0–3.0	50L @ 0.1mg/m ³ ; 1500L	MCE filter (.8µm)	
Cresols	N2546	0.01–0.1	1L @ 5ppm; 24L	SKC 226-95	
Crotonaldehyde	<u>81</u>	1	100L	SKC 225-9019	T(within 24hrs) or R (@ 0°F), L
Cyanides, Particulate and Gaseous	N7904	0.5–1.0	10L @ 0.5mg/m ³ (as CN); 180L @ 11mg/m ³ (as CN)	MCE filter (.8µm) / impinger	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Cyanuric acid	N5030	1.0–3.0	10L @ 0.1mg/m ³ ; 1000L	PVC (5µm), pre-weighted	
Cyclohexanone	<u>01</u>	0.2	10L @ 0.05ppm	SKC 226-110	RTM
1,3-Cyclopentadiene	N2523	0.01–0.05	1L @ 75ppm; 5L	Chromosorb 104 tube	
Cyclic Akyl Amines	<u>CAA-1</u>	0.1	10L	SKC 226-98	
Cypermethrin	N5605	0.1	10L	SKC 226-58	T, R
2,4-D & 2,4,5-T	N5605	0.1	10L	SKC 226-58	
2,4-DNT, 2,6-DNT, 2,4,6-TNT	<u>44</u>	1.0	60L	SKC 226-56	BS
Decabromodiphenyl Oxide	N2559	2.0	48L; 960L	Quartz fiber filter	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Demeton	N5605	0.2–1.0	30L; 500L	SKC 226-58	F7
Desflurane	<u>106</u>	0.05	3L	SKC 226-81A	BS,T or R
Diacetyl	N2557	0.01–0.2	1L; 10L	SKC 226-121	R (5 °C), L
Diamines (Aromatic)	ALS ADA-1	0.1-1L	8L-100L HPLC	SKC-9004	
Diamines (Aromatic)	ALS ADA-2	0.1-1L	8L-100L GC-MS HFB	SKC-9004	
Dibutyl phosphate	N5017	1.0–3.0	50L @ 1ppm; 250L	PTFE filter (1µm)	
Dibutyl phthalate	N5020	1.0–3.0	10L @ 5mg/m ³ ; 200L	MCE filter (.8µm)	
1,1-Dichloro-1-nitroethane	N1601	0.01–1.0	1.5L @ 10ppm; 15L	SKC 226-81A	
Dichlorodifluoromethane	N1018	0.01–0.05	1L @ 1000ppm; 4L	SKC 226-01	R
Dichloroethyl ether	N1004	0.01–1.0	2L @ 15ppm; 15L	SKC 226-01	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Dichlorofluoro-methane	N2516	0.01–0.05	0.25L @ 1000ppm; 3L	SKC 226-09 (2)/226-25	S
Diethylamine	<u>41</u>	0.2	10L	SKC 226-96	BS
Difluorodibromo-methane	N1012	0.01–0.2	2.5L; 10L	SKC 226-01 (2)	
Diisocyanates	<u>42</u>	1.0	15L	SKC 225-9002	BS, SB
Dimethyl acetamide	N2004	0.01–1.0	15L @ 30mg/m ³ ; 80L	SKC 226-10	
Dimethyl Sulfate	N2524	0.01–0.2	0.25L @ 1ppm; 12L	SKC 226-114	
Dimethylamine	<u>34</u>	0.2	10L	SKC 226-96	BS

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
2,5-Dimethyl pyrole	ALS APY-1	0.1	10L GC-MS	SKC 226-153	
Dioxane	N1602	0.01–0.2	0.5L @ 100ppm; 15L	SKC 226-01	
Diphenyl (Biphenyl)	N2530	0.01–0.5	15L @ 0.2ppm; 30L	SKC 226-35-01	
Diphenylamine	<u>78</u>	1.0	100L	GFF SKC 225-9004	
Divinyl Benzene, Styrene	<u>89</u>	0.05	12L	SKC 226-73	BS, T or R
EGDN & Nitroglycerin	<u>43</u>	1.0	15L	SKC 226-35-03	BS
Elemental Carbon	N5040	2.0–4.0	142L @ 40µg/m ³ ; 19m ³ (for filter load of ~90µg/cm ²)	Quartz fiber filter	
Elements	N7300	1.0–4.0	RTM	MCE filter (.8µm)	
Elements by ICP	N7303	1.0–4.0	RTM	MCE filter (.8µm)	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Endrin	N5602	0.1	10L	SKC 226-58	
Enflurane & Halothane	<u>29</u>	0.1	10L	SKC 226-01 (2)	BS
Epichlorohydrin	N1010	0.01–0.2	2L @ 5ppm; 30L	SKC 226-01	
EPN	N5600 Mod	0.1	10L	SKC 226-58	V
Esters I	N1450	0.01–0.2	1L @ PEL; 10L	SKC 226-01	R
Estrogenic Com- pounds	N5044	1.0	150L	PTFE filter	
Ethanolamine	<u>PV 2111</u>	0.1	10L	SKC 226-30-18	BS
2-Methoxyethanol, 2- Ethoxyethanol	<u>79</u>	0.1 for TWA; 1.0 for STEL	48L for TWA; 15L for STEL	SKC 226-01	BS

