Soil Geochemical Data for the Wyoming Landscape Conservation Initiative Study Area

By David B. Smith and Karl J. Ellefsen

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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)
	Area	
square kilometer (km^2)	247.1	acre
	Mass	
gram (g)	0.03527	ounce, avoirdupois (oz)
kilogram (kg)	2.205	pound avoirdupois (lb)

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

°F=(1.8×°C)+32

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Abstract

In 2008 and 2010, soil samples were collected at 175 sites throughout the Wyoming Landscape Conservation Initiative study area in southwest Wyoming. These samples, representing a density of 1 site per 440 square kilometers, were collected from a depth of 0–5 cm and analyzed for a suite of more than 40 major and trace elements following a near-total multi-acid extraction. In addition, soil pH, electrical conductivity, total nitrogen, total and organic carbon, and sodium adsorption ratio were determined. The resulting data set provides a baseline for detecting changes in soil composition that might result from natural processes or anthropogenic activities. This report describes the sampling and analytical protocols used, and makes available all the soil geochemical data generated in the study.

Introduction

As discussed in Bowen and others (2009a, b), the Wyoming Landscape Conservation Initiative (WLCI) was initiated in 2007 primarily in response to concerns about threats posed to the state’s world-class wildlife resources by increasing energy development in southwest Wyoming. The WLCI, in partnership with Federal, State, and local agencies and with participation from public and private entities, industry, and landowners, seeks to assess and enhance aquatic and terrestrial habitats at a landscape scale, while facilitating responsible energy and other types of development. The role of the U.S. Geological Survey (USGS) as a partner in the WLCI is to provide multidisciplinary scientific and technical support to WLCI partners and to advance the scientific understanding of southwest Wyoming’s ecosystems.

One of the major work activities performed by the USGS is targeted monitoring and research, and one of the tasks included in this activity is long-term monitoring. For long-term monitoring, USGS scientists developed a landscape-scale monitoring framework using a spatially balanced design with random site selection to represent the WLCI landscape. This framework provides a means for detecting changes in land use, vegetation, priority habitats, populations of priority species, and soil geochemistry across the region. The purpose of this report is to provide information regarding the soil geochemistry component and to make available the soil geochemical data generated in the WLCI study area.

Sample-Collection and Sample-Preparation Protocols

A generalized random tessellation stratified design was used to select 175 target sites for soil sampling within the WLCI study area. This represented a density of approximately 1 site per 440 square kilometers (km^2). The actual site from which a sample was collected was chosen from the most representative landscape as near as possible to the target site while also taking into consideration the following guidelines:

1. No sample should be collected from within 200 meters (m) of a major highway.
2. No sample should be collected closer than 50 m to a rural road.
3. No sample should be collected closer than 100 m to a building or structure.

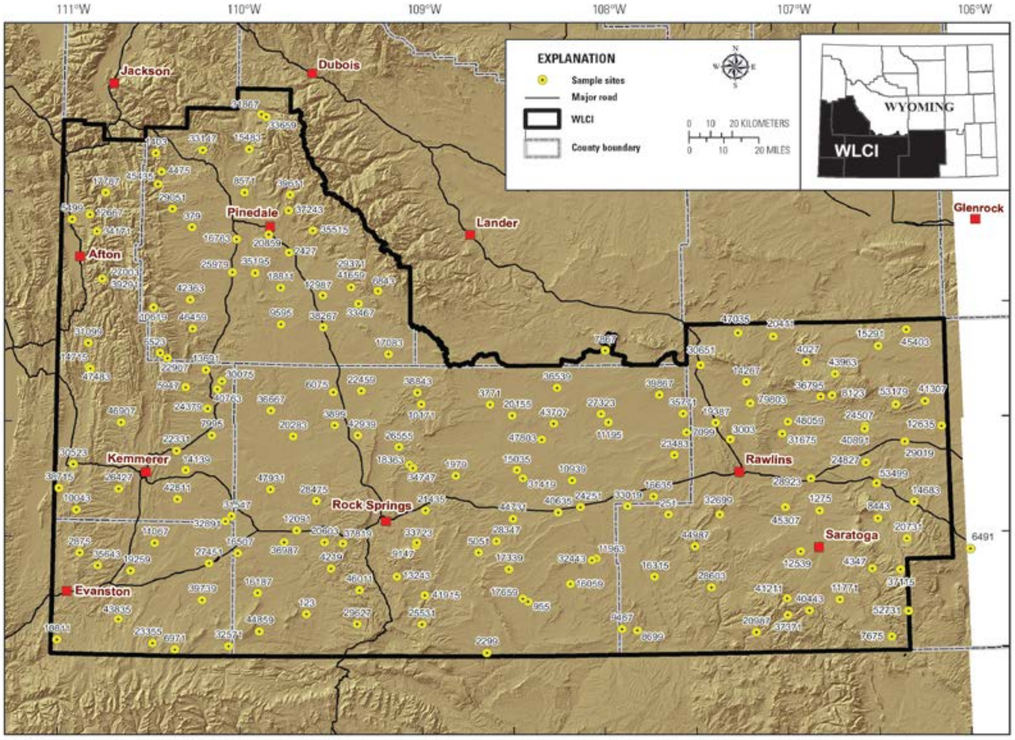

Figure 1. Wyoming Landscape Conservation Initiative (WLCI) study area showing the locations of 175 soil samples collected for chemical analysis.

At each site, a sample of soil was collected from a depth of 0 to 5 centimeters (cm) after removing loose plant debris (if any) from the ground surface. This particular sample medium was selected because this near-surface material is the portion of the soil with which humans and most animals come into contact most often. Geochemical information for this layer is critical for evaluation of a soil pathway through which potentially toxic elements could enter the bodies of both humans and animals. It is also considered to be the portion of the soil most likely to indicate the influence of human activities such as energy development or industrialization. The soil surface, or 0 cm, is considered to be the top boundary of the first soil layer that can support plant/root growth. For mineral soils, the surface is generally the air-earth interface; for vegetated mineral soils, it is the upper boundary of the first layer that can support root growth; for organic soils, the surface is considered to be the upper boundary of the first layer that supports root growth, excluding freshly fallen plant litter, but including litter that has compacted and begun to decompose.

The samples were air dried at ambient temperature, disaggregated, and sieved through a 2-millimeter (mm) stainless steel screen. Material less than 2 mm in size was crushed to less than 150 micrometers (µm) in a ceramic mill and thoroughly mixed to ensure homogeneity. The crushed samples were randomized prior to chemical analysis to avoid confusing spatial variation with any possible systematic bias within a given analytical technique. This randomization does not eliminate a systematic error, but the error is effectively transformed into one that is random with respect to geographic location (Tidball, 1984).

Analytical Protocols

The prepared samples were sent to a USGS contract geochemical laboratory for major and trace element analysis. The concentrations of the elements aluminum (Al), calcium (Ca), iron (Fe), potassium (K), magnesium (Mg), sodium (Na), sulfur (S), titanium (Ti), silver (Ag), barium (Ba), beryllium (Be), bismuth (Bi), cadmium (Cd), cerium (Ce), cobalt (Co), chromium (Cr), cesium (Cs), copper (Cu), gallium (Ga), indium (In), lanthanum (La), lithium (Li), manganese (Mn), molybdenum (Mo), niobium (Nb), nickel (Ni), phosphorus (P), lead (Pb), rubidium (Rb), antimony (Sb), scandium (Sc), tin (Sn), strontium (Sr), tellurium (Te), thorium (Th), thallium (Tl), uranium (U), vanadium (V), tungsten (W), yttrium (Y), and zinc (Zn) were determined by inductively coupled plasma–atomic emission spectrometry (ICP-AES) by a method similar to Briggs (2002) and inductively coupled plasma–mass spectrometry (ICP-MS) by a method similar to Briggs and Meier (2002). A sample of 0.25 grams (g) was decomposed using a mixture of hydrochloric, nitric, perchloric, and hydrofluoric acids at a temperature between 125 and 150 °C.

The four-acid digestion results in effectively a total dissolution of most mineral constituents in soil. However, it does not fully dissolve some of the more refractory or resistant minerals. Examples of such incomplete dissolution include Ba in barite, Cr in chromite, Ti in rutile, Sn in cassiterite, Al in corundum, and rare earth elements in monazite (Briggs, 2002). An aliquot of the digested sample was aspirated into the ICP-AES instrument and the ICP-MS instrument and the concentrations of the optimal elements were determined. The ICP-AES method is best for the major elements, sulfur, and elements with relatively high concentrations not requiring a low detection limit, and the ICP-MS method is optimal for trace elements requiring lower limits of determination near or below their crustal abundance and elements not determined by ICP-AES. The lower limits of determination (LLD) are listed in table 1.

Table 1. Elements determined by ICP-MS and ICP-AES. [LLD, lower limits of determination; ICP-MS, inductively coupled plasma–mass spectrometry; ICP-AES, inductively coupled plasma–atomic emission spectrometry]

Element	LLD
Aluminum	0.01%
Calcium	0.01%
Iron	0.01%
Potassium	0.01%
Magnesium	0.01%
Sodium	0.01%
Phosphorous	50 mg/kg
Titanium	0.01%
Silver	1 mg/kg
Barium	5 mg/kg
Beryllium	0.1 mg/kg
Bismuth	0.04 mg/kg
Cadmium	0.1 mg/kg
Cerium	0.05 mg/kg
Cobalt	0.1 mg/kg
Chromium	1 mg/kg
Cesium	0.05 mg/kg
Copper	0.5 mg/kg
Gallium	0.05 mg/kg
Indium	0.02 mg/kg
Lanthanum	0.5 mg/kg
Lithium	1 mg/kg
Manganese	5 mg/kg
Molybdenum	0.05 mg/kg
Niobium	0.1 mg/kg
Nickel	0.5 mg/kg
Lead	0.5 mg/kg
Rubidium	0.2 mg/kg
Sulfur	0.01%
Antimony	0.05 mg/kg
Scandium	0.1 mg/kg
Tin	0.1 mg/kg
Strontium	0.5 mg/kg
Tellurium	0.1 mg/kg
Thallium	0.1 mg/kg
Thorium	0.2 mg/kg
Uranium	0.1 mg/kg
Vanadium	1 mg/kg
Tungsten	0.1 mg/kg
Yttrium	0.1 mg/kg
Zinc	1 mg/kg

Mercury (Hg) was determined by treating 0.1 g of sample with a mixture of nitric and hydrochloric acids and heating for 30 minutes (min). Once cooled, solutions of sulfuric acid, potassium permanganate, and potassium persulfate were added followed by sodium chloride-hydroxylamine sulfate. The final solution was reduced by stannous chloride and analyzed on an atomic absorption spectrometer. This method is a modification of that published by the U.S. Environmental Protection Agency (1994). The LLD is 0.02 milligrams per kilogram (mg/kg).

Selenium (Se) was determined by heating 0.25 g of sample with a combination of nitric, hydrofluoric and perchloric acids. After the solution was cooled, hydrochloric and nitric acids were added, then the solution was heated and cooled again. The sample was diluted and analyzed using hydride generation atomic absorption spectrometry in a method similar to Hageman and Brown (2002). The LLD is 0.2 mg/kg.

For analysis of arsenic (As), the sample was fused in a mixture of sodium peroxide and sodium hydroxide at 750 ºC. The fused mixture was then dissolved in hydrochloric acid and analyzed by hydride-generation atomic absorption spectrometry in a method similar to Hageman and Brown (2002). The LLS is 0.6 mg/kg.

Total carbon was determined by the use of an automated carbon analyzer. A sample of 0.25 g was combusted in an oxygen atmosphere at 1,370 °C to oxidize carbon to carbon dioxide (CO_2). Moisture and dust were removed and the CO_2 gas was measured by a solid state infrared detector in a method similar to Brown and Curry (2002). The LLD is 0.05 percent.

Carbonate carbon was determined as CO_2 by coulometric titration. A sample of 0.1 g was treated with hot 2N perchloric acid and the evolved CO_2 was passed into a cell containing a solution of monoethanolamine. The CO_2, quantitatively absorbed by the monoethanolamine, was coulometrically titrated using platinum and silver/potassium-iodide electrodes in a method similar to Brown and others (2002). The LLD is 0.05 percent. The measured percent of CO_2 was converted to percent of carbonate carbon by multiplying the percent by the weight fraction of carbon in CO_2 (0.273). The concentration of organic carbon was then calculated as the difference between total carbon and carbonate carbon.

Splits of the material less than 2 mm in size were provided to Colorado State University's Soil, Water, and Plant Testing Laboratory for analysis of total nitrogen (N) content, soil pH, electrical conductivity, and sodium adsorption ratio (SAR). Total N was determined on a carbon-hydrogen-nitrogen (CHN) analyzer by combusting an aliquot of the soil sample at approximately 950 ºC and determining the percent N in a thermal conductivity cell (Bremner, 1996). Soil pH and electrical conductivity were determined on a saturated soil paste using the methods described by Richards (1954) and Rhoades (1996), respectively. The SAR is defined as

$$\mathrm{SAR} = [\mathrm{Na}^{+}]/(([\mathrm{Ca}^{2+}] + [\mathrm{Mg}^{2+}])/2)^{1/2} \tag{1}$$

where $[\mathrm{Na}^{+}]$, $[\mathrm{Ca}^{2+}]$, and $[\mathrm{Mg}^{2+}]$ are the concentrations of these cations, expressed as milliequivalents per liter (meq/L), in a saturation extract (Sumner and Miller, 1996; Natural Resources Conservation Service, 1996).

Quality Assurance and Quality Control

Quality assurance (QA) is mainly the concern of the analytical laboratory. The various components of the QA plan include standard operating procedures, instrument logs, training records, data acceptance and rejection criteria, and laboratory audits. Unlike the unquantifiable QA element, the quality control (QC) element measures, by an analytical method, the accuracy and precision of the data produced. The accuracy and precision are established through the analysis of reference materials (RMs) and sample replicates, respectively.

The samples taken through the analytical process in the USGS laboratories received QC checks on three separate levels. The first level involved QC assessment by the USGS contract laboratory. In the next level, quality was assessed by the USGS QC officer, followed by the third-level assessment by the USGS principal investigator for the WLCI soil geochemistry study.

The USGS contract laboratory is accredited to the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 17025 standard, which includes both QA and QC protocols. The QC is monitored by analyzing an RM with every batch of 48 samples. The RM most often used is a syenite rock standard (SY-3) developed by the Canadian Centre for Mineral and Energy Technology (Govindaraju, 1989). Shewhart Control Charts (Taylor, 1987) are generated for the RM analyses and reviewed with every report as part of the internal quality audits.

The accuracy for elements determined by ICP-MS and ICP-AES, and for total C and carbonate C was considered acceptable if recovery was within the range of 85–115 percent at five times the LLD. The accuracy for Hg and Se was considered acceptable if recovery was within 80–120 percent at five times the LLD.

At the second tier, the USGS QC officer assessed precision and accuracy on the basis of five RMs that were inserted between every batch of 50 samples. The soil RMs used in this study were SRM 2709 and SoNE-1. SRM 2709, a soil from the San Joaquin Valley of central California, is a certified RM available from the National Institute of Standards and Technology (NIST) and is used to assess both accuracy and precision (National Institute of Standards and Technology, 2003). The acceptance criteria for accuracy are the same as those itemized earlier as used by the contract laboratory.

SoNE-1 is a USGS in-house, non-certified soil RM prepared specifically for the North American Soil Geochemical Landscapes Project. It was collected from the Sharpsburg Soil Series (Natural Resources Conservation Service, 1997) in Lancaster County, Nebr., and is used in this study to assess only precision. The precision for elements determined by ICP-MS and ICP-AES, and for total C and carbonate C was considered acceptable if the calculated relative standard deviation (RSD) of duplicate samples is no greater than 15 percent. The precision for Hg, As, and Se was considered acceptable if the calculated RSD of duplicate samples was no greater than 20 percent.

The USGS principal investigator for the WLCI soil geochemistry study initiated the final QC tier, which included two blind SoNE-1 RMs inserted in each batch of 18 samples. In general, one RM was inserted into the first half of the batch and one RM into the second half. The acceptance criteria for accuracy and precision are those stated in the previous paragraph.

Colorado State University’s Soil, Water, and Plant Testing Laboratory maintains its own rigorous QC program using appropriate standard reference materials to determine the accuracy of each technique and to estimate precision through analytical duplicates.

