Physical, Chemical, and Mineralogical Data from Surficial Deposits, Groundwater Levels, and Water Composition in the Area of Franklin Lake Playa and Ash Meadows, California and Nevada

Data Series 607

FRONT COVER

Upper Left: View south from site FP-CSL in Carson Slough showing recently precipitated salt crusts. Eagle Mountain in distance. Photograph by Richard L. Reynolds.

Lower left: Spring discharge from Crystal Spring at Ash Meadows National Wildlife Refuge. Photograph by Richard L. Reynolds.

Right: Obelisk artesian well. Photograph by Harland L. Goldstein.

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By Harland L. Goldstein, George N. Breit, James C. Yount, Richard L. Reynolds,
Marith C. Reheis, Gary L. Skipp, Eric M. Fisher, and Paul J. Lamothe

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Conversion Factors

SI to Inch/Pound

Multiply	By	To obtain
Length		
centimeter (cm)	0.3937	inch (in.)
millimeter (mm)	0.03937	inch (in.)
meter (m)	3.281	foot (ft)
kilometer (km)	0.6214	mile (mi)
kilometer (km)	0.5400	mile, nautical (nmi)
meter (m)	1.094	yard (yd)
Area		
square meter (m ²)	0.0002471	acre
square centimeter (cm ²)	0.001076	square foot (ft ²)
square meter (m ²)	10.76	square foot (ft ²)
square centimeter (cm ²)	0.1550	square inch (in ²)
Volume		
liter (L)	33.82	ounce, fluid (fl. oz)
liter (L)	2.113	pint (pt)
liter (L)	1.057	quart (qt)
liter (L)	0.2642	gallon (gal)
cubic meter (m ³)	264.2	gallon (gal)
cubic meter (m ³)	0.0002642	million gallons (Mgal)
cubic centimeter (cm ³)	0.06102	cubic inch (in ³)
liter (L)	61.02	cubic inch (in ³)
Mass		
gram (g)	0.03527	ounce, avoirdupois (oz)
kilogram (kg)	2.205	pound avoirdupois (lb)
Pressure		
kilopascal (kPa)	0.1450	pound per square inch (lb/in ²)
Density		
gram per cubic centimeter (g/cm ³)	62.4220	pound per cubic foot (lb/ft ³)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F}=(1.8\times^{\circ}\text{C})+32$$

Temperature in degrees Fahrenheit (°F) may be converted to degrees Celsius (°C) as follows:

$$^{\circ}\text{C}=(^{\circ}\text{F}-32)/1.8$$

Vertical coordinate information is referenced to the insert datum name North American Vertical Datum of 1988 (NAVD 88).

Horizontal coordinate information is referenced to the insert datum name North American Datum of 1983 (NAD 83).

Altitude, as used in this report, refers to distance above the vertical datum.

Specific conductance is given in millisiemens per centimeter at 25 degrees Celsius (µS/cm at 25°C).

Concentrations of chemical constituents in water are given either in milligrams per liter (mg/L) or micrograms per liter (µg/L).

NOTE TO USGS USERS: Use of liter (L) as a special name for cubic decimeter (dm³) is restricted to the measurement of liquids and gases. No prefix other than milli should be used with liter. Metric ton (t) as a name for megagram (Mg) should be restricted to commercial usage, and no prefixes should be used with it.

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Introduction

This report presents data and describes the methods used to determine the physical attributes, as well as the chemical and mineralogical composition of surficial deposits; groundwater levels; and water composition in the area of Franklin Lake playa and Ash Meadows, California and Nevada (figs. 1*A* and 1*B*).

The results support studies that examine (1) the interaction between groundwater and the ground surface, and the transport of solutes through the unsaturated zone; (2) the potential for the accumulation of metals and metalloids in surface crusts; (3) emission of dust from metal-rich salt crust; and (4) the effects of metal-rich dusts on human and ecosystem health.

The evaporation of shallow (<3 to 4 m) groundwater in saline, arid environments commonly results in the accumulation of salt in the subsurface and (or) the formation of salt crusts at the ground surface. Ground-surface characteristics such as hardness, electrical conductivity, and mineralogy depend on the types and forms of these salt crusts. In the study area, salt crusts range from hard and bedded to soft and loose (Reynolds and others, 2009). Depending on various factors such as the depth and composition of groundwater and sediment characteristics of the unsaturated zone, salt crusts may accumulate relatively high contents of trace elements (Breit and others, 2009).

Soft, loose salt crusts are highly vulnerable to wind erosion and transport. These vulnerable crusts, which may contain high contents of potentially toxic trace elements, can travel as atmospheric dust and affect human and ecosystem health at local to regional scales (Reynolds and others, 2007).

Methods

Site Selection and Sampling Locations

The study area encompasses Franklin Lake playa (FLP) and portions of Ash Meadows National Wildlife Refuge (fig. 1*B*). Information about sampling sites is displayed in table 1. Surficial materials at the study sites were studied by repeated in situ measurements, and samples were collected for laboratory

determination of physical, chemical, and mineralogical properties (table 2). Water levels in wells were recorded and samples were collected for geochemical characterization (table 3).

Sediment sampling sites were chosen to be representative of the spatial variations across the study area. Although the study area is temporally dynamic, it can be divided into seven general areas on the basis of overall persistent surface characteristics: (1) spring discharge areas, (2) salt pans, (3) areas with porous and sometimes soft sediments, (4) hard and compact areas, (5) areas dominated by braided stream channels, (6) areas dominated by coppice dunes, and (7) vegetated, desert pavement surfaces (table 1; Czarnecki, 1997). In the Ash Meadows area, surface and subsurface sediment samples were collected along the Carson Slough in the west-central part of the refuge, and near Rogers Spring in the north (fig. 1*C*). Sediments collected from FLP include surface and subsurface samples and samples collected by hand auger to depths as much as 4.3 m (figs. 1*D* and 1*E*). Some FLP sample sites, referred to as repeat sites, were identified for replicate sampling (fig. 1*F*; discovery, coppice dune, west transect, east transect, clay dune, and salt pan).

Existing wells and springs were used for the study of groundwater in the area. Water levels were determined during many of the field visits. Water samples were collected from spring discharge pools at Ash Meadows and from artesian and nonflowing wells at FLP (fig. 1*G*).

Sample Collection

Sediment samples were collected by grab sampling and with a hand auger. Auger samples were collected from each bucket retrieved, typically representing <15-cm intervals. Samples from discrete intervals, referred to as grab samples, were collected from small excavations using a hand trowel or shovel. At these sites a surface-crust sample (usually the upper $\approx$ 1 cm) and two subsurface samples (on the order of 1–5 cm and 5–10 cm depths) were collected. Surface measurements were made at repeat sites, and surface-crust grab samples were collected for mineralogic identification intermittently for approximately 2.5 years.

Figure 1A. Shaded relief map showing regional setting of the Franklin Lake playa and Ash Meadows study area. The study area (and the extent of figure 1B) is noted by red box. Inset index map shows coverage of the shaded relief map.

Figure 1B. Satellite image showing the Franklin Lake playa and Ash Meadows study area. Black boxes denote area covered in figures 1C–1F. Yellow line represents the Ash Meadows National Wildlife Refuge boundary.

Figure 1C. Location of grab samples taken in the northern part of study area. Yellow line represents the Ash Meadows National Wildlife Refuge boundary.

Figure 1D. Location of grab samples taken in the central part of study area.

Figure 1E. Location of auger and grab samples taken in the southern part of study area.

Figure 1F. Location of repeat and dust trap sites.

Figure 1G. Location of water samples taken throughout study area. Yellow line represents the Ash Meadows National Wildlife Refuge boundary.

Marble dust traps (Reheis and Kihl, 1995; Reheis, 1997) were installed in February 2004 on the southern end of FLP on an alluvial fan surface on the northeastern flank of Eagle Mountain (fig. 1*F*). Dust samples were collected during the spring and fall of subsequent years until the dust traps were removed in November 2009. Dust analyses are not included in this report except for one dust trap sample that was collected in the spring of 2005. This sample represents the collection period of October 2004 through April 2005 and was leached for chemical analysis (see below).

Methods to collect water samples varied depending on characteristics of the sample site. Spring seeps were sampled directly by drawing water into a clean 60-mL syringe, or for large pools (Crystal and Rogers Springs), through tubing connected to a peristaltic pump. The tubing was suspended over the pools with a pole and lowered to a depth of approximately 10 cm below the pool surface prior to sampling. Water from flowing wells (North Carson Slough, Ojo del Caballo, and Obelisk wells) was collected from tubing that was lowered approximately 1 m into the well casing. Several wells installed by Czarnecki (1997) (GS-4, GS-12, GS-15, GS-18, GS-20) were pumped until empty and allowed to refill for 4 to 6 hours prior to sampling. A peristaltic pump was used to purge and sample these wells. A recently installed well (USGS New well north) was pumped to remove about 100 L of water and then sampled. The small amount of suspended clay in the effluent suggests that this well was incompletely purged at the time of sampling. The Death Valley Junction well was an actively used supply well with an electric pump. Water at this site was collected from a petcock valve installed on the production pipe. Three sample sites (Bucket, Chemical, and Cz-11 wells) were large diameter wells that were incompletely purged prior to sampling. The Bucket well was sampled with a peristaltic pump after removal of approximately 25 L of water. A bailer was used to sample the Chemical well after drawing approximately 30 L of water from the well bore. Cz-11 well was pumped to remove the standing water, leaving a muddy slurry that was collected in a beaker and allowed to settle, before collecting the water fraction. The Chemical and Cz-11 wells were open at the surface; therefore, atmospheric input may influence these water compositions.

One surface-water sample was collected from the Amargosa River at the southern end of FLP shortly after a heavy flood event. The sample was collected from a flowing channel into a plastic bottle without filtration or stabilization.

Water samples were collected for anion, cation, trace element, and isotopic analyses. All water samples were filtered to 0.2 μm with a syringe filter. Sampled water rinsed the syringe, filter, and collection bottles prior to obtaining the sample for analysis. Anion samples were stored with ice in deionized-water-rinsed polyethylene bottles. Water samples for cation and trace element analyses were collected in acid-washed polyethylene bottles and acidified in the field to pH <2 with

high-purity nitric acid. A separate aliquot of water was acidified to a pH between 3 and 4 with hydrochloric acid for preservation of dissolved sulfate to be used for isotopic analysis.

Field Measurements

Surface Characteristics

Surface characteristics were measured at two sets of repeat sites (fig. 1*F*). The first set of sites was established during the initial visits to the area. The sites were visited irregularly from August 2003 through April 2007 (tables 4*A*, *B*, *C*, *D*, and *E*). These sites consisted of a triangular plot area of approximately 45 m² with a rebar stake at each apex. The rebar was approximately 1.2 m long and was pounded approximately two-thirds of its total length into the ground. One apex represented a reference point for repeat photography (not included in this report), and the heights of the other two rebar stakes were measured during each visit to assess deflation or aggradation of the ground surface. Crust compressive strength was measured vertically using a spring-piston-style pocket penetrometer. Surface shear-stress measurements were made in situ with a hand-held shear-vane tester, and sediment compaction was measured using a spear penetrometer. These measurements were made to evaluate changes in the playa surface and subsurface at these sites and were not intended for comprehensive description of playa sediment strength.

The second set of sites was established during the later part of the studies, and these sites were visited during a 29-month period from December 2006 through April 2009 (tables 4*F*, *G*, *H*, *I*, and *J*). A 10-m² plot was set up at each repeat site with four rebar stakes, one at each corner, and all repeat measurements were taken within the plot area. The location of each repeat measurement was noted so that these areas were avoided during future measurements. The rebar stakes were approximately 1.2 m long and were pounded into the ground during the initial site set-up so that the top of the rebar was approximately 45 cm above ground surface. These rebar heights were measured during each visit to assess deflation or aggradation of the ground surface. Small holes were dug in two places in the plot area per visit to determine the depth to moist or wet sediment. Differences in the measured depth to moisture between the two holes per visit are likely due to spatial variability within the plot area. During some sampling events, moist sediment was not intersected within the depth of excavation at the west and east transect sites. When this was the case, the measurement was designated as greater than the depth of the excavation (for example, >70 cm), or as “n.r.” if the depth of the excavation was not recorded. Surface crust conductivities were measured with a portable conductivity meter, crust thickness (in millimeters) was measured using a caliper, and crust compressive strength was measured using a spring-piston-style pocket penetrometer. Samples were collected for mineralogical identification in the laboratory, and observations describing the ground-surface characteristics were recorded.

Groundwater Levels, Well Data, and Field Parameters

Groundwater levels were measured from wells installed by Czarnecki (1997; “GS” and “Cz” wells). Measurements were also made from two new wells drilled in 2008 by the U.S. Geological Survey (“USGS” wells), as well as two previously installed but plugged wells that were re-drilled during USGS activities in 2008 (“Metal” wells). GS and Cz wells were measured 11–15 times over a 30-month period, and USGS and Metal wells were measured 2–5 times over a 12-month period to document groundwater-level fluctuations (table 5). Measurements were made with a standard weighted steel tape. All water levels were measured in feet and later converted to meters. Well depths were also measured at all well sites during the first visit to each site (table 5). Ground-surface elevations around most wells were measured using a GPS receiver and post-correcting, yielding an average vertical error of 20 cm (table 5).

During collection of groundwater samples, characteristics of the water that were measured in the field with standardized meters include pH, temperature, and specific conductance (table 6). Standard titrations to determine the acid-neutralizing capacity were made at the sample site, or within 24 hours on an aliquot of the water sample that was stored with ice.

Laboratory Analysis

Gravimetric Water Content

Gravimetric water content was determined on select auger samples (table 7). During sampling, 15- to 20-g aliquots were stored immediately after excavation in pre-weighed glass scintillation vials fitted with polycone lids. The lids were tightened and wrapped with electrical tape to assure retention of moisture. The mass of sediment in each vial was measured upon return from the field and following heating for four days at 105°C. The decrease in mass following heating is attributed to water loss including free water, nonstructural water in expansive clays, and structural water in some salt minerals.

Following determination of the water loss, the scintillation samples were placed in a chamber at 100 percent humidity to determine the water absorption capacity of the sediment. Samples were weighed weekly until the change in mass was less than 0.5 percent. This typically took six to ten weeks.

Carbonate Percent

Carbonate percent (table 8) was measured on a limited number of select grab samples using a Chittick apparatus (Dreimanis, 1962) as described by Machette (1986) whereby 6N HCl is applied to the sample and the gas evolved from the reaction displaces fluid within the Chittick apparatus. The volume of liquid displaced is used to calculate the percent of carbonate in the sample.

$$\text{CO}_3 \% = (V_{\text{CO}_2} \times C) / W_s,$$

where

$\text{CO}_3 \%$ = Calcium carbonate percent,
 V_{CO_2} = Volume of liquid displaced during reaction in presence of HCl,

C = Constant: $(P_B / T_K) \times 0.16$,
 where

P_B = Barometric pressure in millimeters of mercury,

T_K = Temperature in degrees Kelvin

and

W_s = Oven-dry sample weight (at 105°C for 16 hrs).

Particle-Size Analysis

Particle-size analysis was performed on the <2-mm-size fraction of select grab samples and east transect and coppice-dune auger samples using a laser diffraction system. Prior to measurement of particle size, the samples were digested to remove organic matter and carbonate minerals using 30 percent H_2O_2 and 10 percent HCl, respectively. Sodium hexametaphosphate was added to each sample to aid in the suspension of clay particles. Measurements were made using a Malvern laser analyzer. The samples were introduced into an aqueous medium and pumped through the laser analyzer for particle-size measurements. Thus, the particle size reported here represents the nonwater-soluble fraction. Particle size is reported in accordance with the Wentworth (Wentworth, 1922) scale (tables 9A, B, and C).

Bulk Density

Sediment bulk density (table 10) was determined by using either a 1- or 3-cm-tall brass ring, each having a diameter of 5.4 cm and thus a known volume. The rings were pressed into the sediment, excavated, and excess sediment was shaved flush to the ring with a trowel. The sample was then dried and weighed. The bulk density is expressed in grams of sediment per cubic centimeter (g/cm^3).

Geochemical Analysis

Solid Samples

Samples were analyzed to determine their bulk chemical composition using inductively coupled plasma–optical emission spectrometry (ICP–OES; Briggs, 2002a) and inductively coupled plasma–mass spectrometry (ICP–MS; Briggs and Meier, 2002) following acid digestion. Samples collected by hand auger were sieved to obtain the <2-mm-size fraction that was analyzed (table 11A). The <2-mm- and <53-mm-size fractions (tables 11B and C) of grab samples were also analyzed using ICP–OES and ICP–MS. All sediment samples were finely ground using a shatterbox prior to analysis.

Leach Samples

Deionized (DI) water and 1-percent nitric acid leachates were prepared to determine the water soluble, acid soluble, and final residual components of selected sediment samples

(table 12). Chemical analysis was completed on leachates and final residuals from the east transect auger hole bulk samples (tables 12A, B, and C), and on leachates and final residuals from selected bulk (tables 12D, E, and F) and fine-fraction (tables 12G, H, and I) grab samples. The steps of leaching were DI water → nitric acid → final residual. Thirty milliliters of DI water was added to approximately 1 g of solid sample and shaken for 1 hour. After shaking, the samples were centrifuged to remove suspended aluminosilicate particles that were greater than 0.05 μm in diameter. The leachate was then passed through a 0.2-mm filter to remove organic particles and solids that were resuspended during transfer of the leachate. Measurements of pH were made using pH indicator strips or using a pH meter on a separated aliquot. The resulting leachate was split into two subsamples for chemical analysis: one split for anion analysis (IC-ion chromatograph; Theodorakos and others, 2002) and the second split for cation analysis (ICP-MS; Lamothe and others, 2002; ICP-OES; Briggs, 2002b). The split for cation analysis was stabilized by adding concentrated nitric acid until a pH <2 was obtained. The anion split was refrigerated. Separate splits for alkalinity determinations (tables 12A, D, and G) were prepared as a DI-water leach and were not stabilized. Initial pH measurements are reported in tables 12A, D, and G and include those that were made during alkalinity determinations or those made during DI leaching using pH strips. The solid residue remaining after the DI-water leach was dried and weighed, then combined with 1-percent nitric acid at a 1:30 weight:volume ratio. The samples were shaken for 1 hour, then centrifuged and filtered using the same protocol as the DI-water leaching. Measurements of pH were made on the resulting leachate, and if necessary, the leachate was stabilized to a pH <2 using concentrated nitric acid. The leachate was submitted for chemical analysis by ICP-MS and ICP-OES methods. The final residue remaining after the nitric leach was dried, weighed, ground, and submitted for total chemical analysis by ICP-MS and ICP-OES methods. Some final residues were very low in weight so that only one analytical method (ICP-MS) was possible.

Water Samples

A summary of field and laboratory water analyses is listed in table 3. Water samples were analyzed (table 13) for the concentration of several major, minor, and trace elements, and anions. In addition, the hydrogen (δD) and oxygen ($\delta^{18}\text{O}$) isotopic composition of the water, and sulfur ($\delta^{34}\text{S}$) and oxygen ($\delta^{18}\text{O}$) in dissolved sulfate were measured. Major cation, minor, and trace elements were determined by ICP-OES (Briggs, 2002b) and ICP-MS (Lamothe and others, 2002). Major anion concentrations were determined by ion chromatography (IC; Theodorakos and others, 2002). Analyses of replicate water samples for the ICP and IC analyses indicated a precision of 5 to 10 relative percent for all measured constituents. Determinations of δD and $\delta^{18}\text{O}$ in water were made at the University of Arizona Environmental Isotope Laboratory. Chromium reduction was used to determine δD , and it was measured using isotope-ratio

mass spectrometry (Gehre and others, 1996). Determination of $\delta^{18}\text{O}$ was through equilibrium with CO_2 measured using isotope-ratio mass spectrometry (Craig, 1957).

Dissolved sulfate was precipitated as BaSO_4 from filtered, weakly acidified (pH 3–4) water samples, and the BaSO_4 was analyzed for sulfur ($\delta^{34}\text{S}$) and oxygen ($\delta^{18}\text{O}$) isotopes using continuous-flow isotope-ratio analysis coupled with a thermal combustion/elemental analyzer system. Analyses were completed at the USGS Stable Isotope Laboratory, Denver, Colo. Sulfur values were normalized using IAEA-SO-6 and NBS 127 or sulfide standards IAEA-S-3 and NBS 123 to Vienna Cañon Diablo Troilite (VCDT). Replicate analyses reproduced to within $\pm 0.1\%$ (one-sigma). Oxygen values were normalized to in-house barium sulfate standards (Wasserman and others, 1992). Replicate analyses reproduced to within $\pm 0.3\%$.

Electrical Conductivity

Electrical conductivity was measured in the field on repeat-site crust samples (tables 4F, G, H, I, and J) and in the laboratory on bulk auger-hole samples and a few bulk grab samples (tables 14A and B). Field measurements were made using an electrical conductivity meter on a sediment-water mixture. One level teaspoon of sediment was combined with 250 mL of de-ionized water. The mixture was immediately shaken to suspend the solid and shaken again after 20 minutes. Following a 10-minute settling time the electrical conductivity of the suspension was measured. Lab measurements were made on a 30:1 DI-water-to-sediment mixture as in the leaching methods. After the mixture was shaken and centrifuged, the electrical conductivity was measured.

X-Ray Diffraction

The mineral composition of the sampled sediments was determined using powder X-ray diffraction techniques. Several fractions of the samples were characterized (table 15) including bulk solid, DI residue (bulk and fine fractions), final residue after nitric acid leaching (bulk and fine fractions), bulk clay, and bulk solid as a slurry. All data were collected using copper K α radiation using a Philips XRG 3100 and a Norelco goniometer equipped with a graphite monochromator. Phase identification was facilitated using JADE software by Materials Data, Inc.

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Tables

Table 1. Location information for sampling sites.

[Sample site, name of sampling site; Surface characteristic, general nature of the ground surface around the sample site; Collection method, method of sample collection; Sampling designation, sample labeling designation; WC, water chemistry sampling; WM, groundwater level measurement; *, date designates time of repeat site or dust trap site set-up]

Sample site	Surface characteristic	Collection method	Sampling designation	Latitude	Longitude	Datum	Collection date
Coppice reference	Coppice dunes	Grab	FP-COP-ref	36.240	-116.384	WGS84	11/8/2006
East Transect Auger	Porous and soft	Auger	HG07-04	36.254	-116.368	WGS84	11/12/2007
East Transect Auger	Porous and soft	Auger	HG08-01	36.254	-116.368	WGS84	10/18/2008
East Transect Auger	Porous and soft	Auger	FPAH06-08	36.254	-116.368	WGS84	6/24/2008
East Transect Auger	Porous and soft	Auger	FPAH02-09	36.254	-116.368	WGS84	2/25/2009
East Transect Auger	Porous and soft	Auger	FPAH04-09	36.254	-116.368	WGS84	4/7/2009
Around East Transect Auger	Porous and soft	Grab	HG07-05	36.254	-116.368	WGS84	11/12/2007
Around East Transect Auger	Porous and soft	Grab	HG07-06	36.254	-116.368	WGS84	11/12/2007
Around East Transect Auger	Porous and soft	Grab	HG07-07	36.254	-116.368	WGS84	11/12/2007
Around East Transect Auger	Porous and soft	Grab	HG07-08	36.254	-116.369	WGS84	11/12/2007
Around East Transect Auger	Porous and soft	Grab	HG07-09	36.254	-116.369	WGS84	11/12/2007
Clay Dune Auger	Porous and soft	Auger	HG09-01	36.267	-116.357	WGS84	2/23/2009
Discovery Auger	Porous and soft	Auger	HG09-02	36.230	-116.381	WGS84	2/24/2009
Discovery Auger	Porous and soft	Auger	DSAH04-07	36.230	-116.381	WGS84	4/11/2007
Discovery Auger	Porous and soft	Auger	DSAH04-07b	36.230	-116.381	WGS84	4/11/2007
Coppice Auger	Coppice dunes	Auger	HG09-04	36.239	-116.384	WGS84	2/24/2009
Coppice Auger	Coppice dunes	Auger	CPAH04-09	36.239	-116.384	WGS84	4/7/2009
Salt Pan Auger	Salt pan	Auger	SPAH04-07	36.270	-116.358	WGS84	4/11/2007
Discovery	Porous and soft	Grab	JY03-01	36.230	-116.382	WGS84	1/28/2003
Discovery	Porous and soft	Grab	JY03-01b	36.230	-116.382	WGS84	1/28/2003
Ash Meadows	Spring discharge/ porous and soft	Grab	JY03-09	36.425	-116.364	WGS84	1/27/2003
Obelisk	Vegetated and desert pavement	Grab	JY03-22	36.287	-116.375	WGS84	5/11/2003
Ojo del Caballo	Braided stream channel/ porous and soft	Grab	JY03-23	36.285	-116.369	WGS84	5/11/2003
Ojo del Caballo	Braided stream channel/ porous and soft	Grab	JY03-24	36.285	-116.368	WGS84	5/11/2003
Salt Pan	Salt pan	Grab	JY03-25	36.268	-116.354	WGS84	5/11/2003
Salt Pan	Salt pan	Grab	JY03-26	36.267	-116.354	WGS84	5/11/2003
Salt Pan	Salt pan	Grab	JY03-27	36.267	-116.353	WGS84	5/11/2003
East of East Transect	Hard and compact	Grab	JY03-28	36.253	-116.350	WGS84	5/11/2003
East Transect	Hard and compact	Grab	JY03-29	36.253	-116.355	WGS84	5/11/2003
Between West and East Transect	Porous and soft	Grab	JY03-30	36.254	-116.371	WGS84	5/12/2003
West Transect	Braided stream channel	Grab	JY03-31	36.254	-116.380	WGS84	5/12/2003
East of Coppice	Porous and soft	Grab	JY03-32	36.239	-116.381	WGS84	5/12/2003
Discovery	Porous and soft	Grab	JY03-41	36.230	-116.382	WGS84	8/18/2003
East Transect	Hard and compact	Grab	JY03-42	36.253	-116.355	WGS84	8/18/2003
Salt Pan	Salt pan	Grab	JY03-43	36.267	-116.354	WGS84	8/18/2003
Clay Dune	Porous and soft	Grab	JY-03-44	36.268	-116.355	WGS84	8/18/2003
Ash Meadows	Spring discharge/ porous and soft	Grab	JY03-49	36.428	-116.361	WGS84	8/19/2003
Ash Meadows	Spring discharge/ porous and soft	Grab	JY03-50	36.428	-116.362	WGS84	8/19/2003
Franklin Lake Playa/Carson Slough	Braided stream channel/ porous and soft	Grab	JY04-01	36.323	-116.365	WGS84	1/31/2004
Coppice	Coppice dunes	Grab	JY04-15	36.239	-116.384	WGS84	2/4/2004
Coppice	Coppice dunes	Grab	JY04-16	36.239	-116.384	WGS84	2/4/2004
North of Clay Dune	Salt pan	Grab	JY04-17	36.269	-116.355	WGS84	2/4/2004
Discovery	Porous and soft	Grab	JY05-12	36.230	-116.381	WGS84	4/15/2005
Discovery	Porous and soft	Grab	JY05-13	36.230	-116.381	WGS84	4/15/2005
Coppice	Coppice dunes	Grab	JY05-14	36.239	-116.384	WGS84	4/15/2005
Discovery	Porous and soft	Grab	JY-05-15	36.230	-116.381	WGS84	4/15/2005
Discovery	Porous and soft	Grab	JY-05-16	36.230	-116.381	WGS84	4/15/2005
Coppice	Coppice dunes	Grab	JY-05-17	36.239	-116.384	WGS84	4/15/2005
West Transect	Braided stream channel	Grab	JY05-18	36.254	-116.380	WGS84	4/16/2005
West Transect	Braided stream channel	Grab	JY-05-19	36.254	-116.380	WGS84	4/16/2005
East Transect	Hard and compact	Grab	JY05-20	36.253	-116.355	WGS84	4/16/2005
East Transect	Hard and compact	Grab	JY-05-21	36.253	-116.355	WGS84	4/16/2005
Salt Pan	Salt pan	Grab	JY05-22	36.267	-116.355	WGS84	4/16/2005
Salt Pan	Salt pan	Grab	JY-05-23	36.267	-116.355	WGS84	4/16/2005

Table 1. Location information for sampling sites.—Continued

[Sample site, name of sampling site; Surface characteristic, general nature of the ground surface around the sample site; Collection method, method of sample collection; Sampling designation, sample labeling designation; WC, water chemistry sampling; WM, groundwater level measurement; *, date designates time of repeat site or dust trap site set-up]

Sample site	Surface characteristic	Collection method	Sampling designation	Latitude	Longitude	Datum	Collection date
Clay Dune	Porous and soft	Grab	JY05-24	36.268	−116.355	WGS84	4/16/2005
Clay Dune	Porous and soft	Grab	JY05-25	36.268	−116.355	WGS84	4/16/2005
Franklin Lake Playa/Carson Slough	Braided stream channel/ porous and soft	Grab	JY05-27	36.325	−116.364	WGS84	4/17/2005
Franklin Lake Playa/Carson Slough	Braided stream channel/ porous and soft	Grab	JY05-28	36.313	−116.368	WGS84	4/17/2005
Ash Meadows/Rogers Spring	Spring discharge/ porous and soft	Grab	JY-05-29	36.486	−116.341	WGS84	4/17/2005
Ojo del Caballo	Braided stream channel/ porous and soft	Grab	JY-05-30	36.284	−116.369	WGS84	4/16/2005
Amargosa River Crossing	Vegetated and desert pavement	Grab	JY05-35	36.426	−116.466	WGS84	4/18/2005
Amargosa River East of Death Valley Junction	Vegetated and desert pavement	Grab	JY05-37	36.304	−116.412	WGS84	4/18/2005
Amargosa River East of Death Valley Junction	Braided stream channel	Grab	JY05-38	36.309	−116.403	WGS84	4/18/2005
Salt Pan	Salt pan	Grab	JY-05-59	36.267	−116.355	WGS84	4/16/2005
Discovery	Porous and soft	Grab	JY07-09	36.230	−116.381	WGS84	10/21/2007
Near GS-15	Porous and soft	Grab	JY07-10	36.256	−116.367	WGS84	10/22/2007
Near GS-18	Porous and soft	Grab	JY07-11	36.248	−116.364	WGS84	10/22/2007
Between GS-18 and East Transect	Porous and soft	Grab	JY07-12	36.248	−116.360	WGS84	10/22/2007
North Carson Slough, North of Hwy	Braided stream channel/ porous and soft	Grab	JY07-13	36.336	−116.367	WGS84	10/23/2007
North Carson Slough, North of Hwy	Braided stream channel/ porous and soft	Grab	JY07-14	36.332	−116.363	WGS84	10/23/2007
Dust Trap Array	Vegetated and desert pavement	Dust collection	T-69	36.232	−116.356	WGS84	2/3/2004*
Clay Dune Repeat Site #1	Porous and soft	surface measurements only	n/a	36.268	−116.355	WGS84	8/18/2003*
West Transect Repeat Site #1	Braided stream channel	surface measurements only	n/a	36.254	−116.381	WGS84	8/20/2003*
Discovery Repeat Site #1	Porous and soft	surface measurements only	n/a	36.230	−116.381	WGS84	8/18/2003*
East Transect Repeat Site #1	Hard and compact	surface measurements only	n/a	36.253	−116.355	WGS84	8/18/2003*
Coppice Repeat Site #1	Coppice dunes	surface measurements only	n/a	36.239	−116.384	WGS84	2/4/2004*
Salt Pan Repeat Site #1	Salt pan	surface measurements only	n/a	36.267	−116.355	WGS84	8/18/2003*
Carson Slough Repeat Site	Braided stream channel/ porous and soft	Grab	FP-CSL	36.318	−116.373	WGS84	12/15/2006*
Clay Dune Repeat Site	Porous and soft	Grab	FP-CDN	36.267	−116.357	WGS84	12/12/2006*
West Transect Repeat Site	Braided stream channel	Grab	FP-WTN-MND	36.254	−116.381	WGS84	12/12/2006*
Discovery Repeat Site	Porous and soft	Grab	FP-DSC	36.232	−116.382	WGS84	12/12/2006*
East Transect Repeat Site	Hard and compact	Grab	FP-ETN	36.254	−116.355	WGS84	12/12/2006*
Amargosa River	Braided stream channel	WC	none	36.234	−116.379	WGS84	10/8/2007
North Carson Slough Flowing Well	Braided stream channel/ porous and soft	WC	JY04-18	36.309	−116.368	WGS84	2/4/2004
North Carson Slough Flowing Well	Braided stream channel/ porous and soft	WC	JY06-22	36.309	−116.368	WGS84	11/7/2006
Chemical Well	Braided stream channel/ porous and soft	WC, WM	JY06-24	36.238	−116.375	WGS84	11/7/2006
Crystal Spring	Spring discharge	WC	CS-08-01	36.420	−116.323	WGS84	4/10/2008
Death Valley Junction Well	Vegetated and desert pavement	WC	DVJ-08-01	36.299	−116.412	WGS84	4/11/2008
Grapevine Spring	Spring discharge	WC	JY05-63	36.330	−116.308	WGS84	4/16/2005
King Spring	Spring discharge	WC	JY03-48	36.407	−116.379	WGS84	8/19/2003
Mudhole	Braided stream channel/ porous and soft	WC	HG04-01	36.285	−116.369	WGS84	4/24/2004
Obelisk Flowing Well	Vegetated and desert pavement	WC	JY03-45	36.287	−116.379	WGS84	8/19/2003
Obelisk Flowing Well	Vegetated and desert pavement	WC	JY07-04	36.287	−116.379	WGS84	4/15/2007
Obelisk Flowing Well	Vegetated and desert pavement	WC	JY05-62	36.287	−116.379	WGS84	4/16/2005
Ojo del Caballo Flowing Well	Braided stream channel/ porous and soft	WC	JY05-61	36.284	−116.369	WGS84	4/16/2005

Table 1. Location information for sampling sites.—Continued

[Sample site, name of sampling site; Surface characteristic, general nature of the ground surface around the sample site; Collection method, method of sample collection; Sampling designation, sample labeling designation; WC, water chemistry sampling; WM, groundwater level measurement; *, date designates time of repeat site or dust trap site set-up]

Sample site	Surface characteristic	Collection method	Sampling designation	Latitude	Longitude	Datum	Collection date
Ojo del Caballo Flowing Well	Braided stream channel/ porous and soft	WC	JY03-46	36.284	−116.369	WGS84	8/19/2003
Ojo del Caballo Flowing Well	Braided stream channel/ porous and soft	WC	JY07-05	36.284	−116.369	WGS84	4/15/2007
Point of Rocks Spring	Spring discharge	WC	POR-08-01	36.402	−116.271	WGS84	4/10/2008
Rogers Spring	Spring discharge	WC	RS-08-01	36.479	−116.326	WGS84	4/10/2008
GS-4	Braided stream channel/ porous and soft	WC, WM	JY06-25	36.264	−116.357	WGS84	11/8/2006
GS-4	Braided stream channel/ porous and soft	WC, WM	GS-04-08	36.264	−116.357	WGS84	4/12/2008
GS 12	Braided stream channel	WC, WM	JY07-06	36.274	−116.372	WGS84	4/16/2007
GS-15	Porous and soft	WC, WM	JY06-12	36.257	−116.370	WGS84	11/3/2006
GS-15	Porous and soft	WC, WM	JY06-27	36.257	−116.370	WGS84	11/8/2006
GS-18	Porous and soft	WC, WM	JY06-13	36.247	−116.368	WGS84	11/3/2006
GS 18	Porous and soft	WC, WM	JY07-07	36.247	−116.368	WGS84	4/16/2007
GS-20	Braided stream channel/ porous and soft	WC, WM	JY06-23	36.225	−116.381	WGS84	11/7/2006
Cz-11	Porous and soft	WC, WM	JY07-08	36.240	−116.378	WGS84	4/16/2007
Bucket Well (Cz-13)	Vegetated and desert pavement	WC, WM	JY06-11	36.250	−116.395	WGS84	11/3/2006
USGS New Well North	Vegetated and desert pavement	WC, WM	GWN-08-01	36.231	−116.384	WGS84	4/11/2008
USGS New Well South	Vegetated and desert pavement	WM	USGS New Well South	36.227	−116.383	WGS84	4/11/2008
GS-1	Braided stream channel/ porous and soft	WM	GS-1	36.269	−116.359	WGS84	2/7/2007
CZ-14	Vegetated and desert pavement	WM	CZ-14	36.239	−116.385	WGS84	2/6/2007
Metal Well North	Vegetated and desert pavement	WM	Metal Well North	36.219	−116.381	WGS84	4/11/2008
Metal Well South	Vegetated and desert pavement	WM	Metal Well South	36.218	−116.381	WGS84	4/11/2008
Field blank	n/a	WC	JY03-47	N/A	N/A	N/A	8/19/2003
Field blank	n/a	WC	JY05-60	N/A	N/A	N/A	4/16/2005
Field blank	n/a	WC	JY06-10	N/A	N/A	N/A	11/3/2006
Field blank	n/a	WC	JY06-26	N/A	N/A	N/A	11/8/2006
Field blank	n/a	WC	JY07-09	N/A	N/A	N/A	4/16/2007
Field blank	n/a	WC	FP-Blank	N/A	N/A	N/A	4/11/2008

Table 2. Summary of laboratory analyses completed on sediment samples.

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<53 micrometers); BC, bag contents resulting from hydration of thenardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Bnr, bulk fraction (<2mm) nitric leach residue; Bnr, bulk fraction (<53 micrometers) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₃ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
Clay Dune Auger	HG09-01/0-1	0-1	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/1-5	1-5	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/5-10	5-10	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/10-20	10-20	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/20-30	20-30	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/30-40	30-40	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/40-50	40-50	B	-	-	-	-	-	-	B	-
Clay Dune Auger	HG09-01/90-100	90-100	B	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/0-0.5	0-0.5	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/0.5-3	0.5-3	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/3-5	3-5	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/5-10	5-10	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/10-15	10-15	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/15-20	15-20	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/20-25	20-25	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/25-30	25-30	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/30-35	30-35	-	-	-	-	-	-	-	B	-
Coppice Auger	CPAH04-09/35-40	35-40	-	-	-	-	-	-	-	B	-
Coppice Auger	HG09-04/0-1	0-1	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/1-5	1-5	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/5-10	5-10	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/10-20	10-20	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/20-32	20-32	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/32-45	32-45	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/45-57	45-57	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/68-80	68-80	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/93-104	93-104	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/117-129	117-129	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/153-177	153-177	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/205-214	205-214	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/242-251	242-251	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/268-275	268-275	-	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/275-284	275-284	-	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/284-293	284-293	-	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/326-339	326-339	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/352-365	352-365	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/365-380	365-380	-	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/380-404	380-404	B	-	B	-	-	-	-	B	-
Coppice Auger	HG09-04/404-430	404-430	B	-	B	-	-	-	-	B	-
Discovery Auger	DS04-07/0-2	0-2	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/2-8	2-8	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/8-14	8-14	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/14-20	14-20	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/20-30	20-30	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/30-35	30-35	B	-	-	-	-	-	-	B	-

Table 2. Summary of laboratory analyses completed on sediment samples.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<53 micrometers); BC, bag contents resulting from hydration of theanardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Bnr, bulk fraction (<2mm) nitric leach residue; Bnr, bulk fraction (<53 micrometers) nitric leach residue; Fnr, fine fraction (<53 micrometers) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₃ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
Discovery Auger	DS04-07/35-48	35-48	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/48-57	48-57	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/57-68	57-68	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/68-82	68-82	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/82-87	82-87	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/87-104	87-104	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/104-118	104-118	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/118-131	118-131	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/131-142	131-142	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/142-157	142-157	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/157-170	157-170	B	-	-	-	-	-	-	B	-
Discovery Auger	DS04-07/170-186	170-186	B	-	-	-	-	-	-	B	-
Discovery Auger	DSAH04-07b/0-1	0-1	B	-	-	-	-	-	-	B	-
Discovery Auger	DSAH04-07b/1-2.5	1-2.5	B	-	-	-	-	-	-	B	-
Discovery Auger	DSAH04-07b/2.5-5	2.5-5	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/0-1	0-1	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/1-5	1-5	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/5-10	5-10	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/10-20	10-20	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/20-26	20-26	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/37-48	37-48	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/59-70	59-70	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/80-89	80-89	B	-	-	-	-	-	-	B	-
Discovery Auger	HG09-02/98-110	98-110	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/0-1	0-1	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/1-2	1-2	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/2-5	2-5	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/5-10	5-10	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/10-20	10-20	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/20-25	20-25	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/25-30	25-30	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/30-35	30-35	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/35-40	35-40	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/40-45	40-45	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/45-48	45-48	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH06-08/48-52	48-52	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH02-09/0-1	0-1	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/1-2.5	1-2.5	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/2.5-4	2.5-4	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/4-10	4-10	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/10-18	10-18	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/20-25	20-25	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/25-30	25-30	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/30-35	30-35	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/35-40	35-40	B	-	-	-	-	-	-	-	-

Table 2. Summary of laboratory analyses completed on sediment samples.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<53 micrometers); BC, bag contents resulting from hydration of thenardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Bnr, bulk fraction (<2mm) nitric leach residue; Fnr, fine fraction (<53 micrometers) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₃ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
East Transect Auger	FPAH02-09/40-45	40-45	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/45-50	45-50	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH02-09/50-55	50-55	B	-	-	-	-	-	-	-	-
East Transect Auger	FPAH04-09/0-1	0-1	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/1-3	1-3	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/3-5.5	3-5.5	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/5-8	5-8	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/8-11	8-11	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/11-15	11-15	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/15-20	15-20	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/20-25	20-25	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/25-30	25-30	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/30-35	30-35	B	-	-	-	-	-	-	B	-
East Transect Auger	FPAH04-09/35-40	35-40	B	-	-	-	-	-	-	B	-
East Transect Auger	HG07-04/0-1	0-1	B	-	B	-	-	B	B	B	Bs
East Transect Auger	HG07-04/1-5	1-5	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/5-10	5-10	-	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/10-20	10-20	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/20-30	20-30	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/30-40	30-40	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/40-50	40-50	-	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/50-60	50-60	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/60-70	60-70	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/70-80	70-80	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/80-90	80-90	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/90-95	90-95	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/95-101	95-101	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/101-124	101-124	B	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/124-137	124-137	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/137-145	137-145	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/145-159	145-159	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/159-163	159-163	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/163-169	163-169	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/169-177	169-177	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/177-184	177-184	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/184-193	184-193	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/193-203	193-203	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/203-217	203-217	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/217-228	217-228	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/228-237	228-237	-	-	B	-	B	B	B	B	Bs, Sl
East Transect Auger	HG07-04/237-248	237-248	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/248-258	248-258	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/258-266	258-266	B	-	B	-	B	B	B	B	Bs
East Transect Auger	HG07-04/266-281	266-281	-	-	B	-	B	B	B	B	Bs
East Transect Auger	HG08-01/0-1	0-1	B	-	-	-	-	-	-	B	-

Table 2. Summary of laboratory analyses completed on sediment samples.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<53 micrometers); BC, bag contents resulting from hydration of theanardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Bnr, bulk fraction (<2mm) nitric leach residue; Bs, bulk fraction (<53 micrometers) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₃ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
East Transect Auger	HG08-01/1-3	1-3	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/3-5	3-5	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/5-10	5-10	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/10-15	10-15	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/15-20	15-20	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/20-25	20-25	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/25-30	25-30	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/30-35	30-35	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/35-40	35-40	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/40-45	40-45	B	-	-	-	-	-	-	B	-
East Transect Auger	HG08-01/45-50	45-50	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/0-2	0-2	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/2-5	2-5	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/5-10	5-10	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/10-20	10-20	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/20-30	20-30	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/30-45	30-45	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/45-58	45-58	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/58-69	58-69	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/69-84	69-84	B	-	-	-	-	-	-	B	-
Salt Pan Auger	SPAH04-07/84-105	84-105	B	-	-	-	-	-	-	B	-
Amargosa River Crossing	JY05-35a	0-1	-	B	B	B	B	-	-	-	-
Amargosa River Crossing	JY05-35b	1-4	-	B	B	B	B	-	-	-	-
Amargosa River Crossing	JY05-35c	5-8	-	B	B	B	B	-	-	-	-
Amargosa River East of Death Valley Junction	JY05-37a	0-1	-	B	B	B	B	-	-	-	-
Amargosa River East of Death Valley Junction	JY05-37b	1-4	-	B	B	B	B	-	-	-	-
Amargosa River East of Death Valley Junction	JY05-37c	5-8	-	B	B	B	B	-	-	-	-
Amargosa River East of Death Valley Junction	JY05-38a	0-1	-	B	B	B	B	-	-	-	-
Amargosa River East of Death Valley Junction	JY05-38b	1-4	-	B	B	B	B	-	-	-	-
Amargosa River East of Death Valley Junction	JY05-38c	5-8	-	B	B	B	B	-	-	-	-
Around East Transect Auger	HG07-05/0-1	0-1	-	-	-	-	-	-	-	B	Bs
Around East Transect Auger	HG07-06/0-1	0-1	-	-	-	-	-	-	-	B	Bs
Around East Transect Auger	HG07-07/0-1	0-1	-	-	-	-	-	-	-	-	Bs
Around East Transect Auger	HG07-08/0-1	0-1	-	-	-	-	-	-	-	-	Bs
Around East Transect Auger	HG07-09/0-1	0-1	-	-	-	-	-	-	-	-	Bs
Ash Meadows	JY03-09	0-1	-	-	-	-	-	B, F	-	-	Bs, Bdr, Bnr, Fnr
Ash Meadows	JY03-49a	0-1	-	-	B	-	B, F	B	B	-	Bdr

Table 2. Summary of laboratory analyses completed on sediment samples.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<2mm), F, fine fraction (<53 micrometers); BC, bag contents resulting from hydration of thenardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Bnr, bulk fraction (<2mm) nitric leach residue; Fnr, fine fraction (<53 micrometers) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₃ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
Ash Meadows	JY03-49b	1-5	-	-	-	-	B	B	B	-	Bdr
Ash Meadows	JY03-49c	5-10	-	-	-	-	-	B	B	-	Bdr
Ash Meadows	JY03-50a	0-1	-	-	B	-	B, F	B	B	-	Bdr
Ash Meadows	JY03-50b	1-5	-	-	-	-	B	B	B	-	Bdr
Ash Meadows	JY03-50c	5-10	-	-	-	-	-	B	B	-	Bdr
Between GS-18 and East Transect	JY07-12a	0-1	-	-	-	-	-	B	B	B	-
Between GS-18 and East Transect	JY07-12b	5-15	-	-	-	-	-	B	B	B	-
Between West and East Transect	JY03-30a	1-5	-	-	B	-	-	-	-	-	-
Between West and East Transect	JY03-30b	5-10	-	-	-	-	-	-	-	-	Cl
Clay Dune	JY03-44a	0-1	-	-	B	-	-	B, F	B, F	-	Bdr, Fdr
Clay Dune	JY03-44b	1-5	-	-	-	-	-	B, F	B, F	-	Bdr, Fdr
Clay Dune	JY03-44c	5-10	-	-	-	-	-	B, F	B, F	-	Bdr, Fdr
Clay Dune	JY05-24a	0-1	-	-	-	B	-	-	-	-	-
Clay Dune	JY05-24b	2-5	-	-	-	B	-	-	-	-	-
Clay Dune	JY05-24c	6-9	-	-	-	B	-	-	-	-	-
Clay Dune	JY05-25	0-1	-	B	B	-	B	-	-	-	Bs
Coppice	JY04-15a	0-1	-	B	B	-	F	-	-	-	Bs
Coppice	JY04-15b	1-5	-	B	B	-	-	-	-	-	-
Coppice	JY04-15c	5-10	-	B	B	-	-	-	-	-	-
Coppice	JY04-16a	0-1	-	B	B	-	F	-	-	-	Bs
Coppice	JY04-16b	1-5	-	B	B	-	-	-	-	-	Bs, Cl
Coppice	JY04-16c	5-10	-	B	B	-	-	-	-	-	Bs, Cl
Coppice	JY05-14a	0-1	-	-	-	B	-	-	-	-	-
Coppice	JY05-14b	2-5	-	-	-	B	-	-	-	-	-
Coppice	JY05-14c	6-9	-	-	-	B	-	-	-	-	-
Coppice	JY05-17	0-1	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Coppice reference	FP-COP-ref	surface grab	-	-	-	-	-	B	B	B	-
Discovery	JY03-01	2-10	-	B	B	-	F	B, F	-	-	Bs, Fnr
Discovery	JY03-01a	0-1	-	B	B	-	F	B, F	B	-	Bs, Bdr, Bnr, Fnr
Discovery	JY03-01b	0-5	-	B	B	-	F	-	-	-	Bs
Discovery	JY03-41a	0-1	-	-	B	-	-	-	-	-	-
Discovery	JY05-12a	0-1	-	-	-	B	-	-	-	-	-
Discovery	JY05-12b	1-5	-	-	-	B	-	-	-	-	-
Discovery	JY05-12c	6-9	-	-	-	B	-	-	-	-	-
Discovery	JY05-13a	0-1	-	-	-	B	-	-	-	-	-
Discovery	JY05-13b	2-5	-	-	-	B	-	-	-	-	-
Discovery	JY05-13c	6-9	-	-	-	B	-	-	-	-	-
Discovery	JY05-15	0-1	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Discovery	JY05-16	0-1	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Discovery	JY07-09	0-1	-	-	B	-	-	B	B	B	-
East of Coppice	JY03-32a	0-1	-	-	-	-	-	B	B	-	Bdr
East of East Transect	JY03-28a	0-1	-	-	B	-	-	B	B	-	Bdr
East of East Transect	JY03-28b	1-5	-	-	-	-	-	B	B	-	Bdr, Cl
East of East Transect	JY03-28c	5-10	-	-	-	-	-	B	B	-	Bdr

Table 2. Summary of laboratory analyses completed on sediment samples.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<53 micrometers); BC, bag contents resulting from hydration of theanardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Fnr, bulk fraction (<2mm) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₃ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
East Transect	JY03-29a	0-1	-	-	B	-	-	B, G	B, F	-	Bdr, Fdr, Bnr, Fnr
East Transect	JY03-29b	1-3	-	-	-	-	-	B, G	-	-	Bnr, Fnr
East Transect	JY03-29c	3-7	-	-	-	-	-	B, G	-	-	Bnr, Fnr
East Transect	JY03-29d	7-15	-	-	-	-	-	B, G	-	-	Bnr, Fnr
East Transect	JY03-42a	0-1	-	-	B	-	-	B	B	-	Bdr
East Transect	JY05-20a	0-1	-	-	-	B	-	-	-	-	-
East Transect	JY05-20b	2-5	-	-	-	B	-	-	-	-	-
East Transect	JY05-20c	6-9	-	-	-	B	-	-	-	-	-
East Transect	JY-05-21a	0-1	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
East Transect	JY-05-21b	1-3	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Franklin Lake Playa/Carson Slough	JY04-01	0-1	-	-	-	-	F	B (BC), F	B (BC)	-	Bs
Franklin Lake Playa/Carson Slough	JY05-27	0-1	-	-	-	B	B	B, F	B, F	-	Bs, Bdr, Fdr
Franklin Lake Playa/Carson Slough	JY05-28	0-1	-	-	-	B	B	B, F	B, F	-	Bs, Bdr, Fdr
Ash Meadows	JY-05-29	0-1	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Mudhole	HG04-01/A2RU	surface	-	-	-	-	-	-	B	-	-
Near GS-15	JY07-10a	0-1	-	-	-	-	-	B	B	B	-
Near GS-15	JY07-10b	5-15	-	-	-	-	-	B	B	B	-
Near GS-18	JY07-11a	0-1	-	-	-	-	-	B	B	B	-
Near GS-18	JY07-11b	10-20	-	-	-	-	-	B	B	B	-
North Carson Slough, North of Hwy	JY07-13	0-1	-	-	-	-	-	B	B	B	-
North Carson Slough, North of Hwy	JY07-14	0-1	-	-	-	-	-	B	B	B	-
North of Clay Dune	JY04-17a	0-1	-	-	B	-	-	-	-	-	-
Obelisk	JY03-22a	0-1	-	-	B	-	-	B	B	-	Bdr
Ojo del Caballo	JY03-23a	0-1	-	-	B	-	-	B	B	-	Bdr
Ojo del Caballo	JY03-24a	0-1	-	-	-	-	-	F	-	-	Fnr
Ojo del Caballo	JY03-24b	1-5	-	-	-	-	-	B, F	B	-	Bdr, Bnr, Fnr
Ojo del Caballo	JY03-24c	5-10	-	-	-	-	-	B, F	-	-	Bnr, Fnr
Ojo del Caballo	JY-05-30	0-1	-	B	B	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Salt Pan	JY03-25a	0-1	-	-	B	-	F	B	B	-	Bs, Fs, Bdr
Salt Pan	JY03-25b	1-5	-	-	-	-	F	B	B	-	Bdr
Salt Pan	JY03-25c	5-10	-	-	-	-	F	B	B	-	Bdr
Salt Pan	JY03-26a	0-1	-	-	-	-	-	B, F	-	-	Fnr
Salt Pan	JY03-26b	1-5	-	-	-	-	-	B, F	F	-	Fdr, Bnr, Fnr
Salt Pan	JY03-26c	5-10	-	-	-	-	-	B, F	F	-	Fdr, Bnr, Fnr
Salt Pan	JY03-27a	0-1	-	-	B	-	-	-	-	-	-
Salt Pan	JY03-43a	0-1	-	-	B	-	B, F	B	B	-	Bdr
Salt Pan	JY03-43b	1-5	-	-	-	-	B, F	B	B	-	Bdr
Salt Pan	JY03-43c	5-10	-	-	-	-	B, F	B	B	-	Bdr
Salt Pan	JY05-22a	0-1	-	-	-	B	-	-	-	-	-
Salt Pan	JY05-22b	2-5	-	-	-	B	-	-	-	-	-
Salt Pan	JY05-22c	6-9	-	-	-	B	-	-	-	-	-
Salt Pan	JY-05-23a	0-1	-	-	-	-	B	B, F	B, F	-	Bs, Bdr, Fdr
Salt Pan	JY-05-23b	1-3	-	-	-	-	-	B, F	B, F	-	-
Salt Pan	JY-05-59a	0-0.5	-	-	-	-	B	B, F	B, F	-	Bs, Bdr, Fdr

Table 2. Summary of laboratory analyses completed on sediment samples.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; B, bulk fraction (<53 micrometers); BC, bag contents resulting from hydration of thenardite; Bs, bulk fraction (<2mm) solid; Bdr, bulk fraction (<2mm) DI leach residue; Fdr, fine fraction (<53 micrometers) DI leach residue; Bnr, bulk fraction (<2mm) nitric leach residue; Fnr, fine fraction (<53 micrometers) nitric leach residue; Cl, Clay; Sl, Slurry]

Sample site	Sample ID	Depth (cm)	Gravimetric water content (see table 7)	CO ₂ % (see table 8)	Particle size analysis (see table 9)	Bulk density (see table 10)	Total chemistry (see table 11)	Leach chemistry (see table 12)	Alkalinity and pH (see table 12)	Electrical conductivity (see table 14)	X-ray diffraction (see table 15)
East Transect Repeat Site	FP-ETN/10-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
East Transect Repeat Site	FP-ETN/11-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
East Transect Repeat Site	FP-ETN/4-08	0-1	-	-	-	-	-	-	-	-	Bs, Cl
East Transect Repeat Site	FP-ETN/11-08	0-1	-	-	-	-	-	-	-	-	Bs, Cl
East Transect Repeat Site	FP-ETN/1-09	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN-MIND/12-06	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN-FLT/12-06	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/1-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/3-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/4-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/5-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/7-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/10-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/11-07	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/4-08	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/11-08	0-1	-	-	-	-	-	-	-	-	Bs, Cl
West Transect Repeat Site	FP-WTN/1-09	0-1	-	-	-	-	-	-	-	-	Bs, Cl
Dust Trap Array	T-69	+300	-	-	-	-	-	B	-	-	-

Table 3. Summary of field and laboratory water analyses completed.

Sample site	Sample ID	Field measurements (see table 6)				Chemical analyses (see table 13)	Isotopic analyses (see table 13)				
		pH	Temperature	Specific conductance	Alkalinity		Total iron (ferrozine)	δD-H ₂ O	δ ¹⁸ O-H ₂ O	δ ³⁴ S-SO ₄	δ ¹⁸ O-SO ₄
Amargosa River	none	-	-	-	-	-	-	-	-	X	-
North Carson Slough Flowing Well	JY04-18	X	-	X	X	-	-	-	-	X	-
North Carson Slough Flowing Well	JY06-22	X	X	X	X	-	-	-	-	X	X
Chemical Well	JY06-24	X	X	X	X	-	-	-	-	X	X
Crystal Spring	CS-08-01	X	X	X	X	-	-	-	-	X	X
Death Valley Junction Well	DVJ-08-01	X	X	X	X	-	-	-	-	X	X
Grapevine Spring	JY05-63	X	X	X	X	-	-	-	-	-	-
King Spring	JY03-48	X	X	X	X	-	X	X	-	-	-
Mudhole	HG04-01	-	X	X	X	-	-	-	-	-	-
Obelisk Flowing Well	JY03-45	X	X	X	X	-	X	X	-	-	-
Obelisk Flowing Well	JY05-62	X	X	X	X	-	-	-	-	-	-
Obelisk Flowing Well	JY07-04	X	X	X	X	-	-	-	-	X	X
Ojo del Caballo Flowing Well	JY03-46	X	X	X	X	-	-	-	-	-	-
Ojo del Caballo Flowing Well	JY05-61	X	X	X	X	-	X	X	-	-	-
Ojo del Caballo Flowing Well	JY07-05	X	X	X	X	-	-	-	-	X	X
Point of Rocks Spring	POR-08-01	X	X	X	X	-	-	-	-	X	X
Rogers Spring	RS-08-01	X	X	X	X	-	-	-	-	X	X
USGS-04	JY06-25	X	X	X	X	-	-	-	-	X	X
USGS-04	GS-04-08	X	X	X	X	-	-	-	-	-	-
USGS 12	JY07-06	X	X	X	X	-	-	-	-	X	X
USGS-15	JY06-12	X	X	X	X	-	-	-	-	-	-
USGS-15	JY06-27	X	X	X	X	-	-	-	-	X	X
USGS-18	JY06-13	X	X	X	X	-	-	-	-	-	-
USGS 18	JY07-07	X	X	X	X	-	-	-	-	X	X
USGS-20	JY06-23	X	X	X	X	-	-	-	-	X	X
Well-11	JY07-08	X	X	X	X	-	-	-	-	X	-
Well-13 (Bucket Well)	JY06-11	X	X	X	X	-	-	-	-	X	X
USGS New Well North	GWN-08-01	X	X	X	X	-	-	-	-	X	X
Field blank	JY03-47	-	-	-	X	-	-	-	-	-	-
Field blank	JY05-60	-	-	-	X	-	-	-	-	-	-
Field blank	JY06-10	-	-	X	X	-	-	-	-	-	-
Field blank	JY06-26	-	-	X	X	-	-	-	-	-	-
Field blank	JY07-09	-	-	X	X	-	-	-	-	-	-
Field blank	FP-Blank	-	-	X	X	-	-	-	-	-	-

Table 4A. Repeat measurement data for Coppice Dune repeat site #1.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, height of top of erosion pin above the ground surface; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; Shear stress, horizontal shear stress of ground surface measured with a hand-held shear vane; Sub-surface compaction, vertical sub-surface compaction measured in pounds per square inch (PSI) using a spear penetrometer; cm, centimeters; kg/cm², kilograms per centimeter squared; “, inches]

Date	Pin 1 (cm)	Pin 2 (cm)	Compressive strength (kg/cm ²)	Shear stress (kg/cm ²)	Subsurface compaction (PSI)							
					3"	6"	9"	12"	15"	18"	21"	24"
2/4/2004	50.0	56.2	0.03	0.62	0	20	80	150	140	280	300	350
4/15/2005	55.7	55.8	1.50	3.43	30	60	120	200	250	250	250	250
5/26/2005	55.9	55.7	4.17	4.03	10	60	140	220	190	190	190	280
4/23/2006	55.2	55.0	4.33	3.00	70	50	180	240	300	n.d.	n.d.	n.d.
11/8/2006	54.6	54.2	3.93	n.d.	10	100	150	250	250	n.d.	n.d.	n.d.
12/13/2006	54.6	54.8	4.50	n.d.	30	150	250	300	300	300	n.d.	n.d.
2/5/2007	54.7	54.2	2.47	3.33	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/9/2007	54.6	54.4	0.15	1.38	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/10/2007	54.3	54.3	0.16	1.26	50	80	180	250	250	250	n.d.	n.d.

Table 4B. Repeat measurement data for Clay Dune repeat site #1.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, height of top of erosion pin above the ground surface; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; Shear stress, horizontal shear stress of ground surface measured with a hand-held shear vane; Sub-surface compaction, vertical sub-surface compaction measured in pounds per square inch (PSI) using a spear penetrometer; cm, centimeters; kg/cm², kilograms per centimeter squared; “, inches]

Date	Pin 1 (cm)	Pin 2 (cm)	Compressive strength (kg/cm ²)	Shear stress (kg/cm ²)	Subsurface compaction (PSI)							
					3"	6"	9"	12"	15"	18"	21"	24"
8/18/2003	35.0	30.4	0.42	2.92	5	5	5	5	5	5	n.d.	n.d.
2/4/2004	32.7	28.8	0.63	2.73	40	60	30	30	30	30	30	30
4/16/2005	36.3	32.7	0.40	2.53	0	10	10	10	10	20	20	20
5/26/2005	36.9	32.9	0.33	0.87	0	10	10	10	20	20	20	20
4/23/2006	36.1	33.8	0.73	1.57	10	50	0	10	10	10	10	10
11/8/2006	38.2	34.2	0.17	1.14	0	20	30	20	20	20	20	20
12/12/2006	37.5	34.1	1.10	1.32	30	100	50	20	20	20	20	20
2/7/2007	37.7	34.0	1.47	1.51	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/9/2007	38.4	34.0	1.57	1.59	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/21/2007	38.4	33.4	1.23	1.32	0	80	50	20	20	20	20	20

Table 4C. Repeat measurement data for Discovery repeat site #1.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, height of top of erosion pin above the ground surface; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; Shear stress, horizontal shear stress of ground surface measured with a hand-held shear vane; Sub-surface compaction, vertical sub-surface compaction measured in pounds per square inch (PSI) using a spear penetrometer; cm, centimeters; kg/cm², kilograms per centimeter squared; “, inches]

Date	Pin 1 (cm)	Pin 2 (cm)	Compressive strength (kg/cm ²)	Shear stress (kg/cm ²)	Subsurface compaction (PSI)							
					3"	6"	9"	12"	15"	18"	21"	24"
8/18/2003	42.4	44.4	4.00	9.58	30	100	110	140	200	n.d.	n.d.	n.d.
2/3/2004	40.9	42.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/15/2005	43.1	44.7	0.80	2.77	20	90	130	150	150	170	250	n.d.
5/26/2005	41.4	44.3	0.13	0.67	90	190	250	190	220	220	220	220
4/23/2006	41.2	43.2	0.02	0.60	10	90	140	180	200	180	240	240
10/30/2006	41.1	43.8	0.11	1.21	20	120	250	200	350	200	n.d.	n.d.
12/11/2006	41.1	43.7	0.06	0.47	10	50	220	250	220	250	250	250
2/5/2007	41.1	43.4	0.24	1.33	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/9/2007	40.0	43.5	0.25	1.28	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/11/2007	40.2	43.7	3.17	1.21	10	100	300	250	250	n.d.	n.d.	n.d.
4/16/2007	40.1	43.6	0.18	1.03	10	120	220	320	250	250	n.d.	n.d.
4/21/2007	40.1	43.5	0.15	1.1	20	100	200	250	320	250	200	250

Table 4D. Repeat measurement data for East Transect repeat site #1.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, height of top of erosion pin above the ground surface; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; Shear stress, horizontal shear stress of ground surface measured with a hand-held shear vane; Sub-surface compaction, vertical sub-surface compaction measured in pounds per square inch (PSI) using a spear penetrometer; cm, centimeters; kg/cm², kilograms per centimeter squared; “, inches]

Date	Pin 1 (cm)	Pin 2 (cm)	Compressive strength (kg/cm ²)	Shear stress (kg/cm ²)	Subsurface compaction (PSI)							
					3"	6"	9"	12"	15"	18"	21"	24"
8/18/2003	33.0	36.0	1.67	1.87	5	0	5	10	10	10	10	n.d.
1/31/2004	31.4	34.9	1.92	1.83	0	0	10	160	150	140	n.d.	n.d.
4/16/2005	33.6	33.3	0.50	1.07	20	30	100	110	120	150	180	200
5/26/2005	33.2	33.3	0.63	1.07	0	10	30	50	70	70	70	70
4/23/2006	32.3	32.3	0.80	1.19	20	10	30	50	110	120	120	120
10/30/2006	31.7	32.7	1.50	1.65	0	0	30	50	80	100	110	110
12/13/2006	31.8	32.5	1.10	1.49	10	100	150	180	180	180	180	180
2/7/2007	31.6	32.7	2.10	1.23	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/9/2007	32.5	32.5	2.10	1.35	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/10/2007	32.1	32.0	0.23	1.14	20	10	50	70	100	150	160	160

Table 4E. Repeat measurement data for West Transect repeat site #1.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, height of top of erosion pin above the ground surface; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; Shear stress, horizontal shear stress of ground surface measured with a hand-held shear vane; Sub-surface compaction, vertical sub-surface compaction measured in pounds per square inch (PSI) using a spear penetrometer; cm, centimeters; kg/cm², kilograms per centimeter squared; “, inches]

Date	Pin 1 (cm)	Pin 2 (cm)	Compressive strength (kg/cm ²)	Shear stress (kg/cm ²)	Subsurface compaction (PSI)							
					3"	6"	9"	12"	15"	18"	21"	24"
8/20/2003	43.5	46.4	3.97	6.17	300	350	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/16/2005	43.2	45.8	4.00	3.07	140	100	180	300	n.d.	n.d.	n.d.	n.d.
5/26/2005	43.1	46.2	4.00	4.57	60	80	160	180	240	310	n.d.	n.d.
4/23/2006	44.3	46.2	3.83	7.50	70	50	180	240	300	n.d.	n.d.	n.d.
11/6/2006	44.0	45.7	4.40	8.33	160	150	250	250	n.d.	n.d.	n.d.	n.d.
12/12/2006	44.0	46.2	3.30	3.92	100	250	180	250	n.d.	n.d.	n.d.	n.d.
2/6/2007	44.2	47.3	4.23	3.58	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/9/2007	43.6	45.8	4.50	6.92	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/21/2007	43.5	45.9	4.50	9.25	200	100	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Table 4F. Repeat measurement data for Carson Slough repeat site FP-CSL.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, 3, 4, height of top of erosion pin above the ground surface; M1, depth to moisture measurement #1; M2, depth to moisture measurement #2; >#, depth to moisture was not reached within the depth noted, e.g. >70, depth of moisture was not reached within 70 cm of the ground surface; Conductivity, specific conductance of surface crust; Crust thickness, average measurement of 20 crusts; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; cm, centimeters; mS, millisiemens; mm, millimeters; kg/cm², kilograms per centimeter squared]

Date	Pin 1 (cm)	Pin 2 (cm)	Pin 3 (cm)	Pin 4 (cm)	Depth to moisture M1 (cm)	Depth to moisture M2 (cm)	Conductivity (mS)	Crust thickness (mm)	Compressive strength (kg/cm ²)
12/15/2006	45.7	46.4	46.2	48.9	9.00	4.00	3.70	3.2	0.474
1/25/2007	46.0	46.7	46.0	48.5	5.00	2.50	11.80	8.6	0.068
3/7/2007	46.0	47.0	45.5	49.0	3.00	5.00	0.46	7.9	0.053
4/21/2007	45.7	47.1	45.4	48.1	6.00	7.00	6.20	6.4	1.505
5/31/2007	45.5	47.0	45.7	48.0	7.00	9.00	5.90	9.0	0.044
7/16/2007	45.5	46.7	45.8	48.3	17.00	8.00	4.60	5.2	0.147
10/23/2007	47.4	47.7	48.0	51.4	1.00	0.50	7.10	5.8	0.978
11/14/2007	47.5	47.5	48.0	51.5	5.00	5.00	20.00	3.0	0.096
4/8/2008	46.0	46.5	45.5	50.5	0.50	0.50	26.00	9.0	0.020
5/20/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	27.90	n.d.	n.d.
10/15/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	26.90	n.d.	n.d.
11/24/2008	44.0	46.3	44.8	48.8	9.00	5.00	15.80	8.9	0.083
1/2/2009	44.9	45.0	44.6	46.9	3.00	2.00	9.60	7.4	0.012
2/26/2009	47.5	48.0	46.0	50.0	0.00	0.00	15.90	8.7	0.002
4/7/2009	45.0	46.0	45.2	48.5	0.30	2.00	28.00	7.9	0.058

Table 4G. Repeat measurement data for Clay Dune repeat site FP-CDN.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, 3, 4, height of top of erosion pin above the ground surface; M1, depth to moisture measurement #1; M2, depth to moisture measurement #2; >#, depth to moisture was not reached within the depth noted, e.g. >70, depth of moisture was not reached within 70 cm of the ground surface; Conductivity, specific conductance of surface crust; Crust thickness, average measurement of 20 crusts; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; cm, centimeters; mS, millisiemens; mm, millimeters; kg/cm², kilograms per centimeter squared]

Date	Pin 1 (cm)	Pin 2 (cm)	Pin 3 (cm)	Pin 4 (cm)	Depth to moisture M1 (cm)	Depth to moisture M2 (cm)	Conductivity (mS)	Crust thickness (mm)	Compressive strength (kg/cm ²)
12/12/2006	43.6	46.6	47.1	42.4	5.00	5.00	6.4	19.00	0.158
1/25/2007	45.0	45.5	46.5	42.5	5.50	5.00	5.4	10.45	0.026
3/7/2007	47.0	46.0	47.0	42.5	5.00	8.00	7.3	10.30	0.009
4/21/2007	45.2	46.0	46.5	42.3	6.00	8.00	10.5	15.60	1.550
5/31/2007	46.6	46.0	46.5	42.8	4.00	4.50	7.7	9.95	0.089
7/16/2007	46.5	46.0	46.7	42.5	10.00	8.00	6.6	7.05	0.968
10/23/2007	47.9	47.4	51.0	45.1	2.00	1.50	12.0	0.68	0.010
11/14/2007	48.5	47.5	50.0	44.5	1.00	1.00	17.1	5.10	0.199
4/8/2008	46.6	46.8	50.2	43.3	4.00	6.00	4.9	6.25	0.002
5/18/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	14.1	n.d.	n.d.
10/15/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.3	n.d.	n.d.
11/24/2008	44.1	47.3	48.8	42.2	6.00	7.00	2.8	7.45	0.013
1/2/2009	44.0	46.7	47.8	41.8	4.00	3.00	10.3	2.75	0.002
2/26/2009	47.0	47.5	48.5	43.3	0.00	0.00	8.6	9.05	0.005
4/8/2009	45.3	45.4	48.1	42.1	4.00	5.00	10.7	7.85	0.068

Table 4H. Repeat measurement data for Discovery repeat site FP-DSC.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, 3, 4, height of top of erosion pin above the ground surface; M1, depth to moisture measurement #1; M2, depth to moisture measurement #2; >#, depth to moisture was not reached within the depth noted, e.g. >70, depth of moisture was not reached within 70 cm of the ground surface; Conductivity, specific conductance of surface crust; Crust thickness, average measurement of 20 crusts; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; cm, centimeters; mS, millisiemens; mm, millimeters; kg/cm², kilograms per centimeter squared]

Date	Pin 1 (cm)	Pin 2 (cm)	Pin 3 (cm)	Pin 4 (cm)	Depth to moisture M1 (cm)	Depth to moisture M2 (cm)	Conductivity (mS)	Crust thickness (mm)	Compressive strength (kg/cm ²)
12/12/2006	45.50	45.10	44.50	45.90	5.00	7.00	4.1	9.75	1.212
1/25/2007	45.00	44.50	44.00	45.00	12.50	9.50	2.5	8.70	0.025
3/7/2007	45.00	45.00	44.00	45.00	11.00	8.00	2.7	11.40	0.008
4/11/2007	45.00	44.75	44.00	44.75	15.00	12.00	4.3	11.08	0.180
5/31/2007	45.00	44.50	44.00	45.00	9.00	9.50	6.0	10.15	0.072
7/15/2007	44.50	44.20	44.00	44.30	10.00	14.00	4.9	6.90	0.237
10/21/2007	47.60	46.40	47.10	48.90	3.00	6.00	8.7	3.80	0.134
11/14/2007	48.50	47.00	47.50	49.00	9.00	1.00	9.4	7.70	0.993
4/6/2008	46.30	43.30	44.20	45.80	7.00	5.00	1.7	6.50	0.028
5/20/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.8	n.d.	n.d.
10/14/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	7.8	n.d.	n.d.
11/23/2008	44.30	43.00	42.00	45.60	9.00	11.00	5.1	9.70	0.063
1/1/2009	44.10	41.50	41.50	43.80	26.00	14.00	2.1	7.90	0.028
2/26/2009	46.50	44.50	45.00	49.50	0.00	5.00	5.2	11.00	0.182
4/6/2009	43.00	42.30	40.80	42.00	5.00	10.00	3.3	13.60	0.048

Table 4I. Repeat measurement data for East Transect FP-ETN.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, 3, 4, height of top of erosion pin above the ground surface; M1, depth to moisture measurement #1; M2, depth to moisture measurement #2; >#, depth to moisture was not reached within the depth noted, e.g. >70, depth of moisture was not reached within 70 cm of the ground surface; Conductivity, specific conductance of surface crust; Crust thickness, average measurement of 20 crusts; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; cm, centimeters; mS, millisiemens; mm, millimeters; kg/cm², kilograms per centimeter squared]

Date	Pin 1 (cm)	Pin 2 (cm)	Pin 3 (cm)	Pin 4 (cm)	Depth to moisture M1 (cm)	Depth to moisture M2 (cm)	Conductivity (mS)	Crust thickness (mm)	Compressive strength (kg/cm ²)
12/12/2006	45.9	46.2	45.6	44.7	38.1	27.9	0.69	23.40	0.856
1/25/2007	46.0	46.0	45.5	44.1	33	31	0.49	18.85	0.203
3/7/2007	46.5	46.5	46.0	45.0	23	24	0.49	20.45	0.725
4/11/2007	49.0	48.5	48.0	46.0	28	28	0.55	17.25	1.665
5/31/2007	48.9	49.4	48.0	47.0	32	28	0.53	17.25	1.258
7/15/2007	49.6	49.8	47.9	47.0	41	35	0.55	8.10	0.890
10/22/2007	51.4	50.3	48.1	47.1	8	23	0.47	3.10	1.934
11/14/2007	50.0	50.5	48.0	47.0	12	10	1.58	18.90	0.857
4/8/2008	48.8	48.1	48.8	46.3	12	16	0.37	14.30	0.078
5/20/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.47	n.d.	n.d.
10/15/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.48	n.d.	n.d.
11/23/2008	49.5	48.0	48.8	46.5	41	30	0.57	15.65	0.057
1/2/2009	47.4	44.5	47.5	46.0	>50	>50	0.36	14.85	0.033
2/26/2009	47.5	44.5	49.5	46.5	18.5	16	3.50	27.80	1.898
4/7/2009	47.8	44.6	48.5	46.1	40	>48	0.83	20.80	0.078

Table 4J. Repeat measurement data for West Transect repeat site FP-WTN.

[n.d., not determined; Date, date measurements were made; Pin 1, 2, 3, 4, height of top of erosion pin above the ground surface; M1, depth to moisture measurement #1; M2, depth to moisture measurement #2; >#, depth to moisture was not reached within the depth noted, e.g. >70, depth of moisture was not reached within 70 cm of the ground surface; Conductivity, specific conductance of surface crust; Crust thickness, average measurement of 20 crusts; Compressive strength, vertical compressive strength of ground surface measured with a spring-piston-style pocket penetrometer; cm, centimeters; mS, millisiemens; mm, millimeters; kg/cm², kilograms per centimeter squared]

Date	Pin 1 (cm)	Pin 2 (cm)	Pin 3 (cm)	Pin 4 (cm)	Depth to moisture M1 (cm)	Depth to moisture M2 (cm)	Conductivity (mS)	Crust thickness (mm)	Compressive strength (kg/cm ²)
12/12/2006	46.0	45.6	46.7	45.8	n.r.	n.d.	0.83	11.00	2.940
1/25/2007	46.0	45.0	46.5	45.0	>70	n.d.	0.54	9.45	0.921
3/7/2007	46.0	45.0	47.0	45.5	n.r.	n.d.	0.23	13.00	0.554
4/11/2007	46.0	45.0	47.6	46.2	30	28	1.91	13.65	2.638
5/31/2007	46.0	46.0	48.0	46.0	>23	n.d.	0.94	9.95	2.213
7/15/2007	46.1	45.8	47.5	46.1	>40	n.d.	2.10	11.40	2.740
10/22/2007	47.2	45.8	49.2	46.9	7	3	1.91	16.15	3.110
11/14/2007	47.5	46.0	49.0	46.9	7	>40	1.54	15.20	4.295
4/8/2008	46.8	46.0	48.9	46.2	6	8	1.18	12.85	3.458
5/20/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.53	n.d.	n.d.
10/15/2008	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.36	n.d.	n.d.
11/23/2008	47	45.8	49.4	46.1	>40	>48	1.35	17.9	3.185
1/1/2009	47.2	45.5	49.1	46	>47	41	0.83	14.6	2.945
2/26/2009	47	46	48.5	46	4.5	5.5	2.2	27.7	2.944
4/7/2009	47.1	46.1	48.7	45.7	>38	>43	1.73	16.7	4.32

Table 5. Casing, water level, well depth, and ground-surface elevations for Franklin Lake playa wells. All measurements except ground-surface elevation were made in feet and were later converted to meters.

