

Table - Sediment Reference Material Results - 580-78968

Analyte	CAS Number	Reference Material Source	Range of Expected Results	Analytical Method	Laboratory Results	
					ALS Kelso K1806131	TA Seattle 580-78968
<u>Metals (mg/kg)</u>						
Arsenic	7440-38-2	SRM 1944 ^a	16.1 - 21.7	EPA 6020B	NA	17
Cadmium	7440-43-9	SRM 1944 ^a	7.4 - 10.2	EPA 6020B	NA	7.9
Copper	7440-50-8	SRM 1944 ^b	340 - 420	EPA 6020B	NA	340
Lead	7439-92-1	SRM 1944 ^a	282 - 378	EPA 6020B	NA	290
Manganese	7439-96-5	SRM 1944 ^a	480 - 530	EPA 6020B	NA	310
Mercury	7439-97-6	SRM 1944 ^b	2.9 - 3.9	EPA 7471A	NA	4.2
Zinc	7440-66-6	SRM 1944 ^a	581 - 731	EPA 6020B	NA	560
<u>Polycyclic Aromatic Hydrocarbons (ug/kg)</u>						
Acenaphthene	83-32-9	SRM 1944 ^b	360 - 420	EPA 8270D-SIM	110	240
Acenaphthylene	208-96-8	SRM 1944	--	EPA 8270D-SIM	350	720
Anthracene	120-12-7	SRM 1944 ^b	1,060 - 1,200	EPA 8270D-SIM	530	870
Benzo(a)anthracene	56-55-3	SRM 1944 ^a	4,610 - 4,830	EPA 8270D-SIM	2600	3600
Benzo(a)pyrene	50-32-8	SRM 1944 ^a	4,170 - 4,430	EPA 8270D-SIM	2100	2300
Benzo(b)fluoranthene	205-99-2	SRM 1944 ^a	3,450 - 4,290	EPA 8270D-SIM	3000	3900
Benzo(g,h,i)perylene	191-24-2	SRM 1944 ^a	2,740 - 2,940	EPA 8270D-SIM	1400	2100
Benzo(k)fluoranthene	207-08-9	SRM 1944 ^a	2,100 - 2,500	EPA 8270D-SIM	1100	1300
Chrysene	218-01-9	SRM 1944 ^a	4,760 - 4,960	EPA 8270D-SIM	3400	4000
Dibenz(a,h)anthracene	53-70-3	SRM 1944 ^a	355 - 493	EPA 8270D-SIM	450	610
Dibenzofuran	132-64-9	SRM 1944	--	EPA 8270D-SIM	140	NA
Fluoranthene	206-44-0	SRM 1944 ^a	8,600 - 9,240	EPA 8270D-SIM	4700	6400
Fluorene	86-73-7	SRM 1944 ^b	440 - 520	EPA 8270D-SIM	150	250
Indeno(1,2,3-cd)pyrene	193-39-5	SRM 1944 ^a	2,680 - 2,880	EPA 8270D-SIM	1600	1800
2-Methylnaphthalene	91-57-6	SRM 1944 ^b	680 - 800	EPA 8270D-SIM	230	420
Naphthalene	91-20-3	SRM 1944 ^b	1,240 - 1,320	EPA 8270D-SIM	420	640
Phenanthrene	85-01-8	SRM 1944 ^a	5,050 - 5,490	EPA 8270D-SIM	2600	3600
Pyrene	129-00-0	SRM 1944 ^a	9,280 - 10,120	EPA 8270D-SIM	5100	6700
<u>Total Organic Carbon (mg/kg)</u>	7440-44-0	SRM 1944 ^b	41,000 - 47,000	EPA 9060	NA	42,000

Notes:

a. Certified Mass Fraction Value. A NIST-certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST using two or more chemically independent analytical techniques. The certified values for the trace elements are based on NIST measurements by one technique and additional results from several collaborating laboratories.

b. Reference Mass Fraction Value. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods.

SRM 1944 obtained from NIST.

Acronyms:

µg/kg = microgram per kilogram

ALS = ALS Environmental

CAS = Chemical Abstract Service

EPA = United States Environmental Protection Agency

mg/kg = milligram per kilogram

NA = not analyzed

NIST = National Institute of Standards and Technology

PAH = polycyclic aromatic hydrocarbon

PCB = polychlorinated biphenyl

RM = Reference Material

SIM = selected ion monitoring

SRM = Standard Reference Material

TA = TestAmerica Laboratories, Incorporated