Description of Data Tables

Table 2 shows a statistical summary of the major and trace element data generated from the WLCI soil samples. Table 3 presents the complete analytical results from both the USGS and Colorado State University laboratories for the WLCI soils.

Table 2. Statistical summary for geochemical data on 0–5-cm soils in the WLCI study area.

[n = 175; WLCI, Wyoming Landscape Conservation Initiative; LLD, lower limit of determination; Min, minimum; Q1, first quartile; Max, maximum; Q3, third quartile; MAD, median absolute deviation]

Element	Concentration units	Number of samples below LLD	Min	Q1	Median	Q3	Max	MAD
Aluminum	%	0	2.11	4.38	5.27	6.24	8.09	1.36
Calcium	%	0	0.21	0.82	1.62	3.02	10.3	1.39
Iron	%	0	0.29	1.56	1.95	2.35	4.47	0.59
Potassium	%	0	0.83	1.62	1.88	2.15	3.87	0.34
Magnesium	%	0	0.07	0.49	0.73	1.06	2.42	0.43
Sodium	%	0	0.08	0.58	1.05	1.48	2.66	0.67
Sulfur	%	4	<0.01	0.02	0.03	0.04	0.29	0.015
Titanium	%	0	0.04	0.15	0.19	0.24	0.47	0.059
Arsenic	mg/kg	1	<0.6	3.2	5.2	7.2	30.1	3.0
Silver	mg/kg	175	<1	<1	<1	<1	<1	0
Barium	mg/kg	0	220	553	660	851	2,390	200
Beryllium	mg/kg	0	0.6	1.3	1.5	1.8	2.5	0.4
Bismuth	mg/kg	1	<0.04	0.15	0.20	0.27	0.60	0.089
Cadmium	mg/kg	4	<0.1	0.2	0.3	0.5	5.7	0.15
Cerium	mg/kg	0	18.3	45.6	59.1	70.6	161	19.1
Cobalt	mg/kg	0	0.8	5.9	7.6	9.8	24.9	2.7
Chromium	mg/kg	0	3	31.5	42	50	287	13.3
Cesium	mg/kg	138	<5	<5	<5	5	11	0
Copper	mg/kg	0	1.4	10.6	14.7	19.3	47.9	6.5
Gallium	mg/kg	0	5.6	11.0	13.6	16.0	22.2	3.7
Mercury	mg/kg	31	<0.01	0.01	0.02	0.02	0.15	0.015
Indium	mg/kg	20	<0.02	0.03	0.03	0.04	0.06	0.01
Lanthanum	mg/kg	0	10.1	17.8	23.2	36.8	75.8	9.8
Lithium	mg/kg	0	3	17	23	29	72	8.9
Manganese	mg/kg	0	63	323	460	619	2,000	214
Molybdenum	mg/kg	0	0.15	0.61	0.94	1.27	7.38	0.49
Niobium	mg/kg	0	1.5	6.0	7.7	9.4	25.8	2.5
Nickel	mg/kg	0	1.7	11.2	14.1	17.5	115	4.6
Phosphorous	mg/kg	0	150	555	800	1,030	8,590	341
Lead	mg/kg	0	10.6	16.2	19.2	21.4	32.2	3.7
Rubidium	mg/kg	0	40.9	68.0	79.3	91.6	140	18.1
Antimony	mg/kg	0	0.09	0.40	0.52	0.67	2.53	0.22
Scandium	mg/kg	0	1.5	5.0	6.3	8.0	15.4	2.2
Selenium	mg/kg	110	<0.2	<0.2	<0.2	0.3	4.2	0
Tin	mg/kg	0	0.4	1.0	1.2	1.5	2.8	0.44

Strontium	mg/kg	0	50.1	120	160	364	706	93.4
Tellurium	mg/kg	175	<0.1	<0.1	<0.1	<0.1	<0.1	0
Thorium	mg/kg	0	4.4	7.4	9.4	11.2	32.5	2.8
Thallium	mg/kg	0	0.2	0.4	0.5	0.6	1.5	0.15
Uranium	mg/kg	0	0.8	1.7	2.1	2.6	9.6	0.74
Vanadium	mg/kg	0	8	41	53	68	196	21
Tungsten	mg/kg	0	0.1	0.6	0.8	1.1	6.9	0.3
Yttrium	mg/kg	0	3.4	12.0	14.3	16.3	45.3	3.1
Zinc	mg/kg	0	12	42	55	71	210	20.8
Total Carbon	%	0	0.16	0.89	1.73	3.30	18.3	14.2
Carbonate Carbon	%	18	<0.0030	0.01	0.07	0.75	3.28	0.099
Organic Carbon	%	0	0.16	0.54	0.96	2.66	18.3	0.85
Total Nitrogen	%	0	0.0036	0.079	0.11	0.24	1.10	0.076

Table 3. Complete geochemical data for 0-5-cm soils from the WLCI study area (N = 175).

[Latitude and Longitude determined by hand-held GPS using WGS84 datum. Abbreviation of element names: As, arsenic; Hg, mercury; Al, aluminum; Ca, calcium; Fe, iron; K, potassium; Mg, magnesium; Na, sodium; S, sulfur; Ti, titanium; Ag, silver; Ba, barium; Be, beryllium; Bi, bismuth; Cd, cadmium; Ce, cerium; Co, cobalt; Cr, chromium; Cs, cesium; Cu, copper; Ga, gallium; In, indium; La, lanthanum; Li, lithium; Mn, manganese; Mo, molybdenum; Nb, niobium; Ni, nickel; P, phosphorus; Pb, lead; Rb, rubidium; Sb, antimony; Sc, scandium; Sn, tin; Sr, strontium; Te, tellurium; Th, thorium; Tl, thallium; U, uranium; V, vanadium; W, tungsten; Y, yttrium; Zn, zinc; Se, selenium. Other abbreviations: Combust., combustion;
COUL_TITR, coulometric titration; CRBNT_C, carbonate carbon; Total C, total carbon; Organic C, organic carbon; Total N, total nitrogen; CVAA, cold-vapor atomic absorption spectrometry; EC, electrical conductivity; Hydride AA, hydride-generation atomic absorption spectrometry; mg/kg, milligrams per kilogram; ICP-AES, inductively coupled plasma-atomic emission spectrometery; ICP-MS, inductively coupled plasma-mass spectrometry; meq/L, milliequivalents per liter; mmhos/cm, millimhos per centimeter; SAR, sodium adsorption ratio; <, less than; BLM, U.S. Bureau of Land Management. Organic C determined by difference between total C and carbonate C (CRBNT_C)]