[Well ID, unique well identifier; Casing height, height to the top of the casing from the ground surface; Water level, the depth of water below the ground surface; Total well depth, the depth to the bottom of the well below the ground surface; Ground-surface elevation, elevation determined using a GPS receiver and post correction with an average vertical error of 20 cm; ft, feet; m, meters; n.d., not determined]

Well ID	Date measured	Casing height (ft)	Casing height (m)	Water level (ft)	Water level (m)	Total well depth (ft)	Total well depth (m)	Ground-surface elevation (m)
GS-1	2/7/2007	4.08	1.24	1.72	0.52	6.52	1.99	611.68
	3/9/2007			1.72	0.52			
	4/11/2007			1.72	0.52			
	7/16/2007			2.12	0.65			
	10/23/2007			1.52	0.46			
	11/17/2007			1.57	0.48			
	4/11/2008			1.52	0.46			
	11/24/2008			2.12	0.65			
	1/2/2009			2.17	0.66			
	2/23/2009			2.02	0.62			
	4/8/2009			1.87	0.57			
GS-4	11/6/2006	3.60	1.10	4.50	1.37	22.80	6.95	611.39
	11/8/2006			4.30	1.31			
	12/13/2006			4.70	1.43			
	2/7/2007			4.70	1.43			
	3/9/2007			4.63	1.41			
	4/21/2007			4.60	1.40			
	7/16/2007			4.60	1.40			
	10/23/2007			4.70	1.43			
	11/17/2007			4.73	1.44			
	4/11/2008			4.65	1.42			
	11/24/2008			4.90	1.49			
	1/2/2009			4.95	1.51			
	2/23/2009			4.95	1.51			
	4/8/2009			4.85	1.48			
GS-12	2/7/2007	1.29	0.39	9.51	2.90	28.91	8.81	612.82
	3/9/2007			9.45	2.88			
	4/15/2007			9.46	2.88			
	7/16/2007			9.51	2.90			
	10/23/2007			8.61	2.62			
	11/17/2007			8.59	2.62			
	4/11/2008			8.66	2.64			
	11/24/2008			9.41	2.87			
	1/2/2009			9.46	2.88			
	2/23/2009			9.46	2.88			
	4/8/2009			9.56	2.91			
GS-15	11/3/2006	2.83	0.86	7.57	2.31	23.57	7.18	610.41
	11/8/2006 (a.m.)			7.57	2.31			
	11/8/2006 (p.m.)			7.87	2.40			
	12/13/2006			7.77	2.37			
	2/7/2007			7.87	2.40			
	3/9/2007			7.87	2.40			
	4/21/2007			7.97	2.43			
	7/15/2007			8.07	2.46			
	10/22/2007			7.97	2.43			
	11/17/2007			8.02	2.44			
	4/11/2008			7.82	2.38			
	11/23/2008			7.72	2.35			
	1/1/2009			7.82	2.38			
	2/23/2009			7.97	2.43			
	4/7/2009			7.97	2.43			

Table 5. Casing, water level, well depth, and ground-surface elevations for Franklin Lake playa wells. All measurements except ground-surface elevation were made in feet and were later converted to meters.—Continued

[Well ID, unique well identifier; Casing height, height to the top of the casing from the ground surface; Water level, the depth of water below the ground surface; Total well depth, the depth to the bottom of the well below the ground surface; Ground-surface elevation, elevation determined using a GPS receiver and post correction with an average vertical error of 20 cm; ft, feet; m, meters; n.d., not determined]

Well ID	Date measured	Casing height (ft)	Casing height (m)	Water level (ft)	Water level (m)	Total well depth (ft)	Total well depth (m)	Ground-surface elevation (m)
GS-18	11/3/2006	3.33	1.01	9.97	3.04	26.87	8.19	610.52
	12/12/2006			10.37	3.16			
	2/7/2007			10.42	3.18			
	3/9/2007			10.42	3.18			
	4/16/2007			10.67	3.25			
	7/15/2007			10.57	3.22			
	10/22/2007			10.42	3.18			
	11/17/2007			10.40	3.17			
	4/11/2008			10.72	3.27			
	11/23/2008			10.47	3.19			
	1/1/2009			10.52	3.21			
	2/23/2009			10.62	3.24			
	4/7/2009			10.72	3.27			
GS-20	11/6/2006	4.90	1.49	12.60	3.84	15.20	4.63	608.63
	11/7/2006			12.50	3.81			
	12/11/2006			12.60	3.84			
	2/5/2007			12.70	3.87			
	3/9/2007			12.60	3.84			
	4/16/2007			12.70	3.87			
	7/15/2007			12.80	3.90			
	10/21/2007			12.50	3.81			
	11/17/2007			12.55	3.83			
	4/6/2008			11.50	3.51			
	11/22/2008			12.20	3.72			
	1/1/2009			12.30	3.75			
	2/21/2009			12.40	3.78			
	4/6/2009			12.40	3.78			
Chemical Well (Cz1-middle)	11/6/2006	2.40	0.73	8.10	2.47	25.50	7.77	609.47
	11/7/2006			12.50	3.81			
	12/13/2006			8.30	2.53			
	2/6/2007			8.30	2.53			
	3/9/2007			8.20	2.50			
	4/21/2007			8.15	2.48			
	7/15/2007			8.20	2.50			
	10/22/2007			8.20	2.50			
	11/17/2007			8.10	2.47			
	4/11/2008			7.95	2.42			
	11/23/2008			8.00	2.44			
	1/1/2009			8.00	2.44			
	2/21/2009			8.05	2.45			
	4/6/2009			8.05	2.45			
Chemical Well (Cz1a-south)	11/6/2006	1.50	0.46	6.30	1.92	86.90	26.49	n.d.
	12/13/2006			8.20	2.50			
	2/6/2007			8.00	2.44			
	3/9/2007			8.00	2.44			
	4/21/2007			8.10	2.47			
	7/15/2007			8.10	2.47			
	10/22/2007			8.40	2.56			
	11/17/2007			8.08	2.46			
	4/11/2008			8.15	2.48			
	11/23/2008			8.00	2.44			
	1/1/2009			7.95	2.42			
	2/21/2009			8.00	2.44			
	4/6/2009			8.10	2.47			

Table 5. Casing, water level, well depth, and ground-surface elevations for Franklin Lake playa wells. All measurements except ground-surface elevation were made in feet and were later converted to meters.—Continued

[Well ID, unique well identifier; Casing height, height to the top of the casing from the ground surface; Water level, the depth of water below the ground surface; Total well depth, the depth to the bottom of the well below the ground surface; Ground-surface elevation, elevation determined using a GPS receiver and post correction with an average vertical error of 20 cm; ft, feet; m, meters; n.d., not determined]

Well ID	Date measured	Casing height (ft)	Casing height (m)	Water level (ft)	Water level (m)	Total well depth (ft)	Total well depth (m)	Ground-surface elevation (m)
Cz5	12/13/2006	0.90	0.27	7.00	2.13	34.30	10.45	n.d.
	2/6/2007			6.90	2.10			
	3/9/2007			6.90	2.10			
	4/21/2007			6.95	2.12			
	7/15/2007			7.00	2.13			
	10/22/2007			7.15	2.18			
	11/17/2007			6.90	2.10			
	4/11/2008			6.85	2.09			
	11/23/2008			6.85	2.09			
	1/1/2009			6.75	2.06			
	2/21/2009			6.80	2.07			
	4/6/2009			6.90	2.10			
Cz10	2/6/2007	0.96	0.29	9.54	2.91	31.04	9.46	n.d.
	3/9/2007			9.44	2.88			
	4/21/2007			9.44	2.88			
	7/15/2007			9.54	2.91			
	10/22/2007			9.59	2.92			
	11/17/2007			9.59	2.92			
	4/11/2008			9.39	2.86			
	11/23/2008			9.54	2.91			
	1/1/2009			9.59	2.92			
	2/21/2009			9.54	2.91			
	4/6/2009			9.59	2.92			
Cz11	2/6/2007	0.90	0.27	13.00	3.96	17.30	5.27	n.d.
	3/9/2007			12.95	3.95			
	4/16/2007			13.00	3.96			
	7/15/2007			15.55	4.74			
	10/21/2007			14.60	4.45			
	11/17/2007			14.35	4.37			
	4/9/2008			13.75	4.19			
	11/23/2008			13.00	3.96			
	1/1/2009			13.10	3.99			
	2/21/2009			13.10	3.99			
	4/6/2009			13.10	3.99			
Bucket Well (Cz13)	11/3/2006	3.50	1.07	11.70	3.57	15.20	4.63	610.13
	12/11/2006			11.20	3.41			
	2/6/2007			11.30	3.44			
	3/9/2007			11.25	3.43			
	4/21/2007			11.30	3.44			
	7/15/2007			11.50	3.51			
	10/22/2007			11.20	3.41			
	11/17/2007			11.25	3.43			
	4/9/2008			11.35	3.46			
	11/22/2008			11.35	3.46			
	1/1/2009			11.40	3.47			
	2/22/2009			11.45	3.49			
	4/7/2009			11.45	3.49			

Table 5. Casing, water level, well depth, and ground-surface elevations for Franklin Lake playa wells. All measurements except ground-surface elevation were made in feet and were later converted to meters.—Continued

[Well ID, unique well identifier; Casing height, height to the top of the casing from the ground surface; Water level, the depth of water below the ground surface; Total well depth, the depth to the bottom of the well below the ground surface; Ground-surface elevation, elevation determined using a GPS receiver and post correction with an average vertical error of 20 cm; ft, feet; m, meters; n.d., not determined]

Well ID	Date measured	Casing height (ft)	Casing height (m)	Water level (ft)	Water level (m)	Total well depth (ft)	Total well depth (m)	Ground-surface elevation (m)
Cz14	2/6/2007	1.30	0.40	4.50	1.37	58.10	17.10	610.34
	3/9/2007			4.50	1.37			
	4/21/2007			4.40	1.34			
	7/15/2007			4.50	1.37			
	10/21/2007			4.50	1.37			
	11/17/2007			4.45	1.36			
	4/9/2008			4.35	1.33			
	11/22/2008			4.45	1.36			
	1/1/2009			4.45	1.36			
	2/21/2009			4.45	1.36			
	4/6/2009			4.50	1.37			
USGS North Well - Shallow	4/11/2008	0.20	0.06	8.65	2.64	41.00	12.50	609.46
	2/24/2009			8.95	2.73			
USGS North Well - Deep	4/11/2008	0.35	0.11	7.55	2.30	109.85	33.48	609.46
	2/24/2009			7.60	2.32			
USGS South Well - Shallow	4/11/2008	0.20	0.06	12.60	3.84	36.80	11.22	609.12
	2/27/2009			12.90				
USGS South Well - Deep	4/11/2008	0.20	0.06	12.65	3.86	106.90	32.58	609.12
	2/27/2009			12.95				
Metal Well North	4/11/2008	2.20	0.67	16.30	4.97	130.60	39.81	608.39
	11/22/2008			17.20	5.24			
	1/1/2009			17.15	5.23			
	2/21/2009			17.25	5.26			
	4/6/2009			17.35	5.29			
Metal Well South	4/11/2008	0.80	0.24	17.20	5.24	123.00	37.49	608.25
	11/22/2008			18.05	5.50			
	1/1/2009			18.10	5.52			
	2/21/2009			18.15	5.53			
	4/6/2009			18.25	5.56			

Table 6. Values of field parameters measured on water samples.

[Sample site, name of sampling site; Sample ID, unique sample identifier; n.d., not determined; *, well incompletely purged prior to sampling; °C, degrees Celsius; mS cm⁻¹, millisiemens per centimeter, mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	pH	Temperature (°C)	Specific conductance (mS cm ⁻¹)	Alkalinity (mg/L CaCO ₃)
Amargosa River	none	n.d.	n.d.	n.d.	n.d.
Carson Slough Flowing Well	JY04-18	8.50	n.d.	1.94	420
Carson Slough Flowing Well	JY06-22	8.32	20.4	1.85	430
Chemical Well	JY06-24	9.31	19.0	21.30	2,114
Crystal Spring	CS-08-01	7.35	30.5	0.71	247
Death Valley Junction Well	DVJ-08-01	8.93	22.0	1.69	497
Grapevine Spring	JY05-63	7.50	21.9	3.56	329
King Spring	JY03-48	7.60	21.6	0.59	160
Mudhole	HG04-01	n.d.	17.5	4.40	560
Obelisk Flowing Well	JY03-45	8.49	21.7	1.50	500
Obelisk Flowing Well	JY07-04	8.31	20.0	1.39	487
Obelisk Flowing Well	JY05-62	7.50	21.9	1.61	447
Ojo del Caballo Flowing Well	JY03-46	8.34	18.8	3.38	600
Ojo del Caballo Flowing Well	JY05-61	8.00	19.3	3.11	544
Ojo del Caballo Flowing Well	JY07-05	8.38	19.6	2.92	608
Point of Rocks Spring	POR-08-01	7.49	30.3	0.68	241
Rogers Spring	RS-08-01	7.36	28.6	0.68	243
USGS-04	JY06-25	9.24	20.0	15.00	2,830
USGS-04	GS-04-08	9.20	21.7	16.80	4,140
USGS 12	JY07-06	8.80	22.3	16.30	2,295
USGS-15*	JY06-12	9.22	20.0	69.00	4,730
USGS-15	JY06-27	9.49	19.0	90.00	9,140
USGS-18*	JY06-13	9.65	21.0	75.10	6,320
USGS 18	JY07-07	9.65	22.7	99.50	15,710
USGS-20	JY06-23	7.95	17.4	3.34	914
Well-11	JY07-08	9.40	20.1	144.60	9,910
Well-13 (Bucket Well)	JY06-11	8.23	20.6	3.75	48
USGS New Well North	GWN-08-01	7.29	22.8	2.70	650
Field blank	JY03-47	n.d.	n.d.	n.d.	3
Field blank	JY05-60	n.d.	n.d.	n.d.	2
Field blank	JY06-10	n.d.	n.d.	0.01	2
Field blank	JY06-26	n.d.	n.d.	0.01	2
Field blank	JY07-09	n.d.	n.d.	0.01	1
Field blank	FP-Blank	n.d.	n.d.	0.01	1

Table 7. Moisture content of sediment collected by augering at Franklin Lake playa.

[Sample site, name of sampling site; Sample ID, unique sample identifier; Gravimetric water content, determined by weight loss on heating at 105°C; Adsorbed water, the amount of water adsorbed by the dried sample in an atmosphere of 100% humidity; n.d., not determined; cm, centimeters; wt.%, weight percent]

Sample site	Sample ID	Sample date	Depth (cm)	Gravimetric water content (wt.%)	Adsorbed water (wt.%)
Clay Dune Auger	HG09-01/0-1	2/23/2009	0–1	12	23
Clay Dune Auger	HG09-01/1-5	2/23/2009	1–5	24	24
Clay Dune Auger	HG09-01/5-10	2/23/2009	5–10	40	30
Clay Dune Auger	HG09-01/10-20	2/23/2009	10–20	28	21
Clay Dune Auger	HG09-01/20-30	2/23/2009	20–30	26	11
Clay Dune Auger	HG09-01/30-40	2/23/2009	30–40	26	15
Clay Dune Auger	HG09-01/40-50	2/23/2009	40–50	27	9.5
Clay Dune Auger	HG09-01/90-100	2/23/2009	90–100	21	2.9
Coppice Auger	CPAH04-09/0-0.5	4/7/2009	0–0.5	n.d.	n.d.
Coppice Auger	CPAH04-09/0.5-3	4/7/2009	0.5–3	n.d.	n.d.
Coppice Auger	CPAH04-09/3-5	4/7/2009	3–5	n.d.	n.d.
Coppice Auger	CPAH04-09/5-10	4/7/2009	5–10	n.d.	n.d.
Coppice Auger	CPAH04-09/10-15	4/7/2009	10–15	n.d.	n.d.
Coppice Auger	CPAH04-09/15-20	4/7/2009	15–20	n.d.	n.d.
Coppice Auger	CPAH04-09/20-25	4/7/2009	20–25	n.d.	n.d.
Coppice Auger	CPAH04-09/25-30	4/7/2009	25–30	n.d.	n.d.
Coppice Auger	CPAH04-09/30-35	4/7/2009	30–35	n.d.	n.d.
Coppice Auger	CPAH04-09/35-40	4/7/2009	35–40	n.d.	n.d.
Coppice Auger	HG09-04/0-1	2/25/2009	0–1	12	22
Coppice Auger	HG09-04/1-5	2/25/2009	1–5	15	19
Coppice Auger	HG09-04/5-10	2/25/2009	5–10	19	23
Coppice Auger	HG09-04/10-20	2/25/2009	10–20	21	22
Coppice Auger	HG09-04/20-32	2/25/2009	20–32	20	19
Coppice Auger	HG09-04/32-45	2/25/2009	32–45	19	16
Coppice Auger	HG09-04/45-57	2/25/2009	45–57	26	19
Coppice Auger	HG09-04/68-80	2/25/2009	68–80	20	13
Coppice Auger	HG09-04/93-104	2/25/2009	93–104	26	12
Coppice Auger	HG09-04/117-129	2/25/2009	117–129	35	15
Coppice Auger	HG09-04/153-177	2/25/2009	153–177	31	8.3
Coppice Auger	HG09-04/205-214	2/25/2009	205–214	21	6.5
Coppice Auger	HG09-04/242-251	2/25/2009	242–251	n.d.	n.d.
Coppice Auger	HG09-04/268-275	2/25/2009	268–275	n.d.	n.d.
Coppice Auger	HG09-04/275-284	2/25/2009	275–284	n.d.	n.d.
Coppice Auger	HG09-04/284-293	2/25/2009	284–293	n.d.	n.d.
Coppice Auger	HG09-04/326-339	2/25/2009	326–339	17	3.7
Coppice Auger	HG09-04/352-365	2/25/2009	352–365	17	3.4
Coppice Auger	HG09-04/365-380	2/25/2009	365–380	n.d.	n.d.
Coppice Auger	HG09-04/380-404	2/25/2009	380–404	24	3.1
Coppice Auger	HG09-04/404-430	2/25/2009	404–430	23	3.6
Discovery Auger	DS04-07/0-2	4/11/2007	0–2	1.8	5.6
Discovery Auger	DS04-07/2-8	4/11/2007	2–8	9.0	26
Discovery Auger	DS04-07/8-14	4/11/2007	8–14	17	15
Discovery Auger	DS04-07/14-20	4/11/2007	14–20	20	15
Discovery Auger	DS04-07/20-30	4/11/2007	20–30	20	13
Discovery Auger	DS04-07/30-35	4/11/2007	30–35	19	10
Discovery Auger	DS04-07/35-48	4/11/2007	35–48	20	8.9
Discovery Auger	DS04-07/48-57	4/11/2007	48–57	20	8.4
Discovery Auger	DS04-07/57-68	4/11/2007	57–68	20	7.2
Discovery Auger	DS04-07/68-82	4/11/2007	68–82	19	6.2
Discovery Auger	DS04-07/82-87	4/11/2007	82–87	20	6.6
Discovery Auger	DS04-07/87-104	4/11/2007	87–104	22	6.3
Discovery Auger	DS04-07/104-118	4/11/2007	104–118	20	5.0
Discovery Auger	DS04-07/118-131	4/11/2007	118–131	23	6.4
Discovery Auger	DS04-07/131-142	4/11/2007	131–142	20	5.7
Discovery Auger	DS04-07/142-157	4/11/2007	142–157	22	5.5
Discovery Auger	DS04-07/157-170	4/11/2007	157–170	24	6.2
Discovery Auger	DS04-07/170-186	4/11/2007	170–180	22	6.4

Table 7. Moisture content of sediment collected by augering at Franklin Lake playa.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Gravimetric water content, determined by weight loss on heating at 105°C; Adsorbed water, the amount of water adsorbed by the dried sample in an atmosphere of 100% humidity; n.d., not determined; cm, centimeters; wt.%, weight percent]

Sample site	Sample ID	Sample date	Depth (cm)	Gravimetric water content (wt.%)	Adsorbed water (wt.%)
Discovery Auger	DS04-07b/0-1	4/16/2007	0–1	16	22
Discovery Auger	DS04-07b/1-2.5	4/16/2007	1–2.5	21	25
Discovery Auger	DS04-07b/2.5-5	4/16/2007	2.5–5	5.5	25
Discovery Auger	HG09-02/0-1	2/24/2009	0–1	5.6	17
Discovery Auger	HG09-02/1-5	2/24/2009	1–5	19	25
Discovery Auger	HG09-02/5-10	2/24/2009	5–10	25	28
Discovery Auger	HG09-02/10-20	2/24/2009	10–20	22	26
Discovery Auger	HG09-02/20-26	2/24/2009	20–26	22	18
Discovery Auger	HG09-02/37-48	2/24/2009	37–48	25	11
Discovery Auger	HG09-02/59-70	2/24/2009	59–70	23	6.8
Discovery Auger	HG09-02/80-89	2/24/2009	80–89	24	6.7
Discovery Auger	HG09-02/98-110	2/24/2009	98–110	22	6.8
East Transect Auger	FPAH06-08/0-1	6/24/2008	0–1	1.47	8.5
East Transect Auger	FPAH06-08/1-2	6/24/2008	1–2	2.07	15
East Transect Auger	FPAH06-08/2-5	6/24/2008	2–5	3.36	19
East Transect Auger	FPAH06-08/5-10	6/24/2008	5–10	2.32	13
East Transect Auger	FPAH06-08/10-20	6/24/2008	10–20	8.74	19
East Transect Auger	FPAH06-08/20-25	6/24/2008	20–25	14	22
East Transect Auger	FPAH06-08/25-30	6/24/2008	25–30	17	25
East Transect Auger	FPAH06-08/30-35	6/24/2008	30–35	17	24
East Transect Auger	FPAH06-08/35-40	6/24/2008	35–40	17	24
East Transect Auger	FPAH06-08/40-45	6/24/2008	40–45	18	25
East Transect Auger	FPAH06-08/45-48	6/24/2008	45–48	17	25
East Transect Auger	FPAH06-08/48-52	6/24/2008	48–52	18	26
East Transect Auger	FPAH02-09/0-1	2/25/2009	0–1	3.4	6.9
East Transect Auger	FPAH02-09/1-2.5	2/25/2009	1–2.5	8.1	8.9
East Transect Auger	FPAH02-09/2.5-4	2/25/2009	2.5–4	23	21
East Transect Auger	FPAH02-09/4-10	2/25/2009	4–10	12	17
East Transect Auger	FPAH02-09/10-18	2/25/2009	10–18	10	22
East Transect Auger	FPAH02-09/20-25	2/25/2009	20–25	11	23
East Transect Auger	FPAH02-09/25-30	2/25/2009	25–30	14	21
East Transect Auger	FPAH02-09/30-35	2/25/2009	30–35	15	21
East Transect Auger	FPAH02-09/35-40	2/25/2009	35–40	15	20
East Transect Auger	FPAH02-09/40-45	2/25/2009	40–45	17	19
East Transect Auger	FPAH02-09/45-50	2/25/2009	45–50	20	22
East Transect Auger	FPAH02-09/50-55	2/25/2009	50–55	18	21
East Transect Auger	FPAH04-09/0-1	4/7/2009	0–1	1.7	n.d.
East Transect Auger	FPAH04-09/1-3	4/7/2009	1–3	3.5	n.d.
East Transect Auger	FPAH04-09/3-5.5	4/7/2009	3–5.5	4.6	n.d.
East Transect Auger	FPAH04-09/5-8	4/7/2009	5.5–8	6.1	n.d.
East Transect Auger	FPAH04-09/8-11	4/7/2009	8–11	8.4	n.d.
East Transect Auger	FPAH04-09/11-15	4/7/2009	11–15	10	n.d.
East Transect Auger	FPAH04-09/15-20	4/7/2009	15–20	11	n.d.
East Transect Auger	FPAH04-09/20-25	4/7/2009	20–25	12	n.d.
East Transect Auger	FPAH04-09/25-30	4/7/2009	25–30	15	n.d.
East Transect Auger	FPAH04-09/30-35	4/7/2009	30–35	15	n.d.
East Transect Auger	FPAH04-09/35-40	4/7/2009	35–40	17	n.d.
East Transect Auger	HG07-04/0-1	11/12/2007	0–1	4.1	8.8
East Transect Auger	HG07-04/1-5	11/12/2007	1–5	7.7	11
East Transect Auger	HG07-04/5-10	11/12/2007	5–10	n.d.	14

Table 7. Moisture content of sediment collected by augering at Franklin Lake playa.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Gravimetric water content, determined by weight loss on heating at 105°C; Adsorbed water, the amount of water adsorbed by the dried sample in an atmosphere of 100% humidity; n.d., not determined; cm, centimeters; wt.%, weight percent]

Sample site	Sample ID	Sample date	Depth (cm)	Gravimetric water content (wt.%)	Adsorbed water (wt.%)
East Transect Auger	HG07-04/10-20	11/12/2007	10–20	21	13
East Transect Auger	HG07-04/20-30	11/12/2007	20–30	19	17
East Transect Auger	HG07-04/30-40	11/12/2007	30–40	15	21
East Transect Auger	HG07-04/40-50	11/12/2007	40–50	n.d.	15
East Transect Auger	HG07-04/50-60	11/12/2007	50–60	19	13
East Transect Auger	HG07-04/60-70	11/12/2007	60–70	20	13
East Transect Auger	HG07-04/70-80	11/12/2007	70–80	20	14
East Transect Auger	HG07-04/80-90	11/12/2007	80–90	18	12
East Transect Auger	HG07-04/90-95	11/12/2007	90–95	19	14
East Transect Auger	HG07-04/95-101	11/12/2007	95–101	18	11
East Transect Auger	HG07-04/101-124	11/12/2007	101–124	18	11
East Transect Auger	HG07-04/124-137	11/12/2007	124–137	11	6.7
East Transect Auger	HG07-04/137-145	11/12/2007	137–145	n.d.	n.d.
East Transect Auger	HG07-04/145-159	11/12/2007	145–159	5.3	3.5
East Transect Auger	HG07-04/159-163	11/12/2007	159–163	n.d.	n.d.
East Transect Auger	HG07-04/163-169	11/12/2007	163–169	n.d.	n.d.
East Transect Auger	HG07-04/169-177	11/12/2007	169–177	6.8	4.1
East Transect Auger	HG07-04/177-184	11/12/2007	177–184	12	6.6
East Transect Auger	HG07-04/184-193	11/12/2007	184–193	16	5.9
East Transect Auger	HG07-04/193-203	11/12/2007	193–203	19	8.7
East Transect Auger	HG07-04/203-217	11/12/2007	203–217	n.d.	n.d.
East Transect Auger	HG07-04/217-228	11/12/2007	217–228	5.8	3.6
East Transect Auger	HG07-04/228-237	11/12/2007	228–237	n.d.	n.d.
East Transect Auger	HG07-04/237-248	11/12/2007	237–248	8.0	4.4
East Transect Auger	HG07-04/248-258	11/12/2007	248–258	n.d.	n.d.
East Transect Auger	HG07-04/258-266	11/12/2007	258–266	14	5.2
East Transect Auger	HG07-04/266-281	11/12/2007	266–281	n.d.	n.d.
East Transect Auger	HG08-01/0-1	10/5/2008	0–1	1.7	7.3
East Transect Auger	HG08-01/1-3	10/5/2008	1–3	2.3	9.9
East Transect Auger	HG08-01/3-5	10/5/2008	3–5	3.0	14
East Transect Auger	HG08-01/5-10	10/5/2008	5–10	3.4	12
East Transect Auger	HG08-01/10-15	10/5/2008	10–15	3.5	14
East Transect Auger	HG08-01/15-20	10/5/2008	15–20	8.2	24
East Transect Auger	HG08-01/20-25	10/5/2008	20–25	7.6	23
East Transect Auger	HG08-01/25-30	10/5/2008	25–30	10	24
East Transect Auger	HG08-01/30-35	10/5/2008	30–35	11	23
East Transect Auger	HG08-01/35-40	10/5/2008	35–40	14	23
East Transect Auger	HG08-01/40-45	10/5/2008	40–45	16	22
East Transect Auger	HG08-01/45-50	10/5/2008	45–50	16	21
Salt Pan Auger	SPAH04-07/0-2	4/11/2007	0–2	3.3	48
Salt Pan Auger	SPAH04-07/2-5	4/11/2007	2–5	22	16
Salt Pan Auger	SPAH04-07/5-10	4/11/2007	5–10	17	7.4
Salt Pan Auger	SPAH04-07/10-20	4/11/2007	10–20	18	6.0
Salt Pan Auger	SPAH04-07/20-30	4/11/2007	20–30	19	6.6
Salt Pan Auger	SPAH04-07/30-45	4/11/2007	30–45	18	3.4
Salt Pan Auger	SPAH04-07/45-58	4/11/2007	45–58	14	2.8
Salt Pan Auger	SPAH04-07/58-69	4/11/2007	58–69	13	2.2
Salt Pan Auger	SPAH04-07/69-84	4/11/2007	69–84	27	6.1
Salt Pan Auger	SPAH04-07/84-105	4/11/2007	84–103	19	3.2

Table 8. Carbonate percent of selected grab samples.

[Sample site, name of sampling site; Sample ID, unique sample identifier; %, percent]

Sample site	Sample ID	Carbonate %
Amargosa River Crossing	JY05 35a	9.62
Amargosa River Crossing	JY05 35b	9.76
Amargosa River Crossing	JY05 35c	14.20
Amargosa River East of Death Valley Junction	JY05 37a	21.38
Amargosa River East of Death Valley Junction	JY05 37b	20.98
Amargosa River East of Death Valley Junction	JY05 37c	15.17
Amargosa River East of Death Valley Junction	JY05 38a	7.69
Amargosa River East of Death Valley Junction	JY05 38b	7.27
Amargosa River East of Death Valley Junction	JY05 38c	8.23
Ash Meadows	JY05-29	37.09
Clay Dune	JY05-25	16.36
Coppice	JY04-15a	12.58
Coppice	JY04-15b	11.72
Coppice	JY04-15c	13.26
Coppice	JY04-16a	11.71
Coppice	JY04-16b	14.14
Coppice	JY04-16c	14.97
Coppice	JY05-17	13.55
Discovery	JY-03-01	21.64
Discovery	JY-03-01a	21.41
Discovery	JY-03-01b	20.41
Discovery	JY05-15	21.25
Discovery	JY05-16	26.01
East Transect	JY05-21a	29.56
East Transect	JY05-21b	19.86
Ojo del Caballo	JY05-30	32.96
West Transect	JY05-19	15.18

Table 9A. Particle-size data for the East Transect auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).

		Micrometers	HG07-04/0-1	HG07-04/1-5	HG07-04/5-10	HG07-04/10-20	HG07-04/20-30	HG07-04/30-40	HG07-04/40-50	HG07-04/50-60
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1,680	1,414	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1,414	1,189	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Coarse	1,189	1,000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1,000	841	0.00	0.00	0.00	0.00	0.00	0.00	0.03
		841	707	0.00	0.00	0.00	0.00	0.01	0.00	0.06
	Medium	707	595	0.00	0.00	0.03	0.03	0.01	0.04	0.07
		595	500	0.00	0.04	0.14	0.15	0.21	0.17	0.20
		500	420	0.00	0.09	0.22	0.24	0.24	0.25	0.24
	Fine	420	354	0.07	0.16	0.25	0.26	0.26	0.23	0.23
		354	297	0.29	0.27	0.28	0.26	0.27	0.20	0.26
		297	250	0.63	0.37	0.32	0.24	0.27	0.20	0.30
SILT	Very fine	250	210	0.93	0.47	0.37	0.23	0.30	0.26	0.41
		210	177	1.21	0.54	0.41	0.23	0.34	0.34	0.55
		177	149	1.55	0.61	0.47	0.27	0.42	0.44	0.70
	Coarse	149	125	1.99	0.73	0.57	0.39	0.55	0.52	0.80
		125	105	2.50	0.96	0.74	0.65	0.77	0.52	0.77
		105	88	3.23	1.44	1.10	1.14	1.14	0.49	0.66
	Medium	88	74	4.03	2.18	1.67	1.84	1.66	0.46	0.51
		74	63	4.62	2.99	2.31	2.55	2.20	0.51	0.42
		63	53	5.93	4.49	3.54	3.79	3.24	0.81	0.60
	Fine	53	44	7.37	6.41	5.20	5.35	4.62	1.51	1.19
		44	37	7.47	7.28	6.13	6.04	5.35	2.33	2.04
		37	31.2	7.54	8.02	7.04	6.71	6.14	3.46	3.27
CLAY	Very fine	31.2	26.3	7.32	8.39	7.73	7.18	6.80	4.80	4.78
		26.3	22.1	6.84	8.35	8.11	7.43	7.30	6.27	6.43
		22.1	18.6	5.93	7.61	7.83	7.16	7.29	7.38	7.70
	Coarse	18.6	15.6	5.07	6.75	7.37	6.83	7.18	8.34	8.76
		15.6	13.1	4.10	5.57	6.44	6.14	6.61	8.58	9.00
		13.1	11	3.30	4.49	5.45	5.42	5.93	8.37	8.70
	Medium	11	9.3	2.58	3.45	4.34	4.52	4.99	7.43	7.61
		9.3	7.8	2.25	2.90	3.71	4.07	4.47	6.86	6.88
		7.8	6.6	1.82	2.27	2.88	3.30	3.59	5.52	5.40
	Fine	6.6	5.5	1.74	2.11	2.60	3.07	3.29	4.93	4.70
		5.5	4.6	1.50	1.79	2.15	2.56	2.68	3.86	3.57
		4.6	3.9	1.23	1.46	1.71	2.03	2.09	2.85	2.58
	Very fine	3.9	3.3	1.09	1.31	1.51	1.76	1.79	2.33	2.09
		3.3	2.8	0.93	1.12	1.28	1.47	1.48	1.87	1.66
		2.8	2.3	0.93	1.12	1.29	1.45	1.46	1.80	1.61
	Coarse	2.3	1.95	0.64	0.76	0.88	0.98	0.98	1.21	1.08
		1.95	1.64	0.56	0.64	0.74	0.82	0.82	1.01	0.91
		1.64	1.38	0.47	0.51	0.60	0.66	0.65	0.81	0.72
	Medium	1.38	1.16	0.42	0.45	0.51	0.56	0.54	0.67	0.60
		1.16	0.98	0.40	0.41	0.45	0.49	0.48	0.58	0.51
		0.98	0.82	0.42	0.42	0.46	0.49	0.48	0.56	0.50
	Fine	0.82	0.69	0.39	0.39	0.43	0.45	0.43	0.49	0.44
		0.69	0.58	0.34	0.35	0.37	0.38	0.37	0.40	0.37
		0.58	0.49	0.25	0.25	0.26	0.27	0.25	0.26	0.23
	Very fine	<0.49	0.13	0.12	0.12	0.11	0.10	0.10	0.04	0.01

Table 9A. Particle-size data for the East Transect auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers		HG07-04/60-70	HG07-04/70-80	HG07-04/80-90	HG07-04/90-95	HG07-04/95-101	HG07-04/101-124	HG07-04/124-137	HG07-04/137-145	
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		1,680	1,414	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
	Coarse	1,414	1,189	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	
		1,189	1,000	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.51	
	Medium	1,000	841	0.00	0.00	0.00	0.00	0.00	0.00	0.10	1.07	
		841	707	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.73	
	Fine	707	595	0.01	0.00	0.02	0.06	0.10	0.12	0.53	2.36	
		595	500	0.18	0.09	0.17	0.25	0.32	0.34	0.72	2.93	
	SILT	Very fine	500	420	0.27	0.12	0.27	0.32	0.39	0.47	0.88	3.31
			420	354	0.27	0.12	0.29	0.30	0.36	0.54	0.99	3.39
Coarse		354	297	0.24	0.17	0.33	0.26	0.30	0.62	1.16	3.45	
		297	250	0.22	0.37	0.37	0.24	0.23	0.69	1.29	3.24	
Medium		250	210	0.26	0.74	0.47	0.27	0.21	0.80	1.44	3.11	
		210	177	0.34	1.24	0.59	0.34	0.24	0.90	1.50	2.94	
Fine		177	149	0.45	1.94	0.74	0.45	0.32	1.00	1.53	2.95	
		149	125	0.57	2.80	0.90	0.61	0.42	1.08	1.52	3.10	
CLAY		Very fine	125	105	0.65	3.61	1.02	0.80	0.50	1.08	1.48	3.26
			105	88	0.71	4.42	1.15	1.07	0.57	1.12	1.57	3.54
	Coarse	88	74	0.75	4.91	1.28	1.40	0.61	1.19	1.82	3.74	
		74	63	0.79	4.89	1.37	1.70	0.64	1.30	2.16	3.71	
	Medium	63	53	1.05	5.38	1.76	2.33	0.85	1.78	3.07	4.18	
		53	44	1.57	5.73	2.38	3.15	1.25	2.60	4.36	4.66	
	Fine	44	37	2.11	5.15	2.81	3.56	1.70	3.25	5.06	4.37	
		37	31.2	2.95	4.86	3.49	4.10	2.44	4.12	5.79	4.24	
	Very fine	Coarse	31.2	26.3	4.03	4.71	4.33	4.72	3.46	5.08	6.35	4.10
			26.3	22.1	5.32	4.70	5.33	5.42	4.75	6.07	6.68	3.95
Medium		22.1	18.6	6.44	4.61	6.15	5.94	5.98	6.69	6.49	3.65	
		18.6	15.6	7.55	4.67	6.99	6.52	7.24	7.21	6.20	3.41	
Fine		15.6	13.1	8.09	4.55	7.34	6.74	7.98	7.16	5.54	3.05	
		13.1	11	8.21	4.35	7.37	6.74	8.28	6.82	4.85	2.70	
Very fine		11	9.3	7.56	3.89	6.76	6.21	7.75	5.96	4.02	2.27	
		9.3	7.8	7.20	3.67	6.43	5.99	7.47	5.46	3.61	2.04	
Very coarse		Coarse	7.8	6.6	5.94	3.05	5.31	5.04	6.21	4.40	2.94	1.64
			6.6	5.5	5.41	2.82	4.85	4.71	5.69	3.99	2.76	1.48
	Medium	5.5	4.6	4.26	2.29	3.84	3.83	4.51	3.21	2.34	1.19	
		4.6	3.9	3.15	1.75	2.86	2.91	3.36	2.47	1.88	0.89	
	Fine	3.9	3.3	2.57	1.47	2.35	2.44	2.77	2.12	1.65	0.74	
		3.3	2.8	2.04	1.20	1.90	1.99	2.25	1.78	1.39	0.58	
	Very fine	2.8	2.3	1.97	1.18	1.86	1.97	2.24	1.80	1.37	0.54	
		2.3	1.95	1.33	0.80	1.28	1.36	1.57	1.26	0.92	0.35	
	Very fine	Coarse	1.95	1.64	1.14	0.69	1.11	1.19	1.38	1.10	0.77	0.28
			1.64	1.38	0.92	0.56	0.92	1.00	1.16	0.91	0.61	0.22
Medium		1.38	1.16	0.78	0.48	0.79	0.87	1.00	0.77	0.51	0.19	
		1.16	0.98	0.67	0.44	0.69	0.76	0.86	0.67	0.44	0.17	
Fine		0.98	0.82	0.65	0.44	0.67	0.74	0.82	0.64	0.43	0.17	
		0.82	0.69	0.56	0.41	0.58	0.65	0.71	0.56	0.38	0.16	
Very fine		0.69	0.58	0.46	0.35	0.48	0.54	0.57	0.46	0.32	0.13	
		0.58	0.49	0.30	0.26	0.32	0.37	0.38	0.31	0.21	0.09	
Very fine			<0.49	0.09	0.12	0.11	0.15	0.14	0.12	0.07	0.00	

Table 9A. Particle-size data for the East Transect auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers	HG07-04/145-159	HG07-04/159-163	HG07-04/163-169	HG07-04/169-177	HG07-04/177-184	HG07-04/184-193	HG07-04/193-203
SAND	Very coarse	2,000	1,680	0.00	0.29	0.01	0.62	0.92	0.00
		1,680	1,414	0.06	0.67	0.27	1.67	1.90	0.00
		1,414	1,189	0.76	1.47	1.48	2.70	2.85	0.00
		1,189	1,000	1.27	2.24	2.50	3.72	3.76	0.00
		1,000	841	1.91	3.06	3.59	4.72	4.63	0.00
	Coarse	841	707	2.65	3.97	4.71	5.66	5.45	1.09
		707	595	3.42	4.87	5.76	6.43	6.16	3.23
		595	500	4.23	5.77	6.74	7.14	6.83	5.26
	Medium	500	420	4.93	6.46	7.43	7.58	7.26	7.28
		420	354	5.33	6.70	7.58	7.54	7.22	8.71
		354	297	5.74	6.91	7.67	7.51	7.19	9.88
		297	250	5.67	6.47	7.03	6.80	6.52	9.81
		250	210	5.56	5.97	6.31	6.03	5.82	9.28
	Fine	210	177	5.13	5.14	5.25	4.95	4.85	7.89
		177	149	4.78	4.43	4.32	4.02	4.03	6.44
		149	125	4.46	3.82	3.51	3.22	3.31	4.99
SILT	Very fine	125	105	4.05	3.23	2.74	2.50	2.63	3.56
		105	88	3.77	2.83	2.22	2.02	2.15	2.52
		88	74	3.41	2.46	1.80	1.65	1.74	1.78
		74	63	2.95	2.08	1.46	1.34	1.39	1.30
	Coarse	63	53	2.96	2.07	1.43	1.31	1.32	1.24
		53	44	2.99	2.09	1.45	1.31	1.30	1.31
		44	37	2.63	1.84	1.31	1.15	1.13	1.25
		37	31.2	2.45	1.73	1.26	1.06	1.06	1.26
	Medium	31.2	26.3	2.34	1.65	1.25	1.00	1.02	1.28
		26.3	22.1	2.25	1.60	1.25	0.95	0.99	1.28
		22.1	18.6	2.09	1.49	1.21	0.87	0.94	1.22
		18.6	15.6	1.97	1.41	1.19	0.81	0.90	1.18
	Fine	15.6	13.1	1.77	1.27	1.12	0.72	0.82	1.09
		13.1	11	1.56	1.13	1.03	0.63	0.74	0.99
		11	9.3	1.29	0.94	0.90	0.51	0.63	0.85
	Very fine	9.3	7.8	1.14	0.83	0.83	0.45	0.56	0.79
CLAY		7.8	6.6	0.89	0.66	0.69	0.35	0.45	0.64
		6.6	5.5	0.78	0.58	0.63	0.30	0.41	0.60
		5.5	4.6	0.61	0.46	0.51	0.23	0.32	0.48
		4.6	3.9	0.45	0.34	0.39	0.17	0.24	0.37
	Coarse	3.9	3.3	0.37	0.28	0.32	0.14	0.20	0.31
		3.3	2.8	0.29	0.22	0.25	0.11	0.15	0.25
		2.8	2.3	0.27	0.20	0.23	0.11	0.14	0.23
		2.3	1.95	0.18	0.13	0.15	0.01	0.09	0.15
	Medium	1.95	1.64	0.14	0.11	0.11	0.00	0.01	0.11
		1.64	1.38	0.11	0.08	0.08	0.00	0.00	0.08
		1.38	1.16	0.09	0.04	0.03	0.00	0.00	0.00
		1.16	0.98	0.08	0.02	0.00	0.00	0.00	0.00
	Fine	0.98	0.82	0.09	0.00	0.00	0.00	0.00	0.00
		0.82	0.69	0.09	0.00	0.00	0.00	0.00	0.00
		0.69	0.58	0.02	0.00	0.00	0.00	0.00	0.00
	Very fine	0.58	0.49	0.00	0.00	0.00	0.00	0.00	0.00
		<0.49		0.00	0.00	0.00	0.00	0.00	0.00

Table 9A. Particle-size data for the East Transect auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

[illegible]

Table 9B. Particle-size data for the Coppice dune site auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).

		Micrometers	HG09-04/0-1	HG09-04/1-5	HG09-04/5-10	HG09-04/10-20	HG09-04/20-32	HG09-04/32-45	HG09-04/45-57
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.00	0.00
		1,680	1,414	0.00	0.00	0.00	0.00	0.00	0.00
		1,414	1,189	0.00	0.00	0.00	0.00	0.00	0.00
	Coarse	1,189	1,000	0.00	0.00	0.00	0.00	0.00	0.00
		1,000	841	0.00	0.00	0.00	0.00	0.00	0.00
		841	707	0.00	0.00	0.00	0.00	0.00	0.00
	Medium	707	595	0.08	0.01	0.02	0.10	0.00	0.04
		595	500	0.42	0.18	0.05	0.29	0.07	0.19
		500	420	0.64	0.34	0.08	0.37	0.17	0.28
	Fine	420	354	0.76	0.40	0.12	0.36	0.20	0.28
		354	297	0.94	0.54	0.25	0.36	0.27	0.28
		297	250	1.22	0.78	0.51	0.42	0.44	0.33
SILT	Very fine	250	210	1.73	1.16	0.82	0.59	0.78	0.48
		210	177	2.37	1.61	1.14	0.84	1.26	0.70
		177	149	3.14	2.12	1.50	1.17	1.85	0.99
	Coarse	149	125	3.88	2.60	1.83	1.52	2.43	1.29
		125	105	4.26	2.82	2.03	1.77	2.76	1.48
		105	88	4.35	2.86	2.14	1.96	2.88	1.59
	Medium	88	74	3.96	2.62	2.07	1.97	2.67	1.58
		74	63	3.22	2.17	1.84	1.81	2.24	1.48
		63	53	2.92	2.06	1.89	1.91	2.17	1.66
	Fine	53	44	2.62	2.02	2.00	2.07	2.25	2.04
		44	37	2.17	1.88	1.97	2.06	2.30	2.34
		37	31.2	2.11	2.04	2.17	2.29	2.77	2.94
CLAY	Very fine	31.2	26.3	2.32	2.40	2.55	2.71	3.56	3.76
		26.3	22.1	2.74	2.93	3.09	3.32	4.60	4.75
		22.1	18.6	3.20	3.46	3.62	3.92	5.52	5.57
	Coarse	18.6	15.6	3.78	4.08	4.27	4.66	6.41	6.36
		15.6	13.1	4.20	4.53	4.76	5.21	6.78	6.66
		13.1	11	4.50	4.88	5.17	5.64	6.77	6.64
	Medium	11	9.3	4.44	4.89	5.20	5.63	6.11	6.04
		9.3	7.8	4.58	5.17	5.51	5.89	5.70	5.75
		7.8	6.6	4.14	4.82	5.13	5.38	4.63	4.83
	Fine	6.6	5.5	4.14	5.02	5.32	5.46	4.17	4.57
		5.5	4.6	3.60	4.56	4.82	4.81	3.29	3.87
		4.6	3.9	2.90	3.84	4.05	3.94	2.47	3.13
	Very fine	3.9	3.3	2.53	3.49	3.69	3.50	2.07	2.83
		3.3	2.8	2.13	3.04	3.24	3.01	1.71	2.49
		2.8	2.3	2.14	3.14	3.39	3.10	1.71	2.64
	Coarse	2.3	1.95	1.50	2.23	2.45	2.22	1.20	1.91
		1.95	1.64	1.32	1.97	2.22	1.99	1.05	1.70
		1.64	1.38	1.10	1.65	1.90	1.68	0.88	1.42
	Medium	1.38	1.16	0.95	1.40	1.66	1.45	0.77	1.20
		1.16	0.98	0.80	1.17	1.42	1.23	0.69	1.01
		0.98	0.82	0.74	1.06	1.32	1.13	0.69	0.94
	Fine	0.82	0.69	0.61	0.85	1.09	0.92	0.62	0.78
		0.69	0.58	0.46	0.64	0.87	0.71	0.52	0.62
		0.58	0.49	0.29	0.40	0.57	0.46	0.37	0.41
	Very fine	<0.49	0.10	0.15	0.25	0.18	0.18	0.17	0.18

Table 9B. Particle-size data for the Coppice dune site auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers	HG09-04/68-80	HG09-04/93-104	HG09-04/117-129	HG09-04/153-177	HG09-04/205-214	HG09-04/242-251	HG09-04/268-275	
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.01	0.00	0.23
		1,680	1,414	0.00	0.00	0.00	0.00	0.03	0.00	0.49
	Coarse	1,414	1,189	0.00	0.00	0.00	0.00	0.06	0.00	0.76
		1,189	1,000	0.00	0.00	0.00	0.00	0.09	0.00	1.05
		1,000	841	0.00	0.00	0.00	0.00	0.14	0.00	1.32
		841	707	0.00	0.00	0.00	0.00	0.21	0.03	1.53
		707	595	0.20	0.01	0.00	0.01	0.35	0.22	1.63
		595	500	0.47	0.11	0.02	0.13	0.52	0.51	1.66
		500	420	0.63	0.22	0.12	0.20	0.62	0.74	1.61
		420	354	0.70	0.26	0.15	0.20	0.67	0.88	1.50
354		297	0.83	0.33	0.17	0.22	0.77	1.08	1.49	
297		250	1.06	0.44	0.20	0.30	0.92	1.30	1.46	
Medium	250	210	1.51	0.66	0.29	0.52	1.23	1.66	1.52	
	210	177	2.06	0.96	0.45	0.88	1.66	2.07	1.57	
	177	149	2.72	1.35	0.69	1.44	2.26	2.56	1.67	
	149	125	3.34	1.77	1.01	2.19	2.98	3.07	1.79	
	125	105	3.62	2.08	1.31	2.99	3.61	3.38	1.87	
	105	88	3.64	2.32	1.63	3.91	4.20	3.61	2.02	
	88	74	3.23	2.37	1.86	4.69	4.47	3.57	2.18	
	74	63	2.54	2.23	1.95	5.07	4.27	3.25	2.28	
	Fine	63	53	2.20	2.44	2.33	6.12	4.53	3.35	2.83
		53	44	1.87	2.77	2.82	7.19	4.63	3.43	3.59
44		37	1.46	2.84	2.96	7.02	3.97	3.04	3.90	
37		31.2	1.38	3.16	3.29	6.94	3.56	2.88	4.33	
31.2		26.3	1.52	3.63	3.73	6.70	3.23	2.82	4.73	
26.3		22.1	1.86	4.21	4.26	6.30	3.00	2.85	5.04	
22.1		18.6	2.29	4.63	4.69	5.53	2.77	2.85	5.01	
18.6		15.6	2.90	5.10	5.23	4.81	2.70	2.99	4.91	
15.6		13.1	3.46	5.29	5.56	3.96	2.66	3.08	4.50	
13.1		11	4.02	5.35	5.79	3.22	2.72	3.22	4.02	
Very fine	11	9.3	4.30	5.04	5.62	2.52	2.73	3.23	3.38	
	9.3	7.8	4.85	5.06	5.79	2.18	3.01	3.51	3.07	
	7.8	6.6	4.77	4.51	5.24	1.76	2.99	3.42	2.53	
	6.6	5.5	5.20	4.53	5.29	1.67	3.37	3.77	2.43	
	5.5	4.6	4.91	4.03	4.65	1.46	3.33	3.67	2.14	
	4.6	3.9	4.25	3.36	3.78	1.22	3.02	3.30	1.81	
	Coarse	3.9	3.3	3.93	3.06	3.34	1.13	2.92	3.19	1.70
		3.3	2.8	3.44	2.70	2.82	1.02	2.67	2.93	1.54
		2.8	2.3	3.54	2.82	2.84	1.10	2.86	3.16	1.66
		2.3	1.95	2.47	2.03	1.97	0.81	2.07	2.30	1.23
1.95		1.64	2.12	1.80	1.72	0.75	1.83	2.05	1.11	
1.64		1.38	1.69	1.50	1.43	0.67	1.50	1.68	0.95	
1.38		1.16	1.37	1.26	1.21	0.62	1.24	1.39	0.83	
1.16		0.98	1.09	1.05	1.02	0.57	1.01	1.13	0.73	
0.98		0.82	0.94	0.94	0.94	0.57	0.89	0.99	0.71	
0.82		0.69	0.72	0.75	0.76	0.51	0.71	0.77	0.62	
Medium	0.69	0.58	0.53	0.57	0.58	0.44	0.53	0.57	0.52	
	0.58	0.49	0.31	0.34	0.36	0.31	0.33	0.35	0.37	
	<0.49	0.09	0.12	0.12	0.12	0.16	0.12	0.12	0.18	
	Fine									
Very fine										

Table 9B. Particle-size data for the Coppice dune site auger hole. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers	HG09-04/275-284	HG09-04/284-293	HG09-04/326-339	HG09-04/352-365	HG09-04/365-380	HG09-04/380-404	HG09-04/404-430
SAND	Very coarse	2,000	1,680	0.05	0.00	0.00	0.05	0.00	0.00
		1,680	1,414	0.12	0.00	0.00	0.11	0.00	0.00
		1,414	1,189	0.32	0.00	0.00	0.17	0.00	0.00
		1,189	1,000	0.71	0.00	0.00	0.23	0.00	0.00
	Coarse	1,000	841	1.15	0.06	0.00	0.33	0.00	0.00
		841	707	1.56	0.17	0.20	0.47	0.00	0.01
		707	595	1.81	0.34	1.35	0.62	0.00	0.07
		595	500	1.87	0.57	2.66	0.88	0.03	0.14
	Medium	500	420	1.75	0.86	3.95	1.25	0.26	1.55
		420	354	1.51	1.13	5.04	1.75	0.98	2.74
		354	297	1.35	1.46	6.13	2.53	1.94	4.20
		297	250	1.21	1.74	6.64	3.33	3.05	5.41
	Fine	250	210	1.24	2.08	7.00	4.21	4.40	6.50
		210	177	1.36	2.34	6.80	4.78	5.55	6.88
		177	149	1.61	2.63	6.50	5.16	6.54	6.85
		149	125	1.97	2.95	6.05	5.24	7.17	6.35
SILT	Very fine	125	105	2.30	3.19	5.27	4.81	7.05	5.29
		105	88	2.67	3.54	4.53	4.23	6.55	4.20
		88	74	2.93	3.84	3.68	3.46	5.53	3.12
		74	63	2.96	3.96	2.82	2.69	4.25	2.29
	Coarse	63	53	3.40	4.69	2.54	2.56	3.72	2.17
		53	44	3.85	5.54	2.37	2.68	3.33	2.43
		44	37	3.70	5.49	2.03	2.70	2.79	2.62
		37	31.2	3.68	5.55	1.96	3.02	2.72	3.01
	Medium	31.2	26.3	3.67	5.51	1.99	3.45	2.87	3.38
		26.3	22.1	3.66	5.35	2.06	3.88	3.11	3.64
		22.1	18.6	3.51	4.88	2.04	4.06	3.22	3.57
		18.6	15.6	3.45	4.44	2.02	4.15	3.29	3.39
	Fine	15.6	13.1	3.29	3.83	1.90	3.92	3.12	2.96
		13.1	11	3.19	3.29	1.74	3.57	2.84	2.51
		11	9.3	3.00	2.72	1.51	3.01	2.41	2.01
		9.3	7.8	3.10	2.46	1.40	2.69	2.15	1.76
CLAY	Very fine	7.8	6.6	2.92	2.04	1.17	2.15	1.72	1.43
		6.6	5.5	3.15	1.96	1.11	1.96	1.57	1.37
		5.5	4.6	3.03	1.70	0.95	1.61	1.29	1.21
		4.6	3.9	2.70	1.40	0.76	1.27	1.01	1.03
	Coarse	3.9	3.3	2.59	1.26	0.67	1.12	0.89	0.95
		3.3	2.8	2.36	1.09	0.57	0.96	0.76	0.84
		2.8	2.3	2.51	1.12	0.57	0.99	0.77	0.87
		2.3	1.95	1.80	0.79	0.39	0.69	0.54	0.61
	Medium	1.95	1.64	1.57	0.70	0.33	0.61	0.47	0.52
		1.64	1.38	1.28	0.59	0.27	0.50	0.39	0.42
		1.38	1.16	1.05	0.52	0.22	0.44	0.34	0.36
		1.16	0.98	0.86	0.48	0.19	0.39	0.31	0.32
	Fine	0.98	0.82	0.77	0.48	0.19	0.39	0.31	0.31
		0.82	0.69	0.61	0.44	0.16	0.35	0.28	0.28
		0.69	0.58	0.47	0.38	0.13	0.29	0.24	0.24
		0.58	0.49	0.30	0.28	0.09	0.21	0.17	0.16
	Very fine	<0.49	0.11	0.14	0.00	0.09	0.07	0.07	0.07

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).

		Micrometers		JY03-01	JY03-01a	JY03-01b	JY03-22a	JY03-23a	JY03-25a	JY03-27a
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	56.04	51.45	0.00
		1,680	1,414	0.00	0.00	0.00	0.00	0.00	0.00	0.10
		1,414	1,189	0.00	0.00	0.00	0.05	0.00	0.00	2.16
		1,189	1,000	0.00	0.00	0.00	1.86	0.00	0.00	6.80
	Coarse	1,000	841	0.00	0.00	0.00	4.32	0.00	0.00	9.64
		841	707	0.00	0.00	0.00	4.96	0.00	0.00	10.60
		707	595	0.00	0.00	0.00	4.04	0.00	0.00	9.27
		595	500	0.00	0.00	0.00	2.36	0.00	0.00	6.66
	Medium	500	420	0.00	0.00	0.00	1.18	0.03	0.00	4.36
		420	354	0.00	0.00	0.00	0.70	0.19	0.02	2.39
		354	297	0.00	0.00	0.00	0.34	0.52	0.10	1.09
		297	250	0.00	0.00	0.02	0.46	1.14	0.24	0.46
	Fine	250	210	0.00	0.04	0.37	1.00	2.01	0.44	0.27
		210	177	0.27	0.50	0.73	2.04	3.17	0.69	0.32
		177	149	1.30	1.10	1.13	3.33	4.32	0.92	0.53
		149	125	1.77	1.74	1.54	4.74	5.20	1.18	0.80
Very fine	125	105	2.35	2.35	1.91	5.97	5.52	1.46	1.14	
	105	88	2.96	3.01	2.24	6.46	5.24	1.70	1.50	
	88	74	3.46	3.42	2.35	6.44	4.47	1.99	1.92	
	74	63	3.53	3.43	2.21	5.67	3.30	2.28	2.33	
SILT	Coarse	63	53	3.93	3.81	2.32	4.50	2.15	2.48	2.57
		53	44	4.23	4.17	2.45	3.99	1.51	3.05	3.09
		44	37	3.89	3.97	2.38	3.51	0.96	3.66	3.64
		37	31.2	4.03	4.24	2.67	2.81	0.50	3.62	3.52
	Medium	31.2	26.3	4.36	4.66	3.26	2.59	0.29	3.58	3.40
		26.3	22.1	4.84	5.17	4.16	2.57	0.20	3.40	3.17
		22.1	18.6	5.25	5.52	4.94	2.65	0.19	3.09	2.85
		18.6	15.6	5.78	5.91	5.78	2.61	0.21	2.59	2.39
	Fine	15.6	13.1	6.03	5.96	6.28	2.55	0.23	2.12	1.99
		13.1	11	6.08	5.82	6.56	2.33	0.23	1.63	1.58
		11	9.3	5.62	5.24	6.26	2.06	0.22	1.24	1.27
		9.3	7.8	5.38	4.93	6.22	1.71	0.20	0.92	1.01
	Very fine	7.8	6.6	4.45	4.06	5.36	1.51	0.20	0.77	0.90
		6.6	5.5	4.01	3.70	5.09	1.21	0.18	0.61	0.75
		5.5	4.6	3.08	2.92	4.14	1.11	0.18	0.58	0.74
		4.6	3.9	2.18	2.15	3.12	0.92	0.17	0.51	0.65
CLAY	Coarse	3.9	3.3	1.68	1.74	2.55	0.72	0.14	0.42	0.54
		3.3	2.8	1.27	1.38	2.03	0.63	0.13	0.38	0.48
		2.8	2.3	1.17	1.32	1.93	0.52	0.11	0.33	0.41
		2.3	1.95	0.79	0.90	1.30	0.51	0.11	0.33	0.41
	Medium	1.95	1.64	0.70	0.79	1.12	0.35	0.07	0.22	0.28
		1.64	1.38	0.61	0.67	0.93	0.29	0.06	0.19	0.23
		1.38	1.16	0.53	0.57	0.77	0.24	0.06	0.16	0.19
		1.16	0.98	0.44	0.47	0.63	0.20	0.06	0.13	0.15
	Fine	0.98	0.82	0.41	0.43	0.57	0.17	0.05	0.11	0.12
		0.82	0.69	0.35	0.37	0.48	0.16	0.06	0.11	0.11
		0.69	0.58	0.34	0.37	0.46	0.14	0.05	0.10	0.10
		0.58	0.49	0.36	0.39	0.48	0.14	0.05	0.11	0.11
	Very fine	<0.49		2.59	2.82	3.29	0.15	0.05	0.13	0.13

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers		JY03-28a	JY03-29a	JY03-30a	JY03-31a	JY03-32a	JY03-41a
SAND	Very coarse	2,000	1,680	0.00	50.61	0.00	0.00	0.06	0.00
		1,680	1,414	0.54	0.00	0.03	0.00	1.50	0.00
		1,414	1,189	2.28	0.00	1.36	0.00	6.26	0.00
		1,189	1,000	3.81	0.00	4.66	0.00	11.08	0.00
	Coarse	1,000	841	4.22	0.00	8.23	0.03	12.29	0.00
		841	707	3.50	0.00	8.94	1.04	9.46	0.00
		707	595	2.29	0.00	7.40	2.31	5.70	0.00
		595	500	1.17	0.00	5.02	3.61	3.04	0.00
	Medium	500	420	0.70	0.00	3.23	4.68	1.57	0.00
		420	354	0.69	0.00	1.75	5.10	0.67	0.00
		354	297	0.71	0.00	0.86	4.71	0.23	0.00
		297	250	0.97	0.00	0.56	3.98	0.10	0.00
	Fine	250	210	1.37	0.02	0.59	3.07	0.14	0.00
		210	177	1.98	0.23	0.76	2.55	0.27	0.00
		177	149	2.59	0.45	0.83	2.28	0.41	0.12
		149	125	3.20	0.78	0.83	2.35	0.57	0.56
Very fine	125	105	3.67	1.28	0.83	2.60	0.74	0.95	
	105	88	3.78	1.90	0.95	2.75	0.89	1.38	
	88	74	3.81	2.64	1.32	2.79	1.03	1.75	
	74	63	3.70	3.28	1.94	2.55	1.11	1.99	
SILT	Coarse	63	53	3.52	3.57	2.61	2.05	1.11	2.51
		53	44	4.05	4.15	3.80	1.78	1.27	3.07
		44	37	4.82	4.38	5.20	1.52	1.48	3.20
		37	31.2	4.92	3.89	5.31	1.25	1.57	3.55
	Medium	31.2	26.3	4.87	3.49	5.18	1.23	1.78	4.07
		26.3	22.1	4.69	3.05	4.91	1.38	2.03	4.79
		22.1	18.6	4.45	2.61	4.40	1.71	2.32	5.38
		18.6	15.6	3.90	2.10	3.58	2.08	2.53	6.05
	Fine	15.6	13.1	3.34	1.72	2.82	2.56	2.76	6.41
		13.1	11	2.67	1.36	2.07	2.95	2.83	6.59
		11	9.3	2.10	1.11	1.50	3.28	2.81	6.24
		9.3	7.8	1.60	0.89	1.07	3.33	2.58	6.18
	Very fine	7.8	6.6	1.35	0.80	0.86	3.54	2.49	5.34
		6.6	5.5	1.06	0.66	0.68	3.26	2.12	5.08
		5.5	4.6	0.99	0.63	0.65	3.31	2.01	4.18
		4.6	3.9	0.84	0.53	0.58	2.90	1.66	3.18
CLAY	Coarse	3.9	3.3	0.67	0.42	0.49	2.34	1.29	2.63
		3.3	2.8	0.59	0.36	0.44	2.03	1.10	2.10
		2.8	2.3	0.50	0.30	0.38	1.68	0.91	2.00
		2.3	1.95	0.49	0.29	0.38	1.64	0.90	1.34
	Medium	1.95	1.64	0.33	0.20	0.27	1.11	0.63	1.16
		1.64	1.38	0.29	0.18	0.23	0.95	0.56	0.98
		1.38	1.16	0.24	0.15	0.19	0.78	0.47	0.83
		1.16	0.98	0.20	0.13	0.17	0.64	0.40	0.69
	Fine	0.98	0.82	0.17	0.12	0.14	0.52	0.33	0.64
		0.82	0.69	0.17	0.12	0.14	0.46	0.30	0.54
		0.69	0.58	0.16	0.11	0.14	0.38	0.25	0.52
		0.58	0.49	0.18	0.12	0.16	0.35	0.24	0.51
Very fine	<0.49	0.21	0.13	0.18	0.34	0.25	3.51		

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers		JY03-42a	JY03-43a	JY03-44a	JY03-49a	JY03-50a	JY04-15a
SAND	Very coarse	2,000	1,680	50.25	41.44	0.00	50.02	0.00	0.00
		1,680	1,414	0.00	1.66	0.00	0.00	0.00	0.00
		1,414	1,189	0.00	0.32	0.00	0.01	0.00	0.00
		1,189	1,000	0.00	0.23	0.16	0.00	0.00	0.00
	Coarse	1,000	841	0.00	0.18	3.36	0.00	0.00	0.00
		841	707	0.00	0.15	7.46	0.00	0.00	0.00
		707	595	0.00	0.06	7.76	0.00	0.00	0.00
		595	500	0.00	0.27	6.00	0.00	0.00	0.00
	Medium	500	420	0.00	0.41	3.41	0.01	0.00	0.00
		420	354	0.00	0.51	1.58	0.05	0.00	0.00
		354	297	0.00	0.49	0.60	0.16	0.01	0.14
		297	250	0.00	0.41	0.19	0.30	0.04	0.47
	Fine	250	210	0.00	0.34	0.09	0.48	0.08	0.86
		210	177	0.00	0.37	0.14	0.64	0.12	1.21
		177	149	0.00	0.54	0.29	0.71	0.84	1.54
		149	125	0.09	0.82	0.63	0.75	3.81	1.84
Very fine	125	105	0.44	1.26	1.28	0.76	5.57	1.99	
	105	88	0.87	1.82	2.18	0.76	7.38	2.02	
	88	74	1.60	2.56	3.18	0.88	7.49	1.85	
	74	63	2.45	3.27	3.78	1.16	6.85	1.57	
SILT	Coarse	63	53	3.14	3.68	3.63	1.52	5.44	1.56
		53	44	4.23	4.53	3.65	2.29	4.58	1.67
		44	37	5.29	5.08	3.53	3.35	3.76	1.69
		37	31.2	4.97	4.49	3.02	3.72	2.96	1.96
	Medium	31.2	26.3	4.52	4.09	2.94	3.97	2.89	2.40
		26.3	22.1	4.05	3.61	3.11	4.11	3.22	3.04
		22.1	18.6	3.48	3.09	3.42	4.05	3.79	3.62
		18.6	15.6	2.75	2.46	3.59	3.63	4.26	4.29
	Fine	15.6	13.1	2.15	1.94	3.73	3.15	4.69	4.80
		13.1	11	1.59	1.48	3.61	2.53	4.72	5.24
		11	9.3	1.18	1.14	3.40	1.98	4.49	5.31
		9.3	7.8	0.87	0.87	2.98	1.48	3.89	5.68
	Very fine	7.8	6.6	0.74	0.75	2.79	1.21	3.50	5.33
		6.6	5.5	0.59	0.61	2.33	0.92	2.74	5.55
		5.5	4.6	0.57	0.59	2.19	0.82	2.40	5.01
		4.6	3.9	0.49	0.51	1.82	0.67	1.83	4.16
CLAY	Coarse	3.9	3.3	0.41	0.42	1.41	0.53	1.33	3.70
		3.3	2.8	0.36	0.37	1.18	0.46	1.07	3.14
		2.8	2.3	0.30	0.31	0.94	0.38	0.85	3.14
		2.3	1.95	0.30	0.32	0.88	0.37	0.81	2.17
	Medium	1.95	1.64	0.21	0.22	0.56	0.25	0.54	1.89
		1.64	1.38	0.18	0.19	0.44	0.21	0.47	1.57
		1.38	1.16	0.15	0.16	0.33	0.17	0.39	1.31
		1.16	0.98	0.13	0.14	0.25	0.14	0.32	1.06
	Fine	0.98	0.82	0.11	0.12	0.19	0.12	0.27	0.95
		0.82	0.69	0.11	0.11	0.17	0.11	0.25	0.77
		0.69	0.58	0.10	0.10	0.14	0.11	0.22	0.70
		0.58	0.49	0.12	0.11	0.15	0.12	0.22	0.66
	Very fine	<0.49		0.14	0.13	0.16	0.13	0.23	4.17

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers	JY04-15b	JY04-15c	JY04-16a	JY04-16b	JY04-16c	JY04-17a
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.00
		1,680	1,414	0.00	0.00	0.00	0.00	0.00
		1,414	1,189	0.00	0.00	0.00	0.00	0.00
		1,189	1,000	0.00	0.00	0.00	0.00	0.00
	Coarse	1,000	841	0.00	0.00	0.00	0.00	0.00
		841	707	0.00	0.00	0.00	0.00	0.00
		707	595	0.00	0.00	0.00	0.00	0.00
		595	500	0.00	0.00	0.00	0.00	0.00
	Medium	500	420	0.00	0.00	0.00	0.00	0.00
		420	354	0.00	0.00	0.00	0.00	0.04
		354	297	0.27	0.09	0.63	0.19	1.55
		297	250	0.73	0.44	1.42	0.74	3.37
	Fine	250	210	1.21	0.96	2.26	1.56	4.59
		210	177	1.58	1.50	3.00	2.21	5.61
		177	149	1.91	2.04	3.78	2.87	5.25
		149	125	2.19	2.52	4.43	3.43	5.01
SILT	Very fine	125	105	2.27	2.70	4.61	3.58	4.65
		105	88	2.23	2.62	4.43	3.39	4.27
		88	74	1.98	2.21	3.77	2.77	4.27
		74	63	1.62	1.66	2.86	1.95	4.44
	Coarse	63	53	1.54	1.44	2.47	1.56	4.50
		53	44	1.54	1.33	2.13	1.43	5.22
		44	37	1.54	1.43	1.69	1.21	5.79
		37	31.2	1.73	1.81	1.61	1.53	5.47
	Medium	31.2	26.3	2.13	2.27	1.78	1.89	5.27
		26.3	22.1	2.64	2.88	2.17	2.41	4.94
		22.1	18.6	3.11	3.46	2.65	3.00	4.45
		18.6	15.6	3.69	4.15	3.28	3.74	3.70
	Fine	15.6	13.1	4.18	4.68	3.81	4.35	3.01
		13.1	11	4.63	5.12	4.26	4.87	2.32
		11	9.3	4.79	5.20	4.38	5.00	1.79
		9.3	7.8	5.23	5.54	4.67	5.36	1.35
	Very fine	7.8	6.6	5.03	5.19	4.33	5.00	1.14
		6.6	5.5	5.38	5.39	4.42	5.14	0.90
		5.5	4.6	5.00	4.86	3.89	4.58	0.85
		4.6	3.9	4.26	4.03	3.15	3.75	0.73
CLAY	Coarse	3.9	3.3	3.90	3.59	2.76	3.30	3.36
		3.3	2.8	3.39	3.06	2.31	2.78	2.85
		2.8	2.3	3.48	3.07	2.30	2.77	2.85
		2.3	1.95	2.46	2.13	1.59	1.91	1.98
	Medium	1.95	1.64	2.17	1.85	1.39	1.66	1.72
		1.64	1.38	1.82	1.53	1.17	1.37	1.43
		1.38	1.16	1.52	1.26	0.98	1.14	1.18
		1.16	0.98	1.22	1.01	0.79	0.91	0.95
	Fine	0.98	0.82	1.07	0.89	0.70	0.80	0.84
		0.82	0.69	0.86	0.72	0.58	0.65	0.68
		0.69	0.58	0.76	0.65	0.53	0.60	0.61
		0.58	0.49	0.70	0.62	0.50	0.57	0.58
	Very fine	<0.49		4.27	4.12	2.56	3.65	3.65
								0.22

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).