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Ethyl acetate	N1457	0.01–0.2	0.1L @ 1400mg/m ³ ; 10L	SKC 226-01	R
Ethyl alcohol	<u>100</u>	0.05	12L	SKC 226-82 (2)	
Ethyl bromide	N1011	0.01–0.2	0.5L @ 200ppm; 4L	SKC 226-01	
Ethyl chloride	N2519	0.02–0.05	0.3L; 3L	SKC 226-25	S
Ethyl ether	N1610	0.01–0.2	0.25L @ 400ppm; 3L	SKC 226-01	
Ethyl formate	N1452	0.01–0.2	0.3L @ 100ppm; 10L	SKC 226-01	
Ethylamine	<u>36</u>	0.2	10L	SKC 226-96	BS
Ethanolamines	ALS EA4	0.1L	10L	SKC 226-94	
Ethylene chlorohydrin	N2513	0.01–0.2	2L @ 5ppm; 35L	SKC 226-81A	
Ethylene dibromide	N1008	0.02–0.2	0.1L @ 0.1ppm; 25L	SKC 226-01GWS	D, I
Ethylene dibromide	<u>02</u>	0.2	10L	SKC 226-01	RTM

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Ethylene dichloride	<u>03</u>	0.2	10L	SKC 226-01GWS	RTM
Ethylene oxide	N1614	0.05–0.15	1L @ 5ppm; 24L	SKC 226-178	
Ethylene oxide	<u>50</u>	0.1	24L	SKC 226-81A	
Ethylene thiourea	<u>95</u>	2.0	480L	Glass fiber filter (1 μ m)	
Ethylenediamine	N2540	0.01–0.1	1L @ 10ppm; 20L	SKC 226-30-18	
Ethylenediamine (EDA)	<u>60</u>	0.1	10L	SKC 226-30-18	BS
Fluorotrichloro- methane	N1006	0.01–0.05	0.3L; 7L	SKC 226-09	R
Formaldehyde	N2016	0.03–1.5	1L @ 0.25mg/m ³ ; 15L @ 2.5mg/m ³	SKC 226-119 DNPH	CE, B
Formaldehyde	N2541	0.01–0.1	1L @ 3ppm; 36L	SKC 226-118	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Formic acid	N2011	0.05–0.2	1L @ 5ppm; 24L	SKC 226-10-03/ Prefilter (PTFE)	
Furfural	<u>72</u>	0.1	20L	SKC 226-81A	
Furfuryl alcohol	N2505	0.01–0.05	3L @ 10ppm; 25L	SKC 226-115	
Glutaraldehyde	N2532	0.05–0.5	1L @ 0.2ppm; 30L	SKC 226-119	
Glutaraldehyde	<u>64</u>	1.0	15L	SKC 225-9003	F11
Glycidol	N1608	0.01–1.0	5L @ 150mg/m ³ ; 100L	SKC 226-01	R (@4 °C)
Glycol Ethers	N2554	0.1–0.2	3L; 25L (@ ↓ flow rates)	SKC 226-81A	R, P
Glycols	N5523	0.5–2.0	5L; 60L	SKC 226-57	R
Halogenated hydrocarbons	N1003	0.01–0.2	RTM	SKC 226-01	
Hexachlorobutadiene	N2543	0.05–0.2	1L; 100L @ 0.2L/ min	SKC 226-30-04	L