Laboratory number	Field number	Latitude	Longitude	Depth of collection	Date collected	Land use	Land cover	Hydride AA As mg/kg	CVAA Hg mg/kg	ICP-AES Al %	ICP-AES Ca %	ICP-AES Fe %	ICP-AES K %	ICP-AES Mg %	ICP-AES Na %	ICP-AES S %	ICP-AES Ti %	ICP-MS Ag mg/kg	ICP-MS Ba mg/kg	ICP-MS Be mg/kg	ICP-MS Bi mg/kg	ICP-MS Cd mg/kg	ICP-MS Ce mg/kg	ICP-MS Co mg/kg	ICP-MS Cr mg/kg	ICP-MS Cs mg/kg	ICP-MS Cu mg/kg	ICP-MS Ga mg/kg	ICP-MS In mg/kg	ICP-MS La mg/kg	ICP-MS Li mg/kg	ICP-MS Mn mg/kg	ICP-MS Mo mg/kg	ICP-MS Nb mg/kg	ICP-MS Ni mg/kg	ICP-MS P mg/kg	ICP-MS Pb mg/kg	ICP-MS Rb mg/kg	ICP-MS Sb mg/kg	ICP-MS Sc mg/kg	ICP-MS Sn mg/kg	ICP-MS Sr mg/kg	ICP-MS Te mg/kg	ICP-MS Th mg/kg	ICP-MS Tl mg/kg	ICP-MS U mg/kg	ICP-MS V mg/kg	ICP-MS W mg/kg	ICP-MS Y mg/kg	ICP-MS Zn mg/kg	Hydride AA Se mg/kg	Combust. total C %	COUL_TITR CRBNT_C %	Organic C %	Total N %	pH	EC mmhos/cm	Ca meq/L	Mg meq/L	Na meq/L	K meq/L	SAR
C-318298	123	41.1826	-109.63972	0-5 cm	5-Aug-2008	BLM land	forbs	6.8	<0.01	6.31	6.23	2.39	2.57	1.13	1.48	0.05	0.23	<1	1370	2.2	0.31	0.3	82.5	9.2	53	8	18.9	16.1	0.04	42.9	38	526	1.52	4.5	19.1	790	20.1	110	0.54	8.2	1.7	511	<0.1	14.7	0.6	2.7	54	1	18.5	141	0.3	1.91	1.45	0.46	0.0302	8.7	1.8	0.4	0.3	18.0	0.1	32.0
C-318292	251	41.60887	-107.63695	0-5 cm	3-Jul-2008	grazing/browsing	sagebrush, grasses	7.7	0.02	6.64	0.78	2.59	2.45	0.8	0.62	0.04	0.25	<1	594	2.3	0.36	0.8	78.3	10.1	47	8	27	17.1	0.06	37.7	33	549	1.88	10.4	22.9	1,190	22.9	125	0.99	9.4	2.2	158	<0.1	12.1	0.7	2.7	84	1.3	18.3	99	0.4	2.64	0.01	2.63	0.2575	7.2	0.3	0.7	1.0	0.4	0.2	0.4
C-318300	379	42.85905	-110.30444	0-5 cm	3-Aug-2008	BLM land, grazing	sagebrush, grasses, weeds	7.3	0.02	4.43	3.33	1.92	1.79	0.84	0.46	0.02	0.17	<1	460	1.5	0.25	0.5	63.7	6.6	40	<5	12.7	11.1	0.04	32.1	21	633	0.63	6	14.5	880	15.7	86.7	0.6	6.6	1.5	97.7	<0.1	10.8	0.5	2.6	55	0.7	17.8	54	<0.2	2.01	0.92	1.09	0.1095	8.0	0.3	1.5	0.6	0.3	0.1	0.3
C-318304	955	41.23701	-108.41925	0-5 cm	6-Aug-2008	BLM land, grazing	rocks, cacti, sagebrush, forbs	4.8	0.01	6.05	4.08	2.53	2.38	1.06	1.6	0.02	0.24	<1	868	2.1	0.25	0.3	88	10.3	51	5	13	15.9	0.04	44.7	29	644	0.88	8	16.5	880	21.6	111	0.54	9.3	1.6	442	<0.1	13.6	0.6	2.6	63	0.9	19.3	56	<0.2	1.08	0.73	0.35	0.0124	9.3	1.1	0.2	0.7	11.4	0.1	16.9
C-318299	1403	43.17939	-110.51702	0-5 cm	2-Aug-2008	national forest	sagebrush, grasses, weeds, pines, aspens	6.2	0.04	6.12	1.22	3.11	2.29	1.09	0.39	0.07	0.24	<1	383	2.2	0.49	0.8	66	12.8	50	6	33.4	15.4	0.06	30.6	49	979	1.18	11.9	22.7	1,470	28.8	112	0.65	10.2	1.8	85.1	<0.1	9.5	0.7	2	76	1	20	131	<0.2	7.76	0.04	7.72	0.6085	6.9	0.3	1.3	0.5	0.2	0.2	0.2
C-318305	1979	41.78563	-108.81631	0-5 cm	5-Aug-2008	BLM land	sagebrush, rocks, forbs	6.2	0.01	5.5	2.73	2.25	2.05	0.91	0.63	0.04	0.17	<1	516	1.9	0.23	0.2	61.1	7.6	60	<5	9.8	13.6	0.04	30.2	23	353	0.91	8.7	17	670	17.1	98.1	0.8	6.8	1.6	137	<0.1	9.4	0.5	2.3	77	1.1	12.9	79	0.4	1.45	0.88	0.57	0.0727	8.2	0.4	1.0	1.1	0.9	0.2	0.9
C-318307	2299	41.0158	-108.64689	0-5 cm	6-Aug-2008	BLM land	shrubs, forbs	11.4	0.02	4.25	2.33	2.06	1.84	0.44	0.41	0.18	0.17	<1	453	1.5	0.23	0.8	68.5	8.4	34	<5	17.3	11.1	0.03	31.6	26	505	4.13	8.3	14.5	840	19.2	100	0.91	6.1	1.4	151	<0.1	11.7	0.6	3.2	61	0.9	14.4	67	0.8	2.5	0.67	1.83	0.2204	7.8	1.1	0.6	0.5	10.0	0.5	13.3
C-318313	2427	42.7541	-109.75494	0-5 cm	1-Aug-2008	BLM land	grasses, sage	3.4	0.01	6.72	1.38	1.83	2.24	0.53	2.14	0.02	0.22	<1	757	1.9	0.2	0.3	87.4	7	31	<5	11.2	18	0.03	41.9	16	425	0.46	8	11.3	440	19.6	78.7	0.28	5.9	1.4	411	<0.1	14.8	0.4	1.8	41	0.5	13.7	42	<0.2	0.99	<0.003	0.99	0.0988	7.2	0.2	0.3	0.5	0.4	0.0	0.5
C-318314	2875	41.43595	-110.89885	0-5 cm	4-Aug-2008	grazing	sagebrush, grasses	4.4	0.03	2.59	5.62	1.14	1.13	0.73	0.08	0.04	0.09	<1	313	1	0.17	0.7	30.1	4.9	52	<5	15.8	6.92	0.03	19.5	20	299	0.67	4.2	14.1	1,180	12.8	49.3	0.53	4.5	1	134	<0.1	5.7	0.3	2.3	46	0.5	14.5	59	<0.2	3.88	1.86	2.02	0.1779	7.8	0.4	2.0	0.6	0.3	0.2	0.3
C-318315	3771	42.09492	-108.62374	0-5 cm	5-Aug-2008	BLM land	forbs, some grasses	17.8	0.02	6.18	5.66	2.99	2.82	2.42	0.56	0.03	0.25	<1	506	2.1	0.35	0.4	78.3	11.6	59	7	33.5	17.1	0.05	38.8	62	501	3.7	11.4	23.9	550	23.2	117	0.95	10.1	2.1	467	<0.1	14.7	0.7	4.4	100	1.2	17.4	80	0.4	2.67	2.03	0.64	0.1300	8.1	0.4	1.0	1.6	0.9	0.2	0.8
C-318293	3899	42.00422	-109.49157	0-5 cm	1-Aug-2008	BLM land	sagebrush, grasses	4.7	0.01	8.09	2.53	2.7	2.67	0.81	2.12	0.04	0.3	<1	1110	2.2	0.19	0.3	81.9	12.8	46	<5	15.6	18.9	0.04	41.1	25	712	1.71	14.9	15.6	820	20.4	91.4	0.43	9	1.5	659	<0.1	10.4	0.4	2.3	69	1	16.3	55	<0.2	0.42	0.01	0.41	0.0636	7.2	0.2	0.3	0.6	0.3	0.2	0.5
C-318301	4219	41.38132	-109.50712	0-5 cm	5-Aug-2008	BLM land	rocks, sagebrush, grasses, forbs	3.3	0.01	6.83	3.83	4.47	1.61	2.05	1.93	0.02	0.37	<1	1030	1.7	0.12	0.2	126	21.8	88	<5	12	19.2	0.05	75.8	35	415	0.45	7.3	31.8	1,020	17.3	49.2	0.2	15.4	1.8	655	<0.1	13.3	0.3	2.8	115	1.1	17.9	71	0.2	0.61	0.32	0.29	0.0637	8.2	0.3	1.2	0.6	0.5	0.0	0.6
C-318325	4475	43.09864	-110.48328	0-5 cm	2-Aug-2008	national forest, grazing	sagebrush, yarrow, thistle, willows, pine trees, grasses	11.8	0.02	4.33	2.22	1.95	1.85	1.25	0.73	0.17	0.14	<1	340	1.6	0.17	0.4	32.1	7.8	37	<5	14.7	10.5	0.03	17.4	35	306	1.34	5.9	15.3	1,190	11.9	80.3	0.51	6.8	1.4	104	<0.1	7.4	0.4	2.7	54	0.9	12.5	65	2	7.72	0.6	7.12	0.5607	7.5	0.4	2.1	1.0	0.2	0.2	0.2
C-318328	5051	41.45163	-108.69016	0-5 cm	6-Aug-2008	BLM	sagebrush, some grasses	5.9	0.01	4.8	3.16	1.91	2.19	1.05	0.9	0.02	0.16	<1	486	1.8	0.25	0.3	64.1	7.6	37	5	15.4	12.3	0.04	30.8	21	370	1.49	5.9	13.6	660	14.6	104	0.66	6.4	1.7	135	<0.1	10.2	0.5	3.3	50	1	13.4	46	<0.2	1.43	1.09	0.34	0.0441	8.1	0.6	1.3	1.0	2.7	0.2	2.5
C-318330	5499	42.88467	-110.98345	0-5 cm	2-Aug-2008	grazing	grasses, common mullein, thistle, trees	5.9	0.02	4.9	0.82	2.05	2.04	0.53	0.82	0.04	0.21	<1	525	1.8	0.29	1.3	68.9	8.9	47	5	22.4	12.8	0.04	32.8	29	898	1.44	10.9	17.2	1,400	18.5	102	0.53	7.1	1.6	133	<0.1	10.1	0.6	2.4	58	1.1	19	108	<0.2	4.55	0.01	4.54	0.4048	6.6	0.3	1.1	1.1	0.3	0.6	0.3
C-318333	5947	42.16426	-110.32708	0-5 cm	3-Aug-2008	BLM land, grazing	sagebrush, forbs	2.8	0.01	5.61	4.65	1.73	3.87	1.15	1.2	0.02	0.16	<1	568	2	0.17	0.2	44.2	7.4	43	<5	12.2	15.6	0.04	24.9	30	258	0.28	7.1	17	460	14.4	90.1	0.35	6.7	1.8	470	<0.1	7.3	0.4	1.3	42	0.6	10.7	45	0.2	1.71	1.19	0.52	0.0741	8.2	0.5	0.6	0.4	3.7	0.1	5.1
C-318336	6075	42.14851	-109.49994	0-5 cm	1-Aug-2008	BLM land	sagebrush, grasses	3.3	0.01	6.85	2.19	2.89	2.23	1.36	1.51	0.02	0.29	<1	1190	2.1	0.17	0.3	83.8	11.8	43	<5	17.8	17.4	0.04	43.4	23	722	0.95	17	14.5	1,150	20.7	97.3	0.42	9.1	1.5	452	<0.1	10.8	0.4	2.1	81	1.1	16	71	0.2	0.78	0.01	0.77	0.0946	7.7	0.3	0.8	1.0	0.5	0.2	0.6
C-318335	6523	42.31124	-110.47269	0-5 cm	3-Aug-2008	BLM land, grazing	sagebrush, grasses	5.1	0.02	4.38	0.72	1.98	1.96	0.71	0.62	0.04	0.14	<1	525	1.6	0.25	0.9	46.7	7	38	<5	28.8	10.9	0.04	21.6	27	844	0.93	6.6	12.7	1,170	21	81.3	0.54	6.3	1.4	80	<0.1	7.5	0.5	1.7	53	0.7	12.8	96	0.3	5.71	0.02	5.69	0.4716	6.3	0.3	0.7	0.5	0.4	0.6	0.5
C-318324	6843	42.58936	-109.25182	0-5 cm	1-Aug-2008	BLM land	sagebrush, grasses	3.7	0.01	6.85	1.39	1.82	2.32	0.52	2.28	0.02	0.19	<1	679	1.9	0.17	0.3	128	7.8	22	<5	14.7	18.9	0.03	74.3	24	349	0.95	9	9	920	30.8	95.1	0.19	6.3	1.4	367	<0.1	27.8	0.6	1.6	46	0.6	12	62	<0.2	2.47	0.01	2.46	0.2180	5.9	0.2	0.4	0.3	0.2	0.1	0.4
C-318306	6971	41.02223	-110.36232	0-5 cm	4-Aug-2008	national forest	aspens, spruces, pines, grasses, weeds	3.1	0.03	3.75	0.45	1.04	1.8	0.24	1.03	0.02	0.11	<1	406	1	0.23	0.2	29.4	5.7	22	<5	12.6	9.4	0.02	16.4	20	453	0.41	5.6	7.4	230	16.5	91.7	0.29	3	0.9	91.1	<0.1	6.8	0.4	1.6	26	0.4	6.2	26	<0.2	4.57	0.01	4.56	0.2324	5.5	0.2	0.8	0.7	0.4	0.1	0.5
C-318297	7099	41.96574	-107.52744	0-5 cm	4-Jul-2008	BLM land, possibly grazing	sagebrush, cacti, some grasses	1.2	<0.01	5.96	0.66	0.7	3.03	0.18	2.24	0.01	0.1	<1	660	1.2	0.14	0.1	52.3	2.6	15	<5	8.1	13.5	<0.02	27.3	8	153	0.3	3.8	4.3	220	17.4	101	0.09	2.9	1.2	182	<0.1	11.9	0.5	2.2	18	0.3	7	18	<0.2	0.4	0.01	0.39	0.0429	6.6	0.1	0.2	0.2	0.5	0.1	1.3
C-318334	7867	42.32589	-107.9769	0-5 cm	4-Jul-2008	BLM land, grazing	sagebrush, grasses, weeds	3.1	<0.01	5.39	0.6	1.04	2.32	0.29	1.49	0.01	0.1	<1	813	1.6	0.09	0.2	68.5	3.5	17	<5	6.1	13	<0.02	38.5	11	187	0.28	4.8	4.7	230	19.5	89.2	0.18	2.9	0.8	132	<0.1	23	0.4	3.1	25	0.3	8.2	27	<0.2	0.7	<0.003	0.7	0.0723	6.5	0.1	0.2	0.3	0.3	0.1	0.7
C-318332	7995	41.95661	-110.17619	0-5 cm	3-Aug-2008	BLM land, old field area	sagebrush , grasses	9.9	0.01	6.28	5.78	2.44	2.22	0.92	1.52	0.05	0.26	<1	1270	2.1	0.25	0.4	75.5	11.1	46	<5	35.4	16	0.04	39	29	1,300	3.97	13.9	19.4	1,030	23.4	89.3	0.64	7.5	1.4	453	<0.1	10.7	0.7	2.8	66	1.2	16.8	57	0.2	1.97	1.17	0.8	0.0768	7.8	0.4	1.5	0.5	0.5	0.2	0.5
C-318329	8571	43.01453	-110.01045	0-5 cm	2-Aug-2008	grazing	sagebrush, grasses	5	0.02	5.74	0.99	1.96	2.54	0.46	1.38	0.03	0.2	<1	729	1.8	0.22	0.6	86.5	7	36	<5	25.5	15.1	0.04	40.9	22	584	0.73	9.4	10.3	840	18.9	103	0.4	6.2	1.5	212	<0.1	13.6	0.5	1.9	46	0.8	15.9	68	<0.2	2.3	<0.003	2.3	0.2150	6.7	0.2	0.7	0.5	0.4	0.2	0.6
C-319916	8699	41.10723	-107.81865	0-5 cm	3-Jul-2008	BLM land, grazing	shrubs, sagebrush, weeds	7.1	0.02	5.58	3.62	2.25	2.02	0.97	0.71	0.04	0.2	<1	847	1.8	0.28	0.5	82.4	10.1	34	5	22.9	14.8	0.04	40.8	33	439	2.01	8.8	16.6	670	23	119	0.67	8.1	1.8	244	<0.1	14.9	0.7	3.2	67	0.9	17.2	68	<0.2	1.69	1.08	0.61	0.1077	8.0	0.4	1.0	1.1	1.1	0.2	1.1
C-318323	9147	41.48202	-109.0367	0-5 cm	6-Aug-2008	BLM land	sagebrush	14.1	0.01	3.54	4.57	1.39	1.87	1	0.44	0.05	0.12	<1	613	1.2	0.23	0.8	56	5.1	34	<5	12.6	8.8	0.03	28.7	23	231	5.48	5.9	17.1	920	15.6	75.9	1.39	4.8	1.1	199	<0.1	8.5	1.1	2.8	79	1.4	13.2	59	1.2	2.37	1.66	0.71	0.0866	8.1	0.4	1.5	0.8	0.6	0.2	0.6
C-319914	9467	41.11466	-107.90365	0-5 cm	3-Jul-2008	BLM land, pasture	sagebrush, grasses, weeds	10.1	0.02	5.28	6.87	1.86	1.72	1.41	0.89	0.03	0.17	<1	733	1.7	0.2	0.3	72.6	8.5	34	<5	14.2	14.1	0.04	37.3	56	604	1.66	11	12.7	740	20.7	89.1	0.55	6.8	1.6	463	<0.1	13	0.5	2.9	47	0.7	17.5	48	<0.2	2.63	2.03	0.6	0.0942	8.2	0.4	0.7	0.4	2.4	0.1	3.3