		Micrometers	JY05-15	JY05-16	JY05-17	JY05-19	JY05-21a	JY05-21b
SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.00
		1,680	1,414	0.00	0.00	0.00	0.00	0.00
		1,414	1,189	0.00	0.00	0.00	0.00	0.00
		1,189	1,000	0.00	0.00	0.00	0.00	0.00
	Coarse	1,000	841	0.00	0.00	0.00	0.00	0.00
		841	707	0.00	0.00	0.00	0.00	0.00
		707	595	0.00	0.00	0.00	0.00	0.00
		595	500	0.00	0.00	0.00	0.00	0.00
	Medium	500	420	0.00	0.00	0.00	0.00	0.00
		420	354	0.00	0.76	0.05	0.00	0.00
		354	297	0.00	1.72	0.86	0.45	0.00
		297	250	0.00	2.49	1.70	1.10	0.00
	Fine	250	210	0.04	3.04	2.51	1.78	0.00
		210	177	0.36	3.24	3.09	2.39	0.00
		177	149	1.10	3.33	3.60	3.06	0.00
		149	125	1.74	3.34	3.94	3.76	0.13
SILT	Very fine	125	105	2.40	3.14	3.89	4.26	0.42
		105	88	3.05	2.92	3.64	4.64	0.97
		88	74	3.45	2.54	3.07	4.66	1.93
		74	63	3.41	2.10	2.41	4.24	3.03
	Coarse	63	53	3.68	2.01	2.18	4.28	4.86
		53	44	3.82	1.96	2.01	4.30	7.11
		44	37	3.55	1.75	1.72	3.70	8.05
		37	31.2	3.62	1.76	1.73	3.37	8.75
	Medium	31.2	26.3	3.83	1.91	1.91	3.17	8.44
		26.3	22.1	4.21	2.18	2.24	3.08	7.89
		22.1	18.6	4.53	2.46	2.58	2.99	6.91
		18.6	15.6	4.95	2.84	3.01	3.06	5.96
	Fine	15.6	13.1	5.13	3.13	3.32	3.11	4.85
		13.1	11	5.18	3.41	3.59	3.20	3.94
		11	9.3	4.84	3.48	3.63	3.16	3.11
		9.3	7.8	4.77	3.77	3.88	3.36	2.77
	Very fine	7.8	6.6	4.12	3.61	3.68	3.15	2.31
		6.6	5.5	3.96	3.87	3.91	3.30	2.28
		5.5	4.6	3.33	3.64	3.63	2.98	2.05
		4.6	3.9	2.62	3.15	3.13	2.47	1.74
CLAY	Coarse	3.9	3.3	2.24	2.94	2.90	2.18	1.59
		3.3	2.8	1.87	2.63	2.58	1.83	1.39
		2.8	2.3	1.87	2.79	2.72	1.80	1.41
		2.3	1.95	1.32	2.05	1.98	1.23	0.98
	Medium	1.95	1.64	1.18	1.89	1.81	1.06	0.83
		1.64	1.38	1.02	1.64	1.55	0.89	0.67
		1.38	1.16	0.88	1.43	1.34	0.76	0.54
		1.16	0.98	0.74	1.20	1.11	0.64	0.42
	Fine	0.98	0.82	0.68	1.10	1.01	0.60	0.38
		0.82	0.69	0.58	0.92	0.84	0.53	0.33
		0.69	0.58	0.56	0.85	0.78	0.53	0.36
		0.58	0.49	0.56	0.80	0.74	0.54	0.42
	Very fine	<0.49		4.81	6.22	5.73	4.44	3.17

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers	JY05-25	JY05-29	JY05-30	JY05-35a	JY05-35b	JY05-35c
SAND	Very coarse	2,000 1,680	0.00	0.00	0.00	0.00	0.00	0.00
		1,680 1,414	0.00	0.00	0.00	0.00	0.00	0.00
		1,414 1,189	0.00	0.00	0.00	0.00	0.00	0.00
		1,189 1,000	0.00	0.00	0.00	0.00	0.00	0.00
		1,000 841	0.00	0.00	0.00	0.00	0.00	0.00
		841 707	0.00	0.00	0.00	0.00	0.00	0.00
		707 595	0.00	0.00	0.00	0.00	0.00	0.00
		595 500	0.00	0.00	0.00	0.00	0.00	0.25
		500 420	0.00	0.00	0.43	0.24	0.00	1.43
		420 354	0.07	0.01	1.44	2.19	1.22	2.64
		354 297	0.40	0.36	2.80	4.56	3.51	3.97
		297 250	0.74	0.72	4.43	6.75	5.60	5.02
SILT	Coarse	250 210	1.05	0.99	6.40	8.99	7.72	5.94
		210 177	1.28	1.11	8.19	10.28	9.05	6.33
		177 149	1.60	1.24	10.14	10.48	9.94	6.62
		149 125	2.07	1.40	11.03	9.72	9.68	6.57
		125 105	2.64	1.56	10.46	8.31	8.43	6.10
		105 88	3.45	1.80	9.26	6.73	7.14	5.67
		88 74	4.34	2.01	7.22	5.01	5.56	4.96
		74 63	5.01	2.12	5.03	3.47	4.00	4.03
		63 53	6.46	2.54	3.88	2.72	3.23	3.71
		53 44	7.75	3.02	2.84	2.08	2.54	3.33
		44 37	7.39	3.04	1.79	1.42	1.75	2.57
		37 31.2	7.19	3.20	1.26	1.12	1.37	2.14
CLAY	Medium	31.2 26.3	6.75	3.46	0.99	0.98	1.17	1.86
		26.3 22.1	6.11	3.81	0.86	0.94	1.09	1.69
		22.1 18.6	5.12	4.09	0.80	0.91	1.04	1.56
		18.6 15.6	4.27	4.52	0.79	0.91	1.04	1.52
		15.6 13.1	3.40	4.84	0.75	0.90	1.03	1.48
		13.1 11	2.75	5.15	0.72	0.88	1.03	1.47
		11 9.3	2.19	5.15	0.66	0.84	0.99	1.41
		9.3 7.8	1.98	5.45	0.66	0.87	1.03	1.48
		7.8 6.6	1.69	5.06	0.60	0.81	0.97	1.40
		6.6 5.5	1.69	5.18	0.64	0.86	1.04	1.50
		5.5 4.6	1.53	4.55	0.60	0.81	0.99	1.42
		4.6 3.9	1.31	3.64	0.53	0.70	0.86	1.25
CLAY	Coarse	3.9 3.3	1.20	3.11	0.51	0.65	0.82	1.18
		3.3 2.8	1.05	2.51	0.46	0.59	0.74	1.07
		2.8 2.3	1.07	2.36	0.50	0.62	0.79	1.15
		2.3 1.95	0.75	1.54	0.37	0.45	0.58	0.86
		1.95 1.64	0.64	1.29	0.34	0.41	0.53	0.79
		1.64 1.38	0.53	1.06	0.32	0.37	0.47	0.69
		1.38 1.16	0.42	0.89	0.29	0.32	0.41	0.60
		1.16 0.98	0.33	0.73	0.25	0.26	0.34	0.50
		0.98 0.82	0.30	0.68	0.23	0.24	0.31	0.46
		0.82 0.69	0.26	0.59	0.22	0.22	0.28	0.39
		0.69 0.58	0.28	0.57	0.22	0.22	0.27	0.37
		0.58 0.49	0.33	0.57	0.23	0.23	0.28	0.36
	Very fine	<0.49	2.62	4.10	0.87	0.94	1.18	2.26

Table 9C. Particle-size data for Franklin Lake playa and Ash meadows grab samples. Each value represents the percent of the total sample present in each respective size bin. Size bins based on the Wentworth scale (Wentworth, 1922).—Continued

		Micrometers	JY05-37a	JY05-37b	JY05-37c	JY05-38a	JY05-38b	JY05-38c	
CLAY	SAND	Very coarse	2,000	1,680	0.00	0.00	0.00	0.00	0.00
			1,680	1,414	0.00	0.00	0.00	0.00	0.00
			1,414	1,189	0.00	0.00	0.00	0.00	0.00
			1,189	1,000	0.00	0.00	0.00	0.00	0.00
		Coarse	1,000	841	0.00	0.00	0.00	0.00	0.00
			841	707	0.00	0.00	0.00	0.00	0.00
			707	595	0.00	0.00	0.04	0.00	0.00
			595	500	0.00	0.00	0.70	0.00	0.00
		Medium	500	420	0.00	0.00	2.18	0.00	0.09
			420	354	0.00	0.00	3.38	1.72	1.65
			354	297	0.05	0.05	4.55	4.46	3.87
			297	250	0.19	0.24	5.07	6.89	6.34
	SILT	Fine	250	210	0.43	0.51	5.22	9.26	8.98
			210	177	0.63	0.77	4.82	10.61	10.78
			177	149	0.82	1.00	4.33	10.66	11.90
			149	125	0.99	1.20	3.80	9.56	11.19
		Very fine	125	105	1.10	1.33	3.17	7.76	8.95
			105	88	1.20	1.46	2.65	5.94	6.70
			88	74	1.28	1.55	2.16	4.22	4.57
			74	63	1.08	1.29	1.70	2.85	2.92
		Coarse	63	53	0.78	0.92	1.61	2.25	2.12
			53	44	0.94	1.10	1.59	1.80	1.52
			44	37	0.95	1.09	1.45	1.35	1.00
			37	31.2	1.06	1.20	1.47	1.21	0.83
		Medium	31.2	26.3	1.25	1.38	1.57	1.18	0.81
			26.3	22.1	1.52	1.66	1.73	1.20	0.87
			22.1	18.6	1.83	1.97	1.88	1.19	0.91
			18.6	15.6	2.29	2.41	2.11	1.19	0.95
	CLAY	Fine	15.6	13.1	2.79	2.87	2.29	1.14	0.93
			13.1	11	3.39	3.39	2.48	1.10	0.91
			11	9.3	3.83	3.74	2.56	1.02	0.85
			9.3	7.8	4.55	4.39	2.82	1.03	0.87
		Very fine	7.8	6.6	4.76	4.53	2.77	0.95	0.80
			6.6	5.5	5.53	5.22	3.05	0.99	0.84
			5.5	4.6	5.59	5.25	2.94	0.92	0.79
			4.6	3.9	5.14	4.83	2.61	0.79	0.68
		Coarse	3.9	3.3	5.04	4.74	2.50	0.74	0.65
			3.3	2.8	4.68	4.42	2.28	0.67	0.59
			2.8	2.3	5.12	4.87	2.46	0.72	0.64
			2.3	1.95	3.83	3.68	1.83	0.54	0.48
		Medium	1.95	1.64	3.54	3.43	1.69	0.50	0.45
			1.64	1.38	3.07	3.01	1.48	0.46	0.43
			1.38	1.16	2.65	2.62	1.29	0.41	0.39
			1.16	0.98	2.20	2.19	1.07	0.34	0.33
	Very fine	Fine	0.98	0.82	1.99	1.99	0.97	0.32	0.32
			0.82	0.69	1.64	1.65	0.81	0.30	0.32
			0.69	0.58	1.49	1.50	0.73	0.30	0.32
			0.58	0.49	1.38	1.38	0.67	0.32	0.34
			<0.49		9.43	9.15	3.55	1.14	1.13

Table 10. Bulk density data of Franklin Lake playa grab samples.

[Sample site, name of sampling site; Sample ID, unique sample identifier; Ring size, height of sampling ring; cm, centimeters; g/cm³, grams per cubic centimeter]

Sample site	Sample ID	Ring size	Bulk density (g/cm ³)
Amargosa River Crossing	JY05-35a	1cm	1.87
Amargosa River Crossing	JY05-35b	3cm	1.32
Amargosa River Crossing	JY05-35c	3cm	1.48
Amargosa River East of Death Valley Junction	JY05-37a	1cm	1.33
Amargosa River East of Death Valley Junction	JY05-37b	3cm	1.42
Amargosa River East of Death Valley Junction	JY05-37c	3cm	1.40
Amargosa River East of Death Valley Junction	JY05-38a	1cm	1.17
Amargosa River East of Death Valley Junction	JY05-38b	3cm	1.33
Amargosa River East of Death Valley Junction	JY05-38c	3cm	1.62
Clay Dune	JY05-24a	1cm	1.18
Clay Dune	JY05-24b	3cm	0.79
Clay Dune	JY05-24c	3cm	0.68
Coppice	JY05-14a	1cm	1.38
Coppice	JY05-14b	3cm	1.23
Coppice	JY05-14c	3cm	1.10
Discovery	JY05-12a	1cm	0.83
Discovery	JY05-12b	3cm	1.48
Discovery	JY05-12c	3cm	1.07
Discovery	JY05-13a	1cm	1.08
Discovery	JY05-13b	3cm	1.26
Discovery	JY05-13c	3cm	1.23
East Transect	JY05-20a	1cm	1.13
East Transect	JY05-20b	3cm	0.99
East Transect	JY05-20c	3cm	0.73
Franklin Lake Playa/Carson Slough	JY05-27	1cm	1.21
Franklin Lake Playa/Carson Slough	JY05-28	1cm	1.60
Salt Pan	JY05-22a	1cm	0.71
Salt Pan	JY05-22b	3cm	0.63
Salt Pan	JY05-22c	3cm	0.73
West Transect	JY05-18a	1cm	1.40
West Transect	JY05-18b	3cm	1.37
West Transect	JY05-18c	3cm	1.23

Table 11A. Geochemical data determined on selected bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; ppm, parts per million; wt.%, weight percent]

Sample site	Sample ID	ICP-MS Ag ppm	ICP-OES Al wt.%	ICP-MS As ppm	ICP-MS Ba ppm	ICP-MS Be ppm	ICP-MS Bi ppm	ICP-OES Ca wt.%	ICP-MS Cd ppm	ICP-MS Ce ppm	ICP-MS Co ppm
East Transect Auger	HG07-04/0-1	<1	5.0	18	690	2.0	0.16	6.6	0.17	61	6.7
East Transect Auger	HG07-04/1-5	<1	5.3	14	510	2.6	0.18	6.5	0.18	57	8.7
East Transect Auger	HG07-04/5-10	<1	5.0	16	470	2.4	0.19	6.3	0.21	60	8.0
East Transect Auger	HG07-04/10-20	<1	5.0	26	430	2.1	0.19	6.7	0.19	60	8.4
East Transect Auger	HG07-04/20-30	<1	5.4	42	440	2.3	0.17	7.2	0.17	64	7.6
East Transect Auger	HG07-04/30-40	<1	5.0	45	500	2.4	0.18	6.8	0.19	66	8.0
East Transect Auger	HG07-04/40-50	<1	5.2	45	510	2.1	0.17	7.3	0.18	59	7.7
East Transect Auger	HG07-04/50-60	<1	5.8	39	500	2.4	0.17	8.5	0.19	67	7.8
East Transect Auger	HG07-04/60-70	<1	5.3	44	480	2.2	0.18	8.3	0.21	66	8.4
East Transect Auger	HG07-04/70-80	<1	5.4	41	510	2.5	0.18	8.4	0.18	76	7.5
East Transect Auger	HG07-04/80-90	<1	5.1	38	550	2.3	0.18	9.0	0.19	71	7.0
East Transect Auger	HG07-04/90-95	<1	5.5	37	500	2.5	0.17	9.4	0.20	68	7.0
East Transect Auger	HG07-04/95-101	<1	5.1	38	560	2.3	0.18	8.1	0.19	72	6.7
East Transect Auger	HG07-04/101-124	<1	4.0	34	510	2.4	0.16	6.6	0.16	75	6.1
East Transect Auger	HG07-04/124-137	<1	4.5	19	650	2.4	0.11	7.8	0.12	95	3.4
East Transect Auger	HG07-04/137-145	<1	5.3	10	760	2.1	0.08	11	0.07	76	1.5
East Transect Auger	HG07-04/145-159	<1	4.6	7.9	830	1.9	0.09	8.2	0.07	87	1.3
East Transect Auger	HG07-04/159-163	<1	5.1	7.2	840	2.1	0.07	9.6	0.07	95	1.2
East Transect Auger	HG07-04/163-169	<1	5.0	7.5	770	2.1	0.08	9.9	0.07	130	1.5
East Transect Auger	HG07-04/169-177	<1	4.5	7.7	820	2.4	0.07	10	0.06	90	1.6
East Transect Auger	HG07-04/177-184	<1	4.8	9.9	830	2.3	0.07	8.2	0.07	130	1.7
East Transect Auger	HG07-04/184-193	<1	5.5	7.6	820	2.1	0.08	7.1	0.05	73	1.7
East Transect Auger	HG07-04/193-203	<1	4.4	8.6	850	1.8	0.08	7.5	0.06	71	2.0
East Transect Auger	HG07-04/203-217	<1	5.2	8.7	820	2.4	0.10	8.6	0.09	110	2.0
East Transect Auger	HG07-04/217-228	<1	5.2	6.5	790	2.8	0.11	6.6	0.08	100	1.6
East Transect Auger	HG07-04/228-237	<1	5.1	6.7	730	2.6	0.10	7.0	0.09	100	1.6
East Transect Auger	HG07-04/237-248	<1	4.2	6.8	680	1.6	0.08	10	0.09	73	1.7
East Transect Auger	HG07-04/248-258	<1	3.9	6.5	620	1.7	0.07	11	0.08	57	1.6
East Transect Auger	HG07-04/258-266	<1	4.6	8.3	730	2.0	0.08	8.8	0.08	74	1.6
East Transect Auger	HG07-04/266-281	<1	4.1	7.5	760	1.9	0.07	9.7	0.08	78	1.3

Sample site	Sample ID	ICP-MS Cr ppm	ICP-MS Cs ppm	ICP-MS Cu ppm	ICP-OES Fe wt.%	ICP-MS Ga ppm	ICP-OES K wt.%	ICP-MS La ppm	ICP-MS Li ppm	ICP-OES Mg wt.%	ICP-MS Mn ppm
East Transect Auger	HG07-04/0-1	29	8.5	15	1.7	14	2.7	34	140	3.0	490
East Transect Auger	HG07-04/1-5	31	12	19	2.2	14	2.9	31	210	4.2	590
East Transect Auger	HG07-04/5-10	30	12	19	2.0	14	2.9	31	200	4.0	560
East Transect Auger	HG07-04/10-20	31	12	18	2.1	13	3.0	28	180	4.2	560
East Transect Auger	HG07-04/20-30	28	11	18	2.1	12	3.1	31	190	4.1	510
East Transect Auger	HG07-04/30-40	30	12	18	2.0	13	2.8	33	180	3.8	550
East Transect Auger	HG07-04/40-50	30	10	18	2.0	14	3.0	30	170	3.9	540
East Transect Auger	HG07-04/50-60	30	11	17	2.3	13	3.2	34	160	4.1	550
East Transect Auger	HG07-04/60-70	30	11	18	2.1	14	3.0	32	150	3.7	570
East Transect Auger	HG07-04/70-80	28	11	17	2.1	13	2.9	38	170	3.7	530
East Transect Auger	HG07-04/80-90	28	11	16	1.9	13	2.7	37	140	3.4	510
East Transect Auger	HG07-04/90-95	27	11	16	2.1	12	2.9	34	150	3.8	500
East Transect Auger	HG07-04/95-101	27	11	15	1.9	13	2.8	37	140	3.1	500
East Transect Auger	HG07-04/101-124	24	13	14	1.5	12	2.4	39	170	2.9	460
East Transect Auger	HG07-04/124-137	15	9.3	8.9	1.2	11	2.9	56	140	2.6	340
East Transect Auger	HG07-04/137-145	9.6	5.6	4.6	0.86	10	3.4	46	67	1.5	200
East Transect Auger	HG07-04/145-159	8.8	4.7	3.9	0.66	12	2.8	53	51	0.97	210
East Transect Auger	HG07-04/159-163	8.8	4.2	3.9	0.71	11	3.2	59	49	0.93	190
East Transect Auger	HG07-04/163-169	9.4	4.8	3.9	0.83	11	3.2	78	58	1.1	220
East Transect Auger	HG07-04/169-177	9.0	6.0	4.0	0.74	11	2.9	56	62	1.1	220
East Transect Auger	HG07-04/177-184	9.2	5.2	3.9	0.76	12	3.0	80	63	1.0	240
East Transect Auger	HG07-04/184-193	7.9	5.6	3.9	0.80	11	3.3	45	67	1.2	210
East Transect Auger	HG07-04/193-203	8.7	6.0	4.1	0.66	11	2.7	44	69	1.1	250
East Transect Auger	HG07-04/203-217	9.6	6.7	4.2	0.85	12	3.2	68	75	1.3	220
East Transect Auger	HG07-04/217-228	9.5	4.8	3.6	0.83	14	3.4	66	41	0.67	200
East Transect Auger	HG07-04/228-237	10	4.9	4.2	0.87	13	3.1	67	48	0.82	200
East Transect Auger	HG07-04/237-248	8.7	4.9	3.9	0.66	10	2.9	43	46	0.88	170
East Transect Auger	HG07-04/248-258	8.2	4.7	3.3	0.67	8.4	2.7	35	50	1.1	160
East Transect Auger	HG07-04/258-266	8.1	4.7	4.7	0.71	10	3.0	44	56	1.0	180
East Transect Auger	HG07-04/266-281	9.6	4.4	3.7	0.65	10	2.7	48	44	0.91	170

Table 11A. Geochemical data determined on selected bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; ppm, parts per million; wt.%, weight percent]

Sample site	Sample ID	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm	ICP-MS Sb ppm
East Transect Auger	HG07-04/0-1	0.59	2.7	26	19	11	420	15	110	1.0
East Transect Auger	HG07-04/1-5	0.65	3.2	26	21	15	430	16	130	1.2
East Transect Auger	HG07-04/5-10	0.63	3.1	24	17	15	420	15	120	1.2
East Transect Auger	HG07-04/10-20	1.5	4.1	24	19	16	470	15	130	1.2
East Transect Auger	HG07-04/20-30	4.6	4.7	21	21	15	550	15	110	1.0
East Transect Auger	HG07-04/30-40	4.8	3.7	24	19	13	570	15	120	1.2
East Transect Auger	HG07-04/40-50	4.6	3.6	24	17	13	580	15	130	1.0
East Transect Auger	HG07-04/50-60	4.4	3.7	25	23	13	540	15	120	1.2
East Transect Auger	HG07-04/60-70	5.0	3.5	26	23	14	560	16	120	1.2
East Transect Auger	HG07-04/70-80	5.0	3.3	26	21	13	550	16	110	1.0
East Transect Auger	HG07-04/80-90	4.3	3.0	26	22	11	510	15	110	1.1
East Transect Auger	HG07-04/90-95	4.2	3.2	24	21	12	480	16	110	1.1
East Transect Auger	HG07-04/95-101	4.3	2.9	26	25	12	490	15	120	1.0
East Transect Auger	HG07-04/101-124	4.1	2.5	27	20	10	430	16	120	1.1
East Transect Auger	HG07-04/124-137	3.4	3.0	31	27	4.2	280	13	100	0.97
East Transect Auger	HG07-04/137-145	2.1	3.0	29	29	0.4	210	13	91	0.57
East Transect Auger	HG07-04/145-159	1.6	2.4	30	26	5.0	200	13	94	0.55
East Transect Auger	HG07-04/159-163	1.5	2.6	34	33	<0.3	220	13	90	0.48
East Transect Auger	HG07-04/163-169	1.6	2.6	33	41	0.4	220	14	88	0.54
East Transect Auger	HG07-04/169-177	2.3	2.4	35	28	<0.3	230	13	95	0.55
East Transect Auger	HG07-04/177-184	1.9	2.5	36	39	0.6	220	13	92	0.51
East Transect Auger	HG07-04/184-193	2.3	2.9	28	26	1.1	180	13	87	0.54
East Transect Auger	HG07-04/193-203	2.9	2.6	26	21	0.8	200	13	86	0.61
East Transect Auger	HG07-04/203-217	3.0	3.0	35	35	0.9	230	14	98	0.63
East Transect Auger	HG07-04/217-228	1.6	2.5	42	33	0.7	300	18	110	0.56
East Transect Auger	HG07-04/228-237	1.7	2.5	39	34	0.8	300	17	100	0.60
East Transect Auger	HG07-04/237-248	1.8	2.2	28	23	<0.3	220	13	89	0.72
East Transect Auger	HG07-04/248-258	2.0	2.1	23	19	<0.3	160	12	78	0.46
East Transect Auger	HG07-04/258-266	2.6	2.6	24	22	1.4	200	13	87	0.46
East Transect Auger	HG07-04/266-281	3.0	2.4	26	24	0.4	190	11	87	0.47

Sample site	Sample ID	ICP-MS Sc ppm	ICP-MS Sr ppm	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
East Transect Auger	HG07-04/0-1	6.8	1000	11	2300	0.75	2.0	42	18	57
East Transect Auger	HG07-04/1-5	7.8	980	12	2400	0.88	2.1	47	17	70
East Transect Auger	HG07-04/5-10	7.4	990	12	2200	0.86	2.2	47	17	68
East Transect Auger	HG07-04/10-20	7.5	1000	12	2200	0.81	2.5	46	17	71
East Transect Auger	HG07-04/20-30	6.5	930	12	2000	0.81	6.1	44	16	66
East Transect Auger	HG07-04/30-40	7.0	990	12	2100	0.87	5.6	48	18	65
East Transect Auger	HG07-04/40-50	7.6	1100	12	2300	0.81	4.6	49	17	65
East Transect Auger	HG07-04/50-60	7.2	990	12	2300	0.88	4.1	49	18	65
East Transect Auger	HG07-04/60-70	7.6	990	13	2300	0.91	4.6	49	19	67
East Transect Auger	HG07-04/70-80	6.9	980	13	2200	0.96	4.6	45	19	61
East Transect Auger	HG07-04/80-90	7.2	1100	13	2400	0.91	4.1	46	19	60
East Transect Auger	HG07-04/90-95	6.6	1000	12	2200	0.89	4.1	46	18	59
East Transect Auger	HG07-04/95-101	6.3	1000	13	2100	0.89	4.3	44	19	58
East Transect Auger	HG07-04/101-124	6.1	940	13	2100	0.87	4.4	40	18	57
East Transect Auger	HG07-04/124-137	3.7	950	13	1500	0.86	4.9	23	19	38
East Transect Auger	HG07-04/137-145	2.2	820	12	1100	0.93	3.8	11	19	25
East Transect Auger	HG07-04/145-159	2.2	790	12	1200	0.75	3.1	11	19	40
East Transect Auger	HG07-04/159-163	2.1	810	12	1300	0.79	2.8	10	21	25
East Transect Auger	HG07-04/163-169	2.5	790	15	1600	0.82	3.5	12	24	24
East Transect Auger	HG07-04/169-177	2.1	870	13	1200	0.87	3.0	11	21	25
East Transect Auger	HG07-04/177-184	2.8	800	15	1900	0.81	3.5	12	31	25
East Transect Auger	HG07-04/184-193	2.2	710	10	1200	0.74	2.9	11	17	24
East Transect Auger	HG07-04/193-203	2.8	980	9.9	1500	0.77	2.8	14	15	25
East Transect Auger	HG07-04/203-217	2.6	910	15	1500	0.88	3.3	14	23	30
East Transect Auger	HG07-04/217-228	2.8	500	16	1500	0.83	3.6	13	28	37
East Transect Auger	HG07-04/228-237	2.7	570	15	1400	0.9	3.3	13	25	33
East Transect Auger	HG07-04/237-248	2.1	820	11	960	0.79	2.8	12	21	26
East Transect Auger	HG07-04/248-258	1.7	780	9.5	820	0.74	2.5	10	17	21
East Transect Auger	HG07-04/258-266	1.9	720	12	1000	0.73	2.7	12	16	25
East Transect Auger	HG07-04/266-281	2.1	740	11	990	0.76	2.8	11	19	22

Table 11B. Geochemical data determined on selected bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; ppm, parts per million; wt.%, weight percent]

Sample site	Sample ID	ICP-MS Ag ppm	ICP-OES Al wt.%	ICP-MS As ppm	ICP-MS Ba ppm	ICP-MS Be ppm	ICP-MS Bi ppm	ICP-OES Ca wt.%	ICP-MS Cd ppm
Amargosa River Crossing	JY05-35a	<2	6.5	8.6	840	2.2	0.11	5.6	0.12
Amargosa River Crossing	JY05-35b	<2	6.4	8.6	810	2.2	0.11	5.5	0.11
Amargosa River Crossing	JY05-35c	<2	5.9	9.6	410	2.0	0.13	7.1	0.14
Amargosa River East of Death Valley Junction	JY05-37a	<2	6.4	47	530	2.3	0.26	8.4	0.32
Amargosa River East of Death Valley Junction	JY05-37b	<2	6.4	48	550	2.4	0.26	8.0	0.29
Amargosa River East of Death Valley Junction	JY05-37c	<2	6.6	19	750	2.6	0.20	6.8	0.23
Amargosa River East of Death Valley Junction	JY05-38a	<2	6.8	8.0	850	2.6	0.13	4.0	0.14
Amargosa River East of Death Valley Junction	JY05-38b	<2	7.0	7.4	780	2.6	0.14	4.0	0.13
Amargosa River East of Death Valley Junction	JY05-38c	<2	6.4	7.3	760	3.0	0.14	4.0	0.15
Ash Meadows	JY03-49a/49b	<2	4.7	18	710	1.5	0.08	9.9	0.1
Ash Meadows	JY03-50a/50b	<2	4.2	12	750	1.3	0.06	10.1	0.11
Ash Meadows	JY05-29	<2	0.98	150	150	0.35	<0.06	4.8	0.14
Clay Dune	JY05-25	<2	5.9	15	560	2.0	0.14	5.1	0.14
Coppice	JY05-17	<2	5.8	27	790	2.1	0.13	4.7	0.18
Discovery	JY05-15	<2	5.9	16	780	2.1	0.14	7.8	0.18
Discovery	JY05-16	<2	6.1	17	730	2.2	0.15	9.6	0.22
East Transect	JY05-21a	<2	5.6	9.8	800	1.6	0.10	12	0.14
East Transect	JY05-21b	<2	5.5	19	380	2.0	0.15	7.4	0.15
Franklin Lake Playa/Carson Slough	JY05-27	<2	2.5	53	310	0.69	<0.06	2.7	0.06
Franklin Lake Playa/Carson Slough	JY05-28	<2	2.6	51	260	0.75	<0.06	3.1	0.05
Ojo del Caballo	JY05-30	<2	3.3	100	590	1.0	<0.06	4.0	0.06
Salt Pan	JY03-43a	<2	5.8	13	590	1.9	0.12	5.6	0.16
Salt Pan	JY03-43b	<2	5.1	30	490	1.8	0.13	4.1	0.18
Salt Pan	JY03-43c	<2	5.3	30	500	1.8	0.13	4.6	0.14
Salt Pan	JY05-23a	<2	1.5	7.5	260	0.36	<0.06	2.6	0.02
Salt Pan	JY05-59a	<2	0.41	9.1	64	0.12	<0.06	0.44	0.02
Salt Pan	JY05-59b	<2	2.1	6.1	250	0.60	<0.06	2.0	0.05
West Transect	JY05-19	<2	6.7	16	790	2.6	0.16	6.2	0.18

Sample site	Sample ID	ICP-MS Ce ppm	ICP-MS Co ppm	ICP-MS Cr ppm	ICP-MS Cs ppm	ICP-MS Cu ppm	ICP-OES Fe wt.%	ICP-MS Ga ppm	ICP-OES K wt.%
Amargosa River Crossing	JY05-35a	70	5.0	33	3.9	12	1.5	15	2.9
Amargosa River Crossing	JY05-35b	74	4.9	31	3.8	12	1.5	14	2.9
Amargosa River Crossing	JY05-35c	70	4.9	30	4.0	12	1.6	13	2.7
Amargosa River East of Death Valley Junction	JY05-37a	73	12	50	21	32	2.9	16	3.0
Amargosa River East of Death Valley Junction	JY05-37b	74	11	50	22	31	3.0	15	3.0
Amargosa River East of Death Valley Junction	JY05-37c	89	8.9	45	8.8	21	2.5	16	2.8
Amargosa River East of Death Valley Junction	JY05-38a	79	4.6	33	3.9	11	1.6	16	3.1
Amargosa River East of Death Valley Junction	JY05-38b	86	4.8	34	4.1	11	1.7	16	3.1
Amargosa River East of Death Valley Junction	JY05-38c	91	3.6	26	3.8	9.5	1.5	16	3.3
Ash Meadows	JY03-49a/49b	46	4.3	20	7.0	11	1.3	11	2.6
Ash Meadows	JY03-50a/50b	45	3.3	19	4.9	8.3	1.0	10	2.2
Ash Meadows	JY05-29	18	1.4	8.0	2.2	4.3	0.36	2.4	1.1
Clay Dune	JY05-25	49	9.3	34	9.6	21	2.3	15	2.9
Coppice	JY05-17	68	7.2	33	6.0	16	1.9	14	2.6
Discovery	JY05-15	71	6.9	33	6.2	18	1.9	14	2.6
Discovery	JY05-16	75	7.7	35	7.2	20	2.1	15	2.8
East Transect	JY05-21a	70	5.3	31	4.8	13	1.6	12	2.7
East Transect	JY05-21b	49	9.6	34	12	22	2.4	13	3.0
Franklin Lake Playa/Carson Slough	JY05-27	36	1.2	10	1.1	3.2	0.45	5.6	1.9
Franklin Lake Playa/Carson Slough	JY05-28	37	0.94	7.0	0.82	2.5	0.38	5.7	1.7
Ojo del Caballo	JY05-30	40	1.4	12	1.1	3.6	0.55	7.4	1.8
Salt Pan	JY03-43a	50	8.0	30	8.4	23	2.2	14	2.9
Salt Pan	JY03-43b	39	8.2	28	8.6	19	2.1	13	2.7
Salt Pan	JY03-43c	48	8.4	28	8.8	20	2.2	13	2.8
Salt Pan	JY05-23a	27	1.2	18	0.88	4	0.39	2.8	0.90
Salt Pan	JY05-59a	4.7	0.37	4.7	0.24	1.5	0.14	0.94	0.26
Salt Pan	JY05-59b	21	1.9	47	1.1	7.1	0.70	4.4	1.0
West Transect	JY05-19	76	6.9	32	7.4	16	2.1	16	3.3

Table 11B. Geochemical data determined on selected bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; ppm, parts per million; wt.%, weight percent]

Sample site	Sample ID	ICP-MS La ppm	ICP-MS Li ppm	ICP-OES Mg wt.%	ICP-MS Mn ppm	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm
Amargosa River Crossing	JY05-35a	39	53	1.9	470	1.6	1.8	16
Amargosa River Crossing	JY05-35b	42	55	1.9	470	1.3	1.8	13
Amargosa River Crossing	JY05-35c	39	57	2.0	460	1.2	1.5	17
Amargosa River East of Death Valley Junction	JY05-37a	39	230	2.8	700	8.0	1.0	20
Amargosa River East of Death Valley Junction	JY05-37b	41	250	2.8	640	8.4	1.1	20
Amargosa River East of Death Valley Junction	JY05-37c	49	100	1.8	680	2.9	1.7	23
Amargosa River East of Death Valley Junction	JY05-38a	47	50	1.1	430	1.4	2.3	17
Amargosa River East of Death Valley Junction	JY05-38b	50	50	1.1	460	1.3	2.2	16
Amargosa River East of Death Valley Junction	JY05-38c	54	45	0.81	420	1.2	2.1	21
Ash Meadows	JY03-49a/49b	26	130	3.1	340	1.4	3.1	9.4
Ash Meadows	JY03-50a/50b	24	85	2.1	290	1.6	4.8	6.8
Ash Meadows	JY05-29	9.7	29	0.68	91	95	23	2.8
Clay Dune	JY05-25	29	280	3.8	630	0.57	3.3	15
Coppice	JY05-17	40	72	1.4	540	7.6	6.8	16
Discovery	JY05-15	39	82	2.0	500	2.8	4.6	16
Discovery	JY05-16	41	93	2.2	550	1.4	2.5	19
East Transect	JY05-21a	38	67	1.8	340	0.56	1.9	10
East Transect	JY05-21b	25	240	5.3	620	0.56	3.7	15
Franklin Lake Playa/Carson Slough	JY05-27	22	81	0.27	120	14	16	5.9
Franklin Lake Playa/Carson Slough	JY05-28	22	50	0.24	110	12	17	5.8
Ojo del Caballo	JY05-30	23	19	0.45	140	15	15	8.2
Salt Pan	JY03-43a	29	260	3.2	560	0.78	3.5	12
Salt Pan	JY03-43b	23	490	3.2	550	4.6	5.6	9.8
Salt Pan	JY03-43c	28	490	3.2	570	3.2	4.6	9.9
Salt Pan	JY05-23a	12	22	0.31	110	1.2	19	2.5
Salt Pan	JY05-59a	2.6	18	0.08	27	3.4	27	1.8
Salt Pan	JY05-59b	12	33	0.37	120	2.0	18	5.2
West Transect	JY05-19	41	110	2.3	580	1.8	2.5	21

Sample site	Sample ID	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm	ICP-MS Sb ppm	ICP-MS Sc ppm
Amargosa River Crossing	JY05-35a	26	9.6	420	19	100	0.85	5.4
Amargosa River Crossing	JY05-35b	27	9.5	410	18	99	0.82	5.5
Amargosa River Crossing	JY05-35c	27	9.8	420	16	91	0.84	5.3
Amargosa River East of Death Valley Junction	JY05-37a	29	27	960	21	170	1.7	9.9
Amargosa River East of Death Valley Junction	JY05-37b	30	27	880	19	170	1.6	9.8
Amargosa River East of Death Valley Junction	JY05-37c	32	19	730	23	130	1.2	8.3
Amargosa River East of Death Valley Junction	JY05-38a	31	8.9	440	19	110	0.8	5.4
Amargosa River East of Death Valley Junction	JY05-38b	32	9.7	450	20	110	0.83	5.8
Amargosa River East of Death Valley Junction	JY05-38c	36	6.9	450	21	130	0.76	4.5
Ash Meadows	JY03-49a/49b	16	7.5	390	12	92	0.66	4.8
Ash Meadows	JY03-50a/50b	16	5.8	400	12	77	0.57	4.0
Ash Meadows	JY05-29	6.1	3.1	590	4.1	21	0.47	1.6
Clay Dune	JY05-25	21	17	370	17	130	1.2	7.4
Coppice	JY05-17	29	17	700	20	110	1.1	6.6
Discovery	JY05-15	29	14	630	19	110	1	7.1
Discovery	JY05-16	30	16	670	21	120	1.1	7.7
East Transect	JY05-21a	29	10	430	18	94	0.7	6.2
East Transect	JY05-21b	21	18	440	15	130	1.2	8.0
Franklin Lake Playa/Carson Slough	JY05-27	12	2.2	180	6.4	45	0.55	1.8
Franklin Lake Playa/Carson Slough	JY05-28	13	1.6	160	6.1	40	0.41	1.5
Ojo del Caballo	JY05-30	16	2.8	540	8.6	49	0.4	2.3
Salt Pan	JY03-43a	21	15	380	16	110	1.1	6.8
Salt Pan	JY03-43b	16	15	380	14	110	0.97	7.0
Salt Pan	JY03-43c	19	16	390	15	110	0.99	7.3
Salt Pan	JY05-23a	10	2.5	230	5.3	25	0.22	1.6
Salt Pan	JY05-59a	<4	0.8	55	1.2	6.7	0.1	0.5
Salt Pan	JY05-59b	10	9.3	150	5.3	30	0.28	2.0
West Transect	JY05-19	30	14	600	21	130	1.2	7.3

Table 11B. Geochemical data determined on selected bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; ppm, parts per million; wt.%, weight percent]

Sample site	Sample ID	ICP-MS Sr ppm	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
Amargosa River Crossing	JY05-35a	470	12	2,000	0.58	2.4	35	19	46
Amargosa River Crossing	JY05-35b	450	12	1,900	0.60	2.4	35	18	46
Amargosa River Crossing	JY05-35c	440	11	1,900	0.55	2.4	34	18	46
Amargosa River East of Death Valley Junction	JY05-37a	880	14	3,000	0.96	4.0	75	22	93
Amargosa River East of Death Valley Junction	JY05-37b	860	14	3,100	0.97	4.0	78	21	89
Amargosa River East of Death Valley Junction	JY05-37c	670	15	3,200	0.81	2.9	61	25	78
Amargosa River East of Death Valley Junction	JY05-38a	460	13	2,000	0.67	2.9	32	22	48
Amargosa River East of Death Valley Junction	JY05-38b	470	14	2,300	0.66	2.6	36	22	49
Amargosa River East of Death Valley Junction	JY05-38c	400	16	1,700	0.73	3.2	24	27	47
Ash Meadows	JY03-49a/49b	1,300	7.1	1,400	0.63	1.9	29	14	39
Ash Meadows	JY03-50a/50b	1,300	5.3	1,400	0.59	1.7	23	15	30
Ash Meadows	JY05-29	410	2.6	500	0.30	53	24	4.5	12
Clay Dune	JY05-25	810	9.1	2,400	0.67	1.6	46	16	71
Coppice	JY05-17	590	11	2,500	0.65	3.5	46	21	61
Discovery	JY05-15	980	12	2,500	0.67	2.7	46	22	60
Discovery	JY05-16	1,100	13	2,700	0.75	2.4	49	24	66
East Transect	JY05-21a	1,600	13	2,100	0.66	1.5	38	20	42
East Transect	JY05-21b	1,200	10	2,200	0.76	1.7	53	15	71
Franklin Lake Playa/Carson Slough	JY05-27	420	4.3	870	0.24	6.7	22	7.7	16
Franklin Lake Playa/Carson Slough	JY05-28	400	4.5	740	0.24	6.4	15	7.3	11
Ojo del Caballo	JY05-30	520	5.0	1,100	0.32	8.8	32	11	16
Salt Pan	JY03-43a	800	8.4	2,100	0.59	1.4	44	17	67
Salt Pan	JY03-43b	640	7.2	2,600	0.56	1.5	45	15	65
Salt Pan	JY03-43c	660	8.4	2,600	0.59	1.5	45	16	65
Salt Pan	JY05-23a	200	4.1	660	0.17	0.85	9.9	5.8	9
Salt Pan	JY05-59a	60	0.69	200	<0.08	0.27	3.1	1.7	4
Salt Pan	JY05-59b	270	3.1	890	0.16	0.61	14	7.3	17
West Transect	JY05-19	810	14	2,300	0.82	2.8	44	22	67

Table 11C. Geochemical data determined on the fine fraction of selected grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; ppm, parts per million; wt.%, weight percent]

Sample site	Sample ID	ICP-MS Ag ppm	ICP-OES Al wt.%	ICP-MS As ppm	ICP-MS Ba ppm	ICP-MS Be ppm	ICP-MS Bi ppm	ICP-OES Ca wt.%	ICP-MS Cd ppm	ICP-MS Ce ppm	ICP-MS Co ppm
Ash Meadows	JY03-49a	<2	5.1	15	570	1.6	0.12	17	0.13	61	5.3
Ash Meadows	JY03-50a	<2	4.2	11	590	1.4	0.09	17	0.12	48	3.8
Coppice	JY04-15a	2.2	5.7	23	540	2.3	0.20	5.6	0.27	75	9.4
Coppice	JY04-16a	2.2	6.5	14	610	2.8	0.21	6.4	0.32	82	9.6
Discovery	JY03-01	<3	5.4	22	650	1.9	0.14	8.5	0.23	72	7.0
Discovery	JY03-01a	<3	5.9	11	830	2.1	0.16	9.9	0.25	86	7.5
Discovery	JY03-01b	<3	5.0	34	540	1.7	0.16	5.1	0.21	59	7.8
Franklin Lake Playa/Carson Slough	JY04-01	<2	0.087	36	15	0.03	<0.06	0.33	0.02	3.3	0.84
Salt Pan	JY03-25a	<2	5.0	13	520	1.6	0.15	7.3	0.17	71	6.9
Salt Pan	JY03-25b	<2	6.4	16	450	2.2	0.20	7.0	0.18	56	10
Salt Pan	JY03-25c	<2	5.9	18	390	2.1	0.18	5.4	0.14	47	9.9
Salt Pan	JY03-43a	<2	6.0	12	590	1.9	0.16	10	0.21	70	7.7
Salt Pan	JY03-43b	<2	5.8	37	380	2.0	0.19	5.7	0.16	47	9.8
Salt Pan	JY03-43c	<2	6.5	36	440	2.2	0.20	6.4	0.17	55	11

Sample site	Sample ID	ICP-MS Cr ppm	ICP-MS Cs ppm	ICP-MS Cu ppm	ICP-OES Fe wt.%	ICP-MS Ga ppm	ICP-OES K wt.%	ICP-MS La ppm	ICP-MS Li ppm	ICP-OES Mg wt.%	ICP-MS Mn ppm
Ash Meadows	JY03-49a	28	7.4	12	1.6	9.8	2.7	35	130	4.2	420
Ash Meadows	JY03-50a	22	4.7	9.6	1.2	8.0	2.0	26	73	2.7	340
Coppice	JY04-15a	47	8.8	27	2.5	13	2.6	42	100	2.1	660
Coppice	JY04-16a	49	9.3	26	2.8	16	2.9	49	110	2.4	790
Discovery	JY03-01	36	6.4	19	1.8	13	2.6	38	86	2.0	500
Discovery	JY03-01a	53	6.4	19	2.0	14	2.7	46	84	2.0	530
Discovery	JY03-01b	41	6.7	19	1.9	12	2.4	35	87	1.8	570
Franklin Lake Playa/Carson Slough	JY04-01	6.9	0.11	11	0.046	0.23	0.59	1.4	5.5	0.030	10
Salt Pan	JY03-25a	32	5.6	16	2.1	11	2.4	42	140	2.3	470
Salt Pan	JY03-25b	35	10	24	2.7	14	3.4	34	330	4.6	700
Salt Pan	JY03-25c	31	10	24	2.6	13	3.2	29	360	4.3	670
Salt Pan	JY03-43a	29	6.7	17	2.2	12	2.9	42	190	2.9	530
Salt Pan	JY03-43b	32	10	24	2.5	13	3.3	30	580	4.4	670
Salt Pan	JY03-43c	36	11	25	2.8	14	3.6	33	600	4.6	730

Sample site	Sample ID	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm	ICP-MS Sb ppm
Ash Meadows	JY03-49a	0.55	2.7	9.2	25	9.6	550	12	91	0.73
Ash Meadows	JY03-50a	0.72	5.8	6.4	23	6.0	510	11	65	0.58
Coppice	JY04-15a	6.7	5.8	27	26	24	810	22	110	1.4
Coppice	JY04-16a	1.2	3.0	25	30	22	680	23	130	1.6
Discovery	JY03-01	5.8	5.8	21	26	15	690	18	110	0.98
Discovery	JY03-01a	1.2	3.0	24	31	17	680	21	110	1.1
Discovery	JY03-01b	7.1	9.4	23	23	18	960	17	97	1.0
Franklin Lake Playa/Carson Slough	JY04-01	16	30	0.64	<4	1.6	130	0.88	3.5	0.22
Salt Pan	JY03-25a	0.87	9.5	11	32	12	520	15	84	0.91
Salt Pan	JY03-25b	0.78	4.5	13	27	19	460	17	130	1.3
Salt Pan	JY03-25c	0.97	7.1	12	24	19	390	15	120	1.2
Salt Pan	JY03-43a	0.69	5.4	12	37	13	490	17	98	1.0
Salt Pan	JY03-43b	5.1	6.3	12	23	18	420	15	120	1.2
Salt Pan	JY03-43c	3.3	5.1	14	26	19	480	16	130	1.2

Sample site	Sample ID	ICP-MS Sc ppm	ICP-MS Sr ppm	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
Ash Meadows	JY03-49a	6.8	1,800	9.8	2,400	0.74	1.8	40	19	43
Ash Meadows	JY03-50a	5.6	1,700	7.8	2,000	0.63	1.6	30	17	31
Coppice	JY04-15a	8.2	690	12	3,200	0.68	2.7	57	22	77
Coppice	JY04-16a	9.2	810	14	4,100	0.78	2.4	59	26	88
Discovery	JY03-01	7.3	1,000	13	3,000	0.65	3.2	45	21	58
Discovery	JY03-01a	7.7	1,200	14	3,400	0.70	2.5	48	25	77
Discovery	JY03-01b	7.6	670	11	3,100	0.67	6.7	49	19	63
Franklin Lake Playa/Carson Slough	JY04-01	0.2	47	0.55	71	<0.08	17	8.5	0.57	4.9
Salt Pan	JY03-25a	7.4	980	12	3,000	0.52	1.8	50	24	51
Salt Pan	JY03-25b	8.9	940	11	3,000	0.69	1.9	55	21	79
Salt Pan	JY03-25c	8.6	790	9.1	2,800	0.63	1.6	53	20	75
Salt Pan	JY03-43a	8.1	1,300	13	3,000	0.55	1.7	48	27	56
Salt Pan	JY03-43b	8.8	840	10	2,800	0.64	1.8	51	19	74
Salt Pan	JY03-43c	9.5	890	11	3,000	0.72	1.7	55	21	79

Table 12A. Composition of the DI-leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; d, duplicate; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	Treatment	ICP-MS Ag µg/L	ICP-MS Al µg/L	ICP-MS As µg/L	ICP-OES B µg/L	ICP-MS Ba µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-OES Ca mg/L	ICP-MS Cd µg/L
East Transect Aguer	HG07-04/0-1	DI Water Leach	<0.3	10,000	38	2,000	23	1.5	<0.2	4.0	0.09
East Transect Aguer	HG07-04/0-1d	DI Water Leach	<0.3	15,000	46	2,400	27	2.1	<0.2	4.4	0.09
East Transect Aguer	HG07-04/1-5	DI Water Leach	<0.3	3,100	46	3,400	5.2	0.5	<0.2	1.4	0.03
East Transect Aguer	HG07-04/5-10	DI Water Leach	1.1	3,900	65	3,800	5.3	0.4	<0.2	1.2	0.04
East Transect Aguer	HG07-04/10-20	DI Water Leach	<0.3	660	260	7,200	3.8	<0.05	<0.2	0.81	0.04
East Transect Aguer	HG07-04/20-30	DI Water Leach	<0.3	230	850	14,000	3.4	0.1	<0.2	0.83	0.20
East Transect Aguer	HG07-04/20-30d	DI Water Leach	<0.3	250	890	16,000	5.0	0.2	<0.2	0.76	0.23
East Transect Aguer	HG07-04/30-40	DI Water Leach	<0.3	620	790	14,000	3.0	0.05	<0.2	0.80	0.24
East Transect Aguer	HG07-04/40-50	DI Water Leach	<0.3	830	730	13,000	4.4	0.05	<0.2	0.89	0.16
East Transect Aguer	HG07-04/50-60	DI Water Leach	<0.3	960	700	14,000	3.9	<0.05	<0.2	0.87	0.22
East Transect Aguer	HG07-04/50-60d	DI Water Leach	<0.3	610	700	11,000	3.8	0.3	<0.2	0.94	0.17
East Transect Aguer	HG07-04/60-70	DI Water Leach	<0.3	780	750	13,000	3.8	0.2	<0.2	0.99	0.20
East Transect Aguer	HG07-04/70-80	DI Water Leach	<0.3	540	740	14,000	2.9	0.2	<0.2	1.1	0.23
East Transect Aguer	HG07-04/80-90	DI Water Leach	<0.3	1,200	630	11,000	3.1	<0.05	<0.2	1.0	0.19
East Transect Aguer	HG07-04/90-95	DI Water Leach	<0.3	1,400	690	12,000	3.4	0.4	0.36	1.0	0.14
East Transect Aguer	HG07-04/95-101	DI Water Leach	<0.3	2,300	660	12,000	5.2	0.4	0.24	1.8	0.21
East Transect Aguer	HG07-04/101-124	DI Water Leach	<0.3	1,700	660	12,000	3.8	0.1	<0.2	1.3	0.18
East Transect Aguer	HG07-04/124-137	DI Water Leach	<0.3	2,500	460	9,700	3.4	0.4	<0.2	2.4	0.17
East Transect Aguer	HG07-04/124-137d	DI Water Leach	<0.3	1,900	430	9,000	2.7	0.4	<0.2	1.8	0.15
East Transect Aguer	HG07-04/137-145	DI Water Leach	<0.3	1,000	240	5,100	2.5	0.1	<0.2	1.5	0.15
East Transect Aguer	HG07-04/145-159	DI Water Leach	<0.3	20	140	3,600	1.1	<0.05	<0.2	0.88	0.08
East Transect Aguer	HG07-04/159-163	DI Water Leach	<0.3	14	100	2,600	1.2	<0.05	<0.2	0.96	0.07
East Transect Aguer	HG07-04/163-169	DI Water Leach	<0.3	13	120	2,800	1.0	<0.05	<0.2	0.79	0.09
East Transect Aguer	HG07-04/169-177	DI Water Leach	<0.3	1,500	120	3,000	1.4	<0.05	<0.2	0.80	0.08
East Transect Aguer	HG07-04/169-177d	DI Water Leach	<0.3	38	130	3,100	2.0	0.1	<0.2	0.98	0.08
East Transect Aguer	HG07-04/177-184	DI Water Leach	<1	950	68	1,400	1.6	0.2	<0.2	1.3	0.05
East Transect Aguer	HG07-04/184-193	DI Water Leach	<1	1,300	150	2,900	2.9	0.2	<0.2	1.3	0.11
East Transect Aguer	HG07-04/184-193d	DI Water Leach	<1	1,100	150	3,000	2.8	0.2	<0.2	1.1	0.10
East Transect Aguer	HG07-04/193-203	DI Water Leach	<1	1,000	180	3,400	2.4	0.2	<0.2	1.1	0.13
East Transect Aguer	HG07-04/203-217	DI Water Leach	<1	950	170	3,300	3.6	0.2	<0.2	1.2	0.11
East Transect Aguer	HG07-04/217-228	DI Water Leach	<1	900	81	1,600	2.0	0.2	<0.2	1.2	0.05
East Transect Aguer	HG07-04/217-228d	DI Water Leach	<1	1,100	110	2,200	4.5	0.2	<0.2	1.7	0.08
East Transect Aguer	HG07-04/228-237	DI Water Leach	<1	1,100	95	2,200	1.7	0.3	<0.2	1.4	0.06
East Transect Aguer	HG07-04/237-248	DI Water Leach	<1	1,100	100	2,000	2.7	0.2	<0.2	1.3	0.08
East Transect Aguer	HG07-04/248-258	DI Water Leach	<1	950	110	2,400	1.8	0.2	<0.2	1.2	0.08
East Transect Aguer	HG07-04/258-266	DI Water Leach	<1	1,300	140	2,800	4.1	0.3	<0.2	1.0	0.10
East Transect Aguer	HG07-04/266-281	DI Water Leach	<1	970	130	2,500	4.8	0.2	<0.2	1.2	0.12

Table 12A. Composition of the DI-leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; d, duplicate; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	ICP-MS Ce µg/L	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L
East Transect Aguer	HG07-04/0-1	2.2	11	9.2	1.6	33	0.072	0.050	<0.005	8,100	5.6
East Transect Aguer	HG07-04/0-1d	2.7	12	13	3.7	39	0.097	0.040	0.009	12,000	8.5
East Transect Aguer	HG07-04/1-5	1.1	2.7	3.8	0.82	8.000	0.005	0.010	<0.005	3,200	1.6
East Transect Aguer	HG07-04/5-10	0.88	2.7	4.1	1.2	10	0.010	0.030	<0.005	3,800	2.0
East Transect Aguer	HG07-04/10-20	0.23	0.42	7.5	0.28	4.400	0.020	0.005	0.008	560	0.37
East Transect Aguer	HG07-04/20-30	0.24	0.48	16	0.14	7.700	0.009	0.020	0.008	180	0.10
East Transect Aguer	HG07-04/20-30d	0.29	0.53	17	0.17	6.500	0.010	0.020	<0.005	180	0.10
East Transect Aguer	HG07-04/30-40	0.28	0.48	12	0.26	4.000	<0.005	0.010	<0.005	420	0.27
East Transect Aguer	HG07-04/40-50	0.17	0.54	11	0.33	3.200	<0.005	0.008	<0.005	610	0.39
East Transect Aguer	HG07-04/50-60	0.19	0.51	10	0.38	3.900	0.006	0.005	0.008	700	0.41
East Transect Aguer	HG07-04/50-60d	0.15	0.42	9.4	0.26	2.800	<0.005	0.005	0.010	320	0.22
East Transect Aguer	HG07-04/60-70	0.21	0.50	11	0.31	3.800	<0.005	0.008	<0.005	540	0.28
East Transect Aguer	HG07-04/70-80	0.18	0.43	9.7	0.23	2.800	0.006	<0.005	<0.005	410	0.20
East Transect Aguer	HG07-04/80-90	0.29	0.65	8.3	0.46	4.700	0.009	0.008	0.010	690	0.44
East Transect Aguer	HG07-04/90-95	0.38	0.64	9.1	0.63	3.300	0.006	<0.005	<0.005	930	0.55
East Transect Aguer	HG07-04/95-101	1.0	1.2	7.7	1.5	4.400	0.005	0.020	0.010	1,700	0.93
East Transect Aguer	HG07-04/101-124	0.52	0.69	7.6	0.76	3.000	0.005	0.007	0.005	1,200	0.64
East Transect Aguer	HG07-04/124-137	2.9	1.5	6.9	2.5	6.300	0.067	0.020	<0.005	2,000	1.1
East Transect Aguer	HG07-04/124-137d	2.0	1.1	6.2	1.9	5.500	0.030	0.007	<0.005	1,500	0.83
East Transect Aguer	HG07-04/137-145	1.0	0.68	3.3	1.2	4.800	0.020	<0.005	<0.005	990	0.43
East Transect Aguer	HG07-04/145-159	0.02	0.03	1.3	0.06	4.200	<0.005	<0.005	<0.005	22	<0.05
East Transect Aguer	HG07-04/159-163	0.02	0.03	<1	0.07	3.300	<0.005	<0.005	0.005	<20	<0.05
East Transect Aguer	HG07-04/163-169	0.02	<0.02	<1	0.06	3.100	0.006	<0.005	<0.005	25	<0.05
East Transect Aguer	HG07-04/169-177	0.02	0.03	<1	0.09	3.500	0.005	<0.005	<0.005	<20	<0.05
East Transect Aguer	HG07-04/169-177d	0.03	0.03	<1	0.10	5.100	<0.005	<0.005	<0.005	21	<0.05
East Transect Aguer	HG07-04/177-184	0.92	0.54	1.7	1.1	1.900	0.040	0.020	<0.005	1,600	0.43
East Transect Aguer	HG07-04/184-193	0.60	0.63	3.2	1.7	2.900	0.020	0.010	<0.005	2,100	0.54
East Transect Aguer	HG07-04/184-193d	0.51	0.55	2.4	1.6	2.600	0.010	0.010	<0.005	2,000	0.48
East Transect Aguer	HG07-04/193-203	0.49	0.50	3.3	1.6	2.800	0.010	0.010	<0.005	1,900	0.46
East Transect Aguer	HG07-04/203-217	0.64	0.56	3.1	1.7	3.600	0.020	0.010	<0.005	1,900	0.42
East Transect Aguer	HG07-04/217-228	1.1	0.61	2.1	1.2	3.600	0.040	0.020	0.005	2,300	0.43
East Transect Aguer	HG07-04/217-228d	0.79	0.63	2.4	1.3	3.200	0.030	0.020	<0.005	1,700	0.45
East Transect Aguer	HG07-04/228-237	1.2	0.76	2.4	1.2	2.900	0.040	0.030	<0.005	3,000	0.46
East Transect Aguer	HG07-04/237-248	0.82	0.63	2.1	1.6	2.200	0.020	0.020	<0.005	2,200	0.44
East Transect Aguer	HG07-04/248-258	0.56	0.50	1.9	1.7	2.300	0.020	0.010	<0.005	2,500	0.39
East Transect Aguer	HG07-04/258-266	0.54	0.82	2.8	1.5	3.700	0.010	0.010	<0.005	2,800	0.61
East Transect Aguer	HG07-04/266-281	0.43	0.52	2.5	1.4	3.600	0.010	0.010	<0.005	2,500	0.41

Table 12A. Composition of the DI-leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; d, duplicate; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-OES
		Gd µg/L	Ge µg/L	Ho µg/L	K mg/L	La µg/L	Li µg/L	Lu µg/L	Mg mg/L	Mn µg/L	Mo µg/L	Na mg/L
East Transect Aguer	HG07-04/0-1	0.097	1.6	0.010	14	0.28	440	<0.1	90	630	<2	250
East Transect Aguer	HG07-04/0-1d	0.091	2.5	0.020	16	0.37	520	<0.1	110	800	<2	240
East Transect Aguer	HG07-04/1-5	<0.005	0.49	<0.005	13	0.12	110	<0.1	21	210	<2	510
East Transect Aguer	HG07-04/5-10	0.010	0.58	<0.005	13	0.05	110	<0.1	21	230	<2	490
East Transect Aguer	HG07-04/10-20	<0.005	0.1	<0.005	19	0.02	19	<0.1	2.6	30	30	880
East Transect Aguer	HG07-04/20-30	0.030	<0.05	<0.005	25	0.04	9.6	<0.1	0.84	11	140	1,100
East Transect Aguer	HG07-04/20-30d	0.010	<0.05	<0.005	25	0.05	8.9	<0.1	0.85	11	140	1,000
East Transect Aguer	HG07-04/30-40	0.020	<0.05	0.005	20	0.06	15	<0.1	2.1	25	130	690
East Transect Aguer	HG07-04/40-50	0.007	<0.05	<0.005	19	0.03	17	<0.1	2.5	31	130	640
East Transect Aguer	HG07-04/50-60	<0.005	<0.05	<0.005	19	0.02	21	<0.1	2.8	37	130	670
East Transect Aguer	HG07-04/50-60d	<0.005	<0.05	<0.005	19	0.06	17	<0.1	1.9	25	130	670
East Transect Aguer	HG07-04/60-70	<0.005	0.06	<0.005	19	0.06	16	<0.1	2.2	30	140	610
East Transect Aguer	HG07-04/70-80	0.007	<0.05	<0.005	19	0.03	12	<0.1	1.9	24	140	610
East Transect Aguer	HG07-04/80-90	0.020	0.08	<0.005	16	0.03	25	<0.1	4.0	50	120	500
East Transect Aguer	HG07-04/90-95	0.020	0.20	<0.005	16	0.08	25	<0.1	4.2	53	130	530
East Transect Aguer	HG07-04/95-101	0.010	0.43	<0.005	16	0.08	60	<0.1	8.6	110	120	470
East Transect Aguer	HG07-04/101-124	0.020	0.22	<0.005	17	0.09	33	<0.1	4.8	64	120	490
East Transect Aguer	HG07-04/124-137	0.010	0.71	<0.005	15	0.14	120	<0.1	15	150	110	460
East Transect Aguer	HG07-04/124-137d	0.020	0.50	<0.005	14	0.13	86	<0.1	11	110	110	430
East Transect Aguer	HG07-04/137-145	<0.005	0.40	<0.005	9.3	0.12	40	<0.1	6.1	57	70	320
East Transect Aguer	HG07-04/145-159	<0.005	0.06	<0.005	6.4	<0.01	3.2	<0.1	0.05	0.3	46	210
East Transect Aguer	HG07-04/159-163	0.010	<0.05	<0.005	5.4	<0.01	4.9	<0.1	0.12	1.2	36	170
East Transect Aguer	HG07-04/163-169	0.010	<0.05	<0.005	5.5	<0.01	<0.9	<0.1	0.08	0.8	41	170
East Transect Aguer	HG07-04/169-177	<0.005	0.08	<0.005	6.5	<0.01	4.7	<0.1	0.04	<0.2	49	220
East Transect Aguer	HG07-04/169-177d	0.030	0.10	<0.005	6.8	<0.01	5.3	<0.1	0.15	1.8	50	220
East Transect Aguer	HG07-04/177-184	0.030	0.44	0.006	4.4	0.23	65	<0.1	6.3	41	29	130
East Transect Aguer	HG07-04/184-193	0.020	0.52	<0.005	6.6	0.09	83	<0.1	11	110	66	240
East Transect Aguer	HG07-04/184-193d	0.010	0.46	<0.005	6.2	0.06	72	<0.1	9.5	92	65	240
East Transect Aguer	HG07-04/193-203	0.010	0.42	<0.005	7.9	0.05	86	<0.1	9.6	91	79	290
East Transect Aguer	HG07-04/203-217	0.020	0.45	<0.005	7.7	0.07	80	<0.1	9.0	63	80	270
East Transect Aguer	HG07-04/217-228	0.040	0.48	0.007	3.8	0.3	64	<0.1	6.7	47	33	140
East Transect Aguer	HG07-04/217-228d	0.030	0.42	0.005	4.9	0.18	88	<0.1	10	99	43	180
East Transect Aguer	HG07-04/228-237	0.040	0.52	0.007	6.5	0.24	110	<0.1	9.1	59	36	190
East Transect Aguer	HG07-04/237-248	0.020	0.48	0.005	6.8	0.09	62	<0.1	7.1	51	44	180
East Transect Aguer	HG07-04/248-258	0.010	0.45	<0.005	7.5	0.08	61	<0.1	6.3	44	57	210
East Transect Aguer	HG07-04/258-266	0.010	0.47	<0.005	8.8	0.06	87	<0.1	9.3	62	67	270
East Transect Aguer	HG07-04/266-281	0.010	0.37	<0.005	8.8	0.07	72	<0.1	7.0	41	80	270

Table 12A. Composition of the DI-leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; d, duplicate; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-MS P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L	ICP-MS Se µg/L	ICP-MS SiO ₂ mg/L
East Transect Aguer	HG07-04/0-1	0.52	0.21	17	0.40	4.4	0.08	27	2.1	19	<1	170
East Transect Aguer	HG07-04/0-1d	2.1	0.32	22	0.40	6.0	0.09	47	1.9	30	<1	290
East Transect Aguer	HG07-04/1-5	<0.2	0.04	4.5	0.50	<0.05	0.03	14	1.2	10	2.0	100
East Transect Aguer	HG07-04/5-10	<0.2	0.07	4.6	0.50	<0.05	0.01	18	1.1	11	1.2	110
East Transect Aguer	HG07-04/10-20	<0.2	<0.01	0.7	1.4	<0.05	<0.01	7.5	1.2	4.4	4.7	45
East Transect Aguer	HG07-04/20-30	1.1	0.04	<0.4	4.2	0.20	0.01	7.6	1.7	3.8	9.9	35
East Transect Aguer	HG07-04/20-30d	0.99	0.09	<0.4	4.3	0.30	0.02	8.1	1.7	3.5	10	37
East Transect Aguer	HG07-04/30-40	0.77	0.02	0.7	3.3	0.20	0.01	7.7	1.2	3.8	7.8	38
East Transect Aguer	HG07-04/40-50	0.73	0.04	0.4	2.8	0.20	0.01	8.9	0.84	3.8	6.4	39
East Transect Aguer	HG07-04/50-60	0.67	0.04	0.8	2.4	0.10	<0.01	8.7	0.78	3.5	7.9	39
East Transect Aguer	HG07-04/50-60d	0.55	0.04	0.5	2.4	0.09	<0.01	7.5	0.66	3.3	7.8	36
East Transect Aguer	HG07-04/60-70	0.54	0.04	0.6	2.4	0.20	<0.01	8.5	0.68	3.3	7.3	37
East Transect Aguer	HG07-04/70-80	0.45	<0.01	0.6	2.2	0.08	<0.01	7.7	0.60	2.9	9.4	35
East Transect Aguer	HG07-04/80-90	0.50	0.02	1.2	1.8	0.20	<0.01	8.5	0.42	3.6	8.0	42
East Transect Aguer	HG07-04/90-95	2.3	0.14	1.3	1.9	0.40	0.03	9.7	4.1	4.9	8.3	44
East Transect Aguer	HG07-04/95-101	2.3	0.05	2.4	1.6	0.88	0.02	14	3.4	8.2	6.5	78
East Transect Aguer	HG07-04/101-124	1.6	0.13	1.6	1.6	0.40	0.01	10	2.4	4.9	7.6	48
East Transect Aguer	HG07-04/124-137	1.9	0.13	2.8	1.1	1.9	0.04	19	2.0	11	6.2	110
East Transect Aguer	HG07-04/124-137d	1.7	0.08	1.9	1.0	1.2	0.03	15	1.8	8.8	5.4	91
East Transect Aguer	HG07-04/137-145	1.1	0.06	1.3	0.40	0.53	0.03	9.0	1.3	5.2	3.6	54
East Transect Aguer	HG07-04/145-159	0.53	<0.01	<0.4	0.20	<0.05	<0.01	2.6	0.95	1.7	3.2	19
East Transect Aguer	HG07-04/159-163	0.37	<0.01	<0.4	0.20	<0.05	<0.01	2.4	0.72	1.2	3.1	14
East Transect Aguer	HG07-04/163-169	0.31	<0.01	<0.4	0.20	<0.05	<0.01	2.7	0.64	1.3	3.4	16
East Transect Aguer	HG07-04/169-177	0.30	<0.01	<0.4	0.10	<0.05	<0.01	3.2	0.60	1.4	3.3	17
East Transect Aguer	HG07-04/169-177d	0.22	<0.01	0.6	0.10	<0.05	<0.01	3.5	0.57	1.4	2.5	19
East Transect Aguer	HG07-04/177-184	0.68	0.20	1.2	0.08	0.76	0.06	7.5	0.44	3.7	1.4	27
East Transect Aguer	HG07-04/184-193	0.45	0.08	1.7	0.10	0.91	0.02	11	0.43	5.7	3.1	50
East Transect Aguer	HG07-04/184-193d	0.50	0.06	1.4	0.10	0.86	0.02	11	0.44	4.5	2.9	41
East Transect Aguer	HG07-04/193-203	0.22	0.05	1.3	0.20	0.73	0.01	11	0.53	5.6	3.8	47
East Transect Aguer	HG07-04/203-217	<0.2	0.07	1.2	0.10	0.77	0.02	12	0.40	4.2	3.6	40
East Transect Aguer	HG07-04/217-228	<0.2	0.28	1.3	0.09	0.90	0.08	7.9	<0.3	3.1	1.4	28
East Transect Aguer	HG07-04/217-228d	<0.2	0.17	1.5	0.10	0.92	0.05	8.9	0.32	4.8	2.1	41
East Transect Aguer	HG07-04/228-237	<0.2	0.21	1.6	0.10	0.98	0.06	8.9	<0.3	3.9	1.9	34
East Transect Aguer	HG07-04/237-248	0.21	0.08	1.4	0.10	0.66	0.02	11	0.34	3.8	2.3	32
East Transect Aguer	HG07-04/248-258	0.20	0.08	1.3	0.09	0.61	0.02	11	0.31	2.8	2.5	27
East Transect Aguer	HG07-04/258-266	<0.2	0.05	2.1	0.20	0.79	0.02	12	0.30	3.6	3.0	34
East Transect Aguer	HG07-04/266-281	<0.2	0.06	1.7	0.20	0.65	0.02	11	<0.3	3.2	3.7	28

Table 12A. Composition of the DI-leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; d, duplicate; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS
		Sm µg/L	Sr µg/L	Ta µg/L	Tb µg/L	Th µg/L	Ti µg/L	Tl µg/L	Tm µg/L	U µg/L	V µg/L	W µg/L
East Transect Aguer	HG07-04/0-1	0.05	120	0.98	0.009	<0.2	110	0.2	0.006	<0.1	120	0.6
East Transect Aguer	HG07-04/0-1d	0.08	120	0.90	0.010	<0.2	390	0.2	0.020	<0.1	130	1.7
East Transect Aguer	HG07-04/1-5	<0.01	72	0.66	0.005	<0.2	65	<0.1	<0.005	0.28	190	1.1
East Transect Aguer	HG07-04/5-10	<0.01	31	0.55	<0.005	<0.2	110	<0.1	0.005	0.44	210	1.8
East Transect Aguer	HG07-04/10-20	0.01	36	0.50	<0.005	<0.2	26	<0.1	<0.005	9.8	240	8.4
East Transect Aguer	HG07-04/20-30	0.01	29	0.34	<0.005	<0.2	15	<0.1	<0.005	100	310	14
East Transect Aguer	HG07-04/20-30d	0.02	30	0.29	<0.005	<0.2	15	<0.1	<0.005	100	320	15
East Transect Aguer	HG07-04/30-40	<0.01	50	0.22	<0.005	<0.2	21	<0.1	<0.005	57	310	11
East Transect Aguer	HG07-04/40-50	0.02	55	0.20	<0.005	<0.2	27	<0.1	<0.005	37	290	9.6
East Transect Aguer	HG07-04/50-60	0.01	59	0.20	<0.005	<0.2	32	<0.1	<0.005	28	300	9.4
East Transect Aguer	HG07-04/50-60d	0.01	64	0.20	<0.005	<0.2	22	<0.1	<0.005	28	290	9.4
East Transect Aguer	HG07-04/60-70	0.02	63	0.20	<0.005	<0.2	26	<0.1	<0.005	26	290	10
East Transect Aguer	HG07-04/70-80	0.01	67	0.08	<0.005	<0.2	19	<0.1	<0.005	24	280	8.7
East Transect Aguer	HG07-04/80-90	0.01	59	0.06	<0.005	<0.2	34	<0.1	<0.005	19	250	7.2
East Transect Aguer	HG07-04/90-95	0.04	61	0.50	<0.005	0.23	42	0.2	0.006	20	270	9.1
East Transect Aguer	HG07-04/95-101	0.02	42	0.40	<0.005	0.26	74	0.2	<0.005	13	260	6.7
East Transect Aguer	HG07-04/101-124	<0.01	54	0.31	<0.005	0.21	50	0.1	<0.005	16	250	7.8
East Transect Aguer	HG07-04/124-137	0.01	89	0.31	<0.005	0.28	110	0.2	<0.005	13	190	4.9
East Transect Aguer	HG07-04/124-137d	<0.01	71	0.23	<0.005	0.22	80	0.1	0.009	11	180	4.5
East Transect Aguer	HG07-04/137-145	0.01	51	0.10	<0.005	0.20	61	0.1	<0.005	7.5	120	5.9
East Transect Aguer	HG07-04/145-159	<0.01	38	0.10	<0.005	<0.2	1.8	<0.1	<0.005	4.2	77	6.9
East Transect Aguer	HG07-04/159-163	<0.01	30	0.10	<0.005	<0.2	2.2	<0.1	<0.005	3.1	55	9.5
East Transect Aguer	HG07-04/163-169	<0.01	20	0.10	<0.005	<0.2	1.5	<0.1	<0.005	3.4	65	14
East Transect Aguer	HG07-04/169-177	<0.01	21	0.04	<0.005	<0.2	1.4	<0.1	<0.005	4.1	65	15
East Transect Aguer	HG07-04/169-177d	<0.01	22	0.03	<0.005	<0.2	3.0	<0.1	<0.005	4.0	69	16
East Transect Aguer	HG07-04/177-184	0.03	54	<0.02	0.006	0.23	81	<0.1	<0.005	2.6	22	14
East Transect Aguer	HG07-04/184-193	0.01	50	<0.02	<0.005	<0.2	74	<0.1	<0.005	6.7	55	7.7
East Transect Aguer	HG07-04/184-193d	0.01	50	<0.02	<0.005	<0.2	65	<0.1	<0.005	6.5	50	7.6
East Transect Aguer	HG07-04/193-203	0.01	47	<0.02	<0.005	0.23	65	<0.1	<0.005	7.9	52	4.5
East Transect Aguer	HG07-04/203-217	0.02	38	<0.02	<0.005	<0.2	61	<0.1	<0.005	8.4	49	8.9
East Transect Aguer	HG07-04/217-228	0.05	59	<0.02	0.006	<0.2	77	<0.1	<0.005	3.3	26	15
East Transect Aguer	HG07-04/217-228d	0.03	47	<0.02	<0.005	<0.2	63	<0.1	<0.005	4.6	44	24
East Transect Aguer	HG07-04/228-237	0.04	48	<0.02	0.006	<0.2	64	<0.1	<0.005	3.7	33	7.3
East Transect Aguer	HG07-04/237-248	0.01	25	<0.02	<0.005	<0.2	54	<0.1	<0.005	3.8	39	12
East Transect Aguer	HG07-04/248-258	0.02	24	<0.02	<0.005	<0.2	44	<0.1	<0.005	4.4	38	11
East Transect Aguer	HG07-04/258-266	0.01	28	<0.02	<0.005	<0.2	54	<0.1	<0.005	8.0	51	7.9
East Transect Aguer	HG07-04/266-281	0.02	29	<0.02	<0.005	<0.2	45	<0.1	<0.005	7.2	38	7.2

Table 12A. Composition of the DI-leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; d, duplicate; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Sample site	Sample ID	ICP-MS	ICP-MS	ICP-MS	ICP-MS	IC	IC	IC	IC	pH	Alkalinity mg/L CaCO ₃
		Y µg/L	Yb µg/L	Zn µg/L	Zr µg/L	Cl mg/L	F mg/L	NO ₃ mg/L	SO ₄ mg/L		
East Transect Aguer	HG07-04/0-1	0.46	0.030	79	1.0	1.6	2.4	19	160	10.10	320
East Transect Aguer	HG07-04/0-1d	0.55	0.080	98	9.6	14	2.4	20	170	10.10	360
East Transect Aguer	HG07-04/1-5	0.11	0.020	22	1.1	3.8	3.7	36	310	10.30	690
East Transect Aguer	HG07-04/5-10	0.11	0.020	21	1.8	<.08	5.6	<.08	360	10.50	630
East Transect Aguer	HG07-04/10-20	0.02	0.020	4.0	1.0	160	3.7	42	630	10.30	980
East Transect Aguer	HG07-04/20-30	0.02	0.020	4.5	0.84	470	3.6	57	610	10.10	1,000
East Transect Aguer	HG07-04/20-30d	0.03	0.009	22	0.81	510	4	59	660	10.36	1,050
East Transect Aguer	HG07-04/30-40	0.03	<0.005	3.6	1.3	520	4.1	57	430	10.42	620
East Transect Aguer	HG07-04/40-50	0.02	0.040	5.0	1.7	450	4	53	330	10.31	510
East Transect Aguer	HG07-04/50-60	0.01	0.020	5.2	2.1	420	3.5	51	300	10.38	470
East Transect Aguer	HG07-04/50-60d	0.02	0.020	5.9	1.3	410	3.4	51	290	10.10	470
East Transect Aguer	HG07-04/60-70	0.02	0.030	3.6	1.6	400	3.4	50	290	9.80	430
East Transect Aguer	HG07-04/70-80	0.02	0.030	4.4	1.1	430	3.5	50	310	9.70	390
East Transect Aguer	HG07-04/80-90	0.02	<0.005	8.3	2.7	310	3.2	46	250	10.00	350
East Transect Aguer	HG07-04/90-95	0.05	0.008	6.9	3.1	370	3.4	48	290	10.00	350
East Transect Aguer	HG07-04/95-101	0.08	0.010	11	5.0	280	3.2	46	240	9.80	310
East Transect Aguer	HG07-04/101-124	0.07	<0.005	6.8	3.7	260	3.7	46	230	9.50	350
East Transect Aguer	HG07-04/124-137	0.20	0.100	20	6.4	230	3.3	44	200	10.10	370
East Transect Aguer	HG07-04/124-137d	0.13	0.030	23	5.1	230	3.2	44	200	10.20	360
East Transect Aguer	HG07-04/137-145	0.11	0.020	15	2.7	150	2.3	41	130	9.30	230
East Transect Aguer	HG07-04/145-159	<0.01	0.006	16	<0.2	120	1.2	21	91	9.70	160
East Transect Aguer	HG07-04/159-163	<0.01	<0.005	2.0	<0.2	87	1.1	20	70	9.40	140
East Transect Aguer	HG07-04/163-169	<0.01	<0.005	5.7	<0.2	110	1.2	21	83	9.00	150
East Transect Aguer	HG07-04/169-177	<0.01	<0.005	1.9	<0.2	120	1.2	21	87	9.40	150
East Transect Aguer	HG07-04/169-177d	<0.01	<0.005	18	<0.2	130	1.2	21	93	8.40	150
East Transect Aguer	HG07-04/177-184	0.16	0.020	11	2.6	89	0.26	2.4	61	10.26	140
East Transect Aguer	HG07-04/184-193	0.10	0.020	11	4.3	180	0.50	3.2	110	10.39	170
East Transect Aguer	HG07-04/184-193d	0.08	0.020	9.7	3.8	170	0.50	3.1	110	10.35	170
East Transect Aguer	HG07-04/193-203	0.07	0.020	9.2	4.4	210	0.60	3.4	130	10.31	180
East Transect Aguer	HG07-04/203-217	0.10	0.020	10	3.6	220	0.60	3.8	140	10.37	180
East Transect Aguer	HG07-04/217-228	0.21	0.040	13	1.7	88	0.30	2.1	58	10.31	120
East Transect Aguer	HG07-04/217-228d	0.14	0.020	9.4	2.8	100	0.30	2.2	63	10.14	100
East Transect Aguer	HG07-04/228-237	0.20	0.040	14	1.6	110	0.36	2.2	71	10.28	130
East Transect Aguer	HG07-04/237-248	0.14	0.030	10	2.3	110	0.35	2.8	78	10.29	130
East Transect Aguer	HG07-04/248-258	0.10	0.020	8.8	2.4	160	0.40	4.0	110	10.41	140
East Transect Aguer	HG07-04/258-266	0.08	0.020	11	2.5	170	0.50	3.7	130	10.36	200
East Transect Aguer	HG07-04/266-281	0.08	0.020	8.9	2.3	210	0.40	4.4	130	10.36	150

Table 12B. Composition of the nitric acid leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; µg/L, micrograms per liter; mg/L, milligrams per liter]