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Hexachlorocyclopentadiene	N2518	0.01–0.2	0.25L @ 0.01ppm; 90L	SKC 226-116 (2)	S,R (@25 ° C),L
Hexavalent Chromium	N7600	1.0–4.0	8L @ 0.025mg/m ³ ; 400L	PVC filter (5µm)	
Hexavalent Chromium	N7605	1.0–4.0	1L @ 0.05mg/m ³ ; 400L	PVC filter (5µm)	
Hexavalent Chromium	<u>ID 215</u>	2.0	960L	PVC filter (5µm)	RTM
Hydrazine	N3503	0.2–1.0	7L @ 1ppm; 100L	Impinger	
Hydrazine	<u>108</u>	1.0	240L	SKC 225-9012	T or R
Hydrocarbons	N1500	RTM	RTM	SKC 226-01	
Hydrogen Cyanide and Particulate Cyanide	N6010	0.05–0.2	2L @ 5ppm; 90L	SKC 226-28	
Hydrogen Peroxide	NON-57	1.0	15L	SKC 225-9030	
Hydrogen Sulfide	N6013	0.1–1.5	1.2L @ 10ppm; 40L	SKC 226-09/ prefilter (PTFE)	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Hydrogen Sulfide	<u>1008</u>	0.5 Ceiling and Peak; 0.05 TWA	7.5L Ceiling; 5L Peak; 12L TWA	SKC 226-177	T or R, BS
Hydroquinone	N5004	1.0–4.0	30L @ 2.0mg/m ³ ; 180L	MCE filter (.8µm)	F3
Illicit Drugs	N9111	—	100cm ² or 1ft ² (area) - F10	Cotton gauze / solvent	F9
Inorganic acids	N7903	0.2–0.5	3L; 100L	SKC 226-10-03	
Iodine	N6005	0.5–1.0	15L @ 0.05ppm; 225L	SKC 226-67	
Iodine (Vapor)	<u>ID 212</u>	0.5	2.5L		BS, MSDS, RES, T
Isocyanates	ASSET	0.2	12L-96L	Supelco ASSET Sampler	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Isophorone	N2508	0.01–1.0	2L @ 25ppm; 25L	SKC 226-81A	
Isophorone	N2556	0.01–1.0	2L @ 25ppm; 25L	SKC 226-93	R
Isopropyl acetate	N1454	0.02–0.2	0.1L @ 250ppm; 9L	SKC 226-01	
Isopropyl Alcohol	<u>109</u>	0.05–0.2	18L	SKC 226-82 (2)	BS, T or R
Isopropyl ether	N1618	0.01–0.05	0.1L @ 500ppm; 3L	SKC 226-01	
Ketones I	N1300	0.01–0.2	Acetone 0.5L - 3L; others 1L - 10L	SKC 226-01	R (MIBK)
Ketones I	N2555	0.01–0.2	Acetone 0.5L - 3L; others 1L - 10L	SKC 226-121	R
Ketones II	N1301	0.01–0.2	1L; 25L	SKC 226-01	
Ketones II	N2553	0.01–0.2	1L; 25L	SKC 226-121	
Lead	N7082	1.0–4.0	200L @ 0.05mg/m ³ ; 1500L	MCE filter (.8µm)	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Lead in urine or blood	N8003	---	---	Contact lab	F8
Maleic anhydride	N3512	0.2–1.5	40L @ 1.0mg/m ³ ; 500L	Impinger	F2
Maleic anhydride	<u>25</u>	0.1	20L	SKC 226-30-07	stable for 30 days if L, R
Maleic anhydride	<u>86</u>	0.5	60L	SKC 225-9021	T or R
MCA & ECA	<u>55</u>	0.1	12L	SKC 226-98	D
Mercury	N6009	0.15–0.25	2L @ 0.5mg/m ³ ; 100L	SKC 226-17-1A	
Mercury, particulate	<u>ID 145</u>	2.0	10L	MCE filter (.8µm)	BS, MSDS, RES
Metal Working Fluids	N5524	thoracic: 1.6; total: 2.0	1000L @ 0.4mg/m ³ or 0.5mg/m ³	PTFE (2µm), preweighted	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Metals	<u>N7300</u>	2.0	480L TWA; RTM for STEL; 30L Ceiling	MCE filter (.8µm)	BS, MSDS, RES
Metals in urine	N8310	---	50 - 200mL in polyeth- ylene bottles	Contact lab	D
Methamphetamine on wipes	IH-AN-N 9111	---	100cm ² or 1ft ² (area) - F10	Cotton gauze / solvent	F9
Methanol	N2000	0.02–0.2	1L @ 200ppm; 5L	SKC 226-51	P, store @ 5 ° C
2-Methoxyethanol, 2-Ethoxyethanol	<u>79</u>	0.1 for TWA; 1.0 for STEL	48L for TWA; 15L for STEL	SKC 226-01	BS
Methyl acetate	N1458	0.01–0.2	0.2L @ 200ppm; 10L	SKC 226-01	R
Methyl acrylate	N1459	0.01–0.2	1.0L @ 10ppm; 5L	SKC 226-01	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Methyl acrylate	N2552	0.01–0.2	1L @ 10ppm; 5L	SKC 226-121	R, P
Methyl alcohol	<u>91</u>	0.05	5L (when relative humidity is >50% @ 25 °C); 3L (when relative humidity is <50% @ 25 °C)	SKC 226-82 (2)	
Methyl cellosolve (2ME)	<u>53</u>	0.1	10L	SKC 226-01	BS
Methyl cellosolve Acetate	N1451	0.01–0.2	0.2L @ 25ppm; 20L	SKC 226-01	
Methyl chloride	N1001	0.01–0.1	0.4L @ 100ppm; 3L	SKC 226-09	R
Methyl cyclohexanone	N2521	0.01–0.05	1L @ 460mg/m ³ ; 6L	SKC 226-115	
Methyl ethyl ketone	N2500	0.01–0.2	0.25L @ 200ppm; 12L	SKC 226-81A/226-121	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Methyl iodide	N1014	0.01–1.0	15L @ 5ppm; 50L	SKC 226-01	
Methyl isocyanate	<u>54</u>	0.05	15L	ORBO 657	
Methyl methacrylate	N2537	0.01–0.05	1L @ 100ppm; 8L	SKC 226-30-06	D
Methyl methacrylate	<u>94</u>	0.05	3L	SKC 226-73	T or R
Methyl tert-Butyl ether	N1615	0.1–0.2 L	2L @ 10ppm; 96L	SKC 226-37	
n-Methyl-2-pyrrolidinone	N1302	0.05–0.2	0.5L; 125L	SKC 226-01	R, L
Methylal	N1611	0.01–0.2	1L @ 1000ppm; 3L	SKC 226-01	
Methylamine	<u>40</u>	0.2	10L	SKC 226-96	BS
Methylene bisphenyl Isocyanate (MDI)	<u>47</u>	1.0	15L	SKC 225-9002	BS
Methylene chloride	N1005	0.01–0.2	0.5L @ 500ppm; 2.5L	SKC 226-01 (2)	S