C-318322	9595	42.44199	-109.79629	0-5 cm	1-Aug-2008	BLM land, area of oil drilling	sagebrush, grasses, weeds	3.9	<0.01	7.42	4.06	2.37	1.97	1.02	2.16	0.02	0.29	<1	1140	1.8	0.14	0.2	80.7	10.5	45	<5	6.5	19.3	0.04	41.7	22	546	0.49	11.3	11.4	640	16.6	58.3	0.23	9.3	1.2	706	<0.1	10.6	0.3	1.9	63	0.8	14.9	50	<0.2	1.01	0.43	0.58	0.0821	8.2	0.3	1.2	0.5	0.3	0.2	0.3
C-318303	10043	41.62397	-110.9207	0-5 cm	4-Aug-2008	not recorded	sagebrush, thistles, geraniums, grasses	4.1	0.03	3.13	5	1.38	1.31	0.69	0.09	0.04	0.1	<1	271	1.2	0.23	0.9	34.9	5.2	62	<5	19.3	8.22	0.03	21.2	22	292	0.76	4.1	18.2	1,430	14.5	59	0.62	5	1	116	<0.1	6	0.4	1.8	59	0.5	15.2	71	0.3	4.48	1.52	2.96	0.3055	7.8	0.5	2.4	0.7	0.3	0.3	0.2
C-318320	10171	42.09702	-109.0075	0-5 cm	5-Aug-2008	BLM land	rocks,sagebrush, grasses, forbs	6	0.01	4.83	2.71	1.61	1.94	0.48	1.32	0.02	0.16	<1	622	1.5	0.21	0.2	67	5.3	37	<5	8.6	11.7	0.03	34.3	13	500	0.68	5.3	10.9	450	15.1	67.1	0.42	5.5	1.1	262	<0.1	9.1	0.4	3	40	0.7	13.9	35	0.2	1.15	0.58	0.57	0.0613	8.1	0.3	1.2	0.3	0.4	0.1	0.5
C-318321	10619	42.50859	-110.51351	0-5 cm	3-Aug-2008	national forest	grasses, wildflowers, sagebrush	8.7	0.02	4.86	0.74	2.24	1.34	0.51	0.38	0.04	0.18	<1	480	1.9	0.38	0.6	65.8	9.1	36	5	24.2	12.8	0.05	31.5	30	875	1.17	9	14.8	1,190	19.8	83.3	0.67	7	1.7	104	<0.1	9.8	0.5	3	69	1	20.7	82	0.3	3.27	0.01	3.26	0.2972	7.4	0.3	1.1	0.9	0.3	0.2	0.3
C-318296	10811	41.0563	-111.01186	0-5 cm	4-Aug-2008	state land, grazing	sagebrush	5.8	0.03	4.16	0.67	1.85	1.77	0.5	0.36	0.04	0.18	<1	430	1.3	0.35	0.9	56.6	7.3	39	6	26.6	10.7	0.04	26.2	28	632	1.17	7.9	13.3	1,000	25.1	91.6	0.66	6.1	1.3	98.1	<0.1	8.8	0.5	2.2	49	0.9	14.1	79	<0.2	3.61	0.02	3.59	0.3063	7.0	0.3	1.1	0.8	0.4	0.2	0.5
C-318319	10939	41.76352	-108.16919	0-5 cm	5-Aug-2008	BLM land	sagebrush, some grasses and forbs	6.5	0.02	5.77	1.47	1.95	1.9	0.8	0.43	0.09	0.21	<1	434	2.5	0.27	0.6	70.8	16.6	45	7	18	13.8	0.04	33.3	45	425	1.77	9.1	34.6	670	17.9	102	0.93	8	1.6	201	<0.1	10.1	0.7	3.3	95	1	23.1	105	0.6	0.77	0.37	0.4	0.0794	8.2	0.3	0.5	0.3	2.2	0.1	3.4
C-318317	11067	41.48503	-110.48336	0-5 cm	4-Aug-2008	BLM land, grazing	grasses and forbs	3.1	0.02	2.11	2.9	0.79	1.14	0.7	0.13	0.05	0.09	<1	220	0.7	0.14	0.5	26.4	3.1	43	<5	10.3	5.63	<0.02	17.5	15	266	0.84	4.2	10.6	1,370	10.8	44.4	0.42	3.4	0.7	97.6	<0.1	5.1	0.3	1.4	30	0.7	12.5	46	<0.2	4.52	0.96	3.56	0.2624	7.7	1.4	2.7	3.1	2.1	3.2	1.2
C-318316	11195	42.01393	-107.9627	0-5 cm	4-Jul-2008	BLM land, grazing	sagebrush, cacti, some grasses	3.1	<0.01	5.14	0.6	0.82	2.66	0.27	1.69	0.01	0.09	<1	611	1.3	0.07	0.1	45.4	2.8	19	<5	5	12.2	<0.02	25.9	9	154	0.53	4.2	5.1	280	17.7	96.5	0.19	3.3	0.9	168	<0.1	11.6	0.5	2.1	20	0.3	7.6	18	0.3	0.34	<0.003	0.34	0.0478	7.7	0.2	0.4	0.5	0.4	0.1	0.7
C-319915	11963	41.42241	-108.03982	0-5 cm	3-Jul-2008	grazing	sagebrush and forbs	16.5	0.02	3.98	10.3	2.15	1.33	0.96	0.71	0.29	0.15	<1	863	1.5	0.21	0.3	51	8.9	38	5	26.9	10.2	0.03	27.5	31	1,030	3.33	7.2	20.8	1,430	15.4	72.7	0.64	5.6	1	588	<0.1	8.2	0.5	2.9	50	1.5	13.2	44	0.5	5.16	3.28	1.88	0.1459	7.9	2.1	11.6	3.5	8.2	0.6	3.0
C-318311	12091	41.54616	-109.69764	0-5 cm	4-Aug-2008	BLM land	forbs	5.5	<0.01	6.6	4.4	2.59	2.37	1.4	1.49	0.02	0.26	<1	861	2.1	0.27	0.2	77.3	11.5	47	6	18.4	17.4	0.04	38.9	38	563	0.9	11.7	18.4	900	21.1	103	0.41	8.8	1.8	570	<0.1	11.1	0.5	2.7	65	1.2	15.2	58	<0.2	1.52	0.85	0.67	0.0791	8.5	0.6	0.5	0.2	5.6	0.1	9.6
C-318310	12667	42.90639	-110.88376	0-5 cm	2-Aug-2008	national forest	wildflowers, weeds, rocks, shrubs, trees, forbs	14.3	0.05	4.47	3.55	2.24	2.04	1.61	0.4	0.07	0.17	<1	322	1.8	0.45	1.1	56.7	8.2	46	6	19.3	11.9	0.05	26.7	43	790	0.93	8.8	19.9	680	26.8	93.2	0.68	7.8	1.7	113	<0.1	8.4	0.6	2.1	63	1.9	16.9	92	0.4	13.2	1.05	12.15	0.7569	7.5	0.4	2.1	2.1	0.2	0.1	0.1
C-318294	12987	42.56993	-109.56249	0-5 cm	1-Aug-2008	BLM land, grazing	sagebrush, weeds	1.1	0.01	7.51	1.38	2.09	2.32	0.56	2.3	0.02	0.3	<1	790	2	0.15	0.2	94.9	8.9	34	<5	21.9	19	0.03	54.9	15	333	0.42	9.5	14.4	480	19.3	87.4	0.19	6	1.6	409	<0.1	11.9	0.4	1.4	45	0.6	15.3	53	<0.2	0.99	0.01	0.98	0.1043	7.1	0.2	0.3	0.3	0.9	0.1	1.6
C-318865	13243	41.34759	-109.14191	0-5 cm	11-Aug-2008	BLM land	sagebrush, grasses	18.2	0.02	4.92	1.55	1.94	1.97	0.68	0.79	0.04	0.19	<1	822	2	0.21	0.3	62.3	7.6	46	11	15.6	12.4	0.03	29.6	27	518	1.85	8	13.4	840	18.1	96.1	0.83	6.6	1.6	230	<0.1	8.8	0.5	1.8	53	6.9	15.5	52	0.4	1.8	0.22	1.58	0.1816	7.8	0.4	1.7	0.6	0.3	0.1	0.3
C-318900	13691	42.24107	-110.21493	0-5 cm	15-Aug-2008	state land	sagebrush	8.3	0.01	3.67	0.66	1.62	1.61	0.45	0.8	0.02	0.12	<1	598	1.1	0.13	0.3	50	5.9	40	<5	16.7	9.27	0.02	24.1	17	390	1.69	5.1	14.2	580	15.4	59.6	0.52	4.6	0.9	104	<0.1	7	0.4	1.3	32	0.6	11.8	39	<0.2	0.58	0.07	0.51	0.0592	8.0	0.3	0.8	0.6	0.3	0.1	0.3
C-318805	14139	41.80361	-110.31919	0-5 cm	15-Aug-2008	BLM land	sagebrush	8	0.01	6.93	2.65	2.9	1.97	1.49	1.58	0.03	0.3	<1	971	2.2	0.21	0.4	72	12.5	54	<5	18	16.9	0.04	38.7	34	897	7.22	14.7	16.8	1,260	23.4	77.9	0.57	8.8	1.7	411	<0.1	10.1	0.7	2.5	75	1.3	16	67	<0.2	1.3	0.19	1.11	0.1455	7.9	0.4	1.5	0.5	0.4	0.2	0.4
C-318822	14267	42.18025	-107.189	0-5 cm	10-Aug-2008	BLM land	cacti, grasses, shrubs	0.7	<0.01	7.14	3.02	2.44	2.08	0.97	2.02	0.02	0.31	<1	1100	1.2	0.1	0.1	63	9.5	55	<5	8.8	16.4	0.03	35.6	17	529	1.07	12.3	16.2	800	16.8	64.9	0.33	9.7	1.4	584	<0.1	9	0.4	2.1	75	0.9	14.9	42	<0.2	0.16	<0.003	0.16	0.0414	5.9	0.6	2.2	1.6	0.4	0.2	0.3
C-318825	14715	42.24418	-110.87111	0-5 cm	15-Aug-2008	state land	sagebrush, grasses, flowers, weeds	7	0.03	4.59	0.83	2.19	1.54	0.58	0.55	0.04	0.16	<1	534	1.7	0.3	0.9	44.5	7.6	46	5	26.3	11.3	0.04	22.5	25	876	2	7	17.2	1,770	21.2	75	1.07	6.6	1.4	87.4	<0.1	7.8	0.5	2.3	78	1.1	17.5	103	0.2	4.04	0.01	4.03	0.3493	6.6	0.3	1.1	0.8	0.4	0.4	0.4
C-318829	15035	41.80931	-108.47485	0-5 cm	10-Aug-2008	BLM land	shrubs, grasses	5.4	0.02	5.42	0.89	2.1	1.74	0.75	0.71	0.03	0.19	<1	630	1.8	0.22	0.3	53.6	6.3	46	<5	17.1	13.9	0.04	27.7	22	306	1.15	7.7	12.4	550	17.2	84.6	0.7	7.3	1.9	103	<0.1	9.3	0.5	1.8	56	1.8	12.6	57	0.3	1.1	0.17	0.93	0.1105	8.0	0.5	1.2	0.9	1.7	0.3	1.6
C-318835	15483	43.20209	-109.98762	0-5 cm	16-Aug-2008	national forest	sagebrush, grasses	4.4	0.03	4.96	0.87	1.96	1.87	0.42	0.96	0.05	0.16	<1	652	1.5	0.27	0.7	75.1	6.3	35	<5	21.5	12.9	0.04	35.2	26	814	0.92	7	12.1	1,370	23.1	79.1	0.4	5.6	1.2	134	<0.1	12	0.5	2.1	41	0.7	17.8	109	<0.2	5.72	0.02	5.7	0.3810	6.5	0.2	0.6	0.4	0.3	0.2	0.4
C-318834	16059	41.31212	-108.1843	0-5 cm	9-Aug-2008	BLM land	grasses, shrubs	2.4	<0.01	6.29	2.54	1.79	2.06	0.94	1.65	0.02	0.21	<1	1080	2	0.15	0.2	67	7.5	65	<5	10.2	14.8	0.03	37.7	21	460	0.27	9.6	15.3	800	18.6	76.4	0.36	7.2	1.1	455	<0.1	11.3	0.4	2.3	52	0.8	14.3	39	<0.2	0.56	0.19	0.37	0.0617	8.4	0.4	0.2	0.1	3.7	0.2	8.9
C-318902	16187	41.27196	-109.91036	0-5 cm	11-Aug-2008	BLM land	sagebrush, grasses	5.2	0.01	7.08	3.54	2.35	2.25	1.03	1.77	0.03	0.26	<1	1620	1.9	0.18	0.2	75.7	11	58	<5	20.4	17	0.03	37.4	24	493	1.13	10.4	19.8	1,120	20.3	85	0.45	8.4	1.1	546	<0.1	9.4	0.5	2.8	61	1	16.4	50	<0.2	0.83	0.49	0.34	0.0575	8.5	0.5	0.3	0.2	4.4	0.1	9.0
C-318809	16315	41.33954	-107.71929	0-5 cm	8-Aug-2008	BLM land	grasses	14.7	0.03	5.32	2.43	2.26	1.76	0.86	0.46	0.03	0.17	<1	566	1.9	0.29	0.4	51.3	7.5	50	6	19	13.3	0.05	28.1	25	285	0.94	7.5	17.2	690	21	89.4	1.14	7.5	1.6	115	<0.1	9.3	0.6	2	73	1.1	14.6	76	0.5	1.42	0.7	0.72	0.1096	7.9	0.8	2.5	3.0	0.9	0.1	0.5
C-318854	16507	41.44483	-110.02357	0-5 cm	12-Aug-2008	BLM land	sagebrush, grasses	5.2	0.01	6.2	5.77	2.33	2.03	1.13	1.35	0.03	0.24	<1	1170	1.7	0.28	0.4	66.3	11.4	63	<5	20.9	14.8	0.04	33	25	675	1	9.4	21.3	1,250	21.7	79.3	0.54	8.7	1.3	473	<0.1	9	0.5	3.5	65	1.4	15.3	57	<0.2	2.13	1.35	0.78	0.0878	7.9	0.4	1.7	0.5	0.4	0.2	0.4
C-318831	16635	41.68828	-107.71853	0-5 cm	9-Aug-2008	BLM land	shrubs, grasses	8	0.01	4.3	0.68	1.74	1.78	0.47	0.81	0.04	0.14	<1	707	1.4	0.16	0.3	53.1	5.8	36	<5	11.5	11	0.03	28.8	17	333	1.42	6.6	10.4	490	18.1	78.8	0.74	5.7	1.1	138	<0.1	9.9	0.5	1.7	48	0.8	12.2	40	0.2	0.79	0.03	0.76	0.0582	7.5	1.0	3.9	2.7	0.5	0.2	0.3
C-318840	16763	42.80998	-110.05097	0-5 cm	16-Aug-2008	BLM land	sagebrush, cacti	4.3	0.02	5.27	0.81	1.76	1.72	0.5	1.08	0.02	0.19	<1	778	1.5	0.23	0.4	64.2	7.3	43	<5	13.4	13	0.03	28.7	19	673	0.86	7.1	12.8	660	17.4	76.2	0.52	6.3	1.2	220	<0.1	8.8	0.5	1.9	38	0.9	14.3	50	<0.2	1.37	0.01	1.36	0.1092	7.1	0.2	0.5	0.4	0.3	0.1	0.5
C-318885	17083	42.31501	-109.19135	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	3.7	0.01	6.66	1.34	1.47	1.83	0.31	2.28	0.01	0.18	<1	1060	1.9	0.11	0.2	44.7	5.9	39	<5	7	16.3	0.03	21.6	13	306	0.45	6.1	9.1	560	18.5	56.1	0.2	4.8	0.9	436	<0.1	7.9	0.3	1.4	34	0.5	8.5	34	<0.2	0.84	<0.003	0.84	0.0562	6.3	0.2	0.3	0.3	0.3	0.1	0.6
C-318801	17339	41.3785	-108.52413	0-5 cm	10-Aug-2008	BLM land	shrubs, grasses	4.4	0.02	5.73	2.65	2.65	2.26	1.39	1.07	0.05	0.22	<1	766	2.3	0.25	0.4	65	11	63	6	22.5	16.5	0.05	34.5	35	523	1.83	10.1	20.6	1,160	21.9	109	0.57	9.9	1.9	260	<0.1	11.1	0.7	2.6	71	1.1	15	74	<0.2	3.02	0.69	2.33	0.2493	7.8	1.0	2.4	2.0	3.0	1.3	2.0
C-318887	17659	41.25083	-108.44692	0-5 cm	10-Aug-2008	BLM land	sagebrush, grasses	7	<0.01	6.49	2.65	2.05	2.23	0.84	1.88	0.02	0.2	<1	1270	1.5	0.11	0.2	89.9	8.2	75	<5	8.4	16	0.02	39.4	14	406	0.99	8.3	13.9	960	19.8	56.5	0.36	9.7	0.8	674	<0.1	8.1	0.3	1.7	56	0.8	12.7	35	<0.2	0.37	0.02	0.35	0.0036	8.1	0.3	0.6	0.3	0.5	0.2	0.7
C-318898	17787	43.00358	-110.79722	0-5 cm	15-Aug-2008	national forest	trees	5.4	0.04	4.65	0.62	1.98	1.59	0.57	0.51	0.04	0.16	<1	572	1.7	0.28	1.6	55.2	8.4	61	7	24.2	13	0.04	27.7	33	541	1.21	8.7	23.9	1390	23.2	98.5	0.89	7.1	1.6	66.1	<0.1	8.6	0.7	3.2	75	1	17.3	138	0.3	6.3	0.02	6.28	0.4054	6.6	0.2	0.5	0.3	0.4	0.1	0.7
C-318877	18363	41.83428	-109.07405	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	5.8	0.04	5.42	1.49	1.61	1.72	0.73	0.28	0.07	0.19	<1	604	1.7	0.28	0.7	62	7.4	62	6	20.4	13.7	0.05	29.9	25	421	1.09	8.7	20	1020	22.3	92.1	0.89	6.9	1.5	135	<0.1	9.3	0.6	2.1	61	1.1	16.5	85	0.4	4.18	0.39	3.79	0.2648	7.7	0.5	2.0	1.4	0.5	0.5	0.4