Sample site	Sample ID	Treatment	ICP-MS Ag µg/L	ICP-OES Al µg/L	ICP-MS As µg/L	ICP-MS Ba µg/L	ICP-OES B µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-MS Ca mg/L	ICP-MS Cd µg/L
East Transect Aguer	HG07-04/0-20col	Nitric Leach	<3	19,000	20	110	660	5.2	<2	13	0.27
East Transect Aguer	HG07-04/0-1A	Nitric Leach	<3	140,000	27	2,200	1,100	7.6	2.6	2,000	3.7
East Transect Aguer	HG07-04/0-1dA	Nitric Leach	<3	130,000	28	2,300	1,100	7.4	2.1	2,000	4.8
East Transect Aguer	HG07-04/0-1D	Nitric Leach	<3	180,000	26	2,600	1,200	7.5	<2	2,200	4.4
East Transect Aguer	HG07-04/0-1dD	Nitric Leach	<3	180,000	25	2,600	1,200	8.2	<2	2,200	4.2
East Transect Aguer	HG07-04/1-5A	Nitric Leach	<3	150,000	25	2,600	1,400	7.6	<2	2,200	4.4
East Transect Aguer	HG07-04/5-10A	Nitric Leach	<3	150,000	39	2,500	1,700	8.2	<2	2,300	4.7
East Transect Aguer	HG07-04/10-20A	Nitric Leach	<3	120,000	74	2,400	2,500	12	<2	2,400	4.6
East Transect Aguer	HG07-04/10-20D	Nitric Leach	<3	120,000	50	1,400	1,600	6.0	<2	1,500	2.4
East Transect Aguer	HG07-04/20-30A	Nitric Leach	<3	120,000	95	2,200	2,800	7.7	<2	2,400	4.9
East Transect Aguer	HG07-04/20-30dA	Nitric Leach	<3	110,000	91	2,200	2,900	7.0	<2	2,300	4.5
East Transect Aguer	HG07-04/30-40A	Nitric Leach	<3	120,000	110	2,100	2,600	7.7	<2	2,400	3.9
East Transect Aguer	HG07-04/40-50A	Nitric Leach	<3	95,000	87	1,400	1,500	6.3	<2	1,400	2.4
East Transect Aguer	HG07-04/50-60A	Nitric Leach	<3	84,000	91	1,600	1,400	5.5	<2	1,500	2.8
East Transect Aguer	HG07-04/50-60dA	Nitric Leach	<3	110,000	100	1,900	1,600	7.5	<2	2,000	2.9
East Transect Aguer	HG07-04/60-70A	Nitric Leach	<3	69,000	74	1,400	1,200	5.5	<2	1,400	2.0
East Transect Aguer	HG07-04/70-80A	Nitric Leach	<3	83,000	110	1,500	2,100	8.1	<2	2,600	4.3
East Transect Aguer	HG07-04/80-90A	Nitric Leach	<3	80,000	94	1,900	1,600	8.0	<2	2,600	3.5
East Transect Aguer	HG07-04/90-95A	Nitric Leach	<3	76,000	100	1,100	1,700	8.6	8.0	2,600	3.7
East Transect Aguer	HG07-04/95-101A	Nitric Leach	<3	100,000	110	2,200	1,700	11	4.0	2,600	4.7
East Transect Aguer	HG07-04/101-124A	Nitric Leach	<3	98,000	83	1,800	1,800	7.8	2.8	2,300	3.9
East Transect Aguer	HG07-04/124-137A	Nitric Leach	<3	50,000	52	1,600	1,300	9.1	<2	2,200	2.1
East Transect Aguer	HG0704/124-137dA	Nitric Leach	<3	46,000	45	1,500	1,100	4.9	<2	2,100	2.7
East Transect Aguer	HG07-04/137-145A	Nitric Leach	<3	17,000	40	1,600	690	6.6	<2	2,800	1.4
East Transect Aguer	HG07-04/137-145D	Nitric Leach	<3	11,000	26	1,200	380	1.3	<2	2,200	0.83
East Transect Aguer	HG07-04/145-159A	Nitric Leach	<3	10,000	30	1,400	390	4.6	<2	2,800	1.5
East Transect Aguer	HG07-04/159-163A	Nitric Leach	<3	8,800	32	1,500	270	1.9	<2	2,700	1.6
East Transect Aguer	HG07-04/159-163D	Nitric Leach	<3	7,800	31	1,500	300	1.3	<2	3,000	1.5
East Transect Aguer	HG07-04/163-169A	Nitric Leach	<3	10,000	27	1,500	390	1.9	<2	2,900	1.7
East Transect Aguer	HG07-04/169-177A	Nitric Leach	<3	8,100	31	1,200	320	2.4	<2	3,000	1.4
East Transect Aguer	HG07-04/169-177dA	Nitric Leach	<3	8,000	27	1,700	320	3.4	<2	2,800	1.5
East Transect Aguer	HG07-04/177-184A	Nitric Leach	<1	8,000	29	1,300	360	2.4	<0.2	3,000	1.1
East Transect Aguer	HG07-04/184-193A	Nitric Leach	<1	10,000	28	820	420	3.7	<0.2	2,300	0.97
East Transect Aguer	HG07-04/184-193dA	Nitric Leach	<1	11,000	32	1,300	430	3.5	<0.2	3,600	1.1
East Transect Aguer	HG07-04/193-203A	Nitric Leach	<1	8,900	31	1,100	420	3.5	<0.2	3,300	1.1
East Transect Aguer	HG07-04/203-217	Nitric Leach	<1	18,000	31	1,400	810	2.9	<0.2	3,500	1.6
East Transect Aguer	HG07-04/217-228	Nitric Leach	<1	7,500	34	700	360	2.3	<0.2	2,300	1.1
East Transect Aguer	HG07-04/217-228d	Nitric Leach	<1	7,200	24	540	390	2.6	<0.2	1,900	1.3
East Transect Aguer	HG07-04/217-228dA	Nitric Leach	<1	6,200	26	860	320	2.1	<0.2	2,400	1.2
East Transect Aguer	HG07-04/228-237	Nitric Leach	<1	8,500	25	740	330	2.8	<0.2	2,000	1.1
East Transect Aguer	HG07-04/237-248	Nitric Leach	<1	7,100	38	1,600	320	3.1	<0.2	3,000	1.7
East Transect Aguer	HG07-04/237-248A	Nitric Leach	<1	6,600	39	1,200	300	2.9	<0.2	3,100	1.6
East Transect Aguer	HG07-04/248-258	Nitric Leach	<1	6,000	52	2,600	360	2.9	<0.2	5,700	1.6
East Transect Aguer	HG07-04/258-266	Nitric Leach	<1	16,000	39	1,200	420	3.0	<0.2	2,600	1.3
East Transect Aguer	HG07-04/266-281	Nitric Leach	<1	8,500	45	1,600	380	2.5	<0.2	3,400	1.4

Table 12B. Composition of the nitric acid leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; µg/L, micrograms per liter; mg/L, milligrams per liter]

Sample site	Sample ID	ICP-MS Ce µg/L	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L
East Transect Aguer	HG07-04/0-20col	27	23	<10	0.32	88	0.84	0.50	0.12	18,000	12
East Transect Aguer	HG07-04/0-1A	670	14	<10	0.49	39	45	24	9.8	6,400	12
East Transect Aguer	HG07-04/0-1dA	670	12	<10	0.35	37	44	24	9.5	6,300	11
East Transect Aguer	HG07-04/0-1D	700	19	<10	0.41	56	46	25	9.4	7,700	13
East Transect Aguer	HG07-04/0-1dD	720	19	<10	0.37	43	46	25	9.6	6,000	12
East Transect Aguer	HG07-04/1-5A	700	18	<10	0.42	34	50	25	9.9	3,700	10
East Transect Aguer	HG07-04/5-10A	820	21	<10	0.36	31	51	28	11	3,600	11
East Transect Aguer	HG07-04/10-20A	920	22	<10	0.28	26	51	28	11	1,700	8.3
East Transect Aguer	HG07-04/10-20D	610	20	<10	0.32	28	34	16	6.6	7,900	13
East Transect Aguer	HG07-04/20-30A	900	23	<10	0.34	20	49	26	11	950	7.1
East Transect Aguer	HG07-04/20-30dA	880	20	<10	0.31	33	48	26	11	2,300	8.3
East Transect Aguer	HG07-04/30-40A	870	23	<10	0.40	29	51	27	10	1,700	7.5
East Transect Aguer	HG07-04/40-50A	510	19	<10	0.30	40	28	16	6.0	5,800	9.6
East Transect Aguer	HG07-04/50-60A	530	19	<10	0.41	39	31	16	6.5	7,000	10
East Transect Aguer	HG07-04/50-60dA	580	21	<10	0.31	40	34	18	7.2	8,100	12
East Transect Aguer	HG07-04/60-70A	490	19	<10	0.38	25	30	15	5.7	4,600	7.6
East Transect Aguer	HG07-04/70-80A	800	20	<10	0.36	15	47	26	9.7	640	6.2
East Transect Aguer	HG07-04/80-90A	740	21	<10	0.34	15	46	23	9.1	770	5.4
East Transect Aguer	HG07-04/90-95A	760	19	<10	0.49	14	45	26	9.3	440	5.5
East Transect Aguer	HG07-04/95-101A	800	22	<10	0.48	23	48	26	8.9	1,800	6.6
East Transect Aguer	HG07-04/101-124A	820	22	<10	0.68	28	47	24	9.0	4,900	10
East Transect Aguer	HG07-04/124-137A	620	14	<10	0.85	28	35	20	5.4	7,300	8.7
East Transect Aguer	HG0704/124-137dA	590	12	<10	0.76	27	35	19	5.3	7,200	7.6
East Transect Aguer	HG07-04/137-145A	550	6.2	11	0.56	21	35	19	4.4	3,900	5.4
East Transect Aguer	HG07-04/137-145D	380	3.2	<10	0.55	13	25	13	3.3	2,500	4.1
East Transect Aguer	HG07-04/145-159A	490	4.4	<10	0.67	19	31	17	4.1	3,200	5.1
East Transect Aguer	HG07-04/159-163A	440	3.3	14	0.83	21	28	14	3.5	3,000	3.9
East Transect Aguer	HG07-04/159-163D	450	6.1	15	0.71	15	28	15	3.5	2,200	3.6
East Transect Aguer	HG07-04/163-169A	450	7.3	18	0.71	26	29	14	3.4	2,500	4.4
East Transect Aguer	HG07-04/169-177A	430	9.1	16	0.77	22	28	15	3.5	2,400	3.3
East Transect Aguer	HG07-04/169-177dA	430	9.1	13	0.96	27	27	15	3.7	3,000	3.9
East Transect Aguer	HG07-04/177-184A	540	8.0	8.7	0.76	25	27	15	3.5	3,500	3.0
East Transect Aguer	HG07-04/184-193A	530	11	6.6	1.2	22	26	14	3.5	4,500	3.5
East Transect Aguer	HG07-04/184-193dA	670	14	9.0	1.3	31	30	16	4.5	4,600	4.3
East Transect Aguer	HG07-04/193-203A	550	7.0	6.6	1.0	28	25	14	3.3	3,400	2.9
East Transect Aguer	HG07-04/203-217	820	8.6	9.0	1.1	38	35	21	4.6	6,700	3.7
East Transect Aguer	HG07-04/217-228	810	8.4	8.7	1.1	25	42	21	6.0	3,000	4.0
East Transect Aguer	HG07-04/217-228d	650	6.4	7.4	0.91	21	36	18	4.4	2,700	3.3
East Transect Aguer	HG07-04/217-228dA	700	6.3	7.0	0.94	23	36	19	4.8	2,400	3.3
East Transect Aguer	HG07-04/228-237	570	9.8	6.4	0.95	31	32	17	4.2	3,600	3.2
East Transect Aguer	HG07-04/237-248	690	16	9.8	0.79	27	37	23	4.2	3,100	3.0
East Transect Aguer	HG07-04/237-248A	620	14	10	0.75	27	34	20	3.9	2,900	2.7
East Transect Aguer	HG07-04/248-258	740	29	15	0.97	37	37	22	4.9	3,100	3.6
East Transect Aguer	HG07-04/258-266	560	14	8.0	0.76	35	27	16	4.1	4,300	3.5
East Transect Aguer	HG07-04/266-281	590	8.8	11	0.70	34	30	17	4.2	3,200	2.8

Table 12B. Composition of the nitric acid leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; µg/L, micrograms per liter; mg/L, milligrams per liter]

Sample site	Sample ID	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	ICP-OES	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-OES
		Gd µg/L	Ge µg/L	Ho µg/L	K mg/L	La µg/L	Li µg/L	Lu µg/L	Mg mg/L	Mn µg/L	Mo µg/L	Na mg/L
East Transect Aguer	HG07-04/0-20col	0.7	1.6	0.13	27	5.6	790	<1	190	1,400	<20	62
East Transect Aguer	HG07-04/0-1A	54	0.67	8.4	36	370	340	3	160	1,800	<20	190
East Transect Aguer	HG07-04/0-1dA	52	0.54	8.5	35	370	340	>3	160	1,700	<20	180
East Transect Aguer	HG07-04/0-1D	57	1.4	8.8	38	380	480	>3	190	2,200	<20	220
East Transect Aguer	HG07-04/0-1dD	57	1.9	9.1	39	390	510	>3	200	2,200	<20	220
East Transect Aguer	HG07-04/1-5A	63	0.78	9.2	<10	400	340	>3	170	1,900	<20	230
East Transect Aguer	HG07-04/5-10A	62	0.88	9.7	46	420	360	>3	180	2,100	<20	240
East Transect Aguer	HG07-04/10-20A	65	1.0	9.9	54	430	360	>3	190	2,100	<20	280
East Transect Aguer	HG07-04/10-20D	41	1.4	6.4	41	280	390	2.4	150	1,700	<20	190
East Transect Aguer	HG07-04/20-30A	62	0.60	9.4	56	400	370	>3	180	2,100	<20	270
East Transect Aguer	HG07-04/20-30dA	64	0.76	9.4	57	400	350	>3	180	2,000	<20	270
East Transect Aguer	HG07-04/30-40A	60	1.1	10	58	410	280	>3	160	2,200	<20	240
East Transect Aguer	HG07-04/40-50A	36	0.56	5.5	37	240	320	2.1	130	1,700	<20	140
East Transect Aguer	HG07-04/50-60A	41	0.53	6.0	42	260	280	2.2	120	1,700	<20	140
East Transect Aguer	HG07-04/50-60dA	44	<0.5	6.8	50	280	300	2.4	140	1,900	<20	170
East Transect Aguer	HG07-04/60-70A	34	0.79	5.5	40	230	240	1.9	110	1,700	<20	110
East Transect Aguer	HG07-04/70-80A	58	0.61	9.1	51	380	220	>3	150	2,100	<20	170
East Transect Aguer	HG07-04/80-90A	56	0.91	8.8	47	360	220	>3	150	2,100	<20	150
East Transect Aguer	HG07-04/90-95A	56	1.5	8.8	52	370	200	>3	140	2,000	20	160
East Transect Aguer	HG07-04/95-101A	59	1.7	9.2	55	390	260	>3	140	2,300	<20	170
East Transect Aguer	HG07-04/101-124A	57	2.1	8.8	59	390	410	3	130	2,200	<20	190
East Transect Aguer	HG07-04/124-137A	46	2.6	7.6	54	340	540	2.6	120	1,600	<20	170
East Transect Aguer	HG0704/124-137dA	41	2.3	6.9	48	330	480	2.6	110	1,400	<20	140
East Transect Aguer	HG07-04/137-145A	42	2.2	6.5	29	330	230	2.5	70	1,300	<20	98
East Transect Aguer	HG07-04/137-145D	30	2.0	4.6	20	230	140	1.8	42	930	<20	52
East Transect Aguer	HG07-04/145-159A	37	2.1	6.3	26	290	120	2.2	55	1,300	<20	46
East Transect Aguer	HG07-04/159-163A	31	2.3	5.5	22	250	83	2.1	47	1,500	<20	44
East Transect Aguer	HG07-04/159-163D	32	1.3	5.4	20	250	77	2.2	46	1,400	<20	33
East Transect Aguer	HG07-04/163-169A	32	1.5	5.4	20	230	84	2.1	58	1,900	<20	44
East Transect Aguer	HG07-04/169-177A	31	1.6	5.2	21	240	84	2.1	56	1,700	<20	44
East Transect Aguer	HG07-04/169-177dA	32	1.3	5.5	23	240	100	1.9	50	1,800	<20	37
East Transect Aguer	HG07-04/177-184A	33	1.0	5.1	27	290	110	1.8	47	2,300	<2	40
East Transect Aguer	HG07-04/184-193A	33	1.2	5.0	47	290	110	1.8	44	2,300	<2	60
East Transect Aguer	HG07-04/184-193dA	39	1.5	5.7	47	370	140	1.9	47	2,900	<2	62
East Transect Aguer	HG07-04/193-203A	31	1.2	4.9	42	270	110	1.8	47	2,600	<2	59
East Transect Aguer	HG07-04/203-217	42	1.4	7.0	84	370	190	2.6	110	2,600	<2	113
East Transect Aguer	HG07-04/217-228	56	1.3	7.6	27	500	71	2.1	48	1,400	<2	38
East Transect Aguer	HG07-04/217-228d	44	1.1	6.7	23	360	72	2.0	54	1,100	<2	29
East Transect Aguer	HG07-04/217-228dA	46	1.1	6.7	22	410	57	2.0	48	1,200	<2	33
East Transect Aguer	HG07-04/228-237	41	1.2	6.1	28	350	77	2.0	49	1,400	<2	37
East Transect Aguer	HG07-04/237-248	41	1.2	7.7	26	300	120	2.9	57	2,300	<2	32
East Transect Aguer	HG07-04/237-248A	37	1.1	6.8	22	270	94	2.6	55	2,100	<2	27
East Transect Aguer	HG07-04/248-258	44	1.4	7.3	21	370	97	2.7	62	3,800	<2	31
East Transect Aguer	HG07-04/258-266	34	0.96	5.3	28	290	110	2.1	61	2,100	<2	43
East Transect Aguer	HG07-04/266-281	36	0.93	5.7	23	330	70	2.2	64	2,200	<2	34

Table 12B. Composition of the nitric acid leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; µg/L, micrograms per liter; mg/L, milligrams per liter]

Sample site	Sample ID	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-OES P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L	ICP-MS Se µg/L	ICP-OES SiO ₂ mg/L
East Transect Aguer	HG07-04/0-20col	<2	4.8	38	<0.5	26	1.4	27	<3	12	14	63
East Transect Aguer	HG07-04/0-1A	16	320	24	7.1	140	86	29	17	<6	11	55
East Transect Aguer	HG07-04/0-1dA	13	330	27	7.2	150	86	29	14	<6	<10	52
East Transect Aguer	HG07-04/0-1D	3.3	330	29	7.1	150	85	33	<3	16	20	71
East Transect Aguer	HG07-04/0-1dD	3.2	340	30	7.1	140	86	33	<3	9.3	12	71
East Transect Aguer	HG07-04/1-5A	12	350	25	7.5	150	94	30	12	<6	<10	56
East Transect Aguer	HG07-04/5-10A	11	360	27	9.2	150	98	33	9.8	<6	11	59
East Transect Aguer	HG07-04/10-20A	9.4	370	25	11	130	99	34	8.9	<6	<10	59
East Transect Aguer	HG07-04/10-20D	2.6	240	20	6.6	120	63	33	<3	11	15	71
East Transect Aguer	HG07-04/20-30A	8.7	350	26	10	100	95	33	6.8	<6	<10	57
East Transect Aguer	HG07-04/20-30dA	7.8	350	23	11	120	91	36	6.2	<6	17	56
East Transect Aguer	HG07-04/30-40A	7.3	360	22	11	100	96	37	5.5	<6	10	56
East Transect Aguer	HG07-04/40-50A	7.1	210	21	7.4	100	54	33	4.9	<6	<10	64
East Transect Aguer	HG07-04/50-60A	7.0	230	21	7.5	100	60	35	4.9	<6	<10	62
East Transect Aguer	HG07-04/50-60dA	6.7	250	24	9.1	120	66	38	4.8	<6	11	65
East Transect Aguer	HG07-04/60-70A	6.0	200	19	6.8	89	53	36	4.2	<6	13	51
East Transect Aguer	HG07-04/70-80A	5.4	340	25	9.8	64	88	38	3.5	<6	21	47
East Transect Aguer	HG07-04/80-90A	5.1	320	22	9.1	70	84	34	3.5	<6	<10	45
East Transect Aguer	HG07-04/90-95A	18	330	22	8.9	52	85	33	31	<6	22	43
East Transect Aguer	HG07-04/95-101A	16	340	28	9.7	72	89	39	22	7.3	16	51
East Transect Aguer	HG07-04/101-124A	14	340	35	8.5	95	88	45	18	7.2	<10	52
East Transect Aguer	HG07-04/124-137A	10	280	26	5.1	81	77	45	12	7.0	<10	49
East Transect Aguer	HG0704/124-137dA	9.3	280	24	5.0	81	73	43	9.9	<6	17	43
East Transect Aguer	HG07-04/137-145A	7.6	270	15	3.3	67	73	28	7	6.6	28	27
East Transect Aguer	HG07-04/137-145D	2.2	190	12	2.6	48	50	24	<3	<6	16	24
East Transect Aguer	HG07-04/145-159A	6.6	240	14	2.8	65	64	23	6.1	<6	11	18
East Transect Aguer	HG07-04/159-163A	5.7	200	14	2.6	67	55	23	4.7	8.6	10	16
East Transect Aguer	HG07-04/159-163D	<2	200	9.1	2.7	62	55	21	<3	6.6	16	15
East Transect Aguer	HG07-04/163-169A	4.5	190	12	2.8	65	50	22	4.0	8.1	<10	15
East Transect Aguer	HG07-04/169-177A	4.4	200	17	2.6	63	54	25	3.4	8.3	16	18
East Transect Aguer	HG07-04/169-177dA	3.6	200	17	2.6	64	53	28	3.6	8.0	25	20
East Transect Aguer	HG07-04/177-184A	<0.2	200	<0.4	2.2	57	54	34	<0.3	5.6	1.8	12
East Transect Aguer	HG07-04/184-193A	0.21	200	<0.4	2.4	57	56	55	<0.3	5.2	1.5	13
East Transect Aguer	HG07-04/184-193dA	0.23	260	<0.4	3.9	60	71	51	<0.3	7.3	2.8	14
East Transect Aguer	HG07-04/193-203A	0.24	190	<0.4	2.1	48	50	45	<0.3	4.9	1.7	11
East Transect Aguer	HG07-04/203-217	0.30	260	<0.4	2.6	60	70	42	0.35	6.2	2.8	28
East Transect Aguer	HG07-04/217-228	<0.2	360	<0.4	5.2	58	110	34	0.37	7.4	3.2	12
East Transect Aguer	HG07-04/217-228d	<0.2	260	<0.4	2.8	58	70	35	0.31	5.8	2.0	11
East Transect Aguer	HG07-04/217-228dA	<0.2	280	<0.4	2.8	56	78	29	0.3	6.1	2.9	8.6
East Transect Aguer	HG07-04/228-237	<0.2	250	<0.4	2.8	58	66	35	<0.3	5.9	2.5	12
East Transect Aguer	HG07-04/237-248	<0.2	220	<0.4	2.1	64	57	37	0.32	5.8	2.2	12
East Transect Aguer	HG07-04/237-248A	<0.2	200	<0.4	1.9	58	52	34	0.31	5.4	1.9	12
East Transect Aguer	HG07-04/248-258	<0.2	260	<0.4	4.4	58	70	33	0.38	9.3	4.4	12
East Transect Aguer	HG07-04/258-266	<0.2	210	<0.4	2.3	61	56	35	<0.3	6.6	2.0	12
East Transect Aguer	HG07-04/266-281	<0.2	220	<0.4	1.9	56	61	28	<0.3	6.1	2.6	12

Table 12B. Composition of the nitric acid leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; µg/L, micrograms per liter; mg/L, milligrams per liter]

Sample site	Sample ID	ICP-MS Sm µg/L	ICP-MS SO ₄ mg/L	ICP-MS Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L	ICP-MS Tl µg/L
East Transect Aguer	HG07-04/0-20col	1.2	54	390	0.88	0.13	8.0	550	<1
East Transect Aguer	HG07-04/0-1A	59	<20	27,000	11	8.0	21	88	1.4
East Transect Aguer	HG07-04/0-1dA	61	27	28,000	9.8	7.8	25	98	1.1
East Transect Aguer	HG07-04/0-1D	62	55	27,000	2.5	8.5	23	68	<1
East Transect Aguer	HG07-04/0-1dD	65	<20	28,000	1.5	8.7	19	37	<1
East Transect Aguer	HG07-04/1-5A	65	20	30,000	9.3	8.7	19	36	1.2
East Transect Aguer	HG07-04/5-10A	72	37	32,000	8.7	8.8	19	38	1.2
East Transect Aguer	HG07-04/10-20A	74	27	35,000	8.3	9.5	14	19	1.2
East Transect Aguer	HG07-04/10-20D	48	<20	20,000	1.6	5.8	21	180	<1
East Transect Aguer	HG07-04/20-30A	72	19	34,000	7.1	8.8	12	9.2	1.2
East Transect Aguer	HG07-04/20-30dA	67	<20	32,000	6.9	8.8	15	35	1.2
East Transect Aguer	HG07-04/30-40A	72	36	32,000	6.6	9.3	13	18	1.2
East Transect Aguer	HG07-04/40-50A	38	28	19,000	6.1	5.1	14	150	<1
East Transect Aguer	HG07-04/50-60A	43	32	18,000	5.9	5.8	15	190	1.0
East Transect Aguer	HG07-04/50-60dA	48	33	24,000	6.2	6.7	21	170	1.2
East Transect Aguer	HG07-04/60-70A	39	34	16,000	5.5	4.9	13	120	<1
East Transect Aguer	HG07-04/70-80A	65	40	30,000	5.2	8.2	10	10	0.99
East Transect Aguer	HG07-04/80-90A	61	52	30,000	5.5	8.3	9	13	0.98
East Transect Aguer	HG07-04/90-95A	64	<20	39,000	9.9	8.5	5	13	2.4
East Transect Aguer	HG07-04/95-101A	66	<20	38,000	8.5	8.2	9	27	1.8
East Transect Aguer	HG07-04/101-124A	64	<20	26,000	7.9	8.4	17	71	1.5
East Transect Aguer	HG07-04/124-137A	53	<20	27,000	5.9	6.4	31	190	1.4
East Transect Aguer	HG0704/124-137dA	50	<20	25,000	5.2	6.4	33	200	1.2
East Transect Aguer	HG07-04/137-145A	48	<20	24,000	4.3	6.4	34	110	2.1
East Transect Aguer	HG07-04/137-145D	34	56	16,000	1.4	4.1	23	120	1.5
East Transect Aguer	HG07-04/145-159A	41	48	21,000	3.9	5.5	35	120	1.8
East Transect Aguer	HG07-04/159-163A	38	74	20,000	3.4	4.9	32	110	2.2
East Transect Aguer	HG07-04/159-163D	38	101	21,000	1.4	4.9	27	60	1.6
East Transect Aguer	HG07-04/163-169A	35	70	21,000	2.7	4.7	32	68	1.9
East Transect Aguer	HG07-04/169-177A	36	97	22,000	2.7	5.0	30	86	2.1
East Transect Aguer	HG07-04/169-177dA	35	93	22,000	2.7	5.0	32	120	2.2
East Transect Aguer	HG07-04/177-184A	36	5	21,000	0.03	4.8	42	190	2.2
East Transect Aguer	HG07-04/184-193A	37	5	19,000	0.03	4.8	41	230	1.4
East Transect Aguer	HG07-04/184-193dA	47	10	22,000	0.04	5.7	40	300	1.4
East Transect Aguer	HG07-04/193-203A	34	6	30,000	0.03	4.6	42	160	1.3
East Transect Aguer	HG07-04/203-217	48	6	25,000	0.06	6.3	38	220	1.9
East Transect Aguer	HG07-04/217-228	65	6	11,000	0.06	8.0	41	310	1.6
East Transect Aguer	HG07-04/217-228d	48	4	12,000	0.04	6.5	44	240	2.0
East Transect Aguer	HG07-04/217-228dA	52	4	11,000	0.05	6.7	39	230	2.0
East Transect Aguer	HG07-04/228-237	45	<2	12,000	0.05	5.9	39	240	1.4
East Transect Aguer	HG07-04/237-248	41	6	19,000	0.05	6.2	53	170	1.8
East Transect Aguer	HG07-04/237-248A	38	7	17,000	0.04	5.6	47	160	1.8
East Transect Aguer	HG07-04/248-258	49	23	21,000	0.05	6.5	44	200	1.8
East Transect Aguer	HG07-04/258-266	38	3	18,000	0.04	4.9	38	170	1.5
East Transect Aguer	HG07-04/266-281	41	6	19,000	0.04	5.3	42	130	1.6

Table 12B. Composition of the nitric acid leach bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; µg/L, micrograms per liter; mg/L, milligrams per liter]

Sample site	Sample ID	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L
East Transect Aguer	HG07-04/0-20col	<0.05	<1	6.8	<5	3.8	0.44	150	3.2
East Transect Aguer	HG07-04/0-1A	3.2	6.0	17	6.3	230	20	83	<2
East Transect Aguer	HG07-04/0-1dA	3.0	5.8	16	5.0	230	21	120	2.3
East Transect Aguer	HG07-04/0-1D	3.5	7.1	9.3	<5	230	22	110	<2
East Transect Aguer	HG07-04/0-1dD	3.1	6.9	<5	<5	230	22	86	<2
East Transect Aguer	HG07-04/1-5A	3.5	6.5	9.4	<5	250	23	120	<2
East Transect Aguer	HG07-04/5-10A	3.6	7.6	9.8	<5	260	25	92	2.7
East Transect Aguer	HG07-04/10-20A	3.8	11	6.5	<5	270	24	92	2.8
East Transect Aguer	HG07-04/10-20D	2.5	7.0	7.9	<5	160	16	65	2.2
East Transect Aguer	HG07-04/20-30A	3.7	22	<5	<5	250	24	110	2.2
East Transect Aguer	HG07-04/20-30dA	3.3	22	12	<5	250	23	120	2.8
East Transect Aguer	HG07-04/30-40A	3.8	37	6.4	<5	260	25	75	3.3
East Transect Aguer	HG07-04/40-50A	2.1	19	13	<5	150	15	73	3.1
East Transect Aguer	HG07-04/50-60A	2.3	23	14	<5	160	15	85	4.0
East Transect Aguer	HG07-04/50-60dA	2.6	30	17	<5	180	17	82	3.4
East Transect Aguer	HG07-04/60-70A	2.0	21	7.0	<5	150	12	67	3.0
East Transect Aguer	HG07-04/70-80A	3.5	30	<5	<5	240	24	77	2.8
East Transect Aguer	HG07-04/80-90A	3.4	31	5.9	<5	230	20	68	3.1
East Transect Aguer	HG07-04/90-95A	3.5	30	<5	8.6	230	22	55	2.9
East Transect Aguer	HG07-04/95-101A	3.4	43	<5	6.9	240	22	69	3.4
East Transect Aguer	HG07-04/101-124A	3.5	59	<5	5.4	240	23	69	3.9
East Transect Aguer	HG07-04/124-137A	2.5	69	<5	<5	190	17	73	4.3
East Transect Aguer	HG0704/124-137dA	2.4	63	<5	<5	180	17	67	4.8
East Transect Aguer	HG07-04/137-145A	2.8	44	4.9	<5	190	19	51	4.7
East Transect Aguer	HG07-04/137-145D	1.9	25	<5	<5	130	12	27	5.0
East Transect Aguer	HG07-04/145-159A	2.4	26	<5	<5	170	16	62	6.0
East Transect Aguer	HG07-04/159-163A	2.0	21	7.1	<5	150	14	66	6.3
East Transect Aguer	HG07-04/159-163D	2.1	21	<5	<5	150	13	44	5.4
East Transect Aguer	HG07-04/163-169A	2.2	20	10	<5	150	13	70	5.2
East Transect Aguer	HG07-04/169-177A	2.3	22	5	<5	150	15	61	5.8
East Transect Aguer	HG07-04/169-177dA	2.1	21	<5	<5	150	13	50	6.7
East Transect Aguer	HG07-04/177-184A	1.9	18	5.1	0.82	180	13	52	13
East Transect Aguer	HG07-04/184-193A	1.9	20	4.8	<0.5	160	12	62	18
East Transect Aguer	HG07-04/184-193dA	2.2	20	6.4	0.5	170	14	65	17
East Transect Aguer	HG07-04/193-203A	2.0	21	3.9	0.51	140	13	65	18
East Transect Aguer	HG07-04/203-217	2.8	20	4.8	0.89	210	18	70	19
East Transect Aguer	HG07-04/217-228	2.6	13	7.2	0.73	210	16	73	14
East Transect Aguer	HG07-04/217-228d	2.4	13	5.4	0.52	210	15	73	13
East Transect Aguer	HG07-04/217-228dA	2.3	13	5.4	0.73	190	15	66	12
East Transect Aguer	HG07-04/228-237	2.3	17	5.9	0.51	190	14	74	11
East Transect Aguer	HG07-04/237-248	3.1	19	5.6	0.68	260	20	70	14
East Transect Aguer	HG07-04/237-248A	2.8	17	5.6	0.53	240	18	70	13
East Transect Aguer	HG07-04/248-258	2.9	18	9.4	0.68	220	19	66	13
East Transect Aguer	HG07-04/258-266	2.1	17	7.2	<0.5	170	14	51	7.7
East Transect Aguer	HG07-04/266-281	2.3	20	5.7	0.52	170	15	53	8.8

Table 12C. Composition of the residual fraction of bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; ppm, parts per million; wt.%, weight percent)

Sample site	Sample ID	Treatment	ICP-MS Ag ppm	ICP-OES Al wt.%	ICP-MS As ppm	ICP-MS Ba ppm	ICP-MS Be ppm	ICP-MS Bi ppm	ICP-OES Ca wt.%	ICP-MS Cd ppm
East Transect Auger	HG07-04/0-20col	Final Residual	<1	3.5	19	34	2.8	0.12	<0.005	0.04
East Transect Auger	HG07-04/0-1A	Final Residual	<1	6.7	12	860	2.4	0.16	1.6	0.06
East Transect Auger	HG07-04/0-1dA	Final Residual	<1	6.7	12	830	2.4	0.14	1.5	0.06
East Transect Auger	HG07-04/0-1D	Final Residual	<1	6.9	12	870	2.3	0.20	1.6	0.06
East Transect Auger	HG07-04/0-1dD	Final Residual	<1	6.3	12	870	2.4	0.20	1.3	0.04
East Transect Auger	HG07-04/1-5A	Final Residual	<1	7.1	15	640	2.6	0.19	0.97	0.06
East Transect Auger	HG07-04/5-10A	Final Residual	<1	7.0	16	650	2.6	0.19	1.1	0.07
East Transect Auger	HG07-04/10-20A	Final Residual	<1	6.6	21	540	2.7	0.19	0.85	0.07
East Transect Auger	HG07-04/10-20D	Final Residual	<1	6.3	21	540	2.6	0.26	0.35	0.07
East Transect Auger	HG07-04/20-30A	Final Residual	<1	6.6	23	600	2.6	0.19	1.1	0.08
East Transect Auger	HG07-04/20-30dA	Final Residual	<1	6.7	22	570	2.8	0.19	1.0	0.07
East Transect Auger	HG07-04/30-40A	Final Residual	<1	7.1	22	650	2.8	0.19	1.2	0.07
East Transect Auger	HG07-04/40-50A	Final Residual	<1	6.5	20	680	2.5	0.18	0.56	0.06
East Transect Auger	HG07-04/50-60A	Final Residual	<1	6.8	20	640	2.8	0.20	0.70	0.07
East Transect Auger	HG07-04/50-60dA	Final Residual	<1	7.1	20	680	2.8	0.20	0.89	0.09
East Transect Auger	HG07-04/60-70A	Final Residual	<1	7.1	21	640	2.9	0.21	0.52	0.06
East Transect Auger	HG07-04/70-80A	Final Residual	<1	7.0	22	730	2.8	0.19	1.3	0.08
East Transect Auger	HG07-04/80-90A	Final Residual	<1	6.8	19	740	2.7	0.17	1.5	0.08
East Transect Auger	HG07-04/90-95A	Final Residual	<1	7.1	21	780	2.9	0.20	1.6	0.07
East Transect Auger	HG07-04/95-101A	Final Residual	<1	6.8	20	730	2.6	0.19	1.7	0.07
East Transect Auger	HG07-04/101-124A	Final Residual	<1	6.3	16	640	2.4	0.22	1.5	0.06
East Transect Auger	HG07-04/124-137A	Final Residual	<1	6.0	7.5	740	2.1	0.14	2.5	0.03
East Transect Auger	HG0704/124-137dA	Final Residual	<1	5.8	7.1	760	2.3	0.14	2.9	0.04
East Transect Auger	HG07-04/137-145A	Final Residual	<1	5.7	4.6	910	2.0	0.11	1.8	0.02
East Transect Auger	HG07-04/137-145D	Final Residual	<1	5.9	5.6	1,100	2.4	0.13	1.9	0.03
East Transect Auger	HG07-04/145-159A	Final Residual	<1	6.3	3.8	1,200	2.1	0.10	2.2	0.02
East Transect Auger	HG07-04/159-163A	Final Residual	<1	6.2	4.1	1,100	2.2	0.09	1.8	0.02
East Transect Auger	HG07-04/159-163D	Final Residual	<1	6.5	3.8	970	1.9	0.09	2.5	0.02
East Transect Auger	HG07-04/163-169A	Final Residual	<1	5.8	4.7	920	2.3	0.11	2.5	0.02
East Transect Auger	HG07-04/169-177A	Final Residual	<1	5.3	4.9	980	2.2	0.10	2.3	0.03
East Transect Auger	HG0704/169-177dA	Final Residual	<1	5.6	4.2	1,100	2.1	0.09	2.3	0.03
East Transect Auger	HG07-04/177-184A	Final Residual	<1	6.2	3.8	1,100	2.4	0.08	2.2	0.04
East Transect Auger	HG07-04/184-193A	Final Residual	<1	6.4	3.8	1,300	2.4	0.09	1.6	0.04
East Transect Auger	HG07-04/184-193dA	Final Residual	<1	6.9	4.1	1,400	2.4	0.09	1.7	0.04
East Transect Auger	HG07-04/193-203A	Final Residual	<1	7.1	3.6	1,300	2.4	0.09	1.7	0.03
East Transect Auger	HG07-04/203-217	Final Residual	<1	6.8	4.5	1,400	2.5	0.10	2.3	0.04
East Transect Auger	HG07-04/217-228	Final Residual	<1	6.3	3.9	1,100	2.5	0.11	1.5	0.05
East Transect Auger	HG07-04/217-228d	Final Residual	<1	6.7	5.1	890	2.9	0.11	0.96	0.04
East Transect Auger	HG07-04/217-228dA	Final Residual	<1	6.5	5.3	1,100	2.7	0.10	1.0	0.04
East Transect Auger	HG07-04/228-237	Final Residual	<1	6.5	4.5	1,100	2.8	0.11	1.2	0.05
East Transect Auger	HG07-04/237-248	Final Residual	<1	5.9	3.6	1,000	2.2	0.08	1.8	0.04
East Transect Auger	HG07-04/237-248A	Final Residual	<1	5.7	3.8	990	2.3	0.08	2.3	0.05
East Transect Auger	HG07-04/248-258	Final Residual	<1	5.5	3.9	970	2.2	0.08	2.5	0.04
East Transect Auger	HG07-04/258-266	Final Residual	<1	5.6	3.8	1,000	1.9	0.08	1.6	0.04
East Transect Auger	HG07-04/266-281	Final Residual	<1	4.9	3.5	940	1.9	0.07	1.8	0.22

Table 12C. Composition of the residual fraction of bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; ppm, parts per million; wt.%, weight percent)

Sample site	Sample ID	ICP-MS Ce ppm	ICP-MS Co ppm	ICP-MS Cr ppm	ICP-MS Cs ppm	ICP-MS Cu ppm	ICP-OES Fe wt.%	ICP-MS Ga ppm	ICP-OES K wt.%	ICP-MS La ppm	ICP-MS Li ppm
East Transect Auger	HG07-04/0-20col	5	11	34	16	31	3.0	13	2.1	1.7	390
East Transect Auger	HG07-04/0-1A	58	7.8	64	11	20	2.4	17	3.5	32	140
East Transect Auger	HG07-04/0-1dA	61	7.7	68	10	20	2.5	16	3.4	35	130
East Transect Auger	HG07-04/0-1D	61	7.7	51	11	20	2.4	18	3.7	34	130
East Transect Auger	HG07-04/0-1dD	64	7.9	53	11	19	2.2	18	3.4	36	130
East Transect Auger	HG07-04/1-5A	51	9.5	52	15	24	2.9	18	3.8	27	190
East Transect Auger	HG07-04/5-10A	51	9.4	55	15	23	2.9	18	3.7	28	190
East Transect Auger	HG07-04/10-20A	51	10	49	16	26	2.9	18	3.5	25	220
East Transect Auger	HG07-04/10-20D	45	11	52	17	26	2.8	19	3.5	23	210
East Transect Auger	HG07-04/20-30A	54	11	54	16	26	2.9	18	3.5	27	220
East Transect Auger	HG07-04/20-30dA	55	10	54	16	26	2.9	18	3.5	27	230
East Transect Auger	HG07-04/30-40A	53	10	51	16	25	3.0	18	3.7	28	210
East Transect Auger	HG07-04/40-50A	49	9.3	59	15	25	2.7	18	3.4	26	190
East Transect Auger	HG07-04/50-60A	58	9.9	54	16	25	2.9	19	3.4	30	190
East Transect Auger	HG07-04/50-60dA	62	10	55	16	25	3.1	19	3.7	31	190
East Transect Auger	HG07-04/60-70A	59	9.8	54	16	24	3.1	19	3.5	31	180
East Transect Auger	HG07-04/70-80A	64	9.7	49	16	24	2.8	18	3.5	33	190
East Transect Auger	HG07-04/80-90A	66	8.7	49	15	22	2.6	18	3.4	36	170
East Transect Auger	HG07-04/90-95A	67	9.4	51	16	25	2.8	19	3.6	36	180
East Transect Auger	HG07-04/95-101A	69	8.9	54	16	24	2.6	18	3.4	36	170
East Transect Auger	HG07-04/101-124A	54	7.7	52	16	21	2.5	17	3.5	29	180
East Transect Auger	HG07-04/124-137A	73	4.2	59	13	14	1.8	15	3.5	42	140
East Transect Auger	HG0704/124-137dA	64	4.0	38	12	12	1.6	15	3.5	39	140
East Transect Auger	HG07-04/137-145A	64	2.2	30	7.5	7.6	1.0	14	3.4	41	80
East Transect Auger	HG07-04/137-145D	79	2.4	54	7.8	10	1.2	15	3.7	46	74
East Transect Auger	HG07-04/145-159A	130	1.8	30	5.7	6.9	1.0	15	3.6	76	58
East Transect Auger	HG07-04/159-163A	120	1.6	44	5.1	7.6	1.1	15	3.6	77	47
East Transect Auger	HG07-04/159-163D	120	1.6	45	4.7	7.3	1.1	15	3.7	80	46
East Transect Auger	HG07-04/163-169A	140	1.8	48	5.5	8.5	1.2	14	3.5	86	49
East Transect Auger	HG07-04/169-177A	87	1.8	62	6.4	16	1.0	14	3.2	52	60
East Transect Auger	HG0704/169-177dA	100	1.7	33	6.3	7.3	0.92	14	3.3	62	55
East Transect Auger	HG07-04/177-184A	160	2.3	67	6.2	11	1.3	17	3.3	99	62
East Transect Auger	HG07-04/184-193A	130	2.8	65	7.8	11	1.2	19	3.3	77	81
East Transect Auger	HG07-04/184-193dA	120	2.9	70	8.4	12	1.3	20	3.5	73	90
East Transect Auger	HG07-04/193-203A	110	2.8	40	8.3	9.5	1.1	20	3.4	65	91
East Transect Auger	HG07-04/203-217	130	3.2	68	9.7	14	1.3	21	3.4	84	97
East Transect Auger	HG07-04/217-228	140	2.2	51	5.7	9.4	1.2	20	3.3	96	48
East Transect Auger	HG07-04/217-228d	110	1.8	58	4.9	9.8	1.2	20	3.6	70	42
East Transect Auger	HG07-04/217-228dA	140	2.2	65	7.1	11	1.2	19	3.6	88	48
East Transect Auger	HG07-04/228-237	130	2.6	72	6.5	12	1.4	20	3.5	86	58
East Transect Auger	HG07-04/237-248	90	2.2	47	6.5	9.8	1.1	16	3.3	57	60
East Transect Auger	HG07-04/237-248A	98	2.2	53	6.6	10	1.0	16	3.2	59	59
East Transect Auger	HG07-04/248-258	110	2.4	72	7.6	12	1.2	16	3.1	67	65
East Transect Auger	HG07-04/258-266	110	2.6	92	6.0	15	1.3	17	3.0	65	61
East Transect Auger	HG07-04/266-281	110	1.9	60	5.9	12	0.93	15	2.7	66	55

Table 12C. Composition of the residual fraction of bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; ppm, parts per million; wt.%, weight percent)

Sample site	Sample ID	ICP-OES Mg wt.%	ICP-MS Mn ppm	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm
East Transect Auger	HG07-04/0-20col	7.9	960	0.3	0.16	10	<4	21	96	6.2	140
East Transect Auger	HG07-04/0-1A	2.8	550	1.0	1.7	23	17	17	280	17	150
East Transect Auger	HG07-04/0-1dA	2.8	540	1.0	1.7	23	19	17	260	15	140
East Transect Auger	HG07-04/0-1D	2.7	560	0.9	1.7	24	19	16	290	16	160
East Transect Auger	HG07-04/0-1dD	2.6	550	0.9	1.6	25	19	16	290	17	160
East Transect Auger	HG07-04/1-5A	3.9	660	0.9	1.5	25	14	20	290	16	170
East Transect Auger	HG07-04/5-10A	3.8	650	0.8	1.4	24	16	20	290	16	170
East Transect Auger	HG07-04/10-20A	4.6	720	0.8	1.2	23	13	21	310	17	170
East Transect Auger	HG07-04/10-20D	4.3	720	0.9	0.94	26	12	22	250	16	190
East Transect Auger	HG07-04/20-30A	4.5	720	0.9	1.2	24	16	22	350	18	170
East Transect Auger	HG07-04/20-30dA	4.7	720	0.8	1.2	23	15	22	330	17	170
East Transect Auger	HG07-04/30-40A	4.5	690	0.9	1.3	24	17	21	340	18	170
East Transect Auger	HG07-04/40-50A	3.8	630	0.9	1.1	24	13	20	230	15	170
East Transect Auger	HG07-04/50-60A	3.8	660	0.9	1.1	26	17	21	250	16	170
East Transect Auger	HG07-04/50-60dA	3.8	690	0.9	1.2	27	17	21	280	17	180
East Transect Auger	HG07-04/60-70A	3.6	660	1.0	1.1	27	16	21	230	17	180
East Transect Auger	HG07-04/70-80A	3.7	670	0.9	1.3	25	17	20	380	20	170
East Transect Auger	HG07-04/80-90A	3.4	610	0.9	1.4	25	18	18	340	18	160
East Transect Auger	HG07-04/90-95A	3.7	660	0.9	1.4	27	19	20	370	21	180
East Transect Auger	HG07-04/95-101A	3.2	630	0.9	1.4	26	19	19	340	19	170
East Transect Auger	HG07-04/101-124A	3.6	550	0.9	1.4	26	17	16	220	17	160
East Transect Auger	HG07-04/124-137A	2.8	390	0.9	1.8	26	21	9.9	150	14	130
East Transect Auger	HG0704/124-137dA	2.7	380	0.7	1.8	26	21	8.5	180	15	140
East Transect Auger	HG07-04/137-145A	1.5	260	0.7	2.1	24	19	5.0	140	14	110
East Transect Auger	HG07-04/137-145D	1.3	270	0.9	2.1	28	24	6.4	150	16	130
East Transect Auger	HG07-04/145-159A	0.98	250	0.6	2.4	33	37	4.3	180	17	110
East Transect Auger	HG07-04/159-163A	0.73	220	0.9	2.4	26	34	4.6	150	14	110
East Transect Auger	HG07-04/159-163D	0.76	210	0.8	2.5	27	38	4.5	170	14	100
East Transect Auger	HG07-04/163-169A	0.85	260	0.9	2.2	31	41	4.9	170	15	110
East Transect Auger	HG07-04/169-177A	0.86	230	0.9	2.0	25	24	5.7	140	16	110
East Transect Auger	HG0704/169-177dA	0.93	220	0.7	2.1	28	29	4.4	190	14	110
East Transect Auger	HG07-04/177-184A	0.94	310	1.2	2.2	38	39	6.1	170	16	120
East Transect Auger	HG07-04/184-193A	1.1	300	1.2	2.1	34	31	7.3	160	18	140
East Transect Auger	HG07-04/184-193dA	1.2	330	1.3	2.3	38	29	7.6	170	19	160
East Transect Auger	HG07-04/193-203A	1.3	330	0.9	2.3	35	26	6.0	170	18	140
East Transect Auger	HG07-04/203-217	1.4	330	1.3	2.2	42	31	7.4	190	19	170
East Transect Auger	HG07-04/217-228	0.62	260	1.2	2.3	40	36	5.5	350	19	140
East Transect Auger	HG07-04/217-228d	0.51	250	1.3	2.4	44	32	5.3	220	21	160
East Transect Auger	HG07-04/217-228dA	0.50	250	1.4	2.3	42	36	6.1	260	22	160
East Transect Auger	HG07-04/228-237	0.68	310	1.4	2.3	41	34	7.1	290	20	160
East Transect Auger	HG07-04/237-248	0.88	220	0.9	1.9	28	25	5.9	210	16	120
East Transect Auger	HG07-04/237-248A	0.83	220	0.9	1.9	31	24	6.1	170	17	130
East Transect Auger	HG07-04/248-258	0.98	260	1.2	1.7	32	26	7.4	170	16	130
East Transect Auger	HG07-04/258-266	0.82	260	1.4	1.8	30	24	8.8	150	18	120
East Transect Auger	HG07-04/266-281	0.69	220	1.1	1.6	28	25	6.3	150	15	110

Table 12C. Composition of the residual fraction of bulk East transect auger hole samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; col, DI-leach colloids; A, residue from Alkalinity measurement; d, duplicate; D, residue from DI leach; ppm, parts per million; wt.%, weight percent)

Sample site	Sample ID	ICP-MS Sb ppm	ICP-MS Sc ppm	ICP-MS Sr ppm	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
East Transect Auger	HG07-04/0-20col	0.8	7.5	8.0	1.2	1,100	0.7	0.4	26	1.1	93
East Transect Auger	HG07-04/0-1A	1.3	7.8	300	12	2,700	0.9	2.2	50	13	70
East Transect Auger	HG07-04/0-1dA	1.2	7.5	310	12	2,800	0.9	2.0	48	12	68
East Transect Auger	HG07-04/0-1D	1.4	8.2	330	14	2,800	1.0	2.2	51	14	71
East Transect Auger	HG07-04/0-1dD	1.3	8.3	310	14	2,800	1.0	2.2	50	14	72
East Transect Auger	HG07-04/1-5A	1.6	9.9	220	14	2,900	1.1	2.4	57	13	85
East Transect Auger	HG07-04/5-10A	1.6	9.8	230	14	2,900	1.1	2.3	57	12	84
East Transect Auger	HG07-04/10-20A	1.6	11	200	15	3,000	1.1	2.3	57	11	91
East Transect Auger	HG07-04/10-20D	1.7	11	140	15	3,200	1.2	2.5	63	11	97
East Transect Auger	HG07-04/20-30A	1.7	10	230	15	2,800	1.1	2.6	57	12	92
East Transect Auger	HG07-04/20-30dA	1.6	10	210	15	2,900	1.1	2.5	56	12	90
East Transect Auger	HG07-04/30-40A	1.6	10	250	15	2,800	1.2	2.6	57	12	91
East Transect Auger	HG07-04/40-50A	1.5	9.9	190	14	2,800	1.1	2.4	57	11	86
East Transect Auger	HG07-04/50-60A	1.6	10	200	15	3,100	1.2	2.7	59	12	92
East Transect Auger	HG07-04/50-60dA	1.6	10	220	16	3,000	1.2	2.5	60	14	91
East Transect Auger	HG07-04/60-70A	1.7	10	190	17	3,100	1.2	2.5	60	12	92
East Transect Auger	HG07-04/70-80A	1.6	10	290	16	2,900	1.2	2.8	58	14	87
East Transect Auger	HG07-04/80-90A	1.6	9.4	330	16	2,700	1.1	2.6	53	14	89
East Transect Auger	HG07-04/90-95A	1.6	10	330	17	3,100	1.3	2.9	57	14	89
East Transect Auger	HG07-04/95-101A	1.5	9.5	330	16	2,800	1.2	2.5	53	14	83
East Transect Auger	HG07-04/101-124A	1.4	8.1	280	15	2,500	1.1	2.7	44	13	77
East Transect Auger	HG07-04/124-137A	1.2	5.0	330	13	1,900	1.0	2.8	24	14	50
East Transect Auger	HG0704/124-137dA	1.2	5.0	390	13	1,800	1.0	2.7	24	15	50
East Transect Auger	HG07-04/137-145A	0.7	3.2	320	12	1,400	1.0	2.3	12	16	32
East Transect Auger	HG07-04/137-145D	0.9	3.4	290	14	1,400	1.0	2.8	14	17	35
East Transect Auger	HG07-04/145-159A	0.7	3.5	360	15	1,800	0.9	2.4	12	24	32
East Transect Auger	HG07-04/159-163A	0.6	2.8	320	14	1,500	0.8	2.1	11	22	27
East Transect Auger	HG07-04/159-163D	0.6	3.0	340	14	1,500	0.8	2.0	10	19	27
East Transect Auger	HG07-04/163-169A	0.7	3.1	310	16	1,800	1.0	2.4	12	24	32
East Transect Auger	HG07-04/169-177A	0.8	2.7	330	13	1,300	0.9	2.3	11	17	30
East Transect Auger	HG0704/169-177dA	0.7	2.8	350	14	1,300	0.9	2.2	11	16	29
East Transect Auger	HG07-04/177-184A	0.8	3.7	320	17	2,100	1.0	2.5	14	22	38
East Transect Auger	HG07-04/184-193A	0.9	3.8	410	16	1,800	1.0	2.5	15	20	38
East Transect Auger	HG07-04/184-193dA	0.9	4.0	430	15	2,000	1.1	2.5	17	21	40
East Transect Auger	HG07-04/193-203A	0.9	4.1	440	14	2,000	1.1	2.5	18	19	40
East Transect Auger	HG07-04/203-217	1.1	4.4	440	18	2,200	1.4	2.8	19	22	45
East Transect Auger	HG07-04/217-228	0.9	3.8	300	18	1,900	0.9	2.8	17	25	45
East Transect Auger	HG07-04/217-228d	0.8	3.0	210	18	1,400	1.0	3.2	13	28	46
East Transect Auger	HG07-04/217-228dA	1.1	3.8	270	20	1,800	1.1	3.8	16	103	44
East Transect Auger	HG07-04/228-237	0.9	4.0	290	18	1,800	1.0	3.9	19	26	52
East Transect Auger	HG07-04/237-248	0.9	3.1	320	14	1,400	0.9	2.4	17	18	34
East Transect Auger	HG07-04/237-248A	0.7	2.9	330	14	1,300	1.0	2.3	16	18	34
East Transect Auger	HG07-04/248-258	0.8	3.3	350	15	1,600	1.0	2.4	17	20	37
East Transect Auger	HG07-04/258-266	0.8	3.3	330	13	1,900	0.9	2.0	18	18	37
East Transect Auger	HG07-04/266-281	0.7	3.0	320	13	1,500	0.9	2.3	14	18	32

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Al µg/L	ICP-MS As µg/L	ICP-OES B µg/L	ICP-MS Ba µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-OES Ca mg/L	ICP-MS Cd µg/L	ICP-MS Ce µg/L	ICP-MS Co µg/L
Bulk Leach	Ash Meadows	JY03-09-1	15	3,200	87,000	17	<0.05	<0.2	6.3	0.42	0.02	0.54
Bulk Leach	Ash Meadows	JY03-09-2	11	3,800	91,000	16	<0.05	<0.2	4.9	0.44	0.03	0.62
Leach 3	Ash Meadows	JY03-49a-1	60,000	160	3,300	86	3.2	<0.2	17	0.15	9.4	32
Leach 3	Ash Meadows	JY03-49a-2	64,000	170	3,400	91	3.3	<0.2	18	0.16	9.7	34
Leach 4	Ash Meadows	JY03-49b-1	5.8	370	7,900	6.7	<0.05	<0.2	1.3	0.07	0.01	0.17
Leach 4	Ash Meadows	JY03-49b-2	6.0	360	7,800	7.1	<0.05	<0.2	1.5	0.08	<0.01	0.17
Leach 4	Ash Meadows	JY03-49c	5.1	610	11,000	8.4	<0.05	<0.2	1.3	0.17	0.02	0.31
Leach 3	Ash Meadows	JY03-50a-1	34	87	1,400	4.8	<0.05	<0.2	4.0	0.02	0.06	0.10
Leach 3	Ash Meadows	JY03-50a-2	22	82	1,400	4.8	<0.05	<0.2	4.1	<0.02	0.02	0.08
Leach 4	Ash Meadows	JY03-50b-1	7.1	210	3,700	11	<0.05	<0.2	2.3	0.09	0.01	0.26
Leach 4	Ash Meadows	JY03-50b-2	6	220	3,800	11	<0.05	<0.2	2.3	0.09	<0.01	0.25
Leach 4	Ash Meadows	JY03-50c	8.8	360	6,100	13	<0.05	<0.2	1.5	0.16	0.05	0.41
Leach 5	Ash Meadows	JY-05-29	29	3,600	120,000	53	<0.05	<0.2	24	2.90	0.6	2.90
Leach 7	Between GS-18 and East Transect	JY07-12a	3,400	33	1,300	56	0.4	<0.2	33	0.10	8.7	3.2
Leach 7	Between GS-18 and East Transect	JY07-12b	2,500	64	3,400	8.2	0.2	<0.2	2.3	<0.02	0.4	1.7
Leach 5	Clay Dune	JY-03-44a	18	930	130,000	13	<0.05	<0.2	3.4	0.20	0.39	0.06
Leach 5	Clay Dune	JY-03-44b	33,000	58	9,500	42	1.9	<0.2	2.6	<0.02	7.3	13
Leach 5	Clay Dune	JY-03-44c	28	89	28,000	3.7	<0.05	<0.2	2.0	<0.02	0.14	0.04
Leach 5	Coppice	JY-05-17	62	410	17,000	3.0	<0.05	<0.2	1.3	0.10	0.13	0.06
Leach 7	Coppice reference	FP-COP-ref	180	1,200	21,000	2.8	<0.05	<0.2	7.8	0.34	0.31	0.18
Bulk Leach	Discovery	JY03-01-1	130	350	23,000	4.2	<0.05	<0.2	9.3	0.30	0.03	0.93
Bulk Leach	Discovery	JY03-01-2	23	350	23,500	3.6	<0.05	<0.2	9.5	0.26	0.02	0.92
Bulk Leach	Discovery	JY03-01a	2,900	33	4,200	3.5	0.2	<0.2	1.3	0.02	0.17	1.2
Leach 4	Discovery	JY03-01a	1,600	32	4,100	1.4	0.2	<0.2	1.4	<0.02	0.41	1.8
Leach 5	Discovery	JY-05-15	14,000	130	10,000	13	0.7	<0.2	2.1	<0.02	4.7	6.7
Leach 5	Discovery	JY-05-16	31,000	110	8,200	42	1.4	<0.2	4.5	0.04	13	14
Leach 7	Discovery	JY07-09	310	620	17,000	18	<0.05	<0.2	1.4	0.08	0.48	1.1
Leach 5	Dust Trap Array	T-69	39,000	350	4,000	2,400	4.4	0.28	3.4	110	690	120
Leach 4	East of Coppice	JY03-32a	6.6	500	20,000	3.4	<0.05	<0.2	1.1	0.42	0.04	0.22
Leach 4	East of East Transect	JY03-28a-1	14,000	120	5,000	28	1.2	<0.2	3.4	0.09	0.8	11
Leach 4	East of East Transect	JY03-28a-2	14,000	120	4,600	28	1.2	<0.2	3.4	0.09	0.8	12
Leach 4	East of East Transect	JY03-28b	35,000	140	5,300	58	2.6	<0.2	5.9	0.16	1.8	22
Leach 4	East of East Transect	JY03-28c	22,000	180	7,600	31	2.0	<0.2	3.7	0.10	1.4	16
Bulk Leach	East Transect	JY03-29a	43,000	44	2,500	110	3.6	<0.2	12	0.23	1.2	29
Leach 4	East Transect	JY03-29a	13,000	42	1,800	46	1.4	<0.2	5.5	0.09	1.0	9.9
Bulk Leach	East Transect	JY03-29b	190	29	2,300	10	<0.05	<0.2	8.8	<0.02	0.03	0.12

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Al µg/L	ICP-MS As µg/L	ICP-OES B µg/L	ICP-MS Ba µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-OES Ca mg/L	ICP-MS Cd µg/L	ICP-MS Ce µg/L	ICP-MS Co µg/L
Bulk Leach	East Transect	JY03-29c	12	190	12,000	5.7	<0.05	<0.2	1.8	<0.02	<0.01	0.30
Bulk Leach	East Transect	JY03-29d	120	300	12,000	5.0	<0.05	<0.2	1.2	0.06	0.02	0.39
Leach 4	East Transect	JY03-42a	20,000	57	3,000	37	1.8	<0.2	5.2	0.10	1.6	14
Leach 5	East Transect	JY-05-21a	24,000	25	1,500	74	1.2	<0.2	10	<0.02	8.1	11
Leach 5	East Transect	JY-05-21b	88	21	2,800	3.3	<0.05	<0.2	4.1	<0.02	0.03	<0.02
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	69	19,000	270,000	660	0.2	<0.2	2.6	7.10	230	2.8
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	28	1,500	30,000	61	<0.05	<0.2	8.0	0.41	1.8	0.11
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	27	1,400	30,000	63	<0.05	<0.2	8.3	0.48	1.6	0.12
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	29	1,500	32,000	60	<0.05	<0.2	9.1	0.33	1.5	0.11
Leach 7	Near GS-15	JY07-10a	4,300	25	1,100	20	0.4	<0.2	7.6	0.03	1.3	2.8
Leach 7	Near GS-15	JY07-10b	180	81	3,000	7.2	<0.05	<0.2	1.8	<0.02	0.45	0.18
Leach 7	Near GS-18	JY07-11a	10,000	85	3,200	30	1.1	<0.2	4.6	0.05	1.5	7.4
Leach 7	Near GS-18	JY07-11b	3,500	110	5,400	8.2	0.3	<0.2	1.7	<0.02	0.34	2.3
Leach 7	North Carson Slough, North of Hwy	JY07-13	38	2,100	31,000	32	<0.05	<0.2	2.8	0.64	0.15	0.28
Leach 7	North Carson Slough, North of Hwy	JY07-13d	42	2,100	32,000	32	<0.05	<0.2	2.6	0.59	0.2	0.32
Leach 7	North Carson Slough, North of Hwy	JY07-14	390	1,200	25,000	44	<0.05	<0.2	1.9	0.41	0.88	0.52
Leach 4	Obelisk	JY03-22a	7.7	350	4,700	19	<0.05	<0.2	1.3	0.63	0.03	0.29
Leach 3	Ojo del Caballo	JY03-23a	20	2,600	37,000	59	<0.05	<0.2	19	0.50	1.6	0.18
Bulk Leach	Ojo del Caballo	JY03-24b	3,500	93	5,900	5.8	0.4	<0.2	1.9	<0.02	0.14	1.7
Leach 4	Ojo del Caballo	JY03-24b	13	87	4,900	4.5	<0.05	<0.2	2.0	<0.02	0.04	0.04
Bulk Leach	Ojo del Caballo	JY03-24c	25	1,100	18,000	5.2	<0.05	<0.2	1.3	0.26	0.01	0.09
Leach 5	Ojo del Caballo	JY-05-30	19	2,800	68,000	22	<0.05	<0.2	6.2	0.55	3.2	0.19
Leach 4	Salt Pan	JY03-25a	1,900	39	8,900	12	0.5	<0.2	2.3	0.03	0.2	4.4
Leach 4	Salt Pan	JY03-25b	46,000	56	34,000	69	3.2	<0.2	3.4	0.13	1.5	26
Leach 4	Salt Pan	JY03-25c	2,500	97	69,000	16	0.2	<0.2	1.7	<0.02	0.88	1.8
Bulk Leach	Salt Pan	JY03-26a	ins	1,000	130,000	ins	ins	ins	4.0	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	27,000	310	49,000	96	2.7	0.2	5.3	0.18	1.6	19
Bulk Leach	Salt Pan	JY03-26c	220,000	630	37,000	270	5.8	0.65	11	0.40	5.3	63
Leach 3	Salt Pan	JY03-43a-1	73,000	55	7,600	150	5.8	<0.2	14	0.30	21	60
Leach 3	Salt Pan	JY03-43a-2	93,000	63	7,400	150	6.4	<0.2	14	0.28	23	68
Leach 4	Salt Pan	JY03-43b-1	8.3	450	4,300	3.1	<0.05	<0.2	3.0	0.14	0.03	0.04
Leach 4	Salt Pan	JY03-43b-2	14	450	43,000	2.1	<0.05	<0.2	3.7	0.15	0.02	0.04
Leach 4	Salt Pan	JY03-43c	3,700	440	33,000	3.7	0.4	<0.2	0.91	0.10	0.57	2.4
Leach 5	Salt Pan	JY-05-23a	19	370	78,000	28	<0.05	<0.2	2.9	<0.02	18	0.18
Leach 5	Salt Pan	JY-05-23b	17	320	46,000	17	<0.05	<0.2	1.7	0.06	6.8	0.17
Leach 5	Salt Pan	JY-05-59a-1	41	220	27,000	14	<0.05	<0.2	2.5	0.03	0.10	0.13
Leach 5	Salt Pan	JY-05-59a-2	56	220	27,000	15	<0.05	<0.2	2.5	<0.02	0.11	0.19

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L	ICP-MS Gd µg/L	ICP-MS Ge µg/L
Bulk Leach	Ash Meadows	JY03-09-1	<1	0.22	8.7	<0.005	<0.005	<0.005	<20	0.09	<0.005	0.09
Bulk Leach	Ash Meadows	JY03-09-2	<1	0.21	9.6	<0.005	<0.005	<0.005	<20	0.08	<0.005	0.10
Leach 3	Ash Meadows	JY03-49a-1	32	9.4	63	0.57	0.29	0.13	34,000	18	0.75	2.1
Leach 3	Ash Meadows	JY03-49a-2	34	8.5	64	0.57	0.32	0.15	34,000	19	0.79	2.2
Leach 4	Ash Meadows	JY03-49b-1	1.9	0.12	4.2	n.d.	n.d.	n.d.	<20	<0.05	n.d.	0.08
Leach 4	Ash Meadows	JY03-49b-2	1.8	0.13	5.4	n.d.	n.d.	n.d.	<20	<0.05	n.d.	0.06
Leach 4	Ash Meadows	JY03-49c	2.7	0.15	4.0	n.d.	n.d.	n.d.	<20	<0.05	n.d.	<0.05
Leach 3	Ash Meadows	JY03-50a-1	<1	0.05	4.7	<0.005	<0.005	<0.005	49	0.07	<0.005	0.10
Leach 3	Ash Meadows	JY03-50a-2	<1	0.06	4.0	<0.005	<0.005	<0.005	<20	0.05	<0.005	0.10
Leach 4	Ash Meadows	JY03-50b-1	<1	0.13	8.4	n.d.	n.d.	n.d.	<20	<0.05	n.d.	0.07
Leach 4	Ash Meadows	JY03-50b-2	<1	0.14	8.4	n.d.	n.d.	n.d.	<20	<0.05	n.d.	0.08
Leach 4	Ash Meadows	JY03-50c	<1	0.14	5.2	n.d.	n.d.	n.d.	<20	<0.05	n.d.	<0.05
Leach 5	Ash Meadows	JY-05-29	2.0	0.28	22	0.08	0.11	<0.005	<20	<0.05	0.01	<0.05
Leach 7	Between GS-18 and East Transect	JY07-12a	2.6	0.12	20	0.53	0.3	0.11	3,100	2.0	0.68	0.65
Leach 7	Between GS-18 and East Transect	JY07-12b	4.1	0.48	7.3	0.02	0.01	<0.005	2,100	1.2	0.02	0.43
Leach 5	Clay Dune	JY-03-44a	1.7	0.04	9.4	0.02	<0.005	<0.005	<20	<0.05	0.02	0.08
Leach 5	Clay Dune	JY-03-44b	26	13	40	0.33	0.18	0.05	34,000	12	0.36	3.5
Leach 5	Clay Dune	JY-03-44c	3.4	<0.02	5.0	<0.005	<0.005	<0.005	20	<0.05	<0.005	<0.05
Leach 5	Coppice	JY-05-17	<1	<0.02	4.7	<0.005	<0.005	<0.005	27	<0.05	0.006	<0.05
Leach 7	Coppice reference	FP-COP-ref	2.0	0.08	2.1	0.02	0.01	0.005	200	0.10	0.02	0.06
Bulk Leach	Discovery	JY03-01-1	1.6	0.12	9.3	<0.005	<0.005	<0.005	77	0.10	<0.005	<0.05
Bulk Leach	Discovery	JY03-01-2	1.5	0.05	6.5	<0.005	<0.005	<0.005	<20	0.07	<0.005	<0.05
Bulk Leach	Discovery	JY03-01a	2.6	0.92	6.9	0.008	0.005	<0.005	1,600	0.96	0.01	0.20
Leach 4	Discovery	JY03-01a	1.5	0.36	6.6	n.d.	n.d.	n.d.	1,300	0.66	n.d.	0.25
Leach 5	Discovery	JY-05-15	12	3.9	25	0.22	0.14	0.06	15,000	4.8	0.29	1.1
Leach 5	Discovery	JY-05-16	15	8.0	38	0.58	0.36	0.12	35,000	9.6	0.80	1.7
Leach 7	Discovery	JY07-09	1.3	0.13	24	0.02	0.02	0.01	320	0.20	0.04	0.10
Leach 5	Dust Trap Array	T-69	72	0.19	2,600	42	23	9.1	3,700	6.2	57	1.3
Leach 4	East of Coppice	JY03-32a	<1	0.05	4.6	n.d.	n.d.	n.d.	<20	0.07	n.d.	<0.05
Leach 4	East of East Transect	JY03-28a-1	12	3.5	28	n.d.	n.d.	n.d.	11,000	6.8	n.d.	2.0
Leach 4	East of East Transect	JY03-28a-2	12	3.8	26	n.d.	n.d.	n.d.	11,000	7.0	n.d.	2.0
Leach 4	East of East Transect	JY03-28b	25	12	54	n.d.	n.d.	n.d.	20,000	17	n.d.	6.7
Leach 4	East of East Transect	JY03-28c	15	6.7	37	n.d.	n.d.	n.d.	7,000	11	n.d.	3.1
Bulk Leach	East Transect	JY03-29a	26	4.8	70	0.06	0.03	0.01	21,000	13	0.07	1.4
Leach 4	East Transect	JY03-29a	8.4	2.8	26	n.d.	n.d.	n.d.	11,000	6.8	n.d.	2.0
Bulk Leach	East Transect	JY03-29b	2.5	0.15	6.4	<0.005	<0.005	<0.005	190	0.1	<0.005	0.10
Bulk Leach	East Transect	JY03-29c	9.0	0.15	5.6	<0.005	<0.005	<0.005	36	0.09	<0.005	0.10

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L	ICP-MS Gd µg/L	ICP-MS Ge µg/L
Bulk Leach	East Transect	JY03-29d	14	0.14	6.7	<0.005	<0.005	<0.005	130	0.1	<0.005	<0.05
Leach 4	East Transect	JY03-42a	13	5.7	37	n.d.	n.d.	n.d.	15,000	10	n.d.	3.6
Leach 5	East Transect	JY-05-21a	13	9.0	34	0.28	0.20	0.08	36,000	9.5	0.37	2.2
Leach 5	East Transect	JY-05-21b	<1	<0.02	2.5	0.01	<0.005	<0.005	100	<0.05	<0.005	<0.05
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	4.4	3.5	110	5.5	4.1	0.7	23	0.53	5.3	0.70
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	<1	0.45	7.3	0.09	0.04	0.02	<20	<0.05	0.06	0.06
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	<1	0.39	6.7	0.09	0.07	<0.005	<20	<0.05	0.066	<0.05
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	<1	0.17	13	0.08	0.07	<0.005	<20	<0.05	<0.005	0.10
Leach 7	Near GS-15	JY07-10a	3.9	0.59	14	0.07	0.04	0.01	3,400	2.0	0.08	0.65
Leach 7	Near GS-15	JY07-10b	7.1	0.09	2.7	0.01	0.01	0.007	<200	0.09	0.02	0.09
Leach 7	Near GS-18	JY07-11a	7.5	1.6	24	0.06	0.04	0.01	8,600	5.4	0.07	1.8
Leach 7	Near GS-18	JY07-11b	5.2	0.68	6.4	0.01	0.01	<0.005	2,900	1.6	0.01	0.57
Leach 7	North Carson Slough, North of Hwy	JY07-13	2.4	0.96	23	0.01	0.03	0.006	<200	0.08	0.01	0.10
Leach 7	North Carson Slough, North of Hwy	JY07-13d	2.4	0.95	24	0.01	0.02	<0.005	<200	0.08	0.01	0.20
Leach 7	North Carson Slough, North of Hwy	JY07-14	2.5	0.42	25	0.05	0.07	0.01	560	0.20	0.05	0.24
Leach 4	Obelisk	JY03-22a	<1	0.2	7.2	n.d.	n.d.	n.d.	<20	<0.05	n.d.	0.08
Leach 3	Ojo del Caballo	JY03-23a	<1	0.24	7.2	0.12	0.09	0.01	<20	0.05	0.07	0.10
Bulk Leach	Ojo del Caballo	JY03-24b	5.2	2.1	6.1	<0.005	<0.005	<0.005	4,600	1.6	<0.005	0.75
Leach 4	Ojo del Caballo	JY03-24b	2.5	0.06	4.0	n.d.	n.d.	n.d.	<20	0.08	n.d.	0.10
Bulk Leach	Ojo del Caballo	JY03-24c	15	0.07	2.6	<0.005	<0.005	<0.005	<20	<0.05	<0.005	0.10
Leach 5	Ojo del Caballo	JY-05-30	<1	0.07	9.8	0.07	0.06	<0.005	<20	<0.05	0.04	<0.05
Leach 4	Salt Pan	JY03-25a	4.5	1.5	12	n.d.	n.d.	n.d.	5,000	2.7	n.d.	1.0
Leach 4	Salt Pan	JY03-25b	40	22	70	n.d.	n.d.	n.d.	27,000	24	n.d.	12
Leach 4	Salt Pan	JY03-25c	3.4	0.94	9.0	n.d.	n.d.	n.d.	2,200	1.2	n.d.	0.44
Bulk Leach	Salt Pan	JY03-26a	ins	ins	ins	ins	ins	ins	30	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	40	18	56	0.09	0.05	0.02	24000	21	0.10	5.9
Bulk Leach	Salt Pan	JY03-26c	129	61	180	0.19	0.11	0.05	180,000	73	0.24	21
Leach 3	Salt Pan	JY03-43a-1	45	5.7	120	1.5	0.76	0.35	57,000	33	2.0	2.5
Leach 3	Salt Pan	JY03-43a-2	54	6.3	140	1.5	0.80	0.36	61,000	38	2.1	2.8
Leach 4	Salt Pan	JY03-43b-1	1.1	0.03	2.7	n.d.	n.d.	n.d.	<20	0.05	n.d.	<0.05
Leach 4	Salt Pan	JY03-43b-2	1.0	0.04	2.4	n.d.	n.d.	n.d.	<20	<0.05	n.d.	<0.05
Leach 4	Salt Pan	JY03-43c	3.8	1.6	8.2	n.d.	n.d.	n.d.	3,900	2.0	n.d.	0.73
Leach 5	Salt Pan	JY-05-23a	2.0	0.06	7.8	0.05	0.07	<0.005	62	<0.05	0.01	<0.05
Leach 5	Salt Pan	JY-05-23b	1.0	0.07	9.2	0.07	0.07	<0.005	<20	<0.05	<0.005	<0.05
Leach 5	Salt Pan	JY-05-59a-1	<1	<0.02	19	0.01	0.01	<0.005	<20	<0.05	<0.005	0.39
Leach 5	Salt Pan	JY-05-59a-2	<1	<0.02	20	0.02	<0.005	<0.005	<20	<0.05	<0.005	0.39