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Methylene chloride	<u>59</u>	0.05	10L	SKC 226-09-02	
Methylene chloride	<u>80</u>	0.05	3L	SKC 226-121	BS
Methylenebis-(o-chloroaniline) (MOCA)	<u>71</u>	1.0	100L	SKC 225-9004	SR, L
4,4'-Methylenedianiline (MDA)	N5029	1.0–2.0	10L @ 0.1ppm; 1000L	SKC 225-9004	F4
4,4'-Methylenedianiline (MDA)	<u>57</u>	1.0	100L	SKC 225-9004	
MOCA, o-Dianisidine, o-Tolidine	<u>71</u>	1.0	100L	SKC 225-9004	F12
Morpholine	ALS CAA-1	0.1-1L	3L-100L	SKC 226-98	
Naphthalene	<u>35</u>	0.2	10L	SKC 226-110	BS

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Naphthas	N1550	0.01–0.2	1.3L @ 400mg/m ³ ; 0.2L @ 2500mg/m ³ ; 20L @ 400mg/m ³ ; 3.2L @ 2500mg/m ³	SKC 226-01	
Naphthylamines	ALS ARA-2	1L	100L	SKC 225- 9004	
Nickel Carbonyl	N6007	0.05–0.2	7L @ 0.001ppm; 80L	ORBO 304	
Nicotine	N2544	1.0	60L @ 0.5mg/m ³ ; 400L	SKC 226-30- 04	
Nitric oxide & Nitro- gen dioxide	N6014	NO: 0.025; NO ₂ : 0.025–0.2	1.5L; 6L	SKC 226-40	
p-Nitroaniline	N5033	1.0–3.0	16L @ 6mg/m ³ ; 350L	MCE filter (.8µm)	
Nitrobenzene	N2005	RTM	RTM	SKC 226-10	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Nitroethane	N2526	0.01–0.05	1.5L @ 100ppm; 3L	SKC 226-30-02	S
Nitroglycerin	N2507	0.2–1.0	3L @ 1mg/m ³ ; 100L	SKC 226-35-03	
Nitromethane	N2527	0.01–0.05	1.2L @ 100ppm; 3L	SKC 226-111A	S
1-Nitropropane	<u>46</u>	0.1	4L	SKC 226-93	BS
2-Nitropropane	N2528	0.01–0.05	0.1L @ 25ppm; 2L	SKC 226-110	
1-Octanethiol	N2510	0.01–0.2	1L @ 0.5ppm; 15L	SKC 226-35-03	
Oil mist, mineral	N5026	1.0–3.0	20L @ 5mg/m ³ ; 500L	MCE filter (.8µm)	
Organic vapors	<u>07</u>	RTM	RTM	SKC 226-01	
Organophosphorus pesticides	N5605 Mod	0.1	10L	SKC 226-58	CE
Ozone	<u>ID 214</u>	0.25 to 0.5 TWA; 1.5	90L TWA; 22.5L STEL	SKC 225-9014	T

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
PAHs	N5528	0.1	20L	SKC 226-57	L
Paraquat	N5003	1.0–4.0	40L @ 0.5mg/m ³ ; 1000L	PTFE filter (1µm)	
Particulate and gaseous fluorides	N7902	1.0–2.0	12L @ 2.5 mg/m ³ ; 800L	SKC 225-9001	
Particulates, respirable	N0600	nylon cyclone: 1.7; HD cyclone: 2.2; Al cyclone: 2.5	20L @ 5mg/m ³ ; 400L	Matched weight, PVC filter	
Particulates, total	N0500	1.0–2.0	7L @ 15mg/m ³ ; 133L @ 15mg/m ³	Matched weight, PVC filter	
Pentachloroethane	N2517	0.01–0.2	1L @ 0.1mg/m ³ ; 10L	SKC 226-59-04	
Pentachlorophenol	<u>39</u>	0.2	48L	SKC 226-97 (2)	BS