C-318870	18811	42.60108	-109.80107	0-5 cm	16-Aug-2008	BLM land	sagebrush, grasses	1.1	<0.01	6.36	0.99	1.24	2.25	0.5	1.8	0.01	0.15	<1	1030	1.8	0.16	0.2	45.7	5.1	28	<5	12.8	15.6	0.02	21.8	15	379	0.37	5.2	11.5	540	19.1	80.9	0.41	4.4	1	303	<0.1	5.6	0.4	1.3	30	0.6	10.6	33	<0.2	0.5	0.01	0.49	0.0253	7.0	0.2	0.5	0.5	0.4	0.1	0.5
C-318864	19259	41.36255	-110.61377	0-5 cm	12-Aug-2008	BLM land	sagebrush, grasses, cacti	5.7	0.03	3.57	1.23	1.53	1.33	0.68	0.3	0.04	0.15	<1	487	1.3	0.31	0.7	45.7	5.8	42	<5	18.7	9.73	0.03	22.4	22	556	0.94	7.1	13.4	1,260	21.8	71.4	0.69	5.8	1.2	102	<0.1	7.7	0.4	1.7	39	1	17	66	<0.2	2.71	0.26	2.45	0.2217	7.5	0.8	2.6	1.8	0.5	0.4	0.3
C-318814	19387	42.00511	-107.36494	0-5 cm	9-Aug-2008	BLM land	grasses, shrubs/semi barren	2.9	0.01	5.51	1.3	1.17	2.2	0.44	1.48	0.01	0.11	<1	668	1.5	0.12	0.2	42.5	3.5	28	<5	6.4	13.3	0.02	24.6	15	128	0.63	4.3	7.1	290	18	88.3	0.42	4.3	1.4	138	<0.1	9.7	0.5	2.5	45	0.6	8.7	31	<0.2	0.58	0.28	0.3	0.0227	8.0	0.5	1.6	1.7	0.4	0.1	0.3
C-318888	20155	42.04735	-108.50109	0-5 cm	10-Aug-2008	BLM land	sagebrush	6.5	<0.01	3.73	0.71	1.1	1.66	0.33	1.14	0.01	0.13	<1	708	1.1	0.1	0.1	37.4	3.5	23	<5	5	9.56	<0.02	17.8	11	230	0.7	5.4	7.9	420	13.8	50.9	0.41	3.8	0.8	160	<0.1	4.5	0.3	1.2	26	0.6	9.4	21	<0.2	0.28	0.03	0.25	0.0341	7.4	0.2	0.7	0.3	0.3	0.1	0.4
C-318796	20283	41.95482	-109.72281	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	2.9	<0.01	5.68	1.95	1.5	1.82	0.63	1.77	0.02	0.17	<1	1120	1.8	0.11	0.2	53.8	6	37	<5	6.8	15	0.03	30.3	15	381	0.87	8.6	8.1	630	17.5	65.2	0.37	5.9	0.9	389	<0.1	7.5	0.4	1.5	44	0.8	11.4	31	<0.2	0.44	0.1	0.34	0.0252	8.0	0.2	0.7	0.4	0.4	0.1	0.5
C-318876	20603	41.49553	-109.54307	0-5 cm	11-Aug-2008	BLM land	sagebrush, grasses	3.3	0.01	6.35	1.88	2.38	1.92	0.91	1.46	0.02	0.26	<1	1030	1.6	0.2	0.3	78.6	10.9	55	<5	18.5	16.3	0.04	39	24	546	1.15	10.5	18.3	970	21.5	72.2	0.49	8.5	1.4	421	<0.1	10.3	0.4	2.1	62	1	17	57	<0.2	0.71	0.02	0.69	0.0657	7.8	0.3	1.0	0.6	0.5	0.1	0.6
C-318802	20859	42.83243	-109.87009	0-5 cm	16-Aug-2008	state land	sagebrush, grasses	2.1	0.01	6.94	1.31	3.07	2.47	1.64	1.08	0.03	0.29	<1	680	2.3	0.22	0.4	76	11.6	70	5	22.6	19	0.04	40	33	690	0.41	9.5	27.1	890	22.2	101	0.58	9.2	2.1	202	<0.1	12.6	0.6	2.2	65	1.3	15.8	84	<0.2	1.16	0.06	1.1	0.1158	7.8	0.7	1.8	1.4	1.9	0.9	1.5
C-318848	20987	41.09129	-107.16473	0-5 cm	8-Aug-2008	national forest	grasses, wildflowers, shrubs, trees	12.4	0.04	6.08	3.4	2.63	1.71	1.01	0.33	0.06	0.22	<1	706	1.9	0.49	2.4	51.9	9.9	70	7	27.9	15.8	0.05	25.3	45	185	7.38	9	30.8	1,060	21.6	99.7	2.53	10.7	1.7	153	<0.1	8.8	1	3.6	196	0.9	16.5	118	4.2	5.39	1.21	4.18	0.3848	7.5	0.5	2.4	0.9	0.4	0.4	0.3
C-318891	21435	41.63511	-108.98441	0-5 cm	11-Aug-2008	BLM land	shrubs	8.7	0.02	5.69	3.35	2.25	2.07	1.57	0.6	0.04	0.22	<1	552	1.9	0.28	0.5	64	8.9	62	7	19.3	14.9	0.05	30	39	396	1.74	9.4	19.6	1,030	20.4	95.9	0.85	8.4	1.8	149	<0.1	9.6	0.7	2.5	82	1.3	16.4	79	0.5	2.33	1.38	0.95	0.0692	8.0	0.4	0.7	0.6	1.7	0.2	2.0
C-318837	22331	41.88731	-110.37168	0-5 cm	15-Aug-2008	BLM land	grasses, cacti, sagebrush	4.3	0.01	2.72	0.48	0.92	1.1	0.36	0.29	0.02	0.11	<1	426	1	0.24	0.5	34.7	3.2	42	<5	10.2	7.2	<0.02	18.6	18	238	0.63	5.1	9	890	14.4	47.8	0.56	3.6	0.8	71.6	<0.1	4.8	0.3	1.6	50	0.6	11.5	49	<0.2	1.5	0.01	1.49	0.1522	7.0	0.3	0.7	0.5	0.4	0.2	0.6
C-318880	22459	42.15438	-109.34475	0-5 cm	14-Aug-2008	BLM land	grasses, sagebrush	2.8	<0.01	7.39	3.01	2.45	2.01	1.15	2.03	<0.01	0.3	<1	1100	1.7	0.12	0.1	75.1	10.9	46	<5	9.5	18.7	0.04	37.2	22	526	0.57	13.5	13.6	800	17.4	66.1	0.44	9.5	1.2	622	<0.1	9.3	0.4	2.1	59	0.9	15.4	46	<0.2	0.34	0.04	0.3	0.0234	8.0	0.2	0.6	0.3	0.5	0.1	0.7
C-318844	22907	42.28902	-110.42997	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	2.8	0.05	3.44	1.62	1.41	1.42	0.5	0.42	0.1	0.13	<1	566	1.1	0.26	0.8	32.5	6	31	<5	39.5	8.92	0.03	14.7	23	928	0.99	5.3	11.8	1,650	22.3	61	0.54	5.2	1	107	<0.1	5.4	0.4	1.4	33	0.8	10.9	122	0.3	14.6	0.03	14.57	1.0260	6.7	0.4	1.8	1.1	0.2	0.3	0.2
C-318830	23355	41.04907	-110.4859	0-5 cm	12-Aug-2008	national forest	aspens, pines	4.4	0.08	4.57	1.34	2.07	1.43	0.78	0.38	0.09	0.18	<1	636	1.6	0.4	0.4	50.9	8.1	42	<5	20.9	12.3	0.04	26.1	36	472	1.16	6.9	11.8	750	32	80.5	0.69	6.7	1.5	146	<0.1	10.4	0.5	9.6	48	0.8	11.6	53	0.4	16.1	0.06	16.04	0.7343	6.4	0.2	0.9	1.3	0.4	0.1	0.4
C-318857	23483	41.86781	-107.59794	0-5 cm	10-Aug-2008	BLM land	shrubs, cacti, semi barren	3.9	0.02	6.43	0.68	1.96	1.95	0.62	1.15	0.02	0.19	<1	637	1.8	0.25	0.2	71.7	7.2	42	<5	14	17.6	0.03	34.5	23	251	0.55	8.1	14.7	390	24.6	88.1	0.5	7	1.5	129	<0.1	20.2	0.6	4.5	57	0.8	13	55	0.2	0.57	0.02	0.55	0.0488	7.2	0.5	1.5	1.5	0.8	0.1	0.6
C-318909	24251	41.64586	-108.12356	0-5 cm	9-Aug-2008	BLM land	grasses, shrubs	10	0.02	4.37	2.44	1.92	1.75	0.79	0.6	0.03	0.15	<1	570	1.2	0.14	0.4	59.1	8.4	47	<5	14.6	10.5	0.03	28.3	21	572	1.09	5.9	17.4	970	18.5	74.3	0.59	5.7	1.2	102	<0.1	8.5	0.4	1.7	41	0.8	14.5	47	0.3	1.73	0.8	0.93	0.1108	7.7	1.1	2.6	2.5	3.5	0.6	2.2
C-318828	24379	42.07194	-110.20123	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	5.4	0.01	6.85	2.4	2.63	1.81	1.18	1.56	0.02	0.28	<1	880	1.8	0.18	0.3	69.8	10.6	56	<5	15.3	16.7	0.04	38.7	33	565	1.46	10.4	15.4	860	20.4	70.8	0.55	8.8	1.3	431	<0.1	10.1	0.4	2.3	71	1	15.4	58	<0.2	0.92	0.07	0.85	0.0795	7.7	0.3	1.2	0.6	0.3	0.1	0.3
C-318863	25531	41.13942	-109.00413	0-5 cm	11-Aug-2008	BLM land	shrubs, grasses	8	0.02	4.01	1.13	1.57	1.78	0.39	0.65	0.06	0.1	<1	620	1.4	0.17	0.2	44.7	7.1	31	<5	11.1	9.7	0.03	20.7	17	327	4.14	4.8	11.1	420	14.2	72.6	0.7	4.9	1.1	91.7	<0.1	6.9	0.4	2.2	36	0.7	10.4	32	0.7	0.82	0.34	0.48	0.0062	7.7	0.6	3.0	1.2	0.5	0.1	0.3
C-318873	25979	42.66621	-110.07235	0-5 cm	16-Aug-2008	state land	grasses, sagebrush, cacti	3.2	0.02	4.41	0.55	1.57	1.71	0.43	0.82	0.02	0.16	<1	678	1.2	0.19	0.4	58	6	40	<5	12.1	10.9	0.03	27.1	17	568	0.7	6.7	11.5	640	17.8	71.8	0.51	5.7	1.1	123	<0.1	9.6	0.4	1.7	35	1.1	14.8	47	<0.2	1.14	<0.003	1.14	0.0912	7.2	0.3	0.7	0.6	0.4	0.2	0.5
C-318875	26427	41.71757	-110.68989	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	5.4	0.02	4.17	9.19	1.5	1.64	1.55	0.25	0.06	0.15	<1	400	1.3	0.27	0.7	37.9	5.7	51	<5	20.3	9.99	0.03	19.5	35	403	1.64	6.1	15.4	1,470	17.7	70.3	0.72	5.7	1.2	445	<0.1	6.7	0.5	2.5	58	0.9	15.4	70	0.3	5.15	3.22	1.93	0.3117	7.5	0.4	2.0	1.1	0.4	0.3	0.3
C-318905	26555	41.91107	-109.1326	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	4.9	0.01	3.97	3.03	1.66	1.29	0.5	0.75	0.03	0.13	<1	622	1.1	0.14	0.4	46	6.1	41	<5	8.9	9.57	0.02	23.1	15	626	0.86	6.1	11.7	880	15.4	52.8	0.46	4.8	0.8	246	<0.1	6.1	0.3	1.4	37	0.6	14.2	47	0.3	1.74	0.78	0.96	0.0938	8.0	0.4	1.0	0.9	0.9	0.4	0.9
C-318799	27003	42.63243	-110.80705	0-5 cm	15-Aug-2008	national forest	trees, grasses	7.9	0.07	4.19	2.27	2.18	1.84	0.94	0.68	0.1	0.15	<1	405	1.9	0.25	5.7	50.9	9.1	98	<5	17.8	11.8	0.04	41.9	32	1,820	3.17	4.9	31.2	8,590	23.8	77.7	0.77	8.2	1.5	92.5	<0.1	8	0.9	5.9	78	0.8	45.3	210	2.1	5.88	0.13	5.75	0.3520	6.7	0.3	1.1	1.0	0.2	0.1	0.2
C-318894	27323	42.05072	-108.00445	0-5 cm	10-Aug-2008	BLM land	sagebrush, wildflowers	7.5	0.01	5.89	1.2	1.66	2.2	0.62	1.26	0.02	0.15	<1	650	1.4	0.14	0.2	67	5.9	40	<5	12.6	14.7	0.03	31.9	18	314	0.86	7.2	12.4	820	21.3	96.6	0.45	6.4	1.3	154	<0.1	14.1	0.6	2.5	41	0.8	13.2	39	0.2	0.65	0.18	0.47	0.0944	7.9	0.3	1.1	0.7	0.9	0.1	0.9
C-318842	27451	41.3988	-110.18208	0-5 cm	11-Aug-2008	BLM land	sagebrush, grasses	3.1	0.01	5.02	2.45	2.09	1.66	1.02	1.03	0.03	0.22	<1	1380	1.4	0.22	0.2	65.2	9.2	62	<5	15.6	12.6	0.03	33.4	18	472	0.57	9.2	18.4	800	15.2	65.8	0.38	7.4	0.9	338	<0.1	9.2	0.4	1.9	55	0.8	14.7	44	<0.2	0.84	0.33	0.51	0.0768	8.0	0.4	1.2	0.7	0.8	0.2	0.8
C-318823	28347	41.5013	-108.59169	0-5 cm	10-Aug-2008	BLM land	cacti, sagebrush, grasses	4.7	<0.01	3.83	1.65	1.36	1.59	0.75	0.86	0.02	0.12	<1	552	1.2	0.13	0.2	44.2	4.6	32	<5	8.7	8.84	0.02	23.2	15	314	0.82	4.6	8.8	650	12.9	65.6	0.51	4.4	1.1	98.7	<0.1	6.6	0.4	1.5	34	0.7	10.6	32	<0.2	1.05	0.51	0.54	0.0894	7.4	1.1	4.5	2.0	0.6	0.2	0.3
C-318893	28475	41.67442	-109.58893	0-5 cm	12-Aug-2008	BLM land	sagebrush, grasses	5.5	0.01	6.19	4.69	2.35	2.25	1.27	1.24	0.03	0.25	<1	1030	1.6	0.23	0.3	71.6	10.7	53	<5	16.8	15.2	0.04	35.6	38	835	1.15	10.4	17.6	1,090	19.3	84.2	0.51	8	1.2	455	<0.1	10.4	0.6	2.2	58	1	16.3	54	<0.2	1.65	1.14	0.51	0.0874	8.1	0.4	1.0	0.7	1.2	0.4	1.4
C-318897	28603	41.29044	-107.40596	0-5 cm	8-Aug-2008	BLM land	sagebrush, grasses	9	0.01	5.45	1.44	1.62	2.05	0.36	1.39	0.04	0.18	<1	765	1.7	0.21	0.3	63.4	6.6	38	<5	16.9	14.3	0.03	29.8	23	588	5.17	9.2	12.4	620	20.3	96.4	0.47	4.6	1.4	324	<0.1	12.3	0.5	3.4	40	1.1	14	47	0.3	1.64	0.01	1.63	0.2009	6.9	0.7	2.6	0.8	0.3	0.4	0.2
C-318869	29051	42.93826	-110.41839	0-5 cm	16-Aug-2008	national forest	forest and understory	1.3	0.03	2.4	0.37	0.82	0.83	0.18	0.19	0.03	0.1	<1	354	0.9	0.23	0.5	35.4	3.9	25	<5	15.3	6.28	<0.02	16.1	24	522	0.55	5.6	7.7	750	13.3	43.4	0.44	2.9	0.8	56.9	<0.1	4.8	0.3	1.8	28	0.6	7.7	51	<0.2	6.06	0.02	6.04	0.2929	5.2	0.6	2.1	2.1	0.3	0.2	0.2
C-318903	29371	42.60573	-109.40295	0-5 cm	16-Aug-2008	state land	sagebrush, grasses	2.6	0.02	7.33	2.2	3.39	1.76	0.86	2.45	0.02	0.47	<1	1130	1.9	0.11	0.2	155	11.4	41	<5	31.5	22	0.05	72.7	20	437	0.52	11.4	12.6	2,130	19.5	75.9	0.22	10.7	2.6	626	<0.1	11	0.5	1.5	79	0.5	27.7	79	<0.2	1.72	<0.003	1.72	0.1412	6.2	0.1	0.3	0.2	0.3	0.1	0.6
C-318791	29627	41.1403	-109.36067	0-5 cm	11-Aug-2008	BLM land	shrubs, grasses	9.6	0.03	4.7	0.92	2.32	1.88	0.62	0.72	0.06	0.18	<1	627	1.7	0.34	0.7	50.2	8.5	46	5	26.4	12.4	0.04	25.7	27	612	1.72	7.2	14.8	960	27.2	88.3	0.77	7	1.5	137	<0.1	8.7	0.5	1.8	55	1.1	14	67	<0.2	5.66	0.02	5.64	0.4992	6.9	0.5	2.0	1.4	0.5	0.5	0.4