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L	ICP-MS Lu µg/L	ICP-OES Li µg/L	ICP-MS Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L	ICP-OES Na mg/L	ICP-MS Nb µg/L
Bulk Leach	Ash Meadows	JY03-09-1	<0.005	120	<0.01	<0.1	10	1.3	1.9	320	4,000	1.2
Bulk Leach	Ash Meadows	JY03-09-2	<0.005	120	<0.01	<0.1	<10	1.2	2.1	330	4,100	1.2
Leach 3	Ash Meadows	JY03-49a-1	0.10	39	4.7	<0.1	1,100	340	1,800	0.43	180	<0.02
Leach 3	Ash Meadows	JY03-49a-2	0.11	41	4.8	<0.1	1,200	370	1,900	0.33	190	<0.02
Leach 4	Ash Meadows	JY03-49b-1	n.d.	44	<0.01	n.d.	<10	0.02	<0.2	70	860	<0.2
Leach 4	Ash Meadows	JY03-49b-2	n.d.	44	<0.01	n.d.	<10	0.03	<0.2	69	870	<0.2
Leach 4	Ash Meadows	JY03-49c	n.d.	55	<0.01	n.d.	<10	0.02	<0.2	150	750	<0.2
Leach 3	Ash Meadows	JY03-50a-1	<0.005	8.2	0.03	<0.1	<10	0.18	0.7	8.1	790	<0.02
Leach 3	Ash Meadows	JY03-50a-2	<0.005	8.4	<0.01	<0.1	<10	0.13	0.2	7.7	780	<0.02
Leach 4	Ash Meadows	JY03-50b-1	n.d.	25	<0.01	n.d.	<10	0.06	0.2	74	1,500	0.2
Leach 4	Ash Meadows	JY03-50b-2	n.d.	25	<0.01	n.d.	<10	0.05	<0.2	74	1,500	0.2
Leach 4	Ash Meadows	JY03-50c	n.d.	39	0.03	n.d.	<10	0.07	0.3	140	880	<0.2
Leach 5	Ash Meadows	JY-05-29	0.01	220	0.02	<0.1	23	2.1	9.4	5,800	6,700	<0.2
Leach 7	Between GS-18 and East Transect	JY07-12a	0.10	5.2	4.1	<0.1	140	27	190	<2	82	<0.2
Leach 7	Between GS-18 and East Transect	JY07-12b	<0.005	13	0.14	<0.1	70	14	110	<2	310	0.3
Leach 5	Clay Dune	JY-03-44a	<0.005	27	<0.01	<0.1	300	0.07	0.3	210	nr	<0.2
Leach 5	Clay Dune	JY-03-44b	0.06	34	2.7	<0.1	920	89	980	2.8	1,200	2.7
Leach 5	Clay Dune	JY-03-44c	<0.005	17	<0.01	<0.1	22	0.07	0.5	7	2,400	<0.2
Leach 5	Coppice	JY-05-17	<0.005	24	0.06	<0.1	<10	0.08	1.4	170	2,100	<0.2
Leach 7	Coppice reference	FP-COP-ref	<0.005	23	0.12	<0.1	<50	0.26	8.2	540	1,700	<0.2
Bulk Leach	Discovery	JY03-01-1	<0.005	22	<0.01	<0.1	<10	0.46	4.6	190	1,900	0.4
Bulk Leach	Discovery	JY03-01-2	<0.005	23	<0.01	<0.1	<10	0.08	0.7	190	1,900	0.3
Bulk Leach	Discovery	JY03-01a	<0.005	8.4	0.08	<0.1	31	5.9	84	6.8	610	0.4
Leach 4	Discovery	JY03-01a	n.d.	8.3	0.15	n.d.	35	6.5	99	4.1	520	0.3
Leach 5	Discovery	JY-05-15	0.04	23	2.1	<0.1	220	28	470	40	990	0.5
Leach 5	Discovery	JY-05-16	0.08	32	5.9	<0.1	450	64	970	9.1	300	2.3
Leach 7	Discovery	JY07-09	0.006	27	0.16	<0.1	<50	0.78	15	120	4,100	1.6
Leach 5	Dust Trap Array	T-69	7.8	45	390	2.5	240	110	5,800	4.5	180	0.9
Leach 4	East of Coppice	JY03-32a	n.d.	24	0.02	n.d.	<10	0.02	<0.2	340	1,800	0.4
Leach 4	East of East Transect	JY03-28a-1	n.d.	23	0.18	n.d.	380	82	770	8.9	250	0.8
Leach 4	East of East Transect	JY03-28a-2	n.d.	23	0.17	n.d.	380	83	790	8.4	250	0.9
Leach 4	East of East Transect	JY03-28b	n.d.	26	0.61	n.d.	690	160	1,500	4.6	160	9.2
Leach 4	East of East Transect	JY03-28c	n.d.	21	0.33	n.d.	220	110	1,100	7.4	240	3.8
Bulk Leach	East Transect	JY03-29a	0.01	25	0.41	<0.1	1,200	310	2,300	<2	180	0.9
Leach 4	East Transect	JY03-29a	n.d.	11	0.28	n.d.	380	88	660	<2	120	0.3
Bulk Leach	East Transect	JY03-29b	<0.005	18	0.02	<0.1	28	0.69	5.7	<2	1,700	<0.2
Bulk Leach	East Transect	JY03-29c	<0.005	53	<0.01	<0.1	40	0.06	0.7	6.4	3,300	<0.2

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L	ICP-MS Lu µg/L	ICP-OES Li µg/L	ICP-MS Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L	ICP-OES Na mg/L	ICP-MS Nb µg/L
Bulk Leach	East Transect	JY03-29d	<0.005	56	<0.01	<0.1	12	0.31	4.1	46	1,800	<0.2
Leach 4	East Transect	JY03-42a	n.d.	16	0.32	n.d.	530	120	910	<2	190	3.2
Leach 5	East Transect	JY-05-21a	0.068	27	2.6	<0.1	610	90	770	<2	120	1.1
Leach 5	East Transect	JY-05-21b	<0.005	12	<0.01	<0.1	13	0.36	2.8	<2	940	<0.2
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	1.2	1,500	31	0.9	480	0.38	15	5,800	56,000	3.5
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.01	300	0.1	<0.1	1,400	0.01	0.8	400	5,500	<0.2
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.006	300	0.11	<0.1	1,400	<0.01	0.4	410	5,500	<0.2
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.02	190	0.05	<0.1	820	0.03	1.0	380	6,000	<0.2
Leach 7	Near GS-15	JY07-10a	0.01	6.7	0.48	<0.1	120	25	170	<2	160	0.3
Leach 7	Near GS-15	JY07-10b	<0.005	19	0.24	<0.1	<50	0.74	8.4	19	1,000	<0.2
Leach 7	Near GS-18	JY07-11a	0.01	11	0.44	<0.1	330	59	550	<2	130	0.2
Leach 7	Near GS-18	JY07-11b	<0.005	12	0.07	<0.1	99	18	140	2.5	290	0.4
Leach 7	North Carson Slough, North of Hwy	JY07-13	0.006	600	0.04	<0.1	190	2.6	2.4	1,200	6,100	0.5
Leach 7	North Carson Slough, North of Hwy	JY07-13d	<0.005	590	0.07	<0.1	170	2.7	2.8	1,200	5,600	0.4
Leach 7	North Carson Slough, North of Hwy	JY07-14	0.01	240	0.28	<0.1	190	0.63	9.6	640	7,400	0.4
Leach 4	Obelisk	JY03-22a	n.d.	90	<0.01	n.d.	<10	0.06	0.2	400	2,400	0.7
Leach 3	Ojo del Caballo	JY03-23a	0.02	120	0.09	<0.1	<10	0.05	1.2	330	3,400	1.0
Bulk Leach	Ojo del Caballo	JY03-24b	<0.005	17	0.02	<0.1	89	17	150	3.9	920	0.7
Leach 4	Ojo del Caballo	JY03-24b	n.d.	15	0.02	n.d.	10	0.01	0.2	6.8	750	<0.2
Bulk Leach	Ojo del Caballo	JY03-24c	<0.005	33	<0.01	<0.1	<10	0.02	2.7	210	2,200	0.3
Leach 5	Ojo del Caballo	JY-05-30	0.02	140	0.06	<0.1	<10	0.15	1.1	530	5,500	<0.2
Leach 4	Salt Pan	JY03-25a	n.d.	13	0.06	n.d.	230	28	290	2.5	480	0.4
Leach 4	Salt Pan	JY03-25b	n.d.	26	0.56	n.d.	1,400	160	1,800	4.1	420	21
Leach 4	Salt Pan	JY03-25c	n.d.	15	0.06	n.d.	120	11	130	3.6	1,000	0.5
Bulk Leach	Salt Pan	JY03-26a	ins	17	ins	ins	130	0.34	<10	140	5,900	ins
Bulk Leach	Salt Pan	JY03-26b	0.02	38	0.6	<0.1	2,300	160	1,700	33	990	11.7
Bulk Leach	Salt Pan	JY03-26c	0.04	180	1.7	<0.1	10,000	640	5,800	51	640	42
Leach 3	Salt Pan	JY03-43a-1	0.28	63	13	0.1	3,400	360	3,600	2.0	430	0.4
Leach 3	Salt Pan	JY03-43a-2	0.28	67	14	0.1	3,500	460	4,300	0.48	430	0.5
Leach 4	Salt Pan	JY03-43b-1	n.d.	18	0.02	n.d.	230	0.01	<0.2	120	1,100	1.0
Leach 4	Salt Pan	JY03-43b-2	n.d.	18	0.01	n.d.	220	0.02	0.3	120	1,100	0.8
Leach 4	Salt Pan	JY03-43c	n.d.	18	0.06	n.d.	460	16	170	81	780	1.3
Leach 5	Salt Pan	JY-05-23a	<0.005	24	0.01	<0.1	16	0.25	0.5	70	8,400	<0.2
Leach 5	Salt Pan	JY-05-23b	0.005	12	0.02	<0.1	14	0.18	0.7	120	6,700	<0.2
Leach 5	Salt Pan	JY-05-59a-1	<0.005	16	<0.01	<0.1	340	0.12	0.6	110	9,600	<0.2
Leach 5	Salt Pan	JY-05-59a-2	<0.005	16	<0.01	<0.1	340	0.12	0.9	99	9,700	<0.2

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-MS P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L	ICP-MS Se µg/L	ICP-MS SiO ₂ mg/L	ICP-MS Sm µg/L
Bulk Leach	Ash Meadows	JY03-09-1	<0.01	0.9	12.5	0.20	<0.01	43	2.6	<0.6	12	19	<0.01
Bulk Leach	Ash Meadows	JY03-09-2	<0.01	0.8	12.5	0.20	<0.01	46	2.6	0.8	12	17	<0.01
Leach 3	Ash Meadows	JY03-49a-1	3.9	44	1.0	15	1.1	220	0.1	30	<1	280	0.78
Leach 3	Ash Meadows	JY03-49a-2	4.0	47	1.0	16	1.2	230	0.1	31	<1	290	0.81
Leach 4	Ash Meadows	JY03-49b-1	n.d.	<0.4	0.8	<0.05	n.d.	20	0.6	1.7	3.1	17	n.d.
Leach 4	Ash Meadows	JY03-49b-2	n.d.	<0.4	0.8	<0.05	n.d.	20	0.8	1.9	3.3	17	n.d.
Leach 4	Ash Meadows	JY03-49c	n.d.	<0.4	1.4	<0.05	n.d.	23	0.7	2.2	3.8	20	n.d.
Leach 3	Ash Meadows	JY03-50a-1	<0.01	0.3	0.4	<0.05	<0.01	8.6	0.4	1.2	1.3	13	<0.01
Leach 3	Ash Meadows	JY03-50a-2	<0.01	0.3	0.4	<0.05	<0.01	8.3	0.4	1.2	1.2	13	<0.01
Leach 4	Ash Meadows	JY03-50b-1	n.d.	<0.4	0.7	<0.05	n.d.	14	0.6	1.1	2.3	8.9	n.d.
Leach 4	Ash Meadows	JY03-50b-2	n.d.	<0.4	0.7	<0.05	n.d.	14	0.7	1.1	2.2	8.7	n.d.
Leach 4	Ash Meadows	JY03-50c	n.d.	0.4	1.0	<0.05	n.d.	18	0.4	1.1	2.8	8.9	n.d.
Leach 5	Ash Meadows	JY-05-29	0.07	4.1	9.5	1.5	<0.01	45	3.2	2.6	70	13	0.02
Leach 7	Between GS-18 and East Transect	JY07-12a	3.6	4.4	0.2	3.2	0.94	5.0	<0.3	2.6	<1	33	0.69
Leach 7	Between GS-18 and East Transect	JY07-12b	0.13	2.6	0.3	0.79	0.03	11	0.6	4.8	<1	84	0.03
Leach 5	Clay Dune	JY-03-44a	0.02	<0.4	1.4	<0.05	<0.01	7.9	<0.3	2.9	10	27	<0.01
Leach 5	Clay Dune	JY-03-44b	2.4	24	0.3	8.3	0.68	120	<0.3	45	1.1	440	0.42
Leach 5	Clay Dune	JY-03-44c	<0.01	<0.4	0.4	<0.05	<0.01	4.9	<0.3	3.4	2.5	32	<0.01
Leach 5	Coppice	JY-05-17	0.07	<0.4	1.8	<0.05	<0.01	5.3	<0.3	3.4	15	38	0.03
Leach 7	Coppice reference	FP-COP-ref	0.1	<0.4	2.0	0.20	0.03	8.6	1.3	3.7	19	58	0.03
Bulk Leach	Discovery	JY03-01-1	<0.01	0.7	2.9	0.20	<0.01	10	0.9	<0.6	13	45	<0.01
Bulk Leach	Discovery	JY03-01-2	<0.01	0.6	2.8	0.08	<0.01	9.7	0.9	<0.6	12	45	<0.01
Bulk Leach	Discovery	JY03-01a	0.06	1.9	0.5	0.76	0.02	13	0.7	<0.6	<1	58	0.01
Leach 4	Discovery	JY03-01a	n.d.	2.0	0.3	0.71	n.d.	8.9	0.5	7.2	<1	52	n.d.
Leach 5	Discovery	JY-05-15	1.9	10	0.8	4.3	0.49	48	<0.3	16	1.8	200	0.24
Leach 5	Discovery	JY-05-16	4.8	22	0.9	11	1.3	86	<0.3	39	<1	350	0.83
Leach 7	Discovery	JY07-09	0.16	1.2	4.5	0.54	0.04	13	2.3	2.1	2.1	22	0.04
Leach 5	Dust Trap Array	T-69	310	500	38	2,400	78	37	21	6.1	21	43	55
Leach 4	East of Coppice	JY03-32a	n.d.	<0.4	1.9	0.05	n.d.	7.5	0.8	5.5	26	44	n.d.
Leach 4	East of East Transect	JY03-28a-1	n.d.	14	0.5	4.5	n.d.	49	0.44	19	1.1	210	n.d.
Leach 4	East of East Transect	JY03-28a-2	n.d.	14	0.5	4.5	n.d.	52	0.47	19	1.4	230	n.d.
Leach 4	East of East Transect	JY03-28b	n.d.	29	0.5	9.9	n.d.	120	2.6	58	<1	960	n.d.
Leach 4	East of East Transect	JY03-28c	n.d.	20	0.6	6.5	n.d.	78	1.2	26	<1	420	n.d.
Bulk Leach	East Transect	JY03-29a	0.35	46	0.7	16	0.1	120	<0.3	2.4	<1	340	0.08
Leach 4	East Transect	JY03-29a	n.d.	14	0.2	4.5	n.d.	36	<0.3	12	<1	180	n.d.
Bulk Leach	East Transect	JY03-29b	0.01	<0.4	0.08	0.2	<0.01	11	0.3	<0.6	8.9	21	<0.01
Bulk Leach	East Transect	JY03-29c	<0.01	<0.4	0.5	0.07	<0.01	26	0.9	<0.6	25	40	<0.01

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-MS P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L	ICP-MS Se µg/L	ICP-MS SiO ₂ mg/L	ICP-MS Sm µg/L
Bulk Leach	East Transect	JY03-29d	<0.01	<0.4	0.8	0.2	<0.01	18	0.8	<0.6	8.6	32	<0.01
Leach 4	East Transect	JY03-42a	n.d.	19	0.2	6	n.d.	59	1.1	27	<1	460	n.d.
Leach 5	East Transect	JY-05-21a	2.2	19	0.2	8.0	0.66	83	<0.3	37	1.0	360	0.53
Leach 5	East Transect	JY-05-21b	<0.01	<0.4	0.1	<0.05	<0.01	4.7	<0.3	1.9	1.5	23	0.01
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	25	3.3	18.5	29	6.8	1,200	39	35	<1	200	4.6
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.27	<0.4	0.8	0.06	0.03	170	5.0	24	27	310	0.11
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.23	<0.4	0.8	<0.05	0.03	170	5.0	26	29	310	0.09
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.09	<0.4	1.1	0.06	<0.01	90	3.7	21	20	270	0.07
Leach 7	Near GS-15	JY07-10a	0.4	4.2	0.1	1.6	0.11	10	0.4	5.8	<1	120	0.09
Leach 7	Near GS-15	JY07-10b	0.21	<0.4	0.3	0.1	0.06	8.8	0.5	1.6	6.0	27	0.04
Leach 7	Near GS-18	JY07-11a	0.38	11	0.4	3.7	0.11	24	0.3	9.2	<1	170	0.08
Leach 7	Near GS-18	JY07-11b	0.07	3.4	0.6	1.1	0.02	13	0.6	5.1	<1	110	0.01
Leach 7	North Carson Slough, North of Hwy	JY07-13	0.02	<0.4	0.6	0.55	0.01	710	8.1	0.9	32	5.1	0.01
Leach 7	North Carson Slough, North of Hwy	JY07-13d	0.04	<0.4	0.7	0.61	0.01	720	8.0	0.8	26	5.4	0.02
Leach 7	North Carson Slough, North of Hwy	JY07-14	0.25	0.8	2.1	0.96	0.06	150	9.5	2.5	29	27	0.06
Leach 4	Obelisk	JY03-22a	n.d.	<0.4	1.5	0.06	n.d.	48	1.0	2.5	13	16	n.d.
Leach 3	Ojo del Caballo	JY03-23a	0.11	0.9	4.8	0.20	0.03	43	18	27	9.3	210	0.04
Bulk Leach	Ojo del Caballo	JY03-24b	0.02	3.3	0.4	1.2	<0.01	27	1.4	1	8.1	130	<0.01
Leach 4	Ojo del Caballo	JY03-24b	n.d.	<0.4	0.3	<0.05	n.d.	9	1.2	6.6	8.3	58	n.d.
Bulk Leach	Ojo del Caballo	JY03-24c	<0.01	<0.4	0.9	0.09	<0.01	11	1.4	<0.6	47	36	<0.01
Leach 5	Ojo del Caballo	JY-05-30	0.15	0.5	7.2	0.4	0.02	43	0.5	1.8	21	12	0.01
Leach 4	Salt Pan	JY03-25a	n.d.	5.6	0.2	1.8	n.d.	21	0.5	13	<1	120	n.d.
Leach 4	Salt Pan	JY03-25b	n.d.	37	0.2	11	n.d.	190	5.9	110	<1	1,500	n.d.
Leach 4	Salt Pan	JY03-25c	n.d.	2.5	0.2	0.73	n.d.	15	1.2	9.9	<1	86	n.d.
Bulk Leach	Salt Pan	JY03-26a	ins	ins	1.8	ins	ins	ins	ins	ins	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	0.5	35	0.6	16	0.14	230	2.5	5.3	<1	850	0.10
Bulk Leach	Salt Pan	JY03-26c	1.4	120	2.2	58	0.41	750	4.9	21	<1	3,000	0.26
Leach 3	Salt Pan	JY03-43a-1	9.7	87	0.8	36	2.8	240	0.2	37	<1	270	1.9
Leach 3	Salt Pan	JY03-43a-2	10	97	1.0	37	2.9	270	0.2	40	<1	320	2.0
Leach 4	Salt Pan	JY03-43b-1	n.d.	<0.4	0.3	<0.05	n.d.	6.0	0.6	3.2	5.4	28	n.d.
Leach 4	Salt Pan	JY03-43b-2	n.d.	<0.4	0.3	<0.05	n.d.	6.0	0.6	3	5.3	26	n.d.
Leach 4	Salt Pan	JY03-43c	n.d.	3.8	0.5	1.0	n.d.	22	0.6	11	3.3	100	n.d.
Leach 5	Salt Pan	JY-05-23a	0.01	0.4	0.8	0.51	<0.01	8.3	<0.3	1.9	11	14	<0.01
Leach 5	Salt Pan	JY-05-23b	0.02	<0.4	0.5	0.06	<0.01	5.7	<0.3	2.6	12	17	0.01
Leach 5	Salt Pan	JY-05-59a-1	0.02	<0.4	0.4	<0.05	<0.01	5.3	<0.3	3.2	17	7.2	<0.01
Leach 5	Salt Pan	JY-05-59a-2	<0.01	<0.4	0.4	<0.05	<0.01	5.3	<0.3	3.4	19	7.0	0.02

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-OES Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L	ICP-MS Tl µg/L	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L
Bulk Leach	Ash Meadows	JY03-09-1	460	<0.02	<0.005	<0.2	42	0.2	<0.005	210	450	61
Bulk Leach	Ash Meadows	JY03-09-2	390	<0.02	<0.005	<0.2	44	0.2	<0.005	220	480	63
Leach 3	Ash Meadows	JY03-49a-1	570	<0.02	0.10	4.8	500	0.7	0.04	0.7	110	0.2
Leach 3	Ash Meadows	JY03-49a-2	620	<0.02	0.11	4.9	420	0.8	0.04	0.7	110	0.1
Leach 4	Ash Meadows	JY03-49b-1	76	n.d.	n.d.	<0.2	15	<0.1	n.d.	19	140	n.d.
Leach 4	Ash Meadows	JY03-49b-2	76	n.d.	n.d.	<0.2	14.8	<0.1	n.d.	17	140	n.d.
Leach 4	Ash Meadows	JY03-49c	64	n.d.	n.d.	<0.2	11.1	<0.1	n.d.	38	140	n.d.
Leach 3	Ash Meadows	JY03-50a-1	150	<0.02	<0.005	0.1	20	<0.05	<0.005	0.4	17	1.0
Leach 3	Ash Meadows	JY03-50a-2	160	<0.02	<0.005	<0.2	19.7	<0.05	<0.005	0.4	17	1.0
Leach 4	Ash Meadows	JY03-50b-1	140	n.d.	n.d.	<0.2	29	<0.1	n.d.	14	33	n.d.
Leach 4	Ash Meadows	JY03-50b-2	140	n.d.	n.d.	<0.2	26	<0.1	n.d.	14	33	n.d.
Leach 4	Ash Meadows	JY03-50c	74	n.d.	n.d.	<0.2	10.5	<0.1	n.d.	67	58	n.d.
Leach 5	Ash Meadows	JY05-29	760	<0.02	<0.005	0.8	90	0.7	0.02	1,700	460	150
Leach 7	Between GS-18 and East Transect	JY07-12a	520	<0.02	0.10	1.8	107	<0.1	0.04	0.1	53	0.7
Leach 7	Between GS-18 and East Transect	JY07-12b	130	0.04	<0.005	0.4	74	<0.1	<0.005	<0.1	160	2.1
Leach 5	Clay Dune	JY03-44a	170	0.50	<0.005	1.5	49	<0.1	<0.005	17	41	37
Leach 5	Clay Dune	JY03-44b	86	<0.02	0.05	1.9	880	0.4	0.02	0.5	47	<0.5
Leach 5	Clay Dune	JY03-44c	66	<0.02	<0.005	0.3	26	<0.1	<0.005	0.9	26	2.4
Leach 5	Coppice	JY05-17	32	<0.02	<0.005	<0.2	16.5	<0.1	<0.005	40	100	4.7
Leach 7	Coppice reference	FP-COP-ref	100	<0.02	<0.005	<0.2	14.8	<0.1	<0.005	120	240	20
Bulk Leach	Discovery	JY03-01-1	220	<0.02	<0.005	<0.2	18.4	<0.1	<0.005	47	78	9.1
Bulk Leach	Discovery	JY03-01-2	220	<0.02	<0.005	<0.2	14.1	<0.1	<0.005	44	81	9.2
Bulk Leach	Discovery	JY03-01a	<1	<0.02	<0.005	<0.2	75	<0.1	<0.005	1.1	41	1.4
Leach 4	Discovery	JY03-01a	19	n.d.	n.d.	<0.2	42	<0.1	n.d.	0.6	41	n.d.
Leach 5	Discovery	JY05-15	45	<0.02	0.03	0.8	320	<0.1	0.02	16	47	2.0
Leach 5	Discovery	JY05-16	84	<0.02	0.093	2.3	680	0.3	0.05	4.2	53	0.6
Leach 7	Discovery	JY07-09	100	0.05	<0.005	<0.2	62	<0.1	0.005	190	140	17
Leach 5	Dust Trap Array	T-69	1300	0.37	7.6	3.9	27	0.5	2.8	9.0	40	6.4
Leach 4	East of Coppice	JY03-32a	32	n.d.	n.d.	<0.2	14.7	<0.1	n.d.	60	250	n.d.
Leach 4	East of East Transect	JY03-28a-1	160	n.d.	n.d.	0.3	350	0.2	n.d.	0.4	100	n.d.
Leach 4	East of East Transect	JY03-28a-2	160	n.d.	n.d.	0.3	360	0.2	n.d.	0.4	99	n.d.
Leach 4	East of East Transect	JY03-28b	250	n.d.	n.d.	0.6	1,230	0.5	n.d.	0.5	130	n.d.
Leach 4	East of East Transect	JY03-28c	140	n.d.	n.d.	0.4	620	0.3	n.d.	0.5	190	n.d.
Bulk Leach	East Transect	JY03-29a	650	0.06	0.01	0.2	260	0.5	0.005	0.2	60	<0.5
Leach 4	East Transect	JY03-29a	240	n.d.	n.d.	0.4	310	0.2	n.d.	0.1	74	n.d.
Bulk Leach	East Transect	JY03-29b	660	0.04	<0.005	<0.2	37	<0.1	<0.005	<0.1	85	<0.5
Bulk Leach	East Transect	JY03-29c	310	0.05	<0.005	<0.2	42	0.1	<0.005	3.1	200	3.7

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-OES Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L	ICP-MS Tl µg/L	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L
Bulk Leach	East Transect	JY03-29d	96	0.04	<0.005	<0.2	13	0.1	<0.005	24	180	4.6
Leach 4	East Transect	JY03-42a	240	n.d.	n.d.	0.5	610	0.3	n.d.	0.1	160	n.d.
Leach 5	East Transect	JY-05-21a	400	<0.02	0.06	1.2	620	0.3	0.02	0.3	46	<0.5
Leach 5	East Transect	JY-05-21b	230	<0.02	<0.005	<0.2	19.2	<0.1	<0.005	<0.1	140	<0.5
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	740	5.1	0.94	146	300	2.2	0.63	3,200	3,300	510
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	390	1.3	<0.005	0.6	38	<0.1	<0.005	200	310	38
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	410	1.2	<0.005	0.4	42	<0.1	<0.005	210	310	39
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	350	0.50	<0.005	0.4	62	<0.1	<0.005	230	260	36
Leach 7	Near GS-15	JY07-10a	180	0.03	0.01	0.3	115	<0.1	0.005	<0.1	53	1.4
Leach 7	Near GS-15	JY07-10b	100	0.03	<0.005	<0.2	29	<0.1	<0.005	2.9	190	5.8
Leach 7	Near GS-18	JY07-11a	180	0.04	0.01	0.3	280	0.1	0.01	0.2	140	1.6
Leach 7	Near GS-18	JY07-11b	110	0.02	<0.005	<0.2	100	<0.1	<0.005	<0.1	200	2.8
Leach 7	North Carson Slough, North of Hwy	JY07-13	370	0.09	<0.005	0.4	84	0.6	0.006	330	28	36
Leach 7	North Carson Slough, North of Hwy	JY07-13d	370	0.07	<0.005	0.3	84	0.6	<0.005	340	28	36
Leach 7	North Carson Slough, North of Hwy	JY07-14	250	0.20	0.01	1.3	127	0.2	0.02	94	240	23
Leach 4	Obelisk	JY03-22a	120	n.d.	n.d.	<0.2	30	0.1	n.d.	230	74	n.d.
Leach 3	Ojo del Caballo	JY03-23a	450	0.58	0.01	1.7	38	0.4	0.01	170	1,100	99
Bulk Leach	Ojo del Caballo	JY03-24b	60	0.10	<0.005	<0.2	172	0.3	<0.005	0.3	580	1.0
Leach 4	Ojo del Caballo	JY03-24b	58	n.d.	n.d.	<0.2	12.2	<0.1	n.d.	0.5	570	n.d.
Bulk Leach	Ojo del Caballo	JY03-24c	67	0.20	<0.005	<0.2	15.5	0.2	<0.005	80	880	28
Leach 5	Ojo del Caballo	JY-05-30	270	<0.02	<0.005	<0.2	30	<0.1	0.01	260	730	80
Leach 4	Salt Pan	JY03-25a	110	n.d.	n.d.	<0.2	163	<0.1	n.d.	0.1	40	n.d.
Leach 4	Salt Pan	JY03-25b	110	n.d.	n.d.	0.8	2,100	0.6	n.d.	0.4	83	n.d.
Leach 4	Salt Pan	JY03-25c	67	n.d.	n.d.	0.4	91	<0.1	n.d.	0.4	110	n.d.
Bulk Leach	Salt Pan	JY03-26a	170	ins	ins	ins	ins	ins	ins	ins	45	ins
Bulk Leach	Salt Pan	JY03-26b	230	0.82	0.01	0.6	1,760	0.7	0.01	2.9	140	14
Bulk Leach	Salt Pan	JY03-26c	310	2.3	0.03	1.6	6,600	2.7	0.02	4.3	240	22
Leach 3	Salt Pan	JY03-43a-1	450	<0.02	0.28	9.8	400	1.0	0.11	0.9	26	0.8
Leach 3	Salt Pan	JY03-43a-2	460	<0.02	0.29	9.7	530	1.0	0.10	0.7	33	0.2
Leach 4	Salt Pan	JY03-43b-1	130	n.d.	n.d.	<0.2	8.3	<0.1	n.d.	4.5	65	n.d.
Leach 4	Salt Pan	JY03-43b-2	140	n.d.	n.d.	<0.2	8.1	<0.1	n.d.	4.7	64	n.d.
Leach 4	Salt Pan	JY03-43c	23	n.d.	n.d.	0.3	150	<0.1	n.d.	3.1	69	n.d.
Leach 5	Salt Pan	JY-05-23a	130	0.36	<0.005	1.7	73	<0.1	0.02	8.2	16	18
Leach 5	Salt Pan	JY-05-23b	98	0.06	<0.005	1.2	87	<0.1	0.01	8.5	26	23
Leach 5	Salt Pan	JY-05-59a-1	220	<0.02	<0.005	<0.2	210	<0.1	<0.005	5.6	10	25
Leach 5	Salt Pan	JY-05-59a-2	200	<0.02	<0.005	<0.2	200	<0.1	<0.005	5.2	11	23

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L	IC Cl mg/L	IC F mg/L	IC NO ₃ mg/L	IC SO ₄ mg/L	pH	Alkalinity mg/L CaCO ₃
Bulk Leach	Ash Meadows	JY03-09-1	0.02	<0.005	30	6.3	590	5.5	11	3,900	n.d.	3,800
Bulk Leach	Ash Meadows	JY03-09-2	0.02	<0.005	130	8.2	610	5.4	12	4,200	n.d.	3,800
Leach 3	Ash Meadows	JY03-49a-1	3.6	0.27	220	6.9	17	2.3	2.7	220	9.79	140
Leach 3	Ash Meadows	JY03-49a-2	3.9	0.3	220	4.9	9.1	2.3	1.1	200	n.d.	230
Leach 4	Ash Meadows	JY03-49b-1	<0.01	n.d.	10	0.2	120	2.7	7.6	1,300	10.30	610
Leach 4	Ash Meadows	JY03-49b-2	<0.01	n.d.	5.4	<0.2	120	2.8	7.4	1,200	n.d.	480
Leach 4	Ash Meadows	JY03-49c	<0.01	n.d.	6.4	<0.2	130	2.6	8.0	900	10.33	700
Leach 3	Ash Meadows	JY03-50a-1	<0.01	<0.005	19	0.3	81	5.3	<0.2	1,700	10.01	120
Leach 3	Ash Meadows	JY03-50a-2	0.02	<0.005	5.2	0.1	80	5.4	<0.2	1,800	n.d.	n.d.
Leach 4	Ash Meadows	JY03-50b-1	<0.01	n.d.	8.8	<0.2	190	2.9	7.7	3,200	10.19	400
Leach 4	Ash Meadows	JY03-50b-2	<0.01	n.d.	9.3	<0.2	180	2.9	8.1	3,300	n.d.	n.d.
Leach 4	Ash Meadows	JY03-50c	<0.01	n.d.	9.1	<0.2	410	2.7	8.5	1,200	10.04	620
Leach 5	Ash Meadows	JY-05-29	0.6	0.16	12	49	1,400	4.0	102	6,400	10.00	6,200
Leach 7	Between GS-18 and East Transect	JY07-12a	2.7	0.27	67	1.7	3.4	0.9	1.5	82	9.16	130
Leach 7	Between GS-18 and East Transect	JY07-12b	0.09	0.01	11	2.4	16	2.2	3.3	590	8.33	180
Leach 5	Clay Dune	JY-03-44a	0.07	0.008	7.4	1.4	880	19	5.7	3,800	10.50	3,200
Leach 5	Clay Dune	JY-03-44b	1.5	0.16	100	23	9.7	2.7	2.0	1,500	10.00	900
Leach 5	Clay Dune	JY-03-44c	0.02	<0.005	4.0	0.5	31	2.2	2.8	2,500	10.00	2,600
Leach 5	Coppice	JY-05-17	0.02	0.01	3.0	0.4	1,500	2.2	6.8	1,800	10.00	700
Leach 7	Coppice reference	FP-COP-ref	0.08	0.009	0.7	<0.2	2,200	0.4	22	910	9.70	970
Bulk Leach	Discovery	JY03-01-1	<0.01	<0.005	29	<0.2	1,700	<2.4	11	800	n.d.	850
Bulk Leach	Discovery	JY03-01-2	<0.01	<0.005	28	<0.2	1,700	<2.4	11	820	n.d.	900
Bulk Leach	Discovery	JY03-01a	0.04	<0.005	260	3.0	650	1.0	1.1	190	10.00	250
Leach 4	Discovery	JY03-01a	0.1	n.d.	19	2.9	620	1.7	6.0	210	n.d.	44
Leach 5	Discovery	JY-05-15	0.9	0.13	58	11	320	2.1	3.0	1,000	10.00	530
Leach 5	Discovery	JY-05-16	2.4	0.38	91	32	97	2.2	4.5	160	9.50	290
Leach 7	Discovery	JY07-09	0.2	0.05	5.4	8.4	1,300	<.08	25	4,500	9.98	4,400
Leach 5	Dust Trap Array	T-69	210	18.2	61,000	5.3	320	0.7	3,200	2,100	n.d.	n.d.
Leach 4	East of Coppice	JY03-32a	<0.01	n.d.	8.5	<0.2	2,400	4.2	21	990	9.94	870
Leach 4	East of East Transect	JY03-28a-1	0.3	n.d.	71	9.2	48	1.8	7.0	390	9.77	170
Leach 4	East of East Transect	JY03-28a-2	0.32	n.d.	77	11	48	1.9	7.0	390	n.d.	63
Leach 4	East of East Transect	JY03-28b	0.68	n.d.	150	47	20	2.1	2.9	170	9.89	270
Leach 4	East of East Transect	JY03-28c	0.31	n.d.	98	26	31	2.1	2.3	330	9.95	240
Bulk Leach	East Transect	JY03-29a	0.33	0.04	520	4.4	2.5	1.6	2.9	200	9.74	130
Leach 4	East Transect	JY03-29a	0.52	n.d.	79	3.8	4.2	1.4	3.0	180	n.d.	66
Bulk Leach	East Transect	JY03-29b	0.01	<0.005	49	0.4	59	2.7	<3.6	3,700	n.d.	n.d.
Bulk Leach	East Transect	JY03-29c	<0.01	<0.005	41	<0.2	910	<4.0	2.5	4,700	n.d.	1,030

Table 12D. Composition of the DI-leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.d., not determined; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L	IC Cl mg/L	IC F mg/L	IC NO ₃ mg/L	IC SO ₄ mg/L	pH	Alkalinity mg/L CaCO ₃
Bulk Leach	East Transect	JY03-29d	<0.01	<0.005	57	<0.2	770	2.4	17	810	n.d.	1,900
Leach 4	East Transect	JY03-42a	0.63	n.d.	100	14	7.4	2.8	2.7	320	9.79	160
Leach 5	East Transect	JY-05-21a	1.5	0.19	95	16	7.5	2.2	0.9	140	8.00	110
Leach 5	East Transect	JY-05-21b	<0.01	<0.005	2.6	0.3	5.7	0.7	0.7	1700	8.50	120
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	35	4.9	14	12	14,000	140	103	32,000	10.30	66,000
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.5	0.04	6.4	1.4	2,100	45	10.3	3,000	10.00	6,200
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.5	0.04	6.3	0.67	2,200	46	10.5	3,000	10.50	6,200
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.5	0.05	9	0.4	1,500	38	3.2	5,200	10.00	5,600
Leach 7	Near GS-15	JY07-10a	0.4	0.04	21	2.2	9.8	1.1	2.22	260	8.34	140
Leach 7	Near GS-15	JY07-10b	0.09	<0.005	1.3	0.3	87	1.2	5.8	2,000	8.94	470
Leach 7	Near GS-18	JY07-11a	0.4	0.05	54	6.0	11	2.1	2.0	100	9.23	200
Leach 7	Near GS-18	JY07-11b	0.07	<0.005	15	3.2	26	2.7	3.6	570	8.41	200
Leach 7	North Carson Slough, North of Hwy	JY07-13	0.16	0.05	9.2	13	3,500	3.2	45	9,600	9.88	4,400
Leach 7	North Carson Slough, North of Hwy	JY07-13d	0.16	0.06	8.5	13	3,400	2.9	41	9,500	9.91	4,300
Leach 7	North Carson Slough, North of Hwy	JY07-14	0.4	0.16	10	4.8	2,500	11	24	11,000	9.96	7,000
Leach 4	Obelisk	JY03-22a	0.02	n.d.	8.1	0.4	1,800	<0.8	18	2,100	10.16	1,600
Leach 3	Ojo del Caballo	JY03-23a	1.2	0.09	12	4.0	850	20	<0.2	3,000	10.20	4,400
Bulk Leach	Ojo del Caballo	JY03-24b	0.02	<0.005	100	5.3	2.4	3.5	2.6	970	10.63	910
Leach 4	Ojo del Caballo	JY03-24b	<0.01	n.d.	9.2	0.3	11	4.1	<0.2	920	n.d.	640
Bulk Leach	Ojo del Caballo	JY03-24c	0.01	<0.005	14	0.5	52	4.4	10	1,700	n.d.	2,900
Leach 5	Ojo del Caballo	JY-05-30	0.5	0.2	4.4	1.5	2,600	20	4.0	2,700	10.50	5,700
Leach 4	Salt Pan	JY03-25a	0.09	n.d.	36	3	18	2.0	2.7	1,000	9.94	210
Leach 4	Salt Pan	JY03-25b	1.1	n.d.	180	68	16	2.7	2.4	450	10.08	550
Leach 4	Salt Pan	JY03-25c	0.22	n.d.	18	4.2	21	4.1	2.2	640	10.34	1,800
Bulk Leach	Salt Pan	JY03-26a	ins	ins	170	ins	1,600	26	14	7,200	n.d.	2,900
Bulk Leach	Salt Pan	JY03-26b	0.57	0.06	420	79	170	19	0.7	780	n.d.	1,040
Bulk Leach	Salt Pan	JY03-26c	1.1	0.11	660	250	250	13	0.6	230	n.d.	760
Leach 3	Salt Pan	JY03-43a-1	9.2	0.64	330	3.5	30	4.0	4.6	450	10.30	370
Leach 3	Salt Pan	JY03-43a-2	9.8	0.68	370	4.8	15	3.5	2.6	480	n.d.	410
Leach 4	Salt Pan	JY03-43b-1	0.01	n.d.	10	0.7	720	10.0	3.4	660	10.31	1,010
Leach 4	Salt Pan	JY03-43b-2	0.02	n.d.	3.4	0.4	610	8.0	6.2	550	n.d.	850
Leach 4	Salt Pan	JY03-43c	0.07	n.d.	20	7.4	500	9.0	4.0	540	10.26	700
Leach 5	Salt Pan	JY-05-23a	0.4	0.23	8.0	6.7	4,500	21	3.5	4,700	10.50	6,900
Leach 5	Salt Pan	JY-05-23b	0.4	0.21	11	3.9	1,400	16	2.1	5,700	11.00	6,600
Leach 5	Salt Pan	JY-05-59a-1	0.03	<0.005	23	0.3	830	4.2	3.0	18,000	10.50	1,300
Leach 5	Salt Pan	JY-05-59a-2	0.04	<0.005	26	0.3	820	5.0	3.0	18,000	10.50	1,200

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ag µg/L	ICP-OES Al µg/L	ICP-MS As µg/L	ICP-OES B µg/L	ICP-MS Ba µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-MS Ca mg/L	ICP-MS Cd µg/L	ICP-MS Ce µg/L
Bulk Leach	Ash Meadows	JY03-09-1	<3	1,400	430	7,700	2,300	0.4	<0.2	3,300	0.78	n.r.
Bulk Leach	Ash Meadows	JY03-09-2	<3	2,500	590	13,000	2,700	0.8	<0.2	3,300	0.97	n.r.
Leach 3	Ash Meadows	JY03-49a-1	<3	1,200	57	920	2,000	0.3	0.01	3,900	0.92	94
Leach 3	Ash Meadows	JY03-49a-2	<3	660	42	880	1,900	<0.05	<0.005	3,700	0.87	12
Leach 4	Ash Meadows	JY03-49b-1	<3	3,300	100	2,700	2,100	0.7	<0.2	2,800	0.47	170
Leach 4	Ash Meadows	JY03-49b-2	<3	2,800	98	2,800	2,000	0.8	<0.2	2,800	0.63	190
Leach 4	Ash Meadows	JY03-49c	<3	23,000	94	2,800	2,600	1.8	<0.2	2,700	1.6	340
Leach 3	Ash Meadows	JY03-50a-1	<3	990	63	770	2,800	0.4	0.01	3,600	0.85	70
Leach 3	Ash Meadows	JY03-50a-2	<3	420	63	730	2,200	0.4	0.01	3,600	0.65	46
Leach 4	Ash Meadows	JY03-50b-1	<3	2,900	68	1,200	2,600	0.5	<0.2	2,800	0.9	130
Leach 4	Ash Meadows	JY03-50b-2	<3	1,800	72	1,100	2,600	0.6	<0.2	2,600	0.75	94
Leach 4	Ash Meadows	JY03-50c	<3	30,000	120	1,500	2,900	1.6	<0.2	2,200	1.9	310
Leach 5	Ash Meadows	JY-05-29	<3	270	270	16,000	1,200	0.2	<0.2	3,400	0.56	11
Leach 7	Between GS-18 and East Transect	JY07-12a	<1	31,000	31	430	1,500	1.8	<0.2	1,600	2.3	380
Leach 7	Between GS-18 and East Transect	JY07-12b	<1	87,000	39	1,100	1,500	5.0	<0.2	1,400	2.5	430
Leach 5	Clay Dune	JY-03-44a	<3	140,000	160	13,000	2,200	4.2	<0.2	1,300	3.6	380
Leach 5	Clay Dune	JY-03-44b	<3	150,000	26	4,600	2,100	6.2	<0.2	1,300	3.4	400
Leach 5	Clay Dune	JY-03-44c	<3	190,000	35	9,300	2,200	7.0	<0.2	1,300	3.5	410
Leach 5	Coppice	JY-05-17	<3	97,000	88	5,200	2,300	7.1	<0.2	1,100	5.2	640
Leach 7	Coppice reference	FP-COP-ref	<1	120,000	150	7,000	2,100	8.1	<0.2	1,300	4.6	600
Leach 7	Coppice reference	FP-COP-refA	<1	120,000	170	7,200	2,100	8.0	<0.2	1,300	4.8	610
Bulk Leach	Discovery	JY03-01-1	<3	78,000	90	4,500	2,600	5.8	<0.2	2,100	5.7	n.r.
Bulk Leach	Discovery	JY03-01-2	<3	80,000	85	4,500	3,200	6.4	<0.2	2,200	64	n.r.
Bulk Leach	Discovery	JY03-01a	<3	78,000	43	2,000	4,600	5.7	<0.2	2,600	6.0	n.r.
Leach 4	Discovery	JY03-01a	<3	76,000	48	2,600	3,200	5.1	<0.2	2,600	4.6	1,100
Leach 5	Discovery	JY-05-15	<3	85,000	86	5,300	2,400	5.1	<0.2	2,000	5.5	770
Leach 5	Discovery	JY-05-16	<3	70,000	62	3,400	2,800	4.6	<0.2	2,300	6.5	860
Leach 7	Discovery	JY07-09	<1	39,000	52	1,700	2,800	3.4	<0.2	2,200	4.3	710
Leach 5	Dust Trap Array	T-69	<3	<50	43	5,800	73	0.05	<0.2	200	0.89	0.08
Leach 4	East of Coppice	JY03-32a	<3	120,000	83	6,600	3,100	8.2	<0.2	1,800	5.4	960
Leach 4	East of East Transect	JY03-28a-1	<3	120,000	64	2,700	2,900	4.7	<0.2	1,900	3.3	800
Leach 4	East of East Transect	JY03-28a-2	<3	160,000	67	2,700	3,100	5.1	<0.2	2,000	3.4	830
Leach 4	East of East Transect	JY03-28b	<3	170,000	65	3,000	2,900	5.4	<0.2	2,000	3.4	860
Leach 4	East of East Transect	JY03-28c	<3	160,000	74	3,600	3,100	5.5	<0.2	2,100	3.5	930
Bulk Leach	East Transect	JY03-29a	<3	83,000	40	880	4,700	3.2	<0.2	3,600	4.5	n.r.
Leach 4	East Transect	JY03-29a	<3	64,000	39	1,200	3,000	2.9	<0.2	2,700	3.3	870
Bulk Leach	East Transect	JY03-29b	<3	110,000	53	2,000	3,300	6.8	<0.2	3,100	4.4	n.r.
Bulk Leach	East Transect	JY03-29c	<3	81,000	100	4,100	2,700	5.6	<0.2	3,200	4.3	n.r.
Bulk Leach	East Transect	JY03-29d	<3	87,000	140	3,800	3,700	4.7	<0.2	3,100	4.1	n.r.

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS	ICP-OES	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS
			Ag µg/L	Al µg/L	As µg/L	B µg/L	Ba µg/L	Be µg/L	Bi µg/L	Ca mg/L	Cd µg/L	Ce µg/L
Leach 4	East Transect	JY03-42a	<3	80,000	32	1,800	3,000	3.9	<0.2	2,300	3.1	790
Leach 5	East Transect	JY-05-21a	<3	3,500	30	570	2,400	0.6	<0.2	2,400	3.5	710
Leach 5	East Transect	JY-05-21b	<3	110,000	44	3,100	2,200	5.4	<0.2	1,600	4.2	740
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	<3	11,000	49	4,000	1,600	0.6	<0.2	1,000	2	250
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	<3	10,000	47	4,600	1,700	1.0	<0.2	1,200	2.2	250
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	<3	7,800	43	2,500	1,200	0.8	<0.2	1,500	1.6	210
Leach 7	Near GS-15	JY07-10a	<1	89,000	37	670	2,400	3.8	<0.2	2,200	3.4	630
Leach 7	Near GS-15	JY07-10b	<1	120,000	45	1,600	2,200	6.8	<0.2	2,300	3.9	750
Leach 7	Near GS-18	JY07-11a	<1	110,000	60	1,800	2,600	4.8	<0.2	2,600	3.9	740
Leach 7	Near GS-18	JY07-11aA	<1	110,000	62	2,000	2,500	5.3	<0.2	2,400	3.7	670
Leach 7	Near GS-19	JY07-11b	<1	120,000	68	2,600	2,500	6.4	<0.2	2,600	4.1	780
Leach 7	Near GS-20	JY07-11bA	<1	88,000	75	3,300	2,300	5.6	<0.2	2,700	4.0	740
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	<1	11,000	300	2,900	1,600	1.1	<0.2	2,300	1.4	230
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	<1	11,000	330	3,400	1,500	1.3	<0.2	2,200	1.4	210
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	<1	17,000	110	2,000	1,100	2.2	<0.2	2,400	2.9	390
Leach 4	Obelisk	JY03-22a	<3	43,000	99	1,400	2,600	2.5	<0.2	2,000	2.5	650
Leach 3	Ojo del Caballo	JY03-23a	<3	11,000	97	4,700	1,800	1.1	0.11	2,100	3.2	290
Bulk Leach	Ojo del Caballo	JY03-24b	<3	140,000	40	1,600	1,600	8.0	<0.2	1,400	1.9	n.r.
Leach 4	Ojo del Caballo	JY03-24b	<3	140,000	33	2,000	2,200	6.2	<0.2	1,200	1.7	390
Bulk Leach	Ojo del Caballo	JY03-24c	<3	140,000	280	4,100	1,100	8.0	<0.2	1,500	1.5	n.r.
Leach 5	Ojo del Caballo	JY-05-30	<3	20,000	130	3,400	2,100	1.3	<0.2	1,100	2.4	390
Leach 4	Salt Pan	JY03-25a	<3	130,000	35	3,400	2,700	4.1	<0.2	1,400	2.9	500
Leach 4	Salt Pan	JY03-25b	<3	200,000	28	7,000	3,000	4.9	<0.2	1,400	3.2	600
Leach 4	Salt Pan	JY03-25c	<3	200,000	37	9,700	2,700	4.8	<0.2	1,100	2.3	400
Bulk Leach	Salt Pan	JY03-26a	ins	63,000	ins	11,000	1,000	ins	ins	1,100	ins	ins
Bulk Leach	Salt Pan	JY03-26b	<3	170,000	71	5,300	3,500	4.3	<0.2	1,800	3.6	n.r.
Bulk Leach	Salt Pan	JY03-26c	<3	250,000	88	4,100	5,700	4.6	<0.2	2,600	5.2	n.r.
Leach 3	Salt Pan	JY03-43a-1	<3	190,000	24	2,900	4,200	3.6	0.005	2,500	4.3	560
Leach 3	Salt Pan	JY03-43a-2	<3	200,000	23	3,100	4,100	3.8	<0.005	2,700	4.6	580
Leach 4	Salt Pan	JY03-43b-1	<3	230,000	100	8,900	2,600	3.9	<0.2	1,200	3	400
Leach 4	Salt Pan	JY03-43b-2	<3	220,000	110	10,000	2,200	4.0	<0.2	1,200	2.9	380
Leach 4	Salt Pan	JY03-43c	<3	220,000	74	7,500	2,700	4.0	<0.2	1,200	2.8	390
Leach 5	Salt Pan	JY-05-23a	<3	130,000	89	ins	2,300	5.1	<0.2	1,600	3.6	780
Leach 5	Salt Pan	JY-05-23b	<3	180,000	78	9,400	2,000	3.6	<0.2	1,600	3.1	650
Leach 5	Salt Pan	JY-05-59a-1	<3	43,000	110	ins	1,800	2.4	<0.2	2,300	8.3	520
Leach 5	Salt Pan	JY-05-59a-2	<3	51,000	130	ins	2,000	2.8	<0.2	2,900	10	590
Leach 5	Salt Pan	JY-05-59b	<3	70,000	70	3,400	1,600	2.6	<0.2	1,300	3.2	350
Leach 5	West Transect	JY-05-19	<3	93,000	92	1,600	2,300	8.1	<0.2	1,300	5.2	750

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L	ICP-MS Gd µg/L
Bulk Leach	Ash Meadows	JY03-09-1	4.6	1.2	0.28	4.5	n.r.	n.r.	n.r.	140	0.28	n.r.
Bulk Leach	Ash Meadows	JY03-09-2	5.1	1.6	0.36	4.6	n.r.	n.r.	n.r.	210	0.47	n.r.
Leach 3	Ash Meadows	JY03-49a-1	5.7	1.5	0.17	6.2	3.4	2.1	1	130	0.46	5.6
Leach 3	Ash Meadows	JY03-49a-2	6.5	2.9	0.16	4.0	0.49	0.31	0.33	42	0.07	0.69
Leach 4	Ash Meadows	JY03-49b-1	6.1	2.3	0.24	5.2	6.3	3.9	1.9	150	0.96	10
Leach 4	Ash Meadows	JY03-49b-2	6.7	2.4	0.27	5.7	7.3	4.5	2.1	190	0.96	12
Leach 4	Ash Meadows	JY03-49c	12	6.8	0.44	6.3	19	10	4.4	840	2.0	25
Leach 3	Ash Meadows	JY03-50a-1	6.0	2.0	0.14	5.6	2.8	1.7	0.91	210	0.34	4.3
Leach 3	Ash Meadows	JY03-50a-2	5.8	1.8	0.13	5.5	1.9	1.2	0.71	75	0.22	3.0
Leach 4	Ash Meadows	JY03-50b-1	6.8	2.2	0.20	6.0	5.1	3.1	1.5	390	0.73	7.8
Leach 4	Ash Meadows	JY03-50b-2	6.1	2.1	0.17	5.9	4	2.4	1.3	<200	0.55	6.1
Leach 4	Ash Meadows	JY03-50c	11	13	0.69	23	22	12	4.6	8,700	6.1	28
Leach 5	Ash Meadows	JY-05-29	2.2	3.2	0.24	14	0.53	0.41	0.27	<20	0.2	0.76
Leach 7	Between GS-18 and East Transect	JY07-12a	7.5	5.5	0.31	140	25	13	5.4	4,800	6.0	33
Leach 7	Between GS-18 and East Transect	JY07-12b	14	6.0	0.34	71	28	15	6.2	7,400	10	38
Leach 5	Clay Dune	JY-03-44a	19	12	0.34	140	33	18	7.0	20,000	16	43
Leach 5	Clay Dune	JY-03-44b	18	7.1	0.41	50	37	19	8.3	13,000	13	49
Leach 5	Clay Dune	JY-03-44c	22	9.1	0.41	76	38	20	8.2	16,000	16	51
Leach 5	Coppice	JY-05-17	29	15	0.18	88	46	24	9.7	12,000	13	62
Leach 7	Coppice reference	FP-COP-ref	27	17	0.17	76	46	24	9.4	13,000	16	62
Leach 7	Coppice reference	FP-COP-refA	29	18	0.17	110	47	25	9.4	14,000	17	63
Bulk Leach	Discovery	JY03-01-1	19	8.5	0.22	23	n.r.	n.r.	n.r.	5,700	7.1	n.r.
Bulk Leach	Discovery	JY03-01-2	21	8.9	0.24	26	n.r.	n.r.	n.r.	5,500	6.7	n.r.
Bulk Leach	Discovery	JY03-01a	19	8.7	0.28	28	n.r.	n.r.	n.r.	5,800	7	n.r.
Leach 4	Discovery	JY03-01a	28	11	0.21	44	55	28	14	5,200	8.8	79
Leach 5	Discovery	JY-05-15	18	11	0.17	120	51	27	10	9,000	11	66
Leach 5	Discovery	JY-05-16	13	7.6	0.15	69	56	29	11	3,200	8.5	74
Leach 7	Discovery	JY07-09	11	8.5	0.25	49	43	23	8.7	6,400	8.3	58
Leach 5	Dust Trap Array	T-69	12	2.2	0.16	650	0.02	0.008	0.007	<20	0.06	0.02
Leach 4	East of Coppice	JY03-32a	39	14	0.23	48	64	33	15	10,000	15	93
Leach 4	East of East Transect	JY03-28a-1	21	9.4	0.48	28	45	23	12	8,600	10	66
Leach 4	East of East Transect	JY03-28a-2	24	11	0.47	31	46	24	13	8,600	11	68
Leach 4	East of East Transect	JY03-28b	23	10	0.47	30	47	24	13	6,500	10	69
Leach 4	East of East Transect	JY03-28c	24	8.5	0.43	20	50	25	14	2,600	6.7	74
Bulk Leach	East Transect	JY03-29a	15	7	0.35	17	n.r.	n.r.	n.r.	1,300	4.4	n.r.
Leach 4	East Transect	JY03-29a	18	7	0.26	9.9	49	26	13	440	5.2	72
Bulk Leach	East Transect	JY03-29b	19	9.1	0.48	23	n.r.	n.r.	n.r.	3,600	5.8	n.r.
Bulk Leach	East Transect	JY03-29c	16	11	0.44	19	n.r.	n.r.	n.r.	880	3.2	n.r.
Bulk Leach	East Transect	JY03-29d	16	9.4	0.48	21	n.r.	n.r.	n.r.	2,000	4.6	n.r.

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L	ICP-MS Gd µg/L
Leach 4	East Transect	JY03-42a	18	5.8	0.40	28	46	23	12	3,100	6.5	67
Leach 5	East Transect	JY-05-21a	3.1	1.5	0.08	8.2	35	19	7.9	90	5.9	51
Leach 5	East Transect	JY-05-21b	17	5.7	0.34	43	44	23	10	4,900	9.0	61
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	2.3	3.0	0.40	41	20	10	3.9	1,700	3.3	28
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	2.3	2.3	0.36	34	25	14	4.3	1,500	3.3	32
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	2.2	5.7	0.22	49	18	9.3	3	1,900	3.2	23
Leach 7	Near GS-15	JY07-10a	12	7.0	0.31	57	39	21	7.8	8,100	11	51
Leach 7	Near GS-15	JY07-10b	16	8.0	0.31	40	43	23	9.2	4,800	9.9	58
Leach 7	Near GS-18	JY07-11a	14	7.6	0.26	42	46	24	9.7	3,200	8.3	61
Leach 7	Near GS-18	JY07-11aA	13	7.4	0.31	65	41	22	8.9	6,500	10	55
Leach 7	Near GS-19	JY07-11b	15	7.8	0.26	38	47	25	10	1,800	7.1	63
Leach 7	Near GS-20	JY07-11bA	14	8.1	0.27	55	46	24	9.9	2,900	7.6	63
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	1.3	10	0.51	100	17	9.9	3	2,300	2.9	22
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	1.2	9.8	0.54	96	17	9.6	2.8	2,300	2.7	21
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	11	8.6	0.67	110	27	16	5.4	5,400	4.3	35
Leach 4	Obelisk	JY03-22a	11	10	0.52	33	39	20	8.8	7,400	8.6	56
Leach 3	Ojo del Caballo	JY03-23a	4.9	6.7	0.32	24	19	11	3.6	2,100	3.1	26
Bulk Leach	Ojo del Caballo	JY03-24b	19	8.1	0.56	52	n.r.	n.r.	n.r.	14,000	17	n.r.
Leach 4	Ojo del Caballo	JY03-24b	17	7.3	0.79	29	33	18	7.1	12,000	14	48
Bulk Leach	Ojo del Caballo	JY03-24c	18	10	0.55	36	n.r.	n.r.	n.r.	13,000	16	n.r.
Leach 5	Ojo del Caballo	JY-05-30	3.5	4.3	0.39	43	24	13	4.6	3,600	5.0	33
Leach 4	Salt Pan	JY03-25a	25	10	0.44	45	36	18	9.4	19,000	16	52
Leach 4	Salt Pan	JY03-25b	28	11	0.50	54	41	20	11	21,000	20	61
Leach 4	Salt Pan	JY03-25c	28	13	0.42	64	35	18	9.3	25,000	22	51
Bulk Leach	Salt Pan	JY03-26a	ins	ins	ins	58	ins	ins	ins	13,000	ins	ins
Bulk Leach	Salt Pan	JY03-26b	27	11	0.44	52	n.r.	n.r.	n.r.	16,000	17	n.r.
Bulk Leach	Salt Pan	JY03-26c	22	6.1	0.49	26	n.r.	n.r.	n.r.	8,900	13	n.r.
Leach 3	Salt Pan	JY03-43a-1	22	8.7	0.37	30	42	22	10	11,000	17	58
Leach 3	Salt Pan	JY03-43a-2	24	8.9	0.35	32	43	22	11	7,900	14	61
Leach 4	Salt Pan	JY03-43b-1	28	8.3	0.52	46	35	17	9.1	20,000	21	51
Leach 4	Salt Pan	JY03-43b-2	28	7.9	0.50	42	34	17	8.7	20,000	20	49
Leach 4	Salt Pan	JY03-43c	23	6.0	0.53	39	35	17	9.2	18,000	19	51
Leach 5	Salt Pan	JY-05-23a	26	15	0.41	120	37	19	8.2	26,000	24	49
Leach 5	Salt Pan	JY-05-23b	20	13	0.36	91	32	18	6.9	30,000	19	42
Leach 5	Salt Pan	JY-05-59a-1	14	23	0.73	220	43	22	9	12,000	11	58
Leach 5	Salt Pan	JY-05-59a-2	16	36	0.66	220	46	24	9.8	14,000	13	64
Leach 5	Salt Pan	JY-05-59b	15	11	0.30	100	30	16	6.6	15,000	13	41
Leach 5	West Transect	JY-05-19	22	10	0.21	97	45	24	9	12,000	12	58

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ge µg/L	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L	ICP-OES Li µg/L	ICP-MS Lu µg/L	ICP-OES Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L	ICP-OES Na mg/L
Bulk Leach	Ash Meadows	JY03-09-1	0.2	n.r.	36	n.r.	140	n.r.	170	1,000	2.7	320
Bulk Leach	Ash Meadows	JY03-09-2	0.3	n.r.	46	n.r.	180	n.r.	190	1,200	8.2	670
Leach 3	Ash Meadows	JY03-49a-1	0.09	0.74	17	67	79	0.3	210	1,800	<0.2	70
Leach 3	Ash Meadows	JY03-49a-2	0.05	0.10	17	7.9	83	<0.1	220	1,800	<0.2	68
Leach 4	Ash Meadows	JY03-49b-1	0.22	1.3	40	110	170	0.4	250	1,100	<2	230
Leach 4	Ash Meadows	JY03-49b-2	0.25	1.5	40	120	170	0.5	250	1,300	<2	290
Leach 4	Ash Meadows	JY03-49c	0.48	3.5	46	180	240	1.3	260	2,300	<2	190
Leach 3	Ash Meadows	JY03-50a-1	0.10	0.57	10	50	81	0.2	190	1,800	<0.2	120
Leach 3	Ash Meadows	JY03-50a-2	0.04	0.40	9.9	35	66	0.1	160	1,500	<0.2	120
Leach 4	Ash Meadows	JY03-50b-1	0.20	1.0	15	83	140	0.4	230	1,600	<2	190
Leach 4	Ash Meadows	JY03-50b-2	0.10	0.84	14	64	110	0.3	210	1,400	<2	170
Leach 4	Ash Meadows	JY03-50c	0.83	4.0	29	160	340	1.5	200	1,900	<2	110
Leach 5	Ash Meadows	JY-05-29	0.27	0.12	59	9.5	120	<0.1	140	740	83	730
Leach 7	Between GS-18 and East Transect	JY07-12a	0.72	4.7	18	200	200	1.7	110	1,300	<2	42
Leach 7	Between GS-18 and East Transect	JY07-12b	0.89	5.2	37	220	390	1.9	160	1,700	<2	110
Leach 5	Clay Dune	JY-03-44a	1.4	5.7	33	250	2,800	1.9	120	2,600	<2	410
Leach 5	Clay Dune	JY-03-44b	1.2	6.2	38	290	1,100	2.1	160	2,500	<2	410
Leach 5	Clay Dune	JY-03-44c	1.3	6.4	44	300	1,500	2.2	190	3,000	<2	550
Leach 5	Coppice	JY-05-17	1.4	7.9	47	400	240	2.4	85	3,200	<2	260
Leach 7	Coppice reference	FP-COP-ref	1.4	8.7	52	420	300	3.0	91	3,100	<2	270
Leach 7	Coppice reference	FP-COP-refA	1.5	8.8	51	430	300	3.0	94	3,200	<2	280
Bulk Leach	Discovery	JY03-01-1	1.1	n.r.	37	n.r.	320	n.r.	150	3,200	<2	320
Bulk Leach	Discovery	JY03-01-2	1.1	n.r.	37	n.r.	330	n.r.	160	3,200	<2	320
Bulk Leach	Discovery	JY03-01a	1.1	n.r.	32	n.r.	260	n.r.	150	2,900	<2	240
Leach 4	Discovery	JY03-01a	1.4	10	27	570	290	>3	150	3,600	<2	230
Leach 5	Discovery	JY-05-15	1.3	8.6	39	410	280	2.8	150	3,500	<2	380
Leach 5	Discovery	JY-05-16	1.4	9.6	41	470	230	3.3	130	3,200	<2	190
Leach 7	Discovery	JY07-09	1.1	8.2	18	340	150	2.9	130	2,800	<2	160
Leach 5	Dust Trap Array	T-69	0.07	0.005	125	0.03	170	<0.1	46	36	236	1,800
Leach 4	East of Coppice	JY03-32a	1.7	12	37	620	280	>3	120	3,400	<2	390
Leach 4	East of East Transect	JY03-28a-1	1.1	8.2	53	430	520	2.6	230	2,300	<2	220
Leach 4	East of East Transect	JY03-28a-2	1.2	8.3	55	450	610	2.7	250	2,600	<2	240
Leach 4	East of East Transect	JY03-28b	1.2	8.4	61	460	610	2.8	250	2,600	<2	260
Leach 4	East of East Transect	JY03-28c	1.2	9.0	68	490	560	2.9	250	2,600	<2	300
Bulk Leach	East Transect	JY03-29a	1.1	n.r.	24	n.r.	260	n.r.	180	1,800	<2	140
Leach 4	East Transect	JY03-29a	1.0	8.9	25	480	240	3.0	200	1,900	<2	130
Bulk Leach	East Transect	JY03-29b	1.2	n.r.	38	n.r.	600	n.r.	270	2,300	<2	440
Bulk Leach	East Transect	JY03-29c	0.99	n.r.	58	n.r.	600	n.r.	260	2,300	<2	610
Bulk Leach	East Transect	JY03-29d	0.95	n.r.	68	n.r.	470	n.r.	230	2,000	<2	500

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ge µg/L	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L	ICP-OES Li µg/L	ICP-MS Lu µg/L	ICP-OES Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L	ICP-OES Na mg/L
Leach 4	East Transect	JY03-42a	1.1	8.3	37	430	350	2.8	220	1,700	<2	200
Leach 5	East Transect	JY-05-21a	0.67	6.2	11	390	48	2.0	110	760	<2	70
Leach 5	East Transect	JY-05-21b	1.3	7.3	47	380	630	2.6	270	1,900	<2	420
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.7	3.5	42	180	660	0.9	30	580	4.1	190
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.84	4.4	43	210	660	1.3	30	580	3.6	190
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.67	3.3	26	140	410	1.0	33	840	3	160
Leach 7	Near GS-15	JY07-10a	1.1	7.2	27	310	260	2.7	160	1,900	<2	98
Leach 7	Near GS-15	JY07-10b	1.2	8.2	51	350	420	3.1	230	2,300	<2	200
Leach 7	Near GS-18	JY07-11a	1.1	8.5	45	360	280	3.1	190	2,000	<2	150
Leach 7	Near GS-18	JY07-11aA	1.1	7.8	48	330	360	2.8	200	1,900	<2	170
Leach 7	Near GS-19	JY07-11b	1.2	8.9	57	380	340	3.3	220	2,100	<2	200
Leach 7	Near GS-20	JY07-11bA	1.2	8.6	56	370	330	3.1	210	2,000	<2	230
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	2.5	3.5	51	140	740	1.3	240	1,100	14	350
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	2.6	3.2	64	130	800	1.2	240	1,100	22	490
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	0.87	5.2	36	210	340	2.1	150	2,700	5.4	490
Leach 4	Obelisk	JY03-22a	1.1	7.2	38	390	360	2.1	140	1,600	<2	230
Leach 3	Ojo del Caballo	JY03-23a	0.42	3.6	29	190	72	1.2	49	1,300	2.0	150
Bulk Leach	Ojo del Caballo	JY03-24b	1.9	n.r.	39	n.r.	1,100	n.r.	170	1,800	<2	560
Leach 4	Ojo del Caballo	JY03-24b	1.7	6.2	39	350	1,000	2.1	160	1,500	<2	580
Bulk Leach	Ojo del Caballo	JY03-24c	2.1	n.r.	51	n.r.	1,200	n.r.	160	1,700	<2	800
Leach 5	Ojo del Caballo	JY-05-30	0.77	4.1	36	210	120	1.4	69	750	2.8	200
Leach 4	Salt Pan	JY03-25a	1.4	6.5	30	330	1,000	2.0	180	2,500	<2	220
Leach 4	Salt Pan	JY03-25b	1.4	7.4	38	410	1,200	2.2	180	3,000	<2	310
Leach 4	Salt Pan	JY03-25c	1.5	6.3	38	330	1,900	2.1	170	2,700	<2	360
Bulk Leach	Salt Pan	JY03-26a	ins	ins	18	ins	1,500	ins	96	ins	ins	620
Bulk Leach	Salt Pan	JY03-26b	1.3	n.r.	36	n.r.	2,800	n.r.	120	2,800	<2	310
Bulk Leach	Salt Pan	JY03-26c	1.3	n.r.	48	n.r.	1,900	n.r.	91	2,000	<2	360
Leach 3	Salt Pan	JY03-43a-1	1.2	7.7	26	440	620	2.7	130	3,200	<0.2	270
Leach 3	Salt Pan	JY03-43a-2	1.2	7.9	26	450	620	2.8	130	3,400	<0.2	290
Leach 4	Salt Pan	JY03-43b-1	1.2	6.3	54	320	4,800	1.9	160	2,500	<2	470
Leach 4	Salt Pan	JY03-43b-2	1.1	6.1	52	310	4,700	1.9	160	2,500	<2	520
Leach 4	Salt Pan	JY03-43c	1.2	6.3	50	320	4,100	1.9	140	2,000	<2	410
Leach 5	Salt Pan	JY-05-23a	2.0	6.9	59	270	1,100	2.4	190	3,500	<2	690
Leach 5	Salt Pan	JY-05-23b	1.8	6.0	30	240	1,600	2.2	220	2,600	<2	740
Leach 5	Salt Pan	JY-05-59a-1	1.8	7.7	15	330	830	2.3	82	2,000	2.1	440
Leach 5	Salt Pan	JY-05-59a-2	1.8	8.4	17	360	940	2.7	95	2,400	2.3	590
Leach 5	Salt Pan	JY-05-59b	1.3	5.8	14	230	1,300	1.8	96	2,200	<2	420
Leach 5	West Transect	JY-05-19	1.2	7.7	92	370	410	2.6	170	3,500	<2	150

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-OES P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L
Bulk Leach	Ash Meadows	JY03-09-1	<0.2	n.r.	73	8.1	0.82	n.r.	21	1.9	n.r.
Bulk Leach	Ash Meadows	JY03-09-2	<0.2	n.r.	75	7.9	1.1	n.r.	26	2.0	n.r.
Leach 3	Ash Meadows	JY03-49a-1	<0.2	34	120	2.3	1.4	9.6	21	0.55	5.9
Leach 3	Ash Meadows	JY03-49a-2	0.20	4.5	120	1.1	0.2	1.2	19	0.52	5.5
Leach 4	Ash Meadows	JY03-49b-1	0.66	60	120	3.1	1.3	17	38	0.66	36
Leach 4	Ash Meadows	JY03-49b-2	0.61	68	130	2.3	1.7	19	39	0.48	41
Leach 4	Ash Meadows	JY03-49c	0.49	130	130	2.8	17	37	49	<0.3	38
Leach 3	Ash Meadows	JY03-50a-1	0.31	24	130	2.8	1.4	6.8	15	0.96	5.3
Leach 3	Ash Meadows	JY03-50a-2	0.25	16	130	3.1	0.95	4.4	14	1.0	4.9
Leach 4	Ash Meadows	JY03-50b-1	0.50	44	140	2.3	1.8	12	20	0.58	29
Leach 4	Ash Meadows	JY03-50b-2	0.48	34	140	2.9	1.5	9.2	18	0.68	27
Leach 4	Ash Meadows	JY03-50c	0.45	140	110	6.8	77	37	40	<0.3	44
Leach 5	Ash Meadows	JY-05-29	0.24	4.7	45	5.6	0.51	1.2	24	4.8	7.1
Leach 7	Between GS-18 and East Transect	JY07-12a	0.27	170	14	5.5	83	45	22	0.37	9.7
Leach 7	Between GS-18 and East Transect	JY07-12b	0.34	200	21	5.8	99	51	32	0.39	13
Leach 5	Clay Dune	JY-03-44a	<0.2	230	25	6.6	150	59	32	<0.3	19
Leach 5	Clay Dune	JY-03-44b	<0.2	260	26	5.1	130	68	32	<0.3	16
Leach 5	Clay Dune	JY-03-44c	<0.2	270	33	5.2	130	71	34	<0.3	21
Leach 5	Coppice	JY-05-17	<0.2	350	44	13	140	89	32	<0.3	11
Leach 7	Coppice reference	FP-COP-ref	0.22	340	36	11	130	92	33	<0.3	12
Leach 7	Coppice reference	FP-COP-refA	<0.2	350	40	10	130	92	34	<0.3	12
Bulk Leach	Discovery	JY03-01-1	<0.2	n.r.	48	13	110	n.r.	31	<0.3	n.r.
Bulk Leach	Discovery	JY03-01-2	<0.2	n.r.	54	13	99	n.r.	28	<0.3	n.r.
Bulk Leach	Discovery	JY03-01a	<0.2	n.r.	61	13	110	n.r.	26	<0.3	n.r.
Leach 4	Discovery	JY03-01a	<0.2	460	91	13	110	130	35	<0.3	56
Leach 5	Discovery	JY-05-15	<0.2	370	26	13	120	94	29	<0.3	9.0
Leach 5	Discovery	JY-05-16	<0.2	410	28	11	120	110	25	<0.3	5.6
Leach 7	Discovery	JY07-09	0.63	300	15	10	140	80	25	0.94	6.4
Leach 5	Dust Trap Array	T-69	0.50	0.05	82	0.63	20	<0.01	60	35	0.6
Leach 4	East of Coppice	JY03-32a	<0.2	480	110	15	110	140	27	<0.3	86
Leach 4	East of East Transect	JY03-28a-1	<0.2	340	92	9.5	130	93	56	<0.3	110
Leach 4	East of East Transect	JY03-28a-2	<0.2	350	99	9.9	130	96	58	<0.3	110
Leach 4	East of East Transect	JY03-28b	<0.2	360	96	9.9	130	99	60	<0.3	110
Leach 4	East of East Transect	JY03-28c	<0.2	380	110	10	110	110	61	<0.3	94
Bulk Leach	East Transect	JY03-29a	<0.2	n.r.	92	7.1	85	n.r.	21	<0.3	n.r.
Leach 4	East Transect	JY03-29a	<0.2	370	120	7.3	68	100	28	<0.3	50
Bulk Leach	East Transect	JY03-29b	<0.2	n.r.	89	7.2	110	n.r.	35	<0.3	n.r.
Bulk Leach	East Transect	JY03-29c	<0.2	n.r.	86	7.7	81	n.r.	39	<0.3	n.r.
Bulk Leach	East Transect	JY03-29d	<0.2	n.r.	88	8.7	100	n.r.	39	<0.3	n.r.

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-OES P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L
Leach 4	East Transect	JY03-42a	<0.2	340	110	7.7	110	92	41	<0.3	73
Leach 5	East Transect	JY-05-21a	<0.2	290	26	3.2	6.1	78	8.0	<0.3	1
Leach 5	East Transect	JY-05-21b	<0.2	330	35	7.4	120	85	39	<0.3	13
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	<0.2	150	15	5.5	43	40	58	<0.3	1.6
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	<0.2	170	17	5.7	44	43	58	<0.3	0.9
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.27	120	22	4.6	36	32	35	0.62	3.3
Leach 7	Near GS-15	JY07-10a	0.52	270	17	5.8	120	71	28	0.61	13
Leach 7	Near GS-15	JY07-10b	0.45	300	22	6.1	130	80	38	0.58	13
Leach 7	Near GS-18	JY07-11a	0.37	310	19	7.2	110	82	33	0.45	12
Leach 7	Near GS-18	JY07-11aA	<0.2	280	22	6.9	110	75	36	<0.3	14
Leach 7	Near GS-19	JY07-11b	0.32	320	22	7.4	100	85	35	0.41	10
Leach 7	Near GS-20	JY07-11bA	<0.2	320	24	7.3	110	83	36	<0.3	12
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	0.51	110	5.9	2.6	52	30	98	2.1	11
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	0.48	110	2.6	2.4	49	29	110	2.6	11
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	0.23	180	16	4.8	64	46	57	0.83	4.0
Leach 4	Obelisk	JY03-22a	<0.2	310	71	10	90	85	52	<0.3	47
Leach 3	Ojo del Caballo	JY03-23a	0.20	130	54	6.9	46	36	24	0.90	3.8
Bulk Leach	Ojo del Caballo	JY03-24b	<0.2	n.r.	61	3.4	120	n.r.	46	<0.3	n.r.
Leach 4	Ojo del Caballo	JY03-24b	<0.2	260	64	4.0	120	74	55	<0.3	73
Bulk Leach	Ojo del Caballo	JY03-24c	<0.2	n.r.	63	6.1	96	n.r.	42	<0.3	n.r.
Leach 5	Ojo del Caballo	JY-05-30	<0.2	180	17	12	80	46	29	<0.3	2.3
Leach 4	Salt Pan	JY03-25a	<0.2	270	73	8.3	140	72	36	<0.3	100
Leach 4	Salt Pan	JY03-25b	<0.2	320	77	8.4	160	88	42	<0.3	110
Leach 4	Salt Pan	JY03-25c	<0.2	260	69	6.9	120	72	36	<0.3	140
Bulk Leach	Salt Pan	JY03-26a	ins	ins	ins	7.1	ins	ins	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	<0.2	n.r.	66	8.2	150	n.r.	34	<0.3	n.r.
Bulk Leach	Salt Pan	JY03-26c	<0.2	n.r.	68	9.4	82	n.r.	34	<0.3	n.r.
Leach 3	Salt Pan	JY03-43a-1	<0.2	310	77	8.8	130	84	27	<0.1	20
Leach 3	Salt Pan	JY03-43a-2	<0.2	320	87	8.8	130	88	28	<0.1	20
Leach 4	Salt Pan	JY03-43b-1	<0.2	260	74	8.1	150	69	49	<0.3	150
Leach 4	Salt Pan	JY03-43b-2	<0.2	250	72	7.5	150	67	48	<0.3	140
Leach 4	Salt Pan	JY03-43c	<0.2	250	69	7.1	120	69	46	<0.3	140
Leach 5	Salt Pan	JY-05-23a	0.38	250	45	8.8	180	64	37	0.31	27
Leach 5	Salt Pan	JY-05-23b	0.24	220	35	8.9	140	57	29	0.36	18
Leach 5	Salt Pan	JY-05-59a-1	0.89	290	44	13	140	72	34	0.85	13
Leach 5	Salt Pan	JY-05-59a-2	0.76	320	55	15	150	78	36	0.68	16
Leach 5	Salt Pan	JY-05-59b	0.24	210	30	8.1	120	55	25	<0.3	13
Leach 5	West Transect	JY-05-19	<0.2	330	32	12	130	85	46	<0.3	13

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-OES P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L
Bulk Leach	Ash Meadows	JY03-09-1	<0.2	n.r.	73	8.1	0.82	n.r.	21	1.9	n.r.
Bulk Leach	Ash Meadows	JY03-09-2	<0.2	n.r.	75	7.9	1.1	n.r.	26	2.0	n.r.
Leach 3	Ash Meadows	JY03-49a-1	<0.2	34	120	2.3	1.4	9.6	21	0.55	5.9
Leach 3	Ash Meadows	JY03-49a-2	0.20	4.5	120	1.1	0.2	1.2	19	0.52	5.5
Leach 4	Ash Meadows	JY03-49b-1	0.66	60	120	3.1	1.3	17	38	0.66	36
Leach 4	Ash Meadows	JY03-49b-2	0.61	68	130	2.3	1.7	19	39	0.48	41
Leach 4	Ash Meadows	JY03-49c	0.49	130	130	2.8	17	37	49	<0.3	38
Leach 3	Ash Meadows	JY03-50a-1	0.31	24	130	2.8	1.4	6.8	15	0.96	5.3
Leach 3	Ash Meadows	JY03-50a-2	0.25	16	130	3.1	0.95	4.4	14	1.0	4.9
Leach 4	Ash Meadows	JY03-50b-1	0.50	44	140	2.3	1.8	12	20	0.58	29
Leach 4	Ash Meadows	JY03-50b-2	0.48	34	140	2.9	1.5	9.2	18	0.68	27
Leach 4	Ash Meadows	JY03-50c	0.45	140	110	6.8	77	37	40	<0.3	44
Leach 5	Ash Meadows	JY05-29	0.24	4.7	45	5.6	0.51	1.2	24	4.8	7.1
Leach 7	Between GS-18 and East Transect	JY07-12a	0.27	170	14	5.5	83	45	22	0.37	9.7
Leach 7	Between GS-18 and East Transect	JY07-12b	0.34	200	21	5.8	99	51	32	0.39	13
Leach 5	Clay Dune	JY03-44a	<0.2	230	25	6.6	150	59	32	<0.3	19
Leach 5	Clay Dune	JY03-44b	<0.2	260	26	5.1	130	68	32	<0.3	16
Leach 5	Clay Dune	JY03-44c	<0.2	270	33	5.2	130	71	34	<0.3	21
Leach 5	Coppice	JY05-17	<0.2	350	44	13	140	89	32	<0.3	11
Leach 7	Coppice reference	FP-COP-ref	0.22	340	36	11	130	92	33	<0.3	12
Leach 7	Coppice reference	FP-COP-refA	<0.2	350	40	10	130	92	34	<0.3	12
Bulk Leach	Discovery	JY03-01-1	<0.2	n.r.	48	13	110	n.r.	31	<0.3	n.r.
Bulk Leach	Discovery	JY03-01-2	<0.2	n.r.	54	13	99	n.r.	28	<0.3	n.r.
Bulk Leach	Discovery	JY03-01a	<0.2	n.r.	61	13	110	n.r.	26	<0.3	n.r.
Leach 4	Discovery	JY03-01a	<0.2	460	91	13	110	130	35	<0.3	56
Leach 5	Discovery	JY05-15	<0.2	370	26	13	120	94	29	<0.3	9.0
Leach 5	Discovery	JY05-16	<0.2	410	28	11	120	110	25	<0.3	5.6
Leach 7	Discovery	JY07-09	0.63	300	15	10	140	80	25	0.94	6.4
Leach 5	Dust Trap Array	T-69	0.50	0.05	82	0.63	20	<0.01	60	35	0.6
Leach 4	East of Coppice	JY03-32a	<0.2	480	110	15	110	140	27	<0.3	86
Leach 4	East of East Transect	JY03-28a-1	<0.2	340	92	9.5	130	93	56	<0.3	110
Leach 4	East of East Transect	JY03-28a-2	<0.2	350	99	9.9	130	96	58	<0.3	110
Leach 4	East of East Transect	JY03-28b	<0.2	360	96	9.9	130	99	60	<0.3	110
Leach 4	East of East Transect	JY03-28c	<0.2	380	110	10	110	110	61	<0.3	94
Bulk Leach	East Transect	JY03-29a	<0.2	n.r.	92	7.1	85	n.r.	21	<0.3	n.r.
Leach 4	East Transect	JY03-29a	<0.2	370	120	7.3	68	100	28	<0.3	50
Bulk Leach	East Transect	JY03-29b	<0.2	n.r.	89	7.2	110	n.r.	35	<0.3	n.r.
Bulk Leach	East Transect	JY03-29c	<0.2	n.r.	86	7.7	81	n.r.	39	<0.3	n.r.
Bulk Leach	East Transect	JY03-29d	<0.2	n.r.	88	8.7	100	n.r.	39	<0.3	n.r.