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Paracitic acid	<u>NON-57</u>	1L	15L	SKC 226-193	BS
Pesticides*	N5600 Mod	0.1L	20L	SKC 226-58	
Pesticides*	N5602	0.1L	20L	SKC 226-58	
Pesticides*	N5605	0.1L	20L	SKC 226-58	
Pesticides*	N9204	—————	Wipe	Cotton gauze	
Phenol & Cresol	<u>32</u>	0.1	24L	SKC 226-95	BS
Phenylene Diamine	<u>87</u>	1.0	100L	SKC 225-9004	
Phosphine	<u>1003</u>	1.0–2.0	240min @ 1.0L/min (240L) TWA; 15min @ 2.0L/min (30L) STEL	SKC 225-9018	
Phosphoric acid	<u>ID 111</u>	2.0	960L	MCE filter (.8µm)	
Phosphorus	N7905	0.01–0.2	5L @ 0.1mg/m ³ ; 100L	SKC 226-35-03	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Phthalates	<u>104</u>	1.0	240L	SKC 226-56	
Phthalic anhydride	<u>90</u>	1.0	75L	Glass fiber filter, treated	T (within 24hrs) or R
Piperonyl Butoxide	<u>PV 2110</u> or N5605	1.0	30L	SKC 226-58 OVS2	BS, T
Polychlorinated biphenyls	N5503	0.05–0.2	1L @ 0.5mg/m ³ ; 50L	SKC 226-39/ prefilter (GFF)	TFV
Polynuclear Aromatic Hydrocarbons (PAH)	N5506	2.0	200L; 1000L	SKC 226-30-04/ prefilter (PTFE)	F5
Polynuclear Aromatic Hydrocarbons in Air	N5528	1.0	1L; 1440L	SKC 226-57, OVS (XAD-7)	CE, D

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Propylene dichloride	N1013	0.01–0.2	0.1L @ 75ppm; 3.5L	SKC 226-81A	
Propylene oxide	N1612	0.01–0.2	0.5L @ 100ppm; 5L	SKC 226-01	R
Pyrethrum	N5008 or N5605	0.1	20L	SKC 226-58	BS
Pyrethrum	<u>N5605</u>	0.1-1L	12L-480L	SKC 226-58	
Pyridine	N1613	0.01–1.0	18L; 150L	SKC 226-01	
Quartz & Cristobalite	<u>ID 142</u>	1.7	816L	PVC filter (5µm)	
Ribavirin	N5027	1.0–4.0	5L @ 0.4mg/m ³ ; 1000L	Glass fiber filter (1µm)	
Silica (Crystalline)	N7500	nylon cyclone: 1.7; HD cyclone: 2.2; Al cyclone: 2.5	400L; 1000L	PVC filter (5µm)	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Sodium Azide and Hydrazoic Acid in Workplace	<u>ID 211</u>	0.1	5L	SKC 226-55/ prefilter (PVC)	T or R
Solder metals	<u>ID 206</u>	2.0	480L; 960L if Ag is determined	MCE filter (.8µm)	BS, MSDS, RES
Strychnine	N5016	1.0–3.0	70L @ 0.15mg/m ³ ; 1000L	Glass fiber filter (1µm)	
Styrene	<u>09</u>	0.2–1.0	10L @ 0.2L/min - TWA; 15L @ 1.0L/min - Ceiling or peak	SKC 226-01	RTM
Sulfur dioxide	<u>ID 104</u>	1.0	15L to 60L	Impinger	
Sulfur dioxide	<u>ID 200</u>	0.1	12L TWA; 1.5L STEL	SKC 226-80	
Sulfur dioxide/ Sulfate	N6004	0.5–1.5	4L @ 5ppm; 200L	SKC 225-9005	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Sulfuric acid	<u>ID 113</u>	2.0	480L	MCE filter (.8µm)	
Sulfuryl Fluoride	N6012	0.05–0.1	1.3L @ 5ppm; 10L	SKC 226-16	R (@ 0 °C)
2,4-D & 2,4,5-T	N5605	0.1-1L	12L-480L	SKC 226-58	
2,4-DNT, 2,6-DNT, 2,4,6-TNT	<u>44</u>	1.0	60L	SKC 226-56	BS
o-Terphenyl	N5021	1.0–3.0	2L; 30L	PTFE filter (2µm)	
1,1,2,2- Tetrabromoethane	N2003	0.2–1.0	50L @ 1ppm; 100L	SKC 226-10	
Tetrachlorodifluoro- ethane	N1016	0.01–0.035	0.5L @ 500ppm; 2L	SKC 226-01	
1,1,2,2- Tetrachloroethane	N1019	0.01–0.2	3L @ 5ppm; 30L	SKC 226-81A	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
2,3,4,6-Tetrachlorophenol	<u>45</u>	0.2	48L	SKC 226-97 (2)	BS
Tetraethyl Lead	N2533	0.01–1.0	30L; 200L	SKC 226-30-04/226-30-06	
Tetrahydrofuran	N1609	0.01–0.2	1L; 9L	SKC 226-01	
Tetranitromethane	N3513	0.5–1.0	20L @ 1ppm; 250L	Impinger	R
Thiram	N5005	1.0–4.0	10L; 400L	PTFE filter (1µm)	
o,m,p-Toluidine	<u>73</u>	1.0	100L	SKC 225-9004	
Tributyl Phosphate	N5034	0.1–3.0	2L @ 0.5ppm; 100L	SKC 226-58	S, SB
Triethanolamine	PV2141 Mod EA-3	0.1	10L GC-MS	SKC 226-709	
1,1,2-Trichloro-1,2,2-trifluoroethane	N1020	0.01–0.05	0.1L @ 1000ppm; 3L	SKC 226-01	R