C-318901	30075	42.19225	-110.12443	0-5 cm	15-Aug-2008	BLM land	sagebrush	9	0.02	5.15	5.21	2.04	2.02	1.44	1.49	0.02	0.22	<1	760	1.4	0.14	0.5	59.2	8.7	47	<5	17	12.3	0.03	30.3	28	415	1.63	12.4	17.6	1,030	19.2	66	0.73	6.7	1.1	363	<0.1	7.5	0.4	2.1	64	0.6	15.7	65	0.3	2.14	1.68	0.46	0.1023	6.9	0.5	1.5	1.2	0.5	0.5	0.4
C-318806	30523	41.82131	-110.94516	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses, cacti	5.3	0.03	3.42	3.58	1.51	1.3	1.01	0.23	0.05	0.12	<1	464	1.5	0.26	1.1	38	5.2	39	<5	18	9.21	0.03	20.4	23	723	0.96	5.1	10.1	1,810	26.1	68.1	0.73	5.2	1.3	90.7	<0.1	6.3	0.5	1.7	47	0.8	16.3	65	<0.2	3.35	1.14	2.21	0.2729	7.7	0.4	1.8	0.7	0.3	0.3	0.3
C-318883	31099	42.34868	-110.87652	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses, wildflowers	5.4	0.02	5.09	0.74	2.13	1.73	0.57	0.75	0.04	0.21	<1	582	1.5	0.26	0.8	61	8.6	54	<5	25.9	12.7	0.04	27.6	29	758	1.31	9.4	16.6	1,390	22.3	87.1	0.67	7.1	1.4	121	<0.1	9.4	0.5	2.2	56	1.1	16.4	118	<0.2	4.27	0.01	4.26	0.4121	6.0	0.2	0.4	0.3	0.3	0.2	0.5
C-318807	31419	41.77285	-108.44357	0-5 cm	10-Aug-2008	BLM land	shrubs, grasses	7.2	0.02	5.96	0.94	2.64	2.15	1.04	0.84	0.03	0.22	<1	745	2	0.28	0.5	61.8	9.4	50	6	20.7	15	0.05	31.7	29	702	1.24	8.6	17.5	800	20.2	106	0.85	8.3	2	128	<0.1	10.5	0.6	2.1	64	1.3	17.4	67	0.3	0.74	0.09	0.65	0.1060	7.8	0.3	0.9	0.6	0.5	0.1	0.5
C-318804	31547	41.60482	-110.06017	0-5 cm	12-Aug-2008	BLM land	sagebrush, grasses	11.2	0.01	6.31	3.7	2.46	2.07	1.23	1.37	0.02	0.25	<1	1170	2.2	0.25	0.3	74.7	11	53	<5	17.9	16.6	0.04	41.9	28	496	3.91	9.9	16.8	900	22.4	84.7	0.6	8.8	1.5	459	<0.1	11.9	0.7	3.5	66	1	16.5	55	<0.2	1.2	0.58	0.62	0.1004	8.1	0.6	0.7	0.3	4.8	0.2	6.8
C-318820	31867	43.35417	-109.91978	0-5 cm	16-Aug-2008	national forest	grasses, sagebrush, flowers	2	0.03	4.27	7.4	1.74	1.25	0.64	1.25	0.13	0.15	<1	606	1.3	0.09	0.5	63.6	6.2	30	<5	27	11.2	0.03	34.6	13	486	0.43	5.6	11.5	1,860	13.2	58.7	0.31	5	1.1	202	<0.1	11.3	0.4	1.5	39	0.6	13.6	43	0.7	13.2	1.61	11.59	1.1020	7.3	0.6	2.8	1.7	0.5	0.2	0.3
C-318841	32443	41.41445	-108.06315	0-5 cm	9-Aug-2008	BLM land	grasses, shrubs	4.5	0.01	5.39	7.36	1.6	1.94	1.12	1.23	0.02	0.18	<1	918	1.5	0.2	0.2	51.8	7.3	40	<5	12.8	12.6	0.02	25.6	27	557	0.93	7.9	13.7	800	14.6	71	0.41	6.1	1.1	568	<0.1	8.3	0.4	2	39	0.6	13.6	37	<0.2	2.62	2.1	0.52	0.0900	7.8	0.4	1.2	0.9	0.5	0.5	0.5
C-318852	32571	41.04067	-110.06667	0-5 cm	11-Aug-2008	BLM land	sagebrush, grasses	10.8	0.01	6.7	4.69	3.02	1.53	1.31	1.54	0.04	0.32	<1	1400	1.9	0.27	0.2	96	14.5	88	<5	9.1	17.2	0.04	47.7	59	742	1.33	18	21.7	1,110	16.7	65.5	0.5	11.1	1.3	623	<0.1	11.6	0.5	2.7	75	1.4	19.3	58	<0.2	1.54	0.92	0.62	0.1062	7.8	0.4	1.6	0.8	0.5	0.3	0.4
C-318896	32891	41.58339	-110.09429	0-5 cm	12-Aug-2008	BLM land	sagebrush, grasses	2.6	0.01	6.44	3.56	2.07	1.94	0.93	1.68	0.02	0.27	<1	1430	1.6	0.16	0.2	86.2	8.3	38	<5	13.1	14.6	0.03	44.5	18	448	0.6	13	13.7	1,030	18.3	59.2	0.44	7.1	1	547	<0.1	10.7	0.4	2.9	60	0.8	15.9	45	<0.2	0.85	0.45	0.4	0.0663	8.0	0.3	1.1	0.3	0.6	0.3	0.7
C-318860	33019	41.64808	-107.86256	0-5 cm	9-Aug-2008	BLM land	shrubs, grasses	5.7	0.02	4.41	1.68	1.71	1.72	0.74	0.66	0.04	0.17	<1	628	1.3	0.31	0.4	58	7.5	38	<5	13.8	10.7	0.03	27.3	18	548	1.27	7	13.9	750	16.9	76	0.67	6	1.3	120	<0.1	9.1	0.4	1.9	43	0.8	14.5	44	0.3	1.99	0.49	1.5	0.1748	7.5	1.0	3.8	2.1	0.9	0.4	0.5
C-318827	33147	43.19642	-110.25139	0-5 cm	16-Aug-2008	national forest	forest and understory	4.1	0.05	3.26	0.56	1.49	1.33	0.36	0.48	0.04	0.17	<1	519	1.1	0.29	0.7	40	5.3	31	<5	10.3	8.71	0.03	20.1	23	923	0.82	6.6	7.7	610	24.3	73.9	0.56	4.3	1.2	74.9	<0.1	6.2	0.4	1.4	37	0.9	8.5	63	<0.2	9.71	0.03	9.68	0.4091	5.2	0.1	0.4	0.3	0.2	0.1	0.3
C-318798	33467	42.53331	-109.36182	0-5 cm	16-Aug-2008	BLM land	sagebrush, grasses	3.2	0.01	7.05	1.24	2.23	2.02	0.55	2.02	0.02	0.26	<1	1040	2.4	0.14	0.3	74	8.6	40	<5	15.9	18.1	0.04	38.6	20	475	0.64	8.8	11.7	780	21.5	81.3	0.32	7.2	1.8	365	<0.1	11	0.5	1.6	51	0.6	12.5	60	<0.2	1.11	<0.003	1.11	0.1191	5.8	0.2	0.2	0.3	0.4	0.2	0.7
C-318895	33659	43.34302	-109.89268	0-5 cm	16-Aug-2008	national forest	sagebrush, grasses	4.2	0.03	5.93	1.29	2.33	1.84	0.6	1.63	0.05	0.24	<1	752	1.6	0.2	0.5	90.2	8.6	44	<5	17.7	16.9	0.04	39.7	25	574	0.82	9	14.3	950	23.5	81	0.46	6.9	1.6	203	<0.1	15.3	0.4	1.6	51	0.8	15.1	84	<0.2	5.78	0.02	5.76	0.4117	5.9	0.2	0.6	0.4	0.3	0.1	0.4
C-318908	33723	41.49591	-109.0321	0-5 cm	11-Aug-2008	BLM land	sagebrush	6.4	0.01	3.64	5.02	1.24	1.36	1.72	0.45	0.04	0.12	<1	428	1	0.15	0.6	41.3	4.1	30	<5	9.8	8.16	0.02	20.4	25	199	2.89	4.9	13.1	970	13.7	60.3	0.82	4.4	0.9	152	<0.1	6.4	0.6	2.3	69	0.6	12.1	51	0.8	2.59	2.14	0.45	0.0843	7.9	0.3	1.1	0.6	0.6	0.1	0.6
C-318907	34171	42.83439	-110.84273	0-5 cm	15-Aug-2008	national forest	forest and understory	5.9	0.04	4.21	0.51	1.78	1.71	0.51	0.74	0.03	0.2	<1	689	1.2	0.33	0.7	43.9	9.1	48	<5	16	11.9	0.04	18.9	34	1,720	1.04	8.5	15.8	880	27.6	81.7	0.63	5.7	1.3	101	<0.1	6.5	0.5	1.8	47	1.1	7.9	81	<0.2	5.21	0.02	5.19	0.2859	5.2	0.3	0.9	0.7	0.3	0.1	0.3
C-318839	34747	41.82018	-109.05438	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	30.1	0.15	7.05	2.08	1.94	1.52	0.68	0.1	0.26	0.3	<1	431	1.7	0.49	0.4	76.3	6.1	54	6	18.7	17.5	0.06	36.3	28	190	1.72	12.4	16.8	710	27.4	80.1	1.26	7.3	2.1	140	<0.1	12.8	1.5	4.5	72	1.6	15.8	64	0.9	6.57	0.5	6.07	0.2988	7.7	0.7	2.4	3.4	0.7	0.5	0.4
C-318800	35195	42.66449	-109.94468	0-5 cm	16-Aug-2008	BLM land	sagebrush, grasses, cacti	2.8	0.02	4.74	1.01	1.71	1.76	0.58	1.24	0.03	0.17	<1	712	1.4	0.19	0.4	67.1	4.8	40	<5	14.6	12.1	0.03	35.7	16	477	0.53	6.3	10.4	880	20.1	65.9	0.44	4.9	1.1	195	<0.1	12.5	0.4	1.7	38	0.5	14	43	<0.2	1.92	0.01	1.91	0.1542	6.6	0.3	0.9	1.1	0.3	0.1	0.3
C-318859	35515	42.8515	-109.62169	0-5 cm	16-Aug-2008	national forest	forest and understory	1.9	0.03	6.41	1.72	2.47	1.76	0.66	1.76	0.03	0.31	<1	983	1.8	0.4	0.5	99.5	10.1	43	<5	21.6	18.6	0.04	47.3	18	694	0.57	9.2	17.5	990	25.2	63.4	0.35	7.5	1.7	345	<0.1	10.7	0.4	1.2	56	0.5	15.8	99	<0.2	4.85	0.02	4.83	0.3158	6.3	0.1	0.4	0.2	0.2	0.1	0.4
C-318812	35643	41.38344	-110.79712	0-5 cm	12-Aug-2008	state land	sagebrush, grasses	8.3	0.03	3.67	0.54	1.76	1.33	0.42	0.18	0.03	0.14	<1	380	1.4	0.28	1.1	40.5	7	72	<5	25	10.2	0.04	22.5	30	451	1.05	4.4	20.2	1,170	21.2	76.2	1.12	6.7	1.2	88.4	<0.1	6.8	0.5	2	72	0.8	19.4	95	<0.2	3.23	0.01	3.22	0.3365	6.5	0.3	0.9	0.7	0.4	0.2	0.4
C-318858	35771	42.04696	-107.5459	0-5 cm	10-Aug-2008	BLM land	cacti, grasses, shrubs	1.9	<0.01	5.77	0.78	0.96	2.04	0.22	1.83	<0.01	0.14	<1	630	1.3	0.15	<0.1	102	4.4	22	<5	4.2	15	<0.02	53.3	7	119	0.3	4.3	6.6	230	17	69.8	0.13	4.3	1	168	<0.1	26.1	0.4	3.6	25	0.2	8.3	15	<0.2	0.29	0.01	0.28	0.0556	6.2	0.2	0.6	0.5	0.4	0.1	0.5
C-318881	36539	42.16628	-108.24883	0-5 cm	10-Aug-2008	BLM land	sagebrush, grasses	4.3	0.02	6.69	0.9	2.39	2.15	0.98	1.23	0.02	0.23	<1	736	1.9	0.19	0.2	66	9.1	63	<5	16.5	16.8	0.04	32.2	30	461	0.63	8.1	21.7	720	21	90.8	0.42	8	1.4	212	<0.1	14.2	0.6	2.4	53	1.1	13.8	59	<0.2	0.54	<0.003	0.54	0.0969	7.0	0.2	0.5	0.7	0.5	0.1	0.6
C-318910	36667	42.06611	-109.84773	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	3.6	0.01	7.16	2.77	2.39	1.9	1.1	1.95	0.02	0.28	<1	995	1.7	0.13	0.3	79.6	12.2	44	<5	13.5	17.3	0.03	40.5	25	581	1.46	16.3	16.6	860	19.6	72	0.44	9.1	1.1	482	<0.1	9.8	0.3	1.8	60	1.2	14.8	50	<0.2	0.71	0.32	0.39	0.0780	7.9	0.3	1.1	0.4	0.6	0.1	0.7
C-318861	36987	41.49418	-109.7667	0-5 cm	12-Aug-2008	BLM land	sagebrush, grasses	2.8	<0.01	4.62	0.42	0.29	2.93	0.07	1.48	<0.01	0.04	<1	757	0.6	<0.04	<0.1	18.3	0.8	4	<5	1.7	9.77	<0.02	10.1	3	63	0.15	1.5	1.7	150	17.8	95.3	0.11	1.5	0.6	135	<0.1	5	0.5	1	8	0.1	3.4	15	<0.2	0.26	0.09	0.17	0.0464	8.1	0.3	0.7	0.3	1.2	0.1	1.8
C-318797	37243	42.93727	-109.75858	0-5 cm	16-Aug-2008	national forest	sagebrush, grasses	<0.6	0.01	6.86	1.93	1.77	1.78	0.31	2.66	0.02	0.27	<1	1010	1.3	0.08	0.1	51.3	4.9	30	<5	9.9	16.6	0.02	28.2	8	320	0.24	6.2	6	650	15.1	40.9	0.12	4	0.8	342	<0.1	5.4	0.2	0.8	42	0.2	8.3	37	<0.2	1.79	0.01	1.78	0.1801	6.4	0.2	0.7	0.4	0.3	0.2	0.4
C-318886	37371	41.16263	-106.9888	0-5 cm	8-Aug-2008	national forest	rocky; mixture of grasses, shrubs, trees, wildflowers	6.6	0.02	5.79	1.33	2.93	1.58	1.14	0.91	0.02	0.27	<1	765	1.3	0.29	0.3	49.8	19.5	81	<5	28.1	14.6	0.04	23.3	28	1,080	0.96	8	30.9	670	26.2	81.9	0.53	13.3	1.2	141	<0.1	7.2	0.5	1.9	91	1	10.9	85	<0.2	2.8	0.01	2.79	0.2351	4.5	0.5	1.8	1.2	0.5	0.1	0.4
C-318871	37819	41.4899	-109.44272	0-5 cm	11-Aug-2008	national recreation area	grasses, brush	2.4	<0.01	5.02	3.22	1.81	1.7	0.88	1.42	0.02	0.2	<1	771	1.3	0.16	0.2	64.9	6	35	<5	8.4	12.1	0.02	31.9	18	395	0.83	7.2	10.5	760	14.3	58.9	0.4	5.8	1.1	327	<0.1	14.9	0.4	1.7	44	0.6	14.8	33	<0.2	1.39	0.85	0.54	0.0764	8.0	0.3	1.0	0.5	0.6	0.2	0.7
C-318795	38267	42.43042	-109.55921	0-5 cm	16-Aug-2008	BLM land	sagebrush, grasses	1.3	<0.01	6.44	1.37	0.95	2.28	0.28	2.2	0.01	0.15	<1	1280	1.8	0.09	0.2	44.9	4.2	22	<5	6.4	15.3	<0.02	24.2	8	273	0.38	5.5	4.9	290	16.9	61.8	0.2	3.5	0.8	378	<0.1	5	0.3	0.9	24	0.4	7.9	26	<0.2	0.54	0.01	0.53	0.0784	6.8	0.1	0.1	0.2	0.5	0.1	1.4
C-318892	38715	41.71568	-111.0202	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses, cacti, big shrubs	5.4	0.04	5.75	5.53	2.32	1.4	0.93	1.15	0.03	0.26	<1	1130	1.4	0.09	0.2	64	14.4	109	5	14	13.8	0.03	33.1	18	495	0.5	7.9	47.6	850	20.3	44	0.65	11.6	0.9	390	<0.1	6.7	0.3	2.1	85	1.1	15.1	63	<0.2	2.74	1.47	1.27	0.2225	7.7	0.3	1.3	0.6	0.3	0.1	0.3
C-318817	38843	42.148	-109.02858	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	4.9	0.01	6.93	2.69	2.82	1.89	1.2	1.47	0.02	0.29	<1	1070	1.9	0.22	0.4	75.7	11.9	52	<5	17.6	17.1	0.04	41.3	28	697	1.19	13.8	15.6	1,100	20.4	85.3	0.52	9.6	1.4	455	<0.1	10.4	0.4	2	79	1.1	17	64	<0.2	1.25	0.17	1.08	0.1648	7.6	0.3	1.1	0.9	0.4	0.1	0.4
C-318853	39291	42.62959	-110.80528	0-5 cm	15-Aug-2008	national forest	rocks, trees, shrubs	5.3	0.03	5.04	0.57	2.16	2.43	0.91	0.68	0.04	0.18	<1	531	2.2	0.34	0.6	50	8.4	50	5	13.5	13.2	0.04	19.5	30	880	0.67	6.9	16.7	810	21.7	101	0.72	7.6	1.5	63.4	<0.1	7.3	0.5	1.8	53	0.8	12.3	71	<0.2	7.28	0.03	7.25	0.4040	5.3	0.7	2.4	1.9	0.3	0.2	0.2