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-OES P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L
Leach 4	East Transect	JY03-42a	<0.2	340	110	7.7	110	92	41	<0.3	73
Leach 5	East Transect	JY-05-21a	<0.2	290	26	3.2	6.1	78	8.0	<0.3	1
Leach 5	East Transect	JY-05-21b	<0.2	330	35	7.4	120	85	39	<0.3	13
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	<0.2	150	15	5.5	43	40	58	<0.3	1.6
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	<0.2	170	17	5.7	44	43	58	<0.3	0.9
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.27	120	22	4.6	36	32	35	0.62	3.3
Leach 7	Near GS-15	JY07-10a	0.52	270	17	5.8	120	71	28	0.61	13
Leach 7	Near GS-15	JY07-10b	0.45	300	22	6.1	130	80	38	0.58	13
Leach 7	Near GS-18	JY07-11a	0.37	310	19	7.2	110	82	33	0.45	12
Leach 7	Near GS-18	JY07-11aA	<0.2	280	22	6.9	110	75	36	<0.3	14
Leach 7	Near GS-19	JY07-11b	0.32	320	22	7.4	100	85	35	0.41	10
Leach 7	Near GS-20	JY07-11bA	<0.2	320	24	7.3	110	83	36	<0.3	12
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	0.51	110	5.9	2.6	52	30	98	2.1	11
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	0.48	110	2.6	2.4	49	29	110	2.6	11
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	0.23	180	16	4.8	64	46	57	0.83	4.0
Leach 4	Obelisk	JY03-22a	<0.2	310	71	10	90	85	52	<0.3	47
Leach 3	Ojo del Caballo	JY03-23a	0.20	130	54	6.9	46	36	24	0.90	3.8
Bulk Leach	Ojo del Caballo	JY03-24b	<0.2	n.r.	61	3.4	120	n.r.	46	<0.3	n.r.
Leach 4	Ojo del Caballo	JY03-24b	<0.2	260	64	4.0	120	74	55	<0.3	73
Bulk Leach	Ojo del Caballo	JY03-24c	<0.2	n.r.	63	6.1	96	n.r.	42	<0.3	n.r.
Leach 5	Ojo del Caballo	JY-05-30	<0.2	180	17	12	80	46	29	<0.3	2.3
Leach 4	Salt Pan	JY03-25a	<0.2	270	73	8.3	140	72	36	<0.3	100
Leach 4	Salt Pan	JY03-25b	<0.2	320	77	8.4	160	88	42	<0.3	110
Leach 4	Salt Pan	JY03-25c	<0.2	260	69	6.9	120	72	36	<0.3	140
Bulk Leach	Salt Pan	JY03-26a	ins	ins	ins	7.1	ins	ins	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	<0.2	n.r.	66	8.2	150	n.r.	34	<0.3	n.r.
Bulk Leach	Salt Pan	JY03-26c	<0.2	n.r.	68	9.4	82	n.r.	34	<0.3	n.r.
Leach 3	Salt Pan	JY03-43a-1	<0.2	310	77	8.8	130	84	27	<0.1	20
Leach 3	Salt Pan	JY03-43a-2	<0.2	320	87	8.8	130	88	28	<0.1	20
Leach 4	Salt Pan	JY03-43b-1	<0.2	260	74	8.1	150	69	49	<0.3	150
Leach 4	Salt Pan	JY03-43b-2	<0.2	250	72	7.5	150	67	48	<0.3	140
Leach 4	Salt Pan	JY03-43c	<0.2	250	69	7.1	120	69	46	<0.3	140
Leach 5	Salt Pan	JY-05-23a	0.38	250	45	8.8	180	64	37	0.31	27
Leach 5	Salt Pan	JY-05-23b	0.24	220	35	8.9	140	57	29	0.36	18
Leach 5	Salt Pan	JY-05-59a-1	0.89	290	44	13	140	72	34	0.85	13
Leach 5	Salt Pan	JY-05-59a-2	0.76	320	55	15	150	78	36	0.68	16
Leach 5	Salt Pan	JY-05-59b	0.24	210	30	8.1	120	55	25	<0.3	13
Leach 5	West Transect	JY-05-19	<0.2	330	32	12	130	85	46	<0.3	13

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Se µg/L	ICP-OES SiO ₂ mg/L	ICP-MS Sm µg/L	ICP-MS SO ₄ mg/L	ICP-MS Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L
Bulk Leach	Ash Meadows	JY03-09-1	1.9	48	n.r.	210	50,000	0.05	n.r.	<0.2	3.5
Bulk Leach	Ash Meadows	JY03-09-2	3.1	50	n.r.	680	48,000	0.06	n.r.	<0.2	8
Leach 3	Ash Meadows	JY03-49a-1	<1	30	5	24	54,000	<0.02	0.7	6.6	1.1
Leach 3	Ash Meadows	JY03-49a-2	<1	31	0.73	23	51,000	0.10	0.10	2.8	0.4
Leach 4	Ash Meadows	JY03-49b-1	2.1	38	9.3	100	39,000	0.39	1.2	7.5	3.7
Leach 4	Ash Meadows	JY03-49b-2	2.2	44	11	180	40,000	0.39	1.5	8.9	4.7
Leach 4	Ash Meadows	JY03-49c	<1	40	25	59	38,000	0.22	3.6	10	3.4
Leach 3	Ash Meadows	JY03-50a-1	<1	27	3.6	79	46,000	0.07	0.52	2.2	1.9
Leach 3	Ash Meadows	JY03-50a-2	<1	26	2.5	81	43,000	0.05	0.36	2.1	1.7
Leach 4	Ash Meadows	JY03-50b-1	2.3	30	6.7	120	37,000	0.30	1.0	16	3.8
Leach 4	Ash Meadows	JY03-50b-2	2	25	5.1	100	36,000	0.28	0.77	11	3.7
Leach 4	Ash Meadows	JY03-50c	<1	40	28	42	29,000	0.20	4.0	150	150
Leach 5	Ash Meadows	JY-05-29	5.1	53	0.67	350	22,000	0.08	0.11	0.64	5.9
Leach 7	Between GS-18 and East Transect	JY07-12a	4.6	31	33	12	17,000	0.21	4.7	20	120
Leach 7	Between GS-18 and East Transect	JY07-12b	4.6	58	38	10	19,000	0.21	5.2	21	160
Leach 5	Clay Dune	JY-03-44a	4.2	89	43	170	17,000	<0.02	5.9	37	270
Leach 5	Clay Dune	JY-03-44b	3.5	74	51	84	20,000	<0.02	6.8	41	200
Leach 5	Clay Dune	JY-03-44c	3.0	91	52	110	21,000	<0.02	6.8	43	220
Leach 5	Coppice	JY-05-17	3.7	70	63	12	12,000	<0.02	8.3	14	180
Leach 7	Coppice reference	FP-COP-ref	5.7	71	64	15	12,000	0.20	8.7	18	230
Leach 7	Coppice reference	FP-COP-refA	6.7	70	66	24	12,000	0.10	8.8	20	240
Bulk Leach	Discovery	JY03-01-1	4.1	57	n.r.	24	27,000	0.09	n.r.	1.1	58
Bulk Leach	Discovery	JY03-01-2	4.1	58	n.r.	32	26,000	0.09	n.r.	1.1	54
Bulk Leach	Discovery	JY03-01a	4.1	52	n.r.	17	25,000	0.10	n.r.	1.2	59
Leach 4	Discovery	JY03-01a	<1	50	88	14	30,000	<0.02	11	82	52
Leach 5	Discovery	JY-05-15	4.0	59	67	160	24,000	<0.02	8.9	14	79
Leach 5	Discovery	JY-05-16	6.0	41	77	4	28,000	<0.02	10	7.5	18
Leach 7	Discovery	JY07-09	7.2	35	58	57	22,000	0.42	8.2	12	140
Leach 5	Dust Trap Array	T-69	56	6.2	0.02	1,700	5,000	0.20	<0.005	0.62	19
Leach 4	East of Coppice	JY03-32a	<1	75	94	29	20,000	<0.02	13	150	120
Leach 4	East of East Transect	JY03-28a-1	<1	70	68	18	32,000	<0.02	8.9	240	83
Leach 4	East of East Transect	JY03-28a-2	<1	79	69	18	33,000	<0.02	9.2	200	56
Leach 4	East of East Transect	JY03-28b	<1	87	72	14	34,000	<0.02	9.5	170	41
Leach 4	East of East Transect	JY03-28c	<1	83	76	19	38,000	<0.02	10	94	24
Bulk Leach	East Transect	JY03-29a	4.2	39	n.r.	36	35,000	0.07	n.r.	1.5	11
Leach 4	East Transect	JY03-29a	<1	42	72	18	38,000	<0.02	9.8	64	5.2
Bulk Leach	East Transect	JY03-29b	3.9	66	n.r.	410	34,000	0.08	n.r.	3.0	42
Bulk Leach	East Transect	JY03-29c	4.2	72	n.r.	530	36,000	0.07	n.r.	1.4	16
Bulk Leach	East Transect	JY03-29d	4	55	n.r.	110	34,000	0.07	n.r.	2.1	33

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Se µg/L	ICP-OES SiO ₂ mg/L	ICP-MS Sm µg/L	ICP-MS SO ₄ mg/L	ICP-MS Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L
Leach 4	East Transect	JY03-42a	<1	54	67	19	38,000	<0.02	9.1	150	29
Leach 5	East Transect	JY-05-21a	5.1	14	49	<2	37,000	<0.02	6.5	1.9	0.7
Leach 5	East Transect	JY-05-21b	3.3	66	60	120	32,000	<0.02	8.1	33	61
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	3.9	20	28	26	15,000	<0.02	3.8	6.5	19
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	3.8	18	31	16	15,000	<0.02	4.2	4.6	12
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	2.0	18	23	74	16,000	0.10	3.2	6.3	27
Leach 7	Near GS-15	JY07-10a	6.3	37	51	10	25,000	0.35	7.2	34	120
Leach 7	Near GS-15	JY07-10b	7.5	57	58	10	31,000	0.31	8.4	22	72
Leach 7	Near GS-18	JY07-11a	6.8	50	61	13	32,000	0.28	8.5	19	34
Leach 7	Near GS-18	JY07-11aA	7.1	53	56	14	29,000	0.10	7.8	23	71
Leach 7	Near GS-19	JY07-11b	9.1	59	62	14	36,000	0.25	8.8	13	19
Leach 7	Near GS-20	JY07-11bA	8.5	54	62	33	34,000	0.10	8.7	17	41
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	6.3	100	21	330	44,000	0.53	3.1	14	88
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	6.5	100	20	480	41,000	0.54	2.9	12	90
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	7.5	16	34	470	18,000	0.20	5.0	11	71
Leach 4	Obelisk	JY03-22a	<1	39	58	73	30,000	<0.02	7.7	140	150
Leach 3	Ojo del Caballo	JY03-23a	<1	19	25	63	18,000	0.05	3.6	7.4	51
Bulk Leach	Ojo del Caballo	JY03-24b	2.8	66	n.r.	54	15,000	0.04	n.r.	3.8	330
Leach 4	Ojo del Caballo	JY03-24b	<1	65	50	30	17,000	<0.02	6.5	230	250
Bulk Leach	Ojo del Caballo	JY03-24c	5.5	69	n.r.	160	14,000	0.04	n.r.	5.7	330
Leach 5	Ojo del Caballo	JY-05-30	2.4	29	33	13	15,000	<0.02	4.4	6.2	52
Leach 4	Salt Pan	JY03-25a	<1	70	53	26	19,000	<0.02	7.1	340	200
Leach 4	Salt Pan	JY03-25b	<1	83	64	18	22,000	<0.02	8.3	300	160
Leach 4	Salt Pan	JY03-25c	<1	98	53	22	16,000	<0.02	6.9	440	240
Bulk Leach	Salt Pan	JY03-26a	ins	62	ins	ins	9,800	ins	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	3.1	87	n.r.	49	18,000	0.06	n.r.	3.5	230
Bulk Leach	Salt Pan	JY03-26c	1.2	88	n.r.	22	26,000	0.08	n.r.	2.7	63
Leach 3	Salt Pan	JY03-43a-1	<1	72	61	16	31,000	0.06	7.9	48	69
Leach 3	Salt Pan	JY03-43a-2	<1	76	63	19	34,000	0.06	8.2	38	40
Leach 4	Salt Pan	JY03-43b-1	<1	110	52	37	21,000	<0.02	7.0	370	190
Leach 4	Salt Pan	JY03-43b-2	<1	110	50	59	21,000	<0.02	6.8	390	190
Leach 4	Salt Pan	JY03-43c	<1	110	51	18	20,000	<0.02	7.0	410	170
Leach 5	Salt Pan	JY-05-23a	4.4	79	49	280	19,000	0.23	6.8	65	330
Leach 5	Salt Pan	JY-05-23b	2.7	110	42	260	18,000	0.20	5.9	46	280
Leach 5	Salt Pan	JY-05-59a-1	8.3	58	56	710	16,000	0.26	7.7	43	290
Leach 5	Salt Pan	JY-05-59a-2	10	62	60	990	18,000	0.27	8.5	60	340
Leach 5	Salt Pan	JY-05-59b	1.5	56	42	550	15,000	0.20	5.9	28	260
Leach 5	West Transect	JY-05-19	3.9	84	61	2	18,000	<0.02	8.0	14	110

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ti µg/L	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L
Bulk Leach	Ash Meadows	JY03-09-1	0.50	n.r.	0.57	3.0	1.7	n.r.	n.r.	6.9	1.4
Bulk Leach	Ash Meadows	JY03-09-2	0.65	n.r.	0.99	3.4	2.5	n.r.	n.r.	11	1.8
Leach 3	Ash Meadows	JY03-49a-1	0.40	0.27	1.6	1.2	<0.02	41	1.6	8.7	0.90
Leach 3	Ash Meadows	JY03-49a-2	0.30	0.04	<0.005	1.1	0.21	5.4	0.25	1.0	0.30
Leach 4	Ash Meadows	JY03-49b-1	0.83	0.46	1.0	0.5	0.51	47	2.9	6.5	2.5
Leach 4	Ash Meadows	JY03-49b-2	0.77	0.55	1.2	0.7	<0.5	55	3.4	6.2	2.1
Leach 4	Ash Meadows	JY03-49c	0.99	1.4	7.1	1.7	<0.5	110	8.8	24	3.4
Leach 3	Ash Meadows	JY03-50a-1	0.40	0.22	2.3	0.6	<0.02	30	1.3	12	1.4
Leach 3	Ash Meadows	JY03-50a-2	0.40	0.15	4.3	0.4	<0.02	21	0.91	7.8	1.4
Leach 4	Ash Meadows	JY03-50b-1	0.58	0.40	1.1	<0.5	<0.5	41	2.4	6.0	2.0
Leach 4	Ash Meadows	JY03-50b-2	0.51	0.30	1.5	0.6	0.50	33	1.9	5.3	2.0
Leach 4	Ash Meadows	JY03-50c	1.7	1.6	26	18	<0.5	130	10	53	12
Leach 5	Ash Meadows	JY-05-29	1.6	0.04	38	10	5.1	4.7	0.3	6.1	0.84
Leach 7	Between GS-18 and East Transect	JY07-12a	0.59	1.8	3.8	14	0.55	120	12	62	2.1
Leach 7	Between GS-18 and East Transect	JY07-12b	0.40	1.9	4.5	17	0.59	130	13	78	2.1
Leach 5	Clay Dune	JY-03-44a	0.30	2.1	4.0	19	<0.5	160	14	190	2.4
Leach 5	Clay Dune	JY-03-44b	0.30	2.3	3.2	8	<0.5	180	16	96	1.1
Leach 5	Clay Dune	JY-03-44c	0.20	2.4	3.4	8.4	<0.5	180	17	130	1.2
Leach 5	Coppice	JY-05-17	0.20	2.8	16	24	<0.5	220	20	130	7.1
Leach 7	Coppice reference	FP-COP-ref	0.20	3.2	24	35	<0.5	220	21	150	3.8
Leach 7	Coppice reference	FP-COP-refA	0.20	3.3	22	38	0.51	220	21	160	3.4
Bulk Leach	Discovery	JY03-01-1	0.30	n.r.	14	18	<0.5	n.r.	n.r.	150	7.2
Bulk Leach	Discovery	JY03-01-2	0.30	n.r.	13	18	<0.5	n.r.	n.r.	120	6.4
Bulk Leach	Discovery	JY03-01a	0.20	n.r.	9.3	15	<0.5	n.r.	n.r.	98	6.8
Leach 4	Discovery	JY03-01a	0.30	3.7	17	16	<0.5	290	24	78	5.4
Leach 5	Discovery	JY-05-15	0.30	3.2	16	26	<0.5	250	23	120	5.4
Leach 5	Discovery	JY-05-16	0.20	3.6	13	12	<0.5	270	25	78	3.7
Leach 7	Discovery	JY07-09	0.40	3.1	10	21	0.64	210	20	75	10
Leach 5	Dust Trap Array	T-69	0.20	<0.005	1.9	21	37	0.21	0.007	65	2.5
Leach 4	East of Coppice	JY03-32a	0.20	4.4	35	33	<0.5	330	28	100	2.6
Leach 4	East of East Transect	JY03-28a-1	0.68	3.0	15	18	<0.5	220	20	53	3.1
Leach 4	East of East Transect	JY03-28a-2	0.63	3.1	17	12	<0.5	220	20	60	2.5
Leach 4	East of East Transect	JY03-28b	0.63	3.2	15	9.1	<0.5	220	21	63	2.3
Leach 4	East of East Transect	JY03-28c	0.65	3.4	16	4.6	<0.5	240	22	49	2.7
Bulk Leach	East Transect	JY03-29a	0.30	n.r.	5.6	5.1	<0.5	n.r.	n.r.	68	1.4
Leach 4	East Transect	JY03-29a	0.30	3.4	7.5	2.3	<0.5	240	22	34	1.6
Bulk Leach	East Transect	JY03-29b	0.40	n.r.	6.9	14	<0.5	n.r.	n.r.	99	2.3
Bulk Leach	East Transect	JY03-29c	0.52	n.r.	9.9	4.2	<0.5	n.r.	n.r.	96	2.5
Bulk Leach	East Transect	JY03-29d	0.81	n.r.	24	9.2	<0.5	n.r.	n.r.	85	3.1

Table 12E. Composition of the nitric acid leach bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; d, duplicate; n.r., not reported; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ti µg/L	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L
Leach 4	East Transect	JY03-42a	0.58	3.1	8.5	9.9	<0.5	230	21	50	1.8
Leach 5	East Transect	JY-05-21a	0.20	2.3	0.68	<0.5	<0.5	180	15	7.5	0.65
Leach 5	East Transect	JY-05-21b	0.62	2.8	6.7	22	<0.5	200	20	73	2.3
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.78	1.2	12	17	<0.5	92	7.8	130	7.7
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	2.1	1.6	11	15	<0.5	120	11	45	5.0
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.88	1.2	9.6	12	0.89	91	7.5	43	6.8
Leach 7	Near GS-15	JY07-10a	0.56	2.8	5.8	18	0.52	190	19	62	2.5
Leach 7	Near GS-15	JY07-10b	0.67	3.1	8.3	15	<0.5	210	20	73	3.3
Leach 7	Near GS-18	JY07-11a	0.57	3.1	7.1	13	<0.5	220	22	63	2.7
Leach 7	Near GS-18	JY07-11aA	0.63	2.9	6.4	21	<0.5	200	20	62	2.0
Leach 7	Near GS-19	JY07-11b	0.50	3.3	6.9	6.5	<0.5	230	22	62	2.6
Leach 7	Near GS-20	JY07-11bA	0.62	3.2	6.3	18	<0.5	220	21	65	2.6
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	1.7	1.4	28	14	2.2	93	8.8	58	13
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	1.8	1.3	33	14	1.4	88	8.6	52	13
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	0.90	2.1	19	33	0.91	140	14	75	6.2
Leach 4	Obelisk	JY03-22a	0.64	2.6	33	23	<0.5	200	16	57	7.0
Leach 3	Ojo del Caballo	JY03-23a	0.94	1.4	9.7	110	1.5	120	8.6	53	10
Bulk Leach	Ojo del Caballo	JY03-24b	0.40	n.r.	3.9	27	<0.5	n.r.	n.r.	220	1.0
Leach 4	Ojo del Caballo	JY03-24b	0.53	2.4	6.4	22	<0.5	170	16	97	0.93
Bulk Leach	Ojo del Caballo	JY03-24c	0.50	n.r.	33	63	<0.5	n.r.	n.r.	190	1.2
Leach 5	Ojo del Caballo	JY-05-30	0.60	1.5	12	36	<0.5	110	11	53	4.1
Leach 4	Salt Pan	JY03-25a	0.40	2.3	7.8	15	<0.5	180	15	93	1.6
Leach 4	Salt Pan	JY03-25b	0.40	2.6	7.9	14	<0.5	200	17	91	1.5
Leach 4	Salt Pan	JY03-25c	0.30	2.3	5.4	14	<0.5	170	16	98	1.0
Bulk Leach	Salt Pan	JY03-26a	ins	ins	ins	ins	ins	ins	ins	ins	ins
Bulk Leach	Salt Pan	JY03-26b	0.30	n.r.	4.3	18	<0.5	n.r.	n.r.	160	1.7
Bulk Leach	Salt Pan	JY03-26c	0.40	n.r.	6.2	7.1	<0.5	n.r.	n.r.	94	1.1
Leach 3	Salt Pan	JY03-43a-1	0.30	2.9	5.5	5.7	<0.02	300	19	100	0.59
Leach 3	Salt Pan	JY03-43a-2	0.20	3.0	5.8	3.6	<0.02	330	20	100	0.60
Leach 4	Salt Pan	JY03-43b-1	0.40	2.2	9.9	9.7	<0.5	180	15	95	1.3
Leach 4	Salt Pan	JY03-43b-2	0.40	2.2	9.1	10	<0.5	180	14	89	1.4
Leach 4	Salt Pan	JY03-43c	0.50	2.2	7.7	7.7	<0.5	180	15	81	0.98
Leach 5	Salt Pan	JY-05-23a	0.53	2.6	4.0	16	<0.5	190	17	150	1.5
Leach 5	Salt Pan	JY-05-23b	0.40	2.4	4.0	12	<0.5	170	16	130	1.5
Leach 5	Salt Pan	JY-05-59a-1	0.67	2.6	9.7	26	5.4	210	17	240	6.6
Leach 5	Salt Pan	JY-05-59a-2	0.63	2.9	13	33	4.2	240	19	340	8.0
Leach 5	Salt Pan	JY-05-59b	0.40	2.0	3.5	12	0.56	160	13	120	3.0
Leach 5	West Transect	JY-05-19	0.40	2.9	20	22	<0.5	210	20	96	10

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Ag ppm	ICP-OES Al wt.%	ICP-MS As ppm	ICP-MS Ba ppm	ICP-MS Be ppm	ICP-MS Bi ppm	ICP-OES Ca wt.%	ICP-MS Cd ppm	ICP-MS Ce ppm	ICP-MS Co ppm
Bulk Leach	Ash Meadows	JY03-09-1	<2	6.2	18	870	2.0	n.d.	3.7	0.15	68	6.1
Bulk Leach	Ash Meadows	JY03-09-2	<2	6.4	21	850	2.1	n.d.	3.1	0.16	71	6.2
Leach 3	Ash Meadows	JY03-49a-B1	<2	6.8	8.9	1,100	1.8	0.12	4.5	0.11	65	4.3
Leach 3	Ash Meadows	JY03-49a-B2	<2	6.5	8.9	1,100	2.0	0.13	4.2	0.11	65	4.2
Leach 4	Ash Meadows	JY03-49b-B1	<2	6.4	14	850	2.0	0.12	3.2	0.11	51	6.0
Leach 4	Ash Meadows	JY03-49b-B2	<2	6.3	14	880	1.9	0.11	2.6	0.13	59	5.9
Leach 4	Ash Meadows	JY03-49c-B	<2	6.0	15	880	1.8	0.11	2.1	0.07	50	5.5
Leach 3	Ash Meadows	JY03-50a-B1	<2	6.5	10	1,100	2.0	0.12	4.5	0.14	65	4.8
Leach 3	Ash Meadows	JY03-50a-B2	<2	6.5	10	1,000	1.8	0.12	4.8	0.13	64	5.1
Leach 4	Ash Meadows	JY03-50b-B1	<2	6.5	10	1,000	1.8	0.10	2.9	0.11	57	4.6
Leach 4	Ash Meadows	JY03-50b-B2	<2	6.0	10	1,000	1.8	0.09	3.0	0.11	58	4.7
Leach 4	Ash Meadows	JY03-50c-B	<2	6.2	4.8	1,200	1.8	0.07	1.1	0.04	54	2.6
Leach 5	Ash Meadows	JY-05-29-B	<3	4.8	13	710	1.5	0.17	10	0.2	66	5.4
Leach 7	Between GS-18 and East Transect	JY07-12a	<1	6.7	11	1,100	2.2	0.17	1.1	0.04	47	6.6
Leach 7	Between GS-18 and East Transect	JY07-12b	<1	6.3	21	480	2.4	0.26	0.46	0.06	35	11
Leach 5	Clay Dune	JY-03-44a-B	<3	6.6	12	800	1.8	0.14	1.3	0.04	45	5.8
Leach 5	Clay Dune	JY-03-44b-B	<3	7.1	19	460	2.2	0.24	0.89	0.07	45	13
Leach 5	Clay Dune	JY-03-44c-B	<3	6.5	18	500	2.1	0.21	0.72	0.07	34	11
Leach 5	Coppice	JY-05-17-B	<3	7.7	14	970	2.3	0.19	1.4	0.08	62	8.0
Leach 7	Coppice reference	FP-COP-ref	<1	7.2	13	1,100	2.6	0.20	1.4	0.08	75	7.6
Leach 7	Coppice reference	FP-COP-refA	<1	7.6	13	1,100	2.7	0.21	1.3	0.07	76	8.8
Bulk Leach	Discovery	JY03-01-1	<2	7.5	13	850	2.6	n.d.	1.4	0.08	56	8.5
Bulk Leach	Discovery	JY03-01-2	<2	7.1	13	920	2.6	n.d.	1.3	0.39	56	8.5
Bulk Leach	Discovery	JY03-01a	<2	7.0	11	900	2.5	n.d.	1.4	0.07	59	8.0
Leach 4	Discovery	JY03-01a-B	<2	7.1	11	950	2.5	0.17	1.4	0.08	63	8.2
Leach 5	Discovery	JY-05-15-B	<3	7.8	12	980	2.3	0.20	1.5	0.07	59	7.8
Leach 5	Discovery	JY-05-16-B	<3	7.8	15	970	2.5	0.23	1.5	0.08	59	9.1
Leach 7	Discovery	JY07-09	<1	7.2	10	1,000	2.2	0.20	1.7	0.06	68	7.1
Leach 5	Dust Trap Array	T-69-B	<3	6.7	30	840	2.1	0.63	2.6	1.1	59	14
Leach 4	East of Coppice	JY03-32a-B	<2	7.1	15	850	2.9	0.21	1.2	0.08	61	10
Leach 4	East of East Transect	JY03-28a-B1	<2	6.3	20	620	2.3	0.17	0.93	0.06	47	9.9
Leach 4	East of East Transect	JY03-28a-B2	<2	5.9	20	610	2.1	0.18	0.85	0.05	46	9.8
Leach 4	East of East Transect	JY03-28b-B	<2	6.3	22	570	2.4	0.19	0.81	0.02	43	11
Leach 4	East of East Transect	JY03-28c-B	<2	6.2	24	500	2.4	0.19	0.77	0.07	42	12
Bulk Leach	East Transect	JY03-29a	<2	7.0	14	840	2.1	n.d.	1.8	0.06	51	8.0
Leach 4	East Transect	JY03-29a-B	<2	6.5	15	840	2.2	0.15	1.2	0.06	53	8.1
Bulk Leach	East Transect	JY03-29b	<2	6.5	21	450	2.4	n.d.	1.0	0.07	37	12
Bulk Leach	East Transect	JY03-29c	<2	6.2	25	460	2.4	n.d.	1.0	0.07	38	12
Bulk Leach	East Transect	JY03-29d	<2	6.1	25	480	2.5	n.d.	1.1	0.07	39	11

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-MS
			Ag ppm	Al wt.%	As ppm	Ba ppm	Be ppm	Bi ppm	Ca wt.%	Cd ppm	Ce ppm	Co ppm	
Leach 4	East Transect	JY03-42a-B	<2	6.5	18	600	2.4	0.18	1.1	0.08	48	11	
Leach 5	East Transect	JY-05-21a-B	<3	6.9	11	990	1.8	0.16	2.2	0.13	58	6.1	
Leach 5	East Transect	JY-05-21b-B	<3	6.8	23	430	2.3	0.24	0.71	0.08	36	12	
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins	
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(I)-B	<3	5.3	4.3	1,100	1.5	0.08	0.95	0.03	62	2.1	
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(II)-B	<3	6.3	4.3	1,000	1.5	0.08	1.6	0.04	82	2.2	
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28-B	<3	6.3	4.1	1,100	1.3	0.07	1.2	0.03	63	1.9	
Leach 7	Near GS-15	JY07-10a	<1	6.5	10	1,100	2.1	0.15	1.7	0.05	61	5.8	
Leach 7	Near GS-15	JY07-10b	<1	6.4	17	580	2.4	0.24	1.2	0.07	40	9.4	
Leach 7	Near GS-18	JY07-11a	<1	6.7	18	690	2.4	0.22	1.4	0.07	45	9.0	
Leach 7	Near GS-18	JY07-11aA	<1	6.6	18	820	2.3	0.21	1.3	0.06	60	9.5	
Leach 7	Near GS-19	JY07-11b	<1	6.5	24	450	2.4	0.26	0.88	0.08	38	11	
Leach 7	Near GS-20	JY07-11bA	<1	6.6	25	490	2.5	0.26	0.99	0.08	37	12	
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	<1	5.9	11	1,100	1.4	0.09	2.0	0.04	91	2.8	
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	<1	5.9	10	1,000	1.6	0.08	2.0	0.04	98	2.8	
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	<1	5.9	11	880	1.8	0.16	1.9	0.04	44	5.0	
Leach 4	Obelisk	JY03-22a-B1	<2	6.9	7.0	1,100	2.2	0.09	1.4	0.06	69	4.4	
Leach 3	Ojo del Caballo	JY03-23a-B	<2	6.7	4	1,400	2.0	0.08	1.3	0.03	59	2.1	
Bulk Leach	Ojo del Caballo	JY03-24b	<2	5.7	11	440	2.3	n.d.	0.78	0.06	37	8.3	
Leach 4	Ojo del Caballo	JY03-24b-B	<2	5.7	10	470	2.3	0.15	0.49	0.05	44	8.4	
Bulk Leach	Ojo del Caballo	JY03-24c	<2	5.3	14	390	2.4	n.d.	0.50	0.05	34	8.4	
Leach 5	Ojo del Caballo	JY-05-30-B	<3	6.7	4.9	1,300	1.9	0.10	2.1	0.05	65	2.6	
Leach 4	Salt Pan	JY03-25a-B	<2	5.8	11	690	1.7	0.12	0.86	0.05	45	6.4	
Leach 4	Salt Pan	JY03-25b-B	<2	5.8	12	680	2.1	0.14	0.79	0.06	47	8.0	
Leach 4	Salt Pan	JY03-25c-B	<2	5.3	12	650	1.8	0.12	0.71	0.05	44	7.5	
Bulk Leach	Salt Pan	JY03-26a	<2	5.3	8.9	810	1.6	n.d.	1.2	0.08	47	5.3	
Bulk Leach	Salt Pan	JY03-26b	<2	5.9	13	730	1.9	n.d.	0.90	0.05	46	7.2	
Bulk Leach	Salt Pan	JY03-26c	<2	6.8	21	610	2.2	n.d.	0.79	0.05	48	10	
Leach 3	Salt Pan	JY03-43a-B1	<2	6.6	13	780	2.1	0.20	1.0	0.04	54	8.0	
Leach 3	Salt Pan	JY03-43a-B2	<2	6.7	14	780	1.9	0.20	1.0	0.04	49	7.9	
Leach 4	Salt Pan	JY03-43b-B1	<2	5.8	19	570	2.2	0.18	0.78	0.06	44	9.9	
Leach 4	Salt Pan	JY03-43b-B2	<2	5.8	19	550	1.8	0.15	1.2	0.06	42	9.9	
Leach 4	Salt Pan	JY03-43c-B	<2	6.3	20	540	1.9	0.18	0.78	0.05	42	10	
Leach 5	Salt Pan	JY-05-23a-B	<3	5.0	11	760	1.5	0.12	0.76	0.03	51	5.1	
Leach 5	Salt Pan	JY-05-23b-B	<3	5.3	8.8	870	1.5	0.12	1.8	0.04	46	4.5	
Leach 5	Salt Pan	JY-05-59a(I)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins	
Leach 5	Salt Pan	JY-05-59a(II)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins	
Leach 5	Salt Pan	JY-05-59b-B	<3	5.5	7.2	870	1.4	0.10	1.0	0.03	44	3.5	
Leach 5	West Transect	JY-05-19-B	<3	7.4	12	910	2.7	0.22	1.1	0.07	61	7.0	

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-OES	ICP-MS
			Cr ppm	Cs ppm	Cu ppm	Fe wt.%	Ga ppm	K wt.%	La ppm	Li ppm	Mg wt.%	Mn ppm
Bulk Leach	Ash Meadows	JY03-09-1	59	8.5	19	2.0	14	3.2	36	160	2.9	470
Bulk Leach	Ash Meadows	JY03-09-2	59	8.8	19	2.0	14	3.3	38	160	2.9	460
Leach 3	Ash Meadows	JY03-49a-B1	24	6.9	12	1.5	14	3.5	36	86	2.0	330
Leach 3	Ash Meadows	JY03-49a-B2	24	7.1	11	1.5	14	3.4	36	87	2.0	310
Leach 4	Ash Meadows	JY03-49b-B1	47	9.9	17	1.9	14	3.4	28	170	3.6	420
Leach 4	Ash Meadows	JY03-49b-B2	44	9.7	17	1.9	15	3.3	33	170	3.4	420
Leach 4	Ash Meadows	JY03-49c-B	38	9.5	16	1.7	15	3.2	29	160	3.1	350
Leach 3	Ash Meadows	JY03-50a-B1	25	7.2	12	1.6	14	3.3	37	110	2.6	370
Leach 3	Ash Meadows	JY03-50a-B2	26	7.4	12	1.6	14	3.3	36	110	2.9	380
Leach 4	Ash Meadows	JY03-50b-B1	60	6.7	15	1.7	14	3.2	31	110	2.2	320
Leach 4	Ash Meadows	JY03-50b-B2	51	6.6	14	1.5	14	3.0	32	110	2.1	340
Leach 4	Ash Meadows	JY03-50c-B	31	4.1	8.2	1.0	14	3.2	33	57	0.92	220
Leach 5	Ash Meadows	JY-05-29-B	26	11	18	1.6	11	2.0	38	110	2.8	380
Leach 7	Between GS-18 and East Transect	JY07-12a	69	7.2	17	1.9	17	3.3	29	79	1.6	380
Leach 7	Between GS-18 and East Transect	JY07-12b	56	16	27	2.9	18	3.6	20	230	4.5	690
Leach 5	Clay Dune	JY-03-44a-B	27	5.9	16	1.9	14	3.0	27	170	1.8	370
Leach 5	Clay Dune	JY-03-44b-B	47	14	32	3.3	18	3.2	25	350	4.6	800
Leach 5	Clay Dune	JY-03-44c-B	61	13	30	3.0	17	3.1	19	320	4.1	700
Leach 5	Coppice	JY-05-17-B	62	7.8	23	2.8	18	3.1	37	76	1.6	550
Leach 7	Coppice reference	FP-COP-ref	65	7.6	20	2.3	18	3.5	41	81	1.6	610
Leach 7	Coppice reference	FP-COP-refA	65	8.0	22	2.4	19	3.5	42	87	1.7	680
Bulk Leach	Discovery	JY03-01-1	51	9.3	23	2.7	17	3.5	30	120	2.3	520
Bulk Leach	Discovery	JY03-01-2	52	9.5	23	2.6	17	3.3	30	120	2.3	520
Bulk Leach	Discovery	JY03-01a	50	8.6	22	2.4	17	3.2	31	100	1.9	490
Leach 4	Discovery	JY03-01a-B	52	9.0	21	2.6	17	3.1	32	110	2.0	510
Leach 5	Discovery	JY-05-15-B	67	7.8	24	2.7	18	3.1	34	82	1.8	480
Leach 5	Discovery	JY-05-16-B	77	9.5	27	2.9	19	3.2	34	92	2.1	530
Leach 7	Discovery	JY07-09	90	6.4	21	2.5	17	3.1	37	68	1.5	440
Leach 5	Dust Trap Array	T-69-B	210	8.0	120	3.4	17	2.5	32	87	1.6	530
Leach 4	East of Coppice	JY03-32a-B	63	12	27	3.1	18	3.1	30	110	2.1	650
Leach 4	East of East Transect	JY03-28a-B1	57	12	25	2.9	16	3.3	23	200	3.6	600
Leach 4	East of East Transect	JY03-28a-B2	50	12	24	2.7	16	3.1	22	200	3.4	580
Leach 4	East of East Transect	JY03-28b-B	46	14	27	2.9	17	3.4	20	230	3.9	630
Leach 4	East of East Transect	JY03-28c-B	57	15	30	3.1	17	3.3	19	250	4.6	700
Bulk Leach	East Transect	JY03-29a	55	9.3	22	2.5	15	3.7	26	130	2.6	460
Leach 4	East Transect	JY03-29a-B	43	11	21	2.4	16	3.3	26	160	2.8	480
Bulk Leach	East Transect	JY03-29b	43	16	30	3.2	16	3.7	18	290	5.8	710
Bulk Leach	East Transect	JY03-29c	53	16	32	3.0	16	3.6	19	310	5.6	700
Bulk Leach	East Transect	JY03-29d	48	15	29	2.9	16	3.6	19	280	5.3	680

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-OES	ICP-MS
			Cr ppm	Cs ppm	Cu ppm	Fe wt.%	Ga ppm	K wt.%	La ppm	Li ppm	Mg wt.%	Mn ppm
Leach 4	East Transect	JY03-42a-B	43	15	27	2.9	16	3.5	23	230	4.3	640
Leach 5	East Transect	JY-05-21a-B	72	5.8	23	2.1	15	3.0	32	55	1.5	350
Leach 5	East Transect	JY-05-21b-B	48	16	31	3.1	17	3.5	19	270	5.4	720
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(I)-B	12	2.0	6.2	0.85	13	2.5	39	53	0.37	210
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(II)-B	13	2.1	6.6	0.95	13	2.9	50	55	0.43	220
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28-B	11	1.8	4.8	0.85	14	2.9	40	38	0.39	180
Leach 7	Near GS-15	JY07-10a	61	6.7	17	1.9	16	3.2	34	87	1.8	420
Leach 7	Near GS-15	JY07-10b	51	13	24	2.5	17	3.5	23	200	4.2	630
Leach 7	Near GS-18	JY07-11a	57	12	23	2.5	18	3.6	26	170	3.6	600
Leach 7	Near GS-18	JY07-11aA	61	12	24	2.4	18	3.5	32	170	3.5	640
Leach 7	Near GS-19	JY07-11b	51	17	28	2.9	18	3.7	21	240	5.0	730
Leach 7	Near GS-20	JY07-11bA	62	16	30	2.8	19	3.6	21	240	4.9	790
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	88	2.1	13	1.3	14	3.0	53	94	1.9	280
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	91	2.1	13	1.3	14	3.0	65	96	2.0	280
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	160	12	27	2.1	14	3.1	29	130	1.5	270
Leach 4	Obelisk	JY03-22a-B1	79	4.5	15	1.8	16	3.4	37	77	1.4	340
Leach 3	Ojo del Caballo	JY03-23a-B	13	2.2	5.0	0.90	16	3.4	36	34	0.51	230
Bulk Leach	Ojo del Caballo	JY03-24b	40	13	24	2.5	14	3.8	20	220	4.8	590
Leach 4	Ojo del Caballo	JY03-24b-B	38	14	22	2.5	15	3.7	22	230	4.6	590
Bulk Leach	Ojo del Caballo	JY03-24c	34	14	23	2.5	14	3.8	19	240	5.0	600
Leach 5	Ojo del Caballo	JY-05-30-B	17	2.3	7.4	1.1	15	2.9	40	29	0.52	240
Leach 4	Salt Pan	JY03-25a-B	41	7.1	17	2.2	13	3.0	22	140	2.1	400
Leach 4	Salt Pan	JY03-25b-B	48	9.6	21	2.4	15	3.0	23	190	2.3	470
Leach 4	Salt Pan	JY03-25c-B	44	8.5	20	2.2	13	2.8	22	230	2.3	460
Bulk Leach	Salt Pan	JY03-26a	170	3.6	29	2.1	12	2.6	25	84	0.94	310
Bulk Leach	Salt Pan	JY03-26b	49	7.2	19	2.2	14	3.1	24	220	2.0	440
Bulk Leach	Salt Pan	JY03-26c	50	11	25	2.9	16	3.8	25	280	2.9	610
Leach 3	Salt Pan	JY03-43a-B1	36	8.2	18	2.4	16	3.5	29	150	2.1	470
Leach 3	Salt Pan	JY03-43a-B2	35	8.4	18	2.4	16	3.5	26	150	2.3	470
Leach 4	Salt Pan	JY03-43b-B1	46	12	25	2.8	15	3.2	21	470	3.7	610
Leach 4	Salt Pan	JY03-43b-B2	45	11	25	2.7	16	3.2	22	470	3.7	640
Leach 4	Salt Pan	JY03-43c-B	55	11	26	3.0	16	3.5	22	460	3.8	640
Leach 5	Salt Pan	JY-05-23a-B	26	6.0	13	1.5	12	2.5	27	97	1.3	300
Leach 5	Salt Pan	JY-05-23b-B	21	4.9	11	1.5	12	2.5	25	76	1.3	290
Leach 5	Salt Pan	JY-05-59a(I)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a(II)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b-B	19	2.8	8.6	1.3	12	2.4	26	48	0.72	220
Leach 5	West Transect	JY-05-19-B	55	8.6	21	2.4	18	3.1	36	95	1.8	510

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm	ICP-MS Sb ppm
Bulk Leach	Ash Meadows	JY03-09-1	1.3	1.6	21	30	14	710	18	120	1.0
Bulk Leach	Ash Meadows	JY03-09-2	2.0	1.7	20	31	13	720	19	120	1.0
Leach 3	Ash Meadows	JY03-49a-B1	0.4	1.9	18	25	8.7	420	17	110	0.8
Leach 3	Ash Meadows	JY03-49a-B2	0.4	1.8	16	25	8.8	410	17	110	0.8
Leach 4	Ash Meadows	JY03-49b-B1	0.9	1.5	11	19	12	370	16	120	0.9
Leach 4	Ash Meadows	JY03-49b-B2	1.0	1.5	11	21	12	380	17	120	0.9
Leach 4	Ash Meadows	JY03-49c-B	1.1	1.5	11	18	11	360	15	120	0.8
Leach 3	Ash Meadows	JY03-50a-B1	0.5	1.8	22	25	9.3	430	18	110	0.8
Leach 3	Ash Meadows	JY03-50a-B2	0.5	1.8	18	23	10	440	18	110	0.9
Leach 4	Ash Meadows	JY03-50b-B1	1.2	1.8	11	21	11	420	17	110	0.8
Leach 4	Ash Meadows	JY03-50b-B2	1.0	1.7	12	20	10	380	17	110	0.7
Leach 4	Ash Meadows	JY03-50c-B	0.9	2.0	8.5	18	5.8	100	14	100	0.5
Leach 5	Ash Meadows	JY-05-29-B	2.0	1.1	12	26	11	660	18	91	1.1
Leach 7	Between GS-18 and East Transect	JY07-12a	1.0	1.8	20	19	14	110	15	130	1.0
Leach 7	Between GS-18 and East Transect	JY07-12b	0.8	0.81	23	12	23	170	14	180	1.7
Leach 5	Clay Dune	JY-03-44a-B	0.8	1.7	14	20	11	200	13	110	0.9
Leach 5	Clay Dune	JY-03-44b-B	0.7	1.5	23	19	24	320	15	170	2.2
Leach 5	Clay Dune	JY-03-44c-B	0.8	1.2	19	14	22	220	13	160	1.6
Leach 5	Coppice	JY-05-17-B	1.9	1.9	24	26	22	320	20	130	1.6
Leach 7	Coppice reference	FP-COP-ref	2.3	1.9	30	21	18	290	21	150	1.6
Leach 7	Coppice reference	FP-COP-refA	2.3	2.0	28	26	21	280	21	150	1.5
Bulk Leach	Discovery	JY03-01-1	1.5	1.8	25	22	19	260	19	140	1.3
Bulk Leach	Discovery	JY03-01-2	1.4	1.7	27	20	19	260	19	140	1.3
Bulk Leach	Discovery	JY03-01a	1.1	1.7	27	22	17	310	18	140	1.3
Leach 4	Discovery	JY03-01a-B	1.3	1.7	17	22	18	240	20	140	1.4
Leach 5	Discovery	JY-05-15-B	1.6	1.8	23	26	18	240	19	130	1.4
Leach 5	Discovery	JY-05-16-B	1.5	1.7	26	24	22	380	21	150	1.5
Leach 7	Discovery	JY07-09	1.6	2.0	27	24	17	150	17	130	1.4
Leach 5	Dust Trap Array	T-69-B	20	1.3	21	25	140	1,300	320	120	14.0
Leach 4	East of Coppice	JY03-32a-B	2.6	1.6	19	20	27	230	22	150	1.6
Leach 4	East of East Transect	JY03-28a-B1	1.0	1.1	15	16	21	290	16	150	1.4
Leach 4	East of East Transect	JY03-28a-B2	0.9	1.0	13	15	20	270	15	140	1.5
Leach 4	East of East Transect	JY03-28b-B	0.9	0.93	15	14	22	300	16	160	1.6
Leach 4	East of East Transect	JY03-28c-B	0.9	0.84	16	14	24	320	16	160	1.5
Bulk Leach	East Transect	JY03-29a	0.9	1.7	20	20	17	400	17	130	1.2
Leach 4	East Transect	JY03-29a-B	0.8	1.5	15	19	17	320	18	140	1.2
Bulk Leach	East Transect	JY03-29b	0.7	1.0	23	14	23	350	15	160	1.6
Bulk Leach	East Transect	JY03-29c	0.8	1.0	22	13	24	420	16	160	1.6
Bulk Leach	East Transect	JY03-29d	1.0	1.0	22	14	22	400	15	150	1.5

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm	ICP-MS Sb ppm
Leach 4	East Transect	JY03-42a-B	0.8	1.2	17	15	21	290	16	160	1.5
Leach 5	East Transect	JY-05-21a-B	1.0	1.8	16	25	14	400	21	120	0.9
Leach 5	East Transect	JY-05-21b-B	0.7	0.96	21	13	23	260	16	170	1.7
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(I)-B	0.7	1.8	14	20	3.6	110	15	86	0.7
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(II)-B	0.6	2.0	17	28	3.8	130	14	89	0.7
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28-B	0.4	2.1	14	26	3.4	120	14	86	0.5
Leach 7	Near GS-15	JY07-10a	1.0	1.8	22	21	13	210	15	120	1.0
Leach 7	Near GS-15	JY07-10b	0.8	1.2	22	15	20	240	15	160	1.5
Leach 7	Near GS-18	JY07-11a	0.9	1.4	22	15	19	260	17	150	1.4
Leach 7	Near GS-18	JY07-11aA	0.9	1.4	23	20	19	320	17	160	1.3
Leach 7	Near GS-19	JY07-11b	0.8	1.0	23	13	23	290	17	180	1.6
Leach 7	Near GS-20	JY07-11bA	0.9	1.1	23	13	25	370	17	180	1.7
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	2.2	2.1	21	31	7.7	210	14	83	0.8
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	2.7	2.1	21	32	7.8	200	13	82	0.8
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	3.6	1.7	18	18	16	160	15	130	1.6
Leach 4	Obelisk	JY03-22a-B1	1.9	2.2	18	25	11	140	17	120	0.9
Leach 3	Ojo del Caballo	JY03-23a-B	0.9	2.3	20	17	3.5	130	17	100	0.7
Bulk Leach	Ojo del Caballo	JY03-24b	0.5	1.4	24	13	16	270	12	140	1.4
Leach 4	Ojo del Caballo	JY03-24b-B	0.5	1.3	16	13	16	120	13	150	1.4
Bulk Leach	Ojo del Caballo	JY03-24c	1.0	1.2	26	11	17	220	11	150	1.5
Leach 5	Ojo del Caballo	JY-05-30-B	0.7	2.2	17	25	4.2	160	16	98	0.6
Leach 4	Salt Pan	JY03-25a-B	0.9	1.3	9.1	17	14	140	13	110	0.9
Leach 4	Salt Pan	JY03-25b-B	0.8	1.2	14	16	17	170	14	130	1.1
Leach 4	Salt Pan	JY03-25c-B	0.7	1.1	11	14	16	130	12	120	1.0
Bulk Leach	Salt Pan	JY03-26a	2.3	1.7	15	18	16	650	13	83	1.0
Bulk Leach	Salt Pan	JY03-26b	0.8	1.4	19	18	15	240	14	110	1.0
Bulk Leach	Salt Pan	JY03-26c	0.8	1.2	24	17	21	300	18	140	1.3
Leach 3	Salt Pan	JY03-43a-B1	0.7	1.6	18	14	15	150	16	140	1.3
Leach 3	Salt Pan	JY03-43a-B2	0.6	1.6	19	15	16	190	16	130	1.4
Leach 4	Salt Pan	JY03-43b-B1	1.0	1.1	9.7	14	21	190	14	140	1.1
Leach 4	Salt Pan	JY03-43b-B2	1.3	1.1	11	15	20	210	13	140	1.2
Leach 4	Salt Pan	JY03-43c-B	1.0	1.2	9.0	14	20	190	15	140	1.1
Leach 5	Salt Pan	JY-05-23a-B	0.5	1.4	6.2	20	11	160	13	100	0.9
Leach 5	Salt Pan	JY-05-23b-B	0.6	1.5	9.3	18	8.8	180	12	93	0.8
Leach 5	Salt Pan	JY-05-59a(I)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a(II)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b-B	0.5	1.6	10	18	7.1	140	12	81	0.6
Leach 5	West Transect	JY-05-19-B	1.5	1.6	25	24	17	230	19	140	1.4

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents—hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Sc ppm	ICP-MS Sr ppm	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
Bulk Leach	Ash Meadows	JY03-09-1	7.1	790	12	2,400	0.94	3.2	44	19	60
Bulk Leach	Ash Meadows	JY03-09-2	7.2	670	14	2,300	0.99	4.2	47	18	68
Leach 3	Ash Meadows	JY03-49a-B1	5.6	630	11	2,100	0.85	2.0	34	18	44
Leach 3	Ash Meadows	JY03-49a-B2	5.4	590	11	2,100	0.86	2.0	33	17	44
Leach 4	Ash Meadows	JY03-49b-B1	6.0	450	9.1	2,000	0.80	2.5	34	16	56
Leach 4	Ash Meadows	JY03-49b-B2	6.0	410	9.8	2,000	0.84	2.6	34	16	55
Leach 4	Ash Meadows	JY03-49c-B	5.8	390	9.6	2,000	0.81	2.7	33	13	53
Leach 3	Ash Meadows	JY03-50a-B1	6.0	650	11	2,200	0.88	2.1	34	17	49
Leach 3	Ash Meadows	JY03-50a-B2	6.2	730	11	2,200	0.90	2.1	34	18	49
Leach 4	Ash Meadows	JY03-50b-B1	5.2	470	9.2	1,800	0.79	2.2	29	17	43
Leach 4	Ash Meadows	JY03-50b-B2	5.1	490	9.1	1,900	0.77	2.2	30	18	45
Leach 4	Ash Meadows	JY03-50c-B	3.5	360	7.3	1,500	0.63	1.4	19	12	40
Leach 5	Ash Meadows	JY05-29-B	6.3	1,000	13	2,000	1.30	4.4	39	19	50
Leach 7	Between GS-18 and East Transect	JY07-12a	7.7	340	13	3,000	0.86	1.9	47	13	56
Leach 7	Between GS-18 and East Transect	JY07-12b	11	140	13	3,400	1.1	2.3	65	10	97
Leach 5	Clay Dune	JY03-44a-B	6.1	280	7.7	2,300	0.61	1.5	41	12	51
Leach 5	Clay Dune	JY03-44b-B	10	190	10	3,300	0.86	2.0	65	12	100
Leach 5	Clay Dune	JY03-44c-B	8.6	170	8.2	2,800	0.81	1.7	54	9.3	96
Leach 5	Coppice	JY05-17-B	8.0	320	14	2,900	0.85	2.4	52	16	78
Leach 7	Coppice reference	FP-COP-ref	8.1	320	15	3,200	0.90	2.9	48	19	79
Leach 7	Coppice reference	FP-COP-refA	9.2	310	14	3,600	0.90	2.5	56	17	82
Bulk Leach	Discovery	JY03-01-1	9.2	310	15	3,200	0.89	2.3	55	14	79
Bulk Leach	Discovery	JY03-01-2	9.2	310	15	3,300	0.89	2.3	55	14	76
Bulk Leach	Discovery	JY03-01a	9.0	330	15	3,300	0.85	2.3	56	14	72
Leach 4	Discovery	JY03-01a-B	8.7	340	14	3,700	0.87	2.2	55	17	75
Leach 5	Discovery	JY05-15-B	8.8	340	15	3,300	0.86	2.4	56	16	72
Leach 5	Discovery	JY05-16-B	9.7	340	17	3,400	1.0	2.6	60	18	83
Leach 7	Discovery	JY07-09	9.0	370	17	3,800	0.82	2.5	56	17	64
Leach 5	Dust Trap Array	T-69-B	11	440	16	6,000	0.89	3.7	73	18	840
Leach 4	East of Coppice	JY03-32a-B	10	280	14	4,000	0.91	2.2	63	17	94
Leach 4	East of East Transect	JY03-28a-B1	9.0	220	11	3,400	0.82	1.9	58	13	80
Leach 4	East of East Transect	JY03-28a-B2	9.1	220	11	3,400	0.81	1.8	57	12	78
Leach 4	East of East Transect	JY03-28b-B	10	210	12	3,500	0.90	1.9	61	12	86
Leach 4	East of East Transect	JY03-28c-B	11	190	12	3,500	0.90	1.9	62	11	94
Bulk Leach	East Transect	JY03-29a	8.8	360	14	3,100	0.86	2.0	55	13	62
Leach 4	East Transect	JY03-29a-B	8.8	320	13	3,100	0.84	1.9	53	14	68
Bulk Leach	East Transect	JY03-29b	10	200	13	3,100	0.91	2.2	64	10	91
Bulk Leach	East Transect	JY03-29c	11	210	14	3,100	0.96	2.4	63	10	94
Bulk Leach	East Transect	JY03-29d	11	210	14	3,000	0.93	2.6	61	10	86

Table 12F. Composition of the residual fraction of bulk grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; -1, -2, denotes duplicates; BC, bag contents–hydrated salts converted to liquid upon return from field; n.d., not determined; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Sc ppm	ICP-MS Sr ppm	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
Leach 4	East Transect	JY03-42a-B	9.8	240	12	3,500	0.92	1.9	60	13	86
Leach 5	East Transect	JY-05-21a-B	7.2	390	16	2,500	0.84	2.0	46	16	53
Leach 5	East Transect	JY-05-21b-B	10	180	12	2,800	0.99	2.1	61	8.9	94
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01BC	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(I)-B	3.3	330	9.2	1,600	0.54	1.7	23	12	25
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27(II)-B	3.4	370	9.5	1,700	0.58	1.8	23	14	26
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28-B	3.0	360	8.5	1,500	0.54	1.7	18	13	23
Leach 7	Near GS-15	JY07-10a	7.0	370	12	2,600	0.77	2.1	42	14	55
Leach 7	Near GS-15	JY07-10b	9.2	230	13	2,600	0.98	2.2	52	11	84
Leach 7	Near GS-18	JY07-11a	9.2	280	13	2,800	0.97	2.2	53	12	78
Leach 7	Near GS-18	JY07-11aA	9.6	290	13	3,400	0.93	2.1	59	13	80
Leach 7	Near GS-19	JY07-11b	11	200	14	3,100	1.1	2.5	62	11	96
Leach 7	Near GS-20	JY07-11bA	12	210	14	3,400	1.1	2.3	66	11	100
Leach 7	North Carson Slough, North of Hwy	JY07-13D+A	4.4	430	11	2,400	0.55	1.6	26	16	31
Leach 7	North Carson Slough, North of Hwy	JY07-13dD+A	4.3	420	11	2,300	0.53	1.7	25	15	30
Leach 7	North Carson Slough, North of Hwy	JY07-14D+A	5.9	320	13	2,000	0.86	2.0	37	11	50
Leach 4	Obelisk	JY03-22a-B1	5.8	370	11	3,000	0.69	2.0	35	16	47
Leach 3	Ojo del Caballo	JY03-23a-B	3.4	380	9.0	1,800	0.64	1.8	20	12	35
Bulk Leach	Ojo del Caballo	JY03-24b	8.0	140	7.5	2,300	0.95	2.0	38	8.8	76
Leach 4	Ojo del Caballo	JY03-24b-B	7.8	140	7.8	2,800	0.93	1.9	37	10	76
Bulk Leach	Ojo del Caballo	JY03-24c	8.3	110	8.0	2,400	0.92	2.3	40	8.9	74
Leach 5	Ojo del Caballo	JY-05-30-B	4.2	450	11	1,900	0.66	1.9	26	14	30
Leach 4	Salt Pan	JY03-25a-B	6.1	210	7.5	2,900	0.61	1.4	42	11	55
Leach 4	Salt Pan	JY03-25b-B	7.4	220	9.3	3,100	0.70	1.5	49	11	68
Leach 4	Salt Pan	JY03-25c-B	6.6	190	7.6	2,900	0.59	1.4	44	10	61
Bulk Leach	Salt Pan	JY03-26a	5.1	260	6.8	2,300	0.52	1.3	35	10	49
Bulk Leach	Salt Pan	JY03-26b	7.2	240	8.6	2,800	0.63	1.6	50	10	57
Bulk Leach	Salt Pan	JY03-26c	9.6	190	14	3,600	0.89	2.0	64	11	79
Leach 3	Salt Pan	JY03-43a-B1	7.8	270	11	3,300	0.76	1.8	56	12	69
Leach 3	Salt Pan	JY03-43a-B2	7.6	270	11	3,200	0.75	1.9	54	12	68
Leach 4	Salt Pan	JY03-43b-B1	8.6	180	8.8	3,400	0.72	1.5	53	11	80
Leach 4	Salt Pan	JY03-43b-B2	8.7	190	9.2	3,200	0.65	1.6	54	11	81
Leach 4	Salt Pan	JY03-43c-B	8.4	170	9.1	3,200	0.74	1.6	54	10	80
Leach 5	Salt Pan	JY-05-23a-B	5.3	220	9.7	2,500	0.59	1.6	37	11	44
Leach 5	Salt Pan	JY-05-23b-B	4.8	280	9.2	2,000	0.54	1.7	33	10	39
Leach 5	Salt Pan	JY-05-59a(I)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a(II)-B	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b-B	4.3	380	7.8	1,900	0.50	1.4	31	11	29
Leach 5	West Transect	JY-05-19-B	8.1	300	16	2,600	0.94	2.8	47	16	74

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; n.d., not determined; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	Treatment	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS
				Ag µg/L	Al µg/L	As µg/L	B µg/L	Ba µg/L	Be µg/L	Bi µg/L	Ca mg/L	Cd µg/L
Leach 2	Ash Meadows	JY03-09	DI Leach	<3	14	3,200	59,000	19	<0.05	<0.2	7.2	0.49
Leach 5	Ash Meadows	JY-05-29	DI Leach	<3	30	4,500	140,000	40	<0.05	<0.2	23	3.3
Leach 5	Clay Dune	JY-03-44a	DI Leach	<3	23	1,300	130,000	14	<0.05	<0.2	2.7	0.29
Leach 5	Clay Dune	JY-03-44b	DI Leach	<3	15	54	10,000	2.8	<0.05	<0.2	1.5	<0.02
Leach 5	Clay Dune	JY-03-44c	DI Leach	<3	14	57	24,000	3.1	<0.05	<0.2	1.7	<0.02
Leach 5	Coppice	JY-05-17	DI Leach	<3	160	550	23,000	2.7	<0.05	<0.2	1.3	0.15
Leach 2	Discovery	JY03-01	DI Leach	<3	13	310	20,000	2.3	<0.05	<0.2	14	0.25
Leach 2	Discovery	JY03-01a	DI Leach	<3	56	26	3,200	0.68	<0.05	<0.2	1.1	<0.02
Leach 5	Discovery	JY-05-15	DI Leach	<3	16,000	160	12,000	12	1.3	<0.2	2.4	0.06
Leach 5	Discovery	JY-05-16	DI Leach	<3	17,000	110	7,900	36	1.7	<0.2	4.2	<0.02
Leach 2	East Transect	JY03-29a	DI Leach	<3	15,000	29	1,800	38	1.2	<0.2	5.3	0.06
Leach 4	East Transect	JY03-29a	DI Leach	<3	5,500	24	1,200	32	0.5	<0.2	4.1	0.05
Leach 2	East Transect	JY03-29b	DI Leach	<3	4	25	1,900	18	<0.05	<0.2	13	<0.02
Leach 2	East Transect	JY03-29c	DI Leach	<3	4.7	160	10,000	5.2	<0.05	<0.2	2.8	<0.02
Leach 2	East Transect	JY03-29d	DI Leach	<3	5.7	320	12,000	3.9	<0.05	<0.2	2.9	0.05
Leach 5	East Transect	JY-05-21a	DI Leach	<3	12,000	18	1,400	62	1.3	<0.2	8.4	<0.02
Leach 5	East Transect	JY-05-21b	DI Leach	<3	27	25	2,800	7.5	<0.05	<0.2	7.2	<0.02
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	DI Leach	<3	75	3,500	37,000	33	<0.05	<0.005	4.6	0.92
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	DI Leach	<3	63	3,100	36,000	30	<0.05	<0.005	4.5	0.79
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	DI Leach	<3	24	2,800	47,000	108	<0.05	<0.2	13	0.75
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	DI Leach	<3	25	2,700	44,000	109	<0.05	<0.2	12	0.85
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	DI Leach	<3	26	2,800	43,000	112	<0.05	<0.2	9.7	0.72
Leach 2	Ojo del Caballo	JY03-24a	DI Leach	<3	7,200	98	2,300	17	1.4	<0.2	4.0	0.08
Leach 4	Ojo del Caballo	JY03-24a	DI Leach	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	DI Leach	<3	5.9	78	4,300	2.1	<0.05	<0.2	1.3	<0.02
Leach 2	Ojo del Caballo	JY03-24c	DI Leach	<3	5.5	1,200	16,000	9.7	<0.05	<0.2	1.9	0.28
Leach 5	Ojo del Caballo	JY-05-30	DI Leach	<3	31	6,400	130,000	69	<0.05	<0.2	46	0.85
Leach 2	Salt Pan	JY03-26a	DI Leach	<3	29	1,500	200,000	18	<0.05	<0.2	4.8	0.51
Leach 2	Salt Pan	JY03-26b	DI Leach	<3	2,800	370	63,000	7.5	0.1	<0.2	2.6	0.06
Leach 4	Salt Pan	JY03-26b	DI Leach	<3	14	330	76,000	5.6	<0.05	<0.2	2.0	0.07
Leach 2	Salt Pan	JY03-26c	DI Leach	<3	53,000	560	32,000	99	4.7	<0.2	8.7	0.2
Leach 4	Salt Pan	JY03-26c	DI Leach	<3	37,000	510	37,000	29	2.6	<0.2	3.0	0.17
Leach 5	Salt Pan	JY-05-23a	DI Leach	<3	21	340	70,000	28	<0.05	<0.2	2.3	<0.02
Leach 5	Salt Pan	JY-05-23b	DI Leach	<3	25	410	56,000	24	<0.05	<0.2	2.5	0.15
Leach 5	Salt Pan	JY-05-59a-1	DI Leach	<3	20	220	23,000	15	<0.05	<0.2	2.5	0.16
Leach 5	Salt Pan	JY-05-59a-2	DI Leach	<3	22	220	23,000	14	<0.05	<0.2	2.5	0.03
Leach 5	Salt Pan	JY-05-59b	DI Leach	<3	14	100	20,000	14	<0.05	<0.2	7.7	<0.02
Leach 5	West Transect	JY-05-19	DI Leach	<3	17,000	110	3,000	11	1.1	<0.2	3.3	<0.02

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; n.d., not determined; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Ce µg/L	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L	ICP-OES Fe mg/L	ICP-MS Ga µg/L
Leach 2	Ash Meadows	JY03-09	0.44	0.68	1.7	0.26	16	0.02	0.03	0.005	<20	0.1
Leach 5	Ash Meadows	JY-05-29	0.22	3.1	3.3	0.33	25	0.04	0.03	<0.005	<20	<0.05
Leach 5	Clay Dune	JY-03-44a	0.32	0.12	3.6	<0.02	11	<0.005	<0.005	<0.005	<20	<0.05
Leach 5	Clay Dune	JY-03-44b	0.01	0.02	6.3	<0.02	3.5	<0.005	<0.005	<0.005	<20	<0.05
Leach 5	Clay Dune	JY-03-44c	0.03	0.05	5.4	<0.02	4.0	<0.005	<0.005	<0.005	<20	<0.05
Leach 5	Coppice	JY-05-17	0.08	0.15	1.0	<0.02	3.8	<0.005	<0.005	<0.005	120	<0.05
Leach 2	Discovery	JY03-01	0.85	0.66	1.2	0.02	7.5	0.02	0.01	0.005	<20	<0.05
Leach 2	Discovery	JY03-01a	0.24	0.11	<1	0.02	3.6	0.01	0.005	<0.005	38	0.05
Leach 5	Discovery	JY-05-15	3.8	9.2	11	2.6	28	0.22	0.11	0.04	17,000	5.0
Leach 5	Discovery	JY-05-16	7.5	11	9.4	1.5	31	0.30	0.16	0.06	19,000	5.3
Leach 2	East Transect	JY03-29a	4.3	6.7	11	5.2	22	0.2	0.13	0.05	13,000	5.9
Leach 4	East Transect	JY03-29a	0.45	4.3	3.1	1.4	14	n.d.	n.d.	n.d.	5,100	2.8
Leach 2	East Transect	JY03-29b	0.02	0.08	3.0	0.09	3.8	<0.005	<0.005	<0.005	22	<0.05
Leach 2	East Transect	JY03-29c	0.04	0.31	11	0.11	8.1	<0.005	<0.005	<0.005	<20	<0.05
Leach 2	East Transect	JY03-29d	0.06	0.34	17	0.08	4.6	<0.005	<0.005	<0.005	<20	<0.05
Leach 5	East Transect	JY-05-21a	4.3	8.4	6.7	1.8	22	0.23	0.10	0.03	20,000	4.7
Leach 5	East Transect	JY-05-21b	<0.01	<0.02	1.4	<0.02	2.2	0.01	<0.005	<0.005	<20	<0.05
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	9.8	0.75	3.3	0.3	75	0.08	0.18	0.01	53	0.2
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	9.1	0.62	2.9	0.25	68	0.06	0.17	<0.005	42	0.2
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	1.1	0.18	2.4	0.68	13	0.08	0.08	<0.005	<20	<0.05
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	1.1	0.18	1.0	0.66	13	0.09	0.08	<0.005	<20	<0.05
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	1.5	0.21	1.7	0.27	15	0.06	0.08	<0.005	<20	<0.05
Leach 2	Ojo del Caballo	JY03-24a	4.1	9.2	6.9	0.44	26	0.18	0.11	0.04	12,000	5.5
Leach 4	Ojo del Caballo	JY03-24a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	0.05	0.06	2.7	0.07	4.2	<0.005	<0.005	<0.005	<20	0.05
Leach 2	Ojo del Caballo	JY03-24c	0.49	0.14	22	0.12	4.1	0.02	0.02	<0.005	<20	<0.05
Leach 5	Ojo del Caballo	JY-05-30	7.6	0.33	1.6	0.16	11	0.13	0.20	0.01	<20	0.09
Leach 2	Salt Pan	JY03-26a	0.97	0.22	3.0	0.11	7.8	0.02	0.02	<0.005	<20	0.08
Leach 2	Salt Pan	JY03-26b	1.2	1	3.3	1.1	7.9	0.06	0.03	0.01	1,700	0.98
Leach 4	Salt Pan	JY03-26b	0.06	0.08	<1	0.04	5.5	n.d.	n.d.	n.d.	20	<0.05
Leach 2	Salt Pan	JY03-26c	41	40	29	1.5	110	1.8	0.85	0.48	47,000	27
Leach 4	Salt Pan	JY03-26c	2.7	22	31	17	70	n.d.	n.d.	n.d.	28,000	22
Leach 5	Salt Pan	JY-05-23a	7.5	0.2	3.9	0.06	7.4	0.02	0.07	<0.005	<20	<0.05
Leach 5	Salt Pan	JY-05-23b	18	0.17	2.2	0.05	12	0.06	0.13	<0.005	<20	<0.05
Leach 5	Salt Pan	JY-05-59a-1	0.28	0.15	<1	<0.02	25	0.02	<0.005	<0.005	<20	<0.05
Leach 5	Salt Pan	JY-05-59a-2	0.32	0.14	<1	<0.02	27	0.01	<0.005	<0.005	<20	<0.05
Leach 5	Salt Pan	JY-05-59b	0.03	0.11	2.1	<0.02	22	0.01	<0.005	<0.005	<20	<0.05
Leach 5	West Transect	JY-05-19	5.5	8.0	7.1	2.8	18	0.25	0.15	0.03	13,000	4.7

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; n.d., not determined; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Gd µg/L	ICP-MS Ge µg/L	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L	ICP-OES Li µg/L	ICP-MS Lu µg/L	ICP-MS Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L
Leach 2	Ash Meadows	JY03-09	0.02	0.32	0.006	100	0.04	6.6	<0.1	1.2	2.3	360
Leach 5	Ash Meadows	JY-05-29	0.01	0.1	0.006	260	<0.01	26	<0.1	1.3	7.3	2,800
Leach 5	Clay Dune	JY-03-44a	0.02	0.07	<0.005	33	<0.01	370	<0.1	0.07	0.5	290
Leach 5	Clay Dune	JY-03-44b	<0.005	0.1	<0.005	14	<0.01	24	<0.1	0.02	<0.2	4.2
Leach 5	Clay Dune	JY-03-44c	0.007	0.06	<0.005	15	<0.01	16	<0.1	0.02	<0.2	3.4
Leach 5	Coppice	JY-05-17	0.02	<0.05	<0.005	28	0.05	7.2	<0.1	0.20	4.8	210
Leach 2	Discovery	JY03-01	0.02	0.05	<0.005	16	0.40	4.9	<0.1	0.02	0.3	190
Leach 2	Discovery	JY03-01a	0.01	<0.05	<0.005	4.0	0.11	3.8	<0.1	0.10	1.7	5.6
Leach 5	Discovery	JY-05-15	0.28	0.87	0.04	26	1.7	280	<0.1	37	650	36
Leach 5	Discovery	JY-05-16	0.42	0.58	0.073	22	3.0	360	<0.1	49	870	<2
Leach 2	East Transect	JY03-29a	0.24	1.5	0.04	15	1.7	310	<0.1	55	550	<2
Leach 4	East Transect	JY03-29a	n.d.	0.93	n.d.	7.1	0.13	160	n.d.	34	290	<2
Leach 2	East Transect	JY03-29b	<0.005	0.21	<0.005	18	0.01	15	<0.1	0.26	<0.2	<2
Leach 2	East Transect	JY03-29c	<0.005	0.08	<0.005	43	0.01	7.1	<0.1	0.02	<0.2	9.3
Leach 2	East Transect	JY03-29d	<0.005	<0.05	<0.005	53	0.02	5.0	<0.1	0.01	<0.2	53
Leach 5	East Transect	JY-05-21a	0.19	0.62	0.03	17	1.4	470	<0.1	69	620	<2
Leach 5	East Transect	JY-05-21b	<0.005	<0.05	<0.005	17	<0.01	16	<0.1	0.18	0.6	<2
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	0.03	0.24	0.04	170	0.07	110	<0.1	0.24	2.5	660
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	0.02	0.2	0.04	160	0.07	100	<0.1	0.20	2.6	600
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.03	0.1	0.03	560	0.03	2,400	<0.1	0.02	0.4	670
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.04	<0.05	0.02	550	0.03	2,300	<0.1	0.01	0.2	650
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.04	0.3	0.02	310	0.03	1,300	<0.1	0.02	0.6	670
Leach 2	Ojo del Caballo	JY03-24a	0.24	1.3	0.03	16	1.4	340	<0.1	74	690	6.3
Leach 4	Ojo del Caballo	JY03-24a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	<0.005	0.1	<0.005	15	0.02	6.7	<0.1	0.01	<0.2	3.8
Leach 2	Ojo del Caballo	JY03-24c	0.02	0.09	0.006	36	0.07	5.3	<0.1	0.01	<0.2	240
Leach 5	Ojo del Caballo	JY-05-30	0.083	<0.05	0.054	180	0.12	3.4	<0.1	0.20	2.1	760
Leach 2	Salt Pan	JY03-26a	0.009	0.2	0.006	22	0.03	190	<0.1	0.14	0.5	410
Leach 2	Salt Pan	JY03-26b	0.062	0.38	0.01	18	0.50	250	<0.1	4.8	74	53
Leach 4	Salt Pan	JY03-26b	n.d.	0.1	n.d.	16	0.02	200	n.d.	0.02	0.3	45
Leach 2	Salt Pan	JY03-26c	2.46	4	0.32	67	15	6,400	0.1	310	3,300	11
Leach 4	Salt Pan	JY03-26c	n.d.	9.2	n.d.	43	0.30	2,900	n.d.	170	1,600	74
Leach 5	Salt Pan	JY-05-23a	0.01	<0.05	0.01	22	<0.01	21	<0.1	0.31	0.4	53
Leach 5	Salt Pan	JY-05-23b	0.005	0.1	0.02	15	0.01	18	<0.1	0.29	0.4	150
Leach 5	Salt Pan	JY-05-59a-1	0.01	0.42	<0.005	14	<0.01	310	<0.1	0.09	<0.2	99
Leach 5	Salt Pan	JY-05-59a-2	0.008	0.51	<0.005	15	0.01	320	<0.1	0.10	0.4	92
Leach 5	Salt Pan	JY-05-59b	0.03	0.46	<0.005	11	<0.01	93	<0.1	0.14	0.3	46
Leach 5	West Transect	JY-05-19	0.33	1	0.05	38	2.2	290	<0.1	41	650	14