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
1,1,1-Trichloroethane	<u>14</u>	0.2	3L	SKC 226-01	RTM
1,1,2-Trichloroethane	<u>11</u>	0.2	10L	SKC 226-01	RTM
Trichloroethylene	N1022	0.01–0.2	1L @ 100ppm; 30L	SKC 226-01	
Trimellitic anhydride (TMA)	<u>98</u>	2.0	480L	Glass fiber filter, treated	
Turpentine	N1551	0.01–0.2	1L @ 100ppm; 10L	SKC 226-01	
Valeraldehyde	N2536	0.01–0.04	0.5L @ 50ppm; 10L	SKC 226-118	
Valeraldehyde	<u>85</u>	0.05	3L	SKC 225-9020	L
Vanadium Oxides	N7504	HD cyclone: 2.2; nylon cyclone: 1.7	200L @ 0.5mg/m ³ ; 1000L	PVC filter (5µm)	
Vinyl acetate	N1453	0.1–0.2	0.085L @ 10ppm	ORBO 92 tube	
Vinyl acetate	<u>51</u>	0.1	24L	ORBO 92 tube	

Analyte	Method	Flow [L/min]	Vol. [L]	Media	Shipping
Vinyl bromide	<u>08</u>	0.2	5.0L @ 0.2L/min	SKC 226-01	
Vinyl chloride	N1007	0.05	0.7L; 5L	SKC 226-01 (2)	S
Vinyl chloride	<u>75</u>	0.05	3L	ORBO 92 tube	
Vinylidene chloride	N1015	0.01–0.2	2.5L @ 1ppm; 7L	SKC 226-01	
Vinylidene chloride	<u>19</u>	0.2	3L	SKC 226-01	RTM
VOC	EPA TO 15	—	6L	Summa / Tedlar	
VOC	EPA TO 17	100 mL/min - 200 mL/min	5L - 100L	Carbotrap	
Warfarin	N5002	1.0–4.0	200L @ 0.1mg/m ³ ; 1000L	PTFE filter (1µm)	

Section Two— IH Abbreviations, Acronyms and Footnotes

General Abbreviations and Text Presentation Guide						
Method beginning with ALS		Methods developed by ALS Salt Lake City				
Method beginning with EPA		Environmental Protection Agency Toxic Organic Methods				
*		See Test Catalog for Extensive List of Individual Pesticides (392)				
RTM		Refer to Method				
Underlined Method		All OSHA methods are underlined				
Method beginning with 'N'		All NIOSH methods begin with the letter 'N'				
Shipping Legend						
/S	per sample		P	pack securely	CE	cap ends
B	pack in ice		R	refrigerated / keep cold	D	pack in dry ice
blank	routine shipping or nothing noted in method		RES	check for current shipping restrictions	I	insulated container
BS	ship bulk separate		S	separate front and back tubes	SV	transfer to separate vials
L	protect from exposure to light / store in dark		SB	seal (bubbler/cassettes)	T	ship asap
MSDS	include MSDS		SR	store cool	TFV	transfer filter to glass vials
ND	not determined		C	cooled	V	ship in vials

Footnotes	
F1	transfer samples to low-density polyethylene bottles
F2	plug inlet and outlet with Teflon plugs to prevent spillage during shipment
F3	ship sample solutions
F4	transfer filter to glass vial; extract with 4 mL 0.1 N methanolic KOH before shipping
F5	transfer filters to culture tubes; wrap sorbent and culture tubes in aluminum foil; ship @ 0 °C
F6	place filter in bubbler containing 15 mL ethylene glycol after sampling
F7	transfer filter and front sorbent section to same vial
F8	ship in polyethylene shippers
F9	Place gauze wipes into shipping container (eg: 50-mL polypropylene centrifuge tube). Cap.
F10	as required by local legal jurisdiction
F11	Ship samples suspected of containing low levels of glutaraldehyde in an insulated container using Blue Ice™ (or equivalent) by overnight delivery. Refrigerate glutaraldehyde samples.
F12	Ship and store samples for o-dianisidine at 0 °C or colder.