C-318821	39611	43.00569	-109.75185	0-5 cm	16-Aug-2008	national forest	pine forest and understory	2.5	0.02	6.75	1.65	2.6	1.51	0.59	2.15	0.02	0.33	<1	871	1.8	0.15	0.2	67.8	7.5	40	<5	11.3	19.1	0.04	38.9	24	485	0.53	9.3	11.8	810	20.2	64.5	0.32	6.3	1.9	327	<0.1	10.2	0.3	1.3	65	0.8	12.8	57	<0.2	3.56	0.02	3.54	0.1451	5.1	0.1	0.2	0.2	0.3	0.1	0.6
C-318793	39739	41.23965	-110.21615	0-5 cm	11-Aug-2008	BLM land	sagebrush, shrubs	1.8	<0.01	6.12	6.4	2.52	1.57	1.37	1.83	0.05	0.26	<1	2100	1.7	0.14	0.2	61.8	11.8	142	<5	8.9	14.8	0.03	36.5	16	644	0.6	7.7	29.3	1,050	15.9	47.3	0.31	10.6	0.9	627	<0.1	7.3	0.3	2.6	90	0.6	17.3	40	<0.2	1.32	1.15	0.17	0.0637	5.9	0.4	1.2	0.4	1.3	0.1	1.4
C-318850	39867	42.13035	-107.67704	0-5 cm	10-Aug-2008	BLM land	sagebrush, grasses	1.8	<0.01	5.48	0.53	0.85	2.61	0.22	1.62	0.01	0.11	<1	790	1.2	0.11	0.1	111	3.8	23	<5	5.2	13.9	<0.02	53.7	9	226	0.35	4.5	6.1	400	26.1	97.4	0.18	3.6	0.7	137	<0.1	32.5	0.5	2.8	20	0.4	10.7	21	<0.2	0.87	0.01	0.86	0.0973	7.7	0.2	0.4	0.3	0.3	0.2	0.5
C-318878	40443	41.181	-106.86863	0-5 cm	8-Aug-2008	BLM land	grasses, shrubs, flowers, trees	4	0.02	5.48	2.14	3.33	1.41	1.62	1.1	0.03	0.26	<1	498	1	0.22	0.4	37.9	23.9	171	<5	47.9	12.3	0.04	17.9	17	723	0.79	5.2	57.1	730	14.7	60.5	0.48	15.2	1	131	<0.1	6	0.3	1.3	95	0.8	12	62	<0.2	4.12	0.01	4.11	0.3882	7.7	0.4	1.3	1.2	0.3	0.3	0.3
C-318843	40635	41.62434	-108.24893	0-5 cm	9-Aug-2008	BLM land	shrubs, grasses	11.2	0.01	4.46	3.22	1.82	1.75	0.86	0.6	0.03	0.16	<1	561	1.4	0.2	0.3	50	7.2	38	<5	13.7	11	0.03	23.2	21	516	1.04	5.9	14.3	1,140	15	77	0.54	6.2	1.3	128	<0.1	7.5	0.4	1.6	42	0.9	13.6	41	0.3	1.71	1.05	0.66	0.1255	7.9	0.3	1.1	0.7	0.5	0.2	0.6
C-318856	40763	42.15626	-110.14829	0-5 cm	15-Aug-2008	BLM land	sagebrush	6.8	0.04	6.86	3.12	3.02	2.45	1.37	1.66	0.03	0.31	<1	840	1.8	0.2	0.3	93.3	14.4	51	7	35.4	17.7	0.05	48	29	471	2.86	25.8	19.7	1,070	20.4	97.8	0.62	10.2	1.6	412	<0.1	11.6	0.6	2.6	80	0.9	17.2	67	0.6	1.98	0.61	1.37	0.2094	7.8	0.3	1.4	0.4	0.6	0.0	0.6
C-318866	41659	42.60482	-109.4034	0-5 cm	16-Aug-2008	BLM land	sagebrush, grasses	1.9	<0.01	7.3	2.14	3.12	1.44	0.64	2.65	0.01	0.42	<1	928	2.2	0.09	0.1	161	11.1	31	<5	4.7	22	0.06	72.6	14	409	0.4	10.7	10.3	1,860	17.7	51.3	0.17	10.5	2.8	590	<0.1	17.2	0.3	2	72	0.7	30.2	52	<0.2	0.71	0.01	0.7	0.0870	6.3	0.1	0.2	0.2	0.2	0.1	0.6
C-318808	41915	41.2659	-108.98915	0-5 cm	11-Aug-2008	BLM land	sagebrush, grasses	5.7	0.02	4.51	4.08	1.91	1.61	1.59	0.45	0.03	0.16	<1	468	1.5	0.21	0.2	47.2	6.1	47	5	10.7	10.9	0.04	24.5	31	360	0.61	6.2	13.1	920	17.7	78.9	0.73	6.4	1.3	154	<0.1	8.3	0.5	2.1	78	0.9	13.9	61	0.4	2.07	1.63	0.44	0.0889	8.0	0.3	0.9	0.7	0.6	0.2	0.6
C-318882	42363	42.54485	-110.30932	0-5 cm	16-Aug-2008	BLM land	sagebrush	8.2	<0.01	3.86	0.52	1.05	1.51	0.31	1.02	0.01	0.09	<1	534	0.9	0.06	0.1	38.7	4.2	41	<5	3.4	8.65	<0.02	18.7	16	269	0.48	3.9	8.9	450	11	58.1	0.31	4	0.7	96.2	<0.1	4.9	0.3	1.2	24	0.4	8.7	22	<0.2	0.42	0.03	0.39	0.0689	7.9	0.2	0.5	0.2	0.2	0.1	0.4
C-318884	42811	41.67653	-110.36268	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	9.1	0.02	3.97	1.95	1.42	1.48	0.81	0.57	0.03	0.16	<1	852	1.2	0.15	0.4	61.1	5.5	49	<5	12.9	10.2	0.02	31.8	21	432	1.94	6.9	13.2	990	14.1	62.5	0.65	5.3	1	160	<0.1	8	0.4	1.9	48	0.8	14.8	51	<0.2	1.08	0.47	0.61	0.0965	7.8	0.4	1.5	0.7	0.4	0.1	0.4
C-318849	42939	41.96091	-109.36307	0-5 cm	14-Aug-2008	BLM land	sagebrush, grasses	12.4	0.01	6.65	1.98	2.14	2.01	0.78	1.62	0.02	0.25	<1	940	1.7	0.34	0.3	70.5	9.7	41	<5	15.6	16.5	0.03	34.3	22	417	1.21	11.2	12	830	20.6	69.3	0.54	7.9	1.2	442	<0.1	9.5	0.6	2.2	53	0.8	14.2	47	<0.2	0.8	0.01	0.79	0.1309	7.4	0.3	0.7	0.6	0.4	0.2	0.6
C-318855	43707	42.01009	-108.2698	0-5 cm	10-Aug-2008	BLM land	sagebrush, grasses	8.1	0.01	5.25	2.13	2.02	1.91	1.06	0.85	0.02	0.19	<1	631	1.5	0.17	0.3	59	7.8	44	<5	16.3	12.9	0.03	27.9	26	506	1.09	7.4	16.3	810	15.9	81.9	0.53	6.6	1.4	183	<0.1	9.5	0.5	2.1	48	1	13.4	47	<0.2	1.15	0.58	0.57	0.1076	7.9	0.3	1.0	0.8	0.8	0.1	0.8
C-318847	43835	41.15039	-110.67746	0-5 cm	12-Aug-2008	state land	grasses	3.1	0.02	2.49	1.64	0.96	1.03	0.56	0.11	0.03	0.09	<1	327	0.9	0.14	0.3	30.5	4	41	<5	10	6.57	0.02	16.1	16	266	0.46	4.3	10.5	1,080	11	46.5	0.39	4	0.8	50.1	<0.1	5	0.3	1.2	27	0.4	13	38	<0.2	2.12	0.5	1.62	0.2065	7.7	0.4	1.7	0.8	0.3	0.2	0.3
C-318826	44731	41.59803	-108.49874	0-5 cm	10-Aug-2008	BLM land	shrubs	7.1	0.01	4.96	2.53	2.05	1.97	1.06	0.77	0.02	0.17	<1	632	1.7	0.2	0.3	49.6	6.9	42	<5	16	12	0.04	25.6	22	371	1.06	6.7	12.6	690	15.9	86	0.72	6.7	1.8	115	<0.1	8.7	0.5	2.2	52	1.3	13.5	46	<0.2	1.27	0.75	0.52	0.0832	7.5	1.6	5.8	3.9	2.7	0.4	1.2
C-318815	44859	41.10567	-109.89843	0-5 cm	11-Aug-2008	BLM land	sagebrush, cacti	9.2	0.03	5.26	8.8	1.92	1.78	1.11	1.14	0.07	0.19	<1	2390	1.7	0.2	0.2	58.8	8.5	52	<5	12.6	12.5	0.03	33.4	45	389	1.28	8.7	15.2	710	15.1	76.6	0.59	6	1	513	<0.1	9.4	0.5	2.9	69	1.3	14.3	37	0.2	2.74	2.44	0.3	0.0826	7.7	0.4	1.2	0.8	0.6	0.2	0.6
C-318818	44987	41.46909	-107.49233	0-5 cm	9-Aug-2008	BLM land	brush, grasses	5.6	0.03	4.35	1.45	1.75	1.62	1.03	0.51	0.06	0.15	<1	442	1.4	0.24	0.3	40.3	5.2	45	<5	13.5	10.5	0.03	21.3	27	223	1.23	6.3	11.2	1,000	17.7	77.1	0.62	5.9	1.2	92.6	<0.1	7.5	0.5	2	69	0.8	12.7	67	0.5	3.96	0.54	3.42	0.3478	7.1	0.9	2.3	4.1	0.5	1.0	0.3
C-318816	45435	43.04459	-110.50059	0-5 cm	16-Aug-2008	national forest	trees	4.9	0.03	4.37	0.57	2	1.14	0.36	0.31	0.04	0.17	<1	395	1.6	0.24	0.7	42.4	7.6	49	<5	17	10.5	0.04	20.6	30	642	0.95	6.4	15.1	1,030	17.9	73.6	0.65	6.1	1.3	72.9	<0.1	6.9	0.5	2	71	0.7	14	95	0.2	5.24	0.02	5.22	0.3850	6.1	0.3	0.8	0.4	0.3	0.2	0.4
C-318790	46011	41.28752	-109.34919	0-5 cm	11-Aug-2008	state land	grasses, sagebrush, shrubs	13.4	0.02	5.05	4.61	2.29	2.11	1.57	1.17	0.05	0.18	<1	642	1.7	0.26	0.4	51.2	7.8	48	<5	21.9	12.5	0.04	27.4	39	512	2.43	7.6	16	1,090	19.9	85.9	0.74	7	1.5	266	<0.1	9.8	0.5	2.9	60	1.1	15	58	0.3	3.35	1.65	1.7	0.2308	7.8	0.4	1.3	0.9	0.6	0.3	0.6
C-318813	46459	42.41854	-110.29325	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	5.5	0.02	4.91	6.88	1.74	1.62	1.87	0.97	0.04	0.15	<1	946	1.7	0.21	0.3	45.6	6.8	44	<5	14.2	12.9	0.03	24.1	39	425	1.04	6.2	14.8	860	17	74.7	0.7	6	1.4	551	<0.1	7.7	0.4	4.1	41	1.2	12.9	43	<0.2	2.98	2.44	0.54	0.1257	7.8	0.3	1.1	1.2	0.5	0.1	0.4
C-318904	46907	42.00645	-110.68274	0-5 cm	15-Aug-2008	BLM land	sagebrush, grasses	6.9	0.02	4.76	0.6	2.15	1.53	0.5	0.51	0.03	0.22	<1	567	1.5	0.28	0.7	67.4	9.1	57	<5	21.4	12.9	0.04	30.8	32	878	1.11	9.6	15.6	1,450	21.7	78.8	0.7	8	1.4	107	<0.1	10.1	0.5	2.4	54	1.3	19.2	78	<0.2	2.48	0.01	2.47	0.2351	5.5	0.2	0.5	0.5	0.5	0.1	0.7
C-318874	47483	42.23745	-110.86229	0-5 cm	15-Aug-2008	state land	sagebrush, grasses	3.8	0.02	5.73	1.43	2.38	1.32	0.79	0.13	0.04	0.19	<1	385	1.8	0.29	1	52.6	8.9	79	6	22.8	14.9	0.05	27.3	23	671	0.72	5.9	22.5	2,280	19	80.7	0.71	9.7	1.3	54.5	<0.1	8.2	0.6	2.2	73	0.8	26.2	91	<0.2	2.88	0.2	2.68	0.2931	7.4	0.5	2.3	0.6	0.3	0.2	0.3
C-318836	47803	41.94187	-108.33678	0-5 cm	10-Aug-2008	BLM land	mostly barren	17.2	0.01	7.71	2.53	4.23	2.03	2.01	0.8	0.02	0.35	<1	520	2.1	0.42	0.2	84.5	18.7	101	7	36.9	22.2	0.06	39.1	72	486	1.03	11.4	46.6	800	19.6	109	0.56	14.7	2.3	295	<0.1	14.2	0.7	3.4	108	2.6	19.8	92	<0.2	0.91	0.75	0.16	0.0795	8.4	0.5	0.1	0.2	5.4	0.0	15.3
C-318792	47931	41.72306	-109.84515	0-5 cm	14-Aug-2008	BLM land	sagebrush	5.8	0.02	5.6	3.58	2.28	2.21	1.08	1.06	0.05	0.21	<1	850	2.1	0.3	0.3	64.7	9.9	44	<5	20.9	16.2	0.04	34.9	26	523	3.41	9.9	13.8	1,210	22.5	89.8	0.5	8.6	1.7	324	<0.1	9.9	0.9	2.3	59	1.2	15.2	55	0.2	2.24	0.81	1.43	0.1880	8.1	1.2	1.1	0.9	10.8	0.6	11.0
C-343559	1275	41.61395	-106.79774	0-5 cm	11-Aug-2010	BLM land	sagebrush, grasses, forbs	3.8	0.05	5.06	0.88	1.71	2.18	0.44	1.28	0.02	0.21	<1	712	1.3	0.19	0.2	59.3	7.9	19	<5	10.4	14.8	0.04	30.8	17	381	0.83	8.8	11	440	17.4	94.2	0.44	5.3	1	205	<0.1	9.1	0.5	1.8	44	0.9	14.4	44	<0.2	1.06	<0.003	1.06	0.1201	6.2	0.2	0.1	<0.1	0.4	<0.1	1.8
C-343560	3003	41.93226	-107.2859	0-5 cm	12-Aug-2010	grazing	sagebrush, grasses, forbs, cacti	3.8	0.01	4.42	0.6	1.29	1.95	0.28	1.13	0.02	0.16	<1	646	1	0.14	0.3	65.1	4.9	12	<5	8.3	11.6	0.03	33.7	13	287	0.82	6.5	7.3	400	18	75.9	0.42	3.8	0.9	159	<0.1	12.6	0.4	2.1	32	0.6	12.2	33	<0.2	0.95	0.01	0.94	0.0859	6.6	0.2	0.6	0.2	0.6	0.4	1.0
C-343561	4027	42.2594	-106.84996	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses, cacti	2.6	<0.01	4.27	0.67	1.13	2.08	0.25	1.28	0.01	0.15	<1	680	1	0.09	0.2	50.3	3.9	10	<5	4.7	10.4	<0.02	26.8	8	238	0.38	5.3	6.1	290	15.8	75.2	0.28	3.2	0.8	168	<0.1	10.2	0.4	1.5	29	0.5	9.6	25	<0.2	0.54	<0.003	0.54	0.0627	6.0	0.1	0.4	0.2	0.5	0.3	1.0
C-343562	6491	41.43013	-105.97107	0-5 cm	13-Aug-2010	state trust land	grasses, forbs, cacti	4.5	0.02	4.57	0.71	1.53	2.26	0.26	1.05	0.04	0.38	<1	757	1	0.16	0.3	38.8	5.4	22	<5	7.6	11.1	0.03	20.2	11	320	0.74	9	7.9	350	20.2	75.7	0.37	4	0.8	159	<0.1	5.3	0.4	1.3	36	0.6	9.5	35	<0.2	3.22	0.01	3.21	0.2343	6.4	0.2	1.6	0.3	0.3	0.4	0.3
C-343563	7675	41.05887	-106.41941	0-5 cm	11-Aug-2010	national forest	bunchgrass, sagebrush, forbs	3	0.02	7.11	2.69	2.86	1.83	1.12	2.35	0.03	0.26	<1	758	1.4	0.14	0.2	42.2	14.1	50	<5	23.1	17.3	0.04	21.6	14	668	0.65	7.1	19.9	740	14.1	67	0.32	11.6	1	335	<0.1	4.9	0.4	1.3	68	1	15.6	64	<0.2	3.47	0.01	3.46	0.2533	5.5	0.2	0.6	0.2	0.4	0.7	0.7
C-343564	8123	42.11407	-106.71084	0-5 cm	13-Aug-2010	BLM land	sagebrush, forbs, grasses	4.3	0.02	5.23	1.04	1.97	1.86	0.65	1.28	0.04	0.24	<1	600	1.5	0.17	0.4	82.6	7.8	43	<5	13.9	14.7	0.03	43.9	20	401	2.28	9.6	18.2	740	19.1	77.8	0.45	5.9	1.4	158	<0.1	17.8	0.6	3.2	50	1	15.6	53	0.2	3.73	0.01	3.72	0.3148	6.5	0.1	1.0	0.3	0.4	0.4	0.5
C-343566	8443	41.57373	-106.47671	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, forbs	2.8	0.01	5.71	0.78	1.5	2.2	0.37	1.7	0.02	0.19	<1	782	1.4	0.19	0.4	34.4	8.3	28	<5	11.9	15.5	0.03	17.8	21	356	0.61	7.1	12.8	410	21.2	101	0.32	5.2	1.1	210	<0.1	6.7	0.6	1.9	41	0.6	11.1	46	<0.2	1.64	0.01	1.63	0.1603	6.1	0.1	0.4	0.1	0.5	0.4	1.0