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; n.d., not determined; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-OES Na mg/L	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-MS P mg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L
Leach 2	Ash Meadows	JY03-09	4,900	1.7	0.03	0.5	7.1	0.3	<0.01	42	1.8	2.3
Leach 5	Ash Meadows	JY-05-29	7,600	0.78	0.02	3.6	9.8	0.9	<0.01	62	6.9	2.4
Leach 5	Clay Dune	JY-03-44a	5,000	3.1	0.01	<0.4	1.7	0.64	<0.01	9.1	3.3	3.3
Leach 5	Clay Dune	JY-03-44b	2,200	0.84	0.01	<0.4	0.2	<0.05	<0.01	5.0	1.7	2.6
Leach 5	Clay Dune	JY-03-44c	2,300	0.75	<0.01	<0.4	0.2	<0.05	<0.01	4.8	1.5	3.3
Leach 5	Coppice	JY-05-17	1,800	0.64	0.04	<0.4	2.1	<0.05	<0.01	7.2	1.7	4.5
Leach 2	Discovery	JY03-01	1,000	0.82	0.22	<0.4	1.0	0.08	0.07	6.8	0.95	4.5
Leach 2	Discovery	JY03-01a	260	0.39	0.08	<0.4	0.3	<0.05	0.02	1.9	0.56	2.8
Leach 5	Discovery	JY-05-15	930	1.3	1.6	13	0.9	4.9	0.37	51	0.95	19
Leach 5	Discovery	JY-05-16	280	0.77	2.7	17	0.8	8.2	0.7	45	0.63	20
Leach 2	East Transect	JY03-29a	110	1.9	1.4	12	0.1	5.0	0.37	55	0.53	21
Leach 4	East Transect	JY03-29a	130	<0.2	n.d.	5.7	0.07	2.0	n.d.	19	<0.3	8.2
Leach 2	East Transect	JY03-29b	2,500	<0.2	<0.01	<0.4	0.05	<0.05	<0.01	13	<0.3	1.7
Leach 2	East Transect	JY03-29c	2,600	<0.2	0.01	<0.4	0.4	0.06	<0.01	19	0.66	2.5
Leach 2	East Transect	JY03-29d	1,200	<0.2	0.01	<0.4	0.9	<0.05	<0.01	18	0.66	2.7
Leach 5	East Transect	JY-05-21a	130	0.38	1.1	13	0.1	5.8	0.33	39	0.44	17
Leach 5	East Transect	JY-05-21b	1,600	0.38	0.03	<0.4	0.08	<0.05	<0.01	8.1	0.76	1.7
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	8,500	0.72	0.04	0.8	4.8	1.8	0.02	96	5.9	13
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	8,100	0.53	0.05	0.7	4.2	2.1	0.01	84	5.4	11
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	11,000	1.9	0.09	<0.4	1.2	0.3	0.01	300	11	28
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	11,000	1.6	0.02	<0.4	1.1	0.3	<0.01	290	9.4	30
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	13,000	1.3	0.04	<0.4	1.8	0.4	<0.01	130	8.8	24
Leach 2	Ojo del Caballo	JY03-24a	600	0.38	1.1	13	0.4	8.3	0.31	28	0.32	13
Leach 4	Ojo del Caballo	JY03-24a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	1,200	<0.2	0.01	<0.4	0.1	<0.05	<0.01	8.8	0.68	3.6
Leach 2	Ojo del Caballo	JY03-24c	2,300	0.69	0.04	<0.4	1.4	0.07	0.02	18	0.86	3.9
Leach 5	Ojo del Caballo	JY-05-30	7,400	0.87	0.26	0.6	20	1.6	0.04	60	5.1	2.2
Leach 2	Salt Pan	JY03-26a	5,300	3.2	0.03	<0.4	2.0	0.3	<0.01	12	2.4	3.3
Leach 2	Salt Pan	JY03-26b	1,400	1.2	0.36	1.9	0.2	0.7	0.11	18	0.97	7.2
Leach 4	Salt Pan	JY03-26b	1,200	2.2	n.d.	<0.4	0.2	<0.05	n.d.	6.6	1.6	4.6
Leach 2	Salt Pan	JY03-26c	500	0.68	14	63	1.2	39	3.7	140	<0.3	41
Leach 4	Salt Pan	JY03-26c	400	18	n.d.	36	0.7	11	n.d.	180	2.4	89
Leach 5	Salt Pan	JY-05-23a	12,000	2.1	0.02	<0.4	0.6	0.4	<0.01	9.2	2.3	1.8
Leach 5	Salt Pan	JY-05-23b	12,000	2.0	0.08	<0.4	0.6	0.3	<0.01	7.1	2.2	2.5
Leach 5	Salt Pan	JY-05-59a-1	16,000	0.26	0.03	<0.4	0.4	<0.05	<0.01	4.3	1.3	2.6
Leach 5	Salt Pan	JY-05-59a-2	16,000	0.25	0.05	<0.4	0.3	<0.05	<0.01	4.4	1.2	3.3
Leach 5	Salt Pan	JY-05-59b	13,000	0.29	0.02	<0.4	0.2	<0.05	<0.01	6.0	0.41	2.7
Leach 5	West Transect	JY-05-19	330	1.9	1.9	11	0.6	6.1	0.55	47	0.96	21

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; n.d., not determined; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Se µg/L	ICP-MS SiO ₂ mg/L	ICP-MS Sm µg/L	ICP-MS SO ₄ mg/L	ICP-OES Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L
Leach 2	Ash Meadows	JY03-09	20	6.6	0.01	11,000	550	0.10	<0.005	0.36	120
Leach 5	Ash Meadows	JY-05-29	80	14	<0.01	6,500	760	0.34	<0.005	0.39	71
Leach 5	Clay Dune	JY-03-44a	11	30	<0.01	4,900	170	2.5	<0.005	0.36	45
Leach 5	Clay Dune	JY-03-44b	<1	25	<0.01	3,100	69	0.63	<0.005	<0.2	26
Leach 5	Clay Dune	JY-03-44c	<1	27	<0.01	2,800	69	0.59	<0.005	<0.2	25
Leach 5	Coppice	JY-05-17	18	44	<0.01	1,600	31	0.34	<0.005	<0.2	18
Leach 2	Discovery	JY03-01	15	17	0.04	1,400	250	0.07	<0.005	<0.2	19
Leach 2	Discovery	JY03-01a	1.2	11	0.01	230	9.4	0.05	<0.005	<0.2	5.6
Leach 5	Discovery	JY-05-15	<1	160	0.17	850	51	0.42	0.04	0.66	250
Leach 5	Discovery	JY-05-16	<1	180	0.49	140	75	0.40	0.05	1.4	130
Leach 2	East Transect	JY03-29a	<1	88	0.25	160	250	0.09	0.04	1.5	440
Leach 4	East Transect	JY03-29a	<1	110	n.d.	240	180	n.d.	n.d.	<0.2	140
Leach 2	East Transect	JY03-29b	4.8	6.2	<0.01	6,800	880	0.02	<0.005	0.21	56
Leach 2	East Transect	JY03-29c	16	10	<0.01	4,300	280	0.02	<0.005	<0.2	32
Leach 2	East Transect	JY03-29d	8.1	12	<0.01	510	130	<0.02	<0.005	<0.2	4.9
Leach 5	East Transect	JY-05-21a	<1	160	0.29	140	380	0.32	0.02	0.86	94
Leach 5	East Transect	JY-05-21b	<1	19	<0.01	3,300	490	0.30	<0.005	<0.2	29
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	29	74	0.02	14,000	200	0.66	0.005	18	120
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	18	66	<0.01	13,000	190	0.50	0.006	16	82
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	52	260	0.01	5,800	710	3.2	<0.005	1.2	56
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	55	250	<0.01	5,400	660	2.6	<0.005	0.76	57
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	40	240	0.03	11,000	570	1.9	<0.005	0.94	100
Leach 2	Ojo del Caballo	JY03-24a	6.4	35	0.23	1,300	150	0.04	0.03	1.2	340
Leach 4	Ojo del Caballo	JY03-24a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	11	14	<0.01	2,000	72	0.05	<0.005	<0.2	24
Leach 2	Ojo del Caballo	JY03-24c	53	15	0.01	2,800	120	0.07	<0.005	<0.2	28
Leach 5	Ojo del Caballo	JY-05-30	28	13	0.02	2,700	610	0.92	0.01	0.74	34
Leach 2	Salt Pan	JY03-26a	10	9.2	<0.01	7,100	210	0.54	<0.005	0.56	90
Leach 2	Salt Pan	JY03-26b	3.0	33	0.08	1,900	130	0.40	0.009	0.62	110
Leach 4	Salt Pan	JY03-26b	1.6	42	n.d.	1,100	94	n.d.	n.d.	<0.2	9.7
Leach 2	Salt Pan	JY03-26c	<1	130	2.6	220	220	0.20	0.34	26	1,100
Leach 4	Salt Pan	JY03-26c	<1	1,300	n.d.	180	73	n.d.	n.d.	1.4	1,700
Leach 5	Salt Pan	JY-05-23a	9.7	15	<0.01	6,600	130	1.5	<0.005	1.3	74
Leach 5	Salt Pan	JY-05-23b	21	15	<0.01	11,000	120	1.3	<0.005	3.0	130
Leach 5	Salt Pan	JY-05-59a-1	16	4.8	<0.01	22,000	220	0.21	<0.005	<0.2	240
Leach 5	Salt Pan	JY-05-59a-2	25	4.5	0.01	23,000	230	0.28	<0.005	<0.2	230
Leach 5	Salt Pan	JY-05-59b	23	7.8	<0.01	18,000	220	0.20	<0.005	<0.2	170
Leach 5	West Transect	JY-05-19	<1	190	0.33	330	80	0.36	0.03	1.0	250

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

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Leach batch	Sample site	Sample ID	ICP-MS Ti µg/L	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L
Leach 2	Ash Meadows	JY03-09	0.2	<0.005	220	520	57	0.23	0.04	35
Leach 5	Ash Meadows	JY-05-29	0.9	<0.005	1,000	520	160	0.32	0.12	9.8
Leach 5	Clay Dune	JY-03-44a	<0.1	<0.005	19	53	56	0.05	0.03	5.7
Leach 5	Clay Dune	JY-03-44b	<0.1	<0.005	0.25	26	3.2	0.01	<0.005	5.2
Leach 5	Clay Dune	JY-03-44c	<0.1	<0.005	0.20	29	3.0	<0.01	0.01	2.8
Leach 5	Coppice	JY-05-17	<0.1	<0.005	36	140	9.0	0.02	<0.005	1.6
Leach 2	Discovery	JY03-01	0.2	<0.005	28	80	8.6	0.14	0.008	27
Leach 2	Discovery	JY03-01a	<0.1	<0.005	0.76	36	1.4	0.04	<0.005	35
Leach 5	Discovery	JY-05-15	0.1	0.01	13	55	2.1	0.9	0.18	76
Leach 5	Discovery	JY-05-16	0.1	0.03	3.2	37	<0.5	1.6	0.22	72
Leach 2	East Transect	JY03-29a	0.2	0.02	0.24	55	1.3	1.2	0.13	120
Leach 4	East Transect	JY03-29a	<0.1	n.d.	<0.1	41	n.d.	0.26	n.d.	41
Leach 2	East Transect	JY03-29b	<0.1	<0.005	<0.1	88	1.1	0.09	<0.005	33
Leach 2	East Transect	JY03-29c	<0.1	<0.005	2.9	220	4.4	0.02	<0.005	12
Leach 2	East Transect	JY03-29d	0.1	<0.005	9.7	220	6.0	0.02	<0.005	15
Leach 5	East Transect	JY-05-21a	0.2	0.02	0.10	27	<0.5	0.99	0.12	87
Leach 5	East Transect	JY-05-21b	<0.1	<0.005	<0.1	130	0.5	<0.01	0.006	1.9
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	0.2	0.04	610	420	56	1.4	0.48	12
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	0.2	0.04	560	390	51.8	1.3	0.41	15
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	0.1	0.01	270	540	69	0.9	0.12	11
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.1	0.01	270	500	66	0.91	0.12	9
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	<0.1	0.02	350	340	69	0.84	0.12	15
Leach 2	Ojo del Caballo	JY03-24a	0.2	0.02	2.1	81	1.5	1.1	0.12	110
Leach 4	Ojo del Caballo	JY03-24a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	<0.1	<0.005	0.6	610	1.9	0.02	<0.005	31
Leach 2	Ojo del Caballo	JY03-24c	0.1	0.005	95	1,200	31	0.17	0.02	25
Leach 5	Ojo del Caballo	JY-05-30	<0.1	0.03	290	1,000	120	1.6	0.31	5.1
Leach 2	Salt Pan	JY03-26a	<0.1	0.006	20	100	95	0.19	0.05	31
Leach 2	Salt Pan	JY03-26b	<0.1	<0.005	3.2	140	20	0.35	0.04	42
Leach 4	Salt Pan	JY03-26b	<0.1	n.d.	1.9	110	n.d.	0.04	n.d.	12
Leach 2	Salt Pan	JY03-26c	0.7	0.12	3.6	110	1.9	9.2	0.77	290
Leach 4	Salt Pan	JY03-26c	0.6	n.d.	1.8	200	n.d.	0.68	n.d.	170
Leach 5	Salt Pan	JY-05-23a	<0.1	0.01	6.3	16	16	0.28	0.16	8.6
Leach 5	Salt Pan	JY-05-23b	<0.1	0.05	9.4	27	32	0.82	0.43	17
Leach 5	Salt Pan	JY-05-59a-1	<0.1	<0.005	5.5	9.5	26	0.06	0.02	28
Leach 5	Salt Pan	JY-05-59a-2	<0.1	<0.005	5.1	9.0	24	0.06	0.04	32
Leach 5	Salt Pan	JY-05-59b	<0.1	<0.005	1.8	5.6	10	0.01	<0.005	30
Leach 5	West Transect	JY-05-19	0.1	0.02	2.4	65	2.4	1.3	0.2	57

Table 12G. Composition of the DI-leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; n.d., not determined; µg/L, micrograms per liter; mg/L, milligrams per liter; mg/L CaCO₃, milligrams per liter calcium carbonate]

Leach batch	Sample site	Sample ID	ICP-MS Zr µg/L	IC Cl mg/L	IC F mg/L	IC NO ₃ mg/L	IC SO ₄ mg/L	pH	Alkalinity mg/L CaCO ₃
Leach 2	Ash Meadows	JY03-09	8.5	290	2.6	3.6	8,500	n.d.	1,600
Leach 5	Ash Meadows	JY-05-29	35	1,500	9.5	110	8,300	10.5	6,000
Leach 5	Clay Dune	JY-03-44a	1.2	1,100	33	15	5,700	10.5	3,400
Leach 5	Clay Dune	JY-03-44b	<0.2	67	7	9.0	3,300	10.0	1,300
Leach 5	Clay Dune	JY-03-44c	<0.2	74	7.5	8.6	3,000	10.0	1,800
Leach 5	Coppice	JY-05-17	0.2	880	4.4	15	1,500	10.0	760
Leach 2	Discovery	JY03-01	0.4	240	0.9	11	1,400	n.d.	470
Leach 2	Discovery	JY03-01a	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 5	Discovery	JY-05-15	6.3	230	4.4	10	1,100	10.0	500
Leach 5	Discovery	JY-05-16	2.4	140	<.08	11	230	9.5	290
Leach 2	East Transect	JY03-29a	10	n.d.	n.d.	n.d.	n.d.	9.50	86
Leach 4	East Transect	JY03-29a	2.8	5.7	0.9	1.9	175	n.d.	100
Leach 2	East Transect	JY03-29b	0.4	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	East Transect	JY03-29c	0.3	990	2.4	6.1	3100	n.d.	970
Leach 2	East Transect	JY03-29d	0.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 5	East Transect	JY-05-21a	0.4	63	4.2	<.08	220	8.0	100
Leach 5	East Transect	JY-05-21b	<0.2	63	5.0	<.08	3,800	8.5	110
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	3.9	1,900	28	23	6,600	n.d.	9,000
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	2	2,000	29	25	5,500	n.d.	9,200
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	1.6	5,100	66	28	7,100	11.0	10,000
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	0.8	5,400	67	39	7,300	11.0	10,000
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	0.4	2,600	55	12	14,000	11.0	9,200
Leach 2	Ojo del Caballo	JY03-24a	4.8	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 4	Ojo del Caballo	JY03-24a	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24b	0.8	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Ojo del Caballo	JY03-24c	1.1	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 5	Ojo del Caballo	JY-05-30	1.5	3,300	34	12	3,100	10.0	8,500
Leach 2	Salt Pan	JY03-26a	11	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Leach 2	Salt Pan	JY03-26b	6.3	n.d.	n.d.	n.d.	n.d.	10.44	1,800
Leach 4	Salt Pan	JY03-26b	2.5	180	34	3.4	910	n.d.	1,400
Leach 2	Salt Pan	JY03-26c	53	n.d.	n.d.	n.d.	n.d.	10.03	560
Leach 4	Salt Pan	JY03-26c	67	210	13	1.6	220	n.d.	380
Leach 5	Salt Pan	JY-05-23a	5.1	6,700	32	9.0	8,300	10.5	7,400
Leach 5	Salt Pan	JY-05-23b	7.8	1,900	27	9.5	13,000	11.0	8,900
Leach 5	Salt Pan	JY-05-59a-1	0.2	540	11	10	31,000	11.0	1,300
Leach 5	Salt Pan	JY-05-59a-2	0.2	550	11	10	31,000	11.0	1,300
Leach 5	Salt Pan	JY-05-59b	<0.2	320	7.2	<.08	27,000	10.0	680
Leach 5	West Transect	JY-05-19	11	120	4.5	14	430	10.0	190

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	Treatment	ICP-MS Ag µg/L	ICP-OES Al µg/L	ICP-MS As µg/L	ICP-OES B µg/L	ICP-MS Ba µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-MS Ca mg/L
Leach 2	Ash Meadows	JY03-09	Nitric Leach	<3	140	670	11,000	810	<0.05	<0.2	3,100
Leach 5	Ash Meadows	JY-05-29	Nitric Leach	<3	250	290	16,000	1,200	0.1	<0.2	3,700
Leach 5	Clay Dune	JY-03-44a	Nitric Leach	<3	150,000	150	17,000	3,400	4.7	<0.2	2,700
Leach 5	Clay Dune	JY-03-44b	Nitric Leach	<3	110,000	27	5,100	2,700	5.5	<0.2	2,100
Leach 5	Clay Dune	JY-03-44c	Nitric Leach	<3	190,000	26	9,500	2,400	8.1	<0.2	2,300
Leach 5	Coppice	JY-05-17	Nitric Leach	<3	140,000	120	7,700	2,900	9.6	<0.2	2,100
Leach 2	Discovery	JY03-01	Nitric Leach	<3	58,000	99	4,700	1,800	6.2	<0.2	2,600
Leach 2	Discovery	JY03-01a	Nitric Leach	<3	32,000	49	2,200	1,500	4.4	<0.2	3,000
Leach 5	Discovery	JY-05-15	Nitric Leach	<3	48,000	63	3,800	2,200	3.6	<0.2	2,900
Leach 5	Discovery	JY-05-16	Nitric Leach	<3	44,000	57	3,200	1,400	3.7	<0.2	3,000
Leach 2	East Transect	JY03-29a	Nitric Leach	<3	350	40	560	1,600	0.2	<0.2	3,700
Leach 4	East Transect	JY03-29a	Nitric Leach	<3	630	31	590	2,200	0.1	<0.2	3,200
Leach 2	East Transect	JY03-29b	Nitric Leach	<3	100,000	57	2,200	1,300	6.0	<0.2	2,500
Leach 2	East Transect	JY03-29c	Nitric Leach	<3	110,000	120	4,800	1,200	6.9	<0.2	2,300
Leach 2	East Transect	JY03-29d	Nitric Leach	<3	89,000	170	5,100	1,800	5.6	<0.2	2,400
Leach 5	East Transect	JY-05-21a	Nitric Leach	<3	115	26	500	2,000	0.1	<0.2	3,300
Leach 5	East Transect	JY-05-21b	Nitric Leach	<3	76,000	45	2,900	2,500	5.0	<0.2	2,300
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	Nitric Leach	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	Nitric Leach	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	Nitric Leach	<3	36,000	410	ins	810	3.5	<0.2	4,300
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	Nitric Leach	<3	34,000	430	ins	770	4.1	<0.2	3,900
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	Nitric Leach	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	Nitric Leach	<3	86,000	59	1,300	2,500	6.9	<0.2	2,700
Leach 4	Ojo del Caballo	JY03-24a	Nitric Leach	<3	500	45	700	2,400	<0.05	<0.2	3,300
Leach 2	Ojo del Caballo	JY03-24b	Nitric Leach	<3	86,000	44	1,900	1,300	5.0	<0.2	1,500
Leach 2	Ojo del Caballo	JY03-24c	Nitric Leach	<3	160,000	250	5,300	1,000	10	<0.2	1,200
Leach 5	Ojo del Caballo	JY-05-30	Nitric Leach	<3	16,000	330	13,000	1,500	1.1	<0.2	2,500
Leach 2	Salt Pan	JY03-26a	Nitric Leach	<3	70,000	290	24,000	2,600	5.2	<0.2	2,800
Leach 2	Salt Pan	JY03-26b	Nitric Leach	<3	150,000	90	13,000	2,500	6.0	<0.2	2,300
Leach 4	Salt Pan	JY03-26b	Nitric Leach	<3	180,000	76	12,000	3,300	4.2	<0.2	2,200
Leach 2	Salt Pan	JY03-26c	Nitric Leach	<3	180,000	120	6,100	3,000	6.0	<0.2	2,400
Leach 4	Salt Pan	JY03-26c	Nitric Leach	<3	240,000	79	8,300	3,300	4.6	<0.2	1,800
Leach 5	Salt Pan	JY-05-23a	Nitric Leach	<3	22,000	77	ins	3,900	3.6	0.5	4,400
Leach 5	Salt Pan	JY-05-23b	Nitric Leach	<3	87,000	110	ins	2,700	7.3	<0.2	4,100
Leach 5	Salt Pan	JY-05-59a-1	Nitric Leach	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	Nitric Leach	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	Nitric Leach	<3	120,000	120	ins	3,900	4.6	<0.2	3,800
Leach 5	West Transect	JY-05-19	Nitric Leach	<3	110,000	110	2,150	2,100	8.0	<0.2	2,400

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	ICP-MS Cd µg/L	ICP-MS Ce µg/L	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L	ICP-MS Eu µg/L
Leach 2	Ash Meadows	JY03-09	0.3	2.5	<0.02	<1	0.14	5.1	0.1	0.1	0.11
Leach 5	Ash Meadows	JY-05-29	0.5	9.0	1.9	2.9	0.20	13	0.5	0.35	0.3
Leach 5	Clay Dune	JY-03-44a	6.7	640	19	10	0.19	22	57	30	13
Leach 5	Clay Dune	JY-03-44b	5.1	520	16	7.3	0.31	45	48	25	11
Leach 5	Clay Dune	JY-03-44c	5.1	500	25	10	0.22	61	51	27	11
Leach 5	Coppice	JY-05-17	8.2	950	44	21	0.14	97	67	36	14
Leach 2	Discovery	JY03-01	5.7	910	17	9.3	0.16	33	54	31	11
Leach 2	Discovery	JY03-01a	6.2	870	10	8.7	0.10	11	52	29	11
Leach 5	Discovery	JY-05-15	6.4	840	13	8.4	0.11	69	56	31	11
Leach 5	Discovery	JY-05-16	6.8	830	13	7.6	0.08	23	55	30	11
Leach 2	East Transect	JY03-29a	0.8	8.4	<0.02	1.3	0.06	4.7	0.5	0.4	0.3
Leach 4	East Transect	JY03-29a	0.4	7.9	6.2	1.1	0.11	6.1	0.5	0.3	0.5
Leach 2	East Transect	JY03-29b	3.8	750	19	11	0.28	60	43	23	9.4
Leach 2	East Transect	JY03-29c	3.9	700	17	13	0.37	51	40	22	9.5
Leach 2	East Transect	JY03-29d	3.8	680	16	11	0.40	53	38	20	8.9
Leach 5	East Transect	JY-05-21a	0.9	6.3	2.0	1.8	0.04	8.8	0.4	0.3	0.3
Leach 5	East Transect	JY-05-21b	4.1	770	17	7.5	0.28	44	46	25	10
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	8.8	860	17	11	1.1	170	62	30	14
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	8.7	800	17	11	1.1	200	62	30	13
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	4.6	700	8.8	7.6	0.28	32	57	32	11
Leach 4	Ojo del Caballo	JY03-24a	0.1	1.9	4.8	<1	0.11	4.9	0.2	0.1	0.4
Leach 2	Ojo del Caballo	JY03-24b	3.1	350	12	6.2	0.54	78	37	21	6.7
Leach 2	Ojo del Caballo	JY03-24c	1.7	370	21	14	0.55	96	35	20	5.9
Leach 5	Ojo del Caballo	JY-05-30	3.4	500	4.3	5.4	0.22	18	29	16	5.5
Leach 2	Salt Pan	JY03-26a	6.5	650	16	14	0.14	210	57	31	13
Leach 2	Salt Pan	JY03-26b	5.5	520	21	7.6	0.26	78	55	27	12
Leach 4	Salt Pan	JY03-26b	4.3	640	27	11	0.31	50	54	26	15
Leach 2	Salt Pan	JY03-26c	5.7	700	13	4.7	0.31	62	61	31	14
Leach 4	Salt Pan	JY03-26c	3.7	590	25	4.6	0.38	30	51	24	15
Leach 5	Salt Pan	JY-05-23a	7.3	1,400	8.1	4.9	0.21	20	63	34	14
Leach 5	Salt Pan	JY-05-23b	9.7	2,200	23	17	0.32	99	85	46	18
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	8.9	890	24	17	0.23	160	77	40	17
Leach 5	West Transect	JY-05-19	6.9	990	26	13	0.16	56	58	31	12

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	ICP-OES Fe µg/L	ICP-MS Ga µg/L	ICP-MS Gd µg/L	ICP-MS Ge µg/L	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L	ICP-OES Li µg/L	ICP-MS Lu µg/L
Leach 2	Ash Meadows	JY03-09	<20	0.1	0.2	0.1	0.03	36	2.0	98	0.1
Leach 5	Ash Meadows	JY-05-29	<20	0.1	0.7	0.3	0.1	61	7.9	100	<0.1
Leach 5	Clay Dune	JY-03-44a	6,100	13	77	1.7	11	38	460	2,900	3.5
Leach 5	Clay Dune	JY-03-44b	9,000	13	66	1.4	8.9	35	380	940	3.2
Leach 5	Clay Dune	JY-03-44c	6,600	11	69	1.8	9.5	42	400	1,500	3.5
Leach 5	Coppice	JY-05-17	11,000	18	89	2.2	13	60	570	300	4.2
Leach 2	Discovery	JY03-01	3,200	6.0	72	1.2	10	30	460	240	>3
Leach 2	Discovery	JY03-01a	1,100	4.4	67	0.9	9.8	15	480	150	>3
Leach 5	Discovery	JY-05-15	1,900	9.0	72	1.5	11	29	450	150	3.8
Leach 5	Discovery	JY-05-16	870	8.8	74	1.3	10	32	460	170	3.7
Leach 2	East Transect	JY03-29a	<20	0.1	0.8	<0.05	0.2	5.7	9.6	38	0.1
Leach 4	East Transect	JY03-29a	<200	0.1	0.7	<0.05	0.1	9.6	8.9	<100	<0.1
Leach 2	East Transect	JY03-29b	2,600	4.7	58	1.2	7.8	30	390	690	2.9
Leach 2	East Transect	JY03-29c	2,900	5.0	55	1.1	7.5	55	360	680	2.8
Leach 2	East Transect	JY03-29d	2,700	5.1	53	1.0	7.2	73	350	520	2.6
Leach 5	East Transect	JY-05-21a	<20	0.1	0.6	0.1	0.1	8.1	7.2	30	<0.1
Leach 5	East Transect	JY-05-21b	4,000	10	63	1.4	8.7	42	390	500	3
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	3,200	9.2	93	3.2	11	190	640	2,300	2.5
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	3,000	9.3	91	3.1	11	180	620	2,200	2.5
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	1,600	5.4	77	1.5	11	26	560	510	>3
Leach 4	Ojo del Caballo	JY03-24a	98	<0.05	0.3	<0.05	0.0	10	3.2	<100	<0.1
Leach 2	Ojo del Caballo	JY03-24b	9,300	12	49	1.6	7.2	30	360	830	2.9
Leach 2	Ojo del Caballo	JY03-24c	17,000	22	46	2.5	6.7	49	350	1,500	2.7
Leach 5	Ojo del Caballo	JY-05-30	910	4.3	38	0.8	5.6	56	280	100	1.9
Leach 2	Salt Pan	JY03-26a	1,200	3.8	77	1.2	11	21	520	1,600	>3
Leach 2	Salt Pan	JY03-26b	6,100	10	74	1.2	10	41	490	2,800	>3
Leach 4	Salt Pan	JY03-26b	4,300	7.9	80	1.4	9.5	41	570	3,200	2.7
Leach 2	Salt Pan	JY03-26c	4,500	11	81	1.2	11	43	550	2,100	>3
Leach 4	Salt Pan	JY03-26c	6,300	12	78	1.4	9.1	61	540	2,900	2.6
Leach 5	Salt Pan	JY-05-23a	89	9.1	87	1.7	12	23	610	420	3.7
Leach 5	Salt Pan	JY-05-23b	1,100	13	114	2.4	15	27	710	900	5.4
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	9,900	15	100	1.9	14	ins	620	1600	4.7
Leach 5	West Transect	JY-05-19	5,400	13	75	2.0	11	120	460	400	3.8

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	ICP-OES Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L	ICP-OES Na mg/L	ICP-MS Nb µg/L	ICP-MS Nd µg/L	ICP-MS Ni µg/L	ICP-OES P mg/L
Leach 2	Ash Meadows	JY03-09	80	360	16	450	<0.2	1.0	<0.4	7.9
Leach 5	Ash Meadows	JY-05-29	91	630	83	590	<0.2	4.1	44	5.5
Leach 5	Clay Dune	JY-03-44a	130	4,000	3	480	1.3	410	40	6.7
Leach 5	Clay Dune	JY-03-44b	160	2,700	<2	450	0.9	350	37	5.0
Leach 5	Clay Dune	JY-03-44c	210	4,000	<2	600	0.7	370	50	4.8
Leach 5	Coppice	JY-05-17	120	5,800	<2	350	0.4	510	73	16
Leach 2	Discovery	JY03-01	130	3,700	<2	180	<0.2	400	<0.4	12
Leach 2	Discovery	JY03-01a	120	3,300	<2	150	<0.2	370	<0.4	6.1
Leach 5	Discovery	JY-05-15	120	4,000	<2	220	0.6	390	40	8.9
Leach 5	Discovery	JY-05-16	150	3,800	<2	180	0.4	390	42	8.3
Leach 2	East Transect	JY03-29a	45	300	<2	52	<0.2	3.4	<0.4	2.6
Leach 4	East Transect	JY03-29a	60	240	<2	69	<0.2	3.0	150	2.3
Leach 2	East Transect	JY03-29b	26	2,800	<2	450	<0.2	300	7.7	5.4
Leach 2	East Transect	JY03-29c	260	2,800	<2	420	<0.2	280	4.5	6.9
Leach 2	East Transect	JY03-29d	220	2,500	<2	430	<0.2	270	<0.4	7.9
Leach 5	East Transect	JY-05-21a	50	320	<2	69	0.4	2.4	53	2.3
Leach 5	East Transect	JY-05-21b	250	2,300	<2	380	0.3	340	43	7.6
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	88	3,600	6	1,400	1.8	520	52	15
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	81	3,400	8	1,400	1.5	510	50	16
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	110	1,500	<2	270	<0.2	430	<0.4	5.9
Leach 4	Ojo del Caballo	JY03-24a	36	35	<2	180	<0.2	1.0	120	2.3
Leach 2	Ojo del Caballo	JY03-24b	110	1,300	<2	490	<0.2	280	19	3.3
Leach 2	Ojo del Caballo	JY03-24c	190	2,200	<2	670	<0.2	270	51	5.2
Leach 5	Ojo del Caballo	JY-05-30	93	1,400	3	2,400	0.2	22	34	15
Leach 2	Salt Pan	JY03-26a	110	3,400	<2	550	<0.2	410	12	5.3
Leach 2	Salt Pan	JY03-26b	100	3,200	<2	410	<0.2	390	<0.4	5.9
Leach 4	Salt Pan	JY03-26b	140	3,300	<2	470	<0.2	440	95	8.3
Leach 2	Salt Pan	JY03-26c	100	1,800	<2	290	<0.2	430	<0.4	8.1
Leach 4	Salt Pan	JY03-26c	120	2,100	<2	420	<0.2	420	82	7.8
Leach 5	Salt Pan	JY-05-23a	130	2,800	<2	1,100	2.9	480	50	2.4
Leach 5	Salt Pan	JY-05-23b	210	4,800	<2	1,500	2.0	590	61	5.0
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	160	5,300	<2	920	0.4	530	53	9.3
Leach 5	West Transect	JY-05-19	210	5,700	<2	210	0.4	410	49	14

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L	ICP-MS Se µg/L	ICP-OES SiO ₂ mg/L	ICP-MS Sm µg/L
Leach 2	Ash Meadows	JY03-09	0.3	0.2	23	2.4	9.8	3.6	42	0.2
Leach 5	Ash Meadows	JY-05-29	0.4	1	26	5.2	7.6	6.7	48	0.6
Leach 5	Clay Dune	JY-03-44a	200	110	28	1.0	19	5.1	82	78
Leach 5	Clay Dune	JY-03-44b	160	90	30	0.7	21	4.6	67	67
Leach 5	Clay Dune	JY-03-44c	130	93	28	0.8	25	3.9	98	72
Leach 5	Coppice	JY-05-17	120	130	37	0.5	19	4.8	90	94
Leach 2	Discovery	JY03-01	84	110	26	<0.3	8.7	2.6	35	74
Leach 2	Discovery	JY03-01a	30	100	15	<0.3	6.4	2.4	21	70
Leach 5	Discovery	JY-05-15	91	100	21	0.6	7.7	5.7	33	74
Leach 5	Discovery	JY-05-16	35	100	18	0.5	6.6	3.8	33	72
Leach 2	East Transect	JY03-29a	0.8	0.9	5.5	0.4	4.8	3.3	12	0.6
Leach 4	East Transect	JY03-29a	0.6	0.8	11	<0.3	31	1.4	24	0.5
Leach 2	East Transect	JY03-29b	91	84	37	<0.3	16	2.2	54	58
Leach 2	East Transect	JY03-29c	97	79	47	<0.3	18	3.3	59	55
Leach 2	East Transect	JY03-29d	95	75	55	<0.3	15	3.0	47	54
Leach 5	East Transect	JY-05-21a	0.7	0.6	6.7	0.6	3.5	3.3	14	0.4
Leach 5	East Transect	JY-05-21b	120	87	39	0.4	18	4.5	62	63
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	88	130	260	3.3	10	17	85	94
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	88	130	250	3.3	10	17	86	91
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	100	120	28	<0.3	7.5	3.4	29	79
Leach 4	Ojo del Caballo	JY03-24a	0.3	0.3	11	<0.3	39	1.6	33	0.2
Leach 2	Ojo del Caballo	JY03-24b	120	80	39	<0.3	11	2.5	37	52
Leach 2	Ojo del Caballo	JY03-24c	120	75	52	<0.3	17	1.2	69	50
Leach 5	Ojo del Caballo	JY-05-30	25	57	28	1.6	5.9	4.5	45	37
Leach 2	Salt Pan	JY03-26a	110	110	20	0.5	11	3.4	48	78
Leach 2	Salt Pan	JY03-26b	140	110	35	<0.3	16	1.9	62	76
Leach 4	Salt Pan	JY03-26b	150	120	38	<0.3	87	<1	86	86
Leach 2	Salt Pan	JY03-26c	61	120	36	<0.3	14	2.3	50	83
Leach 4	Salt Pan	JY03-26c	92	120	43	<0.3	100	<1	90	82
Leach 5	Salt Pan	JY-05-23a	31	120	19	3.8	12	14	100	86
Leach 5	Salt Pan	JY-05-23b	170	150	28	2.0	14	11	110	110
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	290	140	26	<0.3	15	6.0	66	100
Leach 5	West Transect	JY-05-19	110	110	55	0.5	17	4.9	87	79

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	ICP-MS SO ₄ mg/L	ICP-MS Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L	ICP-MS Tl µg/L	ICP-MS Tm µg/L
Leach 2	Ash Meadows	JY03-09	410	54,000	0.03	<0.02	1.4	9.7	0.3	<0.02
Leach 5	Ash Meadows	JY-05-29	290	22,000	0.07	0.1	1.3	6.6	1.4	0.04
Leach 5	Clay Dune	JY-03-44a	160	37,000	0.53	11	13	37	0.3	3.9
Leach 5	Clay Dune	JY-03-44b	130	30,000	0.35	9.1	47	120	0.2	3.4
Leach 5	Clay Dune	JY-03-44c	180	33,000	0.31	9.5	28	57	0.2	3.6
Leach 5	Coppice	JY-05-17	45	20,000	0.21	13	11	110	0.2	4.8
Leach 2	Discovery	JY03-01	<2	28,000	0.09	10	4.9	33	0.2	4.0
Leach 2	Discovery	JY03-01a	<2	33,000	0.03	9.7	3.6	3.4	<0.1	3.9
Leach 5	Discovery	JY-05-15	44	32,000	0.24	10	7.1	8.6	0.2	4.0
Leach 5	Discovery	JY-05-16	21	32,000	0.23	10	2.8	2.3	0.2	3.9
Leach 2	East Transect	JY03-29a	21	44,000	<0.02	0.1	4.9	3	<0.1	0.05
Leach 4	East Transect	JY03-29a	21	43,000	<0.02	0.1	37	2.1	0.1	0.05
Leach 2	East Transect	JY03-29b	470	38,000	0.03	7.8	22	26	0.4	3.0
Leach 2	East Transect	JY03-29c	210	36,000	0.03	7.6	23	35	0.5	2.9
Leach 2	East Transect	JY03-29d	73	34,000	<0.02	7.4	22	38	0.8	2.7
Leach 5	East Transect	JY-05-21a	33	45,000	0.09	0.1	0.7	1.8	0.1	0.04
Leach 5	East Transect	JY-05-21b	130	39,000	0.23	8.9	28	55	0.6	3.2
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	570	61,000	0.57	12	4.2	28	1.1	3.4
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	580	55,000	0.51	12	4.3	30	1.1	3.4
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	46	37,000	0.08	11	12	20	0.2	4.3
Leach 4	Ojo del Caballo	JY03-24a	40	50,000	<0.02	<0.02	21	3	0.1	0.0
Leach 2	Ojo del Caballo	JY03-24b	110	20,000	0.06	7.0	40	250	0.4	2.9
Leach 2	Ojo del Caballo	JY03-24c	94	16,000	0.02	6.6	59	260	0.4	2.6
Leach 5	Ojo del Caballo	JY-05-30	130	35,000	0.20	5.4	1.4	4	0.2	2.1
Leach 2	Salt Pan	JY03-26a	350	36,000	0.09	11	21	14	0.2	4.1
Leach 2	Salt Pan	JY03-26b	121	33,000	0.03	10	21	50	0.2	3.5
Leach 4	Salt Pan	JY03-26b	68	34,000	<0.02	11	63	28	0.2	3.3
Leach 2	Salt Pan	JY03-26c	14	35,000	0.06	12	20	33	0.4	4.0
Leach 4	Salt Pan	JY03-26c	11	29,000	<0.02	10	100	38	0.4	3.1
Leach 5	Salt Pan	JY-05-23a	490	55,000	0.77	11	1.1	9.1	0.4	4.3
Leach 5	Salt Pan	JY-05-23b	980	52,000	0.69	15	10	20	0.3	5.9
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	1,200	47,000	0.33	14	28	67	0.3	5.1
Leach 5	West Transect	JY-05-19	33	28,000	0.20	11	9.2	38	0.5	4.0

Table 12H. Composition of the nitric acid leach fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; µg/L, micrograms per liter; mg/L, milligrams per liter]

Leach batch	Sample site	Sample ID	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L
Leach 2	Ash Meadows	JY03-09	11	6.6	5.3	1.9	0.06	16	1.2
Leach 5	Ash Meadows	JY-05-29	24	10	5.3	4.3	0.3	8.2	0.9
Leach 5	Clay Dune	JY-03-44a	4.0	9.7	1.4	300	25	410	1.7
Leach 5	Clay Dune	JY-03-44b	3.0	7.2	0.9	250	22	180	1.2
Leach 5	Clay Dune	JY-03-44c	3.1	3.3	0.9	270	25	120	1.4
Leach 5	Coppice	JY-05-17	19	37	0.7	350	31	340	5.5
Leach 2	Discovery	JY03-01	11	19	1.1	290	26	110	4.8
Leach 2	Discovery	JY03-01a	2.8	4.1	1.0	300	25	77	3.2
Leach 5	Discovery	JY-05-15	8.2	11	0.8	290	27	120	3.9
Leach 5	Discovery	JY-05-16	4.3	2	0.7	280	26	57	1.8
Leach 2	East Transect	JY03-29a	3.0	1.6	0.5	6.8	0.3	4.2	0.7
Leach 4	East Transect	JY03-29a	4.6	1.4	<0.5	5.8	0.3	5.4	1.3
Leach 2	East Transect	JY03-29b	6.9	7.0	0.6	230	19	140	1.4
Leach 2	East Transect	JY03-29c	12	10	0.6	210	19	120	1.9
Leach 2	East Transect	JY03-29d	22	13	<0.5	210	18	100	3.0
Leach 5	East Transect	JY-05-21a	3.0	1.9	0.5	5	0.3	5.6	0.4
Leach 5	East Transect	JY-05-21b	6.5	28	0.5	230	22	140	2.2
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	23	150	6.5	300	20	2,800	2.3
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	24	150	6.4	290	20	3,300	2.5
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	6.1	3.1	0.9	320	27	120	1.3
Leach 4	Ojo del Caballo	JY03-24a	6.0	0.8	<0.5	2.3	0.08	11	1.2
Leach 2	Ojo del Caballo	JY03-24b	3.3	32	0.7	210	19	170	1.1
Leach 2	Ojo del Caballo	JY03-24c	24	57	0.6	200	17	300	1.5
Leach 5	Ojo del Caballo	JY-05-30	1.5	10	1.1	170	13	240	1.8
Leach 2	Salt Pan	JY03-26a	3.9	5.9	1.4	310	24	340	2.6
Leach 2	Salt Pan	JY03-26b	3.9	9.1	0.7	280	22	150	1.8
Leach 4	Salt Pan	JY03-26b	5.9	4.9	<0.5	260	21	97	1.3
Leach 2	Salt Pan	JY03-26c	4.9	5.7	0.5	320	26	96	1.1
Leach 4	Salt Pan	JY03-26c	9.5	4.6	<0.5	250	20	83	1.2
Leach 5	Salt Pan	JY-05-23a	0.7	<0.5	9.3	330	28	400	1.9
Leach 5	Salt Pan	JY-05-23b	4.5	1.3	6.9	410	40	930	1.5
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	4.5	12	0.6	400	33	1,500	1.8
Leach 5	West Transect	JY-05-19	20	24	0.7	300	27	180	7.4

Table 12I. Composition of the residual fraction of fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	Treatment	ICP-MS Ag ppm	ICP-OES Al wt.%	ICP-MS As ppm	ICP-MS Ba ppm	ICP-MS Be ppm	ICP-MS Bi ppm	ICP-OES Ca wt.%
Leach 2	Ash Meadows	JY03-09	Final Residual	<2	6.4	26	790	2.3	0.17	6.1
Leach 5	Ash Meadows	JY-05-29	Final Residual	<3	5.0	15	630	1.7	0.18	12
Leach 5	Clay Dune	JY-03-44a	Final Residual	<3	6.9	23	620	2.1	0.26	1.3
Leach 5	Clay Dune	JY-03-44b	Final Residual	<3	6.8	16	580	2.2	0.20	0.75
Leach 5	Clay Dune	JY-03-44c	Final Residual	<3	7.3	20	470	2.3	0.24	0.97
Leach 5	Coppice	JY-05-17	Final Residual	<3	7.4	20	700	2.6	0.28	1.2
Leach 2	Discovery	JY03-01	Final Residual	2.3	7.4	14	860	2.7	0.24	1.6
Leach 2	Discovery	JY03-01a	Final Residual	<2	7.5	13	950	2.7	0.22	1.8
Leach 5	Discovery	JY-05-15	Final Residual	<3	7.7	15	880	2.6	0.25	1.7
Leach 5	Discovery	JY-05-16	Final Residual	<3	8.1	16	950	2.6	0.25	1.6
Leach 2	East Transect	JY03-29a	Final Residual	<2	7.1	14	890	2.2	0.19	5.8
Leach 4	East Transect	JY03-29a	Final Residual	<2	6.2	13	920	2.2	0.16	5.0
Leach 2	East Transect	JY03-29b	Final Residual	<2	6.6	23	490	2.5	0.23	1.5
Leach 2	East Transect	JY03-29c	Final Residual	<2	6.6	28	470	2.4	0.23	1.6
Leach 2	East Transect	JY03-29d	Final Residual	<2	6.7	29	460	2.6	0.22	1.2
Leach 5	East Transect	JY-05-21a	Final Residual	<3	6.8	13	920	1.9	0.18	7.8
Leach 5	East Transect	JY-05-21b	Final Residual	<3	6.3	23	400	2.4	0.26	0.78
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	Final Residual	<2	6.6	14	550	2.8	0.25	1.0
Leach 4	Ojo del Caballo	JY03-24a	Final Residual	<2	6.8	13	770	2.5	0.16	5.3
Leach 2	Ojo del Caballo	JY03-24b	Final Residual	<2	5.9	13	320	2.7	0.21	0.48
Leach 2	Ojo del Caballo	JY03-24c	Final Residual	<2	5.5	16	290	2.6	0.21	0.39
Leach 5	Ojo del Caballo	JY-05-30	Final Residual	<3	6.6	9.6	1,000	2.2	0.18	2.0
Leach 2	Salt Pan	JY03-26a	Final Residual	<2	7.0	23	790	2.2	0.22	1.7
Leach 2	Salt Pan	JY03-26b	Final Residual	<2	6.8	25	530	2.6	0.24	1.0
Leach 4	Salt Pan	JY03-26b	Final Residual	<2	6.2	23	560	2.3	0.18	1.0
Leach 2	Salt Pan	JY03-26c	Final Residual	<2	7.2	21	520	2.5	0.29	0.83
Leach 4	Salt Pan	JY03-26c	Final Residual	<2	6.3	28	430	2.5	0.20	0.64
Leach 5	Salt Pan	JY-05-23a	Final Residual	<3	4.7	16	710	2.2	0.22	1.4
Leach 5	Salt Pan	JY-05-23b	Final Residual	<3	3.3	18	700	2.1	0.26	0.78
Leach 5	Salt Pan	JY-05-59a-1	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	Final Residual	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	Final Residual	<3	4.7	14	890	2.0	0.22	1.3
Leach 5	West Transect	JY-05-19	Final Residual	<3	7.5	18	590	2.7	0.29	0.98

Table 121. Composition of the residual fraction of fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Cd ppm	ICP-MS Ce ppm	ICP-MS Co ppm	ICP-MS Cr ppm	ICP-MS Cs ppm	ICP-MS Cu ppm	ICP-OES Fe wt. %	ICP-MS Ga ppm
Leach 2	Ash Meadows	JY03-09	0.22	81	7.6	58	9.6	26	2.3	15
Leach 5	Ash Meadows	JY-05-29	0.23	67	6.1	29	12	20	1.9	11
Leach 5	Clay Dune	JY-03-44a	0.07	67	11	47	10	36	3.3	18
Leach 5	Clay Dune	JY-03-44b	0.06	38	10	62	11	27	2.8	17
Leach 5	Clay Dune	JY-03-44c	0.08	41	12	52	14	32	3.5	18
Leach 5	Coppice	JY-05-17	0.10	64	12	64	13	33	3.4	20
Leach 2	Discovery	JY03-01	0.06	64	9.0	55	9.4	23	2.8	18
Leach 2	Discovery	JY03-01a	0.09	77	8.9	63	8.6	25	2.8	18
Leach 5	Discovery	JY-05-15	0.09	72	9.8	62	9.9	30	3.0	19
Leach 5	Discovery	JY-05-16	0.10	67	9.5	60	9.8	30	2.9	19
Leach 2	East Transect	JY03-29a	0.28	110	8.4	59	7.1	21	2.6	16
Leach 4	East Transect	JY03-29a	0.28	96	8.2	52	7.9	20	2.3	15
Leach 2	East Transect	JY03-29b	0.09	45	12	48	16	33	3.3	18
Leach 2	East Transect	JY03-29c	0.16	41	13	49	17	32	3.3	18
Leach 2	East Transect	JY03-29d	0.08	41	13	50	17	33	3.3	18
Leach 5	East Transect	JY-05-21a	0.34	120	7.8	55	7.3	23	2.4	16
Leach 5	East Transect	JY-05-21b	0.08	38	12	47	16	31	3.2	18
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	0.07	57	9.3	44	14	28	2.9	17
Leach 4	Ojo del Caballo	JY03-24a	0.33	92	8.0	36	10	26	2.5	16
Leach 2	Ojo del Caballo	JY03-24b	0.06	35	10	36	16	27	2.9	16
Leach 2	Ojo del Caballo	JY03-24c	0.08	32	9.6	36	16	27	2.9	15
Leach 5	Ojo del Caballo	JY-05-30	0.08	100	6.1	37	4.7	16.0	2.0	17
Leach 2	Salt Pan	JY03-26a	0.06	85	9.8	75	7.5	35	3.1	17
Leach 2	Salt Pan	JY03-26b	0.06	51	13	54	13	33	3.4	19
Leach 4	Salt Pan	JY03-26b	0.09	58	12	51	13	31	3.2	17
Leach 2	Salt Pan	JY03-26c	0.06	50	13	55	15	32	3.6	19
Leach 4	Salt Pan	JY03-26c	0.08	44	13	46	16	32	3.4	18
Leach 5	Salt Pan	JY-05-23a	0.20	80	9.7	41	9.6	29	2.0	17
Leach 5	Salt Pan	JY-05-23b	0.10	73	9.7	41	9.6	28	1.5	16
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	0.09	87	9.2	45	7.2	22	2.1	16
Leach 5	West Transect	JY-05-19	0.10	62	10	49	13	27	3.2	20

Table 12I. Composition of the residual fraction of fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-OES K wt.%	ICP-MS La ppm	ICP-MS Li ppm	ICP-OES Mg wt.%	ICP-MS Mn ppm	ICP-MS Mo ppm	ICP-OES Na wt.%	ICP-MS Nb ppm
Leach 2	Ash Meadows	JY03-09	2.9	43	180	4.0	560	1.2	1.4	12
Leach 5	Ash Meadows	JY-05-29	2.2	37	120	3.3	430	2.1	1.1	15
Leach 5	Clay Dune	JY-03-44a	3.1	37	360	3.5	660	1.2	1.5	25
Leach 5	Clay Dune	JY-03-44b	3.2	21	280	3.5	640	0.8	1.4	20
Leach 5	Clay Dune	JY-03-44c	3.4	23	340	4.9	760	0.8	1.4	23
Leach 5	Coppice	JY-05-17	2.9	35	120	2.3	720	2.4	1.3	29
Leach 2	Discovery	JY03-01	3.2	34	120	2.2	540	1.4	1.6	15
Leach 2	Discovery	JY03-01a	3.1	41	100	2.0	540	1.3	1.7	16
Leach 5	Discovery	JY-05-15	3.1	40	100	2.4	590	1.5	1.7	28
Leach 5	Discovery	JY-05-16	3.3	38	93	2.0	550	1.4	1.7	27
Leach 2	East Transect	JY03-29a	3.1	62	86	2.4	530	1.0	1.7	11
Leach 4	East Transect	JY03-29a	2.8	54	99	2.3	510	1.0	1.6	17
Leach 2	East Transect	JY03-29b	3.5	23	290	5.3	750	0.7	0.90	12
Leach 2	East Transect	JY03-29c	3.7	21	310	6.0	750	0.7	0.81	14
Leach 2	East Transect	JY03-29d	3.7	21	310	6.0	770	1.0	0.89	12
Leach 5	East Transect	JY-05-21a	3.0	61	64	2.0	460	0.9	1.6	22
Leach 5	East Transect	JY-05-21b	3.2	19	280	5.6	760	0.7	0.92	22
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	3.8	31	200	3.9	630	0.9	1.4	12
Leach 4	Ojo del Caballo	JY03-24a	3.9	64	140	2.9	540	1.0	1.9	25
Leach 2	Ojo del Caballo	JY03-24b	3.7	18	270	5.5	710	0.4	1.2	7.2
Leach 2	Ojo del Caballo	JY03-24c	3.8	18	270	5.5	670	0.7	0.92	9.9
Leach 5	Ojo del Caballo	JY-05-30	2.6	56	58	1.3	460	1.9	2.2	16
Leach 2	Salt Pan	JY03-26a	2.9	46	220	2.4	600	2.1	1.7	14
Leach 2	Salt Pan	JY03-26b	3.5	27	520	4.3	780	1.0	1.2	14
Leach 4	Salt Pan	JY03-26b	3.2	28	450	3.9	690	1.1	1.1	20
Leach 2	Salt Pan	JY03-26c	3.7	25	350	3.5	810	2.4	1.0	13
Leach 4	Salt Pan	JY03-26c	3.5	21	570	4.5	810	0.9	0.97	20
Leach 5	Salt Pan	JY-05-23a	2.0	40	210	2.1	620	0.9	1.4	8.4
Leach 5	Salt Pan	JY-05-23b	1.4	37	190	1.6	600	1.1	0.89	14
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	2.0	48	160	1.4	530	1.0	1.4	12
Leach 5	West Transect	JY-05-19	3.2	34	150	3.0	680	1.5	1.1	30

Table 121. Composition of the residual fraction of fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-OES Nd ppm	ICP-MS Ni ppm	ICP-MS P ppm	ICP-MS Pb ppm	ICP-MS Rb ppm	ICP-MS Sb ppm	ICP-MS Sc ppm	ICP-MS Sr ppm
Leach 2	Ash Meadows	JY03-09	32	16	940	19	120	1.3	8.9	1,200
Leach 5	Ash Meadows	JY-05-29	29	12	810	19	93	1.3	7.1	1,200
Leach 5	Clay Dune	JY-03-44a	30	22	470	19	140	1.6	10	270
Leach 5	Clay Dune	JY-03-44b	16	21	230	14	150	1.5	8.3	190
Leach 5	Clay Dune	JY-03-44c	19	24	330	16	170	1.7	10	190
Leach 5	Coppice	JY-05-17	25	32	320	24	170	2.0	12	260
Leach 2	Discovery	JY03-01	23	19	320	20	150	1.6	10	320
Leach 2	Discovery	JY03-01a	29	19	610	24	140	1.7	10	360
Leach 5	Discovery	JY-05-15	29	22	540	23	150	1.6	11	330
Leach 5	Discovery	JY-05-16	26	22	560	26	160	1.6	10	350
Leach 2	East Transect	JY03-29a	45	16	750	23	120	1.3	10	830
Leach 4	East Transect	JY03-29a	39	16	680	24	120	1.1	10	850
Leach 2	East Transect	JY03-29b	14	24	400	16	170	1.9	11	290
Leach 2	East Transect	JY03-29c	13	24	390	15	180	2.0	11	290
Leach 2	East Transect	JY03-29d	13	24	390	14	180	1.9	12	240
Leach 5	East Transect	JY-05-21a	48	16	610	26	130	1.1	9.9	1,200
Leach 5	East Transect	JY-05-21b	14	24	290	16	180	1.7	11	190
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	19	18	250	18	170	2.6	9.2	200
Leach 4	Ojo del Caballo	JY03-24a	49	16	580	27	150	1.4	8.7	740
Leach 2	Ojo del Caballo	JY03-24b	11	19	150	12	170	1.7	9.2	96
Leach 2	Ojo del Caballo	JY03-24c	8	19	130	11	170	1.8	9.1	78
Leach 5	Ojo del Caballo	JY-05-30	41	12	760	23	110	1.2	8.8	430
Leach 2	Salt Pan	JY03-26a	33	20	670	21	130	1.7	11	330
Leach 2	Salt Pan	JY03-26b	17	25	380	17	170	1.8	11	200
Leach 4	Salt Pan	JY03-26b	20	24	360	18	150	1.5	10	220
Leach 2	Salt Pan	JY03-26c	14	26	300	20	180	1.8	12	190
Leach 4	Salt Pan	JY03-26c	14	26	300	19	170	1.6	11	170
Leach 5	Salt Pan	JY-05-23a	23	20	560	25	130	1.4	9.6	340
Leach 5	Salt Pan	JY-05-23b	14	19	480	22	130	1.4	9.4	310
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	25	20	560	21	110	1.2	10	360
Leach 5	West Transect	JY-05-19	24	23	340	22	180	1.8	11	240

Table 12I. Composition of the residual fraction of fine fraction of grab samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry) is listed above each element.—Continued

[Leach batch, denotes the batch in which the sample was processed and analyzed; Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; -1, -2, denotes duplicates; ins, insufficient sample; ppm, parts per million; wt.%, weight percent]

Leach batch	Sample site	Sample ID	ICP-MS Th ppm	ICP-MS Ti ppm	ICP-MS Tl ppm	ICP-MS U ppm	ICP-MS V ppm	ICP-MS Y ppm	ICP-MS Zn ppm
Leach 2	Ash Meadows	JY03-09	13	2,900	1.0	3.3	60	23	69
Leach 5	Ash Meadows	JY-05-29	14	2,300	1.4	4.0	45	21	79
Leach 5	Clay Dune	JY-03-44a	15	3,800	0.8	2.2	70	16	97
Leach 5	Clay Dune	JY-03-44b	8.4	3,000	0.8	1.8	54	11	82
Leach 5	Clay Dune	JY-03-44c	12	3,200	0.9	1.9	63	12	98
Leach 5	Coppice	JY-05-17	18	4,100	1.0	2.7	74	18	110
Leach 2	Discovery	JY03-01	17	3,700	0.9	2.6	62	17	81
Leach 2	Discovery	JY03-01a	18	3,800	0.9	2.9	65	20	81
Leach 5	Discovery	JY-05-15	18	3,800	0.9	2.8	68	19	91
Leach 5	Discovery	JY-05-16	19	3,600	1.0	3.1	66	19	90
Leach 2	East Transect	JY03-29a	20	3,700	0.9	2.4	64	34	65
Leach 4	East Transect	JY03-29a	18	3,600	0.9	2.2	61	36	65
Leach 2	East Transect	JY03-29b	14	3,100	1.0	2.3	68	12	100
Leach 2	East Transect	JY03-29c	14	3,000	1.0	2.4	66	11	99
Leach 2	East Transect	JY03-29d	13	3,200	1.1	2.8	68	11	98
Leach 5	East Transect	JY-05-21a	23	3,200	1.0	2.2	61	36	71
Leach 5	East Transect	JY-05-21b	14	3,000	1.0	2.3	64	11	100
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01	ins	ins	ins	ins	ins	ins	ins
Leach 3	Franklin Lake Playa/Carson Slough	JY04-01-2	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-1	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-27-2	ins	ins	ins	ins	ins	ins	ins
Leach 5	Franklin Lake Playa/Carson Slough	JY-05-28	ins	ins	ins	ins	ins	ins	ins
Leach 2	Ojo del Caballo	JY03-24a	15	3,300	1.0	2.7	56	14	89
Leach 4	Ojo del Caballo	JY03-24a	19	3,900	1.0	3.1	56	37	78
Leach 2	Ojo del Caballo	JY03-24b	8.3	2,400	1.0	2.3	45	9	91
Leach 2	Ojo del Caballo	JY03-24c	8.6	2,400	1.0	2.3	44	9	89
Leach 5	Ojo del Caballo	JY-05-30	18	4,200	0.7	3.3	66	25	74
Leach 2	Salt Pan	JY03-26a	16	4,300	0.7	2.4	74	21	84
Leach 2	Salt Pan	JY03-26b	13	3,600	0.9	2.1	72	13	100
Leach 4	Salt Pan	JY03-26b	13	4,000	0.8	2.0	68	15	97
Leach 2	Salt Pan	JY03-26c	16	3,900	1.1	2.2	77	12	100
Leach 4	Salt Pan	JY03-26c	13	3,800	0.9	1.9	68	12	110
Leach 5	Salt Pan	JY-05-23a	16	3,800	0.7	2.4	64	21	170
Leach 5	Salt Pan	JY-05-23b	19	3,400	0.8	2.4	61	18	120
Leach 5	Salt Pan	JY-05-59a-1	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59a-2	ins	ins	ins	ins	ins	ins	ins
Leach 5	Salt Pan	JY-05-59b	17	4,400	0.7	2.5	73	22	88
Leach 5	West Transect	JY-05-19	19	3,300	1.1	3.0	65	17	110

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS Ag µg/L	ICP-MS Al µg/L	ICP-MS As µg/L	ICP-OES B µg/L	ICP-MS Ba µg/L	ICP-MS Be µg/L	ICP-MS Bi µg/L	ICP-OES Ca mg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	<3	3.6	100	3,200	2.8	<0.05	<0.2	6.0
North Carson Slough Flowing Well	JY06-22	<0.3	<2	93	3,000	2.8	<0.05	<0.2	5.7
Chemical Well	JY06-24	<0.3	4.6	270	55,000	8.3	<0.5	<2	4.1
Crystal Spring	CS-08-01	<1	<2	17	430	64	<0.05	<0.2	45
Death Valley Junction Well	DVJ-08-01	<1	<2	250	4,800	8.6	<0.05	<0.2	1.3
Grapevine Spring	JY05-63	<3	<2	170	3,900	76	<0.05	<0.2	59
King Spring	JY03-48	<3	5.2	16	440	3.0	<0.05	<0.2	23
Mudhole	HG04-01	<3	56	240	3,100	19	<0.05	<0.2	3.0
Obelisk Flowing well	JY03-45	<3	5.3	150	2,000	2.8	<0.05	<0.2	2.2
Obelisk Flowing well	JY05-62	<3	<2	130	2,100	2.7	<0.05	<0.2	2.1
Obelisk Flowing well	JY07-04	<1	<2	130	2,100	2.7	<0.05	<0.2	2.0
Ojo del Caballo Flowing Well	JY03-46	<3	2.5	210	3,500	19	<0.05	<0.2	2.8
Ojo del Caballo Flowing Well	JY05-61	<3	<2	200	3,700	19	<0.05	<0.2	2.6
Ojo del Caballo Flowing Well	JY07-05	<1	<2	190	3,700	19	<0.05	<0.2	2.6
Point of Rocks Spring	POR-08-01	<1	<2	15	400	67	<0.05	<0.2	47
Rogers Spring	RS-08-01	<1	<2	18	390	57	<0.05	<0.2	45
USGS-04	JY06-25	<0.3	8.2	2,400	68,000	11	<0.5	<2	0.87
USGS-04	GS-04-08	<1	3.7	3,700	78,000	16	<0.05	<0.2	0.79
USGS 12	JY07-06	<1	6.6	560	13,000	26	0.2	0.34	4.6
USGS-15*	JY06-12	0.6	4.4	11,000	57,000	15	<0.5	<2	1.5
USGS-15	JY06-27	1.6	21	16,000	84,000	20	<0.5	<2	0.92
USGS-18*	JY06-13	1.2	10	8,400	86,000	21	<0.5	<2	2.8
USGS 18	JY07-07	5.2	18	16,000	160,000	24	0.4	1.1	<1
USGS-20	JY06-23	<0.3	2.4	180	11,000	18	<0.05	<0.2	8.6
Well-11	JY07-08	<1	18	36,000	140,000	45	0.8	1.1	1.6
Well-13 (Bucket Well)	JY06-11	<0.3	<2	600	13,000	16	<0.05	<0.2	10
USGS New Well North	GWN-08-01	<1	2.1	210	12,000	22	<0.05	<0.2	32
Field blank	JY03-47	<3	<2	<1	<5	<0.2	<0.05	<0.2	<0.1
Field blank	JY05-60	<3	<2	<1	<5	<0.2	<0.05	<0.2	<0.1
Field blank	JY06-10	<0.3	1.9	<1	15	0.51	<0.05	<0.2	<0.1
Field blank	JY06-26	<0.3	<2	<1	<5	0.80	<0.05	<0.2	<0.1
Field blank	JY07-09	<1	<2	<1	<5	0.41	<0.05	<0.2	<0.1
Field blank	FP-Blank	<1	<2	<1	<5	<0.2	<0.05	<0.2	0.13

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS Cd µg/L	ICP-MS Ce µg/L	ICP-MS Co µg/L	ICP-MS Cr µg/L	ICP-MS Cs µg/L	ICP-MS Cu µg/L	ICP-MS Dy µg/L	ICP-MS Er µg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	0.05	0.02	<0.02	1.2	0.19	0.78	<0.005	<0.005
North Carson Slough Flowing Well	JY06-22	0.03	0.02	<0.02	<1	0.20	0.61	<0.005	<0.005
Chemical Well	JY06-24	0.82	<0.1	<0.2	<10	1.0	7.5	<0.05	<0.05
Crystal Spring	CS-08-01	11	<0.01	<0.02	3.0	3.0	<0.5	<0.005	<0.005
Death Valley Junction Well	DVJ-08-01	0.04	<0.01	<0.02	6.0	0.16	3.9	<0.005	<0.005
Grapevine Spring	JY05-63	0.05	0.09	<0.02	2.9	0.19	4.8	0.04	0.03
King Spring	JY03-48	0.02	0.03	0.04	2.2	0.46	0.63	<0.005	<0.005
Mudhole	HG04-01	0.07	0.19	0.09	3.7	0.33	1.4	0.007	0.006
Obelisk Flowing Well	JY03-45	0.02	0.01	<0.02	1.5	0.19	0.70	<0.005	<0.005
Obelisk Flowing Well	JY05-62	0.04	<0.01	<0.02	2.6	0.18	0.94	<0.005	<0.005
Obelisk Flowing Well	JY07-04	0.03	<0.01	<0.02	<1	0.21	<0.5	<0.005	<0.005
Ojo del Caballo Flowing Well	JY03-46	0.04	<0.01	0.02	1.6	0.39	<0.5	<0.005	<0.005
Ojo del Caballo Flowing Well	JY05-61	0.12	<0.01	<0.02	4.2	0.36	1.4	<0.005	<0.005
Ojo del Caballo Flowing Well	JY07-05	0.05	<0.01	<0.02	1	0.40	0.59	<0.005	<0.005
Point of Rocks Spring	POR-08-01	<0.02	<0.01	<0.02	3.1	2.9	<0.5	<0.005	<0.005
Rogers Spring	RS-08-01	<0.02	<0.01	<0.02	2.9	3.1	<0.5	<0.005	<0.005
USGS-04	JY06-25	0.79	<0.1	<0.2	<10	0.68	8.2	<0.05	<0.05
USGS-04	GS-04-08	0.8	0.13	0.16	21	0.80	7.9	0.006	<0.005
USGS 12	JY07-06	0.99	0.02	0.22	<1	2.3	9.6	<0.005	<0.005
USGS-15*	JY06-12	20	0.49	3.2	79	6.4	36	<0.05	<0.05
USGS-15	JY06-27	20	2.0	7.5	210	10	50	<0.05	<0.05
USGS-18*	JY06-13	12	1.9	3	240	4.7	64	<0.05	0.062
USGS 18	JY07-07	17	7.3	6.7	450	8.1	82	0.04	0.065
USGS-20	JY06-23	0.11	<0.01	<0.02	1	0.19	1.2	<0.005	<0.005
Well-11	JY07-08	54	3.5	14	190	6.9	140	0.097	0.12
Well-13 (Bucket Well)	JY06-11	0.22	0.02	<0.02	8	0.13	1.4	<0.005	<0.005
USGS New Well North	GWN-08-01	0.10	0.02	0.14	3.4	0.08	1.5	0.007	<0.005
Field blank	JY03-47	<0.02	<0.01	<0.02	<1	<0.02	0.66	<0.005	<0.005
Field blank	JY05-60	<0.02	<0.01	<0.02	<1	<0.02	<0.5	<0.005	<0.005
Field blank	JY06-10	0.02	<0.01	<0.02	<1	<0.02	<0.5	<0.005	<0.005
Field blank	JY06-26	<0.02	<0.01	<0.02	<1	<0.02	<0.5	<0.005	<0.005
Field blank	JY07-09	<0.02	<0.01	<0.02	<1	<0.02	<0.5	<0.005	<0.005
Field blank	FP-Blank	<0.02	<0.01	<0.02	<1	<0.02	0.54	<0.005	<0.005

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS Eu µg/L	ICP-OES Fe µg/L	ICP-MS Ga µg/L	ICP-MS Gd µg/L	ICP-MS Ge µg/L	ICP-MS Ho µg/L	ICP-OES K mg/L	ICP-MS La µg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	<0.005	<20	<0.05	<0.005	0.6	<0.005	17	<0.01
North Carson Slough Flowing Well	JY06-22	<0.005	<5	<0.05	<0.005	0.56	<0.005	16	<0.01
Chemical Well	JY06-24	<0.05	250	<0.5	<0.05	<0.5	<0.05	120	<0.1
Crystal Spring	CS-08-01	0.01	<5	<0.05	<0.005	0.4	<0.005	8.9	<0.01
Death Valley Junction Well	DVJ-08-01	<0.005	<5	<0.05	<0.005	0.35	<0.005	15	<0.01
Grapevine Spring	JY05-63	0.01	<20	<0.05	0.04	0.1	0.01	52	0.14
King Spring	JY03-48	<0.005	<20	<0.05	<0.005	0.97	<0.005	14	0.01
Mudhole	HG04-01	<0.005	24	<0.05	0.007	0.1	<0.005	47	0.08
Obelisk Flowing Well	JY03-45	<0.005	<20	<0.05	<0.005	0.28	<0.005	30	<0.01
Obelisk Flowing Well	JY05-62	<0.005	<20	<0.05	<0.005	0.25	<0.005	28	<0.01
Obelisk Flowing Well	JY07-04	<0.005	8	<0.05	<0.005	0.28	<0.005	29	<0.01
Ojo del Caballo Flowing Well	JY03-46	<0.005	<20	<0.05	<0.005	0.64	<0.005	56	<0.01
Ojo del Caballo Flowing Well	JY05-61	<0.005	<20	<0.05	<0.005	0.53	<0.005	57	<0.01
Ojo del Caballo Flowing Well	JY07-05	<0.005	<5	<0.05	<0.005	0.66	<0.005	57	<0.01
Point of Rocks Spring	POR-08-01	0.01	<5	<0.05	<0.005	0.34	<0.005	7.4	<0.01
Rogers Spring	RS-08-01	0.007	<5	<0.05	<0.005	0.39	<0.005	7.5	<0.01
USGS-04	JY06-25	<0.05	<5	<0.5	<0.05	<0.5	<0.05	84	<0.1
USGS-04	GS-04-08	<0.005	<5	<0.05	<0.005	<0.05	<0.005	88	<0.01
USGS 12	JY07-06	<0.005	24	<0.05	0.01	0.2	<0.005	340	<0.01
USGS-15*	JY06-12	<0.05	<20	<0.5	<0.05	<0.5	<0.05	870	<0.1
USGS-15	JY06-27	<0.05	<200	0.74	<0.05	<0.5	<0.05	1,200	<0.1
USGS-18*	JY06-13	<0.05	<200	<0.5	<0.05	<0.5	<0.05	660	<0.1
USGS 18	JY07-07	0.01	<200	0.37	0.03	<0.05	0.007	1,100	0.03
USGS-20	JY06-23	<0.005	<5	< 0.05	<0.005	2	<0.005	49	<0.01
Well-11	JY07-08	0.03	<200	0.61	<0.005	<0.05	0.02	1,700	0.02
Well-13 (Bucket Well)	JY06-11	<0.005	<5	<0.05	<0.005	3	<0.005	23	0.01
USGS New Well North	GWN-08-01	<0.005	<5	<0.05	0.006	0.73	<0.005	38	<0.01
Field blank	JY03-47	<0.005	<20	<0.05	<0.005	<0.05	<0.005	0.16	<0.01
Field blank	JY05-60	<0.005	<20	<0.05	<0.005	<0.05	<0.005	<0.1	<0.01
Field blank	JY06-10	<0.005	<20	<0.05	<0.005	<0.05	<0.005	0.27	<0.01
Field blank	JY06-26	<0.005	<20	<0.05	<0.005	<0.05	<0.005	<0.1	<0.01
Field blank	JY07-09	<0.005	<5	<0.05	<0.005	<0.05	<0.005	<0.1	<0.01
Field blank	FP-Blank	<0.005	<5	<0.05	<0.005	<0.05	<0.005	0.32	<0.01

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS Li µg/L	ICP-MS Lu µg/L	ICP-OES Mg mg/L	ICP-MS Mn µg/L	ICP-MS Mo µg/L	ICP-OES Na mg/L	ICP-MS Nb µg/L	ICP-MS Nd µg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	280	<0.1	4.4	<0.2	27	370	<0.2	<0.01
North Carson Slough Flowing Well	JY06-22	310	<0.1	4.3	0.4	25	370	<0.2	<0.01
Chemical Well	JY06-24	1,500	<1	2.4	71	660	5,000	<2	<0.1
Crystal Spring	CS-08-01	82	<0.1	21	<0.2	6.2	74	<0.2	<0.01
Death Valley Junction Well	DVJ-08-01	120	<0.1	1.4	0.2	32	370	<0.2	<0.01
Grapevine Spring	JY05-63	310	<0.1	59	12	21	570	<0.2	0.18
King Spring	JY03-48	91	<0.1	8.6	2.0	6.4	82	<0.2	<0.01
Mudhole	HG04-01	45	<0.1	2.5	3.3	33	550	<0.2	0.05
Obelisk Flowing Well	JY03-45	59	<0.1	1.8	1.4	17	310	<0.2	<0.01
Obelisk Flowing Well	JY05-62	65	<0.1	1.8	1.1	17	300	<0.2	<0.01
Obelisk Flowing Well	JY07-04	61	<0.1	1.7	1.0	15	290	0.28	<0.01
Ojo del Caballo Flowing Well	JY03-46	36	<0.1	3.2	2.5	47	610	<0.2	<0.01
Ojo del Caballo Flowing Well	JY05-61	44	<0.1	3.1	2.5	44	600	<0.2	<0.01
Ojo del Caballo Flowing Well	JY07-05	36	<0.1	3.2	2.2	40	650	0.22	<0.01
Point of Rocks Spring	POR-08-01	76	<0.1	21	<0.2	5.2	67	<0.2	<0.01
Rogers Spring	RS-08-01	79	<0.1	20	<0.2	5.6	67	<0.2	<0.01
USGS-04	JY06-25	430	<1	0.79	<2	530	4,600	<2	<0.1
USGS-04	GS-04-08	400	<0.1	0.79	0.2	560	4,600	0.56	<0.01
USGS 12	JY07-06	100	<0.1	52	15	690	5,400	0.49	<0.01
USGS-15*	JY06-12	12	<1	1.1	3.9	14,000	20,000	<2	<0.1
USGS-15	JY06-27	13	<1	0.44	5.4	15,000	28,000	<2	0.17
USGS-18*	JY06-13	24	<1	0.46	2.5	6,200	21,000	<2	<0.1
USGS 18	JY07-07	11	<0.1	<1	2.5	12,000	37,000	1.3	0.05
USGS-20	JY06-23	930	<0.1	16	0.2	75	700	0.37	<0.01
Well-11	JY07-08	280	0.1	<1	14	43,000	61,000	2.1	0.12
Well-13 (Bucket Well)	JY06-11	370	<0.1	5.4	0.2	140	740	<0.2	<0.01
USGS New Well North	GWN-08-01	610	<0.1	18	110	77	540	<0.2	<0.01
Field blank	JY03-47	<0.1	<0.1	<0.1	<0.2	<2	0.23	<0.2	<0.01
Field blank	JY05-60	<0.9	<0.1	<0.1	<0.2	<2	<0.1	<0.2	<0.01
Field blank	JY06-10	<0.9	<0.1	<0.1	0.6	<2	1.3	<0.2	<0.01
Field blank	JY06-26	<0.9	<0.1	<0.1	0.2	<2	<0.1	<0.2	<0.01
Field blank	JY07-09	1.2	<0.1	<0.1	<0.2	<2	<0.1	<0.2	<0.01
Field blank	FP-Blank	<0.1	<0.1	0.1	<0.2	<2	3.2	<0.2	<0.01