Section Three—Environmental Analysis with Associated Methods

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)
Acidity	W/WW	305.1	500 mL/P	Cool, 4°C	14
Alkalinity	W/WW	310.1/310.2	500 mL/P	Cool, 4°C	14
Ammonia	W/WW	350.1	500 mL/P	Cool, 4°C, H ₂ SO ₄ , pH<2	28
Anions	W/WW S/SW	300.0 300.0 Mod	500 mL/P 4 oz/G	Cool, 4°C	28 (2 for NO ₃ , NO ₂ & PO ₄)
Aroclors (PCBs)	W/WW S/SW	8082	2 x 1 L/AG 4 oz/AG	Cool, 4°C	None
BTEX	W/WW S/SW	8260C	2 x 40 mL/AG 4 oz/AG	Cool, 4°C, HCl, pH<2	14 14
Chemical Oxygen Demand (COD)	W/WW	COD/HACH	500 mL/P	Cool, 4°C, H ₂ SO ₄ , pH<2	28
Color	W	110.2	250 mL/P	Cool, 4°C	2
Conductivity	W/WW S/SW	120.1/SM2510B/9050A	500 mL/P 4 oz/G	Cool, 4°C	28

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)	
Corrosivity	W/WW S/SW	1110A	250 mL/P 4 oz/P	NA	7 7	
Cyanide	W/WW S/SW	335.4 9012B	500/AP 4 oz/P	NaOH, pH>12 Cool, 4°C	14 14	
Diesel Range Organics	W/WW S/SW	8015B	1 L/AG 4 oz/AG	Cool, 4°C	14 14	40 40
DIMP/DMMP	W/WW S/SW	ALS SOP	2 x 1L/AG 4 oz/AG	Cool, 4°C	14 14	— 40
Dioxins/Furans ⁽²⁾	W/WW S/SW	8280/8290	2 x 1 L/AG 4 oz/AG	Cool, 4°C 0.008% Na ₂ S ₂ O ₃	7 30	40 45
EMPA, IMPA,MPA, etc.	W/WW S/SW	UT04 ALS SOP	2 x 1L/AG 4 oz/AG	Cool, 4°C	14 14	40 40
Explosives	W/WW S/SW	8330	2 x 1 L/AG 4 oz/AG	Cool, 4°C, Dark 0.008% Na ₂ S ₂ O ₃	7 14	40 40
Fluoride	W/WW	340.2	500 mL/P	NA	28	
Gasoline Range Organics	W/WW S/SW	8260C	2 X 40 mL/AG 4 oz/P	Cool, 4°C HCl, pH<2	14 14	

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)	
Herbicides	W/WW S/SW	8151A	2 x 1 L/AG 4 oz/AG	Cool, 4°C 0.008% Na ₂ S ₂ O ₃	7	40
					14	40
Hexavalent Chromium	W/WW S/SW	7196A	500 mL/P 4 oz/P/G	Cool, 4°C	1	
					28	1
Ignitability	W/WW S/SW	1010A	500 mL/G 4 oz/G	None	7	
Mercury	W/WW S/SW	245.1/245.5 7470A/7471B	250mL/P/G 4 oz/P/G	HNO ₃ , pH<2	28	
					28	
Metals ICP/AA	W/WW S/SW	200 Series 6010C/6020A	500 mL/P 4 oz/P/G	HNO ₃ pH<2	180	
					180	
NDMA	W/WW S/SW	UM34 and ALS SOP	2 x 1 L/AG 4 oz/AG	Cool, 4°C	7	40
					14	40
Nitrate	W/WW	353.2	250 mL/P	Cool, 4°C	2	
Nitrate + Nitrite	W/WW	353.2	250 mL/P	Cool, 4°C. H ₂ SO ₄ pH<2	28	
Nitrite	W/WW	353.2 Mod	125 mL/P	Cool, 4°C	2	
Nitroglycerin/PETN	W/WW S/SW	8332	2 x 1 L/AG 4 oz/AG	Cool, 4°C	7	40
					14	40

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)	
Odor	W/WW	140.1	500 mL/G	Cool, 4°C	1	
Oil & Grease	W/WW	1664A	1 L/AG	Cool, 4°C, H ₂ SO ₄ or HCL pH<2	28	
Organochlorine Pesticides	W/WW S/SW	8081	2 x 1 L/AG 4 oz/AG	Cool, 4°C, pH 5-9 0.008% Na ₂ S ₂ O ₃	7 14	40 40
ortho-Phosphate	W/WW	365.1	125 mL/P	Cool, 4°C Filter Immediately	2	
Perchlorate	W/WW S/SW	EPA 6850	500 mL/P 4 oz/AG	Cool, 4°C	28 28	
pH	W/WW S/SW	150.1 9040C/9045D	500mL/P 4 Oz/P/G	Cool, 4°C	ASAP ASAP	
Phenolics	W/WW	420.4 9066	1 L/AG 4 oz/AG	Cool, 4°C, H ₂ SO ₄ pH<2	1 28	
Phosphorus— White/Elemental (P4)	WWW S/SW	7580	250 mL/AG 8 oz/AG	Cool, 4°C, No headspace	5 30	
Polynuclear Aromatics (PAHs)	W/WW S/SW	8270D 8310	2 x 1 L/AG 4 oz/AG	Cool, 4°C, Dark 0.008% Na ₂ S ₂ O ₃	7 14	40 40