C-343567	11771	41.22553	-106.6995	0-5 cm	11-Aug-2010	BLM land	sagebrush, cacti, forbs	3.9	<0.01	5.45	0.88	1.41	2.58	0.36	1.48	0.02	0.19	<1	894	1.5	0.14	0.2	63.4	6.8	16	<5	10.9	14.6	0.03	32.5	13	386	0.74	13.3	9.4	380	20.3	103	0.38	4.6	1.2	235	<0.1	9	0.6	2.1	36	0.9	15.4	40	<0.2	0.71	<0.003	0.71	0.0768	6.7	0.1	0.5	0.2	0.5	0.3	0.9
C-343568	12539	41.43884	-106.90843	0-5 cm	11-Aug-2010	BLM land	sagebrush, forbs, grasses	6	0.01	5.26	3.93	1.63	1.91	0.82	1.27	0.03	0.19	<1	664	1.3	0.16	0.3	52.3	7.6	28	<5	13.1	13.4	0.03	27.5	29	407	0.7	8.5	12.8	540	16.3	76.8	0.52	5.3	1	289	<0.1	7.7	0.4	2.5	44	0.8	15.3	45	<0.2	1.86	0.95	0.91	0.1032	8.0	0.3	2.2	0.3	0.5	0.3	0.4
C-343569	12635	41.96762	-106.10735	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, cacti	4.6	0.02	4.25	0.46	1.62	1.85	0.51	0.62	0.03	0.16	<1	575	1.3	0.16	0.3	40.6	6	21	<5	10.9	11.9	0.03	21.7	19	288	1.11	7.7	12.1	390	15.2	81.5	0.5	5.3	1.1	97.7	<0.1	8.4	0.5	2	45	0.7	13.2	47	<0.2	1.08	0.01	1.07	0.1284	8.0	0.2	1.4	0.4	0.4	0.2	0.4
C-343570	14683	41.64257	-106.27192	0-5 cm	13-Aug-2010	BLM land	sagebrush, forbs, grasses	9.6	0.04	7.65	1.14	3.12	1.88	0.72	0.51	0.04	0.3	<1	596	1.8	0.33	0.4	65.2	13.4	50	7	32.9	21.2	0.05	33.4	33	282	2.2	11	25.9	430	22.4	105	0.82	10.6	1.8	134	<0.1	11.4	0.8	3.4	103	1.5	19	88	0.5	1.02	0.13	0.89	0.1169	7.8	0.3	2.4	0.6	0.5	0.2	0.4
C-343571	15291	42.32346	-106.4453	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses	4.4	0.01	5.91	0.41	1.18	3.06	0.23	1.24	0.02	0.15	<1	802	1.3	0.11	0.3	83.7	5.1	13	<5	7.8	16	<0.02	49.8	12	192	0.37	6	7.3	380	22.4	105	0.24	3.6	0.9	131	<0.1	28.4	0.5	3.3	29	0.5	10.5	28	<0.2	1.61	0.01	1.6	0.1372	6.0	0.2	0.6	0.2	0.5	0.3	0.7
C-343572	20411	42.37456	-107.03236	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses, cacti, forbs	1.7	<0.01	3.44	0.78	0.66	1.55	0.15	0.96	0.01	0.09	<1	697	0.8	0.08	<0.1	33.5	2.3	4	<5	3.6	9.06	<0.02	21.2	10	125	0.36	4.4	3.1	190	12.2	58.8	0.26	1.6	0.5	235	<0.1	4.9	0.3	1.1	19	0.4	7.7	18	<0.2	0.51	0.01	0.5	0.0719	6.1	0.1	0.4	0.2	0.4	0.3	0.8
C-343574	20731	41.48341	-106.32043	0-5 cm	13-Aug-2010	national forest	pines, forbs, grasses	6.8	0.02	4.81	1.07	2.96	1.39	1.84	0.72	0.02	0.25	<1	507	1	0.2	0.2	39.4	24.9	287	<5	15.7	14.1	0.03	20	28	803	0.78	8.8	115	520	16.3	72.9	0.85	10.6	1.1	116	<0.1	5.8	0.4	1.7	83	1.1	9	65	<0.2	4.76	0.01	4.75	0.1707	5.2	0.1	0.3	0.2	0.5	0.2	1.0
C-343575	24507	41.97582	-106.53256	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, forbs	7.3	0.03	5.5	0.64	2.34	2	0.6	0.48	0.07	0.23	<1	649	1.5	0.25	0.5	65.7	10.4	37	<5	21.3	14.9	0.04	34	26	422	1.29	9.7	18.2	780	19.5	90.9	0.76	7	1.4	120	<0.1	11.5	0.6	2.9	73	1.2	17	71	0.5	2.35	0.1	2.34	0.2019	7.6	0.5	2.5	1.1	3.0	1.2	2.2
C-343576	24827	41.81737	-106.53394	0-5 cm	13-Aug-2010	BLM land	sagebrush, cacti, grasses, forbs	3.2	<0.01	3.66	0.4	1.03	1.86	0.19	0.85	0.01	0.13	<1	640	0.9	0.1	0.2	43.4	3.7	10	<5	5.5	8.94	<0.02	23.1	9	225	0.38	5.6	5.5	310	13.6	67.8	0.29	2.8	0.6	124	<0.1	6	0.4	1.3	24	0.5	8.8	26	<0.2	0.87	0.01	0.86	0.0923	6.1	0.1	0.5	0.2	0.5	0.3	0.9
C-343577	28923	41.75427	-106.84264	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, cacti	2.1	<0.01	4.61	0.84	1.07	2.08	0.31	1.22	0.01	0.13	<1	720	1	0.1	0.1	39.2	3.2	8	<5	6.5	10.5	<0.02	22	13	190	0.42	5.2	5.4	240	14.6	69.9	0.31	3	0.6	257	<0.1	5.9	0.4	1.2	27	0.4	8.8	25	<0.2	0.56	<0.003	0.56	0.0642	6.9	0.2	0.8	0.3	0.8	0.3	1.1
C-343578	29019	41.90401	-106.31328	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, forbs	2.7	0.02	2.4	0.21	0.72	1.06	0.14	0.27	0.03	0.1	<1	398	0.7	0.11	0.2	35.4	2.7	14	<5	6.8	6.64	<0.02	18.8	10	122	0.66	4.7	4.6	220	13.4	48.3	0.44	2.3	0.7	64	<0.1	5.3	0.3	1.2	24	0.5	7.7	25	<0.2	2.44	<0.003	2.44	0.1146	6.0	0.1	0.3	0.2	0.6	0.3	1.1
C-343579	30651	42.25617	-107.44401	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses, forbs, cacti	4.8	<0.01	5.73	0.52	1.54	2.65	0.44	1.13	0.02	0.17	<1	651	1.4	0.15	0.2	48.4	6	18	<5	9.5	14.4	0.03	24.8	18	262	0.58	7.3	10.6	360	20.9	108	0.42	4.8	1	141	<0.1	9.9	0.6	2.2	43	0.8	11.9	44	<0.2	0.76	<0.003	0.76	0.0851	6.6	0.2	0.6	0.4	0.8	0.2	1.1
C-343582	31675	41.95186	-106.99473	0-5 cm	12-Aug-2010	state park	sagebrush, grasses	10.1	0.01	4.66	3.01	2.15	1.94	0.81	0.94	0.02	0.17	<1	554	1.3	0.24	0.3	50.9	9.7	20	<5	13	12.8	0.04	26.8	24	459	1.08	7.5	13.2	640	19.2	79.4	1.21	5.1	1.1	158	<0.1	7.7	0.4	2	45	1.2	14	69	0.3	1.25	0.91	0.34	0.0611	8.1	0.2	2.0	0.3	0.6	0.2	0.6
C-343583	32699	41.60531	-107.35226	0-5 cm	10-Aug-2010	BLM land	sagebrush, grasses, forbs, cacti	8.7	0.02	5.27	2.28	2.56	1.9	1.37	0.59	0.03	0.21	<1	671	1.5	0.27	0.2	53.4	8.6	34	6	15.5	14.6	0.04	27.6	31	338	0.88	9.4	17.9	780	20.6	94.4	0.79	7	1.4	125	<0.1	8.3	0.5	2.3	94	1.1	16.9	79	0.4	1.7	0.86	0.84	0.1172	8.02	0.3	2.2	0.7	0.8	0.2	0.7
C-343591	36795	42.10829	-106.77481	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, forbs, cacti	5.9	0.02	5.66	1.14	1.73	2.15	0.55	1.24	0.04	0.19	<1	699	1.4	0.19	0.8	51.2	6.2	26	7	14.1	15	0.03	27.2	26	381	5.03	8.4	11.9	650	19.4	91.1	0.72	5	1.2	223	<0.1	9.8	0.7	3.4	65	0.8	14	62	0.8	2.19	0.04	2.15	0.2282	7.28	0.4	3.3	0.8	0.8	0.7	0.5
C-343592	40891	41.96457	-106.53489	0-5 cm	13-Aug-2010	BLM land	sagebrush, grasses, forbs	8.3	0.03	6.51	0.83	2.98	2.17	0.79	0.51	0.05	0.27	<1	640	1.8	0.31	0.6	70.2	11.6	45	6	25.7	19.1	0.05	35.6	30	672	1.15	13.2	21.1	920	21.1	111	0.75	8.4	2	99.8	<0.1	11.7	0.6	2.9	78	1.5	19.3	87	0.4	2.59	0.09	2.5	0.2602	7.6	0.3	3.2	0.7	0.5	0.3	0.3
C-343593	41211	41.23578	-106.98984	0-5 cm	11-Aug-2010	national forest	pines, cottonwood, sagebrush, forbs	2.3	0.02	6.18	0.94	1.6	2.66	0.5	2.22	0.02	0.15	<1	659	2.3	0.6	0.2	37.7	7.1	35	<5	13	18	0.02	24.1	17	450	0.44	6.8	13.9	470	27.1	140	0.28	4.1	0.9	219	<0.1	15.6	0.9	1.6	33	0.6	7	41	<0.2	3.32	<0.003	3.32	0.1842	5.4	0.2	0.9	0.2	0.4	0.4	0.6
C-343594	41307	42.07739	-106.1937	0-5 cm	13-Aug-2010	BLM land	forbs, grasses	5.3	0.02	3.76	1.63	1.84	1.28	0.46	0.33	0.04	0.16	<1	507	1.3	0.18	0.3	46.8	9.1	21	<5	11.2	10.3	0.03	23.6	26	568	1.13	7.5	13.2	490	15.4	56.4	0.46	4.4	1.2	88.3	<0.1	6.7	0.3	2.5	41	0.8	14.9	52	0.4	1.39	0.38	1.01	0.1006	7.9	0.3	3.3	0.4	0.6	0.4	0.4
C-343595	43963	42.20627	-106.6925	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses, forbs	4.5	0.02	5.25	0.95	1.86	2.05	0.53	1.15	0.04	0.23	<1	620	1.3	0.18	0.4	64.6	8.2	35	<5	16.8	14	0.03	33	19	423	0.82	9.2	13.4	770	19.9	87.9	0.45	5.9	1.2	168	<0.1	12.7	0.5	2.6	49	0.9	14.6	57	0.2	5.13	0.01	5.12	0.3088	6.3	0.2	1.9	0.6	0.6	0.7	0.5
C-343596	45307	41.63132	-106.98858	0-5 cm	11-Aug-2010	BLM land	sagebrush, grasses, forbs	8.2	0.03	6.95	0.33	2.96	1.76	0.44	0.21	0.23	0.3	<1	953	1.9	0.33	0.4	70.4	9.9	46	7	16.8	17.7	0.05	35.9	42	451	1.03	13	15.9	690	22.4	103	0.65	9.1	1.7	90.8	<0.1	11.6	0.7	3.6	85	1.5	20.6	82	0.6	0.71	0.01	0.7	0.0986	6.6	0.3	1.6	0.9	2.4	0.7	2.2
C-343598	45403	42.39033	-106.28513	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses	3.2	0.02	5.48	0.76	1.48	2.21	0.43	1.39	0.04	0.22	<1	638	1.5	0.15	0.4	80.6	7.3	18	<5	11	15.3	0.03	41.7	15	353	1.05	9	8.9	510	21.2	85.1	0.34	5	1.1	181	<0.1	19.8	0.5	5.6	39	0.7	14.5	40	<0.2	1.84	0.01	1.83	0.1935	6.4	0.2	0.6	0.3	0.6	0.5	0.8
C-343599	47035	42.39397	-107.23113	0-5 cm	12-Aug-2010	BLM land	sagebrush, grasses	2.4	<0.01	4.01	0.68	1.05	1.92	0.23	1.08	0.01	0.15	<1	654	1	0.13	0.2	57.4	4	8	<5	6.5	10.1	<0.02	31.8	9	215	0.35	6	5.3	260	16.1	71.1	0.33	2.9	0.7	173	<0.1	11.1	0.4	1.5	28	0.5	10.6	25	<0.2	0.74	<0.003	0.74	0.0662	5.9	0.1	0.3	0.1	0.5	0.3	1.1
C-343600	48059	42.00354	-106.96203	0-5 cm	12-Aug-2010	state park	grasses, forbs	11	0.01	4.34	1.8	3.31	1.6	0.7	0.56	0.03	0.17	<1	590	1.6	0.2	0.6	55.6	9.3	27	<5	17.4	13.7	0.04	29.1	21	708	1.25	7.9	16.9	940	20	71.5	0.98	6.2	1.1	133	<0.1	10.3	0.5	3.1	66	0.9	19.5	69	0.7	1.03	0.48	0.55	0.0801	8.2	0.3	1.2	0.4	1.3	0.2	1.5
C-343601	53179	42.06677	-106.35829	0-5 cm	13-Aug-2010	BLM land	sagebrush, pines, junipers, forbs, grasses	4.2	<0.01	3.2	2.51	1.38	1.65	1.07	0.4	0.03	0.16	<1	315	0.9	0.12	0.1	35.6	5.9	22	<5	10.8	8.45	0.02	17.8	22	312	0.82	5.1	12	460	10.6	56.1	0.37	4.5	0.8	67.6	<0.1	5.4	0.3	1.6	34	0.6	10.7	34	<0.2	2.06	0.84	1.22	0.1231	7.8	0.3	2.3	0.4	0.7	0.4	0.6
C-343602	79803	42.08734	-107.1704	0-5 cm	12-Aug-2010	BLM land	sagebrush, cacti, forbs, grasses	1.7	<0.01	4.74	0.49	0.47	2.75	0.12	1.95	<0.01	0.07	<1	696	1	0.04	<0.1	33.5	1.6	3	<5	1.4	12.7	<0.02	18.2	5	90	0.16	2.8	2.7	220	15.9	85.3	0.15	1.5	0.4	122	<0.1	10.4	0.4	1.3	12	0.3	5.4	12	<0.2	0.44	0.02	0.42	0.0434	7.1	0.3	1.7	0.6	0.6	0.6	0.6
C-343603	4347	41.35713	-106.51637	0-5 cm	14-Aug-2010	national forest	pines, cottonwood, sagebrush, grasses	3.6	0.02	4.96	0.88	2.14	1.88	0.63	1.06	0.03	0.27	<1	690	1.2	0.19	0.4	52.9	11.7	48	<5	15.3	14.6	0.03	25.8	26	909	0.94	10.6	17.8	580	18	87.8	0.43	5.5	1.2	162	<0.1	8.1	0.5	2.1	50	1.2	10.9	73	<0.2	5	0.01	4.99	0.2949	5.5	0.1	0.4	0.2	0.5	0.3	0.8
C-343604	37115	41.34938	-106.36071	0-5 cm	14-Aug-2010	national forest	pines, grasses, forbs	6.3	0.05	5.5	0.47	2.38	1.57	0.75	1.48	0.03	0.28	<1	671	1.3	0.5	0.3	38.1	11.8	58	<5	11.4	17.8	0.05	18.7	20	1,780	1.04	10.2	33.3	540	30.8	90.7	0.58	7.9	1.7	137	<0.1	6.8	0.5	2.2	68	1.4	9.3	79	<0.2	5.52	0.02	5.5	0.3158	4.6	0.1	0.3	0.1	0.5	0.1	1.2
C-343605	52731	41.16874	-106.32412	0-5 cm	14-Aug-2010	national forest	pines, forbs	4	0.14	4.17	1.02	1.92	1.23	0.63	0.7	0.05	0.23	<1	585	0.9	0.39	0.4	32.3	9.7	38	<5	16.3	12.2	0.04	16.5	18	2,000	0.87	7.9	14.2	620	32.2	66.5	0.58	6.3	1.2	156	<0.1	4.4	0.4	1.4	46	0.9	8.1	76	0.3	18.3	0.02	18.3	0.6051	4.2	0.2	1.3	0.5	0.4	0.6	0.4
C-343606	53499	41.72661	-106.47781	0-5 cm	13-Aug-2010	BLM land	sagebrush, forbs, grasses	5.7	0.01	4.04	3.17	1.87	1.56	1.45	0.58	0.02	0.18	<1	423	1.1	0.15	0.1	47.5	6.6	23	<5	8.7	10.8	0.03	25.3	21	242	0.58	7.3	11.1	690	13.6	69.6	0.62	5.3	1	114	<0.1	7.3	0.4	2.1	58	1.1	13.4	52	0.3	2.02	1.29	0.73	0.0963	8.0	0.3	1.9	0.6	0.6	0.4	0.5

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