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS Ni µg/L	ICP-MS P µg/L	ICP-MS Pb µg/L	ICP-MS Pr µg/L	ICP-MS Rb µg/L	ICP-MS Sb µg/L	ICP-MS Sc µg/L	ICP-MS Se µg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	<0.4	0.03	<0.05	<0.01	20	0.50	11	2.9
North Carson Slough Flowing Well	JY06-22	<0.4	<0.01	0.51	<0.01	19	0.80	4.4	1.7
Chemical Well	JY06-24	<4	<0.1	0.1	<0.1	90	<3	<6	38
Crystal Spring	CS-08-01	0.6	<0.01	<0.05	<0.01	15	<0.3	2.6	1.2
Death Valley Junction Well	DVJ-08-01	<0.4	0.04	0.2	<0.01	14	0.30	1.1	2.3
Grapevine Spring	JY05-63	<0.4	<0.01	<0.05	0.03	60	<0.3	6.0	11
King Spring	JY03-48	0.9	0.01	0.06	<0.01	29	<0.3	6.6	nd
Mudhole	HG04-01	0.8	0.2	0.52	0.02	25	0.51	5.0	6.1
Obelisk Flowing Well	JY03-45	<0.4	0.06	0.06	<0.01	20	0.72	3.2	nd
Obelisk Flowing Well	JY05-62	<0.4	0.04	<0.05	<0.01	21	0.77	7.0	2.2
Obelisk Flowing Well	JY07-04	<0.4	0.05	<0.05	<0.01	19	1.0	3.2	1.8
Ojo del Caballo Flowing Well	JY03-46	<0.4	0.09	<0.05	<0.01	39	<0.3	2.9	nd
Ojo del Caballo Flowing Well	JY05-61	<0.4	0.07	<0.05	<0.01	38	<0.3	8.5	8.3
Ojo del Caballo Flowing Well	JY07-05	<0.4	0.06	0.2	<0.01	36	<0.3	2.8	4.2
Point of Rocks Spring	POR-08-01	0.6	<0.01	<0.05	<0.01	12	<0.3	2.2	1.1
Rogers Spring	RS-08-01	0.6	<0.01	<0.05	<0.01	13	<0.3	2.4	1.2
USGS-04	JY06-25	<4	1.3	6.1	<0.1	48	7.5	<6	30
USGS-04	GS-04-08	<0.4	1.2	27	<0.01	52	8.1	2.3	59
USGS 12	JY07-06	0.8	1.4	7.3	<0.01	210	3.7	1.4	50
USGS-15*	JY06-12	<4	4.6	22	<0.1	510	7.2	9.0	410
USGS-15	JY06-27	5.4	13	9.7	<0.1	710	8.7	16	420
USGS-18*	JY06-13	4.2	12	150	<0.1	370	12	8.0	280
USGS 18	JY07-07	6.4	30	150	0.02	560	21	8.4	680
USGS-20	JY06-23	<0.4	0.03	0.79	<0.01	25	0.58	7.4	3.0
Well-11	JY07-08	15	47	230	0.02	810	44	15	1,800
Well-13 (Bucket Well)	JY06-11	<0.4	0.05	1.2	<0.01	34	1.1	5.3	4.7
USGS New Well North	GWN-08-01	<0.4	0.3	0.2	<0.01	18	0.61	5.1	3.6
Field blank	JY03-47	<0.4	<0.01	0.09	<0.01	0.15	<0.3	<0.6	nd
Field blank	JY05-60	<0.4	<0.01	<0.05	<0.01	<0.01	<0.3	<0.6	<1
Field blank	JY06-10	0.4	<0.01	0.2	<0.01	0.1	<0.3	<0.6	<1
Field blank	JY06-26	<0.4	<0.01	0.1	<0.01	0.02	<0.3	<0.6	<1
Field blank	JY07-09	<0.4	<0.01	0.05	<0.01	0.17	<0.3	<0.6	<1
Field blank	FP-Blank	<0.4	<0.01	<0.05	<0.01	<0.01	<0.3	<0.6	<1

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS SiO ₂ mg/L	ICP-MS Sm µg/L	ICP-MS Sr µg/L	ICP-MS Ta µg/L	ICP-MS Tb µg/L	ICP-MS Th µg/L	ICP-MS Ti µg/L	ICP-MS Tl µg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	31	<0.01	340	0.03	<0.005	<0.2	5.4	<0.1
North Carson Slough Flowing Well	JY06-22	40	<0.01	300	0.23	<0.005	<0.2	3.0	<0.1
Chemical Well	JY06-24	3.1	<0.1	890	1.3	<0.05	<2	44	<1
Crystal Spring	CS-08-01	27	<0.01	790	<0.02	<0.005	<0.2	1.2	0.2
Death Valley Junction Well	DVJ-08-01	18	<0.01	380	0.2	<0.005	<0.2	2.1	<0.1
Grapevine Spring	JY05-63	34	0.03	1,700	<0.02	0.006	<0.2	37	<0.1
King Spring	JY03-48	40	<0.01	650	nd	<0.005	<0.2	1.1	<0.1
Mudhole	HG04-01	51	<0.01	450	0.38	<0.005	<0.2	6.0	<0.1
Obelisk Flowing Well	JY03-45	40	<0.01	240	nd	<0.005	<0.2	1.5	<0.1
Obelisk Flowing Well	JY05-62	39	<0.01	270	0.02	<0.005	<0.2	4.6	<0.1
Obelisk Flowing Well	JY07-04	40	<0.01	250	0.42	<0.005	<0.2	2.1	<0.1
Ojo del Caballo Flowing Well	JY03-46	37	<0.01	720	nd	<0.005	<0.2	2.7	<0.1
Ojo del Caballo Flowing Well	JY05-61	38	<0.01	750	0.04	<0.005	<0.2	8.2	<0.1
Ojo del Caballo Flowing Well	JY07-05	35	<0.01	690	0.36	<0.005	<0.2	3.6	<0.1
Point of Rocks Spring	POR-08-01	22	<0.01	820	<0.02	<0.005	<0.2	1.0	0.1
Rogers Spring	RS-08-01	23	<0.01	820	<0.02	<0.005	<0.2	1.2	0.3
USGS-04	JY06-25	18	<0.1	510	1.5	<0.05	<2	41	<1
USGS-04	GS-04-08	20	<0.01	630	0.96	<0.005	<0.2	30	0.2
USGS 12	JY07-06	50	0.02	3,400	0.47	<0.005	<0.2	50	0.3
USGS-15*	JY06-12	19	<0.1	1,200	1.5	<0.05	<2	160	3
USGS-15	JY06-27	23	0.12	690	1.8	<0.05	<2	190	2.8
USGS-18*	JY06-13	25	<0.1	190	1.7	<0.05	<2	170	<1
USGS 18	JY07-07	30	0.06	280	1.5	0.007	1.1	430	0.99
USGS-20	JY06-23	69	<0.01	480	0.4	<0.005	<0.2	6.0	<0.1
Well-11	JY07-08	55	0.12	830	1.5	0.009	1.5	780	1.7
Well-13 (Bucket Well)	JY06-11	47	<0.01	1,400	0.1	<0.005	<0.2	6.1	<0.1
USGS New Well North	GWN-08-01	70	<0.01	580	0.1	<0.005	<0.2	4.0	<0.1
Field blank	JY03-47	<0.2	<0.01	<0.5	nd	<0.005	<0.2	<0.5	<0.1
Field blank	JY05-60	<0.2	<0.01	<0.5	<0.02	<0.005	<0.2	<0.5	<0.1
Field blank	JY06-10	<0.2	<0.01	0.48	0.07	<0.005	<0.2	<0.5	<0.1
Field blank	JY06-26	<0.2	<0.01	<0.5	0.06	<0.005	<0.2	<0.5	<0.1
Field blank	JY07-09	2.2	<0.01	<0.5	0.06	<0.005	<0.2	<0.5	<0.1
Field blank	FP-Blank	<0.2	<0.01	<0.5	<0.02	<0.005	<0.2	<0.5	<0.1

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	ICP-MS Tm µg/L	ICP-MS U µg/L	ICP-MS V µg/L	ICP-MS W µg/L	ICP-MS Y µg/L	ICP-MS Yb µg/L	ICP-MS Zn µg/L	ICP-MS Zr µg/L	IC Cl ⁻ mg/L
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY04-18	<0.005	9.9	11	1.9	0.03	<0.005	2.6	0.2	160
North Carson Slough Flowing Well	JY06-22	<0.005	8.3	7.6	1.8	0.02	0.008	1.6	0.2	120
Chemical Well	JY06-24	<0.05	11	<5	24	<0.1	<0.05	7.6	<2	4,200
Crystal Spring	CS-08-01	<0.005	2.1	1.8	<0.5	0.02	<0.005	0.8	<0.2	26
Death Valley Junction Well	DVJ-08-01	<0.005	5.7	22	6.4	0.03	<0.005	4.5	<0.2	77
Grapevine Spring	JY05-63	<0.005	17	7.5	0.85	0.34	0.03	3.4	<0.2	230
King Spring	JY03-48	<0.005	2.2	9.5	nd	0.02	<0.005	1.9	<0.2	19
Mudhole	HG04-01	<0.005	11	2.5	14	0.12	<0.005	3.9	0.96	360
Obelisk Flowing Well	JY03-45	<0.005	5.2	16	nd	0.03	0.007	5.5	0.3	49
Obelisk Flowing Well	JY05-62	<0.005	4.6	15	12	0.03	<0.005	<0.5	<0.2	54
Obelisk Flowing Well	JY07-04	<0.005	5.0	15	9.6	0.03	<0.005	1.4	0.51	49
Ojo del Caballo Flowing Well	JY03-46	<0.005	15	<0.5	nd	0.06	<0.005	<0.5	0.2	420
Ojo del Caballo Flowing Well	JY05-61	<0.005	14	0.5	12	0.02	<0.005	0.8	0.2	460
Ojo del Caballo Flowing Well	JY07-05	<0.005	16	<0.5	10	0.03	<0.005	0.6	<0.2	420
Point of Rocks Spring	POR-08-01	<0.005	2.3	1.9	<0.5	0.02	<0.005	45	<0.2	23
Rogers Spring	RS-08-01	<0.005	2.4	1.6	<0.5	0.03	<0.005	0.6	<0.2	23
USGS-04	JY06-25	<0.05	62	43	83	<0.1	<0.05	10	<2	3,100
USGS-04	GS-04-08	<0.005	61	47	95	0.07	0.005	4.3	1.2	3,700
USGS 12	JY07-06	<0.005	170	36	34	0.05	0.01	23	1.8	420
USGS-15*	JY06-12	<0.05	2,900	420	190	<0.1	0.07	42	<2	19,000
USGS-15	JY06-27	<0.05	4,300	580	330	0.16	0.09	53	<2	26,000
USGS-18*	JY06-13	<0.05	2,300	410	190	0.24	0.08	59	<2	14,000
USGS 18	JY07-07	0.02	4,000	710	310	0.39	0.09	78	1.9	29,000
USGS-20	JY06-23	<0.005	6.0	7.0	<0.5	<0.01	<0.005	5.2	0.3	230
Well-11	JY07-08	0.057	10,000	1,200	680	0.56	0.28	93	25	54,000
Well-13 (Bucket Well)	JY06-11	<0.005	23	48	4.5	0.04	0.005	3.4	<0.2	500
USGS New Well North	GWN-08-01	<0.005	2.1	1.1	2.0	0.06	0.009	0.9	<0.2	260
Field blank	JY03-47	<0.005	<0.1	<0.5	nd	<0.01	<0.005	5.6	<0.2	<0.08
Field blank	JY05-60	<0.005	<0.1	<0.5	<0.5	<0.01	<0.005	<0.5	<0.2	<0.08
Field blank	JY06-10	<0.005	<0.1	<0.5	<0.5	<0.01	<0.005	7.5	<0.2	<0.08
Field blank	JY06-26	<0.005	<0.1	<0.5	<0.5	<0.01	<0.005	6.6	<0.2	0.15
Field blank	JY07-09	<0.005	<0.1	<0.5	<0.5	<0.01	<0.005	1.4	<0.2	<0.08
Field blank	FP-Blank	<0.005	<0.1	<0.5	<0.5	<0.01	<0.005	<0.5	<0.2	<0.08

Table 13. Composition of water samples. Method of determination (ICP–MS, inductively coupled plasma–mass spectrometry; ICP–OES, inductively coupled plasma–optical emission spectrometry; IC, ion chromatograph or IRMS, isotope ratio mass spectrometry; GSMS, gas source mass spectrometry) is listed above each element.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; *, well incompletely purged prior to sampling; µg/L, micrograms per liter; mg/L, milligrams per liter; per mil VSMOW, parts per thousand deviation from the composition of Vienna Standard Mean Ocean Water; per mil VCDT, parts per thousand deviation from the composition of Vienna Cañon Diablo Troilite]

Sample site	Sample ID	IC F ⁻ mg/L	IC NO ₃ ⁻ mg/L	IC SO ₄ ²⁻ mg/L	IRMS δD-H ₂ O (per mil VSMOW)	IRMS δ ¹⁸ O-H ₂ O (per mil VSMOW)	GSMS δ ³⁴ S-SO ₄ (per mil VCDT)	GSMS δ ¹⁸ O-SO ₄ (per mil VSMOW)
Amargosa River	none	n.d.	n.d.	n.d.	n.d.	n.d.	14.9	n.d.
North Carson Slough Flowing Well	JY04-18	0.4	<0.08	300	n.d.	n.d.	n.d.	n.d.
North Carson Slough Flowing Well	JY06-22	2.6	1.3	300	n.d.	n.d.	19.8	6.7
Chemical Well	JY06-24	5.2	<0.08	3,300	n.d.	n.d.	21.6	10.4
Crystal Spring	CS-08-01	2.0	9.1	93	n.d.	n.d.	16.0	4
Death Valley Junction Well	DVJ-08-01	6.7	18	210	n.d.	n.d.	19.3	7.4
Grapevine Spring	JY05-63	1.8	1.1	1,100	n.d.	n.d.	n.d.	n.d.
King Spring	JY03-48	2.2	<0.08	92	-13.4	-102	n.d.	n.d.
Mudhole	HG04-01	4.5	<0.08	200	n.d.	n.d.	n.d.	n.d.
Obelisk Flowing Well	JY03-45	4.9	<0.08	150	-13.5	-103	n.d.	n.d.
Obelisk Flowing Well	JY05-62	6.5	<0.08	150	n.d.	n.d.	20.4	5.1
Obelisk Flowing Well	JY07-04	5.0	<0.08	140	n.d.	n.d.	n.d.	n.d.
Ojo del Caballo Flowing Well	JY03-46	6.4	<0.08	210	n.d.	n.d.	n.d.	n.d.
Ojo del Caballo Flowing Well	JY05-61	7.6	<0.08	250	-13.1	-102	n.d.	n.d.
Ojo del Caballo Flowing Well	JY07-05	5.8	<0.08	230	nd	n.d.	18.7	5.6
Point of Rocks Spring	POR-08-01	1.6	9.3	82	n.d.	n.d.	16.0	4.2
Rogers Spring	RS-08-01	1.8	9.8	84	n.d.	n.d.	16.0	3.5
USGS-04	JY06-25	5.8	4.5	3,100	n.d.	n.d.	21.3	10.1
USGS-04	GS-04-08	16	22	3,300	n.d.	n.d.	n.d.	n.d.
USGS 12	JY07-06	1.3	<0.08	3,000	n.d.	n.d.	16.6	7.4
USGS-15*	JY06-12	18	360	13,000	n.d.	n.d.	n.d.	n.d.
USGS-15	JY06-27	26	550	17,000	n.d.	n.d.	15.8	7.4
USGS-18*	JY06-13	<1	510	9,000	n.d.	n.d.	n.d.	n.d.
USGS 18	JY07-07	6.0	1,100	24,000	n.d.	n.d.	16.8	7.8
USGS-20	JY06-23	5.2	<0.08	460	n.d.	n.d.	14.9	7.3
Well-11	JY07-08	42	2,700	42,000	n.d.	n.d.	12.1	n.d.
Well-13 (Bucket Well)	JY06-11	2.3	2.0	550	n.d.	n.d.	11.4	5.8
USGS New Well North	GWN-08-01	8.5	<0.08	420	n.d.	n.d.	13.8	8.8
Field blank	JY03-47	<0.08	<0.08	<1.6	n.d.	n.d.	n.d.	n.d.
Field blank	JY05-60	<0.08	<0.08	<1.6	n.d.	n.d.	n.d.	n.d.
Field blank	JY06-10	<0.08	<0.08	<1.6	n.d.	n.d.	n.d.	n.d.
Field blank	JY06-26	<0.08	1.6	<1.6	n.d.	n.d.	n.d.	n.d.
Field blank	JY07-09	<0.08	<0.08	<1.6	n.d.	n.d.	n.d.	n.d.
Field blank	FP-Blank	<0.08	<0.08	<1.6	n.d.	n.d.	n.d.	n.d.

Table 14A. Electrical conductivity measurements of bulk ager hole samples.[Sample site, name of sampling site; Sample ID, unique sample identifier; $\mu\text{S}/\text{cm}$, millisiemens per centimeter]

Site name	Sample ID	Specific conductance $\mu\text{S}/\text{cm}$	Site name	Sample ID	Specific conductance $\mu\text{S}/\text{cm}$
Clay Dune	HG09-01/0-1	16	Discovery	DS04-07/82-87	0.53
Clay Dune	HG09-01/1-5	7.5	Discovery	DS04-07/87-104	0.38
Clay Dune	HG09-01/5-10	17	Discovery	DS04-07/104-118	0.31
Clay Dune	HG09-01/10-20	7.8	Discovery	DS04-07/118-131	0.39
Clay Dune	HG09-01/20-30	1.7	Discovery	DS04-07/131-142	0.34
Clay Dune	HG09-01/30-40	2.6	Discovery	DS04-07/142-157	0.29
Clay Dune	HG09-01/40-50	1.1	Discovery	DS04-07/157-170	0.31
Clay Dune	HG09-01/90-100	0.42	Discovery	DS04-07/170-186	0.37
Coppice	HG09-04/0-1	7.1	Discovery	DS04-07b/0-1	17
Coppice	HG09-04/1-5	6.2	Discovery	DS04-07b/1-2.5	12
Coppice	HG09-04/5-10	8.1	Discovery	DS04-07b/2.5-5	8.2
Coppice	HG09-04/10-20	7.2	Discovery	HG09-02/0-1	4.5
Coppice	HG09-04/20-32	2.9	Discovery	HG09-02/1-5	6.5
Coppice	HG09-04/32-45	2.2	Discovery	HG09-02/5-10	12.3
Coppice	HG09-04/45-57	2.6	Discovery	HG09-02/10-20	6.3
Coppice	HG09-04/68-80	1.5	Discovery	HG09-02/20-26	2.6
Coppice	HG09-04/93-104	1.5	Discovery	HG09-02/37-48	0.89
Coppice	HG09-04/117-129	1.4	Discovery	HG09-02/59-70	0.46
Coppice	HG09-04/153-177	0.96	Discovery	HG09-02/80-89	0.38
Coppice	HG09-04/205-214	0.61	Discovery	HG09-02/98-110	0.35
Coppice	HG09-04/242-251	0.52	East Transect	HG07-04/0-1	0.96
Coppice	HG09-04/268-275	0.51	East Transect	HG07-04/1-5	2.0
Coppice	HG09-04/275-284	0.43	East Transect	HG07-04/5-10	8.0
Coppice	HG09-04/284-293	0.51	East Transect	HG07-04/10-20	3.5
Coppice	HG09-04/326-339	0.33	East Transect	HG07-04/20-30	4.2
Coppice	HG09-04/352-365	0.36	East Transect	HG07-04/30-40	3.1
Coppice	HG09-04/365-380	0.44	East Transect	HG07-04/40-50	2.7
Coppice	HG09-04/380-404	0.37	East Transect	HG07-04/50-60	2.7
Coppice	HG09-04/404-430	0.39	East Transect	HG07-04/60-70	2.7
Coppice	CPAH04-09/0-0.5	25	East Transect	HG07-04/70-80	2.5
Coppice	CPAH04-09/0.5-3	4.7	East Transect	HG07-04/80-90	2.2
Coppice	CPAH04-09/3-5	4.6	East Transect	HG07-04/90-95	2.2
Coppice	CPAH04-09/5-10	3.2	East Transect	HG07-04/95-101	2.0
Coppice	CPAH04-09/10-15	3.1	East Transect	HG07-04/101-124	1.9
Coppice	CPAH04-09/15-20	3.1	East Transect	HG07-04/124-137	1.8
Coppice	CPAH04-09/20-25	2.6	East Transect	HG07-04/137-145	1.2
Coppice	CPAH04-09/25-30	2.0	East Transect	HG07-04/145-159	0.85
Coppice	CPAH04-09/30-35	2.1	East Transect	HG07-04/159-163	0.70
Coppice	CPAH04-09/35-40	2.2	East Transect	HG07-04/163-169	0.80
Discovery	DS04-07/0-2	16	East Transect	HG07-04/169-177	0.87
Discovery	DS04-07/2-8	8.5	East Transect	HG07-04/177-184	0.88
Discovery	DS04-07/8-14	2.5	East Transect	HG07-04/184-193	1.2
Discovery	DS04-07/14-20	2.0	East Transect	HG07-04/193-203	1.4
Discovery	DS04-07/20-30	1.8	East Transect	HG07-04/203-217	1.4
Discovery	DS04-07/30-35	1.1	East Transect	HG07-04/217-228	0.71
Discovery	DS04-07/35-48	0.67	East Transect	HG07-04/228-237	0.82
Discovery	DS04-07/48-57	0.72	East Transect	HG07-04/237-248	0.89
Discovery	DS04-07/57-68	0.47	East Transect	HG07-04/248-258	1.1
Discovery	DS04-07/68-82	0.45	East Transect	HG07-04/258-266	1.3

Table 14A. Electrical conductivity measurements of bulk ager hole samples.—Continued[Sample site, name of sampling site; Sample ID, unique sample identifier; $\mu\text{S}/\text{cm}$, millisiemens per centimeter]

Site name	Sample ID	Specific conductance $\mu\text{S}/\text{cm}$	Site name	Sample ID	Specific conductance $\mu\text{S}/\text{cm}$
East Transect	HG07-04/266-281	1.3	East Transect	FPAH02-09/10-18	nd
East Transect	FPAH06-08/0-1	0.72	East Transect	FPAH02-09/20-25	nd
East Transect	FPAH06-08/1-2	2.1	East Transect	FPAH02-09/25-30	nd
East Transect	FPAH06-08/2-5	2.4	East Transect	FPAH02-09/30-35	nd
East Transect	FPAH06-08/5-10	1.4	East Transect	FPAH02-09/35-40	nd
East Transect	FPAH06-08/10-20	2.4	East Transect	FPAH02-09/40-45	nd
East Transect	FPAH06-08/20-25	2.9	East Transect	FPAH02-09/45-50	nd
East Transect	FPAH06-08/25-30	3.3	East Transect	FPAH02-09/50-55	nd
East Transect	FPAH06-08/30-35	3.2	East Transect	FPAH04-09/0-1	0.75
East Transect	FPAH06-08/35-40	3.2	East Transect	FPAH04-09/1-3	1.2
East Transect	FPAH06-08/40-45	3.3	East Transect	FPAH04-09/3-5.5	2.3
East Transect	FPAH06-08/45-48	3.1	East Transect	FPAH04-09/5-8	3.2
East Transect	FPAH06-08/48-52	3.2	East Transect	FPAH04-09/8-11	2.8
East Transect	HG08-01/0-1	0.54	East Transect	FPAH04-09/11-15	2.9
East Transect	HG08-01/1-3	1.1	East Transect	FPAH04-09/15-20	3.2
East Transect	HG08-01/3-5	1.1	East Transect	FPAH04-09/20-25	3.6
East Transect	HG08-01/5-10	1.5	East Transect	FPAH04-09/25-30	4.5
East Transect	HG08-01/10-15	1.7	East Transect	FPAH04-09/30-35	3.8
East Transect	HG08-01/15-20	4.2	East Transect	FPAH04-09/35-40	3.0
East Transect	HG08-01/20-25	3.6	Salt Pan	SPAH04-07/0-2	19
East Transect	HG08-01/25-30	3.6	Salt Pan	SPAH04-07/2-5	3.0
East Transect	HG08-01/30-35	3.4	Salt Pan	SPAH04-07/5-10	1.1
East Transect	HG08-01/35-40	3.0	Salt Pan	SPAH04-07/10-20	0.90
East Transect	HG08-01/40-45	2.7	Salt Pan	SPAH04-07/20-30	1.1
East Transect	HG08-01/45-50	2.6	Salt Pan	SPAH04-07/30-45	0.52
East Transect	FPAH02-09/0-1	nd	Salt Pan	SPAH04-07/45-58	0.63
East Transect	FPAH02-09/1-2.5	nd	Salt Pan	SPAH04-07/58-69	0.42
East Transect	FPAH02-09/2.5-4	nd	Salt Pan	SPAH04-07/69-84	0.57
East Transect	FPAH02-09/4-10	nd	Salt Pan	SPAH04-07/84-105	0.47

Table 14B. Electrical conductivity measurements of bulk grab samples.[Sample site, name of sampling site; Sample ID, unique sample identifier; $\mu\text{S}/\text{cm}$, millisiemens per centimeter]

Site name	Sample ID	Specific conductance $\mu\text{S}/\text{cm}$
Between GS-18 and East Transect	JY07-12a	420
Between GS-18 and East Transect	JY07-12b	1,560
Coppice reference	FP-cop-ref	8,350
Discovery	JY07-09	16,100
Near GS-15	JY07-10a	850
Near GS-15	JY07-10b	4,760
Near GS-18	JY07-11a	620
Near GS-18	JY07-11b	1,420
North Carson Slough, North of Hwy	JY07-13	24,300
North Carson Slough, North of Hwy	JY07-13d	24,100
North Carson Slough, North of Hwy	JY07-14	27,300

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Treatment	Size	Depth	Trona	Halite	K-Halite	Thenardite
East Transect Auger	HG07-04/0-1	Solid	<2mm	0–1 cm		X		
East Transect Auger	HG07-04/1-5	Solid	<2mm	1–5 cm		X(?)		
East Transect Auger	HG07-04/5-10	Solid	<2mm	5–10 cm		X		
East Transect Auger	HG07-04/10-20	Solid	<2mm	10–20 cm				
East Transect Auger	HG07-04/10-20	Slurry	<2mm	10–20 cm		X		
East Transect Auger	HG07-04/20-30	Solid	<2mm	20–30 cm		X		
East Transect Auger	HG07-04/20-30	Slurry	<2mm	20–30 cm		X		
East Transect Auger	HG07-04/30-40	Solid	<2mm	30–40 cm		X		
East Transect Auger	HG07-04/30-40	Slurry	<2mm	30–40 cm		X		
East Transect Auger	HG07-04/40-50	Solid	<2mm	40–50 cm		X(?)		
East Transect Auger	HG07-04/40-50	Slurry	<2mm	40–50 cm		X		
East Transect Auger	HG07-04/50-60	Solid	<2mm	50–60 cm		X		
East Transect Auger	HG07-04/50-60	Slurry	<2mm	50–60 cm		X		
East Transect Auger	HG07-04/60-70	Solid	<2mm	60–70 cm		X		
East Transect Auger	HG07-04/60-70	Slurry	<2mm	60–70 cm		X		
East Transect Auger	HG07-04/80-90	Solid	<2mm	80–90 cm		X		
East Transect Auger	HG07-04/95-101	Solid	<2mm	95–101 cm		X(?)		
East Transect Auger	HG07-04/95-101	Slurry	<2mm	95–101 cm		X		
East Transect Auger	HG07-04/124-137	Solid	<2mm	124–137 cm				
East Transect Auger	HG07-04/145-159	Solid	<2mm	145–159 cm				
East Transect Auger	HG07-04/177-184	Solid	<2mm	177–184 cm				
East Transect Auger	HG07-04/193-203	Solid	<2mm	193–203 cm				
East Transect Auger	HG07-04/237-248	Solid	<2mm	237–248 cm				
East Transect Auger	HG07-04/237-248	Slurry	<2mm	237–248 cm		X		
East Transect Auger	HG07-04/258-266	Solid	<2mm	258–266 cm				
East Transect Auger	HG07-04/266-281	Solid	<2mm	266–281 cm				
Around East Transect Auger	HG07-05/0-1	Solid	<2mm	0–1 cm				
Around East Transect Auger	HG07-06/0-1	Solid	<2mm	0–1 cm				
Around East Transect Auger	HG07-07/0-1	Solid	<2mm	0–1 cm				
Around East Transect Auger	HG07-08/0-1	Solid	<2mm	0–1 cm				
Around East Transect Auger	HG07-09/0-1	Solid	<2mm	0–1 cm				
Ash Meadows	JY05-29	Solid	<2mm	0–1cm	X	X		X
Ash Meadows	JY05-29	DI residue	<53um	0–1 cm				
Ash Meadows	JY05-29	DI residue	<2mm	0–1 cm				
Between West and East Transect	JY03-30b	Clay	<2mm	1–5 cm				
Carson Slough/Ash Meadows	JY03-09	Final residue	<53um	0–1cm ?				
Carson Slough/Ash Meadows	JY03-09	Solid	<2mm	0–1cm	X	X		X
Carson Slough/Ash Meadows	JY03-09	Final residue	<2mm	0–1cm ?				
Carson Slough/Ash Meadows	JY03-09	DI residue	<2mm	0–1cm ?				
Carson Slough/Ash Meadows	JY03-49a	DI residue	<2mm	0–1cm				
Carson Slough/Ash Meadows	JY03-49b	DI residue	<2mm	1–5cm				
Carson Slough/Ash Meadows	JY03-49c	DI residue	<2mm	5–10cm				
Carson Slough/Ash Meadows	JY03-50a	DI residue	<2mm	0–1cm				
Carson Slough/Ash Meadows	JY03-50b	DI residue	<2mm	1–5cm				
Carson Slough/Ash Meadows	JY03-50c	DI residue	<2mm	5–10cm				
Clay Dune	JY03-44a	DI residue	<53um	0–1 cm				
Clay Dune	JY03-44a	DI residue	<2mm	0–1 cm				
Clay Dune	JY03-44b	DI residue	<53um	1–5 cm				
Clay Dune	JY03-44b	DI residue	<2mm	1–5 cm				
Clay Dune	JY03-44c	DI residue	<53um	5–10 cm				
Clay Dune	JY03-44c	DI residue	<2mm	5–10 cm				

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordentite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Treatment	Size	Depth	Trona	Halite	K-Halite	Thenardite
Clay Dune	JY05-25	Solid	<2mm	0–1cm				X
Coppice	JY04-15a	Solid	<2mm	0–1cm		X		X
Coppice	JY04-16a	Solid	<2mm	0–1cm			X(?)	
Coppice	JY04-16b	Solid	<2mm	1–5cm			X(?)	X
Coppice	JY04-16b	Clay	<2mm	1–5cm				
Coppice	JY04-16c	Solid	<2mm	5–10cm			X(?)	X
Coppice	JY04-16c	Clay	<2mm	5–10cm				
Coppice	JY05-17	Solid	<2mm	0–1 cm		X		X
Coppice	JY05-17	DI residue	<53um	0–1 cm				
Coppice	JY05-17	DI residue	<2mm	0–1 cm				
Discovery	JY03-01	Final residue	<53um	2–10cm				
Discovery	JY03-01	Solid	<2mm	2–10cm	X	X		X
Discovery	JY03-01-1	Final residue	<2mm	2–10cm				
Discovery	JY03-01-2	Final residue	<2mm	2–10cm				
Discovery	JY03-01a	Final residue	<53um	0–1cm				
Discovery	JY03-01A	Final residue	<2mm	0–1cm				
Discovery	JY03-01a	Solid	<2mm	0–1cm		X		
Discovery	JY03-01a	DI residue	<2mm	0–1cm				
Discovery	JY03-01b	Solid	<2mm	0–5cm ?		X		X
Discovery	JY05-15	Solid	<2mm	0–1 cm				X
Discovery	JY05-15	DI residue	<53um	0–1 cm				
Discovery	JY05-15	DI residue	<2mm	0–1 cm				
Discovery	JY05-16	Solid	<2mm	0–1 cm		X		
Discovery	JY05-16	DI residue	<53um	0–1 cm				
Discovery	JY05-16	DI residue	<2mm	0–1 cm				
East of Coppice	JY03-32a	DI residue	<2mm	0–1cm				
East of East Transect	JY03-28a	DI residue	<2mm	0–1cm				
East of East Transect	JY03-28b	DI residue	<2mm	1–5cm				
East of East Transect	JY03-28b	Clay	<2mm	1–5cm				
East of East Transect	JY03-28c	DI residue	<2mm	5–10cm				
East Transect	JY03-29a	Final residue	<53um	0–1cm				
East Transect	JY03-29a	DI residue	<53um	0–1cm				
East Transect	JY03-29a	Final residue	<2mm	0–1cm				
East Transect	JY03-29a	DI residue	<2mm	0–1cm				
East Transect	JY03-29B2	Final residue	<53um	1–3cm				
East Transect	JY03-29B2	Final residue	<2mm	1–3cm				
East Transect	JY03-29C2	Final residue	<53um	3–7cm				
East Transect	JY03-29C2	Final residue	<2mm	3–7cm				
East Transect	JY03-29D2	Final residue	<2mm	7–15cm				
East Transect	JY03-29D2	Final residue	<53um	7–15cm				
East Transect	JY03-42a	DI residue	<2mm	0–1cm				
East Transect	JY05-21a	Solid	<2mm	0–0.5 cm				
East Transect	JY05-21A	DI residue	<53um	0–1 cm				
East Transect	JY05-21a	DI residue	<2mm	0–1 cm				
East Transect	JY05-21b	Solid	<2mm	1–3 cm				
East Transect	JY05-21b	DI residue	<53um	1–3 cm				
East Transect	JY05-21b	DI residue	<2mm	1–3 cm				
Franklin Lake Playa/Carson Slough	JY05-27a	Solid	<2mm	0–1 cm	X	X		
Franklin Lake Playa/Carson Slough	JY05-27	DI residue	<53um	0–1 cm				
Franklin Lake Playa/Carson Slough	JY05-27	DI residue	<2mm	0–1 cm		X(?)		
Franklin Lake Playa/Carson Slough	JY05-27	DI residue	<53um	0–1 cm				

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordentite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, therronatrinite; N, norsethite]

Sample site	Sample ID	Treatment	Size	Depth	Trona	Halite	K-Halite	Thenardite
Franklin Lake Playa/Carson Slough	JY05-27	DI residue	<2mm	0–1 cm				
Franklin Lake Playa/Carson Slough	JY05-28a	Solid	<2mm	0–1 cm	X	X		X
Franklin Lake Playa/Carson Slough	JY05-28a	DI residue	<53um	0–1 cm				
Franklin Lake Playa/Carson Slough	JY05-28a	DI residue	<2mm	0–1 cm				
Franklin/Carson Slough	JY04-01	Solid	<2mm	0–1cm	X	X		
Obelisk	JY03-22a	DI residue	<2mm	0–1cm				
Ojo	JY03-23a	DI residue	<2mm	0–1cm				
Ojo	JY03-24a	Final residue	<53um	0–1cm				
Ojo	JY03-24b	Final residue	<53um	1–5cm				
Ojo	JY03-24b	Final residue	<2mm	1–5cm				
Ojo	JY03-24b	DI residue	<2mm	1–5cm				
Ojo	JY03-24c	Final residue	<53um	5–10cm				
Ojo	JY03-24c	Final residue	<2mm	5–10cm				
Ojo del Caballo	JY05-30	Solid	<2mm	0–1 cm	X	X		X
Ojo del Caballo	JY05-30	DI residue	<53um	0–1 cm				
Ojo del Caballo	JY05-30	DI residue	<2mm	0–1 cm				
Salt Pan	JY03-25a	Solid	<2mm	0–1cm				X
Salt Pan	JY03-25a	Solid	<53um	0–1cm				X
Salt Pan	JY03-25a	DI residue	<2mm	0–1cm				
Salt Pan	JY03-25a	DI residue	<2mm	1–5cm				
Salt Pan	JY03-25c	DI residue	<2mm	5–10cm				
Salt Pan	JY03-26a	Final residue	<53um	0–1cm				
Salt Pan	JY03-26b	Final residue	<53um	1–5cm				
Salt Pan	JY03-26b	Final residue	<2mm	1–5cm				
Salt Pan	JY03-26b	DI residue	<53um	1–5cm				
Salt Pan	JY03-26c	Final residue	<53um	5–10cm				
Salt Pan	JY03-26c	Final residue	<2mm	5–10cm				
Salt Pan	JY03-26c	DI residue	<53um	5–10cm				
Salt Pan	JY03-43a	DI residue	<2mm	0–1cm				
Salt Pan	JY03-43b	DI residue	<2mm	1–5cm				
Salt Pan	JY03-43c	DI residue	<2mm	5–10cm				
Salt Pan	JY05-23a	Solid	<2mm	0–1cm	X	X		X
Salt Pan	JY05-23a	DI residue	<53um	0–1 cm				
Salt Pan	JY05-23a	DI residue	<2mm	0–1 cm				
Salt Pan	JY05-59a	Solid	<2mm	0–0.5 cm		X		X
Salt Pan	JY05-59a	DI residue	<2mm	0–0.5 cm				
Salt Pan	JY05-59a	DI residue	<2mm	0–0.5 cm				
Salt Pan	JY05-59b	Solid	<2mm	0.5–1 cm		X		X
Salt Pan	JY05-59b	DI residue	<53um	0.5–1 cm				
Salt Pan	JY05-59b	DI residue	<2mm	0.5–1 cm				
West Transect	JY05-19	Solid	<2mm	0–1 cm				X
West Transect	JY05-19	DI residue	<53um	0–1 cm				
West Transect	JY05-19	DI residue	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/12-06	Solid	<2mm	0–1 cm		X		X
Carson Slough Repeat Site	FP-CSL/12-06	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/1-07	Solid	<2mm	0–1 cm		X		X
Carson Slough Repeat Site	FP-CSL/1-07	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/3-07	Solid	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/3-07	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/4-07	Solid	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/4-07	Clay	<2mm	0–1 cm				

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Treatment	Size	Depth	Trona	Halite	K-Halite	Thenardite
Carson Slough Repeat Site	FP-CSL/5-07	Solid	<2mm	0–1 cm		X		X
Carson Slough Repeat Site	FP-CSL/5-07	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/7-07	Solid	<2mm	0–1 cm		X		X
Carson Slough Repeat Site	FP-CSL/7-07	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/10-07	Solid	<2mm	0–1 cm		X		X
Carson Slough Repeat Site	FP-CSL/10-07	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/11-07	Solid	<2mm	0–1 cm		X		X
Carson Slough Repeat Site	FP-CSL/11-07	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/4-08	Solid	<2mm	0–1 cm	X	X		X
Carson Slough Repeat Site	FP-CSL/4-08	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/11-08	Solid	<2mm	0–1 cm	X?	X		
Carson Slough Repeat Site	FP-CSL/11-08	Clay	<2mm	0–1 cm				
Carson Slough Repeat Site	FP-CSL/1-09	Solid	<2mm	0–1 cm	X	X		X
Carson Slough Repeat Site	FP-CSL/1-09	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/12-06	Solid	<2mm	0–1 cm		X		X
Clay Dune Repeat Site	FP-CDN/12-06	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/1-07	Solid	<2mm	0–1 cm				X
Clay Dune Repeat Site	FP-CDN/1-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/3-07	Solid	<2mm	0–1 cm	X	X		X
Clay Dune Repeat Site	FP-CDN/3-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/4-07	Solid	<2mm	0–1 cm				X
Clay Dune Repeat Site	FP-CDN/4-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/5-07	Solid	<2mm	0–1 cm		X		X
Clay Dune Repeat Site	FP-CDN/5-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/7-07	Solid	<2mm	0–1 cm		X		X
Clay Dune Repeat Site	FP-CDN/7-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/10-07	Solid	<2mm	0–1 cm		X		
Clay Dune Repeat Site	FP-CDN/10-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/11-07	Solid	<2mm	0–1 cm		X		
Clay Dune Repeat Site	FP-CDN/11-07	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/4-08	Solid	<2mm	0–1 cm	X	X		
Clay Dune Repeat Site	FP-CDN/4-08	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/11-08	Solid	<2mm	0–1 cm	X			
Clay Dune Repeat Site	FP-CDN/11-08	Clay	<2mm	0–1 cm				
Clay Dune Repeat Site	FP-CDN/1-09	Solid	<2mm	0–1 cm	X	X		X
Clay Dune Repeat Site	FP-CDN/1-09	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/12-06	Solid	<2mm	0–1 cm		X		X
Discovery Repeat Site	FP-DSC/12-06	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/1-07	Solid	<2mm	0–1 cm		X		X
Discovery Repeat Site	FP-DSC/1-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/3-07	Solid	<2mm	0–1 cm				X(?)
Discovery Repeat Site	FP-DSC/3-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/4-07	Solid	<2mm	0–1 cm		X		X
Discovery Repeat Site	FP-DSC/4-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/5-07	Solid	<2mm	0–1 cm		X		
Discovery Repeat Site	FP-DSC/5-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/7-07	Solid	<2mm	0–1 cm		X		X
Discovery Repeat Site	FP-DSC/7-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/10-07	Solid	<2mm	0–1 cm		X		X(?)
Discovery Repeat Site	FP-DSC/10-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/11-07	Solid	<2mm	0–1 cm		X		X

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordantite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, apththalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thermanatrite; N, norsethite]

Sample site	Sample ID	Treatment	Size	Depth	Trona	Halite	K-Halite	Thenardite
Discovery Repeat Site	FP-DSC/11-07	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/4-08	Solid	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/4-08	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/11-08	Solid	<2mm	0–1 cm		X		
Discovery Repeat Site	FP-DSC/11-08	Clay	<2mm	0–1 cm				
Discovery Repeat Site	FP-DSC/1-09	Solid	<2mm	0–1 cm		X		X
Discovery Repeat Site	FP-DSC/1-09	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/12-06	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/12-06	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/1-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/1-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/3-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/3-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/4-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/4-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/5-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/5-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/7-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/7-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/10-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/10-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/11-07	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/11-07	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/4-08	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/4-08	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/11-08	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/11-08	Clay	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/1-09	Solid	<2mm	0–1 cm				
East Transect Repeat Site	FP-ETN/1-09	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN-MND/12-06	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN-FLT/12-06	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN-MND/12-06	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN-FLT/12-06	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/1-07	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/1-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/3-07	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/3-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/4-07	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/4-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/5-07	Solid	<2mm	0–1 cm		X		
West Transect Repeat Site	FP-WTN/5-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/7-07	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/7-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/10-07	Solid	<2mm	0–1 cm		X		
West Transect Repeat Site	FP-WTN/10-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/11-07	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/11-07	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/4-08	Solid	<2mm	0–1 cm		X		
West Transect Repeat Site	FP-WTN/4-08	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/11-08	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/11-08	Clay	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/1-09	Solid	<2mm	0–1 cm				
West Transect Repeat Site	FP-WTN/1-09	Clay	<2mm	0–1 cm				

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Burkeite	Calcite	Dolomite	Clay	Amph.	Zeolite	Andalusite
East Transect Auger	HG07-04/0-1		X		I		A	
East Transect Auger	HG07-04/1-5		X	X	I		A	
East Transect Auger	HG07-04/5-10		X		I		A	
East Transect Auger	HG07-04/10-20		X		I		A	
East Transect Auger	HG07-04/10-20		X		I,K		A	
East Transect Auger	HG07-04/20-30		X	X	I		A	
East Transect Auger	HG07-04/20-30		X		I,K		A	
East Transect Auger	HG07-04/30-40		X		I		A	
East Transect Auger	HG07-04/30-40		X		I		A	
East Transect Auger	HG07-04/40-50		X	X(?)			A	
East Transect Auger	HG07-04/40-50		X		I,S			
East Transect Auger	HG07-04/50-60		X		I		A	
East Transect Auger	HG07-04/50-60		X		I		A	
East Transect Auger	HG07-04/60-70		X				A	
East Transect Auger	HG07-04/60-70		X		I		A	
East Transect Auger	HG07-04/80-90		X	X	I		A	
East Transect Auger	HG07-04/95-101		X	X(?)			A(?)	
East Transect Auger	HG07-04/95-101		X		I,K,S		A	
East Transect Auger	HG07-04/124-137		X		I(?)			
East Transect Auger	HG07-04/145-159		X	X(?)			A(?)	
East Transect Auger	HG07-04/177-184		X					
East Transect Auger	HG07-04/193-203		X					
East Transect Auger	HG07-04/237-248		X					
East Transect Auger	HG07-04/237-248		X					
East Transect Auger	HG07-04/258-266		X					
East Transect Auger	HG07-04/266-281		X					
Around East Transect Auger	HG07-05/0-1		X	X(?)				
Around East Transect Auger	HG07-06/0-1		X					
Around East Transect Auger	HG07-07/0-1		X	X				
Around East Transect Auger	HG07-08/0-1		X				A	
Around East Transect Auger	HG07-09/0-1		X	X	I		A	
Ash Meadows	JY05-29	X	X		I			
Ash Meadows	JY05-29		X	X	I,K			
Ash Meadows	JY05-29		X	X	I	X		
Between West and East Transect	JY03-30b						A	
Carson Slough/Ash Meadows	JY03-09		X	X	I			
Carson Slough/Ash Meadows	JY03-09	X	X	X				
Carson Slough/Ash Meadows	JY03-09		X		I			
Carson Slough/Ash Meadows	JY03-09		X		I,K	X		
Carson Slough/Ash Meadows	JY03-49a		X	X	I,K	X	A	
Carson Slough/Ash Meadows	JY03-49b		X	X	I			
Carson Slough/Ash Meadows	JY03-49c		X	X	I			
Carson Slough/Ash Meadows	JY03-50a		X	X	I		A(?)	
Carson Slough/Ash Meadows	JY03-50b		X	X	I			
Carson Slough/Ash Meadows	JY03-50c		X	X				
Clay Dune	JY03-44a		X		I,K	X	A	
Clay Dune	JY03-44a		X		I,K			X(?)
Clay Dune	JY03-44b		X		I,K	X	A	
Clay Dune	JY03-44b		X		I,K		A	
Clay Dune	JY03-44c		X		I,K	X	A	
Clay Dune	JY03-44c		X		I,K		A	
Clay Dune	JY05-25		X		I,K		A	
Coppice	JY04-15a		X		I			

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thermonatrite; N, norsethite]

Sample site	Sample ID	Burkeite	Calcite	Dolomite	Clay	Amph.	Zeolite	Andalusite
Coppice	JY04-16a		X	X(?)	I, K			
Coppice	JY04-16b		X	X(?)	I			
Coppice	JY04-16b						A	
Coppice	JY04-16c		X	X(?)	I			
Coppice	JY04-16c						A	
Coppice	JY05-17		X		I	X		
Coppice	JY05-17		X		I,K,Chl	X	A,H	
Coppice	JY05-17		X		I,K	X	A,H	
Discovery	JY03-01				I	X		
Discovery	JY03-01		X	X	K		C	
Discovery	JY03-01-1				I	X	H	
Discovery	JY03-01-2				I, K		H	
Discovery	JY03-01a				I,K		H	
Discovery	JY03-01A				I,K		H	
Discovery	JY03-01a		X	X	I,K		C	
Discovery	JY03-01a		X	X	I,K		M	
Discovery	JY03-01b		X	X	I			
Discovery	JY05-15		X	X	I	X		
Discovery	JY05-15		X		I,K		A,H	
Discovery	JY05-15		X		I,K		A,H	
Discovery	JY05-16		X	X	I,K			
Discovery	JY05-16		X		I,K	X	A,H	
Discovery	JY05-16		X		I,K	X	A,H	
East of Coppice	JY03-32a		X	X	I,K	X	A, H	
East of East Transect	JY03-28a		X	X	I,K		A(?)	
East of East Transect	JY03-28b		X	X	I,K		A	
East of East Transect	JY03-28b						A	
East of East Transect	JY03-28c		X	X	I,K		A	
East Transect	JY03-29a		X		I	X		
East Transect	JY03-29a		X	X	I,K			
East Transect	JY03-29a				I,K	X		
East Transect	JY03-29a		X	X	I		A	
East Transect	JY03-29B2				I		A(?)	
East Transect	JY03-29B2				I,K		A(?)	
East Transect	JY03-29C2		X		I,K		A	
East Transect	JY03-29C2				I,K		A	
East Transect	JY03-29D2				I		A	
East Transect	JY03-29D2				I,K		A	
East Transect	JY03-42a		X	X	I,K		A	
East Transect	JY05-21a		X	X	I,K		Z(?)	
East Transect	JY05-21A		X	X	I,K	X	A	
East Transect	JY05-21a		X	X	I,K	X	A	
East Transect	JY05-21b		X		K,S			
East Transect	JY05-21b		X	X	I,K	X	A,H	
East Transect	JY05-21b		X	X	I,K		A	
Franklin Lake Playa/Carson Slough	JY05-27a	X	X		I			
Franklin Lake Playa/Carson Slough	JY05-27		X	X	I,K	X	A,C	
Franklin Lake Playa/Carson Slough	JY05-27		X	X				
Franklin Lake Playa/Carson Slough	JY05-27		X	X	I,K		C	
Franklin Lake Playa/Carson Slough	JY05-27		X	X	I			

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thermonatrite; N, norsethite]

Sample site	Sample ID	Burkeite	Calcite	Dolomite	Clay	Amph.	Zeolite	Andalusite
Franklin Lake Playa/Carson Slough	JY05-28a	X	X		I			
Franklin Lake Playa/Carson Slough	JY05-28a		X		I			
Franklin Lake Playa/Carson Slough	JY05-28a		X					
Franklin/Carson Slough	JY04-01	X			I			
Obelisk	JY03-22a		X	X	I,K	?	?	
Ojo	JY03-23a		X					
Ojo	JY03-24a				I,Se		A	
Ojo	JY03-24b				I,Se		A	
Ojo	JY03-24b				I,Se		A	
Ojo	JY03-24b		X	X (?)	I,S		A	
Ojo	JY03-24c				I,Se		A	
Ojo	JY03-24c				I,Se		A	
Ojo del Caballo	JY05-30	X	X			X		
Ojo del Caballo	JY05-30		X	X	I	X		
Ojo del Caballo	JY05-30		X	X	I	X		
Salt Pan	JY03-25a		X		I	X(?)		
Salt Pan	JY03-25a		X		I,K	X		
Salt Pan	JY03-25a		X		I			
Salt Pan	JY03-25a		X		I		A (?)	
Salt Pan	JY03-25c		X		I		A (?)	
Salt Pan	JY03-26a				I	X		
Salt Pan	JY03-26b				I		A	
Salt Pan	JY03-26b				I	X		
Salt Pan	JY03-26b		X	X	I,K	X	A	
Salt Pan	JY03-26c				I	X	A (?)	
Salt Pan	JY03-26c				I			
Salt Pan	JY03-26c		X	X (?)	I,K		A	
Salt Pan	JY03-43a		X	X	I,K	X	A	
Salt Pan	JY03-43b		X		I		A	
Salt Pan	JY03-43c		X	X	I,K		A	
Salt Pan	JY05-23a	X	X					
Salt Pan	JY05-23a		X	X	I,K	X	A,H	
Salt Pan	JY05-23a		X		I,K	X	A	
Salt Pan	JY05-59a	X						
Salt Pan	JY05-59a		X					
Salt Pan	JY05-59a		X					
Salt Pan	JY05-59b							
Salt Pan	JY05-59b		X		I,K	X		
Salt Pan	JY05-59b		X		I	X		
West Transect	JY05-19		X		I			
West Transect	JY05-19		X	X	I,K	X	A,H	
West Transect	JY05-19		X	X	I,K	X	A,H	
Carson Slough Repeat Site	FP-CSL/12-06		X	X	I(?)	?	A	
Carson Slough Repeat Site	FP-CSL/12-06						A	
Carson Slough Repeat Site	FP-CSL/1-07		X	X	I,K(?)			
Carson Slough Repeat Site	FP-CSL/1-07							
Carson Slough Repeat Site	FP-CSL/3-07		X	X(?)	I	X		
Carson Slough Repeat Site	FP-CSL/3-07						A	
Carson Slough Repeat Site	FP-CSL/4-07		X	X	I	X		
Carson Slough Repeat Site	FP-CSL/4-07						A(?)	
Carson Slough Repeat Site	FP-CSL/5-07		X		I	X		

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Burkeite	Calcite	Dolomite	Clay	Amph.	Zeolite	Andalusite
Carson Slough Repeat Site	FP-CSL/5-07						A(?)	
Carson Slough Repeat Site	FP-CSL/7-07		X					
Carson Slough Repeat Site	FP-CSL/7-07							
Carson Slough Repeat Site	FP-CSL/10-07	X	X					
Carson Slough Repeat Site	FP-CSL/10-07							
Carson Slough Repeat Site	FP-CSL/11-07		X		I	X	A	
Carson Slough Repeat Site	FP-CSL/11-07							
Carson Slough Repeat Site	FP-CSL/4-08	X	X				A	
Carson Slough Repeat Site	FP-CSL/4-08							
Carson Slough Repeat Site	FP-CSL/11-08	X?	X				A	
Carson Slough Repeat Site	FP-CSL/11-08							
Carson Slough Repeat Site	FP-CSL/1-09	X	X				A	
Carson Slough Repeat Site	FP-CSL/1-09							
Clay Dune Repeat Site	FP-CDN/12-06	X	X	X	I		A	
Clay Dune Repeat Site	FP-CDN/12-06						A	
Clay Dune Repeat Site	FP-CDN/1-07		X		I	X		
Clay Dune Repeat Site	FP-CDN/1-07						A	
Clay Dune Repeat Site	FP-CDN/3-07	X	X				A(?)	
Clay Dune Repeat Site	FP-CDN/3-07						A	
Clay Dune Repeat Site	FP-CDN/4-07		X	X	I		A	
Clay Dune Repeat Site	FP-CDN/4-07						A	
Clay Dune Repeat Site	FP-CDN/5-07		X	X	I,K		A	
Clay Dune Repeat Site	FP-CDN/5-07						A	
Clay Dune Repeat Site	FP-CDN/7-07		X					
Clay Dune Repeat Site	FP-CDN/7-07						A	
Clay Dune Repeat Site	FP-CDN/10-07	X	X		I	X		
Clay Dune Repeat Site	FP-CDN/10-07							
Clay Dune Repeat Site	FP-CDN/11-07	X	X		I	X	A	
Clay Dune Repeat Site	FP-CDN/11-07							
Clay Dune Repeat Site	FP-CDN/4-08	X	X				A	
Clay Dune Repeat Site	FP-CDN/4-08							
Clay Dune Repeat Site	FP-CDN/11-08	X	X	X	I	X	A	
Clay Dune Repeat Site	FP-CDN/11-08							
Clay Dune Repeat Site	FP-CDN/1-09	X	X	X	I		A	
Clay Dune Repeat Site	FP-CDN/1-09							
Discovery Repeat Site	FP-DSC/12-06		X	X(?)	I,K	?	A	
Discovery Repeat Site	FP-DSC/12-06						A	
Discovery Repeat Site	FP-DSC/1-07		X	X	I,K	X		
Discovery Repeat Site	FP-DSC/1-07							
Discovery Repeat Site	FP-DSC/3-07		X		I,K		A(?)	
Discovery Repeat Site	FP-DSC/3-07						A	
Discovery Repeat Site	FP-DSC/4-07	X	X		I,K	X		
Discovery Repeat Site	FP-DSC/4-07							
Discovery Repeat Site	FP-DSC/5-07		X	X	I,K	X	A(?)	
Discovery Repeat Site	FP-DSC/5-07						A(?)	
Discovery Repeat Site	FP-DSC/7-07		X		I	X		
Discovery Repeat Site	FP-DSC/7-07							
Discovery Repeat Site	FP-DSC/10-07	X(?)	X		I,K	X	A	
Discovery Repeat Site	FP-DSC/10-07							
Discovery Repeat Site	FP-DSC/11-07	X	X		I		A	
Discovery Repeat Site	FP-DSC/11-07							

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, themonatrite; N, norsethite]

Sample site	Sample ID	Burkeite	Calcite	Dolomite	Clay	Amph.	Zeolite	Andalusite
Discovery Repeat Site	FP-DSC/4-08		X	X	I,K		A	
Discovery Repeat Site	FP-DSC/4-08							
Discovery Repeat Site	FP-DSC/11-08	X?	X	X	I		A	
Discovery Repeat Site	FP-DSC/11-08							
Discovery Repeat Site	FP-DSC/1-09		X		I,K		A	
Discovery Repeat Site	FP-DSC/1-09							
East Transect Repeat Site	FP-ETN/12-06		X	X	I,K			
East Transect Repeat Site	FP-ETN/12-06						A	
East Transect Repeat Site	FP-ETN/1-07		X	X	I,K(?)		A	
East Transect Repeat Site	FP-ETN/1-07						A	
East Transect Repeat Site	FP-ETN/3-07		X	X(?)	I,K	X	A	
East Transect Repeat Site	FP-ETN/3-07						A	
East Transect Repeat Site	FP-ETN/4-07		X	X	I		A	
East Transect Repeat Site	FP-ETN/4-07						A	
East Transect Repeat Site	FP-ETN/5-07		X	X	I,K		A	
East Transect Repeat Site	FP-ETN/5-07						A	
East Transect Repeat Site	FP-ETN/7-07		X		I		A	
East Transect Repeat Site	FP-ETN/7-07						A	
East Transect Repeat Site	FP-ETN/10-07		X		I		A	
East Transect Repeat Site	FP-ETN/10-07						A	
East Transect Repeat Site	FP-ETN/11-07		X		I		A	
East Transect Repeat Site	FP-ETN/11-07							
East Transect Repeat Site	FP-ETN/4-08		X	X	I,K	X	A	
East Transect Repeat Site	FP-ETN/4-08							
East Transect Repeat Site	FP-ETN/11-08		X	X	I		A	
East Transect Repeat Site	FP-ETN/11-08							
East Transect Repeat Site	FP-ETN/1-09		X	X	I,K		A	
East Transect Repeat Site	FP-ETN/1-09							
West Transect Repeat Site	FP-WTN-MND/12-06		X	X	I,K		C(?), A(?)	
West Transect Repeat Site	FP-WTN-FLT/12-06		X	X(?)	I	X(?)	A	
West Transect Repeat Site	FP-WTN-MND/12-06						A(?)	
West Transect Repeat Site	FP-WTN-FLT/12-06						A(?)	
West Transect Repeat Site	FP-WTN/1-07		X		I,K(?)	X		
West Transect Repeat Site	FP-WTN/1-07						A	
West Transect Repeat Site	FP-WTN/3-07		X		I		A	
West Transect Repeat Site	FP-WTN/3-07						A	
West Transect Repeat Site	FP-WTN/4-07		X	X	I,K		A	
West Transect Repeat Site	FP-WTN/4-07						A(?)	
West Transect Repeat Site	FP-WTN/5-07		X	X(?)	I,K		A	
West Transect Repeat Site	FP-WTN/5-07						A(?)	
West Transect Repeat Site	FP-WTN/7-07		X		I	X		
West Transect Repeat Site	FP-WTN/7-07							
West Transect Repeat Site	FP-WTN/10-07		X		I			
West Transect Repeat Site	FP-WTN/10-07							
West Transect Repeat Site	FP-WTN/11-07		X		I,K		A	
West Transect Repeat Site	FP-WTN/11-07							
West Transect Repeat Site	FP-WTN/4-08		X		I,K		A	
West Transect Repeat Site	FP-WTN/4-08							
West Transect Repeat Site	FP-WTN/11-08		X	X	I		A	
West Transect Repeat Site	FP-WTN/11-08							
West Transect Repeat Site	FP-WTN/1-09		X		I		A	
West Transect Repeat Site	FP-WTN/1-09							

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Iron	Quartz	Fieldspar	Anhydrous sulfate	Misc CO ₃ 's	Clay minerals
East Transect Auger	HG07-04/0-1		X	P			
East Transect Auger	HG07-04/1-5		X	P			
East Transect Auger	HG07-04/5-10		X	P			
East Transect Auger	HG07-04/10-20		X	P			
East Transect Auger	HG07-04/10-20		X				
East Transect Auger	HG07-04/20-30		X	P			
East Transect Auger	HG07-04/20-30		X				
East Transect Auger	HG07-04/30-40		X	P			
East Transect Auger	HG07-04/30-40		X				
East Transect Auger	HG07-04/40-50		X	P			
East Transect Auger	HG07-04/40-50		X	P			
East Transect Auger	HG07-04/50-60		X	P			
East Transect Auger	HG07-04/50-60		X				
East Transect Auger	HG07-04/60-70		X	P			
East Transect Auger	HG07-04/60-70		X				
East Transect Auger	HG07-04/80-90		X	P			
East Transect Auger	HG07-04/95-101		X	P			
East Transect Auger	HG07-04/95-101		X				
East Transect Auger	HG07-04/124-137		X	P			
East Transect Auger	HG07-04/145-159		X	P			
East Transect Auger	HG07-04/177-184		X	P			
East Transect Auger	HG07-04/193-203		X	P			
East Transect Auger	HG07-04/237-248		X	P			
East Transect Auger	HG07-04/237-248		X				
East Transect Auger	HG07-04/258-266		X	P			
East Transect Auger	HG07-04/266-281		X	P			
Around East Transect Auger	HG07-05/0-1		X	P			
Around East Transect Auger	HG07-06/0-1		X	P			
Around East Transect Auger	HG07-07/0-1		X	P			
Around East Transect Auger	HG07-08/0-1		X	P			
Around East Transect Auger	HG07-09/0-1		X	P			
Ash Meadows	JY05-29		X	P			
Ash Meadows	JY05-29		X	P, K-spar			
Ash Meadows	JY05-29		X	P, K-spar			
Between West and East Transect	JY03-30b						I/S-mixed, I, S, K
Carson Slough/Ash Meadows	JY03-09		X	P			
Carson Slough/Ash Meadows	JY03-09		X	P			
Carson Slough/Ash Meadows	JY03-09		X	P, K-spar			
Carson Slough/Ash Meadows	JY03-09		X	P			
Carson Slough/Ash Meadows	JY03-49a		X	P, K-spar			
Carson Slough/Ash Meadows	JY03-49b		X	P			
Carson Slough/Ash Meadows	JY03-49c		X	P			
Carson Slough/Ash Meadows	JY03-50a		X	P			
Carson Slough/Ash Meadows	JY03-50b		X	P		Mg(?)	
Carson Slough/Ash Meadows	JY03-50c		X	P			
Clay Dune	JY03-44a		X	P, K-spar			
Clay Dune	JY03-44a		X	P, K-spar			
Clay Dune	JY03-44b		X	P, K-spar			
Clay Dune	JY03-44b		X	P, K-spar			
Clay Dune	JY03-44c		X	P, K-spar			
Clay Dune	JY03-44c		X	P, K-spar			
Clay Dune	JY05-25		X	P, K-spar			
Coppice	JY04-15a		X	P			
Coppice	JY04-16a		X	P			
Coppice	JY04-16b		X	P			

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordentite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthitalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Iron	Quartz	Fieldspar	Anhydrous sulfate	Misc CO ₃ 's	Clay minerals
Coppice	JY04-16b		X				I/S-MIXED, I, K, S
Coppice	JY04-16c		X	P			
Coppice	JY04-16c						I/S-MIXED, I, K, S, Chl(?)
Coppice	JY05-17		X	P, K-spar			
Coppice	JY05-17		X	P, K-spar			
Coppice	JY05-17		X	P, K-spar			
Discovery	JY03-01		X	P			
Discovery	JY03-01		X	P, K-spar			
Discovery	JY03-01-1		X	P			
Discovery	JY03-01-2		X	P			
Discovery	JY03-01a		X	P			
Discovery	JY03-01A		X	P			
Discovery	JY03-01a		X	P, K-spar			
Discovery	JY03-01a		X	P			
Discovery	JY03-01b		X	P		G	
Discovery	JY05-15		X	P, K-spar			
Discovery	JY05-15		X	P, K-spar			
Discovery	JY05-15		X	P, K-spar			
Discovery	JY05-16		X	P, K-spar			
Discovery	JY05-16		X	P, K-spar			
Discovery	JY05-16		X	P, K-spar			
East of Coppice	JY03-32a		X	P			
East of East Transect	JY03-28a		X	P			
East of East Transect	JY03-28b		X	P			
East of East Transect	JY03-28b						I/S-mixed, I, S, K
East of East Transect	JY03-28c		X	P			
East Transect	JY03-29a		X	P			
East Transect	JY03-29a		X	P			
East Transect	JY03-29a		X	P, K-spar			
East Transect	JY03-29a		X	P			
East Transect	JY03-29B2		X	P, K-spar			
East Transect	JY03-29B2		X	P, K-spar			
East Transect	JY03-29C2		X	P, K-spar			
East Transect	JY03-29C2		X	P, K-spar			
East Transect	JY03-29D2		X	P, K-spar			
East Transect	JY03-29D2		X	P, K-spar			
East Transect	JY03-42a		X	P, K-spar			
East Transect	JY05-21a		X	P, K-spar			
East Transect	JY05-21A		X	P, K-spar			
East Transect	JY05-21a		X	P, K-spar			
East Transect	JY05-21b		X	P, K-spar		N	
East Transect	JY05-21b		X	P, K-spar			
East Transect	JY05-21b		X	P, K-spar			
Franklin Lake Playa/Carson Slough	JY05-27a		X	P, K-spar		Th	
Franklin Lake Playa/Carson Slough	JY05-27		X	P			
Franklin Lake Playa/Carson Slough	JY05-27		X	P			
Franklin Lake Playa/Carson Slough	JY05-27		X	P, K-spar			
Franklin Lake Playa/Carson Slough	JY05-27		X	P			
Franklin Lake Playa/Carson Slough	JY05-28a		X	P			
Franklin Lake Playa/Carson Slough	JY05-28a		X	P, K-spar			
Franklin Lake Playa/Carson Slough	JY05-28a		X	P, K-spar			
Franklin/Carson Slough	JY04-01		X(?)			Th	
Obelisk	JY03-22a		X	P			
Ojo	JY03-23a		X	P			

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordentite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thermonatrite; N, norsethite]

Sample site	Sample ID	Iron	Quartz	Fieldspar	Anhydrous sulfate	Misc CO ₃ 's	Clay minerals
Ojo	JY03-24a		X	P			
Ojo	JY03-24b	X(?)	X	P			
Ojo	JY03-24b	X (?)	X	P			
Ojo	JY03-24b		X	P		Ar	
Ojo	JY03-24c		X	K-spar			
Ojo	JY03-24c		X	P			
Ojo del Caballo	JY05-30		X	P			
Ojo del Caballo	JY05-30		X	P, K-spar			
Ojo del Caballo	JY05-30		X	P, K-spar			
Salt Pan	JY03-25a		X	P			
Salt Pan	JY03-25a		X	P			
Salt Pan	JY03-25a		X	P			
Salt Pan	JY03-25a		X	P			
Salt Pan	JY03-25c		X	P			
Salt Pan	JY03-26a		X	P			
Salt Pan	JY03-26b	X (?)	X	P			
Salt Pan	JY03-26b		X	P			
Salt Pan	JY03-26b		X	P			
Salt Pan	JY03-26c		X	P			
Salt Pan	JY03-26c		X	P			
Salt Pan	JY03-26c		X	P			
Salt Pan	JY03-43a		X	P			
Salt Pan	JY03-43b		X	P			
Salt Pan	JY03-43c		X	P			
Salt Pan	JY05-23a		X			Th	
Salt Pan	JY05-23a		X	P, K-spar			
Salt Pan	JY05-23a		X	P, K-spar			
Salt Pan	JY05-59a		X				
Salt Pan	JY05-59a		X	P, K-spar			
Salt Pan	JY05-59a		X	P, K-spar			
Salt Pan	JY05-59b		X				
Salt Pan	JY05-59b		X	P, K-spar			
Salt Pan	JY05-59b		X	P, K-spar			
West Transect	JY05-19		X	P, K-spar	Y(?)		
West Transect	JY05-19		X	P, K-spar			
West Transect	JY05-19		X	P, K-spar			
Carson Slough Repeat Site	FP-CSL/12-06		X	P	Y(?)		
Carson Slough Repeat Site	FP-CSL/12-06						I,K,S,Chl?
Carson Slough Repeat Site	FP-CSL/1-07		X	P			
Carson Slough Repeat Site	FP-CSL/1-07						I,K?,S,Chl
Carson Slough Repeat Site	FP-CSL/3-07		X	P, K-spar			
Carson Slough Repeat Site	FP-CSL/3-07						I/S-Mixed, I,S,K,Chl
Carson Slough Repeat Site	FP-CSL/4-07		X	P			
Carson Slough Repeat Site	FP-CSL/4-07						I,S,K,Chl?
Carson Slough Repeat Site	FP-CSL/5-07		X	P			
Carson Slough Repeat Site	FP-CSL/5-07						I,S,K,Chl?
Carson Slough Repeat Site	FP-CSL/7-07		X	P			
Carson Slough Repeat Site	FP-CSL/7-07						I,S
Carson Slough Repeat Site	FP-CSL/10-07		X	P			
Carson Slough Repeat Site	FP-CSL/10-07						I,K?,Chl?
Carson Slough Repeat Site	FP-CSL/11-07		X	P			
Carson Slough Repeat Site	FP-CSL/11-07						I,Chl
Carson Slough Repeat Site	FP-CSL/4-08		X		Aph		
Carson Slough Repeat Site	FP-CSL/4-08						I,S,Chl

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordentite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Iron	Quartz	Fieldspar	Anhydrous sulfate	Misc CO ₃ 's	Clay minerals
Carson Slough Repeat Site	FP-CSL/11-08		X	P			
Carson Slough Repeat Site	FP-CSL/11-08					I,S,K	
Carson Slough Repeat Site	FP-CSL/1-09		X	P			
Carson Slough Repeat Site	FP-CSL/1-09					I,S,Se,Chl?,K?	
Clay Dune Repeat Site	FP-CDN/12-06		X	P			
Clay Dune Repeat Site	FP-CDN/12-06					I,S,Chl,K?	
Clay Dune Repeat Site	FP-CDN/1-07		X	P			
Clay Dune Repeat Site	FP-CDN/1-07					I,S,Chl	
Clay Dune Repeat Site	FP-CDN/3-07		X				
Clay Dune Repeat Site	FP-CDN/3-07					I,K?,Chl	
Clay Dune Repeat Site	FP-CDN/4-07		X	P			
Clay Dune Repeat Site	FP-CDN/4-07					I,S,K,Chl?	
Clay Dune Repeat Site	FP-CDN/5-07		X	P			
Clay Dune Repeat Site	FP-CDN/5-07					I,S,K	
Clay Dune Repeat Site	FP-CDN/7-07		X	P			
Clay Dune Repeat Site	FP-CDN/7-07					I,S,Chl	
Clay Dune Repeat Site	FP-CDN/10-07		X	P			
Clay Dune Repeat Site	FP-CDN/10-07					I,S?	
Clay Dune Repeat Site	FP-CDN/11-07		X	P			
Clay Dune Repeat Site	FP-CDN/11-07					I,S,Chl	
Clay Dune Repeat Site	FP-CDN/4-08		X	P			
Clay Dune Repeat Site	FP-CDN/4-08					I,S,Chl	
Clay Dune Repeat Site	FP-CDN/11-08		X	P			
Clay Dune Repeat Site	FP-CDN/11-08					I,S,K	
Clay Dune Repeat Site	FP-CDN/1-09		X	P			
Clay Dune Repeat Site	FP-CDN/1-09					I,S,Chl	
Discovery Repeat Site	FP-DSC/12-06		X	P, K-spar	Y(?)		
Discovery Repeat Site	FP-DSC/12-06					I,S,K	
Discovery Repeat Site	FP-DSC/1-07		X	P			
Discovery Repeat Site	FP-DSC/1-07					I,S,K	
Discovery Repeat Site	FP-DSC/3-07		X	P			
Discovery Repeat Site	FP-DSC/3-07					I,S,K,Chl	
Discovery Repeat Site	FP-DSC/4-07		X	P			
Discovery Repeat Site	FP-DSC/4-07					I,S,K,Chl?	
Discovery Repeat Site	FP-DSC/5-07		X	P			
Discovery Repeat Site	FP-DSC/5-07					I,S,K,Chl?	
Discovery Repeat Site	FP-DSC/7-07		X	P			
Discovery Repeat Site	FP-DSC/7-07					I,S	
Discovery Repeat Site	FP-DSC/10-07		X	P			
Discovery Repeat Site	FP-DSC/10-07					I,S,Chl,K?	
Discovery Repeat Site	FP-DSC/11-07		X	P			
Discovery Repeat Site	FP-DSC/11-07					I,Chl,K?	
Discovery Repeat Site	FP-DSC/4-08		X	P			
Discovery Repeat Site	FP-DSC/4-08					I,S,Chl?,K?	
Discovery Repeat Site	FP-DSC/11-08		X	P			
Discovery Repeat Site	FP-DSC/11-08					I,S,K	
Discovery Repeat Site	FP-DSC/1-09		X	P,K-spar			
Discovery Repeat Site	FP-DSC/1-09					I,S,Chl	
East Transect Repeat Site	FP-ETN/12-06		X	P, K-spar			
East Transect Repeat Site	FP-ETN/12-06					I,K,S,Chl?,I/S-Mixed	
East Transect Repeat Site	FP-ETN/1-07		X	P			
East Transect Repeat Site	FP-ETN/1-07					I/S-Mixed, I,S,Chl	
East Transect Repeat Site	FP-ETN/3-07		X	P			
East Transect Repeat Site	FP-ETN/3-07					I/S-Mixed, I,S,K(?),Chl	
East Transect Repeat Site	FP-ETN/4-07		X	P			
East Transect Repeat Site	FP-ETN/4-07					I,S,K,Chl?	

Table 15. Mineralogical data of auger hole and grab samples determined by X-ray diffraction.—Continued

[Sample site, name of sampling site; Sample ID, unique sample identifier; Treatment, type of sample preparation; Size, size fraction analyzed; Solid, unaltered bulk material; Slurry, water and sediment mixture; DI residue, remaining material after DI leaching; Clay, clay separates; Final residue, remaining material after nitric acid leaching; X, mineral is detected; I, illite; K, kaolinite; Se, sepiolite; Chl, chlorite; S, smectite/montmorillonite/beidellite; C, clinoptilolite; H, heulandite; M, mordenite; A, analcime; Z, unknown zeolite; P, plagioclase; K-spar, potassium feldspar; Y, yeelimite; Aph, aphthalite; G, gaylussite; Ar, aragonite; Mg, magnesite; Th, thessonatrite; N, norsethite]

Sample site	Sample ID	Iron	Quartz	Feldspar	Anhydrous sulfate	Misc CO ₃ 's	Clay minerals
East Transect Repeat Site	FP-ETN/5-07		X	P			
East Transect Repeat Site	FP-ETN/5-07					I,S,K?,Chl	
East Transect Repeat Site	FP-ETN/7-07		X	P			
East Transect Repeat Site	FP-ETN/7-07					I,S,Chl,K?	
East Transect Repeat Site	FP-ETN/10-07		X	P			
East Transect Repeat Site	FP-ETN/10-07					I/S-Mixed,I,S,Chl,K?	
East Transect Repeat Site	FP-ETN/11-07		X	P			
East Transect Repeat Site	FP-ETN/11-07					I,S,Chl?,K?	
East Transect Repeat Site	FP-ETN/4-08		X	P			
East Transect Repeat Site	FP-ETN/4-08					I,S,Chl?,K?	
East Transect Repeat Site	FP-ETN/11-08		X	P			
East Transect Repeat Site	FP-ETN/11-08					I,S,K	
East Transect Repeat Site	FP-ETN/1-09		X	P			
East Transect Repeat Site	FP-ETN/1-09					I,S,Chl	
West Transect Repeat Site	FP-WTN-MND/12-06		X	P			
West Transect Repeat Site	FP-WTN-FLT/12-06		X	P			
West Transect Repeat Site	FP-WTN-MND/12-06					I,K,S,Chl?	
West Transect Repeat Site	FP-WTN-FLT/12-06					I,K,S,Chl?,I/S-Mixed	
West Transect Repeat Site	FP-WTN/1-07		X	P			
West Transect Repeat Site	FP-WTN/1-07					I/S-Mixed, I,S,K	
West Transect Repeat Site	FP-WTN/3-07		X	P			
West Transect Repeat Site	FP-WTN/3-07					I/S-Mixed, I,S,K,Chl	
West Transect Repeat Site	FP-WTN/4-07		X	P			
West Transect Repeat Site	FP-WTN/4-07					I,S,K,Chl?	
West Transect Repeat Site	FP-WTN/5-07		X	P			
West Transect Repeat Site	FP-WTN/5-07					I,S,K	
West Transect Repeat Site	FP-WTN/7-07		X	P			
West Transect Repeat Site	FP-WTN/7-07					I,S	
West Transect Repeat Site	FP-WTN/10-07		X	P			
West Transect Repeat Site	FP-WTN/10-07					I,S,K?,Chl?	
West Transect Repeat Site	FP-WTN/11-07		X	P			
West Transect Repeat Site	FP-WTN/11-07					I,S,Chl?,K?	
West Transect Repeat Site	FP-WTN/4-08		X	P			
West Transect Repeat Site	FP-WTN/4-08					I,S,Chl?,K?	
West Transect Repeat Site	FP-WTN/11-08		X	P			
West Transect Repeat Site	FP-WTN/11-08					I,S,K	
West Transect Repeat Site	FP-WTN/1-09		X	P			
West Transect Repeat Site	FP-WTN/1-09					I,S,K	

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