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)	
Reactive Cyanide	W/WW S/SW	7.3.3.2	500 mL/P 4 oz/P/G	Cool, 4°C Dark	7 7	
Reactive Sulfide	W/WW S/SW	7.3.4.2	500 mL/P 4 oz/P/G	Cool, 4°C Dark	7 7	
Semivolatile Organics	W/WW S/SW	8270D	2 x 1 L/AG 4 oz/AG	Cool, 4°C 0.008% Na ₂ S ₂ O ₃	7 14	40 40
Sulfide	W/WW S/SW	376.1 9030B	500 mL/P 4 oz/P/G	Cool, 4°C pH>9 NaOH, ZnOAc	7 7	
TCLP Metals	W/WW S/SW	1311	1 L/P	NA	180	
TCLP SVOAs, Pesticides, & Herbicides	W/WW S/SW	1311	3 X 1L/AG 8 oz/AG	Cool, 4°C	14 (leach) 7 (extraction)	40
TCLP Volatiles	W/WW S/SW	1311	3 X 40mL/AG 4 oz/AG	Cool, 4°C	14 (leach) 14 (analyze)	
Thiodiglycol	W/WW S/SW	UL09 LL9	2 x 1 L/AG 4 oz/AG	Cool, 4°C	14 14	— 40
Total Dissolved Solids	W/WW	160.1	500 mL/P	Cool, 4°C	7	

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)	
Total Kjeldahl Nitrogen	W/WW	351.2	1 L/P	Cool, 4°C, H ₂ SO ₄ pH<2	28	
Total Organic Carbon (TOC)	W/WW S/SW	415.1 9060A	250 mL/AG 4 oz/AG	Cool, 4°C, H ₂ SO ₄ pH<2	28 28	
Total Phosphorus	W/WW	365.4	125 mL/P	Cool, 4°C, H ₂ SO ₄ pH<2	28	
Total Recoverable Petroleum Hydrocarbons (TRPH)	W/WW	418.1	1 L/AG	Cool, 4°C, H ₂ SO ₄ pH<2	28	
Total Settleable Solids	W/WW	160.1	500 mL/P	Cool, 4°C	2	
Total Solids Moisture	W/WW S/SW	160.3	500 mL/P 4 oz/G	Cool, 4°C	7 7	
Total Suspended Solids	W/WW	160.2	500 mL/P	Cool, 4°C	7	
Total Volatile Solids	W/WW	160.4	250 mL/P	Cool, 4°C	7	
Turbidity	W/WW	180.1	250 mL/P	Cool, 4°C	2	

Analysis	Matrix	Method	Container	Preservative ¹	Hold Time (days)	
Volatile Organics	W/WW	524.2	2 x 40 mL/AG	Cool, 4°C Dechlorination then HCl, pH<2 No Headspace	14	
Volatile Organics	W/WW S/SW	8260C	2 x 40 mL/AG 4 oz/AG	Cool, 4°C HCl, pH<2, No Headspace	14 14	
Miscellaneous						
Asbestos ⁽²⁾	W	100.1	1 L/P	Cool, 4°C	2	
Asbestos ⁽²⁾	W/W	100.1	1 L/P	Cool, 4°C	None	

Abbreviations used are as follows:

Matrix		Container		Preservatives	
W	Water	P	Plastic (HDPE)	NaOH	Sodium Hydroxide
WW	Waste Water	AG	Amber Glass	HCl	Hydrochloric Acid
S	Soil/Sediment	G	Glass	HNO ₃	Nitric Acid
SW	Solid Waste			H ₂ SO ₄	Sulfuric Acid
				Na ₂ S ₂ O ₄	Sodium Thiosulfate

To Order Call: 1-800-356-9135

¹ Chemical Preservative on W/W matrix only.

Concerning 5035 VOA analysis using Sodium bi-sulfate preparation:

If carbonaceous materials are present, do not acid preserve samples

7 days from collection hold time

If vinyl chloride, styrene, or 2-chloroethyl vinyl ether are the analysis of interest,
no acid preservation is recommended and analysis is necessary as soon as possible

7 days from collection hold time

NOTES:

1. Sample preservation should be performed during sample collection.
2. ALS—SLC does not perform these analyses and subcontracts this work, with client approval, to certified vendors.

Section Four—Salt Lake City Contact Information

This ALS pocket guide was produced by the ALS Salt Lake City, UT laboratory. You can use either of the following means to reach the Salt Lake City lab:

Call 1-800-356-9135 and ask for a member of the Project Management Team. Our Project Managers are there to answer questions related to sample collection, shipping and to assist in determining the best analytical procedure for your sample.

or—

Visit us at WEB: www.alsglobal.com for the latest updates to this guide as well as our fee schedule, industrial hygiene analytical request forms (ARF), environmental chains of custody (CoC), and much more.

A close-up photograph of laboratory glassware. On the left is a large Erlenmeyer flask containing a clear blue liquid. On the right is a graduated cylinder, also containing a clear blue liquid with many small bubbles rising from the bottom. The background is a bright, clean white.

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